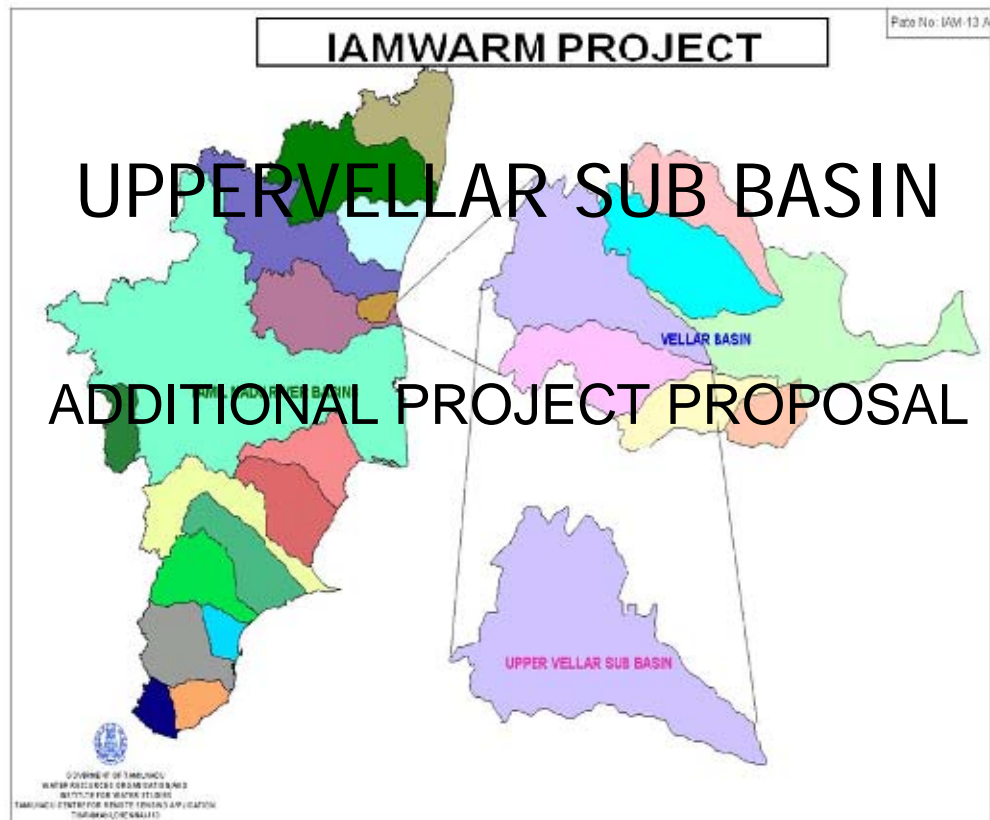




PUBLIC WORKS DEPARTMENT

WATER RESOURCES ORGANISATION



DPR ESTIMATE Rs. 154.50 LAKHS

TRICHY REGION, TRICHY
UPPER CAUVERY BASIN CIRCLE, SALEM
SARABANGA BASIN DIVISION, NAMAKKAL.

Additional proposals for providing Lining of Irrigation Channel and Flow Measuring Device in Upper Vellar Sub Basin (Phase I) under IAMWARM Project

The lining of irrigation channel and installation of measuring device has been proposed for Phase I and II sub basins by utilizing the Project Savings as discussed with the world bank ,during the implementation support mission from Sept 12-20th 2011.

Accordingly in the Upper Vellar sub basin of Phase I the following works have been proposed.

- i) i) Lining of irrigation channel below the tanks sluice using C.C. M 15 as per sketch enclosed
- ii) Installing flow measuring device in the irrigation channel as per sketch
- iii) L.S provision of 2.8 % for Provision of labour welfare @ 0.30 % and provision for contingencies, advertisement charges , photographic charges @ 2.5%

The package details are appended separately and works are proposed to be taken up under national shopping procedure

The total cost for the DPR works out to Rs.154.50 lakhs

(Nodal officer) / Executive Engineer, WRD, Sarabanga Basin Subdivision, Namakkal.	Superintending Engineer,WRD, Uper Cauvery Basin Circle, Salem.	Chief Engineer, WRD, Trichy Region Trichy.
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FORMAT- I

Name of Region
 Name of Circle
 Name of Division
 Name of Sub Basin

Trichy.
 Upper Cauvery Basin Circle,Trichy.
 Sarabanga Basin Subdivision, Namakkal.
 Upper Vellar.

Total Number of Tanks taken up under IAMWARM :

49

NO OF TANKS, SLUICES IN EACH PACKAGE

Sl. No	Package No	Name of Tank / Anicut / Reservoir	No of Sluices	Flow Measuring Device		Lining the field channel			Total Amount	L.S. Provision @2.80%	Grand Total (Rs. in Lakhs)	Remarks
				No	Amount	Type of soil BC / OS*	Length (m)	Amount				
1	1	Vellalakundam Tank	1	1	10000.00	OS	40	142700.00	152700.00			
2		Kuruchi Tank	1	1	10000.00	BC	27	142200.00	152200.00			
3		Belur Hissa Chinna Eri	3	3	30000.00	BC	83	425600.00	455600.00			
4		Singipuram Tank	3	3	30000.00	BC	83	425600.00	455600.00			
		TOTAL	8	8	80000.00			233	1136100.00	1216100.00	33900.00	1250000.00
5	2	Kottavadi Tank	3	3	30000.00	BC	82	442400.00	472400.00			
6		Kalyanagiri Tank	1	1	10000.00	OS	40	144600.00	154600.00			
7		Kalleripatti Tank	2	2	20000.00	BC	54	288400.00	308400.00			
8		Abinavam Tank	1	1	10000.00	BC	27	144200.00	154200.00			
		TOTAL	7	7	70000.00			203	1019600.00	1089600.00	30400.00	1120000.00
9	3	Chinna Krishnapuram Tank	2	2	20000.00	BC	54	288500.00	308500.00			
10		Puthiragoundanpalayam Tank	3	3	30000.00	BC	82	442600.00	472600.00			
11		Umayalpuram Tank	2	2	20000.00	OS	75	288400.00	308400.00			
		TOTAL	7	7	70000.00			211	1019500.00	1089500.00	30500.00	1120000.00

12	4	Erramasamudram Tank	5	5	50000.00	BC	137	720200.00	770200.00			
13		Thalavapatti Tank	3	3	30000.00	BC	78	415800.00	445800.00			
		TOTAL	8	8	80000.00		215	1136000.00	1216000.00	34000.00	1250000.00	
14	5	Kallar Tank	1	1	10000.00	BC	27	144200.00	154200.00			
15		Kalichettiyur Tank	1	1	10000.00	BC	27	144200.00	154200.00			
16		Chinnamasamudram Tank	2	2	20000.00	BC	56	294200.00	314200.00			
		TOTAL	4	4	40000.00		110	582600.00	622600.00	17400.00	640000.00	
17	6	Attur pudu Tank	2	2	20000.00	BC	54	288400.00	308400.00			
18		Ayyanar Kovil Eri(Kalleri)	3	3	30000.00	BC	81	435000.00	465000.00			
		TOTAL	5	5	50000.00		135	723400.00	773400.00	21600.00	795000.00	
19	7	Kallanatham Tank	4	4	40000.00	BC	108	574300.00	614300.00			
20		Ammampalayam Muttal Tank	1	1	10000.00	BC	27	144200.00	154200.00			
		TOTAL	5	5	50000.00		135	718500.00	768500.00	21500.00	790000.00	
21	8	Kalleri Chokka nathapuram Tank	1	1	10000.00	OS	40	143700.00	153700.00			
22		Lakshmanasamudram Tank	2	2	20000.00	BC	54	287400.00	307400.00			
23		Othaiyathur Tank	2	2	20000.00	OS	74	287400.00	307400.00			
		TOTAL	5	5	50000.00		168	718500.00	768500.00	21500.00	790000.00	
24	9	Manivillundan Old Tank	4	4	40000.00	BC	108	576800.00	616800.00			
25		Manivillundan pudu Tank	1	1	20000.00	OS	40	144200.00	164200.00			
26		Deviyakurichi Tank	1	1	10000.00	BC	30	162400.00	172400.00			
		TOTAL	6	6	70000.00		178	883400.00	953400.00	26600.00	980000.00	
27	10	Sarvoy large Tank	5	5	50000.00	BC	138	729800.00	779800.00			
28		Thenkumarai Tank	1	1	10000.00	BC	27	144200.00	154200.00			
		TOTAL	6	6	60000.00		165	874000.00	934000.00	26000.00	960000.00	

29	11	Sivasankarapuram Tank	1	1	10000.00	OS	38	144200.00	154200.00			
30		Thalaivasal Tank	3	3	30000.00	BC	83	441400.00	471400.00			
31		Puthur Tank	2	2	20000.00	OS	55	293400.00	313400.00			
		TOTAL	6	6	60000.00		176	879000.00	939000.00	26000.00	965000.00	
32	12	Periyeri Tank	5	5	50000.00	BC	135	718500.00	768500.00			
		TOTAL	5	5	50000.00		135	718500.00	768500.00	21500.00	790000.00	
33	13	Aragalur Tank	4	4	40000.00	BC	111	590400.00	630400.00			
34		Thiyaganur Tank	2	2	20000.00	BC	54	293400.00	313400.00			
		TOTAL	6	6	60000.00		165	883800.00	943800.00	26200.00	970000.00	
35	14	Sitteri Tank	2	2	20000.00	BC	55	293200.00	313200.00			
36		Arthi Agraharam Tank	2	2	20000.00	BC	55	289400.00	309400.00			
		TOTAL	4	4	40000.00		110	582600.00	622600.00	17400.00	640000.00	
37	15	Govindampalayam Tank	1	1	10000.00	OS	38	143200.00	153200.00			
38		Pulliyankurichi Tank	3	3	30000.00	BC	83	439400.00	469400.00			
		TOTAL	4	4	40000.00		121	582600.00	622600.00	17400.00	640000.00	
39	16	Tiruvalanthurai Tank	3	3	30000.00	BC	83	441400.00	471400.00			
40		Pilankulam Tank	2	2	20000.00	BC	55	288400.00	308400.00			
41		Perunila Tank	1	1	10000.00	BC	27	144200.00	154200.00			
		TOTAL	6	6	60000.00		165	874000.00	934000.00	26000.00	960000.00	
42	17	Kariyanur Tank	3	3	30000.00	BC	81	431000.00	461000.00			
43		Kaikalathur Tank	2	2	20000.00	BC	54	287500.00	307500.00			
		TOTAL	5	5	50000.00		135	718500.00	768500.00	21500.00	790000.00	
TOTAL FOR UPPER VELLAR SUBBASIN			97	97	980000.00		2760	14050600.00	15030600.00	419400.00	15450000.00	0

OR 154.50 LAKHS

Certified that the Tanks included in the originally approved in Upper Vellar Sub Basin DPR alone are considered now.

Certified that the above works have not been taken up in any other Project.

Certified that the field / Irrigation channel drawing type I is adopted in 9 number of tanks having soil other than black cotton soil.

Certified that the field / Irrigation channel drawing type II is adopted in 35 number of tanks having black cotton soil

**(Nodal officer)/ Executive Engineer, WRD,
Sarabanga Basin Subdivision,
Namakkal.**

**Superintending Engineer,WRD,
Uper Cauvery Basin Circle,
Salem.**

**Chief Engineer, WRD,
Trichy Region
Trichy.**

FORMAT II

Name of Region **Trichy.**
 Name of Circle **Uper Cauvery Basin Circle,Trichy.**
 Name of Division **Sarabanga Basin Subdivision, Namakkal.**
 Name of Sub Basin **Upper Vellar.**

Total Number of Tanks taken up under IAMWARM : **49**
 Method of procurement : National shopping
 (Note : Procurement plan to be got approved by World Bank separately)

PACKAGEWISE ABSTRACT

Sl.No	Package No.	Name of Work	No. of Tanks	Flow Measuring Device (NO's)	Length of lining (m)	Total Amount including L.S. (Rs. In Lakhs)	Remarks
1	2	3	4	5	6	7	8
1	AP_1/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Vellalakundam Tank, Kuruchi Tank, Belur Hissa Chinna Eri and Singipuram Tank in Upper Vellar Sub basin in Salem District	4	8	233	12.50	
2	AP_2/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Kottavadi Tank, Kalyanagiri Tank, Kalleripatti Tank and Abinavam Tank in Upper Vellar Sub basin in Salem District	4	7	203	11.20	
3	AP_3/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Chinna Krishnapuram Tank, Puthiragoundanpalayam Tank, Umayalpuram Tank in Upper Vellar Sub basin in Salem District	3	7	211	11.20	
4	AP_4/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Erramasamudram Tank and Thalavapatti Tank in Upper Vellar Sub basin in Salem District	2	8	215	12.50	

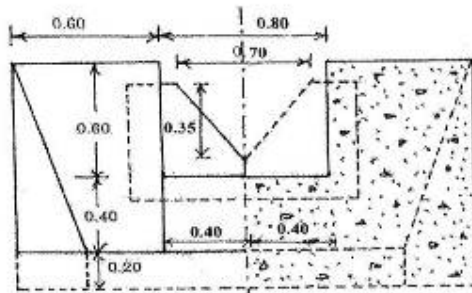
5	AP_5/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Kallar Tank, Kalichettiur Tank, and Chinnamasamudram Tank in Upper Vellar Sub basin in Salem District	3	4	110	6.40	
6	AP_6/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Attur pudu Tank and Ayyanar Kovil Eri(Kalleri) in Upper Vellar Sub basin in Salem District	2	5	135	7.95	
7	AP_7/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Kallanatham Tank and Ammampalayam Muttal Tank in Upper Vellar Sub basin in Salem District	2	5	135	7.90	
8	AP_8/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Kalleri Chokka nathapuram Tank, Lakshmanasamudram Tank and Othaiyathur Tank in Upper Vellar Sub basin in Salem District	3	5	168	7.90	
9	AP_9/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Manivillundan Old Tank, Manivillundan New Tank and Deviyakurichi Tank in Upper Vellar Sub basin in Salem District	3	6	178	9.80	
10	AP_10/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Sarvoy large Tank and Thenkumarai Tank in Upper Vellar Sub basin in Salem District	2	6	165	9.60	
11	AP_11/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Sivasankarapuram Tank, Thalaivasal Tank and Puthur Tank in Upper Vellar Sub basin in Salem District	3	6	176	9.65	
12	AP_12/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Periyeri Tank in Upper Vellar Sub basin in Salem District	1	5	135	7.90	
13	AP_13/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011-2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Aragalur Tank and Thiyaganur Tank in Upper Vellar Sub basin in Salem District	2	6	165	9.70	

14	AP_14/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011- 2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Sitteri Tank and Arthi Agraharaam Tank in Upper Vellar Sub basin in Salem District	2	4	110	6.40	
15	AP_15/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011- 2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Govindampalayam Tank and Pulliyankurichi Tank in Upper Vellar Sub basin in Salem District	2	4	121	6.40	
16	AP_16/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011- 2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Tiruvalanthurai Tank, Pilankulam Tank and Perunila Tank in Upper Vellar Sub basin in Perambalur District	3	6	165	9.60	
17	AP_17/ IAMWARM/ WRD/ UVR/ WORKS/ II / 2011- 2012	Lining in head Irrigation Channel and providing Flow Measuring devices for Kariyanur Tank and Kaikalathur Tank in Upper Vellar Sub basin in Perambalur District	2	5	135	7.90	
		TOTAL	43	97	2760	154.50	

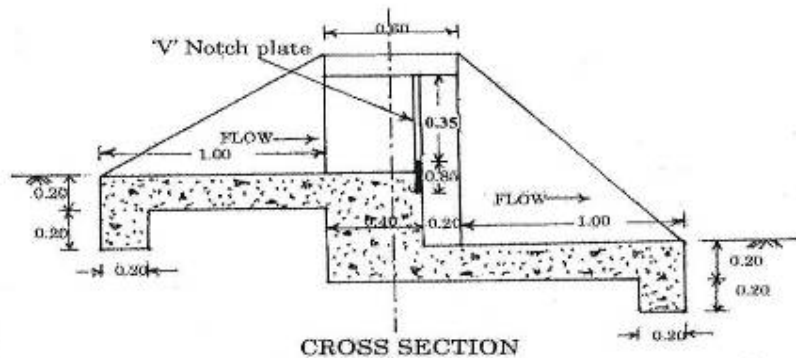
Executive Engineer, WRD,
Sarabanga Basin Subdivision,
Namakkal.

Superintending Engineer,WRD,
Uper Cauvery Basin Circle,
Salem.

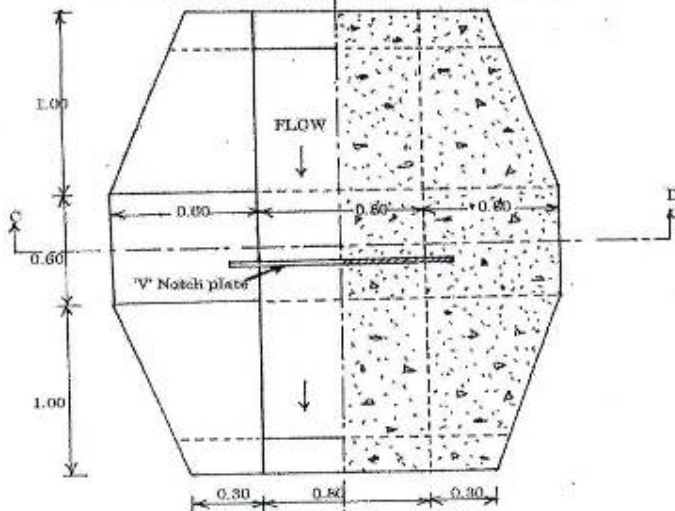
Chief Engineer, WRD,
Trichy Region
Trichy.



HALF FRONT ELEVATION AND HALF SECTIONAL ELEVATION AT 'CZ'



CROSS SECTION



HALF PLAN AT TOP AND HALF PLAN AT BOTTOM

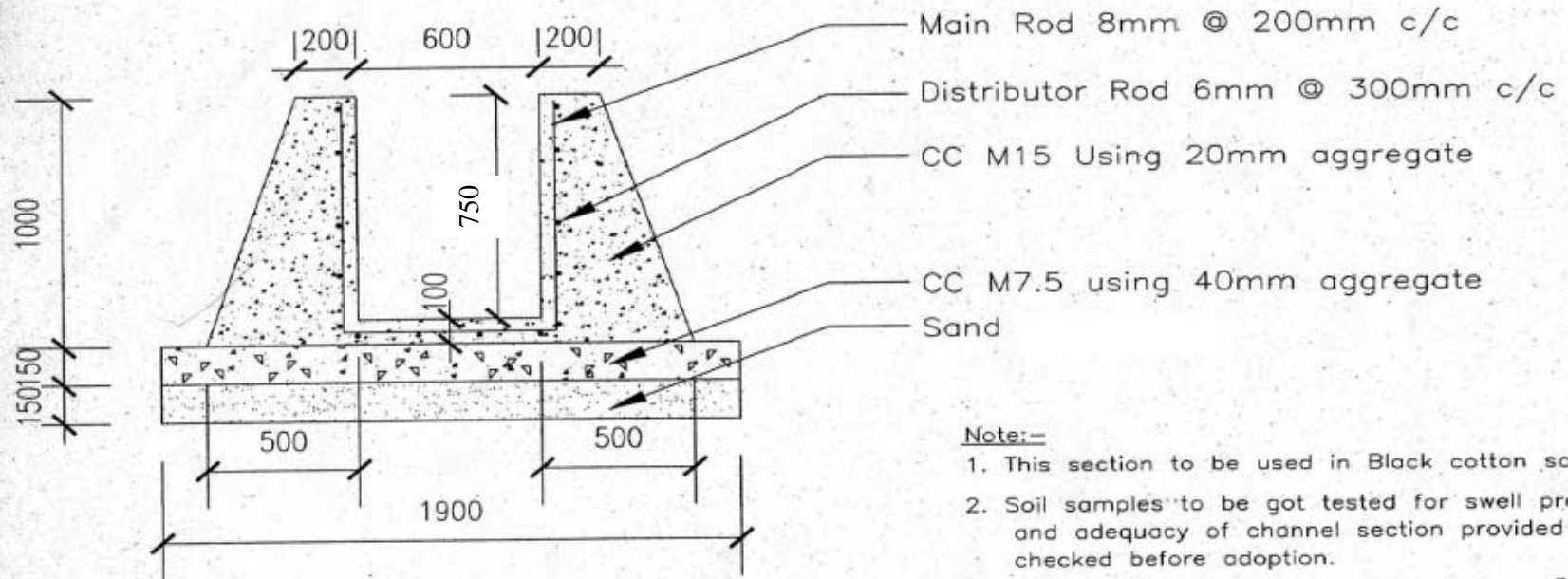
TYPE - C
3 CLASS V-NOTCH

'V' - NOTCH - SALIENT DETAILS (For 1 to 4 C/s)

Discharge		Head Over Crest Cm	V' Notch size Cm	Overall size Cm
Cusec	Litre / sec			
1	26.3	20.5	25 x 50	50 x 85
2	56.6	27	30 x 60	50 x 75
3	85	32	35 x 70	55 x 90
4	113.27	36	42 x 84	60 x 100

TYPICAL SKTECH FOR
PROVIDING MEASURING DEVICE
IN THE SLUICES FOR UPPER
VELLAR SUB BASIN
Scale: 1cm=0.25m
All dimensions are in metre

LINING OF IRRIGATION CHANNEL
TYPICAL CROSS SECTION
FOR BLACK COTTON SOIL



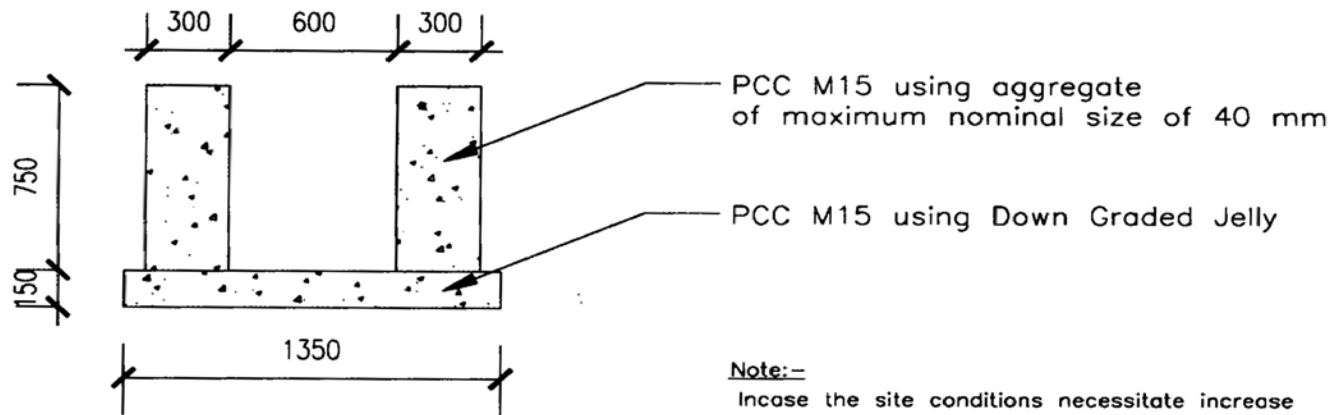
Note:-

1. This section to be used in Black cotton soil.
2. Soil samples to be got tested for swell pressure and adequacy of channel section provided to be checked before adoption.
3. Nominal cover to steel reinforcements = 30 mm

IAMWARM PROJECT
 UPPER VELLAR SUB BASIN
 IRRIGATION CHANNEL LINING

Scale:1:1000
 All dimensions are in mm

TYPICAL CROSS SECTION OF LINED IRRIGATION CHANNEL



Note:-

Incase the site conditions necessitate increase the Channel section requisite modifications be made there-in duly ensuring the stability section

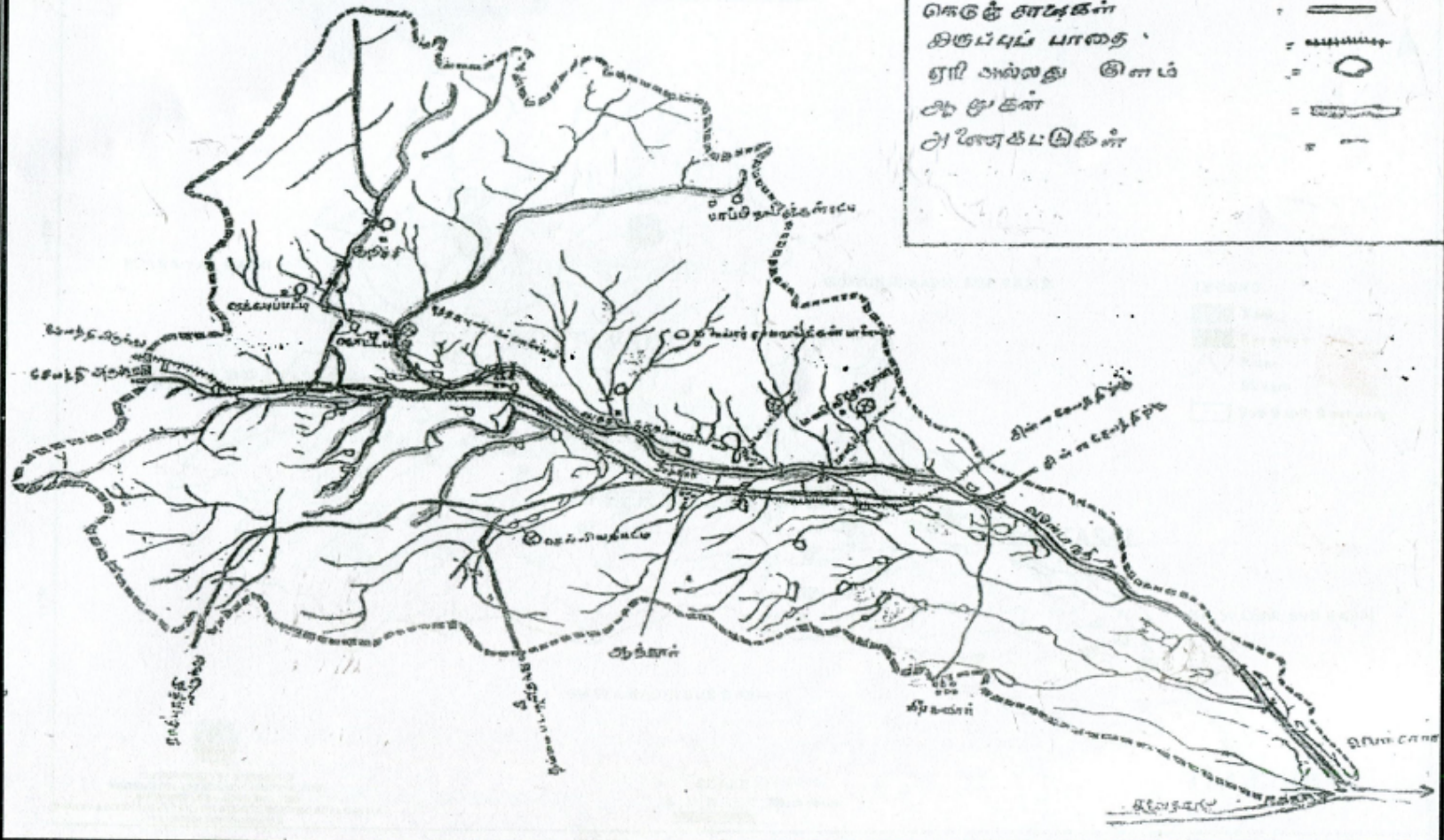
All Dimensions are in mm

வசின்பா நதி படுகை

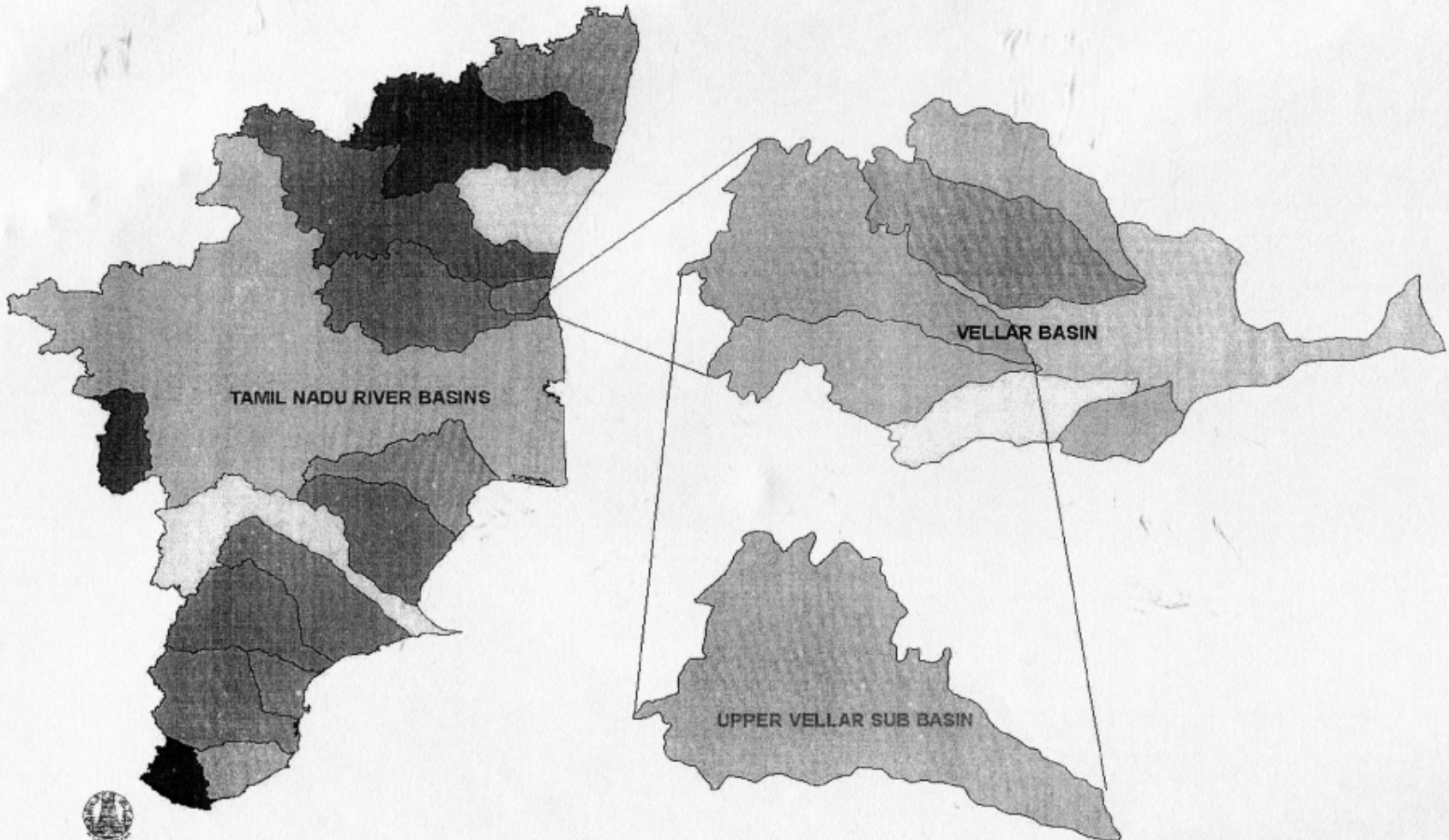
அளவு = 1:25000 = 4 மைல்கள்

குறியீடுகள்:-

கெட்டு எழிகள்	—
கிராமியப் பாதை	—
ஏரி அல்லது இளம்	○
ஆளுகை	—
பிணைக்கடிகள்	—



UPPER VELLAR SUB BASIN
INDEX MAP



GOVERNMENT OF TAMILNADU
WATER RESOURCES ORGANISATION, FWD
INSTITUTE FOR WATER STUDIES
TAMILNADU CENTRE FOR REMOTE SENSING APPLICATION
THARAMANI, CHENNAI-112