



GOVERNMENT OF TAMIL NADU

IRRIGATED AGRICULTURAL MODERNISATION AND WATER
RESOURCES MANAGEMENT PROJECT

(IAMWARM)

KOUNDANYA NADHI SUB BASIN

PUBLIC WORKS DEPARTMENT
WATER RESOURCES ORGANISATION

TN IAMWARM PROJECT

DETAILED PROJECT REPORT

***ADDITIONAL PROPOSALS FOR REHABILITATION WORKS IN
RESPECT OF KOUNDANYA NADHI SUB BASIN***

PROJECT COST: Rs. 121.11 Lakhs

REGION	:	CHENNAI
PROJECT CIRCLE	:	VELLORE
UPPER PALAR BASIN DIVISION	:	VELLORE

**Additional proposals for providing Lining of Head Irrigation Channel and Flow
Measuring Device in Koundanya Nadhi Sub Basin (Phase - II)
Under IAMWARM Project**

The Lining of Head Irrigation channel and installation of Measuring device has been proposed for Phase I & 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 Koundanya Nadhi Sub Basin of phase - II the following works have been proposed.

- 1) Lining of Head Irrigation channel below the tanks sluice using C.C. M15 as per sketch enclosed
- 2) Installing flow measuring device in the irrigation channel as per sketch
- 3) L.S provision of 2.80% for Provision of labour welfare @ 0.30% and provision for contingencies, advertisement charges, photographic charges @ 2.50%

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. 121.11 Lakhs.

FORMATE I

Name of Region Chennai Region, Chennai.
 Project Circle,
 Name of Circle Vellore-6
 Name of Division Upper Palar Basin, Division, Vellore-6
 Name of Sub Basin Upper Palar Basin Sub Division, Gudiyattam
 Total Number of Tanks taken up under IAMWARM :
 33
 Method of
 procurement National shopping
 (Note : procurement plan to be got approved by World Bank separately)

NO OF TANKS, SLIUCES IN EACH PACKAGE

Rs in Lakhs.

Sl. No	Package No	Name of Tank	No on Sluice	Flow Measuring Device		Lining the Field channel			Total Amount	L.S Provision @ 2.80%	Grand Total	Remarks
				No	Amount	Type of soil BC / OS	Length in 'M'	Amount				
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Package - 1	Agraharam	2	2	0.26	OS	100	2.80	3.06			
		Perumbadi	2	2	0.26	OS	100	2.80	3.06			
		Erthangal	2	2	0.26	OS	100	2.80	3.06			
		Thattankuttai	2	2	0.26	OS	100	2.80	3.06			
		Total	8	8	1.04		400	11.20	12.24	0.34	12.58	
2	Package - 2	Cheruvangi	3	3	0.39	OS	150	4.20	4.59			
		Goodanagram	3	3	0.39	OS	150	4.20	4.59			
		Total	6	6	0.78		300	8.40	9.18	0.26	9.44	
3	Package - 3	Ammanankuppam	2	2	0.26	OS	100	2.80	3.06			
		Veppur	4	4	0.52	OS	200	5.60	6.12			
		Natteri	2	2	0.26	OS	100	2.80	3.06			
		Total	8	8	1.04		400	11.20	12.24	0.34	12.58	

4	Package - 4	Pasumathur Periya Eri	4	4	0.52	OS	200	5.60	6.12			
		Pasumathur Chitteri	2	2	0.26	OS	100	2.80	3.06			
		Total	6	6	0.78		300	8.40	9.18	0.26	9.44	
5	Package - 5	Kilathur	3	3	0.39	OS	150	4.20	4.59			
		Kavanur	4	4	0.52	OS	200	5.60	6.12			
		Total	7	7	0.91		350	9.80	10.71	0.30	11.01	
6	Package - 6	Bethanaicken	1	1	0.13	OS	50	1.40	1.53			
		Veppanganeri	2	2	0.26	OS	100	2.80	3.06			
		Vickramatchi	2	2	0.26	OS	100	2.80	3.06			
		Melmoil	1	1	0.13	OS	50	1.40	1.53			
		Hissakuppinaicken	1	1	0.13	OS	50	1.40	1.53			
		Total	7	7	0.91		350	9.80	10.71	0.30	11.01	
7	Package - 7	Latheri Big Tank	3	3	0.39	OS	150	4.20	4.59			
		Annankudi Ponnamman	2	2	0.26	OS	100	2.80	3.06			
		Thirumani Ponnamman	3	3	0.39	OS	150	4.20	4.59			
		Total	8	8	1.04		400	11.20	12.24	0.34	12.58	
8	Package - 8	Vilunthakkal	3	3	0.39	OS	150	4.20	4.59			
		Olaiyathur	3	3	0.39	OS	150	4.20	4.59			

		Senur Pudu Eri	2	2	0.26	OS	100	2.80	3.06			
		Total	8	8	1.04		400	11.20	12.24	0.34	12.58	
9	Package - 9	Vandranthangal	2	2	0.26	OS	100	2.80	3.06			
		Jabrapet	1	1	0.13	OS	50	1.40	1.53			
		Dharapadavedu	1	1	0.13	OS	50	1.40	1.53			
		Katpadi Big	3	3	0.39	OS	150	4.20	4.59			
		Total	7	7	0.91		350	9.80	10.71	0.30	11.01	
10	Package - 10	Serkadu	3	3	0.39	OS	150	4.20	4.59			
		karnampattu	3	3	0.39	OS	150	4.20	4.59			
		Total	6	6	0.78		300	8.40	9.18	0.26	9.44	
11	Package - 11	Karigiri Big	2	2	0.26	OS	100	2.80	3.06			
		Kandipedu	2	2	0.26	OS	100	2.80	3.06			
		Kandipedu Oddanhangal	2	2	0.26	OS	100	2.80	3.06			
		Total	6	6	0.78		300	8.40	9.18	0.26	9.44	
		Grand Total	77	77	10.01		3850	107.80	117.81	3.3	121.11	

CERTIFICATE

- 1 Certified that the Tanks included in the Originally approved DPR of KOUNDANYA NADHI SUB BASIN alone are considered now.
- 2 Certified that the tanks works were not taken up under any project.
- 3 Certified that the field/Irrigation channel drawing type I is adopted in 33 Nos of tanks having soil other black cotton soil.
- 4 Certified that the field/Irrigation channel drawing type II is adopted in None of the tanks having black cotton soil.

FORMATE II

Name of Region Chennai Region, Chennai.
Name of Circle Project Circle, Vellore-6
Name of Division Upper Palar Basin, Division, Vellore-6
Name of Sub Basin Upper Palar Basin Sub Division, Gudiyattam
Total Number of Tanks taken up under IAMWARM : 33
Method of
procurement National shopping
(Note : procurement plan to be got approved by World Bank separately)

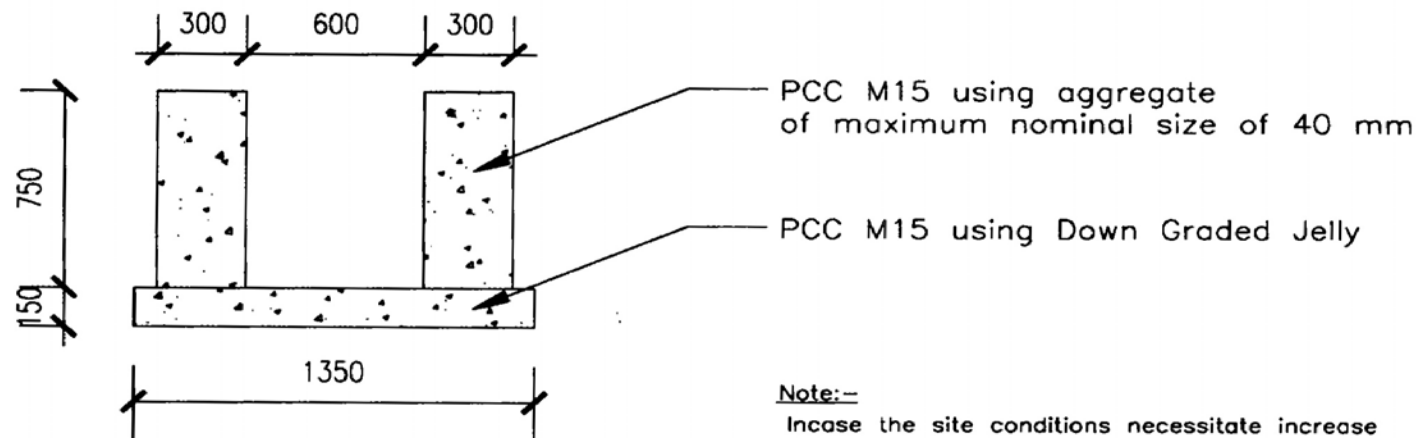
PACKAGEWISE ABSTRACT

Amount in Lakhs

Sl. No	Package No	Name of Work	No. of Tanks	No. of flow measuring devices	Length of Head Irrigation channels	Total Amount including L.S. (Rs. In Lakhs)	Remarks
1	AP 1 IAMWARM/WRD/ KDN/WORKS/ II/2011-2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Agraharam, Perumbadi, Erthangal & Thattankuttai in Koundanya Nadhi Sub Basin in Vellore District.	4	8	400	12.58	
2	AP 2 IAMWARM/WRD/ KDN/WORKS/ II/2011-2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Cheruvangi, & Goodanagaram in Koundanya Nadhi Sub Basin in Vellore District.	2	6	300	9.44	
3	AP 3 IAMWARM/WRD/ KDN/WORKS/ II/2011-2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Ammanankuppam, Veppur & Natteri in Koundanya Nadhi Sub Basin in Vellore District.	3	8	400	12.58	

4	AP 4 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Pasumathur Peria Eri & Pasumathur Chitteri in Koundanya Nadhi Sub Basin in Vellore District.	2	6	300	9.44	
5	AP 5 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Kilalathur & kavanur in Koundanya Nadhi Sub Basin in Vellore District.	2	7	350	11.01	
6	AP 6 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Bethanaicken, Veppanganeri, Vickramatchi, Melmoil & Hissakuppinaicken in Koundanya Nadhi Sub Basin in Vellore District.	5	7	350	11.01	
7	AP 7 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Latheri Big, Annankudi Ponniamman & Thirumani Ponniamman in Koundanya Nadhi Sub Basin in Vellore District.	3	8	400	12.58	
8	AP 8 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Vilunthakkal, Olaiyathur & Senur Pudu Eri in Koundanya Nadhi Sub Basin in Vellore District.	3	8	400	12.58	
9	AP 9 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Vandranthangal, Jabrapet, Dharapadavedu & Katpadi Big in Koundanya Nadhi Sub Basin in Vellore District.	4	7	350	11.01	
10	AP 10 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Serkad & Karnapattu in Koundanya Nadhi Sub Basin in Vellore District.	2	6	300	9.44	
11	AP 11 IAMWARM/ WRD/ KDN/ WORKS/ II/2011- 2012	Lining of head Irrigation Channel and providing Flow Measureing devices for Karigiri Big, Kandipedu & Kandipedu Oddanhangal in Koundanya Nadhi Sub Basin in Vellore District.	3	6	300	9.44	
		TOTAL	33	77	3850	121.11	

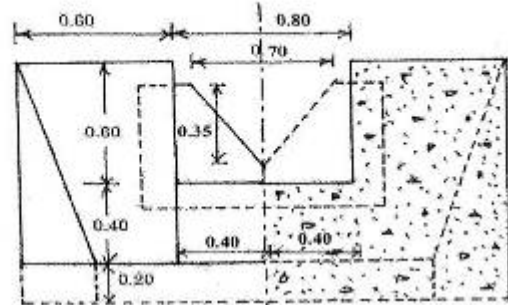
TYPICAL CROSS SECTION OF LINED IRRIGATION CHANNEL



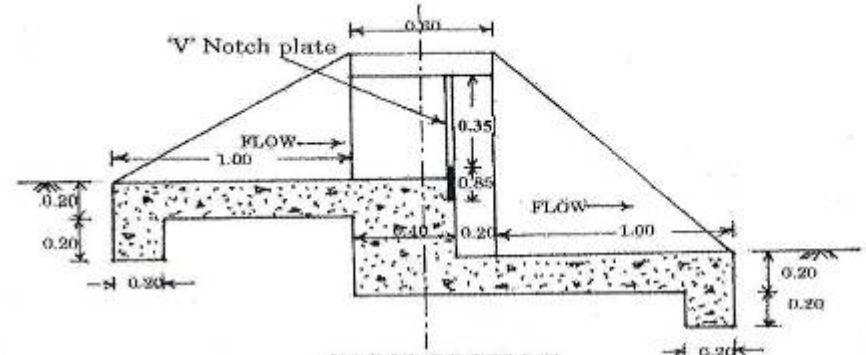
Note:-

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

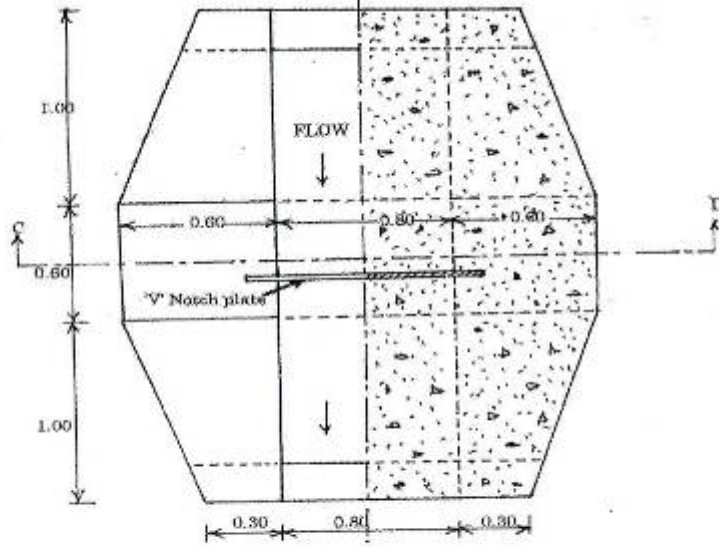
All Dimensions are in mm



HALF FRONT ELEVATION AND HALF SECTIONAL ELEVATION AT "CD"



CROSS SECTION



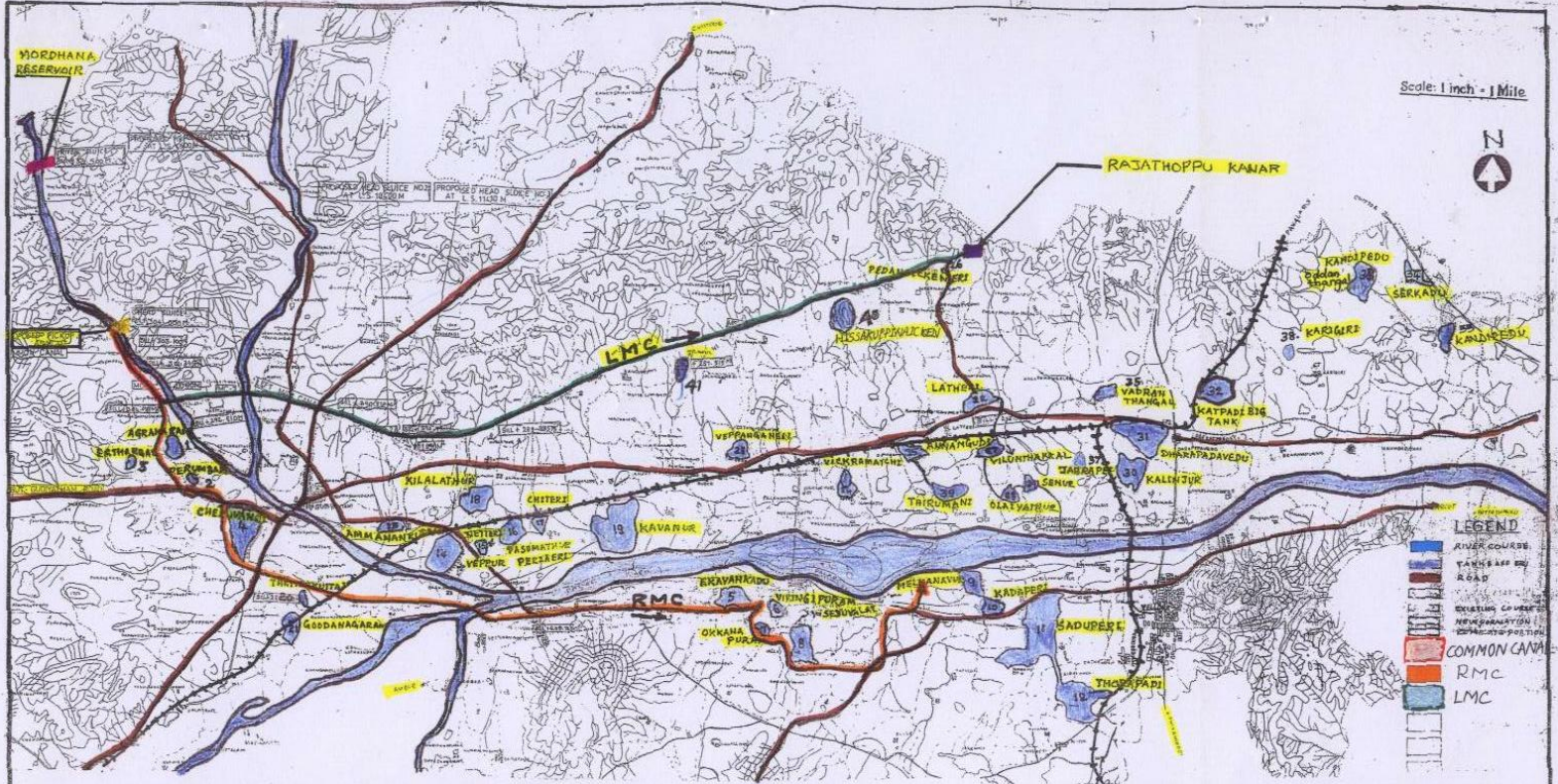
HALF PLAN AT TOP AND HALF PLAN AT BOTTOM

TYPE - C
1.35SEC 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	28.3	23.5	25 x 58	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	38	42 x 84	60 x 100

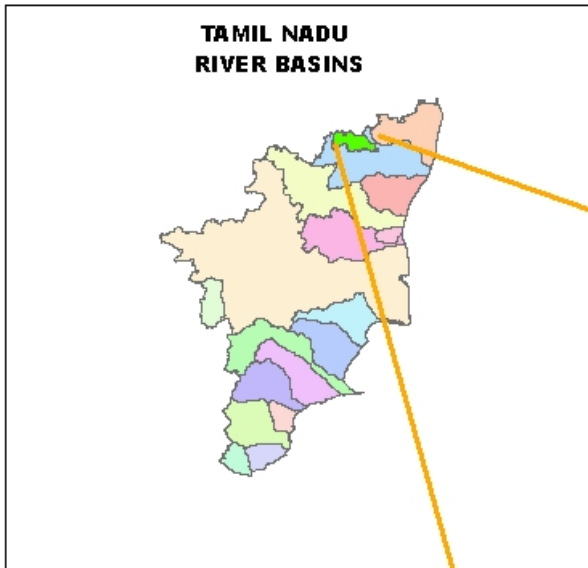
TYPICAL SKTECH FOR PROVIDING MEASURING DEVICE IN THE SLUICES FOR KOUNDANYANADHI SUB BASIN
Scale: 1cm=0.25m
All dimensions are in metre



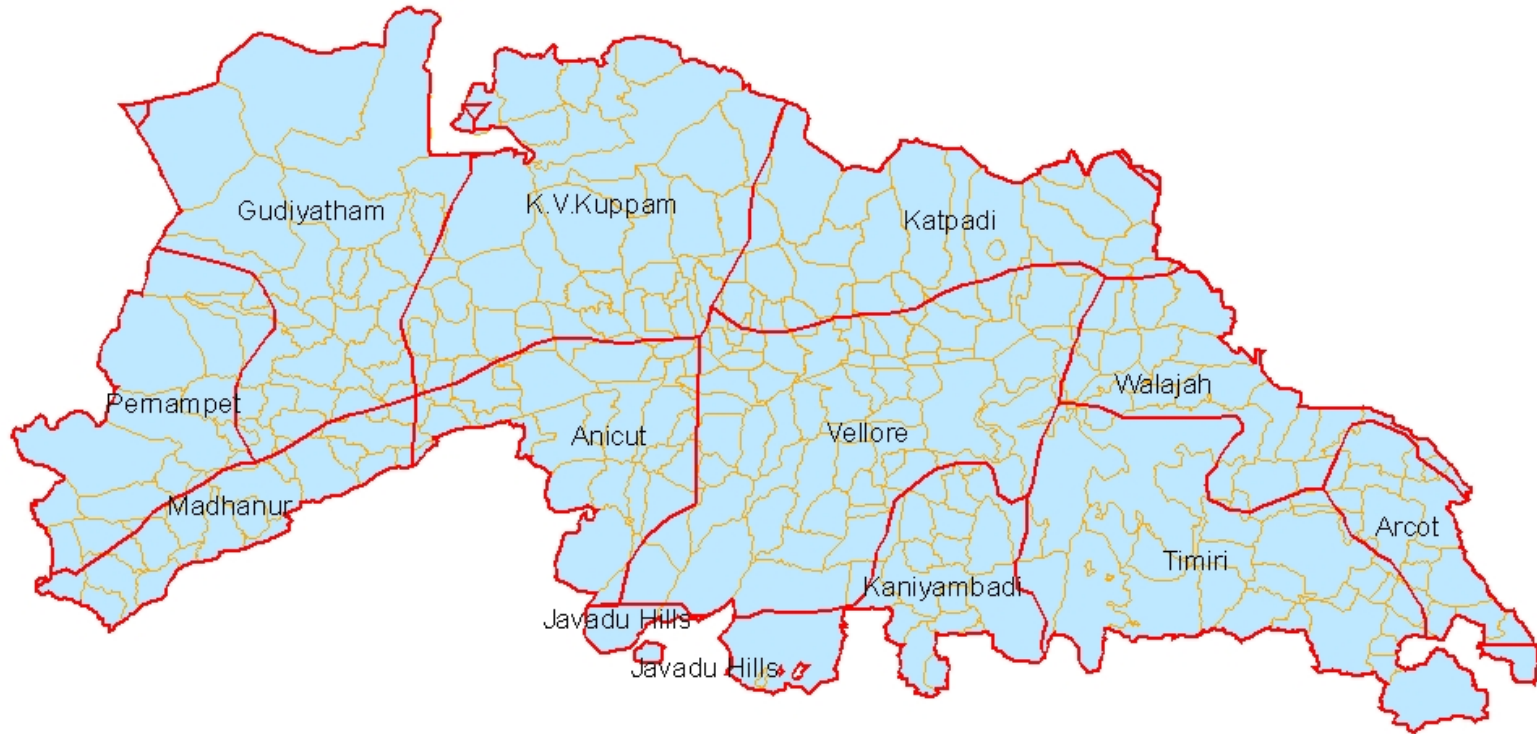
Sl. No.	Name of Tank	Sl. No.	Name of Tank	Sl. No.	Name of Tank	Sl. No.	Name of Tank
1	Agraharam	11	Sadupperi	21	Goodanagaram	31	Dharapadavedu
2	Perumbadi	12	Thorapadi	22	Latheri	32	Katpadi Big Tank
3	Erthangal	13	Ammanankuppam	23	Veppanganeri	33	Kandipedu Tank
4	Cheruvangi	14	Veppur	24	Vikramachi	34	Serkadu Tank
5	Erayankadu	15	Netteri	25	Annankudi	35	Vandranthangal
6	Virinjipuram	16	Pasumathur Peria Eri	26	Bethanaicken	36	Kandipedu Oddanthargal
7	Okkanapuram	17	Pasumathur Chitteri	27	Vilunthakkal	37	Jabrapet
8	Seduvalai	18	Kilalathur	28	Olaiyathur	38	Karigiri Big
9	Melmonavur	19	Kavanur	29	Senur Pudu Eri	39	Thirumani Ponniamman
10	Kadaperi	20	Thattankuttai	30	Kalinjur	40	Hissakuppinaicken
						41	Melmoil

GOVERNMENT OF TAMIL NADU
P.W.D - W.R.O
PLAN SHOWING THE
KOUNDANYA NADHI SUB BASIN



KOUNDINYANADHI - INDEX MAP



KOUNDINYANADHI SUB BASIN ADMINISTRATIVE MAP



LEGEND

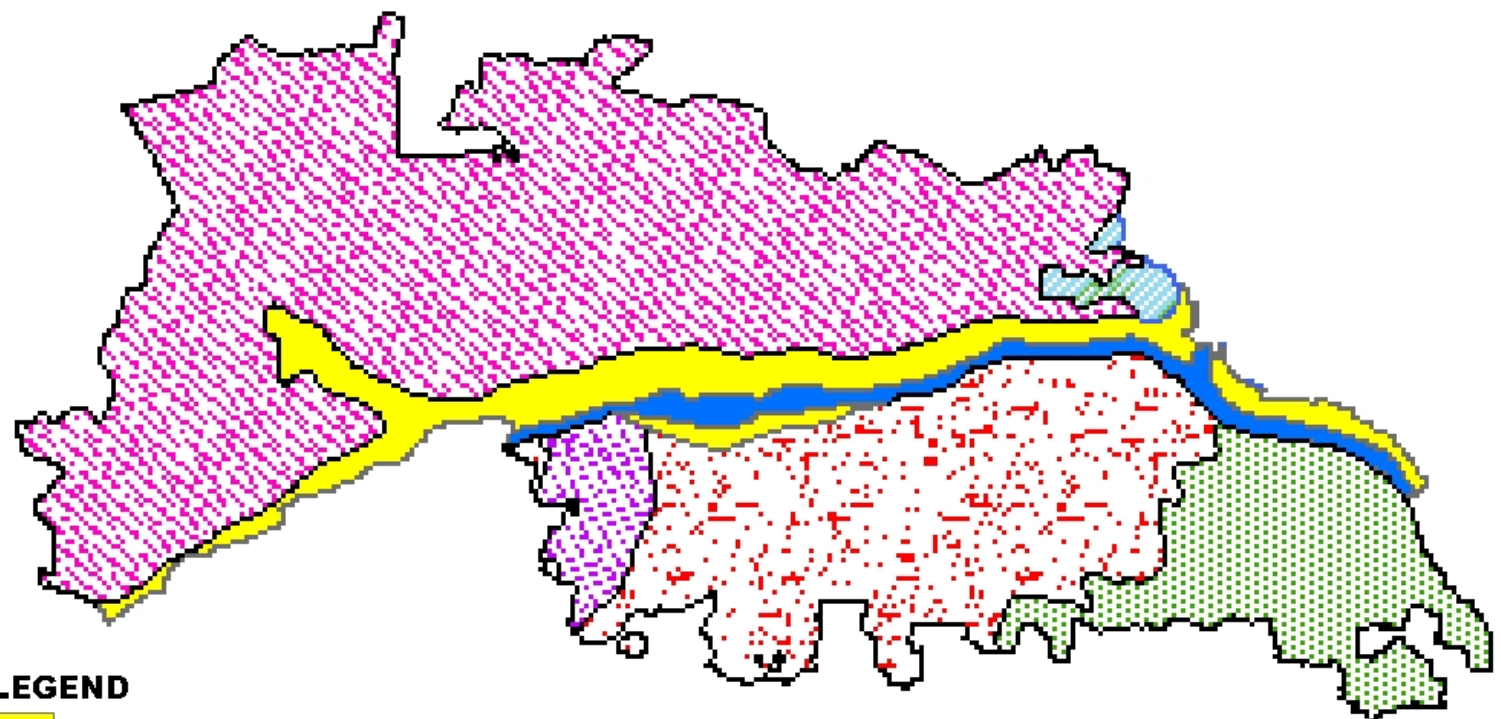
-  Block boundary
-  Village boundary









GOVERNMENT OF TAMIL NADU
WATER RESOURCES ORGANISATION, PWD
INSTITUTE FOR WATER STUDIES
TAMIL NADU STATE CENTRE FOR REMOTE SENSING APPLICATION
THARAMANI, CHENNAI - 113



KOUNDINYANADHI GEOLOGY MAP



LEGEND

-  Alluvium
-  Ultra mafic rocks
-  Epidote-hornblende gneiss
-  Fissile hornblende-biotite gneiss
-  Hornblende-biotite gneiss
-  Charnockite
- OTHERS**
-  River

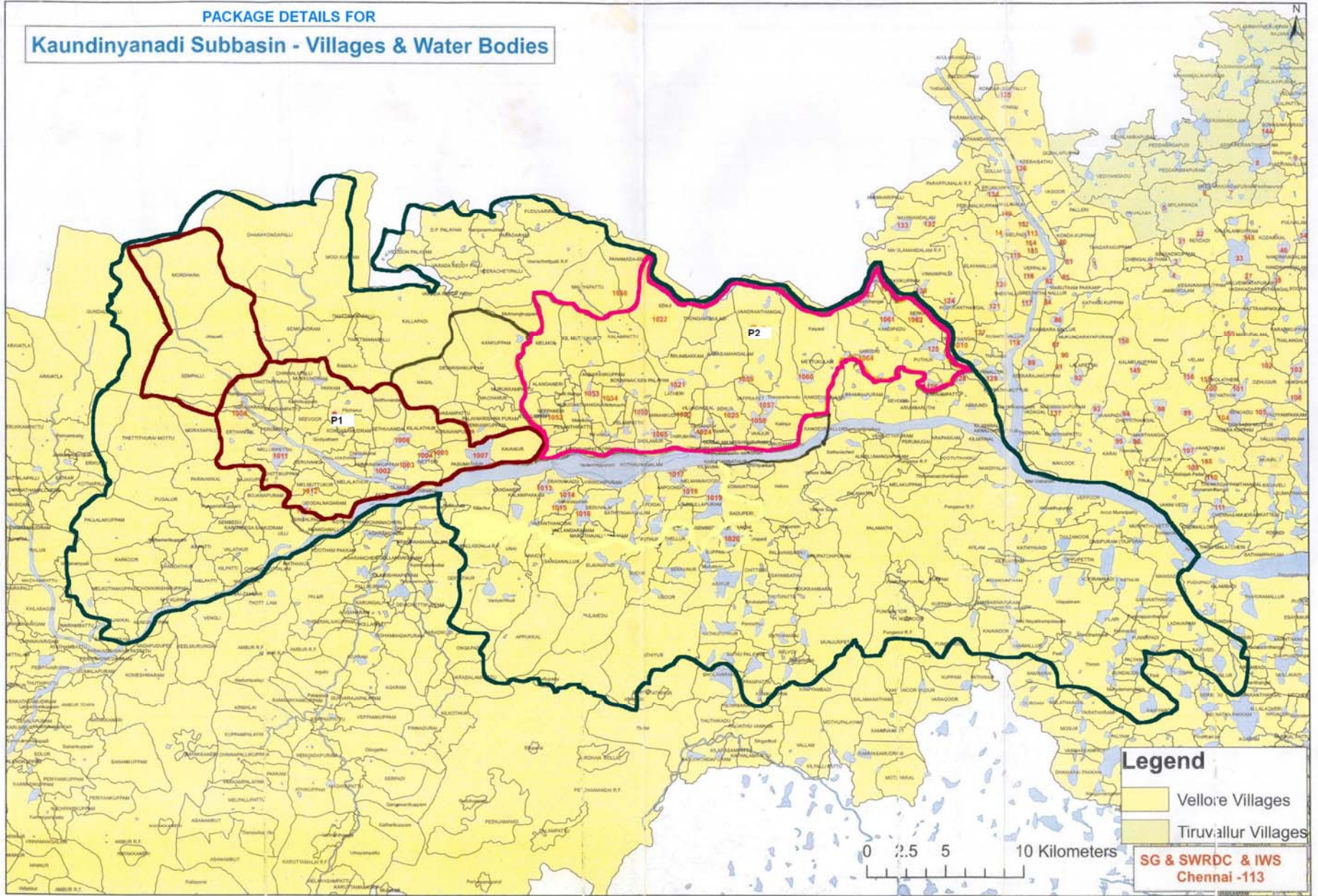


GOVERNMENT OF TAMIL NADU
WATER RESOURCES ORGANISATION, PWD
INSTITUTE FOR WATER STUDIES
TAMIL NADU STATE CENTRE FOR REMOTE SENSING APPLICATION
THARAMANI, CHENNAI - 113



PACKAGE DETAILS FOR

Kaundinyanadi Subbasin - Villages & Water Bodies



WUA BOUNDRIES FOR
Kaundinyanadi Subbasin - Villages & Water Bodies



CLUSTER DETAILS FOR
Kaundinyanadi Subbasin - Villages & Water Bodies

