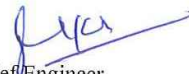


**PRESENT REQUIREMENT OF FOREST LAND FOR TELANGANA DRINKING
WATER SUPPLY PROJECT FOR LAYING OF PIPE LINES AND CONSTRUCTION
OF OTHER STRUCTURES FOR PROVIDING SAFE DRINKING WATER TO
MULUGU CONSTITUENCY, WARANGAL DISTRICT, SEGMENT- 20/3
ETURUNAGARM.**

Sl.No	DESCRIPTION OF LOCATIONS	LENGTH (Km)	AREA
			Hectare
1	Total length for Laying of Pipelines and Construction of other structures in the Forest Land of Telangana Drinking Water Supply Project Mulugu Constituency, Warangal District, Segment- 20/3 Eturunagarm.		
	In WLM Warangal Division		
	(A) In Wildlife area	43782.556	5.428
	In Warangal North Division		
	(A) In Wildlife area	114604.088	12.395
	(B) In Eco-sensitive area	25713.739	2.583
	TOTAL	184100.400	20.406
2	STRUCTURES		
	in WLM Warangal Division		
	(B) In Wildlife area	1 no's	0.282
	In Warangal North Division		
	(C) In Wildlife area	6 no's	1.57
	TOTAL	7 no's	1.852
	Total area of segment 20/3-Eturnagaram- Total	Pipe line -184100.400 Structures-7 no's	22.258

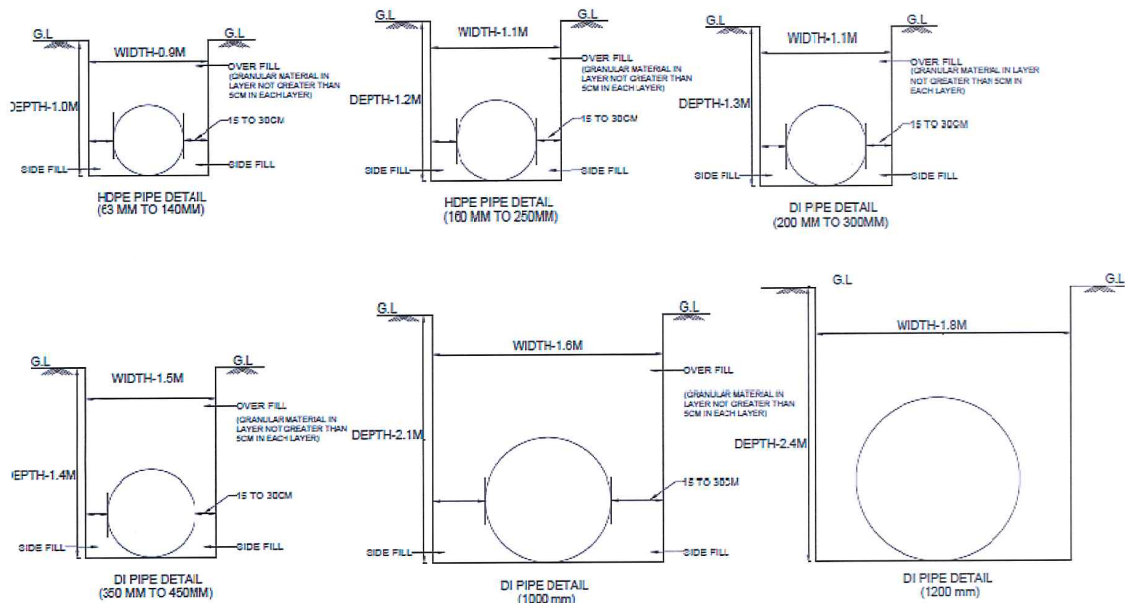

Superintending Engineer
TDWSP Circle
Warangal.

"Counter Signed"


Chief Engineer
TDWSP, Hyderabad.

TELANGANA DRINKING WATER SUPPLY PROJECT –ETURUNAGARAM SEGMENT – 20/3

MAP SHOWING PIPELINE CROSS-SECTION IN FOREST AREA OF WARANGAL.



Superintending Engineer
TDWSP Circle, Warangal

Chief Engineer
TDWSP, Hyderabad

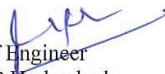
CERTIFICATE

5.B. UNDERTAKING CERTIFICATE NOT TO VIOLATE FOREST (CONSERVATION)
ACT, 1980.

We do hereby give an unconditional and irreversible undertaking not to violate Forest (Conservation) Act 1980 and WL(P) Act 1972, only after all approvals are obtained no work shall executed in the proposed area.


Superintending Engineer
TDWSP Circle,
Warangal.

''Counter Signed''


Chief Engineer
TDWSP, Hyderabad

Location wise Forest Area (Segment -20-3 -ETURUNAGARAM)												
FOR THE WORK "TELANGANA DRINKING WATER SUPPLY PROJECT for Laying Pipe Line and construction of other structures for providing safe Drinking Water in Mulugu Constituency of WARANGAL DISTRICT ETURUNAGARAM SEGMENT-20/3."												
Sno	DIVISION	RANGE	SECTION	BEAT	BLOCK	COMPONENT NO	SET	DIA	WIDTH	LENGTH IN MTR	AREA IN HA	REMARKS
1	WARANGAL NORTH	ETURANGARAM	BHUPATHIPUR	TUPAKULAGUDA	CHITYAL	2	1	63	0.700	2351.835	0.165	WILDLIFE
2	WARANGAL NORTH	ETURANGARAM	BHUPATHIPUR	TUPAKULAGUDA	CHITYAL	4	1	63	0.700	770.669	0.054	WILDLIFE
3	WARANGAL NORTH	ETURANGARAM	BHUPATHIPUR	TUPAKULAGUDA	CHITYAL	4	1	90	0.800	2089.455	0.167	WILDLIFE
4	WARANGAL NORTH	ETURANGARAM	BHUPATHIPUR	TUPAKULAGUDA	CHITYAL	5	1	75	0.700	518.850	0.036	WILDLIFE
5	WARANGAL NORTH	ETURANGARAM	BHUPATHIPUR	TUPAKULAGUDA	CHITYAL	5	1	225	3.000	39.566	0.012	WILDLIFE
6	WARANGAL NORTH	ETURANGARAM	BHUPATHIPUR	BHUPATHIPUR	PADGEPUR	46	2	75	0.700	6203.285	0.434	WILDLIFE
7	WARANGAL WLM	ETURUNAGARAM	CHITYAL	CHITTAYAL	PADGEPUR	46	2	63	0.700	5564.126	0.389	WILDLIFE
8	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	63	0.700	315.882	0.022	WILDLIFE
9	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	160	1.100	1323.851	0.146	WILDLIFE
10	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	140	1.100	287.350	0.032	WILDLIFE
11	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	63	0.700	252.768	0.018	WILDLIFE
12	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	63	0.700	671.250	0.047	WILDLIFE
13	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	140	1.100	295.607	0.033	WILDLIFE
14	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	140	1.100	811.512	0.089	WILDLIFE
15	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	46	2	75	0.700	80.521	0.006	WILDLIFE
16	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	147	2	63	0.700	1074.221	0.075	WILDLIFE
17	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	147	2	200	1.100	926.890	0.102	WILDLIFE
18	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	147	2	200	1.100	631.502	0.069	WILDLIFE
19	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	147	2	63	0.700	206.918	0.014	WILDLIFE
20	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	147	2	63	0.700	93.057	0.007	WILDLIFE

21	WARANGAL, NORTH	ETURANGARAM	SALPAK	SALPAK	PADGEPUR	147	2	63	0.700	191.315	0.013	WILDLIFE
22	WARANGAL, WLM	ETURNAGARAM	CHITYAL	SARVAI(N)	NO-DATA	52	2	63	0.700	1330.733	0.093	WILDLIFE
23	WARANGAL, NORTH	ETURANGARAM	SALPAK	SALPAK	CHITYAL	73	3	225	1.100	6223.607	0.685	WILDLIFE
24	WARANGAL, NORTH	ETURANGARAM	SALPAK	SALPAK	CHITYAL	77	3	250	1.500	6125.054	0.919	WILDLIFE
25	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	RAMPUR MULAKATTA	CHITYAL	129	3	63	0.700	3424.395	0.240	WILDLIFE
26	WARANGAL, WLM	ETURNAGARAM	KONDAI	IYLA PUR	NO-DATA	104	4	75	1.100	9904.620	1.090	WILDLIFE
27	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	RAMPUR MULAKATTA	SOUTH SINGARAM	1612	4	63	0.700	2926.606	0.205	WILDLIFE
28	WARANGAL, NORTH	ETURANGARAM	SALPAK	SALPAK	SOUTH SINGARAM	1612	4	110	1.100	1265.329	0.139	WILDLIFE
29	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	SOUTH SINGARAM	1612	4	300	1.500	1665.414	0.250	WILDLIFE
30	WARANGAL, NORTH	ETURANGARAM	SALPAK	SALPAK	NO-DATA	647	4	63	0.700	576.714	0.040	WILDLIFE
31	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	RAMPUR MULAKATTA	RAMPUR EXTN.	7058	4	63	0.700	1158.984	0.081	WILDLIFE
32	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	RAMPUR MULAKATTA	RAMPUR EXTN.	7058	4	63	0.700	322.808	0.023	WILDLIFE
33	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	SOUTH SINGARAM	1612	4	500	3.000	3278.966	0.984	WILDLIFE
34	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	RAMPUR MULAKATTA	CHITYAL	139	4	90	0.800	195.163	0.016	WILDLIFE
35	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	SOUTH SINGARAM	1612	4	110	1.100	3458.352	0.380	WILDLIFE
36	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	CHITYAL	141	4	450	1.500	5044.119	0.757	WILDLIFE
37	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	CHITYAL	141	4	450	3.000	109.785	0.033	WILDLIFE
38	WARANGAL, WLM	ETURNAGARAM	KONDAI	MALLIAL(S)	NO-DATA	104	4	125	1.100	85.424	0.009	WILDLIFE
39	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	TADWAI	157	4	140	1.100	1046.124	0.115	WILDLIFE
40	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	TADWAI	157	4	63	0.700	489.357	0.034	WILDLIFE
41	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	TADWAI	157	4	450	1.500	2447.789	0.367	WILDLIFE
42	WARANGAL, NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	TADWAI	157	4	63	0.700	165.926	0.012	WILDLIFE
43	WARANGAL, NORTH	TADWAI	SHAPALLI	SHAH PALLI	TADWAI	165	4	450	1.500	1593.433	0.239	WILDLIFE
44	WARANGAL, NORTH	TADWAI	SHAPALLI	SHAH PALLI	TADWAI	166	4	75	0.700	46.749	0.003	WILDLIFE

45	WARANGAL. WLM	TADVAI	TADVAI	DODLA	DODLA EXTN.	653	5	160	1.100	4693.208	0.516	WILDLIFE
46	WARANGAL. NORTH	TADWAI	SHAPALLI	SHAHBALLI	TADWAI	207	5	180	1.100	3672.751	0.404	WILDLIFE
47	WARANGAL. NORTH	TADWAI	SHAPALLI	SHAHBALLI	SHAPALLY EXTN- II	7027	5	160	1.100	3021.245	0.332	WILDLIFE
48	WARANGAL. NORTH	TADWAI	SHAPALLI	SHAHBALLI	SHAPALLY EXTN- II	7027	5	63	0.700	184.756	0.013	WILDLIFE
49	WARANGAL. NORTH	ETURANGARAM	ETURNAGARAM	ETURNAGARAM	TADWAI	197	5	350	1.500	3428.376	0.514	WILDLIFE
50	WARANGAL. NORTH	ETURANGARAM	ETURNAGARAM	ETURNAGARAM	TADWAI	197	5	90	0.900	642.152	0.058	WILDLIFE
51	WARANGAL. NORTH	TADWAI	CHINNA BOINAPALLY	CHINNA BOINAPALLY	TADWAI	207	5	63	0.700	966.247	0.068	WILDLIFE
52	WARANGAL. NORTH	TADWAI	CHINNA BOINAPALLY	CHINNA BOINAPALLY	TADWAI	205	5	63	0.700	1959.842	0.137	WILDLIFE
53	WARANGAL. NORTH	ETURANGARAM	ETURNAGARAM	ETURNAGARAM	TADWAI	203	5	90	0.900	2729.078	0.246	WILDLIFE
54	WARANGAL. WLM	TADVAI	MEDARAM	KAMARAM	MEDARAM EXTN.	658	6	300	1.500	12706.792	1.906	WILDLIFE
55	WARANGAL. NORTH	TADWAI	CHINNA BOINAPALLY	CHINNA BOINAPALLY	TADWAI	207	6	350	1.500	730.448	0.110	WILDLIFE
56	WARANGAL. NORTH	TADWAI	CHINNA BOINAPALLY	CHINNA BOINAPALLY	TADWAI	207	6	350	3.000	79.522	0.024	WILDLIFE
57	WARANGAL. NORTH	TADWAI	CHINNA BOINAPALLY	CHINNA BOINAPALLY	TADWAI	206	6	300	3.000	120.539	0.036	WILDLIFE
58	WARANGAL. WLM	TADVAI	TADVAI	HEERAPUR	TADWAI	239	6	300	1.500	9497.653	1.425	WILDLIFE
59	WARANGAL. NORTH	TADWAI	TADVAI	TADVAI	KAMARAM EXTN.	657	6	63	0.700	656.963	0.046	WILDLIFE
60	WARANGAL. NORTH	TADWAI	TADVAI	BODIGUDA	TADWAI	275	7	250	1.500	7785.560	1.168	WILDLIFE
61	WARANGAL. NORTH	TADWAI	TADVAI	BODIGUDA	TADWAI	277	7	75	0.700	3611.767	0.253	WILDLIFE
62	WARANGAL. NORTH	PASARA	PASRA	PASRA	TADWAI	230	7	63	0.700	840.084	0.059	WILDLIFE
63	WARANGAL. NORTH	PASARA	PASRA	PASRA	TADWAI	230	7	63	0.700	6127.167	0.429	WILDLIFE
64	WARANGAL. NORTH	TADWAI	TADVAI	TADVAI	TADWAI	276	7	63	0.700	150.311	0.011	WILDLIFE
65	WARANGAL. NORTH	TADWAI	TADVAI	TADVAI	TADWAI	270	7	63	0.700	276.439	0.019	WILDLIFE
66	WARANGAL. NORTH	TADWAI	TADVAI	TADVAI	TADWAI	270	7	225	1.500	997.278	0.150	WILDLIFE
67	WARANGAL. NORTH	ETURANGARAM	MANGAPETA	THIMMAMPET	TADWAI	260	8	63	0.700	6045.380	0.423	WILDLIFE
68	WARANGAL. NORTH	TADWAI	BEERELLI	RAMPUR_NEW	BANDAL	327	9	140	1.100	4851.838	0.534	ESZ

69	WARANGAL NORTH	TADWAI	BEERELLI	RAMPUR_NEW	BANDAL	327	9	63	0.700	238.987	0.017	ESZ
70	WARANGAL NORTH	TADWAI	KATAPUR	KATAPUR	BANDAL	326	9	160	1.100	991.625	0.109	ESZ
71	WARANGAL NORTH	TADWAI	BEERELLI	RAMPUR_NEW	BANDAL	326	9	75	0.700	1663.828	0.116	ESZ
72	WARANGAL NORTH	TADWAI	BEERELLI	BEERELLI	BEERELLI EXTN.	655	9	63	0.700	118.869	0.008	ESZ
73	WARANGAL NORTH	TADWAI	BEERELLI	BEERELLI	BEERELLI EXTN.	655	9	63	0.700	1052.459	0.074	ESZ
74	WARANGAL NORTH	TADWAI	BEERELLI	BEERELLI	BEERELLI EXTN.	655	9	63	0.700	321.086	0.022	ESZ
75	WARANGAL NORTH	TADWAI	BEERELLI	BEERELLI	BEERELLI EXTN.	655	9	110	0.900	2954.960	0.266	ESZ
76	WARANGAL NORTH	TADWAI	BEERELLI	BEERELLI	BEERELLI EXTN.	338	9	110	0.900	175.875	0.016	ESZ
77	WARANGAL NORTH	TADWAI	MEDARAM	ORATTAM	VENKATAPUR - I	499	10	180	1.100	1966.325	0.216	ESZ
78	WARANGAL NORTH	TADWAI	MEDARAM	ORATTAM	VENKATAPUR - I	501	10	110	1.100	4073.290	0.448	ESZ
79	WARANGAL NORTH	TADWAI	MEDARAM	ORATTAM	MEDARAM EXTN.	658	10	250	1.100	636.315	0.070	WILDLIFE
80	WARANGAL NORTH	TADWAI	MEDARAM	ORATTAM	SOUTH SINGARAM	163	10	110	1.100	3233.184	0.356	ESZ
81	WARANGAL NORTH	TADWAI	MEDARAM	ORATTAM	SOUTH SINGARAM	163	10	110	1.100	1711.193	0.188	ESZ
82	WARANGAL NORTH	TADWAI	MEDARAM	ORATTAM	SOUTH SINGARAM	163	10	110	1.100	532.578	0.059	ESZ
83	WARANGAL NORTH	PASARA	NARLAPUR	NARLAPUR	VENKATAPUR - I	500	10	63	0.700	948.620	0.066	ESZ
84	WARANGAL NORTH	TADWAI	MEDARAM	ORATTAM	MEDARAM EXTN.	658	10	110	1.100	2249.710	0.247	WILDLIFE
85	WARANGAL NORTH	PASARA	NARLAPUR	NARLAPUR	VENKATAPUR - I	496	10	140	1.000	879.022	0.088	ESZ
86	WARANGAL NORTH	PASARA	NARLAPUR	NARLAPUR	TADWAI	181	11	75	0.700	804.609	0.056	WILDLIFE
87	WARANGAL NORTH	PASARA	NARLAPUR	NARLAPUR	VENKATAPUR - I	491	11	75	0.700	2592.125	0.181	WILDLIFE
88	WARANGAL NORTH	PASARA	NARLAPUR	YENGLAPUR	VENKATAPUR - I	490	11	75	0.700	2274.204	0.159	WILDLIFE
89	WARANGAL NORTH	PASARA	NARLAPUR	YENGLAPUR	VENKATAPUR - I	467	11	63	0.900	1320.242	0.119	WILDLIFE
									TOTAL	184100.383	20.406	

Location wise Forest Area (Segment -20-3 -ETURUNAGARAM-TADVAI)														
FOR THE WORK “TELANGANA DRINKING WATER SUPPLY PROJECT for construction of other structures for providing safe Drinking Water in Mulugu Constituency of WARANGAL														
S.No	DIVISION	RANGE	SECTION	BEAT	BLOCK	Easting	Northing	Elevation	BUFF DIST	COMP NO	SET	Name	FILENAME	Area Ha
1	WARANGAL NORTH	ETURANGARAM	BHUPATHIPUR	TUPAKULAGUDA	CHITYAL	433816.550007	2052537.329970	93.262199	25	5	1	SUMP	KORLI.THUPAKULAG	0.195
2	WARANGAL NORTH	ETURANGARAM	SALPAK	GURVELLA	PADGEPUR	429872.482667	2047844.535890	95.056369	25	46	2	SUMP	CHITYALA	0.195
3	WARANGAL NORTH	ETURANGARAM	ETURNAGARAM	ROHEER	SOUTH SINGARAM	438051.757356	2035471.770140	111.243866	50	1612	4	WTP,OHBR	ETOOR2	0.783
4	WARANGAL WLM	ETURUNAGARAM	KONDAI	MALLIAL(S)	NO-DATA	426105.882288	2031720.457740	103.339009	30	104	4	SUMP	DODLA	0.282
5	WARANGAL NORTH	TADVAI	CHINNABOINAPALLY	CHINNABOINAPALLY	TADVAI	0.000000	0.000000	0.000000	30	207	6	SUMP		0.282
6	WARANGAL NORTH	TADVAI	CHINNABOINAPALLY	CHINNABOINAPALLY	TADVAI	433794.092374	2020884.526710	144.574797	15	206	6	OHBR	TADVAI2	0.070
7	WARANGAL NORTH	TADVAI	TADVAI	TADVAI	TADVAI	429328.884646	2012668.787540	185.165945	12	276	7	OHSR	BIRELLY	0.045
													TOTAL	1.852


 Superintending Engineer,
 TDWSP Circle, Warangal.


 Chief Engineer
 RWS&S TDWSP, Hyderabad

AREA STATEMENT - SEGMENT - 20/3- WGL (WLM)							
Set	Structure type	Pipe Dia	width m	Length in m	Area_Ha	Total area in Ha	Remarks
1	PIPELINE	63	0.700	770.669	0.054	0.629	WILDLIFE
	PIPELINE	90	0.800	2089.455	0.167		WILDLIFE
	PIPELINE	75	0.700	518.850	0.036		WILDLIFE
	PIPELINE	63	0.700	2351.835	0.165		WILDLIFE
	PIPELINE	225	3.000	39.566	0.012		WILDLIFE
	SUMP	-	-	-	0.195		WILDLIFE
2	PIPELINE	75	0.700	6203.285	0.434	1.784	WILDLIFE
	PIPELINE	63	0.700	5564.126	0.389		WILDLIFE
	PIPELINE	63	0.700	315.882	0.022		WILDLIFE
	PIPELINE	63	0.700	1074.221	0.075		WILDLIFE
	PIPELINE	63	0.700	1330.733	0.093		WILDLIFE
	PIPELINE	200	1.100	926.890	0.102		WILDLIFE
	PIPELINE	63	0.700	191.315	0.013		WILDLIFE
	PIPELINE	200	1.100	631.502	0.069		WILDLIFE
	PIPELINE	63	0.700	206.918	0.014		WILDLIFE
	PIPELINE	160	1.100	1323.851	0.146		WILDLIFE
	PIPELINE	140	1.100	287.350	0.032		WILDLIFE
	PIPELINE	63	0.700	252.768	0.018		WILDLIFE
	PIPELINE	63	0.700	671.250	0.047		WILDLIFE
	PIPELINE	140	1.100	295.607	0.033		WILDLIFE
	PIPELINE	140	1.100	811.512	0.089		WILDLIFE
	PIPELINE	75	0.700	80.521	0.006		WILDLIFE
	PIPELINE	63	0.700	93.057	0.007		WILDLIFE
	SUMP	-	-	-	0.195		WILDLIFE
3	PIPELINE	225	1.100	6223.607	0.685	1.844	WILDLIFE
	PIPELINE	63	0.700	3424.395	0.240		WILDLIFE
	PIPELINE	250	1.500	6125.054	0.919		WILDLIFE
4	PIPELINE	63	0.700	2926.606	0.205	5.842	WILDLIFE
	PIPELINE	140	1.100	1046.124	0.115		WILDLIFE
	PIPELINE	75	1.100	9904.620	1.090		WILDLIFE
	PIPELINE	450	1.500	5044.119	0.757		WILDLIFE
	PIPELINE	63	0.700	489.357	0.034		WILDLIFE
	PIPELINE	450	1.500	2447.789	0.367		WILDLIFE
	PIPELINE	450	1.500	1593.433	0.239		WILDLIFE
	PIPELINE	63	0.700	165.926	0.012		WILDLIFE
	PIPELINE	500	3.000	3278.966	0.984		WILDLIFE
	PIPELINE	300	1.500	1665.414	0.250		WILDLIFE
	PIPELINE	63	0.700	1158.984	0.081		WILDLIFE
	PIPELINE	63	0.700	322.808	0.023		WILDLIFE
	PIPELINE	110	1.100	3458.352	0.380		WILDLIFE
	PIPELINE	110	1.100	1265.329	0.139		WILDLIFE
	PIPELINE	63	0.700	576.714	0.040		WILDLIFE
	PIPELINE	75	0.700	46.749	0.003		WILDLIFE
	PIPELINE	90	0.800	195.163	0.016		WILDLIFE
	PIPELINE	450	3.000	109.785	0.033		WILDLIFE
	PIPELINE	125	1.100	85.424	0.009		WILDLIFE
	WTP,OHBR	-	-	-	0.783		WILDLIFE

	SUMP	-	-	-	0.282		WILDLIFE
5	PIPELINE	90	0.900	2729.078	0.246	2.288	WILDLIFE
	PIPELINE	63	0.700	1959.842	0.137		WILDLIFE
	PIPELINE	180	1.100	3672.751	0.404		WILDLIFE
	PIPELINE	350	1.500	3428.376	0.514		WILDLIFE
	PIPELINE	63	0.700	184.756	0.013		WILDLIFE
	PIPELINE	160	1.100	4693.208	0.516		WILDLIFE
	PIPELINE	90	0.900	642.152	0.058		WILDLIFE
	PIPELINE	63	0.700	966.247	0.068		WILDLIFE
	PIPELINE	160	1.100	3021.245	0.332		WILDLIFE
	PIPELINE	300	1.500	9497.653	1.425	3.899	WILDLIFE
6	PIPELINE	300	1.500	12706.792	1.906		WILDLIFE
	PIPELINE	63	0.700	656.963	0.046		WILDLIFE
	PIPELINE	350	1.500	730.448	0.110		WILDLIFE
	PIPELINE	300	3.000	120.539	0.036		WILDLIFE
	PIPELINE	350	3.000	79.522	0.024		WILDLIFE
	OHBR	-	-	-	0.07		WILDLIFE
	SUMP	-	-	-	0.282		WILDLIFE
	PIPELINE	250	1.500	7785.560	1.168	2.134	WILDLIFE
7	PIPELINE	63	0.700	276.439	0.019		WILDLIFE
	PIPELINE	63	0.700	6127.167	0.429		WILDLIFE
	PIPELINE	75	0.700	3611.767	0.253		WILDLIFE
	PIPELINE	225	1.500	997.278	0.150		WILDLIFE
	PIPELINE	63	0.700	840.084	0.059		WILDLIFE
	PIPELINE	63	0.700	150.311	0.011		WILDLIFE
	OHSR	-	-	-	0.045		WILDLIFE
8	PIPELINE	63	0.700	6045.380	0.423	0.423	WILDLIFE
9	PIPELINE	140	1.100	4851.838	0.534	1.162	ESZ
	PIPELINE	63	0.700	118.869	0.008		ESZ
	PIPELINE	75	0.700	1663.828	0.116		ESZ
	PIPELINE	63	0.700	238.987	0.017		ESZ
	PIPELINE	63	0.700	1052.459	0.074		ESZ
	PIPELINE	63	0.700	321.086	0.022		ESZ
	PIPELINE	110	0.900	2954.960	0.266		ESZ
	PIPELINE	160	1.100	991.625	0.109		ESZ
	PIPELINE	110	0.900	175.875	0.016		ESZ
	PIPELINE	110	1.100	2249.710	0.247	1.738	WILDLIFE
10	PIPELINE	140	1.000	879.022	0.088		ESZ
	PIPELINE	180	1.100	1966.325	0.216		ESZ
	PIPELINE	110	1.100	4073.290	0.448		ESZ
	PIPELINE	63	0.700	948.620	0.066		ESZ
	PIPELINE	110	1.100	3233.184	0.356		ESZ
	PIPELINE	110	1.100	1711.193	0.188		ESZ
	PIPELINE	250	1.100	636.315	0.070		WILDLIFE
	PIPELINE	110	1.100	532.578	0.059		ESZ
	PIPELINE	75	0.700	2592.125	0.181	0.515	WILDLIFE
11	PIPELINE	75	0.700	804.609	0.056		WILDLIFE
	PIPELINE	63	0.900	1320.242	0.119		WILDLIFE
	PIPELINE	75	0.700	2274.204	0.159		WILDLIFE
TOTAL				184100.383	22.258	22.258	

BRIEF NOTE ON THE PROJECT.

ETURNAGARAM-TADVAI SUB - SEGMENT – 20/3 IN WARANGAL DISTRICT.

Diversion of Warangal North Division-13.965 Hectares, Warangal North ESZ Division – 2.583 Hectares & Warangal WLM Division – 5.71 Hectares out of a Total of 22.258 Ha. of Forest land for ‘Laying of pipe lines and Construction of other structures for providing safe drinking water to Mulugu Constituency, Warangal District, Segment 20/3 – Eturnagaram”

The Government of Telangana has decided to take up the Water Grid programme as a flag ship item to provide safe drinking water to all rural and urban people at 100 lpcd to rural households and 135 lpcd in municipalities and 150 lpcd in corporation areas.

The provision of safe drinking water deserves top priority to improve the health and economic development of the people in the project area. Majority of people in the Project area are tribal, illiterate and economically very poor. Scarcity of water is one of the major problems in this area.

The people in district purely depend only on ground water for drinking, domestic and agriculture purposes. Warangal District comprises geographically the underlain granites with coarse to medium texture. Dolerite dykes varying from few meters to hundreds of meters traverse the area. These dykes are very hard and compact and stand out prominently in the granite rocks. The ground in the area is limited to secondary porosity developed through fracturing and subsequent weathering. The movement of ground water is controlled by the degree of inter connection of these secondary pores.

So, it is extremely difficult to obtain potable drinking water especially in the project area. The bore wells fitted with hand pumps are yielding very little and proved failure in many places as the water table has depleted very fast due to frequent failures of monsoon in the District. Many of habitations which are covered partially earlier are again looking for relief as the source infrastructure provided is in need of either augmentation or replacement. Due to shallow basin of the area having very poor potential of ground water and over exploited by the farmers for Irrigation purposes by digging many of open wells in their fields, the individual sources of open wells for the PWS Schemes and MPWS Schemes have become seasonal and failed to supply sufficient drinking water to the people in project area, in summer months.

PROJECT DESIGN CRITERIA:

The design parameters adopted for this project component are detailed below:

i) Design Period:

The year 2018 is taken as the proposed year of commissioning and considered as the base year. The ultimate design period of the project is considered as 30 years over the base year.

ii) Design Population & Population Forecast

The base year population is worked out by adding the population increase @ 0.8% growth rate from 2011 to 2018 to the population of 2011. The ultimate design population is worked out by increasing @ 0.8% growth rate in Geometric Progression for 30 years over the base year population. And for urban population the growth rate is considered as 2% in Geometric Progression.

iii) Design Parameters:

Established parameters are followed in the system design. Sources and transmission main lines are designed for ultimate population. Sumps, Water Treatment Plants, balancing and service reservoirs, pumping machinery are designed for prospective population (i.e., 15 years period over base year)

iv) Service Level:

The service level of 100lpcd for rural area, 135lpcd for urban area and 150 lpcd for corporations is considered.

v) System Design Criteria:

- 1) Operation Period of Pumping Machinery 22 hours
- 2) Treatment Rapid Sand Filters
 - b) Disinfecting by addition of chlorine in gas form
- 3) Clear Water Sump 4 hours capacity for Intermediate sumps
- 4) Service Storage of prospective Capacity required for 50% daily demand. (i.e. Two fillings)
- 5) Balancing Reservoir 30-60minutes
- 6) Pumping Machinery Selection – preliminary Design As per discharge and head

➤ **Source:** Kanthanpally OHBR & Chinnaboinapally OHBR in Villages of Eturnagaram Mandal and in Warangal District

Sl.No	Name of the Constituency	Name of the Mandal	Population covered(2011)	No of Habs
1	MULUGU	Eturnagaram	43238	52
		SSThadvai	25929	41
		Mangapeta (part)	317	3
	WARANGAL RURAL TOTAL		69484	96

➤ Structures:

- WTP-- 1 No.
- Sumps— 5 Nos
- OHBRs— 2 Nos

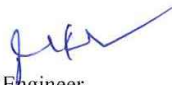
Details of Structures:

Sl.No	Name of the Structure	Location	Capacity in KL	Staging mtrs	GL	MWL	Remarks
1	2	3	4	5	6	7	8
1	WTP	Kanthanpally X	12 MLD		112.00		
2	Sump	Kanthanpally X	1100.00		112.00		
3	Sump	Kannaigudem	10		93.95		
4	Sump	Devadula	30		102.60		
5	Sump	Chinnaboinapally	800		113.57		
6	Sump	Kondai	15		105.00		
7	OHBR	Kanthanpally X	220	30.00	112.00	142.00	
8	OHBR	Chinnaboinapally	100	30.00	144.00	174.00	

➤ Industrial Requirement: Considered 10% of Total Demand


Superintending Engineer
TDWSP Circle, Warangal

Counter signed


Chief Engineer,
TDWSP, Hyderabad.

FLOW DIAGRAM FOR ETURNAGARAM AND SS TADVAI SEGMENT (2 MANDALS) : WARANGAL DIST.

