

PROPOSED INTERVENTIONS

SI	Interventions / Items	Qty
1	De-Weeding	277000 Sqm
2	De-Silting	68296.86 Cum
3	Peripheral Bund	3341 meter
4	H P Laying – 600 φ	2 nos
5	Approach Road	160 meter
	a. Earth work filling	803.15 Cum
	b. GSB	96 Cum
	c. WBM	45 Cum
	d. ICBP	600 Sqm
6	Rearing Tank – 0.15 ha each	6 nos
7	Stocking Tank – 0.40 ha each	3 nos
8	Pen Culture	
	Rearing Pen – 0.20 ha each	2 nos
	Stocking Pen - 0.40 ha each	3 nos
9	Katal/Jeng - 0.2 ha each	2 nos
10	Bamboo Barricade	200 m
11	Community Hall cum Wetland Information Centre	202.09 Sqm PA
12	Fish Landing Structure	66.93 Sqm PA
13	Solar Lamp	10 units
14	Information Board	2 nos

FUTURE PROVISION : (From other components)

1.	Vermicomposting unit
2.	Landscaping and plantation
3.	Eco-tourism development
4.	Furniture for community hall cum Wetland Information Centre
5.	Craft & Gear

Name of Beel: Solmari Beel			
Development Block : Bhurbandha			
Revenue Village : Solmari			
District : Morigaon			
Lat/Long- 26.228580, 92.378853			
Beel Area : 34.64 ha			
Project Title: Sustainable Wetlands and Integrated Fisheries Transformation (SWIFT)			
Client Detail: ARIAS Society 			
Consultant Details : Sumato Globaltech Private Limited			
Title: MASTER PLAN LAYOUT OF SOLMARI BEEL			
Date			
Checked By	Submitted to	Recommended by	Approved by

Legend

- Proposed Vermicompost Site
- TBM (58.93 m)
- Proposed Approach Road
- Paved Road
- Proposed Embankment
- Existing Culvert
- Bamboo Barricade
- Katal Structure
- Stocking Tank
- Rearing Tank
- Stocking Pen
- Rearing Pen
- Fish Landing Structure
- Community Hall cum Wetland Information Centre
- Beel Boundary

92°22'30"E

92°22'45"E

92°23'0"E

92°23'15"E

DRONE SURVEY IMAGE OF SOLMARI BEEL, MORIGAON



26°14'0"N

26°14'0"N

26°13'45"N

26°13'45"N

26°13'30"N

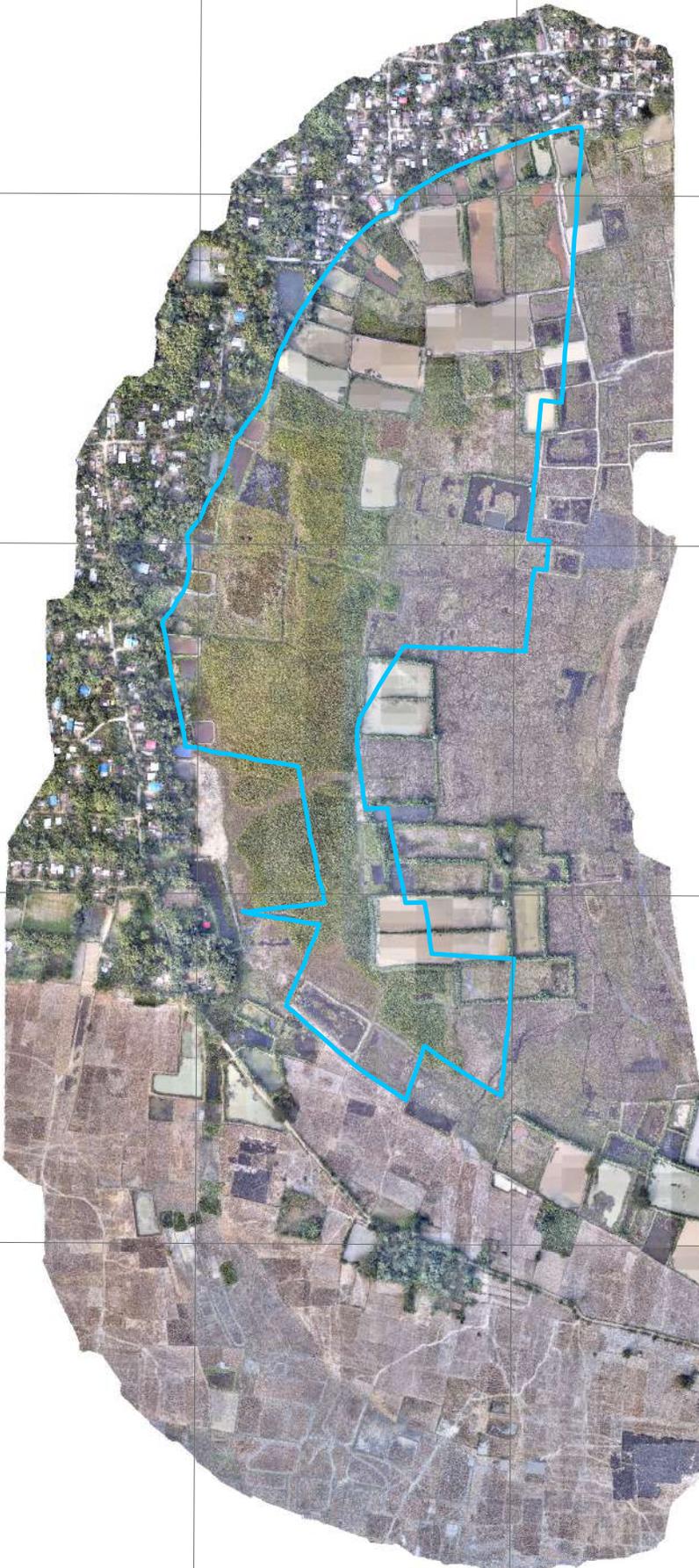
26°13'30"N

26°13'15"N

26°13'15"N

26°13'0"N

26°13'0"N



92°22'30"E

92°22'45"E

92°23'0"E

92°23'15"E

92°22'40"E

92°22'50"E

92°23'0"E

92°23'10"E

WEED INFESTED MAP OF SOLMARI BEEL, MORIGAON SHOWING THE WEED TYPE AND AREA COVER

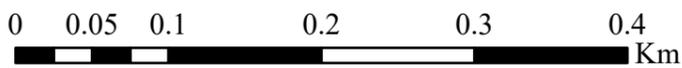
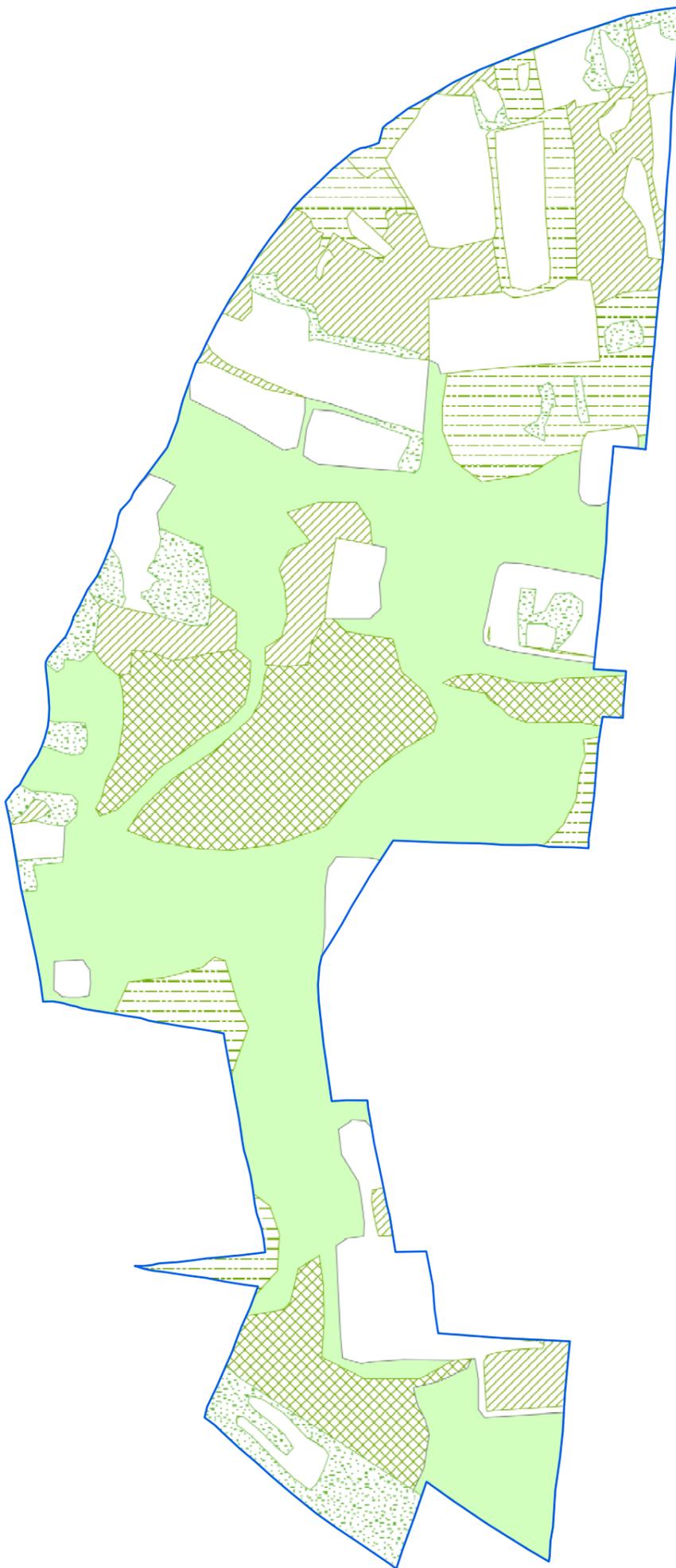


Table- This table shows the which type of weed comes under which category

Weed Category	Type	Area sqm	%
A	Thin and floating water hyacinths and other aquatic weeds etc.	13850	5
B	Thick and floating water hyacinths and other aquatic weeds etc.	27700	10
C	Thick and floating Taranies, Dalanies, Pitannies and other marginal aquatic weeds etc. upto a depth of 50 cm.	41550	15
D	Medium and floating Taranies, Dalanies, Pitannies and other marginal aquatic weeds etc. upto a depth of 50 cm to 80 cm	55400	20
E	Heavy and floating Taranies, Dalanies, Pitannies and other marginal aquatic weeds etc. upto a depth of 80 cm to 120 cm	138500	50

Legend

-  Beel Boundary (34.64 ha)
- Weed Category**
-  Category A (1.38 ha)
-  Category B (2.76 ha)
-  Category C (4.15 ha)
-  Category D (5.45 ha)
-  Category E (13.85 ha)

92°22'40"E

92°22'50"E

92°23'0"E

92°23'10"E

26°13'20"N

26°13'30"N

26°13'40"N

26°13'50"N

26°14'0"N

26°13'20"N

26°13'30"N

26°13'40"N

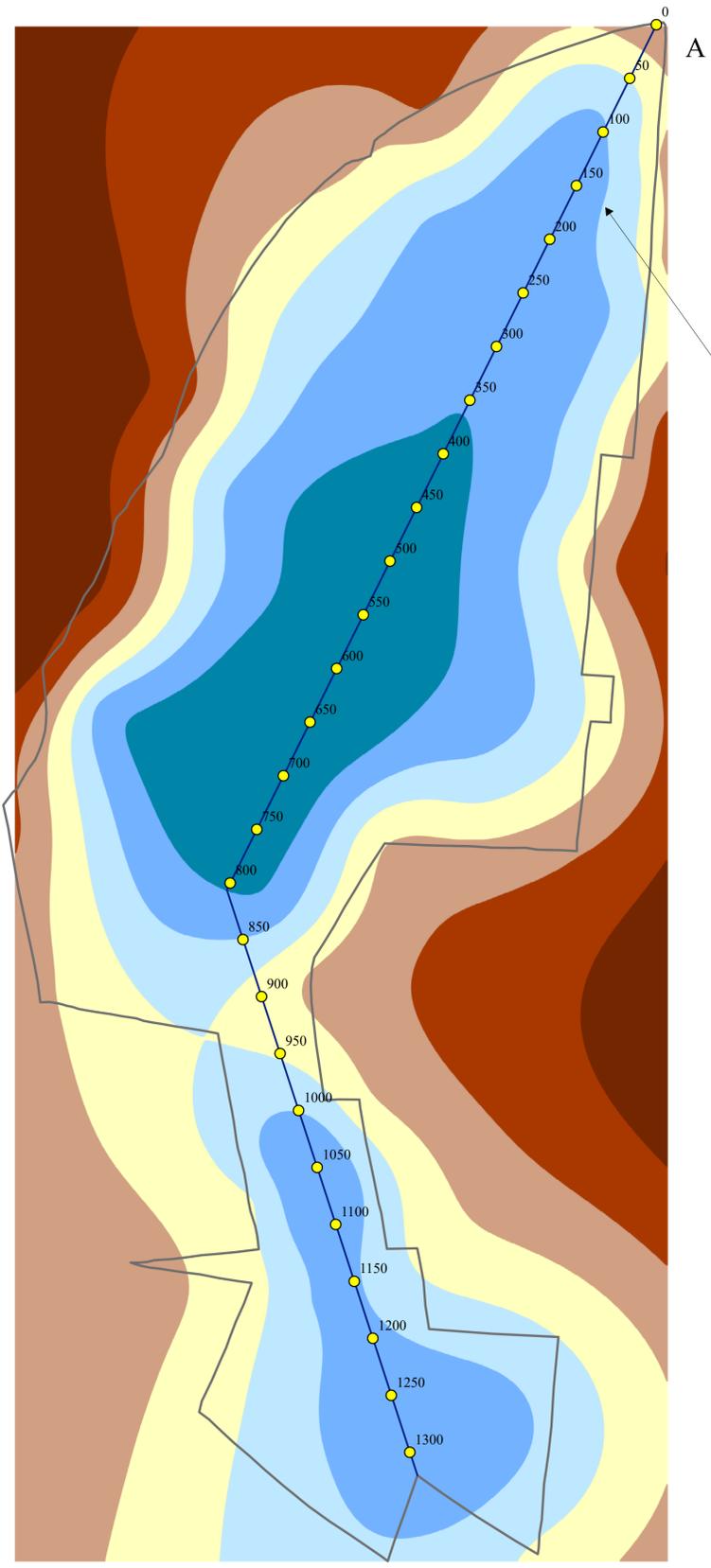
26°13'50"N

26°14'0"N

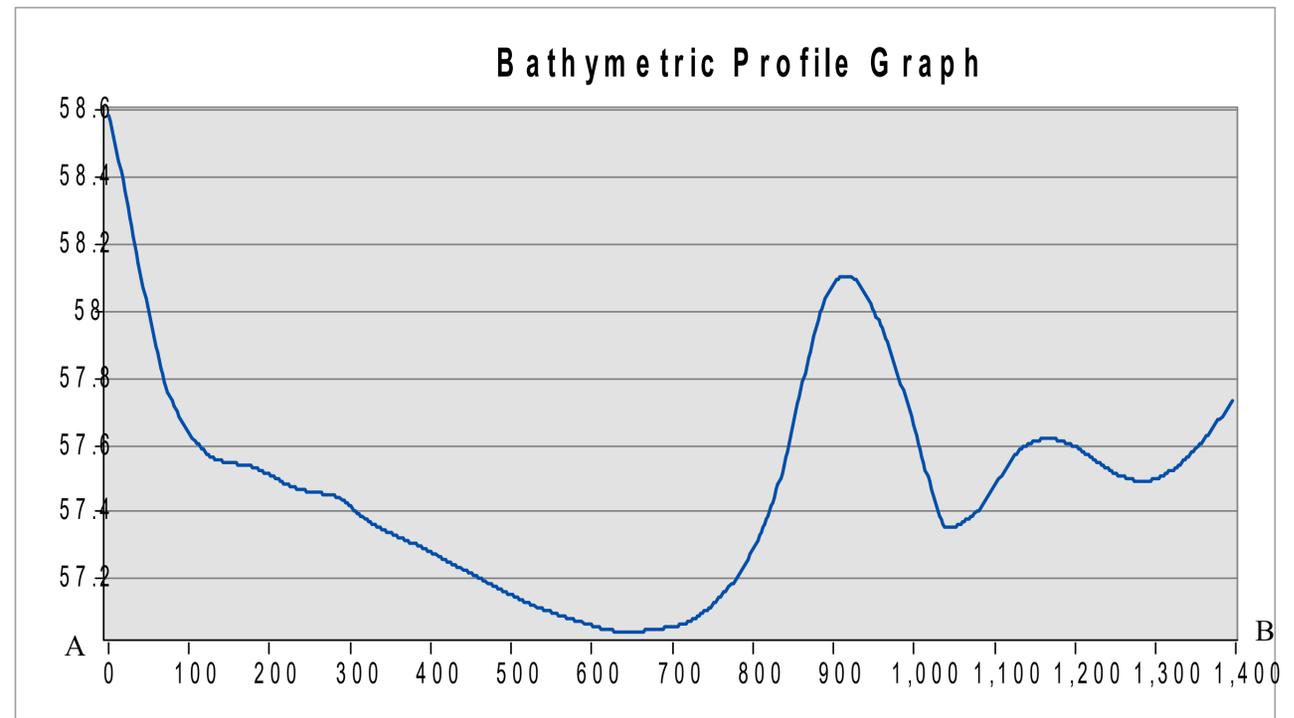
26°13'10"N

26°13'10"N

BATHYMETRIC MAP & PROFILE GRAPH OF SOLMARI BEEL, MORIGAON



Cross Section



Legend

	Beel Boundary
	56.995 - 57.322
	57.323 - 57.65
	57.651 - 57.977
	57.978 - 58.304
	58.305 - 58.631
	58.632 - 58.959
	58.96 - 59.286

92°22'45"E 92°23'0"E 92°23'15"E 92°23'30"E 92°23'45"E

92°22'45"E 92°23'0"E 92°23'15"E 92°23'30"E 92°23'45"E

26°14'0"N
26°13'45"N
26°13'30"N

26°14'0"N
26°13'45"N
26°13'30"N

DURVEY SURVEY MAP LAYOUT OF SOLMARI, BEEL

92°22'43"E

92°22'55"E

92°23'7"E



26°14'10"N

26°14'10"N

26°13'58"N

26°13'58"N

26°13'45"N

26°13'45"N

26°13'32"N

26°13'32"N

26°13'20"N

26°13'20"N

No 2 Solmari Village

Paddy Field

Paddy Field

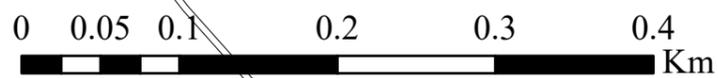
Paddy Field

DGPS point

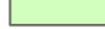
Culvert

Inlet

Outlet



Legend

-  DGPS Point
-  Outlet
-  Inlet
-  Road
-  Culvert
-  Household
-  Tree Cover Area
-  Banana Cultivation (0.68 ha)
-  Category A Weed (1.38 ha)
-  Category B Weed (2.77 ha)
-  Category C Weed (4.15 ha)
-  Category D (5.54 ha)
-  Category E (13.85 ha)
-  Water Area (6.92 ha)
-  Beel Boundary (34.64 ha)

92°22'43"E

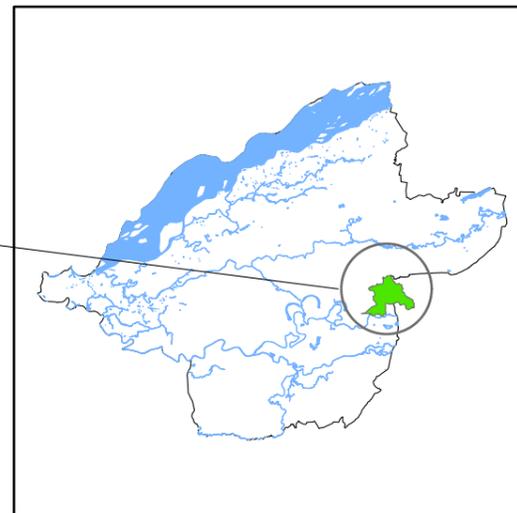
92°22'55"E

92°23'7"E

CATCHMENT AREA OF SOLMARI BEEL, MORIGAON



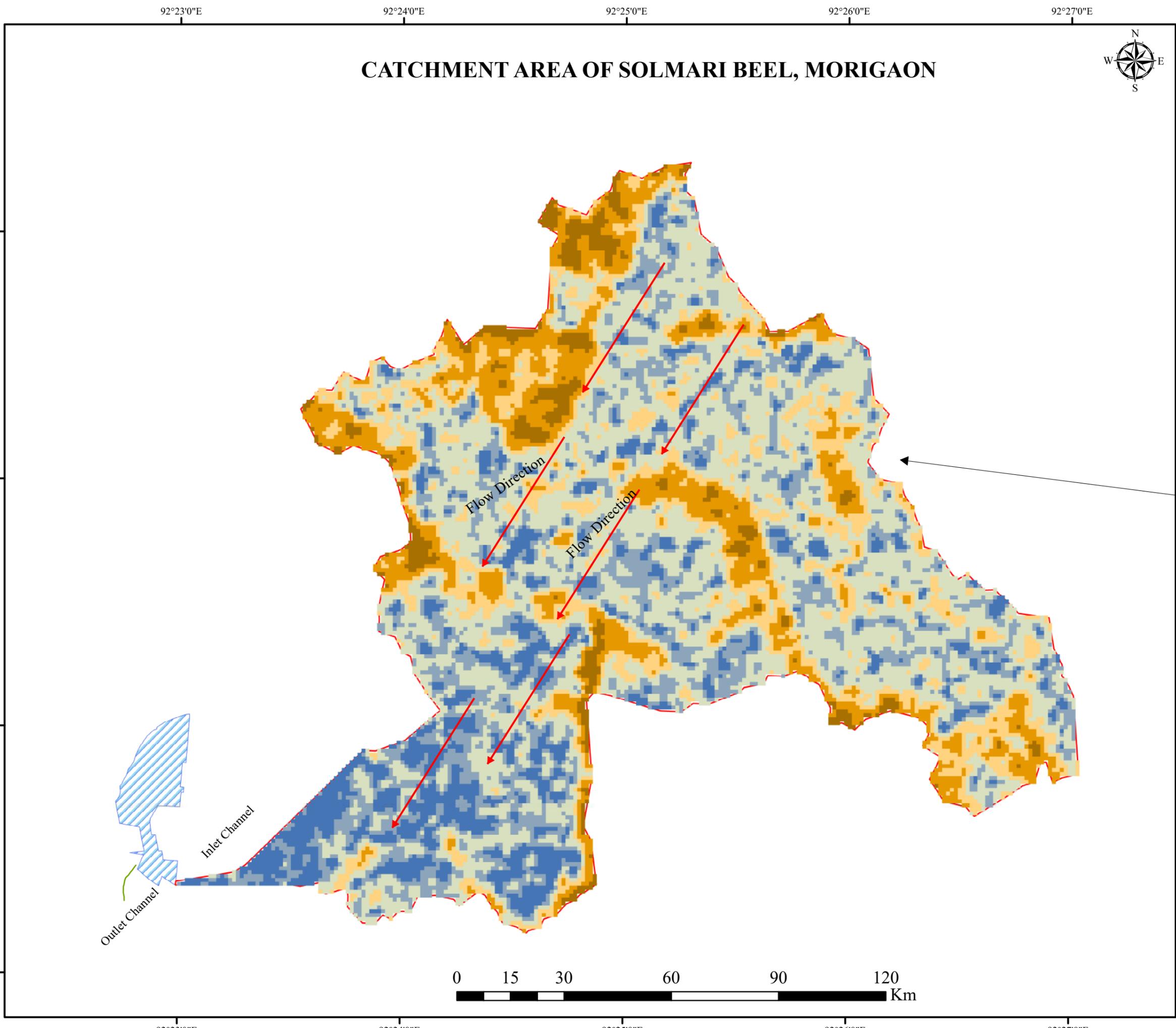
This wetland is located near the Kolong River basin, which flows in a west-south direction. Although there is no direct inlet channel supplying water to the wetland, during the monsoon season excess water from the Kolong basin drains into it through an outlet channel.



Legend

Elevation in m From MSL

- 54 - 58.94
- 58.95 - 60
- 60.01 - 61.98
- 61.99 - 63.95
- 63.96 - 66
- 66.01 - 72
- Flow Direction
- Inlet
- Outlet
- Beel Boundary (34.64 ha)
- Catchment Area (1678.16 ha)



92°22'45"E

92°23'0"E



26°14'0"N

26°14'0"N

No 2 Solmari Village

26°13'45"N

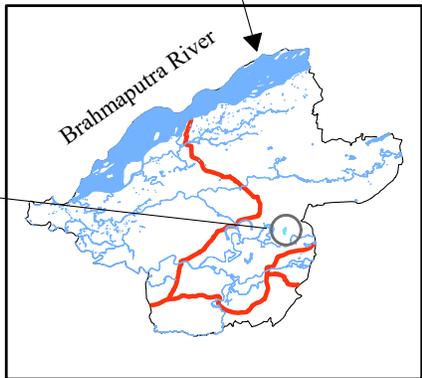
26°13'45"N

Paddy Field

26°13'30"N

26°13'30"N

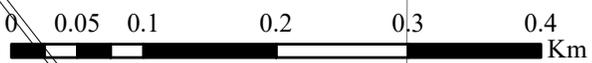
Paddy Field



LOCATION MAP OF SOLMARI BEEL, MORIGAON

Legend

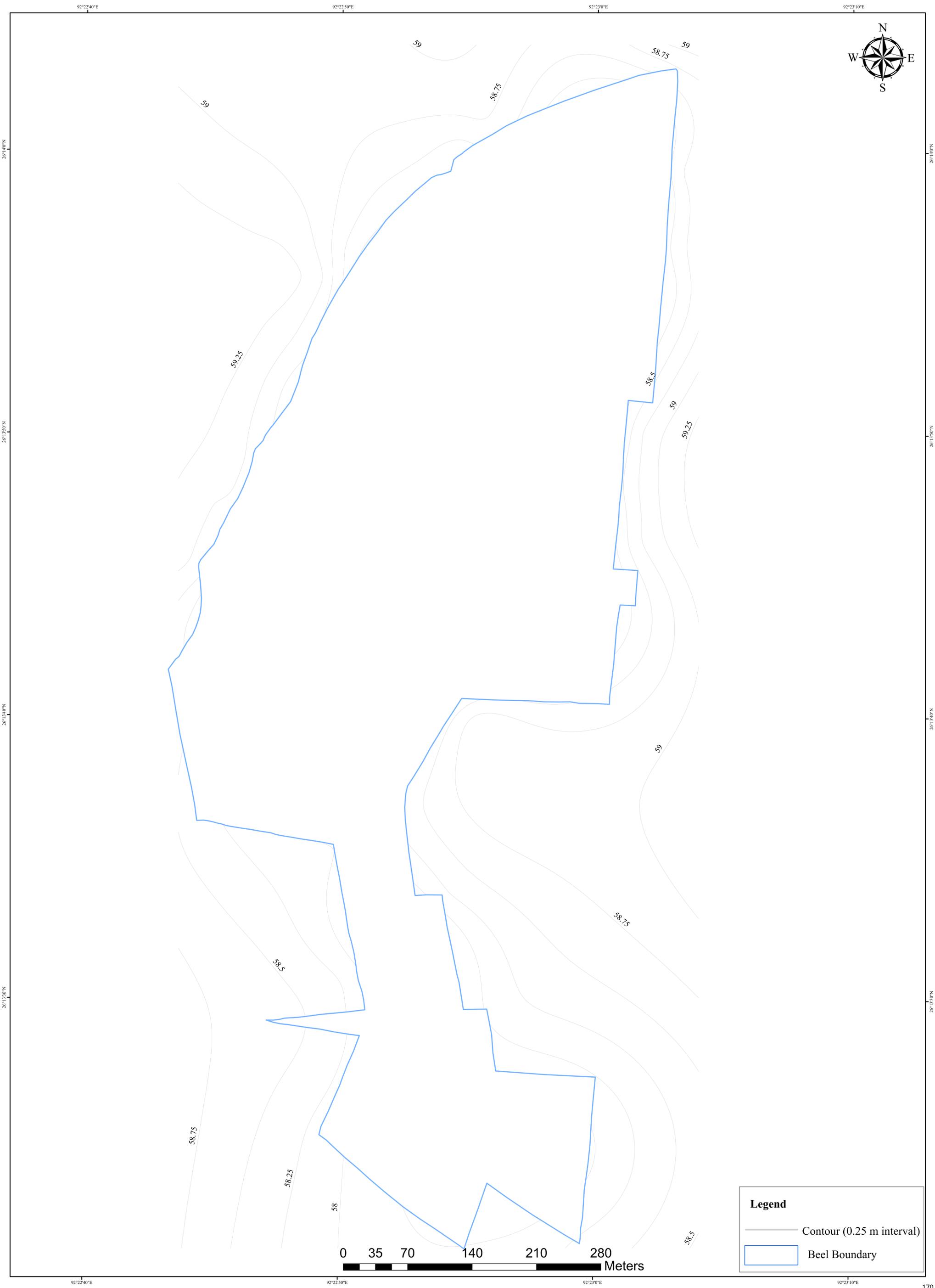
- Road
- Beel Boundary (64.64 ha)



92°22'45"E

92°23'0"E

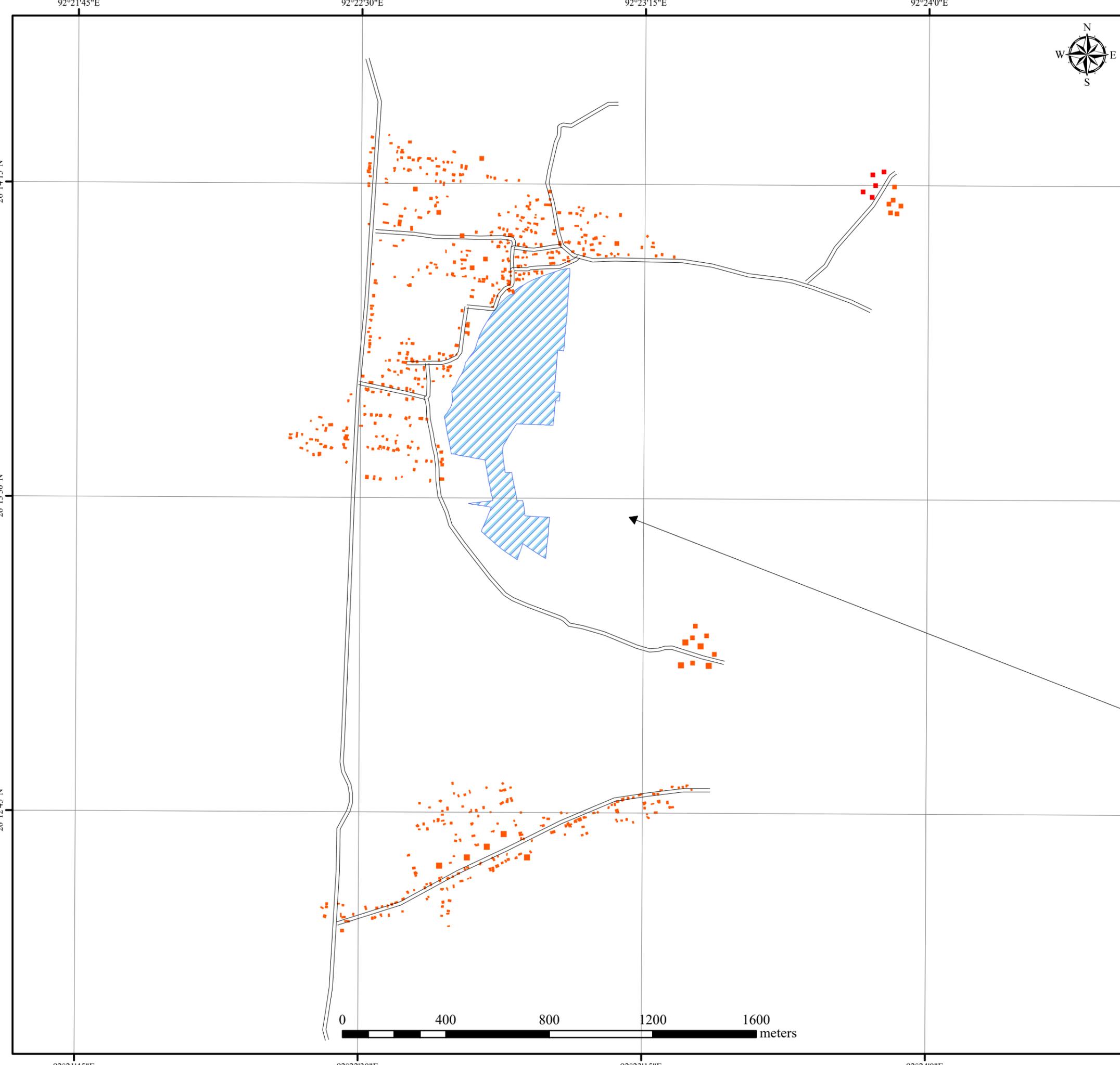
CONTOUR MAP OF SOLMARI BEEL, MORIGAON



Legend

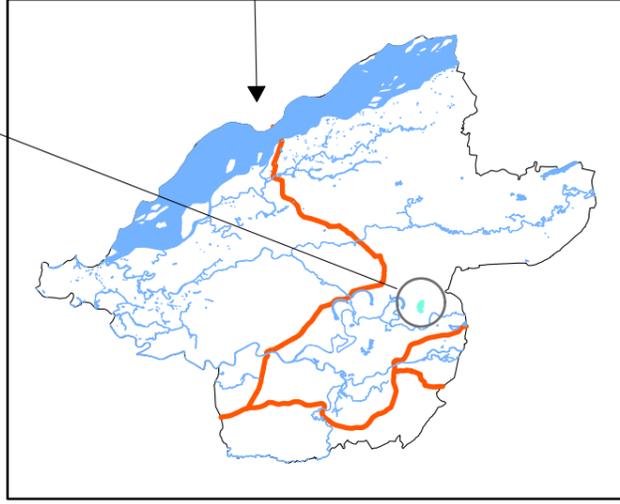
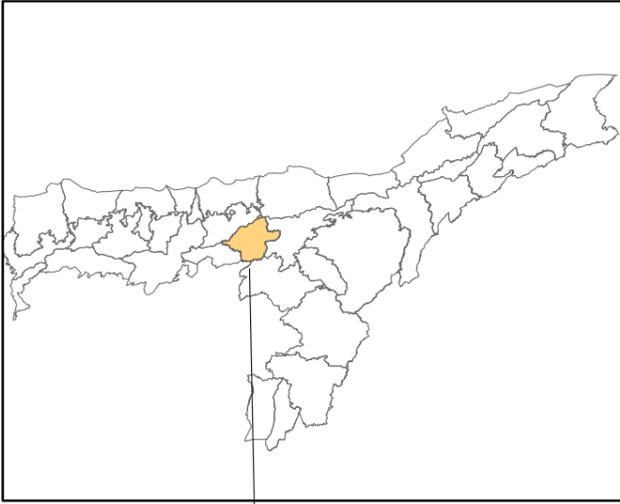
- Contour (0.25 m interval)
- Beel Boundary

0 35 70 140 210 280 Meters



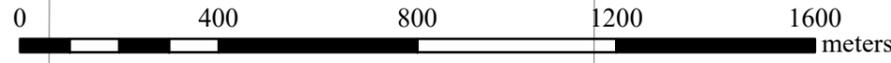
**BENEFICIARY HOUSEHOLD
MAP OF SOLMARI BEEL,
MORIGAON**

The map indicates that approximately 200 families are directly benefited, while an estimated 1000–1,200 families are indirectly benefited.

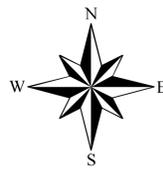


Legend

-  Road
-  Household
-  Beel Boundary (34.64 ha)



BATHYMETRIC CONTOUR MAP OF SOLMARI BEEL, MORIGAON



26°13'40"N

26°13'50"N

26°13'40"N

26°13'30"N

26°13'20"N

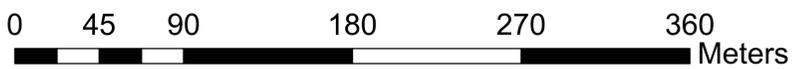
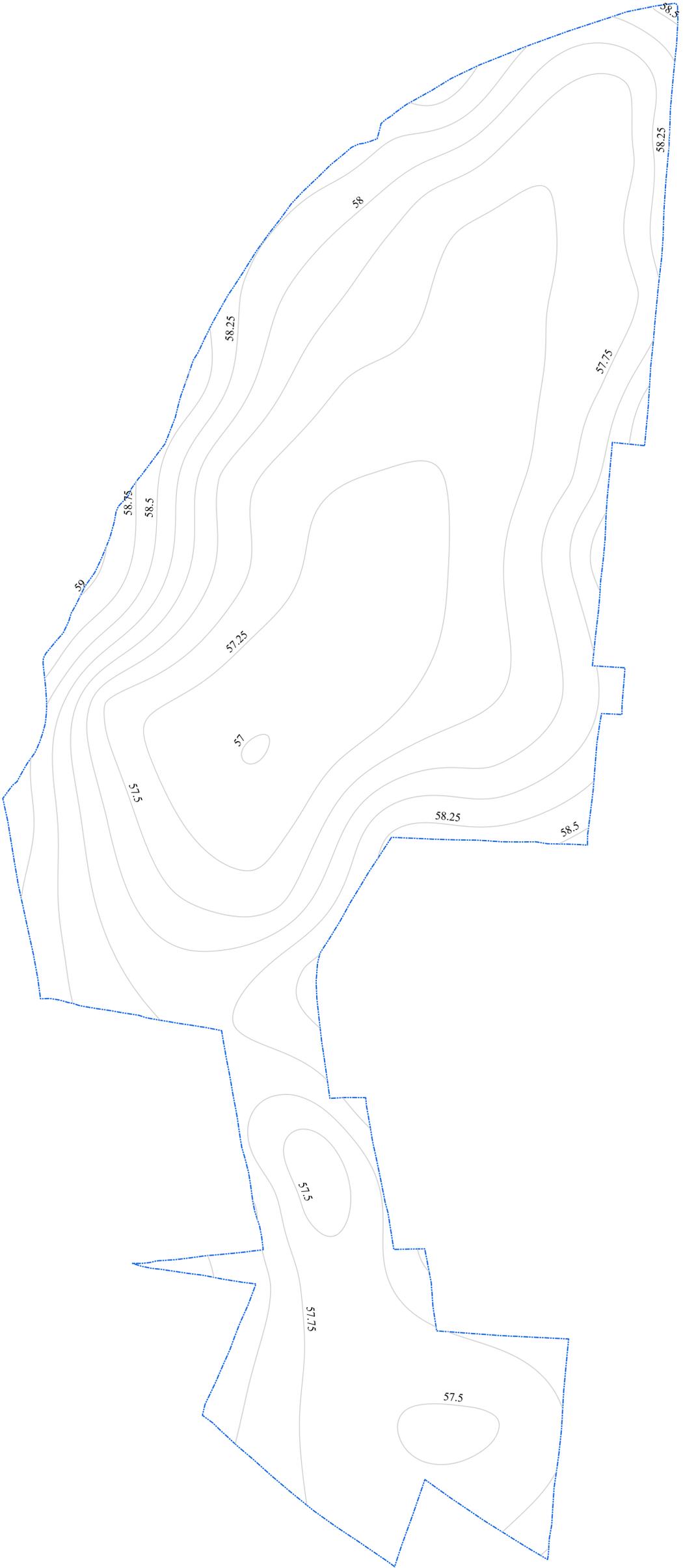
26°13'40"N

26°13'50"N

26°13'40"N

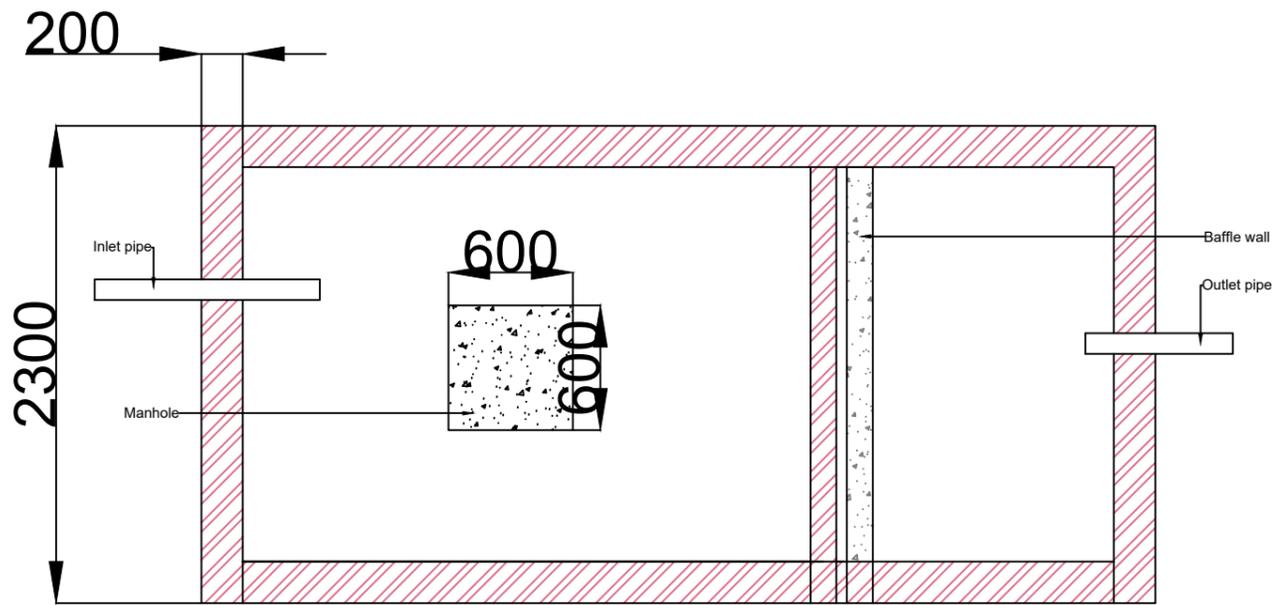
26°13'30"N

26°13'20"N

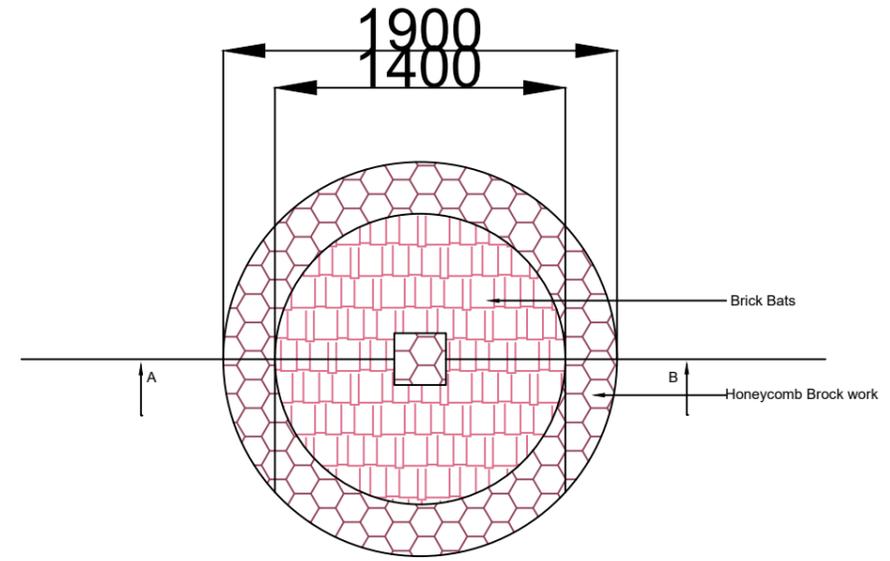


Legend

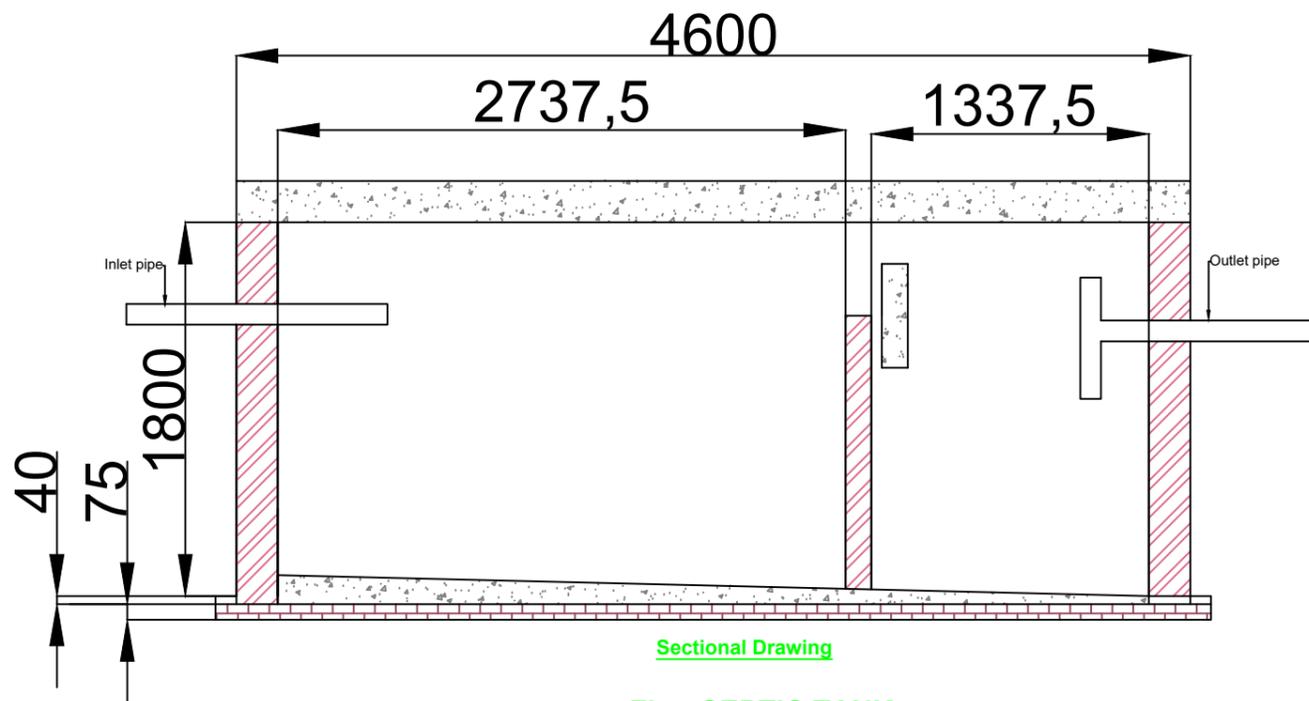
- Bathymetric Contour
- Beel Boundary



Plan Drawing

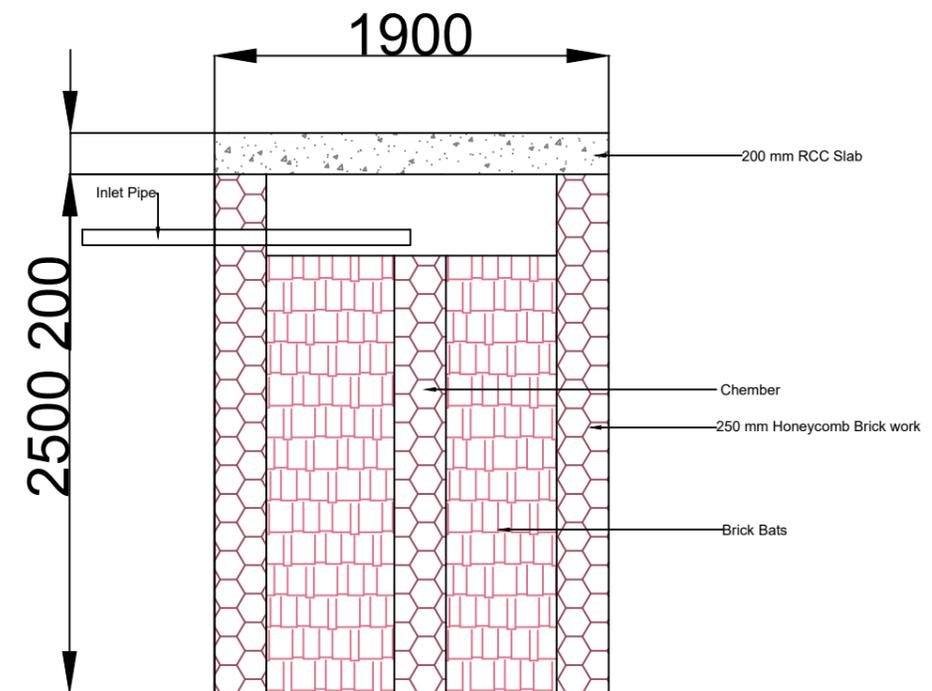


Plan Drawing



Sectional Drawing

Fig:- SEPTIC TANK



Sectional Drawing

Fig:- SOAK PIT

KEY PLAN

REFERENCE DRAWING

NO	DRAWING NO.	DESCRIPTION

GENERAL NOTES

- ALL DIMENSION ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

LEGEND

NO	DATE	DESCRIPTION	BY	CHECKED	APPROVED

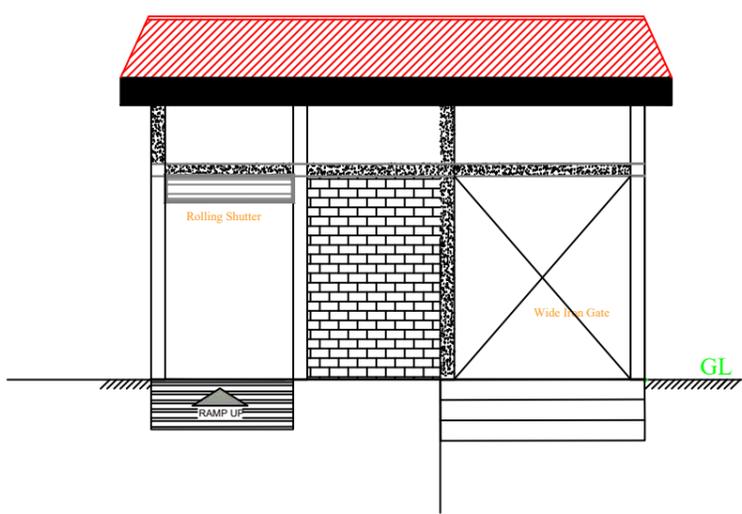
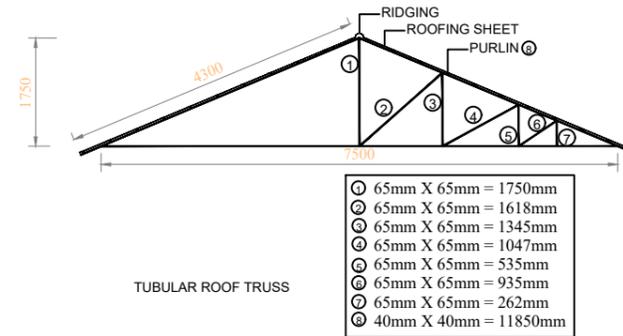
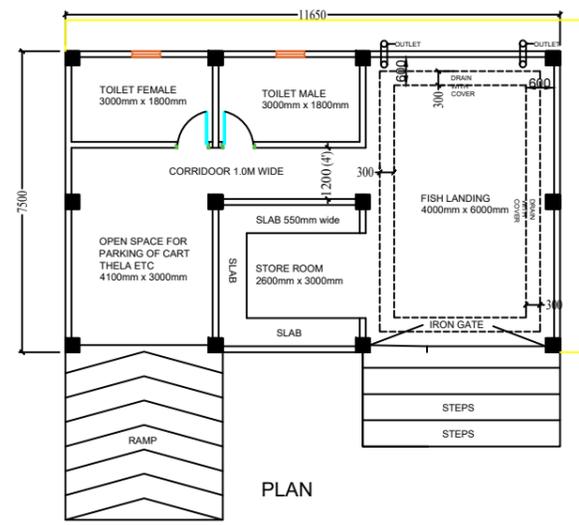
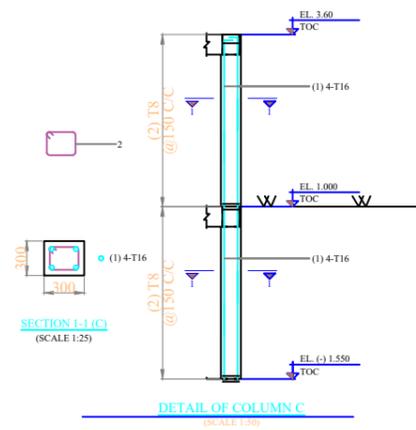
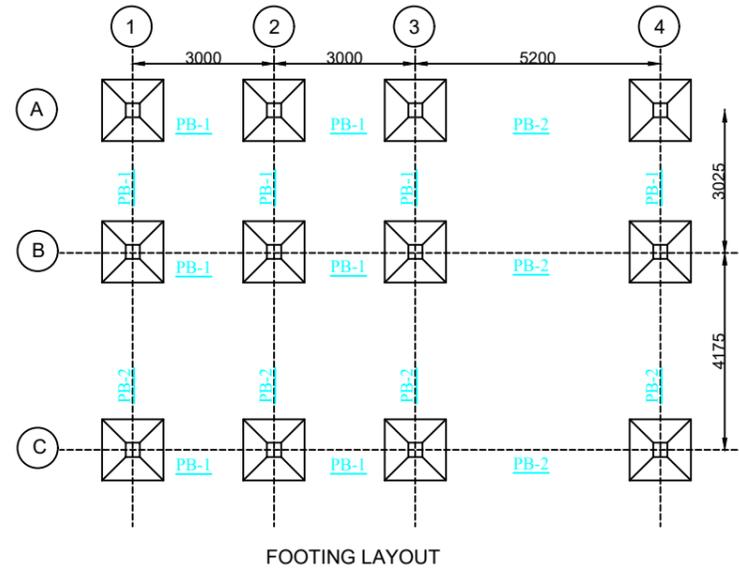
PROJECT	CLIENT
SWIFT DPR	ARIAS

DRAWING TITLE	SCALE	FORMAT	DRAWING NUMBER	SHEET NUMBER
COMMUNITY HALL SEPTIC TANK AND SOAK PIT	A3			180

SUMATO GLOBALTECH PVT LTD	AVATAR COMPLEX, NAHARANI PATH, DISPUR GUWAHATI, ASSAM
Architects & Consultant	

NOTES

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2. All dimensions are in millimeters except where mentioned otherwise.
3. Drawings are not to be scaled, written dimensions are to be followed. All discrepancies to be brought to the notice of the Architect and resolved before commencement of any work.
4. This drawing is to be read in conjunction with details, large scale drawings, structural, plumbing, electrical and other relevant drawings.
5. Detail drawings shall supercede smaller scale drawings and notes.
6. All lintel lvl. is from finish floor lvl.



NOTE:

1. COLUMN SIZE = 300MM X 300MM
2. PLINTH BEAM SIZE = 300MM X 350MM
3. BEAM SIZE ABOVE GL = 200MM X 250MM
4. SIZE OF LINTEL = 150MM X 150MM
5. SIZE OF WINDOW = 1.50M X 1.20M
6. SIZE OF DOOR = 0.75M X 1.80M

DESCRIPTION

CLIENT:
ARIAS SOCIETY

PROJECT TITLE:
Sustainable Wetlands and Integrated Fisheries Transformation (SWIFT) Project

DRAWING CONTENTS:
PLAN ELEVATION & CROSS SECTION OF FISH LANDING STRUCTURE

DRAWING NO:

DRAWING TITLE:-
PLAN & SECTION

SCALE:
DATE : 12-01-2025

PAPER SIZE: A3

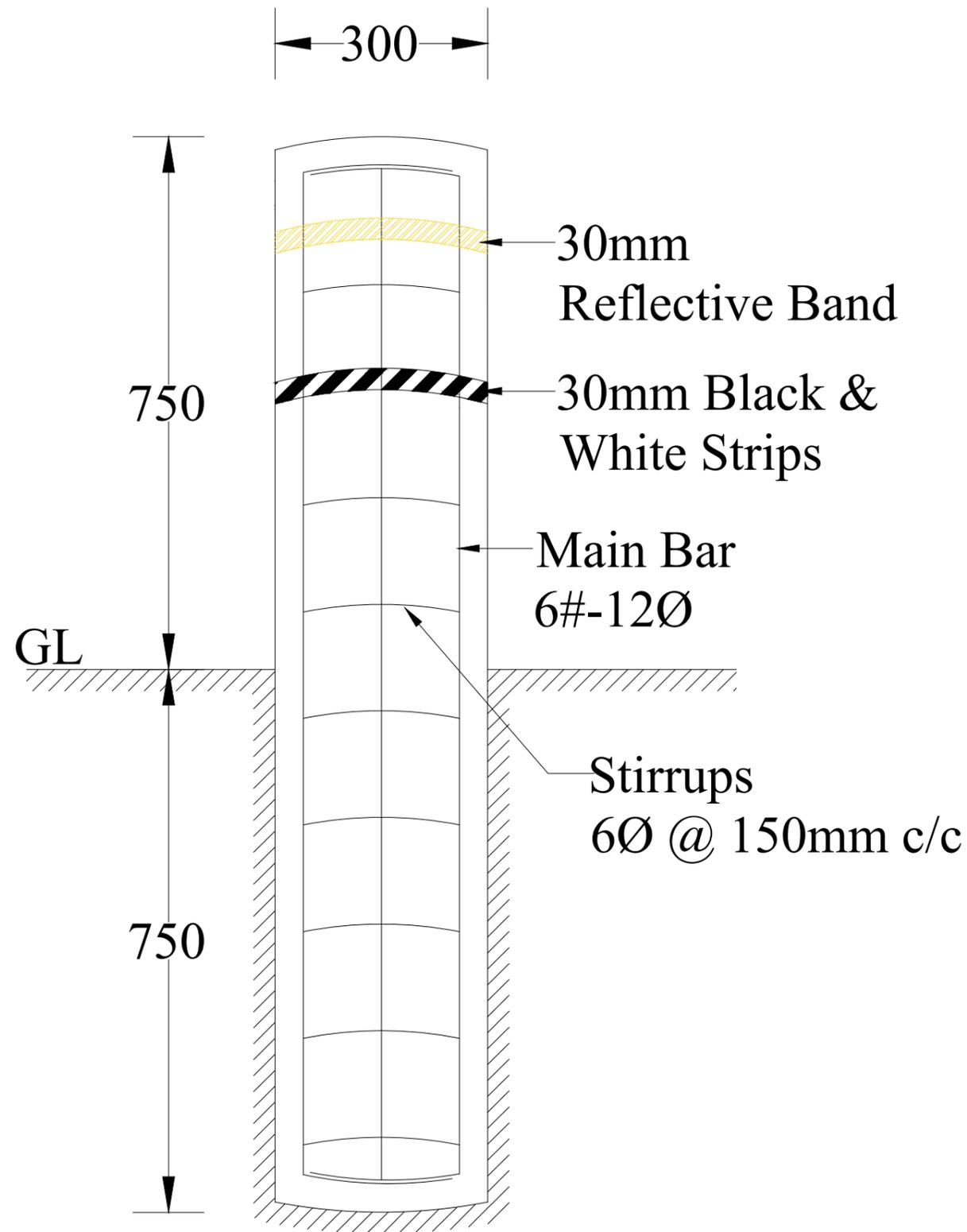
SIGNATURE:

DESIGNED BY:

CONSULTANT ►

SUMATO GLOBALTECH PVT LTD

REVISIONS



KEY PLAN

REFERENCE DRAWING

NO	DRAWING NO.	DESCRIPTION

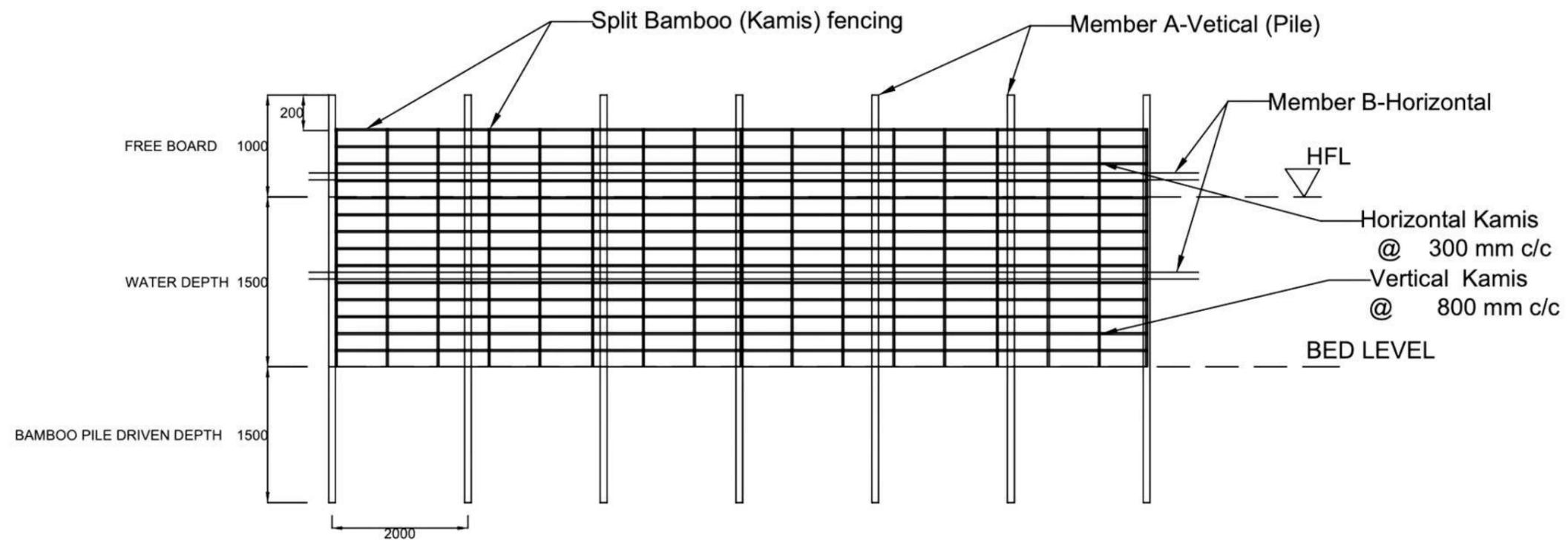
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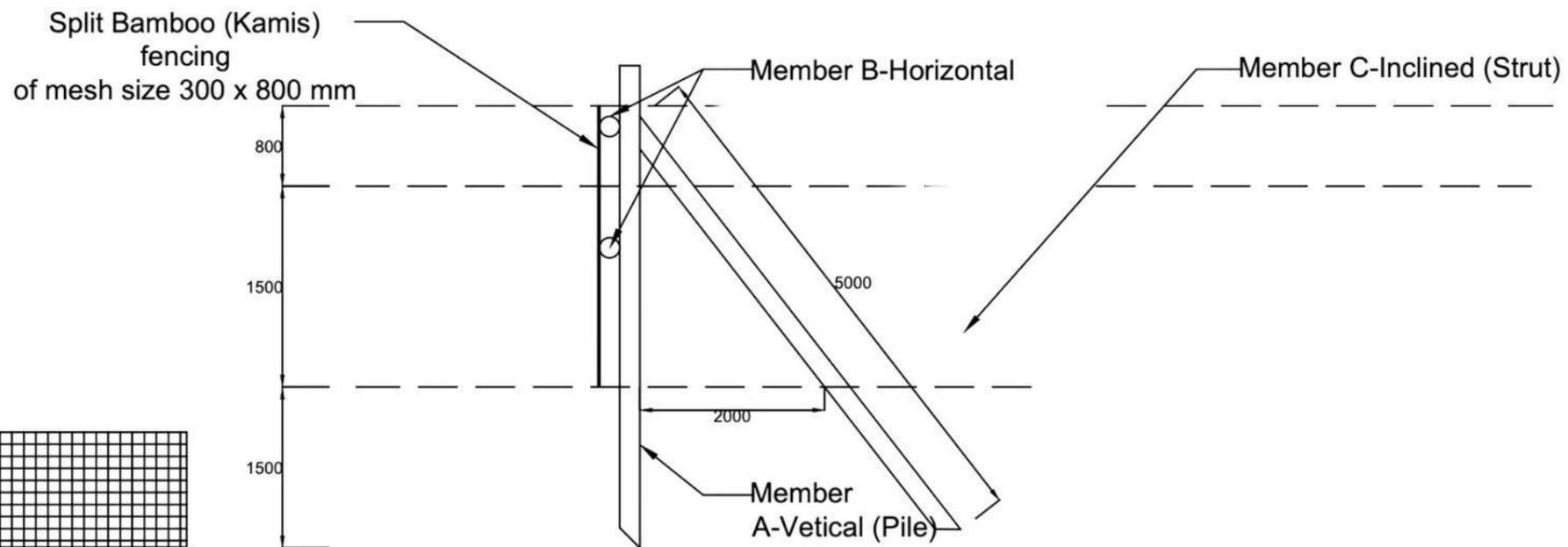
LEGEND

NO	DATE	DESCRIPTION	DRAWN	CHECKED	APPROVED

PROJECT SWIFT DPR		CLIENT ARIAS	
DRAWING TITLE COMMUNITY HALL		NO 	SHEET
SUMATO GLOBALTECH PVT LTD Architects & Consultant		AVATAR COMPLEX KANDAMBA PATEL, DESHPANDE DUMBAKATI-781008	



PEN CULTURE STRUCTURE AT BEEL/WETLAND FISHERIES. (FRONT-ELEVATION)



URE STRUCTURE AT BEEL/WETLAND

KEY PLAN

REFERENCE DRAWING

NO.	DRAWING NO.	DESCRIPTION

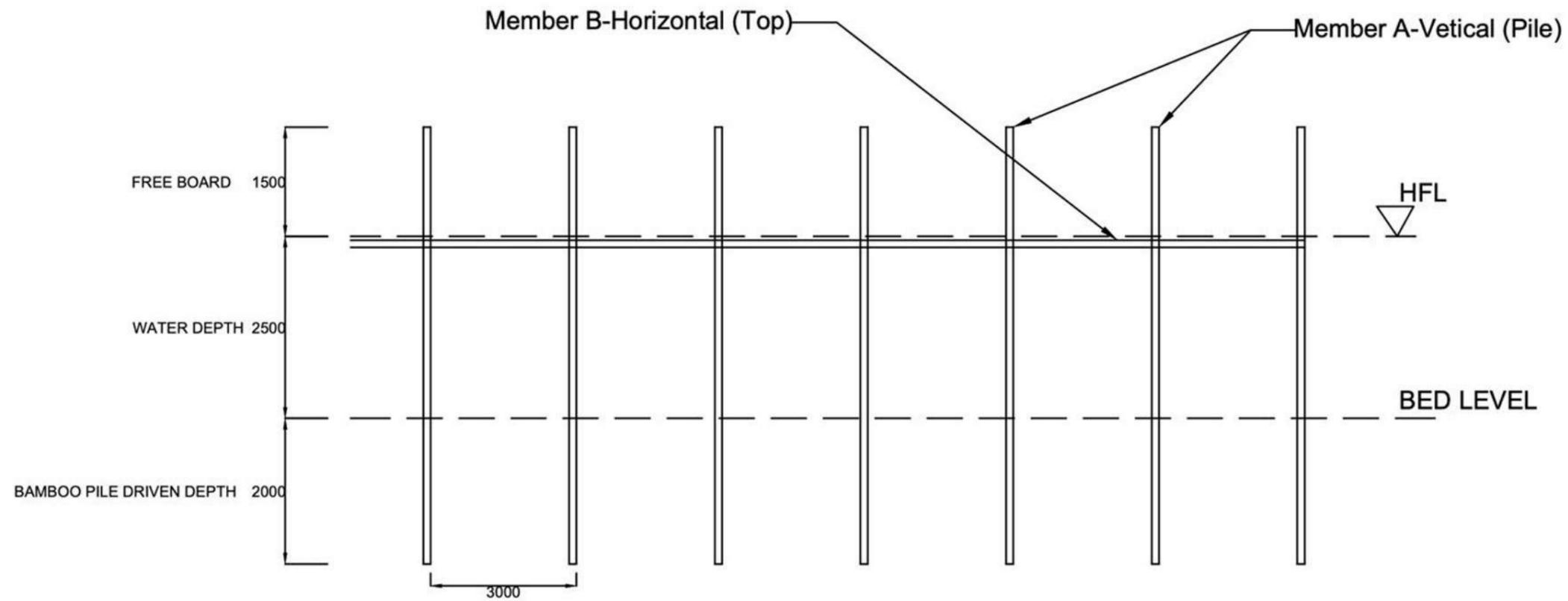
GENERAL NOTES

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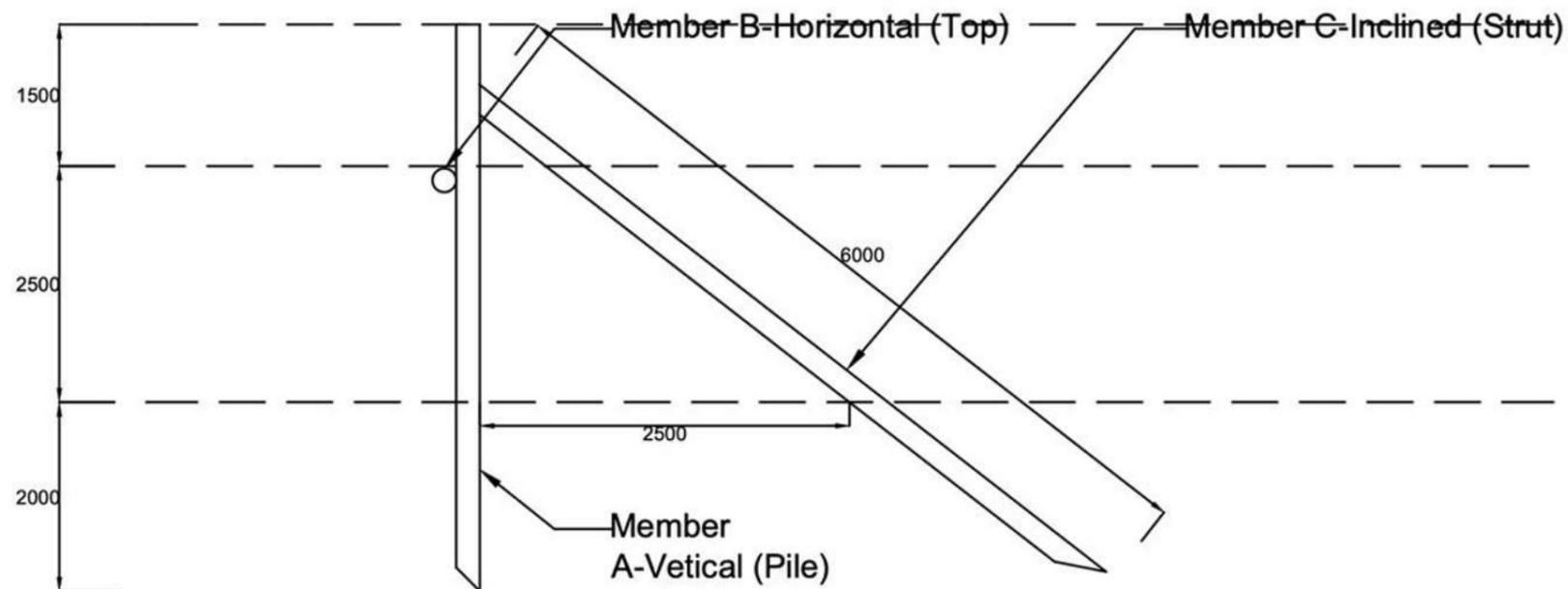
LEGEND

NO.	REV.	DATE	BY	CHKD.	APPV.

PROJECT	CLIENT
SWIFT DPR	ARIAS
DRAWING TITLE	
PEN CULTURE	
SUMATO GLOBAL TECH PVT LTD	AVATAR COMPLEX, RAJAJANATHALAS, DISPUR, GUWAHATI, ASSAM
Architects & Consultant	



KATAL/CATTLE FISHING STRUCTURE AT BEEL/WETLAND FISHERIES. (FRONT-ELEVATION)



KATAL/CATTLE FISHING STRUCTURE AT BEEL/WETLAND FISHERIES. (SIDE-ELEVATION)

KEY PLAN

REFERENCE DRAWING

NO	DRAWING NO.	DESCRIPTION

GENERAL NOTES

1. ALL DIMENSION ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

LEGEND

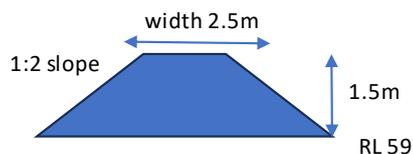
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PROJECT	CLIENT
SWIFT DPR	ARIAS
DRAWING TITLE	
KATAL FISHING	
SUMATO GLOBAL TECH PVT LTD	AVATAR COMPLEX, RAJAJAN PATE, DISPUR GUWAHATI, ASSAM
Architects & Consultant	

Earth cutting filling statement of Solmari Embekment and Road

Mean area method

Name	Embakment A
Ground level (RL)	59
Desired hight	1.5
slope (1:2)	2
Embankment top width	2.5
top RL of embakment	60.5



Total earthwork required

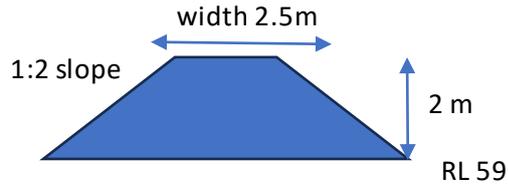
Chainage (m)	Elevation (m)	Depth (D)	Area	Mean Area	Length	Quantity of f
0	58.5697	1.9303	12.2778662	0	0	0
30	58.4141	2.0859	13.9167076	13.0972869	30	392.918607
60	58.4431	2.0569	13.6039252	13.7603164	30	412.809493
90	58.8187	1.6813	9.85678938	11.7303573	30	351.910719
120	58.8239	1.6761	9.80887242	9.8328309	30	294.984927
150	58.8901	1.6099	9.20830602	9.50858922	30	285.257677
180	58.9613	1.5387	8.58194538	8.8951257	30	266.853771
210	58.9421	1.5579	8.74885482	8.6654001	30	259.962003
240	58.8378	1.6622	9.68131768	9.21508625	30	276.452587
270	58.674	1.826	11.233552	10.4574348	30	313.723045
300	58.5921	1.9079	12.0499148	11.6417334	30	349.252002
330	58.7245	1.7755	10.7435505	11.3967327	30	341.90198
360	58.7778	1.7222	10.2374457	10.4904981	30	314.714943
390	58.6964	1.8036	11.0149459	10.6261958	30	318.785874
420	58.4546	2.0454	13.4808223	12.2478841	30	367.436524
450	58.2377	2.2623	15.8917526	14.6862875	30	440.588624
480	58.2332	2.2668	15.9437645	15.9177585	30	477.532756
510	58.2686	2.2314	15.5367919	15.7402782	30	472.208346
540	58.3266	2.1734	14.8808351	15.2088135	30	456.264406
570	58.3268	2.1732	14.8785965	14.8797158	30	446.391474
600	58.3504	2.1496	14.6155603	14.7470784	30	442.412352
630	58.5937	1.9063	12.0337094	13.3246349	30	399.739046
660	58.5668	1.9332	12.3075245	12.1706169	30	365.118508
690	58.3442	2.1558	14.6844473	13.4959859	30	404.879576
720	58.1586	2.3414	16.8178079	15.7511276	30	472.533828
750	58.0988	2.4012	17.5345229	17.1761654	30	515.284962
780	58.1789	2.3211	16.5777604	17.0561417	30	511.68425

810	58.3903	2.1097	14.1759182	15.3768393	30	461.305179
840	58.6235	1.8765	11.7337545	12.9548363	30	388.64509
870	58.5078	1.9922	12.9182217	12.3259881	30	369.779643
900	58.2707	2.2293	15.512807	14.2155143	30	426.46543
930	58.2274	2.2726	16.0109215	15.7618643	30	472.855928
960	58.2293	2.2707	15.988907	15.9999143	30	479.997427
990	58.1398	2.3602	17.0415881	16.5152475	30	495.457426
1020	58.1783	2.3217	16.5848318	16.8132099	30	504.396298
1050	58.0718	2.4282	17.8628105	17.2238211	30	516.714634
1080	58.0166	2.4834	18.5430511	18.2029308	30	546.087924
1110	58.171	2.329	16.670982	17.6070166	30	528.210497
1140	58.3495	2.1505	14.6255505	15.6482663	30	469.447988
1170	58.4006	2.0994	14.0634607	14.3445056	30	430.335168
1200	58.2372	2.2628	15.8975277	14.9804942	30	449.414826
1230	58.352	2.148	14.597808	15.2476678	30	457.430035
1260	58.4356	2.0644	13.6844947	14.1411514	30	424.234541
1290	58.4351	2.0649	13.689874	13.6871844	30	410.615531
1320	58.3154	2.1846	15.0064543	14.3481642	30	430.444925
1350	58.1902	2.3098	16.4448521	15.7256532	30	471.769596
1380	58.3178	2.1822	14.9794937	15.7121729	30	471.365186
1410	58.36	2.14	14.5092	14.7443468	30	442.330405
1440	58.0978	2.4022	17.5466297	16.0279148	30	480.837445
1470	58.1618	2.3382	16.7798585	17.1632441	30	514.897322
1500	58.3462	2.1538	14.6622089	15.7210337	30	471.63101
1530	58.5722	1.9278	12.2523257	13.4572673	30	403.718018
1560	58.5372	1.9628	12.6121677	12.4322467	30	372.9674
1590	58.4802	2.0198	13.2086841	12.9104259	30	387.312776
1620	58.4832	2.0168	13.1769645	13.1928243	30	395.784728
1650	58.5307	1.9693	12.679535	12.9282497	30	387.847492
1680	58.4673	2.0327	13.3454886	13.0125118	30	390.375353
1710	58.3942	2.1058	14.1332873	13.7393879	30	412.181638
1740	58.3916	2.1084	14.1617011	14.1474942	30	424.424826
1770	58.3032	2.1968	15.1438605	14.6527808	30	439.583424
1800	58.3124	2.1876	15.0401875	15.092024	30	452.76072
1830	58.3553	2.1447	14.5612262	14.8007069	30	444.021206
1860	58.2405	2.2595	15.8594305	15.2103283	30	456.30985
1890	58.0495	2.4505	18.1361505	16.9977905	30	509.933715
1920	57.9795	2.5205	19.0070905	18.5716205	30	557.148615
1950	58.0794	2.4206	17.7701087	18.3885996	30	551.657988
1980	57.8308	2.6692	20.9222573	19.346183	30	580.38549
2010	57.7471	2.7529	22.0391668	21.4807121	30	644.421361
2040	57.7796	2.7204	21.6021523	21.8206596	30	654.619787
2070	57.9333	2.5667	19.5926478	20.5974001	30	617.922001
2100	57.9517	2.5483	19.3584158	19.4755318	30	584.265953

2130	57.7812	2.7188	21.5807469	20.4695813	30	614.08744
2160	57.7914	2.7086	21.4445279	21.5126374	30	645.379122
2190	57.829	2.671	20.945982	21.195255	30	635.857649
2220	57.8982	2.6018	20.0432265	20.4946042	30	614.838127
2250	57.9541	2.5459	19.3279636	19.6855951	30	590.567852
2280	57.7944	2.7056	21.4045427	20.3662532	30	610.987595
2310	57.6944	2.8056	22.7567827	22.0806627	30	662.419882
2340	57.4944	3.0056	25.5812627	24.1690227	30	725.070682
2370	57.5944	2.9056	24.1490227	24.8651427	30	745.954282
2400	57.6944	2.8056	22.7567827	23.4529027	30	703.587082
2430	57.8944	2.6056	20.0923027	21.4245427	30	642.736282
2460	57.9944	2.5056	18.8200627	19.4561827	30	583.685482
2490	57.8944	2.6056	20.0923027	19.4561827	30	583.685482
2510	57.6944	2.8056	22.7567827	21.4245427	20	428.490854
2540	57.8944	2.6056	20.0923027	21.4245427	30	642.736282
2550	58.0214	2.4786	18.4834159	19.9439793	10	199.439793
2580	58.0537	2.4463	18.0845174	18.2839667	30	548.519
2610	57.9046	2.5954	19.9607023	19.0226099	30	570.678296
2640	57.8619	2.6381	20.5143932	20.2375478	30	607.126433
2670	57.9221	2.5779	19.7358868	20.12514	30	603.754201
2700	57.9922	2.5078	18.8476217	19.2917543	30	578.752628
2730	58.0003	2.4997	18.7462502	18.7969359	30	563.908078
2760	58.0411	2.4589	18.2396284	18.4929393	30	554.788179
2790	58.104	2.396	17.471632	17.8556302	30	535.668906
2820	58.19	2.31	16.4472	16.959416	30	508.78248
2850	58.2941	2.2059	15.2467396	15.8469698	30	475.409094
2880	58.3711	2.1289	14.3866804	14.81671	30	444.501301
2910	58.4127	2.0873	13.9318926	14.1592865	30	424.778595
2940	58.4992	2.0008	13.0084013	13.4701469	30	404.104408
2970	58.6192	1.8808	11.7768173	12.3926093	30	371.778278
						47555.9878

Mean area method

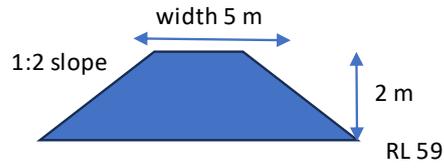
Name	Embakment A
Ground level	59
Desired high	2
slope (1:2)	2
Embankmen	2.5
top RL of em	61



Chainage (m)	Elevation (m)	Depth (D)	Area	Mean Area	Length	Quantity of f
0	58.1627	2.8373	23.1937926	0	0	0
30	58.0228	2.9772	25.1704397	24.1821161	30	725.463484
60	57.9075	3.0925	26.8583625	26.0144011	30	780.432033
90	57.814	3.186	28.266192	27.5622773	30	826.868318
120	57.7485	3.2515	29.2732545	28.7697233	30	863.091698
150	57.7188	3.2812	29.7355469	29.5044007	30	885.132021
180	57.7282	3.2718	29.5888505	29.6621987	30	889.86596
210	57.7353	3.2647	29.4782822	29.5335663	30	886.00699
240	57.6575	3.3425	30.7008625	30.0895723	30	902.68717
270	57.5722	3.4278	32.0691257	31.3849941	30	941.549823
300	57.5913	3.4087	31.7602214	31.9146735	30	957.440206
330	57.6751	3.3249	30.42217	31.0911957	30	932.735871
360	57.816	3.184	28.235712	29.328941	30	879.86823
390	58.0021	2.9979	25.4695588	26.8526354	30	805.579062
						11276.7209

Mean area method

Name	Embakment A
Ground level (RL)	59
Desired hight	59.5
slope (1:2)	2
Embankment top width	5
FL	59.5



CH (m)	GL (m)	FL (m)	Depth (h)	Area (sqm)	Mean Area	Length	Qty (cum)
0	59.42	59.5	0.08	0.4	0	0	0
30	59.21	59.5	0.29	1.6	1	30	29.95
60	59.47	59.5	0.03	0.17	0.88	30	26.55
90	58.55	59.5	0.95	6.57	3.37	30	101.04
120	58.38	59.5	1.12	8.15	7.36	30	220.68
150	58.24	59.5	1.26	9.44	8.79	30	263.8
160	57.15	59.5	2.35	22.78	16.11	10	161.13

803.15