



ABSTRACT

Schemes – Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) – Formation of Single Layer WBM Road, Construction of Cement Concrete Pavement, Construction of interlocking Paver Block pavement, Construction of Cement Concrete Drainage and Construction of Individual and Community Soak Pits in Rural areas at an estimated cost of Rs.2197.42 crore under MGNREGS 2023-2024 – Permission accorded – Orders – Issued.

RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS.1) DEPARTMENT

G.O.(Ms.)No.95

Dated: 14.07.2023

சோபகிருது, ஆனி 29

திருவள்ளூர் ஆண்டு-2054

Read:

1. Announcement made by Hon'ble Minister (Rural Development) on the floor of Tamil Nadu Legislative Assembly on 30.03.2023.
2. G.O.(Ms.) No.65, Rural Development & Panchayat Raj (CGS1) Department, dated 21.04.2023.
3. G.O.(Ms.) No.74, Rural Development & Panchayat Raj (CGS1) Department, dated 05.06.2023.
4. The Commissioner of Rural Development and Panchayat Raj, Letter No.64350/ 2023/MGNREGS 1.2, dated 01.06.2023.

ORDER:

While replying to the debate on the demands for grants for Rural Development and Panchayat Raj Department on the floor of the Tamil Nadu Legislative Assembly on 30.03.2023, the Hon'ble Minister (Rural Development), has made the following Announcement:-

"விளிம்பு நிலை மக்களின் வாழ்க்கைத் தரத்தை மேம்படுத்த அவர்கள் வாழும் குடியிருப்புகளில் தேவையான கண்டறியப்பட்டுள்ள முக்கியமான உட்கட்டமைப்பு வசதிகளான சாலைகள், கால்வாய்கள், தெரு விளக்குகள், குடிநீர் வசதிகள் போன்றவை பல்வேறு திட்டங்களை ஒருங்கிணைத்து 1500 கோடி ரூபாய் மதிப்பீட்டில் உருவாக்கப்படும்.

(P.T.O)

and the State Government respectively. The fund requirement and the Central and the State share for each work is as follows:

(Rupees in Crore)

(i) Formation of Single Layer WBM Road (Rural Connectivity)					
Description	Material Component (84.23%)			Labour Component (15.77%) (Central Share 100%)	Grand Total in Crores
	Central Share (75%)	State Share (25%)	Total		
Construction of Single layer WBM Road to a length of 1km = 25.06 lakhs. Cost for 3000 Km of WBM road =Rs.75180 Lakhs (Rs.751.80 Crores)	474.93	158.31	633.24	118.56	751.80
(ii) Construction of Cement Concrete Pavement in Rural Areas					
Description	Material Component (90.35%)			Labour Component (9.65%) (Central Share 100%)	Grand Total
	Central Share (75%)	State Share (25%)	Total		
Cost of Construction of CC Pavement/km = 46.77 Lakhs. Cost for 1000 km of CC Pavement = Rs.46770.00 Lakhs =(Rs.467.70 Crores)	316.93	105.64	422.57	45.13	467.70
(iii) Construction of Interlocking Paver Block Pavement in Rural Areas					
Description	Material Component (95.15%)			Labour Component (4.85%) (Central Share 100%)	Grand Total
	Central Share (75%)	State Share (25%)	Total		
Cost of Construction of Interlocking Paver Block Pavement/km = 49.80 Lakhs. Cost for 1000 km of Interlocking Paver Block Pavement = Rs.49800.00 Lakhs =(Rs.498.00 Crores)	355.39	118.46	473.85	24.15	498.00
(iv) Construction of Cement Concrete Drainage in Rural Areas					
Description	Material Component (88.07 %)			Labour Component (11.93 %) (Central Share 100%)	Grand Total
	Central Share (75%)	State Share (25%)	Total		
Cost of construction of CC Drain / km. is Rs.52.84 lakhs. The cost of 350 km of CC Drain is Rs.18494 lakhs = Rs.184.94 crores	122.16	40.72	162.88	22.06	184.94

5. The details of work selection and Non-Negotiable items during implementation for the sanctioned works in para 3 above shall be as follows :-

Work Selection :-

1. All works will be selected as per the GIS plan prepared for each village panchayats.
2. The riding surface of the Cement Concrete Pavement/Paver Block Roads should be laid by taking into account the floor levels of the houses in order to ensure that the surface run-off does not enter into the residential units. Dummy duct with a pipe provision may be provided wherever necessary.
3. The Paver Block Road/CC Road should be taken up where houses are available on either side.
4. The District Collector should document various process of the Scheme implementation starting from selection of works to completion of works, documenting the works with photographs, video etc.,
5. The Aspirational Districts Virudhunagar and Ramanathapuram as well as the Backward Districts like Sivagangai, Pudukottai, Dharmapuri, Krishnagiri, Ariyalur and Perambalur shall be given maximum possible number of works.

Non-Negotiable Items:-

1. Citizen Information Board shall be kept at the work site in 3 X 4 feet with all necessary information as per the framework given by the Government of India vide Ref No: K-11023/1/1/2017 – MGNREGA (IV), Ministry of Rural Development, Dated 07.04.2017. The cost of Citizen Information Board will be fixed at Rs.4,500/- per unit for brick work, Rs.4000/- per unit for precast concrete slab and Rs.1000/- for wall painting. The cost of the Citizen Information Board shall be included in the estimate itself.
2. Estimate creation, Administrative sanction and Technical sanction shall be done in SECURE software.
3. Geo-Tagging of Assets at all three i.e., before, during and after completion should be ensured.
4. The Government of India have notified the wage rate for the Financial Year 2023-24 as Rs.294/- which has been approved in the Government order 2nd read above.

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ANNEXURE-I

G.O.(MS).No.95, RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS-1) DEPARTMENT,

DATED: 14.07.2023

GUIDELINES FOR SINGLE LAYER WBM ROAD

Non – PMGSY (Pradhan Mantri Gram SadakYojna) Roads to be taken-up:

1. Single all-weather motorable connectivity to habitations not eligible under PMGSY, but at a standard that enables up-gradation to PMGSY standard in due course (either due to increase in population and/or because of higher traffic making the road eligible for such up-gradation).
2. Inter-habitation and link roads of socio – economic importance which are not included in PMGSY Core Network on account of being multiple links.
3. It has to be ensured that only earthen/gravel surface roads are taken up for upgrading to single layer WBM standard.
4. Roads which are eligible under PMGSY in the ensuing phases may be taken up for single layer WBM standard and subsequent up gradation to BT standard has to be ensured under PMGSY scheme.
5. The roads which are connecting the unconnected habitations, inter habitation roads, internal roads of habitations and Farm net roads can be improved upto Grade II WBM layer under MGNREGS and subsequent surface up gradation is to be taken up under any of the suitable scheme

Under PMGSY, roads can be constructed only up-to an important location in the habitation which is normally Village Panchayat (VP), Govt. School or community facility. **"The remaining part of the road and other streets within the habitation may be taken up under this programme including side drains.**

The roads that connect unconnected habitations, inter habitation roads, internal roads of habitations and Farm net roads can be improved upto Grade II WBM layer under Rural connectivity category of MGNREGS. The roads thus improved upto Grade II WBM layer may be improved upto BT standard in PMGSY or any other state schemes in the subsequent years.

Selection of Roads:

The following Guiding Principles and Selection Procedure shall be adopted for the selection of roads under MGNREGS:

1. All roads available in the Village Panchayat including roads connecting unconnected habitations, inter habitation roads, internal roads of habitations and Farm net roads shall be identified for every village Panchayat and should be approved from Grama Sabha.
2. The roads under Rural Connectivity shall be selected from the approved roads list by the Grama Sabhas of every Village Panchayats.
3. Priority shall be given to all unconnected habitations having less than 500 populations based on 2011 census as per PMGSY –I core network.
4. Only New Connectivity would be provided under this Scheme and not Upgradation except gravel surface roads having no crust.
5. This Scheme would cover only for Village Panchayat Roads (VPR) and Panchayat Union Roads (PUR).

ANNEXURE-II

G.O.(Ms).No.95, Rural Development and Panchayat Raj (CGS-1) Department, Dated 14.07.2023

**Estimate for Single Layer WBM Road formation (Rural Connectivity)
under Mahatma Gandhi NREGS (For 1km length)**

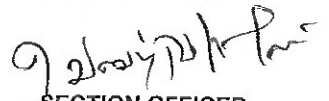
Abstract Estimate

Estimate amount Rs. 2506000						
Sl. No	Quantity	Unit	Description work	Rate	Per	Amount (In Rs.)
1	1200	Sqm	Provision for scrub Jungle Clearance	19.07	Sqm	22884
2	900.00	Cum	Earth work excavation and depositing on bank with initial lead and lift in hard gravelly soil, hard stiff clay, black cotton soil, hard red earth, shales, murram, and earth muds with 50% fair sized boulders as per SS 20B for narrow foundation. KM 0/0-1/0	280.6	Cum	252540
3	562.50	Cum	Construction of Granular Sub base by providing well graded material (63mm to 26.5mm @35%, 26.5mm to 4.75 @45% and 4.75 mm below @ 20%) & spreading in uniform layers with tractor with grader on prepared surface mixing by mix in place method with rotovator at OMC and compacting with three wheel 80-100 KN capacity and finished in accordance with the requirements of the specification and thickness as per approved plans or as directed by the Engineer as per (Mix in - place method) KM 0/0-1/0	1630.03	Cum	916892
4	281.25	Cum	Providing and laying the WBM 75mm compacted thickness with Grade-II metal using 1:00 cum of 63-45 mm IRC HBG. Metal with 0.24 cum gravel mix blind age per 10sqm of 75 mm thickness. The value of below 6% including cost and conveyance of materials and stacking them at the site to the departmental gauge for pre measurement, labour charges for spreading metal and gravel hand packing to chamber with all leads for water and compaction by 8-10 tonne power roller including hire charges and fuel charges for power roller water sprinkler and all other tools and plants employed Barricading etc., complete as per clause 404 of MOST specification. KM 0/0-1/0	2428.49	Cum	683013
5	450.00	Cum	Providing and Laying Gravel to 100mm compacted thick including cost & conveyance of gravel from approved sources to work site including labour for spreading, watering and compacting by Power roller to achieve the required Proctor density at 100% compaction (Berms) KM 0/0-1/0	537.78	Cum	242001
6	1	Nos	Provision for KM Stone	443.3	Sqm	443.3
7	4	Nos	Provision for HM Stone	226.2	Sqm	904.8
			SUB Total		Rs.	2118678
8	1	Nos	Provision for Citizen Information Board			4500
9			Provision for GST (18%)		L.S	381362
10			Provision for Photographic charges		L.S	- 500
11			Contingency and other unforeseen items etc.		L.S	960
			Total		Rs.	2506000

4	Providing and Laying Gravel to 100mm compacted thick including cost & conveyance of gravel from approved sources to work site including labour for spreading, watering and compacting by Power roller to achieve the required Proctor density at 100% compaction (Berms)							
	KM 0/0-1/0	1	2	1000.00	1.00	0.225	450.00	Cum
	Total						450.00	Cum
5	Provision for KM Stone						1	
6	Provision for HM Stone						4	
7	Provision for Citizen Information Board						LS	
8	Provision for Photographic charges						LS	
9	Provision for GST 18%						18%	
11	Contigency and other unforeseen items etc.						LS	

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ANNEXURE-III

G.O.(MS).No.95, RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS-1) DEPARTMENT,
DATED: 14.07.2023

GUIDELINES FOR CEMENT CONCRETE ROAD

Work Selection:

1. Cement Concrete pavement shall be proposed under MGNREGS in the Street/Lanes of the Village Panchayats wherein allocation under 15th Finance Commission/State Finance Commission Grant is less and specifically streets/lanes/roads which give access to SC/ST/Hilly habitations, should be given first priority.
2. Priority shall be given to the Village Panchayats selected for the implementation of Anaithu Grama Anna Marumalarchi Thittam-II (AGAMT-II).
3. Only those streets and lanes which have residential units on both sides of the pavement should be selected.
4. Street and lanes in newly developed layouts should not be selected until the lands of common areas are transferred to the Village panchayats.
5. Street and lanes in newly developed layouts /newly formed streets with fewer houses should not be selected.
6. Streets and lanes in low-lying areas prone to water logging during rainy seasons should be selected.
7. The width of streets/lanes taken-up should preferably be not more than 3.00m in width.
8. The site selected should be inspected both by Block Development Officer and Assistant Engineer/Block Engineer.

Deliberately splitting-up of a single work into two or more individual works to avoid higher level Administrative and Technical Scrutiny should never be resorted to. Any such instance will lead to severe disciplinary action.

Technical Specifications for execution of works:

1. Under Exceptional circumstances and wherever it is warranted, more than 3m width of Cement Concrete Pavement may be taken-up based on the vehicular traffic and necessity and IRC SP: 62 – 2004 "Design and Construction of Cement Concrete Pavement for Low Volume Roads" should be strictly adopted for pavement design.
2. Existing surface should be cleaned properly, sectioned, levelled and compacted properly. In case of poor/loose soil where CBR is less than 4%, the existing surface should be strengthened adequately.
3. The riding surface of the Cement Concrete pavement should be laid by taking into account of the floor levels of the houses in order to ensure that the surface run-off does not enter into the residential units.
4. Sand for filling may be substituted with M-Sand wherever river sand is not available.
5. Both sides of the Cement Concrete pavement should be filled up with unscreened gravel as this avoids stagnation of water on both sides and prevents breaking of edges apart from preventing skidding of two-wheelers and pedestrians. Gentle camber (2%) may be provided so that the water may drain easily.

ANNEXURE-IV

G.O.(Ms).No.95, Rural Development and Panchayat Raj (CGS-1) Department, Dated 14.07.2023

Estimate for Providing Cement Concrete Pavement (1km Length) under Mahatma Gandhi NREGS

Detailed cum Abstract Estimate

Estimate Amount : 4677000

/-

Sl. No.	Details of Work	No.	Measurement in			Contents	Amount (In Rs.)
			L.	B.	D.		
1	Earth work excavation and depositing on bank with initial lead and lift in hard stiff clay and hard gravelly soil as per SS20B for narrow foundations. etc., complete (Foundation for Corewall)						
	core wall	1 x 2	1000.00	0.30	0.300	180.00	
						180.00	
			180.00		280.6		50508
2	Cement Concrete 1:4:8 (One Cement Four sand and eight Hard Broken stone) using 40 mm gauge Hard Broken Granite stone jelly for foundation including cost and conveyance of materials to site and labour charges for laying, watering and compacting etc. complete as per standard specification.						
	Pavement	1 x 1	1000.00	2.54	0.100	254.00	
	core wall	1 x 2	1000.00	0.30	0.100	60.00	
						314.00 m ³	
			314.00 m ³		4937.75 /M ³		1550454
3	Cement Concrete 1:3:6 (One Cement three sand and six Hard Broken Granite stone) using 20 mm gauge Hard Broken Granite stone jelly for foundation including cost and conveyance of materials to site and labour charges for laying, watering and compacting etc., complete as per standard specification.						
	core wall	1 x 2	1000.00	0.23	0.300	138.00	
						138.00 m ³	
			138.00 m ³		5646.80 /M ³		779258
5	Cement Concrete 1:2:4 (One cement, Two sand, Four Hard Broken stone) using 20 mm guage machine broken hard broken granite stone jelly fincluding cost conveyance and all labour charges for laying, watering and compacting etc., complete as per standard specification.						
	Wearing coat	1 x 1	1000.00	3.00	0.075	225.00 m ³	
						225.00 m ³	
			225.00 m ³		6310.35 /M ³		1419829
6	Towards expansion joint Bitumen pad (75mm thickness)						
		1 x 200	3.00		0.075	45.00	
			45.00		234.3 /M ²		10544
7	Towards centering charges inclusive of all material and labour charges etc., complete as per standard specification.						
	core wall	2 x 2	1000.00		0.300	1200.00	
	core wall	2 x 1	1000.00		0.075	150.00	
						1350.00	
			1350.00		110 /M ²		148500
SUB TOTAL							3959093
8	Provision For Citizen Information Board with brick work						4500
9	Provision for GST					18%	712637
10	Provision for Photographic charges etc.,					LS	500
11	Contingencies					LS	271
TOTAL : Rs.							4677000

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ANNEXURE-V

G.O.(MS).No.95, RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS-1) DEPARTMENT,

DATED: 14.07.2023

GUIDELINES FOR PAVER BLOCK

Work Selection:

- 1) Interlocking Paver block pavement shall be proposed under MGNREGS in the Street/Lanes of Village Panchayats wherein allocation under 15th Finance Commission/State Finance Commission Grant is less and specifically streets/lanes/roads which give access to SC/ST/Hilly habitations, should be given first priority.
- 2) Priority shall be given to the Village Panchayats selected for the implementation of AnaithuGrama Anna Marumalarchi Thittam-II (AGAMT-II).
- 3) Only those street and lanes which have residential units on both sides of the pavement should be selected.
- 4) Street and lanes in newly developed layouts should not be selected until the lands of common areas are transferred to the Village panchayats.
- 5) Street and lanes in newly developed layouts /newly formed streets with few houses or scattered houses should not be selected.
- 6) Street and lanes in low-lying areas prone to water logging during rainy seasons should not be selected.
- 7) The width of street and Lanes taken-up should preferably be not more than 3.00m in width.
- 8) The site selected should be inspected both by Block Development Officer (VPs) and Assistant Engineer/Block Engineer.
- 9) Deliberately splitting-up of a single work into two or more individual works to avoid higher level Administrative and Technical Scrutiny should never be resorted to. Any such instance will lead to severe disciplinary action.

Technical Specifications for execution of works

1. Under Exceptional circumstances and wherever it is warranted, more than 3m width of Interlocking paver block may be taken-up based on the vehicular traffic and necessity and IRC SP: 63 – 2004 "Guidelines for the use of Interlocking Concrete Block Pavement" should be strictly adopted for pavement design.
2. Existing Surface – surface should be cleaned properly, sectioned, levelled and compacted properly. In case of poor/loose soil where CBR is less than 4%, the existing surface should be strengthened adequately.
1. Side Wall – The edges of the pavement should be provided with kerb wall (or) core wall using Cement Concrete mix in the ratio 1:3:6 for 15cm thickness with a foundation depth of 30cm. The construction of core wall should be completed before laying of sand.
2. Cross-drainage provision must be given so as to avoid water logging on both sides of the pavement. The Cross drainage structures essentially required for these street/lanes shall be constructed and provisions may be incorporated in the estimates prepared under MGNREGS in the FY 2023-24.
3. Bedding course – A GSB layer of 150mm thickness shall be laid uniformly and compacted with proper level and 2% camber should be maintained throughout the surface.

ANNEXURE-VI

G.O.(Ms).No.95, Rural Development and Panchayat Raj (CGS-1) Department, Dated 14.07.2023

Estimate for Providing Interlocking Paver Block (1 Km length) under Mahatma Gandhi NREGS

ABSTRACT CUM DETAILED ESTIMATE

Estimate Amount : Rs. 4980000

Sl. No.	Details of Work	No.	Measurement			Contents	Amount (In Rs.)
			L.	B.	D.		
1	Earth work excavation and depositing on bank with initial lead and lift in hard stiff clay and hard gravelly soil as per SS20B for narrow foundations etc., complete as per standard specification.						
	Core wall	1 x 2	1000	0.3	0.2	120 m ³	
		120 m ³		280.6 /M ³			33672
2	Cement Concrete 1:4:8 (One Cement Four sand and Eight Hard Broken Granite stone) using 40 mm gauge Hard Broken Granite stone jelly for foundation including cost and conveyance of all materials to site and all labour charges at site, including curing etc., complete as per standard specification.						
	Core wall	1 x 2	1000	0.3	0.1	60 m ³	
		60 m ³		4937.75 /M ³			296265
3	Cement Concrete 1:3:6 (One Cement three sand and six Hard Broken Granite stone) using 20 mm gauge Hard Broken Granite stone jelly for foundation including cost and conveyance of all materials to site and all labour charges at site, including curing etc., complete as per standard specification.						
	core wall	1 x 2	1000	0.23	0.35	161 "	
		161 m ³		5646.80 /M ³			909135
7	Towards centering charges inclusive of all material and labour charges etc., complete as per standard specification.						
	core wall	2 x 2	1000.00		0.350	1400.00	
						1400.00	
		1400.00		476.5 /M ²			667100
5	Providing GSB Grade III from approved quarry and staking them at site to dept. gauge for pre-measurement including cost and conveyance of all materials to site and all labour charges at site, including watering and compaction etc., complete as per standard specification.						
	For pavement	1 x 1	1000	2.54	0.15	381 m ³	
		381 m ³		1630.03 /m ³			621041
6	Flooring with paver blocks using interlocking concrete blocks having thickness 60mm and compacted over a thin bedding sand layer of 25mm thickness and joints shall be filled by fine sand of specified grading including cost and conveyance of all materials to site and all labour charges at site, including cost of sand for bedding and watering etc., complete as per standard specification.						
	For the road (6 cm thick block)	1 x 1	1000	2.54	-	2540 m ²	
		2540 m ²		664.70 /M ²			1688338
						Sub Total	4215551
7	Provision for Citizen Information Board					LS	4500
8	Provision for GST(18%)					LS	758799
10	Provision for Photographic charges					LS	500
11	Contingencies					LS	650
						TOTAL Rs.:	4980000

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ANNEXURE-VII

G.O.(MS).No.95, RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS-1) DEPARTMENT,
DATED: 14.07.2023

GUIDELINES FOR CEMENT CONCRETE DRAINAGE

General Instructions:

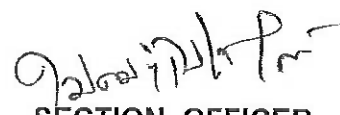
- Streets where grey water is stagnating and causing nuisance to public shall be taken.
- Streets with comparatively more number of households and without space for providing soakpits at individual household level, should be given priority.
- Sewage water from households should never get mixed with the grey water that is let out into the street drain.
- The drain constructed should end at a proper disposal point so as to drain out the collected grey water.
- Based on the space availability, at the end point of disposal, either Horizontal filter soak pit or Vertical filter soak pit shall be constructed. The filtered grey water can be used for irrigation purposes.
- The drain should have proper bed slope.
- The size of the drain should be designed properly to cater the quantity of grey water generated in the selected area.

Work Selection

- Priority shall be given to the Village Panchayats selected for the implementation of Anaithu Grama Anna Marumalarchi Thittam-II (AGAMT-II)
- Drain shall be constructed along with Paver Block/CC Road based on the quantity of grey water generated in the selected area.
- Selection of sites shall be based on descending order of population.

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ANNEXURE-VIII

G.O.(Ms).No.95, Rural Development and Panchayat Raj (CGS-1) Department, Dated 14.07.2023

Estimate for construction of CC Drain under Mahatma Gandhi NREGS

Rs. 5284000

DETAILED AND ABSTRACT ESTIMATE

Sl. No.	Description of work	Nos	L	B	D	Quantity	Rate	Per	Amount
1	Earth work excavation and depositing on bank with an initial lead of 10m and lift of 2m in sand, silt or other loose soil, wet sand or silt not under water, light black cotton soil, sandy loam and ordinary soil including excavated earth etc., complete								
	I Depth	1 × 1	1,000.00	1.26	0.30	378.00 M ³			
						378.00 M ³			
					Say :	378.00 M ³	280.60	1M ³	106067
	II Depth	1 × 1	1,000.00	1.26	0.30	378.00 M ³			
						378.00 M ³			
					Say :	378.00 M ³	346.39	1M ³	130935
2	Cement concrete 1:4:8 mix using 40mm ISS size HBG metal including all cost and conveyance of materials from approved sources to worksite including cost of cement to be supplied departmentally at section stores including handling charges for the same, cost of form work whenever necessary baling out water labour charges for mixing concrete laying compacting curing with all leads for good water including hire and fuel charges for all T&P employed and all other incidental charges etc. complete complying with standard specification								
		1 × 1	1,000.00	1.26	0.20	252.00 M ³			
						252.00 M ³			
					Say :	252.00 M ³	4937.75	1M ³	1244313
3	Cement concrete 1:3:6 mix using 20mm ISS size HBG metal including all cost and conveyance of materials from approved sources to worksite including cost of cement to be supplied departmentally at section stores including handling charges for the same, cost of form work whenever necessary baling out water labour charges for mixing concrete laying compacting curing with all leads for good water including hire and fuel charges for all T&P employed and all other incidental charges etc. complete complying with standard specification								
		1 × 2	1,000.00	0.23	0.60	276.00 M ³			
					TOTAL =	276.00 M ³			
					Say :	276.00 M ³	5646.80	1M ³	1558517
4	Supplying and erecting centering for sides for all cement concrete works using Mild steel sheets stiffened with Mild steel Angles including removing the same after specified period without damaging works etc., complete								
a)	For drain wall sides								
		2 × 2	1,000.00		0.60	2,400.00 M ²			
					Say =	2400.00 M ²	476.50	1M ²	1143600
5	Plastering with cement mortar 1:4 (One of cement and four of sand) 20mm thick including finishing smooth, scaffolding, setting, curing etc., complete as directed by the departmental officers.								
	Drain Vent	1 × 1	1,000.00	0.60		600.00 M ²			

ANNEXURE-IX

G.O.(MS).No.95, RURAL DEVELOPMENT AND PANCHAYAT RAJ (CGS-1) DEPARTMENT,
DATED: 14.07.2023

GUIDELINES FOR INDIVIDUAL AND COMMUNITY SOAK PITS SELECTION PROCEDURE

- **Model 1 – Individual Household Soak Pit**
 - **Model 2 - Common Soak Pit** (Can be located at Public Fountains, Hand Pumps, OHTs etc.,)
 - **Model 3 - Horizontal Soak Pit** (Suitable at locations where the Ground water table is high)
 - **Model 4 - Vertical Soak Pit** (Suitable at locations where the Ground water table is low)
1. Priority shall be given to the Village Panchayats selected for the implementation of Anaithu Grama Anna Marumalarchi Thittam-II (AGAMT-II)
 2. Other than Mission AGAMT-II Villages, priority shall be given to villages where the quantum of liquid waste generated is more and stagnation of grey water is rampant.
 3. The nature of soil at site chosen should be of permeable nature.
 4. Rocky stratum should be avoided.
 5. The soak pits may not be taken up in the flood prone areas or where the groundwater table is high.

Technical guidelines for the construction of soak pits

Construction Procedure

The liquid waste management technologies should be environmental friendly, low cost, affordable and manageable at village level. If grey water is managed at source by each household, it becomes a more appropriate solution and after exploring many possibilities, finally it is decided to provide a soak pit in each household. The soak pit proposed not only prevents water stagnation on the streets but also acts as a Water Harvesting Structure.

Construction Methodology

In **Individual soak pit**, the household grey water from the bathroom and the kitchen should be collected through inlet pipe to the inspection chamber where the grey water is screened and the water is then led to the Soak Pit where the water passes through the filter media and soaks to the ground.

In **community soak pit**, the grey water from the public fountain, hand pump, OHT etc., should be collected from the platform and filtered in the inspection chamber to screen the floating material and then led into the soak pit where the water passes through the filter media and soaks to the ground.

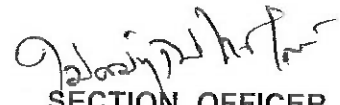
Individual Soak Pit

1. The grey water from the Kitchen and Bathroom should be collected through inlet pipe to the inspection chamber ensuring proper gradient.
2. The Inspection chamber of size 0.45m X 0.45m X 0.45m is constructed so that the debris collected through the inlet pipe along with the sullage water may be allowed to settle and the filtered water will pass through the outlet pipe of the inspection chamber to the soak pit.

8. The joints of the pipe, chamber and soak pit should be leak proof.
9. Over the top of metal layer at ground level in soak pit, a cement bag sheet shall be placed before filling with earth.
10. According to the prevailing Ground Water Table level, either Horizontal filter soak pits or Vertical filter soak pits shall be adopted, wherein the sullage water will be collected from all households in the locality through drainage and let into the soak pit.
11. In the case of horizontal filter soak pit, cleansed water from the soak pit can be used for watering the crops.
12. As far as Vertical filter soak pits are concerned, it should be strictly ensured that **sewage water does not get mixed with sullage collected from the households**, as there are possibilities for traces of E-Coli bacteria in sewage water, generally.
13. In the case of vertical filter soak pit, cleansed water from the soak pit will be let into the ground for the purpose of recharge of Ground water table. Hence, mixing of sewage water with sullage will lead to Ground water contamination and so, ***utmost care and supervision are necessary.***

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ANNEXURE-X
G.O.(Ms).No.95, Rural Development and Panchayat Raj (CGS-1) Department, Dated 14.07.2023
Estimate for Construction of Soak pits for Individual House Holds under Mahatma Gandhi NREGS
Detailed Cum Abstract Estimate

Estimate Rs. 14,000

Estimate RS. 14,000								
Sl. No	Details of work	No	Measurements in m			Quantity	Rate per unit	Amount (in Rs.)
			L	B	D			
1	Earth work excavation and depositing on bank with initial lead and lift in hard gravelly soil as per SS20 B for foundation etc complete							
a	Upto 0.3m depth							
	Soak pit	1	1.2	1.2	0.3	0.43		
	Chamber	1	0.45	0.45	0.3	0.06		
	washing platform	0	1.43	1.43	0.1	0		
	Platform	1	1.2	1.2	0.1	0.14		
						0.63		
			0.63	Cum	at Rs.	280.6	Cum	177
b	From 0.3m - 0.6m depth							
	Soak pit	1	1.2	1.2	0.3	0.43		
	Chamber	1	0.45	0.45	0.15	0.03		
						0.46		
			0.46	Cum	at Rs.	346.39	Cum	159
c	Above 0.60m depth							
	Soak pit	1	1.2	1.2	1.2	1.73		
						1.73		
			1.73	Cum	at Rs.	359.76	Cum	622
2	Cement concret 1:4:8 with 40mm HBG Metal etc. complete							
	Platform	1	1.2	1.2	0.1	0.14		
	Chamber	1	0.45	0.45	0.1	0.02		
						0.16		
		0.16425	Cum		at Rs.	4937.75	Cum	811

8	Supply of PVC pipes 75mm dia including necessary joints for inspection chamber to the soak pit etc.,							
	PVC pipes 75mm dia 4 Ksc	1	8			8		
			8 m	at Rs.	335.81	RM		2686
9	Provision for Nani Trap	1	1		591	No		591
					Sub Total			11601
10	Photo Charges							100
11	GST 18%							2088
12	Citizen information Board							90
13	Contingencies and					LS		211
					TOTAL	Rs.		14000

** As per G.O.(Ms) No. 124, dated 12.09.2018, it is mentioned that for individual soak pits, one citizen information board shall be provided for one habitation/cluster.
Assuming, 50 soakpits per habitation/cluster are constructed, approximate cost to be included in the estimate will be Rs. 90/-, calculating for one community Citizen Information Board as Rs.4500/-.

**Estimate for Community Soak pit (for Public Fountain, Hand Pump, OHT etc.)
under Mahatma Gandhi NREGS**

Detailed Cum Abstract Estimate

Estimate Rs. 17,000

Estimate RS. 17,000								
Sl. No	Details of work	No	Measurements in m			Quantity	Rate per unit	Amount (in Rs.)
			L	B	D			
1	Earth work excavation and depositing on bank with initial lead and lift in hard gravelly soil as per SS20 B for foundation etc complete							
a	Upto 0.3m depth							
	Soak pit	1	1.5	1.5	0.3	0.68		
	Chamber	1	0.45	0.45	0.3	0.06		
	Platform	1	1.5	1.5	0.1	0.23		
						0.97		
			0.97	Cum	at Rs.	280.6	Cum	272
b	From 0.3m - 0.6m depth							
	Soak pit	1	1.5	1.5	0.3	0.68		
	Chamber	1	0.45	0.45	0.15	0.03		
						0.71		
			0.71	Cum	at Rs.	346.39	Cum	246
c	Above 0.60m depth							
	Soak pit	1	1.5	1.5	1.2	2.7		
						2.7		
			2.7	Cum	at Rs.	359.76	Cum	971
2	Cement concret 1:4:8 with 40mm HBG Metal etc. complete							
	Platform	1	1.5	1.5	0.1	0.23		
	Chamber	1	0.45	0.45	0.1	0.02		
						0.25		
		0.25	Cum		at Rs.	4937.75	Cum	1234
3	Brick work in cm 1:5 mix using country bricks etc. complete							
	Platform Kerb wall	1	5.08	0.115	0.15	0.09		
	Chamber	1	1.34	0.115	0.35	0.05		
						0.14		
		0.14	Cum		at Rs.	5660.28	Cum	801

8	Supply of PVC pipes 75mm dia including necessary joints for inspection chamber to the soak pit etc.,							
	PVC pipes 75mm dia 4 Ksc	1	3			3		
			3 m	at Rs.	335.81	RM		1007
9	Provision for Nahini trap	1	1		1.00	no		591
					Sub Total			13171
10	Photo Charges							200
11	GST 18%							2371
12	Citizen information Board							1000
13	Contingencies					LS		258
					TOTAL	Rs.		17000

** As per G.O.(Ms) No. 124, dated 12.09.2018, it is mentioned that for individual soak pits, one citizen information board shall be provided for one habitation/cluster.

Assuming, 50 soakpits per habitation/cluster are constructed, approximate cost to be included in the estimate will be Rs. 90/-, calculating for one community Citizen Information Board as Rs.4500/-.

ABSTRACT

Construction of Horizontal Soak Pit						
Sl. No.	Description of Work	Qty	Unit	Rate	Per	Amount
1	Earth work excavation in all clauses of soil with initial lead and lift except hard rock requiring blasting as per SS 20B for foundation etc., complete.					
	Earth work 0.00m to 0.30m Depth :-	6.26	cum	280.60	cum	1757
	Earth work 0.30m to 0.60m Depth :-	6.26	cum	346.39	cum	2168
	Earth work 0.60m Above Depth :-	6.37	cum	359.76	cum	2292
2	Cement concrete 1:4:8 mix using 40mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.	3.07	cum	4937.75	cum	15159
3	Cement concrete 1:2:4 mix using 20mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.	7.74	cum	6310.35	cum	48842
4	Centering charges for all concrete works including cost and conveyance of all materials and all labour charges etc., complete.	47.19	cum	476.50	cum	22486
5	Brick work in cement mortar 1:5 mix using country bricks 83/4"x4 1/4"x2 3/4" and conveyance of all materials to site and all labour charges etc complete.	0.74	cum	5660.28	cum	4189
6	Plastering with cement mortar 1:5 mix to 12mm thick including cost and conveyance of all materials to site and all labour charges etc complete.	6.55	Sqm	238.59	Sqm	1563
7	Supplying and filling with Filling sand from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	1.50	cum	1716.85	cum	2575
8	Supplying and filling with 20mm metal from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	7.50	cum	1833.65	cum	13752
9	Supplying and filling with Red Gravel from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	1.50	cum	438.80	cum	547
10	Supplying and filling with Char coal from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	1.50	cum	1000		1500
11	Colour washing two coats using with approved colour including cost and conveyance of all materials to site and all labour charges etc complete.	16.83	Sqm	45.82	Sqm	771
12	Supplying and Delivery of 160mm Dia 6Ksc PVC Pipe including cost and conveyance to the site and all labour charges for filling etc., complete.	3.00	m	735.31	m	2206
13	Supplying and Delivery of 63mm Dia 6Ksc PVC Pipe including cost and conveyance to the site and all labour charges for filling etc., complete.	3.00	m	275.60	m	827

DETAILED ESTIMATE

Name of the Work : Construction of Horizontal Soak Pit

Sl. No.	Description of work	No.	Measurements			Contents		
			L	B	D or H			
1	Earth work excavation in all clauses of soil with initial lead and lift except hard rock requiring blasting as per SS 20B for foundation etc., complete.							
	Earth work 0.00m to 0.30m Depth :-							
	Soak Pit	1	x	1	4.46	3.46	0.30	4.63
	Inspection Chamber :-							
	Chamber	1	X	1	1.23	0.83	0.30	0.31
	Drainage :-							
	Drainage	1	X	1	3.50	1.26	0.30	1.32
							6.26	
	Earth work 0.30m to 0.60m Depth :-							
	Soak Pit	1	x	1	4.46	3.46	0.30	4.63
	Inspection Chamber :-							
	Chamber	1	X	1	1.23	0.83	0.30	0.31
	Drainage :-							
	Drainage	1	X	1	3.50	1.26	0.30	1.32
							6.26	
	Earth work 0.60m Above Depth :-							
	Inspection Chamber :-							
	Soak Pit	1	x	1	4.46	3.46	0.40	6.17
	Chamber	1	x	1	1.23	0.83	0.20	0.20
							6.37	
	2	Cement concrete 1:4:8 mix using 40mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.						
	Soak pit foundation	1	x	1	4.46	3.46	0.15	2.31
	Inspection Chamber :-							
	Chamber	1	X	1	1.23	0.83	0.10	0.10
	Drainage :-							
	Drainage	1	X	1	3.50	1.26	0.15	0.66
						3.07		
3	Cement concrete 1:2:4 mix using 20mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.							
	Soak pit foundation	1	X	1	4.46	3.46	0.15	2.31
	Soak pit around	1	X	1	14.92	0.23	1.30	4.46
	Drainage :-							
	Both side Drain wall	1	X	2	3.50	0.23	0.600	0.97
							7.74	
4	Centering charges for all concrete works including cost and conveyance of all materials and all labour charges etc., complete.							
	Soak pit inner	1	X	1	14.00		1.30	18.20
	Soak pit outer around	1	X	1	15.84		1.30	20.59
	Drainage :-							
	Both side Drain wall	2	X	2	3.50		0.60	8.40
							47.19	
5	Brick work in cement mortar 1:5 mix using country bricks 83/4"x4 1/4"x2 3/4" and conveyance of all materials to site and all labour charges etc complete.							
	Inspection Chamber :-							
	Chamber	1	X	1	3.66	0.23	0.90	0.76
	d/f Open	1	X	2	0.15	0.23	0.30	-0.02
							0.74	

Sl. No.	Description of work	No.	Measurements			Contents
			L	B	D or H	
13	Supply and fixing of MS Weld mesh including cost and conveyance to the site and all labour charges for filling etc., complete.					
	weld mesh in drain	1 X 10	0.60		0.90	5.40
	Weld mesh in Filter Chamber	1 x 4	3.00		1.00	12.00
						17.40
14	Supplying and Delivery of 63mm Dia 6Ksc PVC Pipe including cost and conveyance to the site and all labour charges for filling etc., complete.					
	63mm dia 6Ksc PVC Pipe	1 X 1	3.00			3.00
						3.00
15	Provision for Conducting Lab. Test etc., complete.,					LS
16	Provision for Citizen Name Board					LS
17	Provision for Photographic charges					LS
18	Provision for 18% GST					LS
19	Contingencies and other unforeseen items					LS

ABSTRACT

Construction of Vertical Soak Pit						
Sl. No.	Description of Work	Qty	Unit	Rate	Per	Amount
1	Earth work excavation in all clauses of soil with initial lead and lift except hard rock requiring blasting as per SS 20B for foundation etc., complete.					
	Earth work 0.00m to 0.30m Depth :-	8.86	cum	280.60	cum	2486
	Earth work 0.30m to 0.60m Depth :-	8.86	cum	346.39	cum	3069
	Earth work 0.60m Above Depth :-	32.87	cum	359.76	cum	11825
2	Cement concrete 1:4:8 mix using 40mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.	0.76	cum	4937.75	cum	3753
3	Cement concrete 1:2:4 mix using 20mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.	0.97	cum	6310.35	cum	6121
4	Centering charges for all concrete works including cost and conveyance of all materials and all labour charges etc., complete.	8.40	cum	476.50	cum	4003
5	Brick work in cement mortar 1:5 mix using country bricks 83/4"x4 1/4"x2 3/4" and conveyance of all materials to site and all labour charges etc complete.	4.62	cum	5660.28	cum	26122
6	Plastering with cement mortar 1:5 mix to 12mm thick including cost and conveyance of all materials to site and all labour charges etc complete.	45.86	Sqm	238.59	Sqm	10942
7	Supplying and filling with 225 mm metal from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	8.91	cum	794.15	cum	7076
8	Supplying and filling with 40mm metal from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	20.63	cum	1414.45	cum	29180
9	Supplying and filling with 20mm metal from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	1.50	cum	1833.65	cum	2486
10	Supplying and filling with Char coal from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	0.11	cum	1000	cum	108
11	Supplying and filling with red Gravel from an approved quarry including all cost and conveyance materials and all labour charges etc., complete with Standard Specification.	0.08	cum	438.8	cum	37
12	Colour washing two coats using with approved colour including cost and conveyance of all materials to site and all labour charges etc complete.	32.53	Sqm	45.82	Sqm	1491
13	Supplying and Delivery of 160mm Dia 6Ksc PVC Pipe including cost and conveyance to the site and all labour charges for filling etc., complete.	3.00	m	735.31	m	2206

DETAILED ESTIMATE

Name of the Work : Construction of Vertical Soak Pit

Sl. No.	Description of work	No.	Measurements			Contents
			L	B	D or H	
1	Earth work excavation in all clauses of soil with initial lead and lift except hard rock requiring blasting as per SS 20B for foundation etc., complete.					
	Earth work 0.00m to 0.30m Depth :-					
	Soak Pit	1 x 1	4.91	4.91	0.30	7.23
	Inspection Chamber :-					
	Chamber	1 X 1	1.23	0.83	0.30	0.31
	Drainage :-					
	Drainage	1 X 1	3.50	1.26	0.30	1.32
						8.86
	Earth work 0.30m to 0.60m Depth :-					
	Soak Pit	1 x 1	4.91	4.91	0.30	7.23
	Inspection Chamber :-					
	Chamber	1 X 1	1.23	0.83	0.30	0.31
	Drainage :-					
	Drainage	1 X 1	3.50	1.26	0.30	1.32
						8.86
	Earth work 0.60m Above Depth :-					
	Inspection Chamber :-					
	Soak Pit	1 x 1	4.45	4.45	1.65	32.67
	Soak pit free board	1 x 1	18.72	0.30	0.30	
	Chamber	1 x 1	1.23	0.83	0.20	0.20
						32.87
2	Cement concrete 1:4:8 mix using 40mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.					
	Soak pit free board	1 x 1	18.72	0.23	0.10	0.43
	Inspection Chamber :-					
	Chamber	1 X 1	1.23	0.83	0.10	0.10
	Drainage :-					
	Drainage	1 X 1	3.50	1.26	0.15	0.66
						0.76
3	Cement concrete 1:2:4 mix using 20mm ISS HBG metal including cost and conveyance of all materials and all labour charges etc., complete.					
	Drainage :-					
	Both side Drain wall	1 X 2	3.50	0.23	0.600	0.97
						0.97
4	Centering charges for all concrete works including cost and conveyance of all materials and all labour charges etc., complete.					
	Drainage :-					
	Both side Drain wall	2 X 2	3.50		0.60	8.40
						8.40
5	Brick work in cement mortar 1:5 mix using country bricks 83/4"x4 1/4"x2 3/4" and conveyance of all materials to site and all labour charges etc complete.					
	Soak Pit Free Board	1 x 1	18.72	0.23	0.90	3.88
	Inspection Chamber :-					
	Chamber	1 X 1	3.66	0.23	0.90	0.76
	d/f Open	1 X 2	0.15	0.23	0.30	-0.02
						4.62

Sl. No.	Description of work	No.	Measurements			Contents
			L	B	D or H	
13	Supplying and Delivery of 160mm Dia 6Ksc PVC Pipe including cost and conveyance to the site and all labour charges for filling etc., complete.					
	160mm dia 6Ksc PVC Pipe	1 X 1	3.00			3.00
						3.00
14	Supply and fixing of MS Weld mesh including cost and conveyance to the site and all labour charges for filling etc., complete.					
	weld mesh at drain	1 X 10	0.60		0.90	5.40
						5.40
15	Supplying and Delivery of 63mm Dia 6Ksc PVC Pipe including cost and conveyance to the site and all labour charges for filling etc., complete.					
	63mm dia 6Ksc PVC Pipe	1 X 1	3.00			3.00
						3.00
16	Provision for Conducting Lab. Test etc., complete.,					LS
17	Provision for Citizen Name Board					LS
18	Provision for Photographic charges					LS
19	Provision for 18% GST					LS
20	Contingencies and other unforeseen items					LS

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