

**TWAD BOARD
CHARGE PAPER**

GENERAL SCHEME DETAILS

RWS SUB DIVISION, ARNI

1	Name of the scheme	: CWSS to Namthodu, Chetpet RTP (improvement) and 22 other habitations in pernamallur union
2	Adm. Sanction No	: BP Ms no 28 dt 05.04.99 for RS.785 lakhs.
3	Estimste sanction No	: CE,NR,VLR. CER.32/TWAD 1999-2000 dt 14.01.2000 for RS.678 lakhs.
4	contract pattern	: Turn key system - Lumpsum.
5	Name of contractor	: M/s Larsen & Toubro Ltd , Manapakkam, chennai - 69.
6	Date of work order	: 15.07.2000
7	Date of Agreement	: 18.09.2000
8	Date of handing over of site	: 26.08.2000
9	Agreement No	: Lump sum Agreement. CE/NR 9/2000 - 2001
10	BOQ value	: 468.61 lakhs
11	L&T Contractor Agt value	: 515.34 lakhs
12	Agreement period	: 18 months
13	Target date of completion	: 26.02.2002
14	maintenance period	: March 2002 to May 2002
15	Funds tie up	:
	state	: 421 lakhs
	LIC	: 364 lakhs
	Total	: 785 lakhs
16	Installation cost	: RS.785 lakhs.
17	Annual maintenance cost	: RS.25 lakhs.
18	per capita cost	: RS.2090
19	Cost per 1000 litres	: RS.11.25

GENERAL SCHEME DETAILS

- 1 Total number of rural habitations covered = 23 nos
- 2 Total number of rural Town Panchayat = 01 no
- Total = 24 nos

3 Population as per 1991 census

	Chetpet RTP	23 rural habitations	Total
As per 1991 census	16840	13740	30580

4 Population approved as per CE approval No 1635/chetpet / RTP / AE4 / NR dt 03.02.1999

	chetpet RTP	23 rural habitations	Total
As per CE appr dt 03.02.99			
present population	18777	18784	37561
Ultimate population	31000	26297	57297
Intermediate	25000		

5 pro rate of supply

For rural habitations : 55lpcd

For chetpet RTP : 70 lpcd

6 water supply requirement

	chetpet RTP	Rural	Total
Ultimate water supply required	22,78,500	14,46,335	37,24,835 litres
Intermediate water supply	17,50,000	-	
Existing water supply now available	4,50,000		4,50,000
Balance water supply required for ultimate stage for design	18,28,500	14,46,335	32,74,835 litres
Discharge req for ultimate stage (Assuming 16 hrs pumping)	1905 lpm	1515 lpm	3420 lpm
water supply now required	13,14,000	14,46,335	27,60,335
Discharge now required	1445 lpm	1515lpm	2960lpm
	(Intermediate stage)	(ultimate stage)	

CHARGE PAPER

CWSS TO NAMATHODU, CHETPET SCHEME COMPONENT WISE DETAILS

HEAD WORKS AT KORUKATHUR

1. Source : Infiltration well – 4 nos in cheyar river(completed)
(considering ULT – stage requirement for 23 rural habitations and Int.
stage requirement for chetpet RTP).

2. Size of Infiltration well :

	IW- I	IW-2	IW-3	IW-4
Diameter :	3.50m	3.50m	3.50m	3.50m
Depth :	8.50m	8.50m	7.50m	8.00m
3. Yield ascertained :	750 LPM in each well.			
4. Total Yield :	4 x 750 LPM = 3000 LPM			
5. Hours of piming :	16 Hours . daily			
6. Pump set at	7.5 HP Submersible Pump set (Texmo)			
Infiltration well :	740 lpm x 26m head	-	4 nos	
	Stand by	-	4 nos	
	Total	-	8 nos	

7. Short Raising main for 4 infiltration well :

150mm ϕ CI D/F pipes	:	1563.25 Rm.
140mm ϕ OD PVC PIPES	:	1203.00 Rm.
Total	:	2766.25 Rm.

8. Pump Room Size : 8.00m x 6.00m x 4.00m.
9. Common sump : 1.00 lakh Litres capacity RCC sump.
- Size of sump
- Inner diameter : 7.00m
- Depth of sump : 2.95m

10. Quarters:

Electrician quarters	:	1 no
Watchman quarters	:	1 no

11. Pump set Details :

50 HP HSC Centrifugal Pump set	:	2960 lpm x 45m Head - 1 no.
Motor : ABB		Stand By - 1 no
Pump : Beakon weir		Total - 2 nos.

12. Conveying main : 350mm ϕ ,PSC (10KSC) - 9710.00 Rm.
- 350mm ϕ MS barrel - 189.95 Rm.

Total - 9899.95 Rm.

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CWSS TO NAMATHODU, CHETPET SCHEME

13. Booster station at Aliyandal :

Sump capacity	:	1 lakh litres.
Inner Dia	:	7.00 m.
Depth	:	2.95 m.

14. Pump Room size : 10m x 8m x 4m.

15. Booster main :

Booster main – I Aliyandal to Thatcampattu sump :

250mm ϕ CI LA CL pipe	:	950.00 Rm.
250mm ϕ AC CL.15 pipes	:	10391.20 Rm.

Total Length : 11341.20 Rm.

Booster main –I pump set	:	30 HP Centrifugal HSC 1865 lpm x 43m head – 2nos.
Motor	:	ABB
Pump	:	Flow More

Booster main – II Aliyandal sump to Anathimangalam OHT:

150mm AC CL 15 pipes	:	1727.00 Rm
150mm CI D/F pipes	:	11.00 Rm
140mm OD pvc 4 KSC	:	4371.05 Rm
110mm OD pvc 4 KSC	:	1631.55 Rm
125mm GI pipes	:	42.30 Rm
100mm GI pipes	:	54.05 Rm

TOTAL LENGTH : 7836.95 Rm

Booster main – II pump set : 15 HP Centrifugal (Endsuction)

714 lpm x 48m head – 2nos.

Motor	:	ABB
Pump	:	Mather & plate

Booster main – III Aliyandal sump to Thalarapadi OHT:

140mm OD pvc 4 KSC	:	558.30 Rm
110mm OD pvc 4 KSC	:	247.30 Rm
90mm OD pvc 4 KSC	:	3841.40 Rm
100mm GI pipe	:	9.00 Rm
80mm GI pipe	:	56.50 Rm,

TOTAL LENGTH : 4712.50 Rm

CHARGE PAPER

CWSS TO NAMATHODU, CHETPET SCHEME

Booster main – III pump sets : 5 HP Centrifugal (Monoblock) Eureka
420 lpm x 28m – 2 nos.

16. Booster Station – II at Thatchampattu:

Sump capacity : 70,000 litres
Inner diameter : 5.00m.
Depth : 4.00m.

17. Pump Room size : 8.00m x 6.00m x 4.00m

18. Booster mains :

Booster main – IV to Chetpet, Nirmalalagar:

250mm ϕ AC CL 15 pipes : 3575.65 Rm
250mm ϕ CI S/S pipes : 140.85 Rm
140mm OD PVC pipe : 1124.00 Rm
125mm GI pipe : 24.20 Rm
110mm OD PVC pipe : 114.00 Rm

TOTAL LENGTH : 4978.70 Rm

Booster main – IV pump sets : 20 Hp HSC Centrifugal pump sets :
1445 x 34m – 2 nos.
Motor : ABB
Pump : BEACON WEIR

Booster main – V to Nedungunam periyar nagar:

140mm OD pvc 4 KSC : 167.00 Rm
110mm OD pvc 4 KSC : 2682.00 Rm
90mm OD pvc 4 KSC : 408.00 Rm
125mm ϕ GI pipe : 5.00 Rm
100mm ϕ GI pipe : 24.00 Rm
80mm ϕ GI pipe : 12.00 Rm

TOTAL LENGTH : 3298.00 Rm

Booster main – V pump set : 7.5 HP Centrifugal (mono block) Eureka
420 lpm x 34m - 2 nos.

CHARGE PAPER
CWSS TO NAMATHODU, CHETPET SCHEME

I) Feeder main under Booster IV chetpet RTP:

➤ 200mm ϕ AC CL 15 pipe to existing 3.00lakh SR @ pazhampettai (zone - I)	: 349.15 Rm.
➤ 200mm ϕ CI S/S pipes to existing 3.00lakh SR @ pazhampettai (zone - I)	: 36.50 Rm.
➤ 90mm OD PVC 4KSC pipe to existing 60,000 litres OHT @ chetpet Colony (zone - IV)	: 48.00 Rm.
➤ 90mm OD PVC 4KSC pipe to new 60,000 litres OHT @ AR palayam (zone - III)	: 292.00 Rm.
➤ 80mm ϕ CI S/S pipes to new 60,000 litres OHT @ AR palayam (zone - III)	: 9.00 Rm.
➤ 90mm OD PVC 4KSC pipe to new 60,000 litres OHT @ kannanur (zone - VI)	: 960.00 Rm.
➤ 80mm ϕ GI pipe to new 60,000 litres OHT @ kannanur (zone - VI)	: 18.50 Rm.
➤ 150mm ϕ AC CL 15 pipes to new 2.00LL SR @ chetpet (zone - II)	: 644.00 Rm.
➤ 150mm ϕ CI D/F pipes to new 2.00LL SR @ chetpet (zone - II)	: 11.00 Rm.

Total : 2366.15 Rm.

SALIENT DETAILS

CWSS TO VINNAMANGALAM & 13 OTHER HABITATIONS IN

CHEYAR UNION

1. Scheme Cost

- a. Installation cost : Rs. 97.17 Lakhs
b. Annual Maintenance cost : Rs. 6.21 Lakhs DR 11/2010-11 dt : 09.04.2010

2. Administrative approval No & Amount : MD/TWAD/Chennai Proc No.17898/AE2/P&D/
dt : 25.08.1998 for Rs. 97.10 Lakhs

3. Technical sanction No & Amount : ----

4. Beneficiaries :

S.No	Habitation	Pop	Cap in Lit	Design Qty(LLD)
1	Vinnamangalam	-	60000	DL
2	Pinnapattu	-	30000	DL
3	Palakandaputhur	-	30000	DL
4	Melmattai	520	30000	0.286
5	Vinnamangalam Col	495	30000	0.272
6	Palakandaputhur	470	30000	0.259
7	Arunthathirapalayam	320	30000	0.176
8	Pudukottai	465	30000	0.256
9	Pudukottai Col	137	60000	0.075
10	Sadathangal	380	30000	0.209
11	Vilaripattu	410	30000	0.225
12	Melnagarampedu	900	60000	0.495
13	Kaduganur	1193	30000	0.656
14	Kaduganur HC	-	30000	Dilink
15	Kaduganur High School	-	5000	-
	Total	5290		2.909

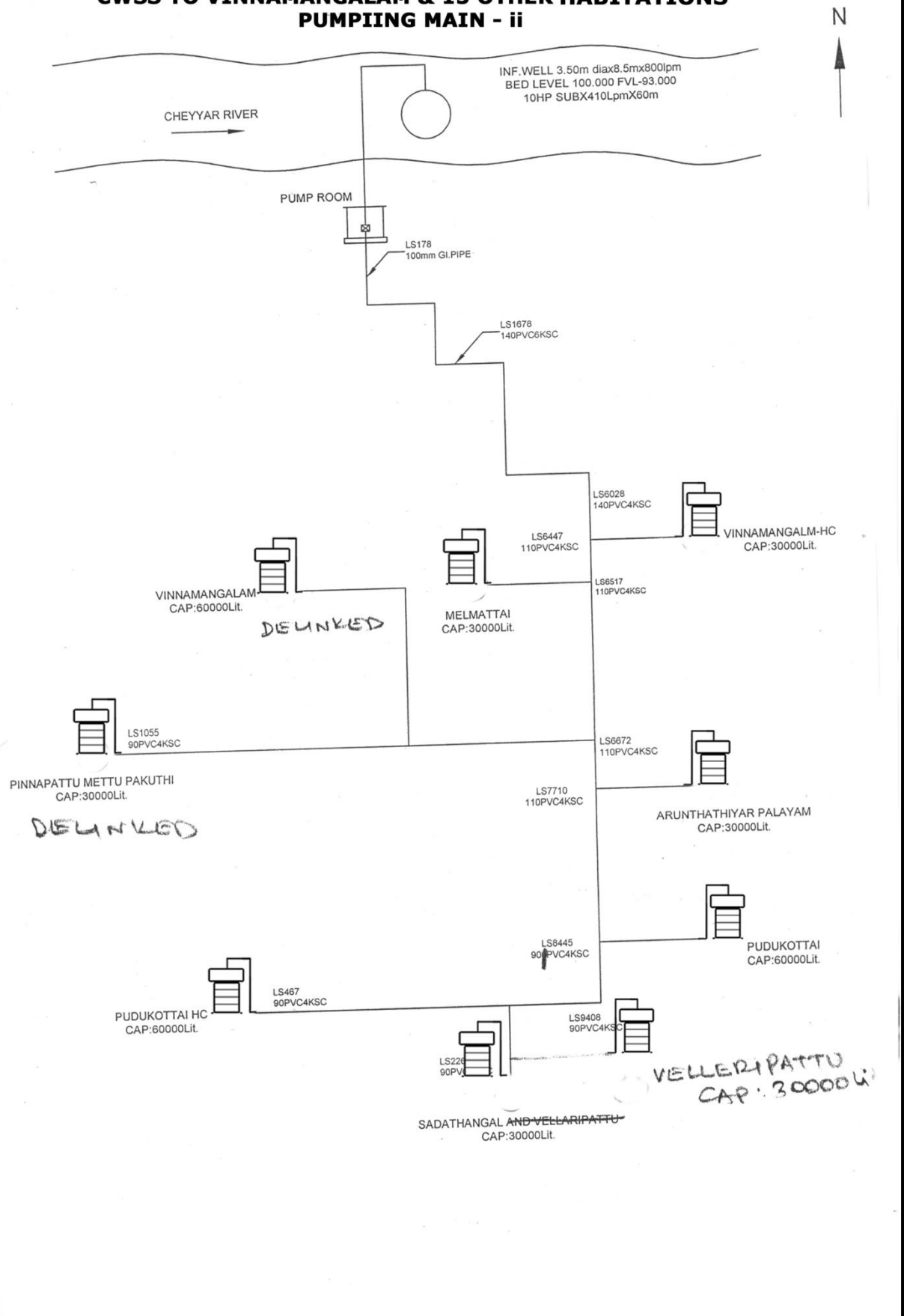
5. Populations

- a. Present (Year) 1998 : 9662
As on 2011 : 5290
b. Intermediate (Year) : ---
c. Ultimate (Year) 2028 : 13527

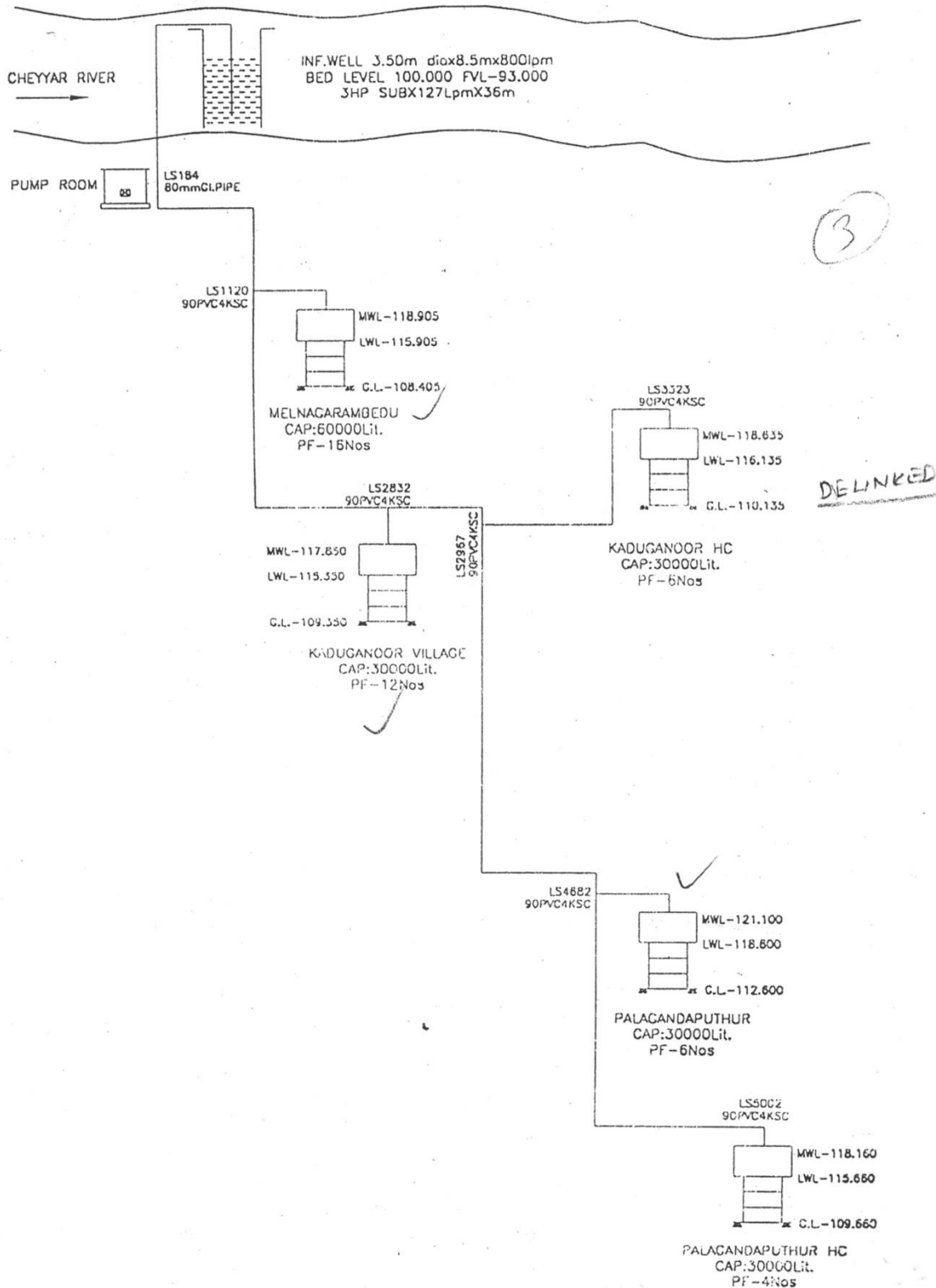
6. Level of service : 55 LPCD

7. Designed Quantity			
a. Present (Year) 2011	:	290 KLD	
b. Intermediate (Year)	:	-----	
c. Ultimate (Year) 2026	:	382 KLD	
8. Year of Completion & Commissioning	:		
a. Original Scheme	:	10/1999	
b. Taken over of Maintenance	:	01.08.2000	
c. Improvement scheme	:	--	
9. Head works with source details	:	Infiltration well -2 nos in cheyyar river at Melnagarambedu	
		Dia	Depth Yield
	IW 1 No	: 3.50 M	8.50 M 800 LPM
	IW 1 No	: 3.50 M	8.50 M 800 LPM
	Pump Room	:	1 No (4.00 M X 3.00 M)
10. Pumpset		IW No.I	IW No.II
a. Type		Sub : 3HP - 127 lpm x 60M	Sub : 10HP- 410 lpm x 60M
b. Duty		5HP - 125 lpm x 75M	10HP- 400 lpm x 60M
c. Hours of pumping	:	10 Hours	
11. Treatment plant (with Units Details)	:	----	
12. Transmission Main	:	Short Raising main	
	PM .I	:	80 mm GI Pipe 'B' Class = 184 M
	PM .II	:	100 mm GI Pipe 'B' Class = 178 M
a. Pumping Main	PM.I	:	90 mm PVC Pipe 4ksc = 5174 M
	PM.II	:	140 mm PVC Pipe 6ksc = 1500 M
			140 mm PVC Pipe 4ksc = 4350 M
			110 mm PVC Pipe 4ksc = 1740 M
			90 mm PVC Pipe 4ksc = 1640 M
b. Gravity Main	:	----	
13. Booster Main			
a. Sump with capacity	:	----	
b. Pumpset details	:	-----	
14. Feeder mains	:		
	BPM	:	90 mm PVC pipe 4ksc = 4143 M
15. No of Group sump with capacity	:	----	
16. Service reservoirs with capacity	:	30000 Lit Cap = 8 nos	
		60000 Lit Cap = 2 nos	
17. Separate Power Feeder Main	:	Shift Supply	
18. Distribution system	:	63 mm PVC Pipe 4ksc = 10950 M	

CWSS TO VINNAMANGALAM & 15 OTHER HABITATIONS PUMPING MAIN - ii



CWSS TO VINNAMANGALAM & 13 OTHER HABITATIONS PUMPIING MAIN - I



SALIENT DETAILS

CWSS TO PARASUR & 13 OTHER HABITATIONS IN CHEYYAR & ANNAKAVUR UNION

19. Scheme Cost

- a. Installation cost : Rs. 32.70 Lakhs
b. Annual Maintenance cost : Rs. 8.00 Lakhs DR -10/2010-11

20. Administrative approval No & Amount : ----

21. Technical sanction No & Amount : Rs. 32.70 Lakhs

22. Beneficiaries :

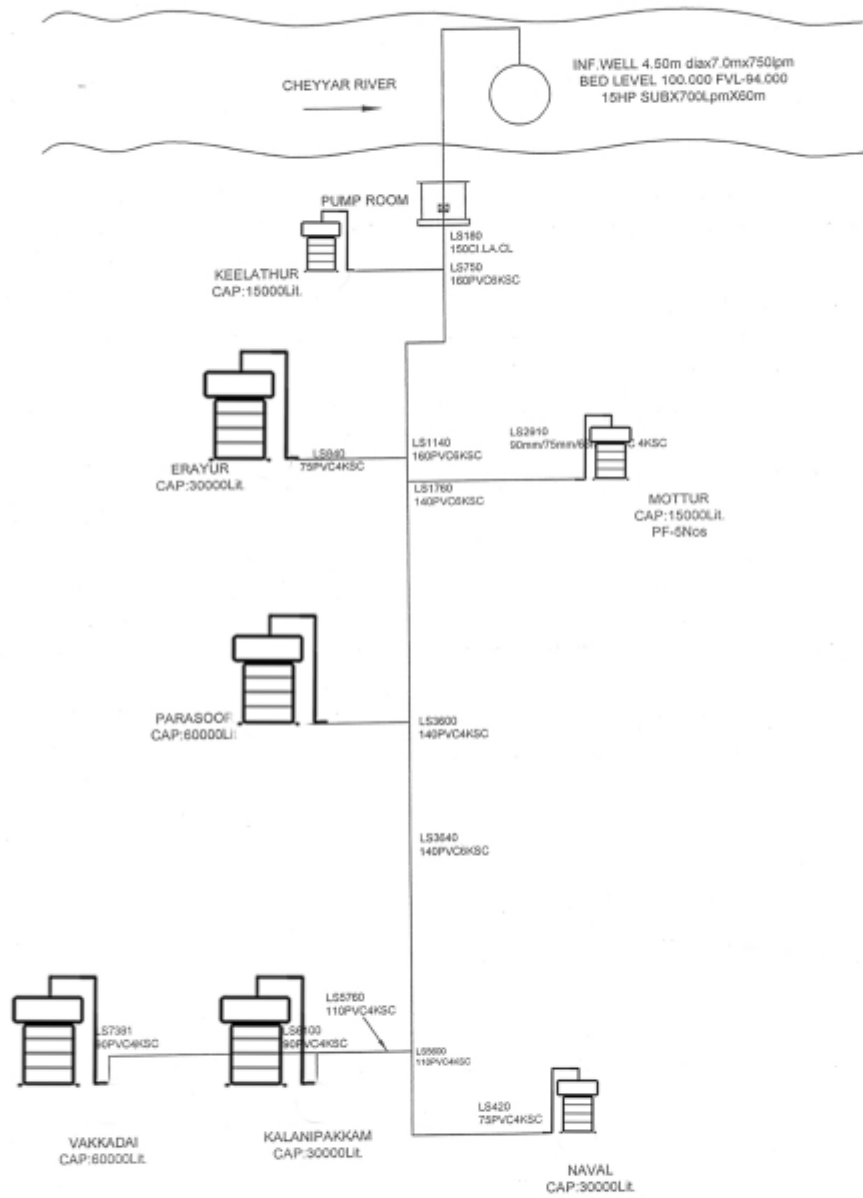
S.No	Habitation		Pop	Cap in Lit	Design Qty(LLD)
1	Kizhathur	Kizhathur	DL		
2	Cheyyartivendran	Mottur	491	30000	0.196
3	Eariyur	Eraiur	DL		
4		Eraiur Colony	245	30000	0.098
5	Parasur	Parasur	2055	60000	0.822
6		Mettu Colony	DL		
7		Palla Colony	DL		
8		Lakshmipuram	531	10000	0.212
9	Naval	Naval	1394	30000	0.558
10		Naval colony	DL		
11	Kalanipakkam	Kalanipakkam	1237	30000	0.495
12		Kalanipakkam Col	DL		
13	Vakkadai	Vakkadai	1380	60000	0.552
14		Vakkadai Col	DL		
			7333		2.933

23. Populations

- a. Present (as on 2011) : 7333
b. Intermediate (Year) : ---

c. Ultimate (Year)	:	---
24. Level of service	:	40 LPCD
25. Designed Quantity		
a. Present (Year) (as on 2011)	:	380 KLD
b. Intermediate (Year)	:	---
c. Ultimate (Year) (2029)	:	---
26. Year of Completion & Commissioning	:	
a. Original Scheme	:	06/1995
b. Taken over of Maintenance	:	06.10.1995
c. Improvement scheme	:	--
27. Head works with source details	:	Infiltration wells 3 nos in cheyyar river Kizhathur
		Dia Depth Yield
IW.I	-	4.50 M 7.00 M 750 LPM
Pump room	-	1 no
28. Pumpset		
a. Type	:	Submersible
b. Duty		15HP (700 lpmX60 M Head)= 2 Nos (with stand by)
c. Hours of pumping	:	10 Hours
29. Treatment plant (with Units Details)	:	---
30. Transmission Main	:	Short Raising Main = 150 CI LA Class = 180 M
a. Pumping Main	:	160 mm PVC pipe 6ksc = 960 M 140 mm PVC pipe 6ksc = 2500 M 110 mm PVC pipe 4ksc = 2120 M 90 mm PVC pipe 4ksc = 1921 M
b. Gravity Main	:	-----
31. Booster Main		
a. Sump with capacity	:	-----
b. Pumpset details	:	-----
32. Feeder mains	:	75 PVC pipe 4ksc =1540 M 63 PVC pipe 4ksc = 2450 M
33. No of Group sump with capacity	:	---
34. Service reservoirs with capacity	:	10000 Lit = 1 no 60000 Lit = 2 nos 30000 Lit = 4 nos
35. Separate power feeder main details	:	----
36. Distribution system	:	75 mm & 63 mm PVC Pipe 4ksc = 9750 M

CWSS TO PARASUR & 13 OTHER HABITATIONS



SALIENT DETAILS

CWSS TO ERAIYUR & 10 OTHER HABITATIONS IN

CHEYYAR & ANNAKAVUR UNION

37. Scheme Cost

- a. Installation cost : Rs. 79.57 Lakhs
b. Annual Maintenance cost : Rs. 9.360 Lakhs DR -8/2010-11

38. Administrative approval No & Amount : MD's Pro No. F.Eraiur CWSS/AE10/P&D/
Dt :21.02.2000 Rs.80.430 Lakhs

39. Technical sanction No & Amount : SEC No. 1/MNP/2001-02 / Rs. 79.57 Lakhs

40. Beneficiaries :

S.No	Habitation	Pop	Cap in Lit	Design Qty(LLD)
1	Eraiur	893	30000	0.491
2	Thodukulam	358	30000	0.196
3	EB Colony	360	EPL	0.198
4	Madurai	426	30000	0.234
5	Madurai Col	301	30000	0.165
6	Parasur Mettu Colony	1450	60000	0.798
7	Palla Colony	1170	30000	0.643
8	Naval HC	725	30000	0.398
9	Kalanipakkam Col	420	30000	0.231
10	Vakkadai mettu Colony	624	30000	0.343
11	Vakkadai New Colony	410	30000	0.225
12	Mukkur Mettu Colony	1181	30000	0.649
		8318		4.571

41. Populations

- a. Present (2000) : 7137
As on (2011) : 8318
b. Intermediate (Year) : ---
c. Ultimate (Year) (2030) : 9991

42. Level of service : 55 LPCD

43. Designed Quantity

- a. Present (Year) (as on 2000) : 392 KLD
As on 2011 : 458 KLD
b. Intermediate (Year) : ---
c. Ultimate (Year) (2030) : 550 KLD

44. Year of Completion & Commissioning	:	
a. Original Scheme	:	20.09.2001
b. Taken over of Maintenance	:	30.09.2002
c. Improvement scheme	:	--
45. Head works with source details	:	Infiltration well 2 nos. in river cheyyar near Eraiyur
		Dia Depth Yield
	IW1	- 4.50 M 7.00 M 600 LPM
	IW 2	- 3.50 M 9.00 M 600 LPM
46. Pumpset		IW1 IW2
a. Type		Submersible Submersible
b. Duty		10HP x 573lpm - 59M 5 HP x 350lpm - 60M
	(with stand by)	(with stand by)
c. Sump	:	35000 Lits. Cap. 15 HP 500 Lpm x 75m
c. Hours of pumping	:	16 Hours
47. Treatment plant (with Units Details)	:	----
48. Transmission Main	:	----
a. Pumping Main	IW	: S.R.M = 150 CI D/F Pipe = 399 M 0
	BW	: S.R.M = 80 GI Pipe = 324 M
b. Gravity Main	IW	: 140 PVC Pipe 6ksc = 1209 M
		140 PVC Pipe 4ksc = 3907 M
		110 PVC Pipe 4ksc = 2303 M
		90 PVC Pipe 4ksc = 1785 M
	BW	: 90 PVC Pipe 4ksc = 600 M
		110 PVC pipe 4ksc = 108 M
49. Booster Main		@ Vakkadai
a. Sump with capacity	:	5000 Lit Cap
b. Pumpset details	:	1.00 HP C.F set x 33lpm x 20M Head = 2nos
		(With stand by)
50. Feeder mains	:	90 PVC pipe 4ksc = 198 M
51. No of Group sump with capacity	:	---
52. Service reservoirs with capacity	:	30000 Lit = 10 60000 Lit = 1
53. Separate power feeder main details	:	EB Application Given & Registered separate feeder
54. Distribution system	:	63 mm PVC Pipe 4ksc = 8455 M

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SALIENT DETAILS

CWSS TO ANNAKAVUR & 6 OTHER HABITATIONS IN **ANNAKAVUR UNION**

55. Scheme Cost

- a. Installation cost : Rs. 12.950 Lakhs
b. Annual Maintenance cost : Rs. 7.29 Lakhs DR -9/2010-11

56. Administrative approval No & Amount : ----

57. Technical sanction No & Amount : Rs. 12.950 Lakhs

58. Beneficiaries :

S.No	Habitation	Pop	Cap in Lit	Design Qty(LLD)
1	Athikulam	680	15000	0.272
2	Annakavur	3065	100000	1.226
3	Annakavur Col	795	EPL	0.318
4	Cheyyamoor	671	30000	0.27
5	Vilaripattu	559	15000	0.223
6	Kilmattai	1532	30000	0.612
7	Vellai	748	30000	0.299
	TOTAL	8050		3.22

59. Populations

- a. Present (2011) : 8050
b. Intermediate (Year) : ---
c. Ultimate (Year) : ---

60. Level of service : 40 LPCD

61. Designed Quantity

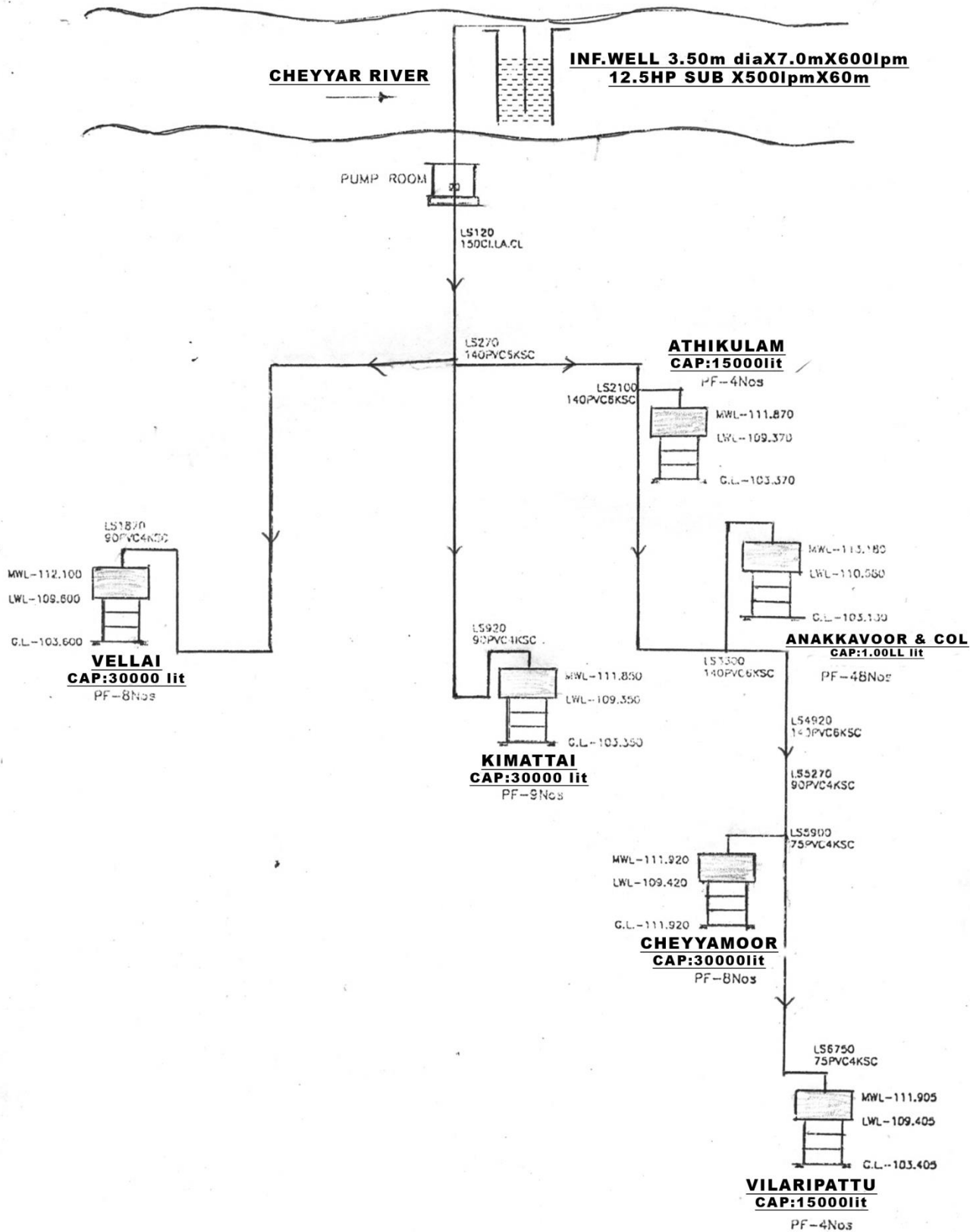
- a. Present (Year) (as on 2011) : 320 KLD
b. Intermediate (Year) : ---
c. Ultimate (Year) : ---

62. Year of Completion & Commissioning :

- a. Original Scheme : 1988

b.	Taken over of Maintenance	:	9/1995		
c.	Improvement scheme	:	--		
63.	Head works with source details	:	Infiltration well in cheyyar river 1no @		
				Gnanamuruganpoondi	
			Dia	Depth	Yield
	IW	-	3.50 M	7.00 M	600 LPM
	Pump Room	-	1 No		
64.	Pumpset				
a.	Type		Submersible		
b.	Duty		12.50HP X 500lpm X 60M = 2nos (with stand by)		
c.	Hours of pumping	:	12 Hours		
65.	Treatment plant (with Units Details)	:	----		
66.	Transmission Main	:	----		
Short R.M		:	150 mm Dia CI LA CI = 120 M		
a.	Pumping Main	:	140 mm PVC pipe 6ksc = 4800 M		
			90 mm PVC pipe 4ksc = 2600 M		
			75 mm PVC pipe 4ksc = 1480 M		
b.	Gravity Main	:	NIL		
67.	Booster Main				
a.	Sump with capacity	:	-----		
b.	Pumpset details	:	-----		
68.	Feeder mains	:	-----		
69.	No of Group sump with capacity	:	----		
70.	Service reservoirs with capacity	:	15000 Lit Cap = 2	100000 Lit Cap = 1	
			30000 Lit Cap = 3		
71.	Separate power feeder main details	:	24 Hours Available		
72.	Distribution system	:	90 mm, 75 mm, 63 mm PVC Pipe 4ksc = 7500 M		

CWSS TO ANAKKAVOOR & 6 OTHER HABITATIONS
SCHEMATIC DIAGRAM (Not to scale)



COMBINED WATER SUPPLY SCHEME TO HASANAMPETTAI, THENKAZHANI AND PERUNGATTUR IN VEMBAKKAM UNION FROM THE CWSS TO THENPOONDIPATTU AND 9 OTHER HABITATIONS IN CHEYYAR UNION

SALIENT DETAILS

1 Name	:	Combined Water Supply Scheme to Hasanampettai, Thenkazhani and Perungattur in Vembakkam union from the CWSS to Thenpoondipattu and 9 other habitations in Cheyyar Union		
2 No. of Habitations Covered	:	4		
3 Population				
Present (2011)	:	3969		
Base year (2012)	:	4020		
Intermediate year (2027)	:	4787		
Ultimate year (2042)	:	5553		
4 Daily Requirement		Hasanam pettai	Thenpoondi pattu	Total
Intermediate	:	221181 lit	189078	410259 lit
Ultimate	:	256560 lit	204300	460860 lit
5 Hours of Pumping	:	20 Hours at Head Works		
	:	12 Hours at Booster Station		
6a Requirement of LPM (For 20 Hrs Pumping)		Hasanam pettai	Thenpoondi pattu	Total
Intermediate (2027)	:	307 lpm	262	569 lpm
Ultimate (2042)	:	356 lpm	284	640 lpm
6b Requirement of LPM (For 12 Hrs Pumping)		Hasanam pettai	Thenpoondi pattu	Total
Intermediate (2027)	:	185 lpm	159	344 lpm
Ultimate (2042)	:	214 lpm	170	384 lpm
7 i Installation cost - Administrative approval	:	CE/TWAD/VLR proce.No: 8818/ Delink/ AE-5/ 2014/ Dt. 20.01.2015 for Rs.49.90 lakhs		
7 ii Installation cost - Technical Sanction		Technical sanction SE/ TWAD / Vellore - TV Malai Circle / Vellore SECR.No.18/2014-15/ dt.23.01.2015 for Rs.49.90 lakhs.		
8 Name of Contractor Executed	:	Thiru S.Dharmadurai		
		Keelsathamangalam		
9 i Date of Work Order		26.02.2015		
9 ii Date of site Handing over		01.03.2015		

9 iii	Date of Commencement of work	:	01.03.2015
9 iv	Date of Completion of work.	:	14.08.2015
9 v	Date of commencement of Contractor's Maintenance	:	15.08.2015
9 vi	Date of completion of Contractor's Maintenance	:	14.09.2015
10 i	Agreement No.		DR. no. 42/ TWAD/ 2015 -16
10 ii	Agreement Value		Rs. 4218204.71
11	SCHEME DETAILS		
I	Head Works		
a	Source	:	Infiltration well (Existing) : 1 nos
		:	1 no - Existing 3.50m dia 9.00m depth - 538lpm yield
b	Pumpsets		
i	Pumpset at Infiltration well	:	12.50 HP Submersible Pumpset 333 lpm x 63m Head with stand by
ii	Guarantee period Card	:	One year from date of Supply
iii	Armoured Aluminium Cable	:	70Sqmm Armoured Aluminium Cable - 570m
iv	Capacity of Power capacitor	:	3 KVAR 1 no
c	Control Room (Existing)	:	3m x 2m : 1 no
II	Pumping main (Existing)	:	125mm GI Pipe : 557 m
		:	140mm OD PVC 6 Ksc Pipe : 8958 m
		:	110mm OD PVC 4 Ksc Pipe : 900 m
III	Booster station		
a	Sump	:	180000 lit capacity ground level sump - 1no (8 Hours detention time)
b	Control Room	:	3m x 2m : 1 no
c	Pumpset		
I a	Pumpset for Hasanampettai Branch main	:	4 HP Submersible Pumpset 293 lpm x 42m Head with stand by - Working
b	Cable	:	4 sqmm flat submersible cable : 30 m

c	Power capacitor	: 2 KVAR	: 1 no
d	Change Over switch	: 63 Amps 500V	: 1 no
e	Pressure Guage	: 1 no	
f	Guarantee period Card	: One year from date of Supply	
II a	Pumpset for Thenpoondipattu Branch main	: 3 HP Submersible Pumpset 262 lpm x 33m Head with stand by - Working	
b	Cable	: 4 sqmm flat submersible cable	: 66 m
c	Power capacitor	: 2 KVAR	: 1 no
d	Change Over switch	: 63 Amps 500V	: 1 no
e	Pressure Guage	: 1 no	
f	Guarantee period Card	: One year from date of Supply	
III	Booster mains & Branch mains		
A i	Thenpoondipattu Booster Main (Existing)	: 110mm OD PVC 4 Ksc pipe	: 2236 m
		: 90mm OD PVC 4 Ksc pipe	: 1454 m
		: 75mm OD PVC 4 Ksc pipe	: 1224 m
		: 63mm OD PVC 4 Ksc pipe	: 294 m
ii	Branch main (Exisitng)	: 50mm OD PVC 6 Ksc pipe	: 5486 m
		: 40 mm GI Pipe	: 31 m
B i	Hasanampettai Booster Main	: 110mm OD PVC 6 Ksc pipe	: 924 m
		: 110mm OD PVC 4 Ksc pipe	: 4686 m
		: 100 mm GI Pipe	: 166 m
ii	Branch main	: 90mm OD PVC 4 Ksc pipe	: 1250 m
		: 63mm OD PVC 4 Ksc pipe	: 66 m
		: 80 mm GI Pipe	: 36 m

IV Service Reservoir		
A Thenpoondipattu Booster Main (Existing)		
a 60000 lit capacity	: 1 no (Existing)	
b 30000 lit capacity	: 5 nos (Existing)	
c 10000 lit capacity	: 2 nos (Existing)	
d 5000 lit capacity	: 1 no (Existing)	
B Hasanampettai Booster Main (Existing)		
a 100000 lit capacity	: 2 nos (Existing) (Hasanampettai & Perungattur)	
b 60000 lit capacity	: 2 no (Existing) (Thenkazhani & Perungattur colony)	
V Distribution System	: Existing	
VI STPF	: Existing	
12 VALVES AND WATER METER		
a Air Valve	: 40 mm Double Air Valve	: 3 nos
	: 20 mm Single Air Valve	: 3 nos
b Scour Valve	: 80mm CI Scour Valve	: 1 nos
c Sluice Valve	: 100 mm CI Sluice Valve	: 2 no
	: 65mm CI Sluice Valve	: 3 nos
d Water Meter	: No provision in the DPR	
13 Annual Maintenance Cost	: Rs. 12.89 lakhs	
14 Per capita cost	: Rs. 1623.00	
15 Cost per 1000lit	: Rs. 10.59	
16 FM Sketch		
FM Sketch for Booster Station	: Survey no. 25 of Duli Village (copy enclosed)	
17 Completion Plan	: Enclosed	
18 Details of laying of Pipe line in Private land	: NIL	

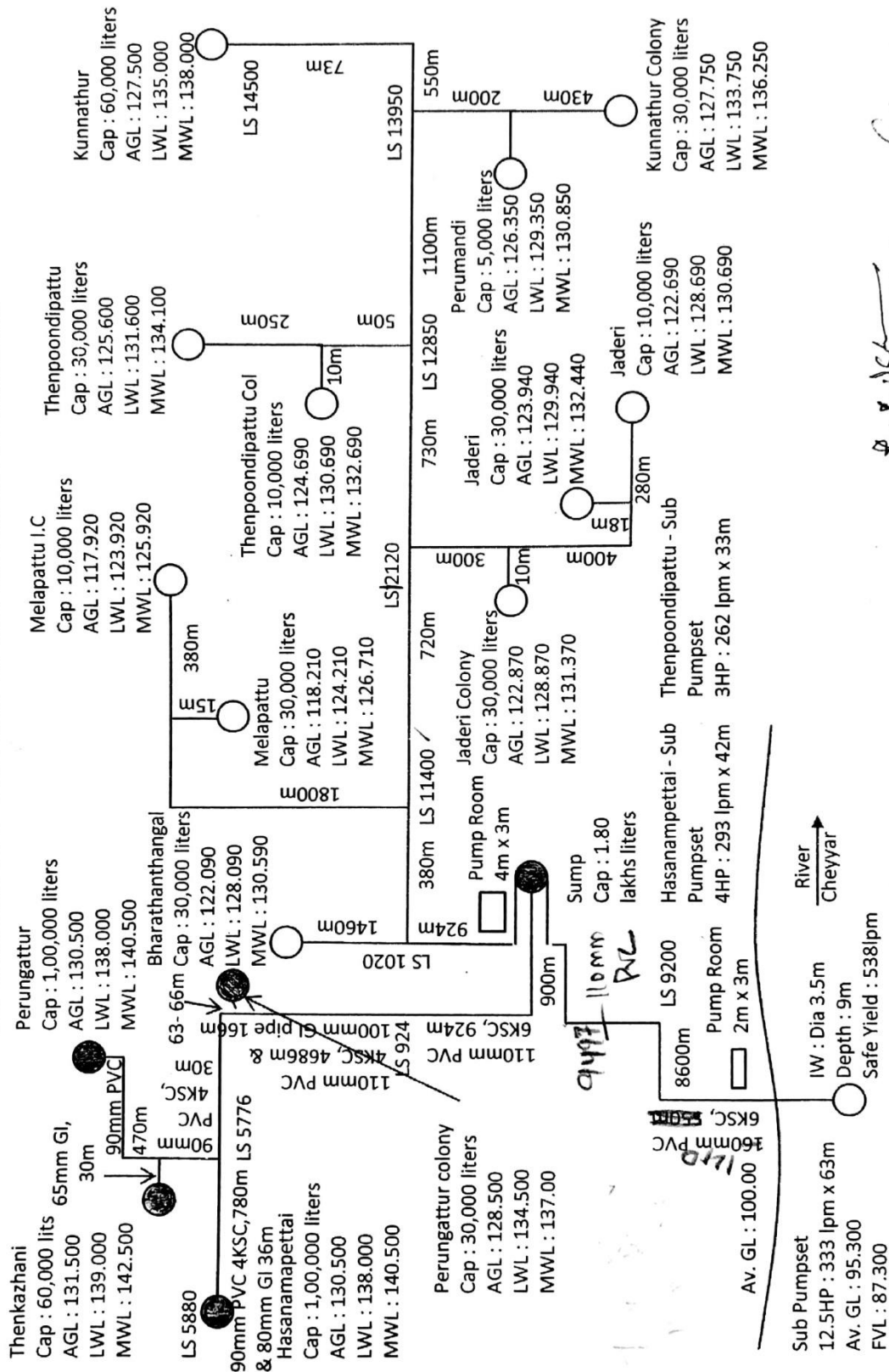
19	Details of Payment of Road Restoration	: Rs. 23,000 is remitted to Highways as per the request in Ir.no 476/ 2015/ JDO dated 16.07.2015 of Executive Engineer, HW (O & M) Department, Cheyyar vide cheque no. 005166 dated 31.07.2015.
		Abdullapuram - Moranam Road - Km 14/2 to 14/4
20	Details of EB Service	
	a Head works (Exisitng)	: 243 - 010 - 490
	b Booster Station at Duli	: 242 - 010 - 336 CC Charges paid upto 31.08.2015
21	DCB details	: Demand raised for the upto 30.06.2015 and the amount to be collected from the panchayats
	i Hasanampettai	: Rs. 4500
	ii Thenkazhani	: Rs. 3000
	iii Perungattur	: Rs. 6000

REQUIREMENT OF WATER

Sl. no	Name of Panchayat	Name of Habitation	Requirement in lit			Requirement in lpm in Booster station			Capacity of OHT available
			Base year	Inter mediate	Ultimate	Base year	Inter mediate	Ultimate	
I	Thenpoondipattu Branch								
1	Thenpoondipattu	Jaderi	13675	15043	16410	19	21	23	30000 lit - 1no 10000 lit - 1no
2	Thenpoondipattu	Jaderi colony	19145	21060	22974	27	29	32	30000 lit -1no
3	Thenpoondipattu	Melapattu	20969	23066	25162	29	32	35	30000 lit -1no
4	Thenpoondipattu	Bharathanthangal	19145	21060	22974	27	29	32	30000 lit -1no
5	Thenpoondipattu	Thenpoondipattu	13333	14667	16000	19	20	22	30000 lit -1no
6	Thenpoondipattu	Thenpoondipattu colony	5812	7200	7200	10	10	10	10000 lit -1no
7	Thenpoondipattu	Melpattu Irular colony	3419	7200	7200	10	10	10	10000 lit -1no
8	Kunnathur	Kunnathur	47863	52650	57436	66	73	80	60000 lit -1no
9	Kunnathur	Kunnathur colony	18120	19932	21744	25	28	30	30000 lit -1no
10	Kunnathur	Perumandi	4547	7200	7200	10	10	10	5000 lit -1no
II	Hasanampettai Branch								
1	Hasanampettai	Hasanampettai	55394	65969	76521	77	92	106	100000 - 1no
2	Thenkazhani	Thenkazhani	73366	87372	101348	102	121	141	60000 - 1no
3	Perungattur	Perungattur	56965	67840	78691	79	94	109	100000 - 1no
4	Perungattur	Perungattur colony	30000	30000	30000	42	42	42	60000 - 1no

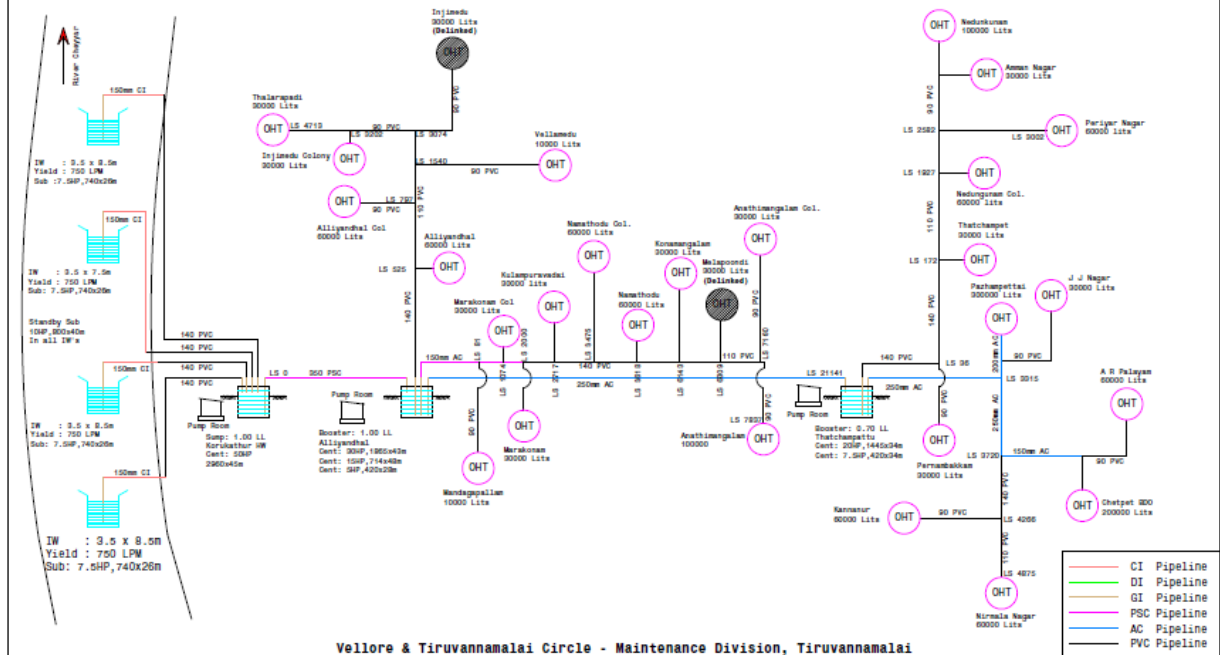
**CWSS TO THENPOONDIPATTU AND 9 OTHER HABITATIONS IN CHEYYAR UNION ,
HASANAMAPETTAI, THENKAZHANI AND PERUNGATTUR IN VEMBAKKAM UNION OF**

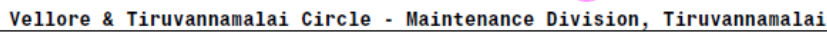
TIRUVANNAMALAI DISTRICT : PUMPING MAIN ALIGNMENT



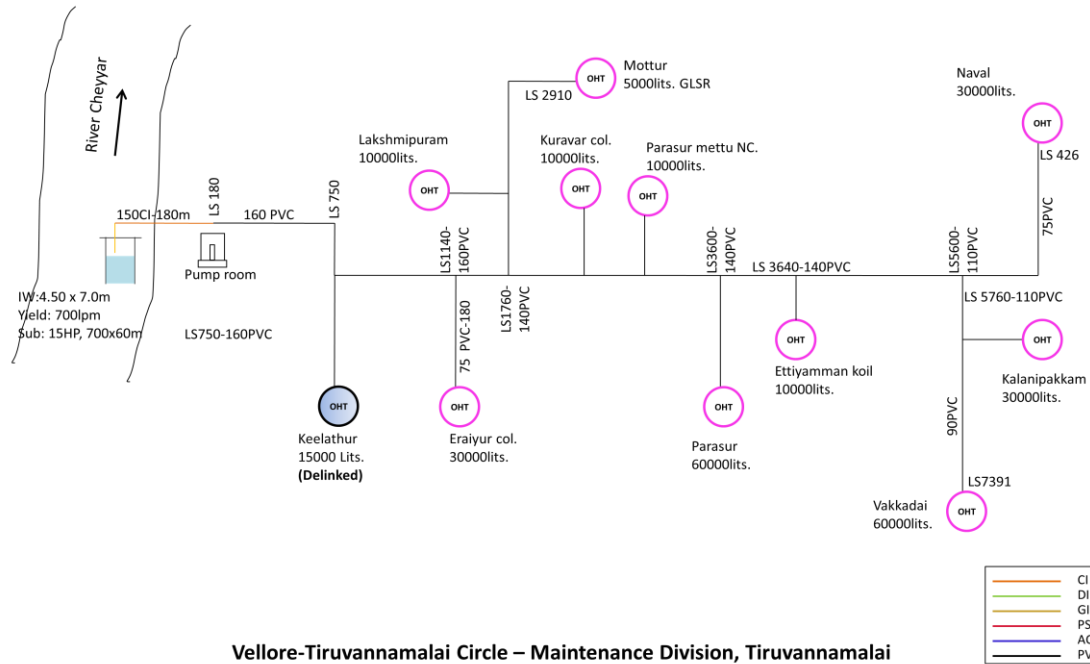
Handwritten signature and date: 18.9.05

CWSS to Namathodu, Chetpet RTP and 22 Other Habitations in Peranamallur union in Thiruvannamalai District (Flow Chart - Not to Scale)



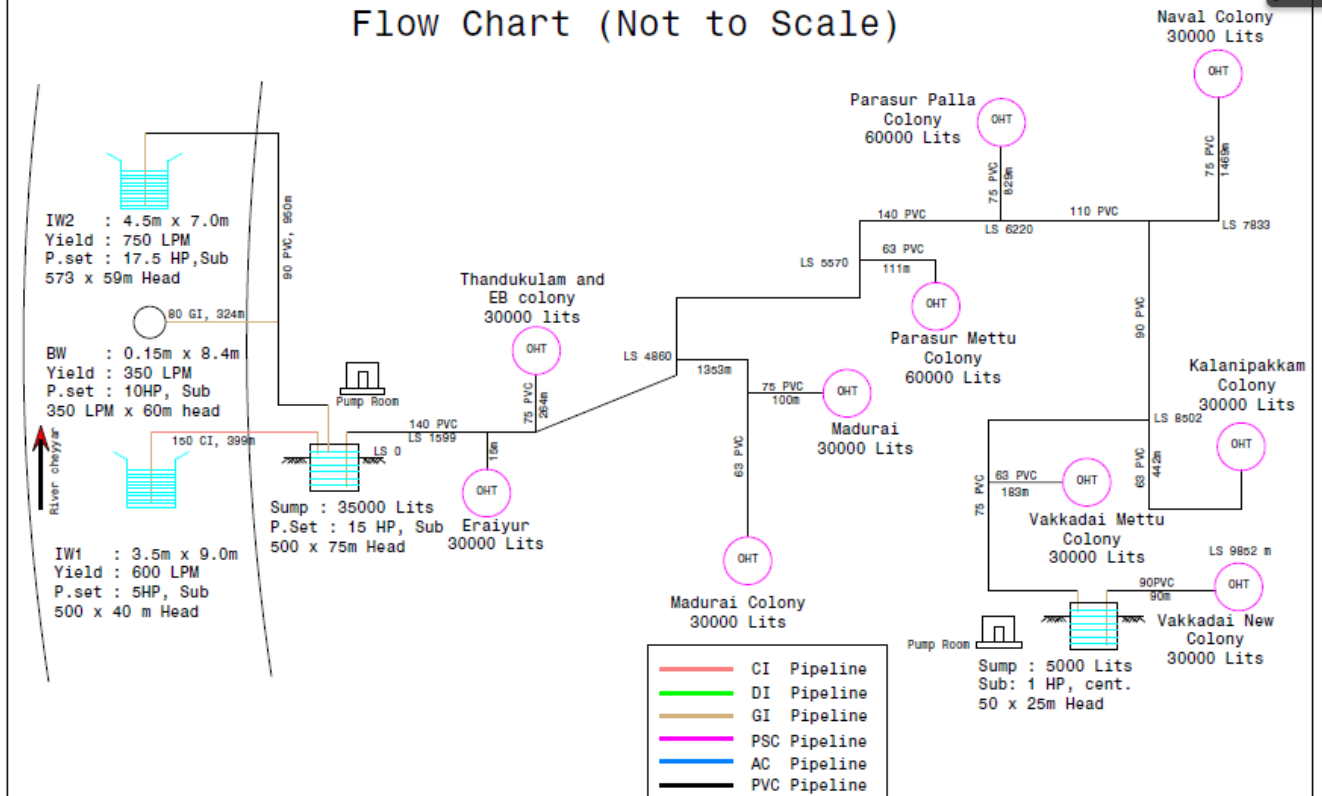


CWSS to Parasur and 13 other Habitations in Anakkavur and Cheyyar Union of Tiruvannamalai District (Flow Diagram – Not to Scale)



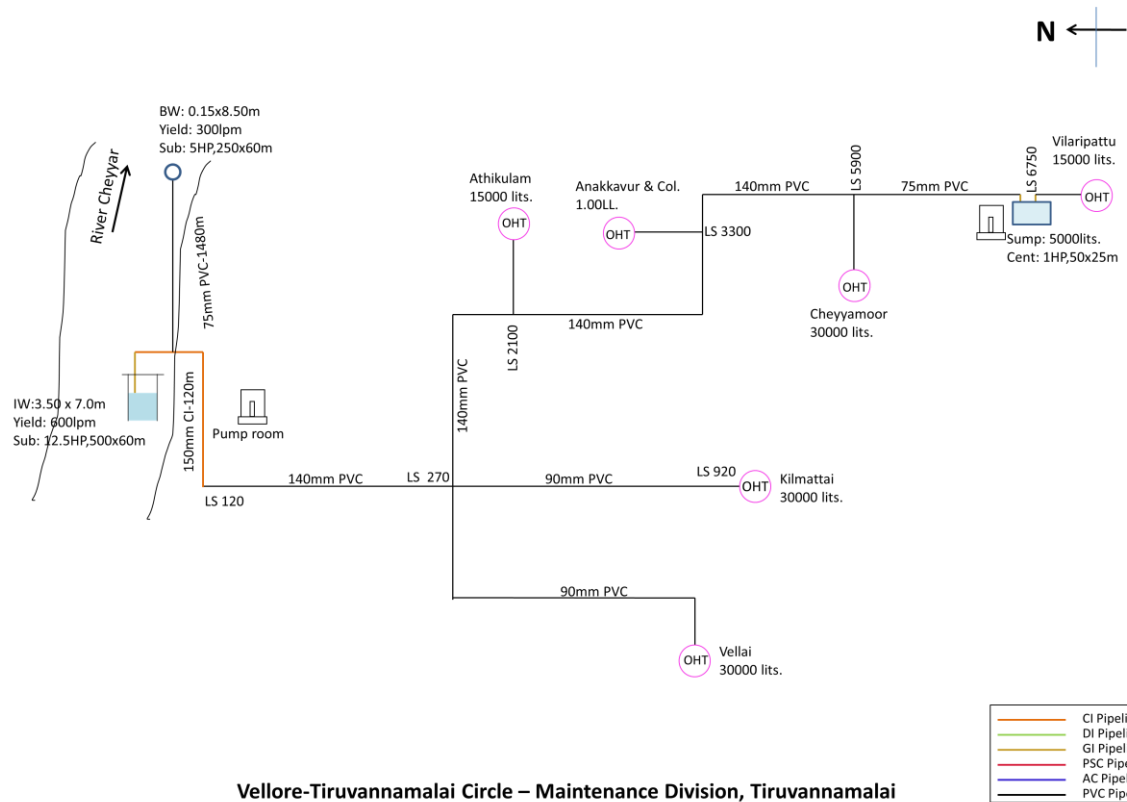
Vellore-Tiruvannamalai Circle – Maintenance Division, Tiruvannamalai

CWSS to Eraiyur and 10 Other Habitations in Cheyyar N Union in Thiruvannamalai District Flow Chart (Not to Scale)

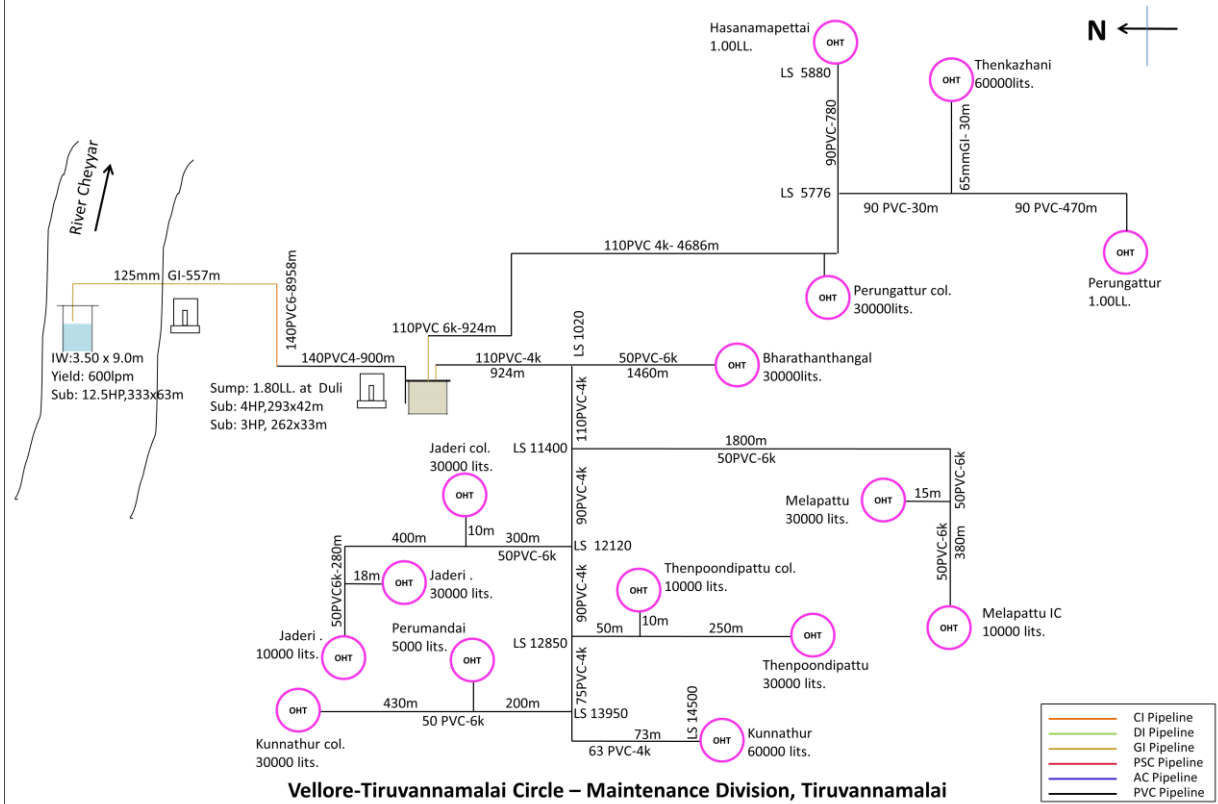


Vellore & Tiruvannamalai Circle - Maintenance Division, Tiruvannamalai

CWSS to Anakkavur and 6 other Habitations in Anakkavur union of Tiruvannamalai District (Flow Diagram – Not to scale)



**CWSS to Thenpoondipattu and 13 other Habitations in Cheyyar and Vembakkam union of
Tiruvannamalai District (Flow Diagram – Not to scale)**



Details of CWSS maintained by the TWAD Board					
Sl.No	Name of CWSS	Pumping Main		Feeder/Booster Main	
		Size	Length in Mts	Size	Length in Mts
1	CWSS to Umayalpuram, Vembakkam H and 10 other habitations in Vembakkam union of Tiruvannamalai District	150mm AC Cl.15	800	110mm PVC 4KSC	910
		125mm AC Cl.15	5325	90mm PVC 4KSC	2152
		110mm PVC 4KSC	2506	63mm PVC 4KSC	4114
		90mm PVC 4KSC	260	75mm PVC 4KSC	2020
			8891		9196

Sl.No	Name of CWSS	Pumping Main		Feeder/Booster Main	
		Size	Length in Mts	Size	Length in Mts
2	CWSS to Chithathur and 14 other habitations in Vembakkam union of Tiruvannamalai District	150mm AC Cl.15	1087	90mm PVC 4KSC	1046
		160mm PVC 10KSC	414	75mm PVC 4KSC	2670
		140mm PVC 6KSC	2516	65mm GI Pipe	84
		125mm GI	30	50mm GI Pipe	2398
		110mm PVC 4KSC	6095	63mm PVC 6KSC	1352
		100mm GI	61	40mm GI Pipe	30
		50mm PVC 6KSC	835		
		63mm PVC 4KSC	387		
			11425		7580

Sl.No	Name of CWSS	Pumping Main		Feeder/Booster Main	
		Size	Length in Mts	Size	Length in Mts
3	CWSS to Abdullapuram and 13 other habitations in Vembakkam union of Tiruvannamalai District	150mm AC Cl.15	2634	140mm PVC 4KSC	1550
		140mm PVC 4KSC	494	110mm PVC 4KSC	3189
		90mm PVC 6KSC	1450	90mm PVC 4KSC	1368
		90mm PVC 4KSC	30	75mm PVC 4KSC	950
		75mm PVC 4KSC	375	63mm PVC 4KSC	1894
			4983		8951

Sl.No	Name of CWSS	Pumping Main		Feeder/Booster Main	
		Size	Length in Mts	Size	Length in Mts
4	CWSS to Menalur H and 10 other habitations in Vembakkam union of Tiruvannamalai District	160mm PVC 10KSC	1093	110mm PVC 4KSC	331
		150mm GI	161	90mm PVC 4KSC	826
		150mm AC Cl.15	3640		
		150mm AC Cl.10	6710		
		125mm AC Cl.10	420		
		90mm PVC 4KSC	2700		
		150mm AC Cl.15	767		
			15491		1157

Sl.No	Name of CWSS	Pumping Main		Feeder/Booster Main	
		Size	Length in Mts	Size	Length in Mts
5	CWSS to Sodiampakkam and 10 other habitations in Vembakkam union of Tiruvannamalai District	150mm CI A class	1633	110mm PVC 6KSC	1080
		150mm AC Cl.15	5139	110mm PVC 4KSC	3135
				90mm PVC 4KSC	2082
				75mm PVC 4KSC	2052
				63mm PVC 4KSC	1456
			6772		9805

Sl.No	Name of CWSS	Pumping Main		Feeder/Booster Main	
		Size	Length in Mts	Size	Length in Mts
6	CWSS to Ukkal Kottakarai and 13 other habitations union in Anakkavur union of Tiruvannamalai District	110mm PVC 4KSC	2485	75mm PVC 4Ksc Pipe	1500
		90mm PVC 4KSC	2126	63mm PVC 4KSC	5000
			4611		6500

1. CWSS to Namathodu and Chetpet RTP and 22 other habitations in Tiruvannamalai District

Initial Reach - CWSS to Namathodu and Chetpet RTP and 22 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Peranamallur	Alliyandal	Alliyandal	59.36
2	Peranamallur	Alliyandal	Alliyandal Colony	50.40
3	Peranamallur	Alliyandal	Mandagapallam	5.36
4	Peranamallur	Marakonam	Marakonam	40.16
5	Peranamallur	Marakonam	Marakonam Colony	27.84
6	Peranamallur	Pernambakkam	Pernambakkam	36.36
7	Peranamallur	Nedunkunam	Thatchampattu	16.80
Initial Reach - Total				236.28

Middle Reach - CWSS to Namathodu and Chetpet RTP and 22 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Peranamallur	Injimedu	Vellamedu	10.72
2	Peranamallur	Injimedu	Injimedu colony	29.76
3	Peranamallur	Namathodu	Namathodu	59.04
4	Peranamallur	Namathodu	Namathodu Colony	29.76
5	Peranamallur	Namathodu	Thellarampattu	20.16
6	Peranamallur	Namathodu	Kulampuravadai	18.48
7	Peranamallur	Konamangalam	Konamangalam	53.52
8	Peranamallur	Anathimangalam	Kolathur	8.00
9	Peranamallur	Anathimangalam	Anathimangalam Col	21.40
10	Peranamallur	Nedunkunam	Nedunkunam	160.56

12	Peranamallur	Nedunkunam	Nedunkunam Colony	51.60
13	Peranamallur	Thatchampattu	J.J Nagar	44.52
14	Peranamallur	Thatchampattu	Amman Nagar	24.00
	Middle Reach Total			531.52

Tail end - CWSS to Namathodu and Chetpet RTP and 22 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Peranamallur	Injimu	Thalarpadi	34.80
2	Peranamallur	Anathimangalam	Anathimangalam	80.28
3	Peranamallur	Nedunkunam	Periyarnagar	18.72
4	Peranamallur	Chetpet	RTP	500.00
	Tail end Total			633.80

2.CWSS to Vinnamangalam and 13 other habitations in Tiruvannamalai District

Initial Reach - CWSS to Vinnamangalam and 13 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Vinnamangalam	Vinnamangalam colony	Vinnamangalam colony
2	Cheyyar	Pudukottai	Pudukottai	Pudukottai
3	Cheyyar		Pudukottai colony	Pudukottai colony
4	Cheyyar		Vellaripattu	Vellaripattu
5	Cheyyar	Kaduganur	Kaduganur	Kaduganur
6	Cheyyar		IrularKudiruppu	IrularKudiruppu
Initial Reach - Total				148.50

Middle Reach - CWSS to Vinnamangalam and 13 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Vinnamangalam	Melmattai	286.00
2	Cheyyar	Vinnamangalam	ArunthathiyarPalayam	255.75

	Middle Reach Total			541.75
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Tail end - CWSS to Vinnamangalam and 13 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Vinnamangalam	Palakandaputhur	25.85
2	Cheyyar	Vinnamangalam	Palakandaputhur col	25.85
3	Cheyyar	Pudukottai	Sadathangal	20.90
	Tail end Total			72.60

3. CWSS to Parasur and 13 other habitations in Tiruvannamalai District

Initial Reach - CWSS to Parasur and 13 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Eraiur	Eraiur Colony	12.74
2	Cheyyar	Parasur	Lakshmipuram	27.612
Initial Reach - Total				40.352

Middle Reach - CWSS to Parasur and 13 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Anakkavur	Anakkavur	Mottur	25.53
2	Cheyyar	Parasur	Parasur	106.86
3	Cheyyar	Parasur	Naval	72.49
4	Cheyyar	Parasur	Kalanipakkam	64.32
	Middle Reach Total			269.20

Tail end - CWSS to Parasur and 13 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Vakkadai	Vakkadai	71.76
	Tail end Total			71.76

4. CWSS to Eraiur and 10 other habitations in Cheyyar union of Tiruvannamalai District

Initial Reach - CWSS to Eraiyur and 10 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyvar	Eraiyur	Eraiyur	51.57
2	Cheyvar	Eraiyur	Thandukulam	20.67
3	Cheyvar	Eraiyur	E.B.colony	20.79
4	Cheyvar	Madurai	Madurai	24.60
Initial Reach - Total				117.64

Middle Reach - CWSS to Eraiyur and 10 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyvar	Madurai	Maduraicolony	17.38
2	Cheyvar	Parasur	ParasurMettu colony	83.74
3	Cheyvar	Parasur	ParasurPalla colony	67.57
4	Cheyvar	Naval	Naval-HC	34.89
5	Cheyvar	Kalanipakkam	Kalanipakkam colony	24.26
6	Cheyvar	Vakkadai	Vakkadai New Colony	23.68
7	Cheyvar	Mukkur	MukkurMettu Colony	56.84
	Middle Reach Total			308.35

Tail end - CWSS to Eraiyur and 10 other habitations in Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Cheyvar	Vakkadai	VakkadaiMettu Colony	36
	Tail end Total			36.04

5.CWSS to Anakkavur and 6 other habitations in Anakkavur union of Tiruvannamalai District

Initial Reach - CWSS to Anakkavur and 6 other habitations in Anakkavur union of Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Anakkavur	Anakkavur	Anakkavur	123.00
2	Anakkavur	Anakkavur	Athikulam	27.00
Initial Reach - Total				150.00

Middle Reach - CWSS to Anakkavur and 6 other habitations in Anakkavur union of Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Anakkavur	Anakkavur	Anakkavur-HC	31.80
2	Anakkavur	Anakkavur	Cheyyamoor	27.00
3	Anakkavur	Vellai	Vellai	29.90
	Middle Reach Total			88.70

Tail end - CWSS to Anakkavur and 6 other habitations in Anakkavur union of Tiruvannamalai District				
No.	Union	Panchayat	Habitation	In KL
1	Anakkavur	Vellai	Kilmattai	61.20
2	Anakkavur	Thenmavandal	Vilaripattu	22.30
	Tail end Total			83.50

6.CWSS to Thenpoondipattu and 13 other habitations in Cheyyar union of Tiruvannamalai District

Initial Reach - CWSS to Thenpoondipattu and 18 other habitations in Cheyyar union				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Thenpoondipattu	Bharathanthangal	20.10
2	Cheyyar	Hasanamapettai	Hasanamapettai	58.16
3	Vembakkam	Perungattur	Perungattur Col.	31.50
Initial Reach - Total				109.77

Middle Reach - CWSS to Thenpoondipattu and 18 other habitations in Cheyyar union				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Thenpoondipattu	Jaderi	14.36
2	Cheyyar	Thenpoondipattu	Jaderi colony	20.10
3	Cheyyar	Thenpoondipattu	Melapattu	22.02
4	Cheyyar	Thenpoondipattu	Thenpoondipattu	14.00
5	Cheyyar	Thenpoondipattu	Thenpoondipattu Col.	6.10
6	Cheyyar	Thenpoondipattu	Melapattu IC	3.59
7	Cheyyar	Kunnathur	Kunnathur	50.26
8	Cheyyar	Kunnathur	Perumandi	4.77
9	Vembakkam	Thenkazhani	Thenkazhani	77.03
	Middle Reach Total			212.24

Tail end - CWSS to Thenpoondipattu and 18 other habitations in Cheyyar union				
No.	Union	Panchayat	Habitation	In KL
1	Cheyyar	Kunnathur	Kunnathur col.	19.03
2	Vembakkam	Perungattur	Perungattur	59.81
	Tail end Total			78.84