

Annexure IX(A)


MODEL ESTIMATE FOR INSTALLATION OF SHALLOW TUBE WELL (STW) UP TO 45 METER DEPTH

Rate based on Schedule of rate of PHE for 2015-16 & APWD(B) for 2013-14

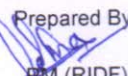
SN	SOR No	Description of item	Unit	Quantity	Rate	Amount
A. Material cost						
1	5.1 (h)	Medium duty Galvanized Iron (GI) pipe 80 mm dia having ISI Mark	Meter	1.50	611.10	916.65
2	5.3 (6)	UPVC Casing pipe withstanding 6kgf/cm ² 80 mmdia	Meter	38.50	310.20	11942.70
3	5.2 (c)	PVC ribbed screen stainer 80 mm dia having ISI mark,	Meter	6.00	471.20	2827.20
4		PVC non returnable check valve 90mm dia having ISI mark.	Nos.	1	300.00	300.00
5	6.1.7 (h)	PVC End plug, 90 mm dia best quality having ISI Mark.	Nos.	2	54.20	108.00
6	6.1.1(h)	PVC socket 90 mm dia pressure 6kgf/cm ²	Nos.	5	42.00	210.00
7	6.1.2 (h)	PVC adaptor	Nos.	1	78.00	78.00
9		PVC suction pipe dia 75mm with working pressure 6kgf/cm ²	Meter	1	150.00	150.00
10	6.8.1 (a)	Solvent cement (250 ml)	No.	1	152.00	152.00
SUB TOTAL(A)=						16,684.55
B. Labour cost for Installation of STW						
1	7.1.3	Labour charge of making bore hole of 100 mm dia and collecting sample of soil at every 3.00 Meter depth.				
		a. For 0 to 20 m depth	Meter	20.00	193.60	3872.00
		b. For 20 m to 40 m depth	Meter	20.00	301.60	6032.00
		c. For 40 m to 60 m depth	Meter	5.00	372.40	1862.00
2	7.1.12	Labour charge of sinking lowering, fitting fixing of Direct Action (Tara hand pump assembly in position with 90 mm/50 mm dia P.V.C casing pipe with ribbed screen placed in potable water bearing strata with 40 mm dia sand trap with end cap at bottom of well, washing the bore well etc. and supplying necessary jointing materials including carriage of materials and cleaning and priming the tube well all complete as directed.	Meter	45.00	25.90	1165.50
3	7.1.16	Providing and packing coarse sand around stainer and casing pipe including supplying and carriage of materials all complete as directed and specified.	Meter	45.00	9.50	427.50
4	7.1.21	Labour charges for providing Bentonite clay including the cost of Bentonite clay around 150/200 mm dia tube well up to depth of 6 m from top.	Meter	2.00	544.5	1089.00
SUB TOTAL(B)=						14,448.00
C. Cement Concrete Floor base (1.50m X 1.50m)						
		Construction of floor base Flat Brick soiling, P.C.C and R.C.C , Plastering works as directed. (enclosed estimate)	Sq.m	2.25		3874.00
Sub TOTAL-(C)						3874.00
TOTAL (A + B+C)=						35,006.55
Deduct Contractor Profit 10%						3,500.65
Grand Total						31,505.90

(A) If execution through Contractor = Rs. 35,007/- only.

(B) Execution by beneficiary themselves = Rs. 31,430/- only (within the limit of DPR after deduction of Contractor's profit of 10 per cent).

Approved By: 
Chief Engineer (Agri.), Assam, Khanapara, Ghy-22

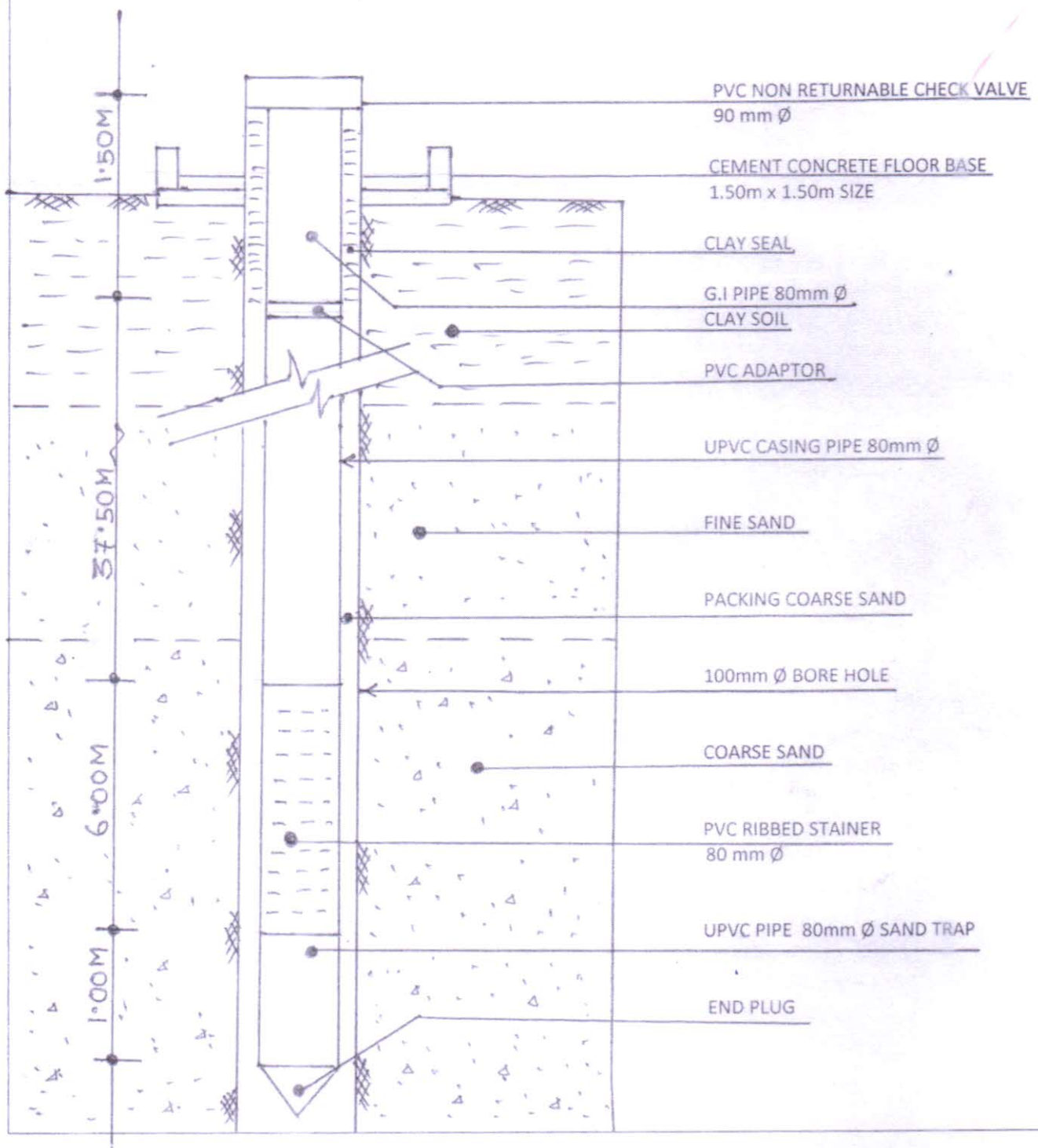
Checked By:  AAE

Prepared By:  PM (RIDF)

NO RIDF
EE(FC)

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LITHO LOG



MODEL DRAWING OF STW – 45.00M DEPTH & 80MM DIAMETER

SCALE	DRAWN BY	CHECKED BY	APPROVED
NTS	 PM (RIDE)	 AAE NO RIDE, EE (FC)	 Chief Engineer (Agri) Assam, Khonapasa, Guwahati-22

Annexure-IX(B)

MODEL ESTIMATE FOR INSTALLATION OF SHALLOW TUBE WELL (STW) UP TO 60 METER DEPTH

Rate based on Schedule of rate of PHE for 2015-16 & APWD(B) for 2013-14

SN	SOR No	Description of item	Unit	Quantity	Rate	Amount
A. Material cost						
1	5.1	Medium duty Galvanized Iron (GI) pipe 125 mm dia having ISI Mark	Meter	1.50	1162.70	1744.05
2	5.3	UPVC Casing pipe withstanding 6kgf/cm ² 125 mmdia weight 8kg/m and thickness 3.1 to 3.7mm, having ISI mark.	Meter	50.00	628.90	31445.00
3	5.2	PVC ribbed screen stainer with nylon 125 mm dia having ISI mark, with opening space between 12% to 25% of the surface area and with average size of slot in between 1mm to 1.5 mm having ISI mark.	Meter	9.00	709.10	6381.90
4	5.3	UPVC column pipe with standing 6kgf/cm ² 40mmdia weight withstanding 6kgf/cm ² having ISI mark.	Meter	45.00	146.80	6606.00
5	6.1.8	PVC End Cap, 140 mm dia best quality having ISI Mark.	Nos.	1	306.00	306.00
6	6.1.1	PVC socket 140 mm dia pressure 6kgf/cm ²	Nos.	9	210.00	1890.00
7	6.1.2	PVC adaptor	Nos.	1	220.00	220.00
8	6.1.6	UPVC Reducing Socket 40X32 mm dia	Nos.	1	237.00	237.00
10	6.8.1	Solvent cement (500 ml)	Nos.	1	299.00	299.00
SUB TOTAL(A)=						49,128.95
B. Labour cost for Installation of STW						
1	7.1.6	Labour charge for boring to make 200mm dia borehole including arranging and carriage of necessary boring materials/ tools/ bentonite etc, and withdrawing the pipe all complete as directed.				
		a. For 0 to 20 m depth	Meter	20.00	305.90	6118.00
		b. For 20 m to 40 m depth	Meter	20.00	367.50	7350.00
		c. For 40 m to 60 m depth	Meter	20.00	454.30	9086.00
2	7.1.14	Labour charge of sinking lowering, fitting fixing in position of 150mm dia UPVC pipe assembly comprising of strainer , pipes and cone in potable water bearing strata, washing the bore well etc.				
		a. For 0 to 60m depth	Meter	60.00	44.80	2688.00
3	7.1.16	Providing and packing coarse sand around stainer and casing pipe including supplying and carriage of materials all complete as directed and specified.	Meter	60.00	9.50	570.00
4	7.1.21	Labour charges for providing Bentonite clay including the cost of Bentonite clay around 150/200 mm dia tube well up to depth of 6 m from top.	Meter	6.00	544.50	3267.00
5		Site preparation	L.S.			100.00
SUB TOTAL(B)=						29179.00

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C. Cement Concrete Floor base (1.50m X 1.50m)					
	Construction of floor base Flat Brick soiling, P.C.C and R.C.C , Plastering works as directed.	Sq.m	2.25		3874.00
Sub TOTAL-(C)					3874.00
TOTAL (A + B+C)=					82,181.95
Deduct Contractor's profit 10%					8,218.20
Grand Total					73,943.95
Say Rs.					73,295.00(Limit)

(A) If execution through Contractor = Rs. 82,182/- only.

(B) Execution by beneficiary themselves = Rs.73,295/- only (within the limit of DPR after deduction of Contractor's profit of 10 per cent).

Approved By:

Chief Engineer (Agri.),
Assam, Khanapara, Ghy-22

Checked
NO RIDF
EE. (FC)

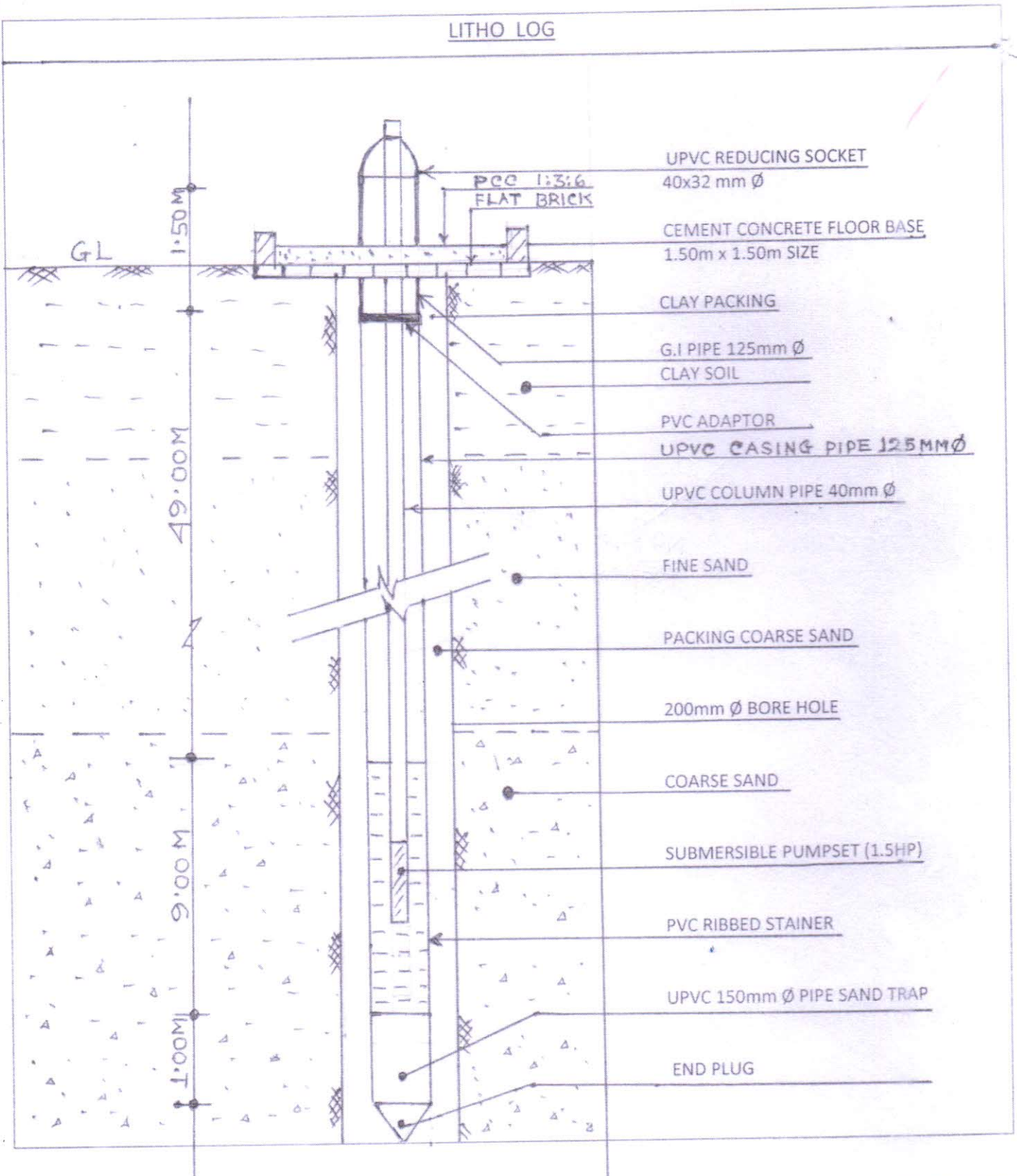
Checked By:

AAE

Prepared By:

PM (RIDF)

LITHO LOG



MODEL DRAWING OF STW - 60.00M DEPTH X 125 MM DIA

SCALE	DRAWN BY	CHECKED BY	APPROVED
NTS	 PM (RIDE)	 AAE	 Chief Engineer (Ari)

NO RIDE.
EE (FC)
Assam, Khanapara
Gusabahi - 22

Annexure-IX(C)

**Name of work: Proposed construction of 10000 Ltrs capacity R.C.C water storage Tank.
(For Irrigation System)**

As per Schedule of Rates for APWD Building(Civil) for the year 2013-14

Sl No	SOR NO	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)								
	1	EARTHWORK												
1	1.1(A) (a)	Earth work in excavation for foundation trenches of walls, retaining walls, footings of columns, steps and septic tank etc. including refilling (return filling) the quantity as necessary after completing of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified. (Upto a depth of 2m below the existing ground level) In ordinary soil.												
		Floor	6.00	x	2.00	x	0.30	=	3.60					
		Total							=	3.60	cum	3.60	108.82	391.75
2	4.1.1 (a)	BRICKWORKS												
		Providing brick soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. (a).Brick on flat soling.												
		Floor	6.00	x	2.00			=	12.00					
Total							=	12.00	Sq.m	12.00	368.71	4424.52		
3	2.1.1 (a)	P.C.C WORKS												
		Plain Cement concrete Works with coarse aggregate of size 13 mm to 32mm in foundation of steps, footing of column and plinth beam as directed and specified including curing complete (shuttering where necessary shall be measured and paid separately) in prop. 1 cement:3 Sand :6 Coarse aggregate by volume.												

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			Floor	6.00	x	2.00	x	0.05	=	0.60					
			Total								0.60	Cu.m.	0.60	4292.86	2575.72
4	3.1.1.2	FORMWORKS													
		Providing form work of ordinary timber planking so as to give a rough finish including centering, shuttering, strutting and propping etc. height of propping and centering below supporting floor to ceiling not exceeding 4.0 m and removal of the same for in-situ reinforced concrete and plain concrete work.													
		Sides of tie beams, grade beams etc. at or below ground level. Using 25mm thick plank													
		tie beam	(2x1.50+2x5.5)x1.25					=	17.50						
			(1.96+5.96)x1.25					=	9.90						
		Total							=	27.40	Sq.m	27.40	341.90	9368.06	
5	18.1.1	IRON AND STEEL WORKS													
		Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work/ R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete (upto 1st floor level). b) Other ISI approved TMT reinforcement bar (SRMB/SAI/BISCON/ X TECH) (For Assam Type Bldg., drain works, retaining wall & boundary wall etc. .													
		Floor	(6.00 + 1) x 2.00x0.62					0.125	60.76						
			(2.00 + 1) x 6.00x0.62					0.125	63.24						
		Wall	2x(5.50) x 1.35x0.62					0.125	73.66						
			2x(1.96) x 1.35x0.62					0.125	26.25						
			2x(1.25 + 1) x 8.00x0.39					0.125	68.64						
										Qtl	4.58	6026.82	27602.80		

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9	18.60	Angles/Flats/Bolts and Nuts								
	18.6.1 (b)	Supplying, fitting and fixing M.S.Angles, M.S.Flat... (b) M.S.Flats								
		Steel Frames	2x5.96+5x1.96	=	21.72	Qtl	0.40	9604.99	3842.00	
		Total Quantity in Rm			=					21.72
		Total Quantity in Qtl			=					0.45
10		Fullway Valve with pipe 50mm dia				LS			400.00	
	Grand Total=							Rs.82,272.12		
	Deduct contractor profit @10%=						Rs.	8227.21		

Total after deduction of Contractor profit Rs. 74044.91

Say, Rs 74000.00

(Rupees Seventy Four Thousand) Only

(A) If execution through Contractor = Rs. 82,272/- only.

(B) Execution by beneficiary themselves = Rs.74,000/- only (within the limit of DPR after deduction of Contractor's profit of 10 per cent).

Approved By:

Chief Engineer (Agri.),
Assam, Khanapara, Ghy-22

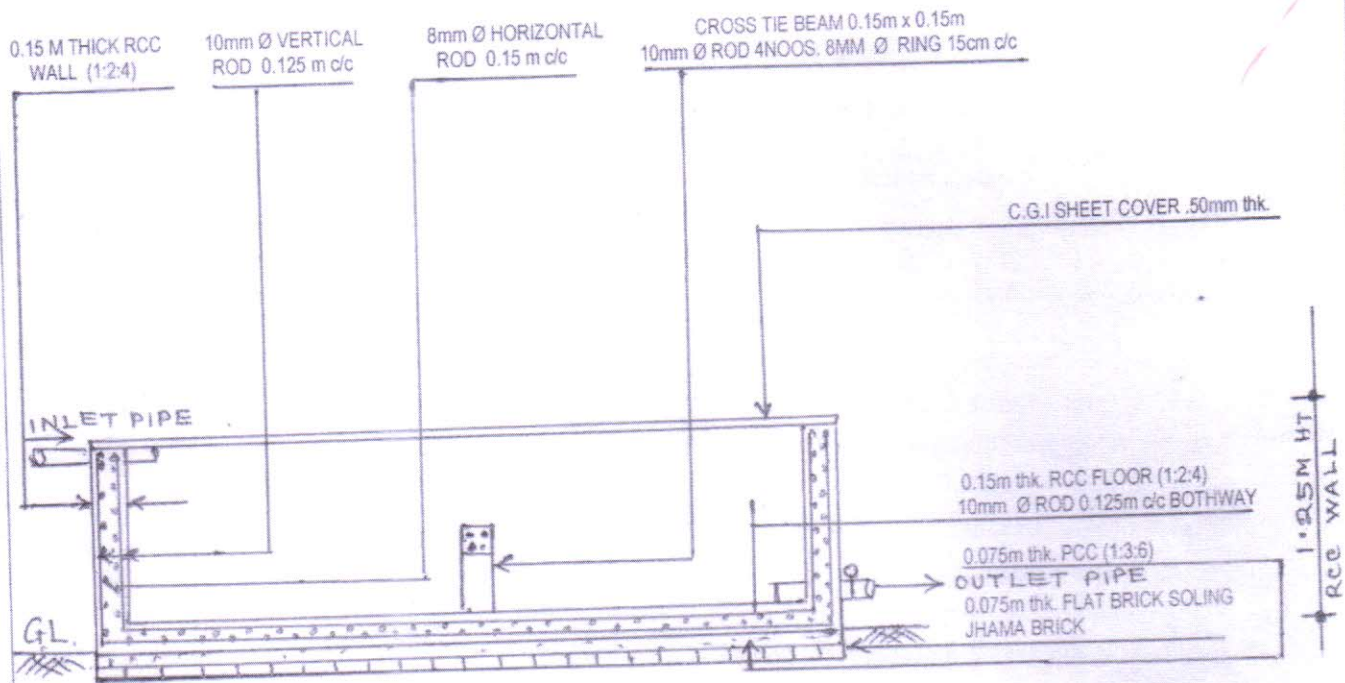
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RIDE
EE (F.C)

Checked By:

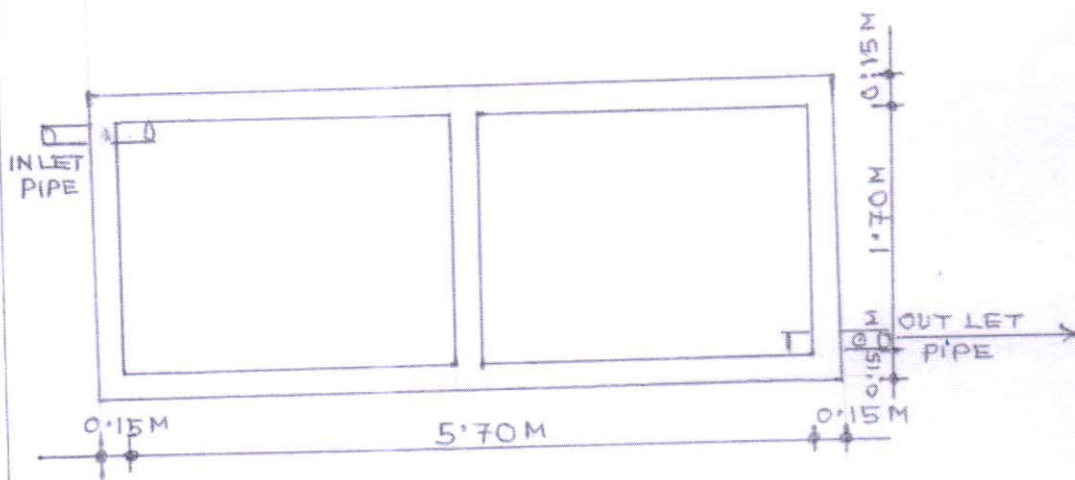
AAE

Prepared By:

PM (RIDF)



SECTION AT A-A



PLAN

PROPOSED PLAN L-SECTION OF CONSTRUCTION OF 10,000 LT CAPACITY WATER STORAGE TANK AT GROUND LEVEL (RCC)

SCALE	DRAWN BY	CHECKED BY	APPROVED
NTS	PM(RIDF)	AAE	Chief Engineer (Agr)

Annexure-IX(D)

**Name of work: Proposed construction of 10000 Ltrs capacity Brick water storage Tank.
(For Irrigation System)**

As per Schedule of Rates for APWD Building(Civil) for the year 2013-14

Sl No	SOR NO	Description of item	Unit	Qty	Rate (Rs.)	Amount (Rs.)
	1	EARTHWORK				
1	1.1(A) (a)	Earth work in excavation for foundation trenches of walls, retaining walls, footings of columns, steps and septic tank etc. including refilling (return filling) the quantity as necessary after completing of work, breaking clods in return filling, dressing, watering and ramming etc. and removal of surplus earth with all lead and lifts as directed and specified in the following classification of soils including bailing out water where necessary as directed and specified. (Upto a depth of 2m below the existing groundlevel) In ordinary soil.				
		Floor 5.00 x 3.00 x 0.30 = 4.50				
		Total = 4.50	cum	4.50	108.82	489.69
		BRICKWORKS				
2	4.1.1 (a)	Providing brick soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete. (a).Brick on flat soling.				
		Floor 5.00 x 3.00 = 15.00				
		Total = 15.00	Sq.m	15.00	368.71	5530.65
3	4.1.4	Brickwork with cement mortar (1:4) with first class brick including racking out joint and curing as directed.				
		15.50 x 1.50 x 0.23 = 5.35	cum	5.35	5860.86	31340.95

4	2.1.1	R.C.C WORKS													
		Providing and laying plain/reinforced cement concrete works cement, coarse sand & 20mm down graded stone aggregate including dewatering if necessary, and curing complete but excluding cost of form work and reinforcement for reinforced cement concrete work (form work and reinforcement will be measured and paid separately)													
		Floor	4.75	x	2.50	x	0.12	=	1.43						
		Total							1.43	Cu.m.	1.43	5496.65	7860.21		
5	18.1.1	IRON AND STEEL WORKS													
		Supplying, fitting and fixing in position reinforcement bars conforming to relevant I.S. Code for R.C.C. work/ R.B. walling including straightening, cleaning, cutting and bending to proper shapes and length as per details, supplying and binding with 20G annealed black wire and placing in position with proper blocks, supports, chairs, spacers etc. complete (upto 1st floor level). b) Other ISI approved TMT reinforcement bar (SRMB/SAI/BISCON/ X TECH) (For Assam Type Bldg., drain works, retaining wall & boundary wall etc. .													
		Floor	20 x 5 x 0.62 x 2							124.00					
			30x2.5x0.39x2							58.5					
									182.50						
		Add 10% for lapping etc.							18.25						
		Total Quantity in Kg =							200.75						
		Total Quantity in Quintal =							2.01	Qtl	2.01	6026.82	12113.90		
6	5.10	Cement Concrete Flooring													
	5.1.10	15 mm thick Cement plaster skirting In cement mortar 1:3													
		Floor	2	x	2	x	2	=	8						
		Wall Plaster	1	x	14.5	x	1.75	=	25.38	Sq.m	61.38	230.44	14143.26		

			8	x	8	x	1.75	=	28						
		Total							=	61.38					
8	8.1	Roofing													
		Providing CGI Sheet roofing...													
	8.1.1(a)	(a)	0.45 mm thick												
				4.75	x	2.5	=	11.88							
		Total							=	11.88	Sq.m	11.88	450.45	5349.09	
9	18.60	Angles/Flats/Bolts and Nuts													
	18.6.1	Supplying, fitting and fixing M.S.Angles, M.S.Flat...													
	(b)	(b) M.S.Flats													
		Steel Frames	25					=	25						
		Total Quantity in Rm							=	25					
		Total Quantity in Qtl							=	0.50	Qtl	0.50	9604.99	4802.50	
10		Fullway Valve with pipe 50mm dia										LS		600.00	
	Grand Total=												Rs.82,230.24		
Deduct contractor profit @10%=										Rs.	8223.24				

Total after deduction of Contractor profit Rs. 74007.24

Say, Rs 74000.00

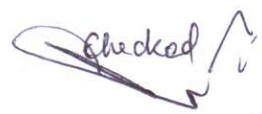
(Rupees Seventy Four Thousand) Only

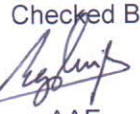
(A) If execution through Contractor = Rs. 82,230/- only.

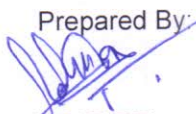
(B) Execution by beneficiary themselves = Rs.74,000/- only (within the limit of DPR after deduction of Contractor's profit of 10 per cent).

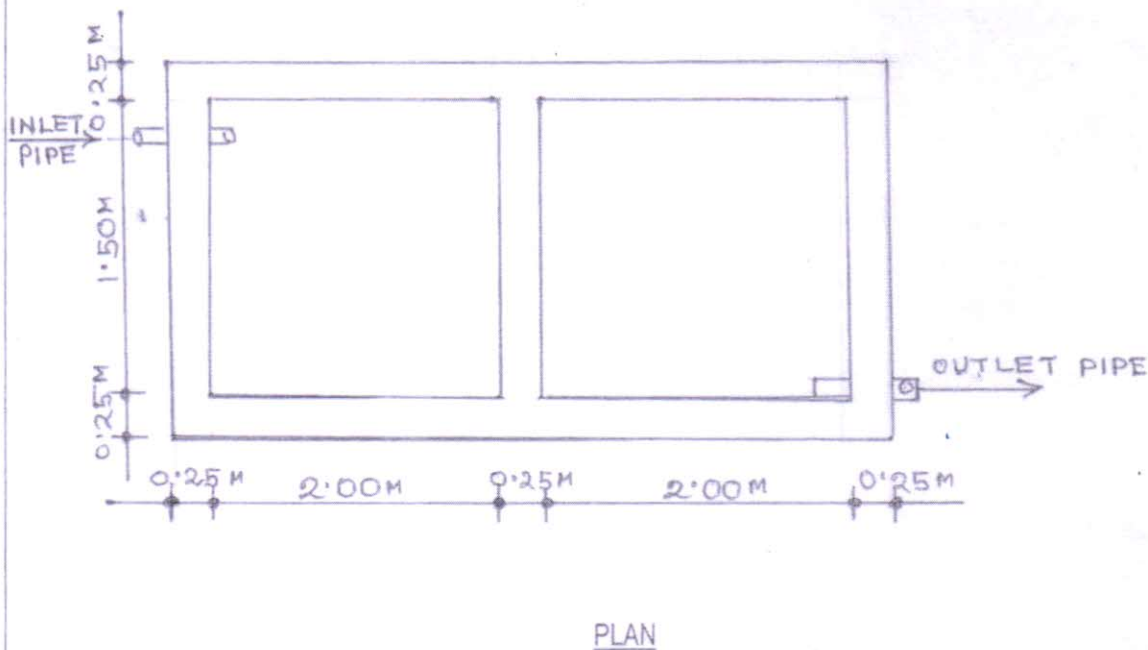
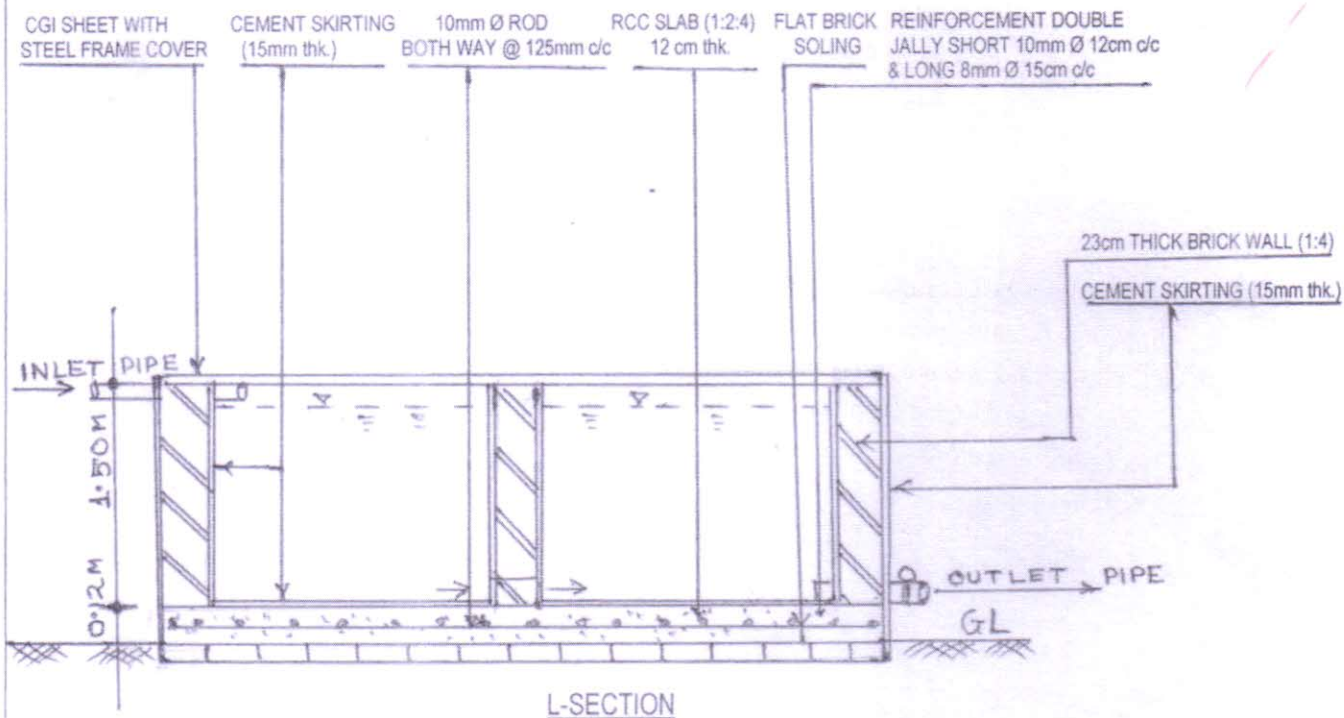
Approved By:

 Chief Engineer (Agri.),
 Assam, Khanapara, Ghy-22

Checked

 NO(RIDF)
 EE (FC)

Checked By:

 AAE

Prepared By:

 PM (RIDF)



PROPOSED PLAN L-SECTION OF CONSTRUCTION OF 10,000 LT CAPACITY WATER STORAGE TANK AT GROUND LEVEL (BRICK)			
SCALE	DRAWN BY	CHECKED BY	APPROVED
NTS	 PM (RIDE)	 AAE	 Chief Engineer (Agri)

Annexure-IX(E)

Name of work: Model estimate for construction of cement concrete floor base (size 1.5mx 1.5m) for STW

As per Schedule of Rates for APWD Building(Civil) for the year 2013-14

As per Schedule of Rates for APWD Building(Civil) for the year 2015-16													
SI No	SOR NO	Description of item							Unit	Qty	Rate (Rs.)	Amount (Rs.)	
1	4.1.1 (a)	BRICKWORKS							Sq.m	2.25	368.71	829.60	
		Providing brick soling in foundation and under floor with stone/ best quality picked jhama brick, sand packed and laid to level and in panel after preparing the subgrade as directed including all labour and materials and if necessary dewatering, complete.											
		(a).Brick on flat soling.											
		Floor	1.5	x	1.5			=					2.25
Total							=	2.25					
3	4.1.4	Brickwork with cement mortar (1:4) with first class brick including racking out joint and curing as directed.							cum	0.22	5860.86	1289.40	
		6.00	x	0.30	x	0.12	=	0.22					
4	2.1.1	P.C.C WORKS							Cu.m.	0.225	5496.65	1236.75	
		Providing and laying plain cement concrete works cement, coarse sand including dewatering if necessary, and curing complete.											
		Floor	1.50	x	1.50	x	0.10	=					0.225
		Total											0.225
65.10	Cement Concrete Flooring												
5.1.10	15 mm thick Cement plaster skirting In cement mortar 1:3							sqm	2.25	230.44	518.50		
	Total =											2.25	
Total=										Rs.3874.25			
Say, Rs 3,874.00													

Approved
Checked By:

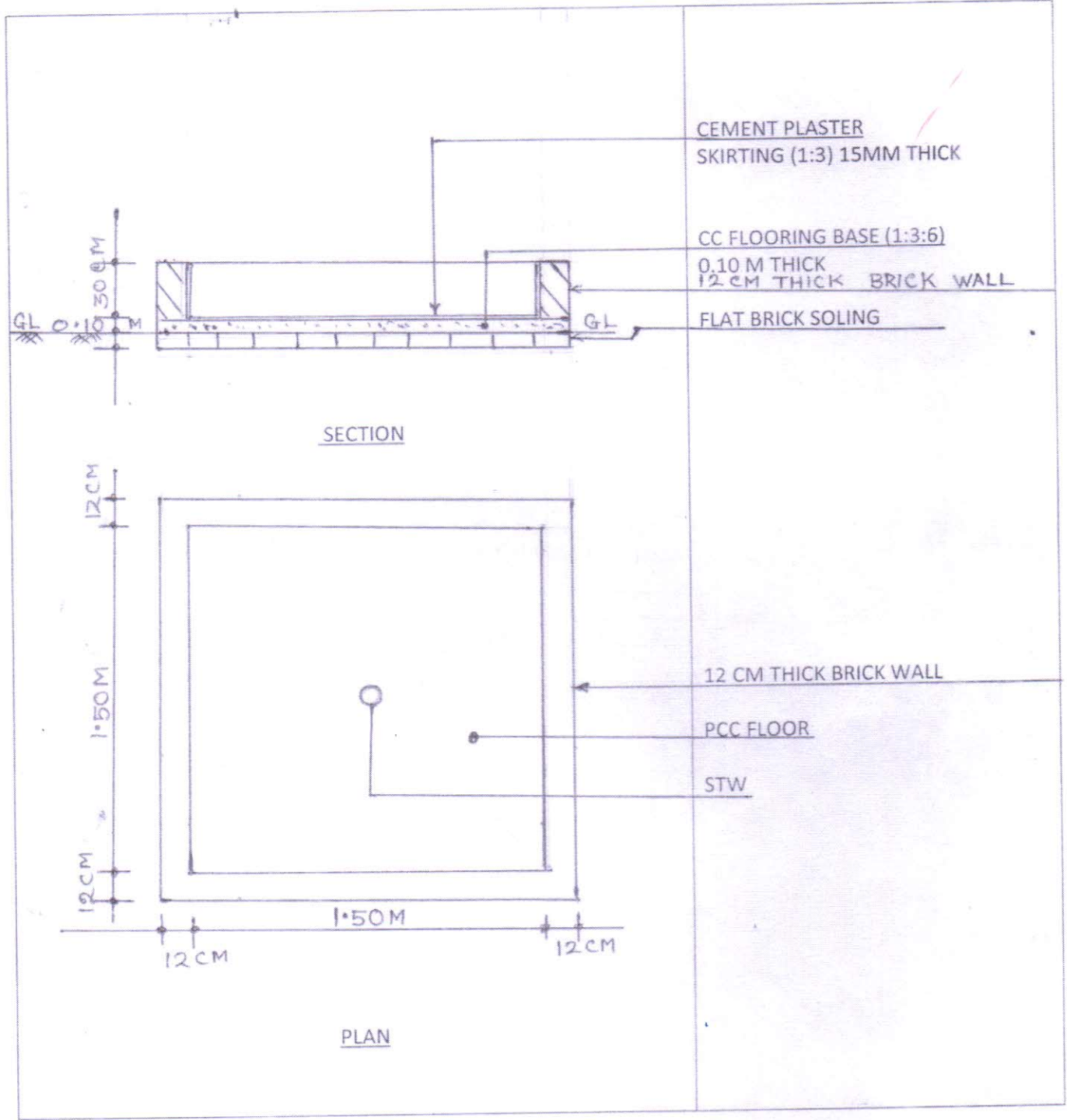
Chief Engineer(Agri)
Assam, Khanapara, Ghy-22

Checked
Approved By:
NO RIDF
EE (FC)

AAE

Prepared By:

PM(RIDF)



PLAN & SECTION OF CC FLOOR BASE FOR STW			
SCALE	DRAWN BY	CHECKED BY	APPROVED
NTS	 P.M. (RIDE)	 AAE	 Chief Engineer (Asst) EE (FC) Assam, Kamapara