



ABSTRACT

Schemes – State Scheme – Rural Housing Scheme – Construction of Solar Powered Green Houses under “Chief Minister’s Solar Powered Green House Scheme”(CMSPGHS) – Implementation – Guidelines prescribed – Orders – Issued.

Rural Development and Panchayat Raj (SGS1) Department

G.O.(Ms.) No.46

Dated: 17.08.2011

Read:

From the Commissioner of Rural Development
and Panchayat Raj Letter No.47691/IAY/2011,
dated 27.07.2011

ORDER:

In his address in the Tamil Nadu Legislative Assembly on 03.06.2011, His Excellency the Governor of Tamil Nadu announced that Government will launch a “Solar Powered Green House Scheme” for the benefit of the poor in the rural areas and construct houses measuring about 300 square feet at the unit cost of Rs.1.80 lakhs by meeting the entire cost by Government.

2. The Hon’ble Minister for Finance while presenting revised budget for the year 2011-12 on 04.08.2011 has announced that the Government will construct 60,000 Green Houses with Solar Power at a cost of Rs.1,080 crores during 2011-2012 in rural areas for the benefit of the houseless poor and the unit cost of each house measuring 300 square feet under this scheme will be Rs.1.80 lakhs.

(p t o)

3. The Commissioner of Rural Development and Panchayat Raj, in the letter read above, has sent a proposal along with the draft Guidelines for implementation of the scheme. The Commissioner of Rural Development and Panchayat Raj has also sent the model type design, estimates etc. He has stated that out of the unit cost of Rs.1.80 lakhs, Rs.1.50 lakhs shall be utilized for construction of house and the balance of Rs.30,000/- is earmarked for installation of Solar Powered Home Lighting System by Tamil Nadu Energy Development Agency. The Commissioner of Rural Development and Panchayat Raj had also stated that the Tamil Nadu Energy Development Agency has asked for 8% in the total cost of installation of Solar Powered Home Lighting System as service charge. The Commissioner of Rural Development and Panchayat Raj has further requested the Government to release Rs.1,080 crores for construction of 60,000 Solar Powered Green House during 2011-12 at the rate of Rs.1.80 lakhs each house and to issue necessary orders for implementation of the Scheme.

4. The Government have examined the proposal of the Commissioner of Rural Development and Panchayat Raj in detail and decided to accept the same and issue the following orders:-

- (i) The State scheme of construction of Solar Powered Green House shall be called as "Chief Minister's Solar Powered Green House Scheme".
- (ii) Under this State Scheme 3 lakh Houses shall be constructed over a period of 5 years from 2011-12 to 2015-16.
- (iii) Out of the 3 lakh houses sanctioned, during 2011-12, 60,000 Solar Powered Green Houses measuring 300 square feet each shall be constructed at the unit cost of Rs.1.80 lakhs wherein the construction component will be of Rs.1.50 lakhs and the balance of Rs.30,000/- is earmarked for providing Solar Powered Home Lighting system.
- (iv) Sanction is accorded for a sum of Rs.1,080 crores (Rupees One Thousand and Eighty crores only) for construction of 60,000 Solar Powered Green Houses during the financial year 2011-2012.

- (v) The guidelines appended to this order as Annexure-A is approved.
- (vi) The model type design brought out by the Commissioner of Rural Development and Panchayat Raj is approved and appended to this order as Annexure-B.
- (vii) The Colour of the house shall be Cream and Maroon as in Annexure -C.
- (viii) The Tamil Nadu Energy Development Agency shall be paid a service charge at the rate of 8 % of the total cost of installation of Solar Powered Home Lighting System. The claims shall be submitted to Commissioner of Rural Development and Panchayat Raj and he will disburse the funds to the Tamil Nadu Energy Development Agency. The modalities of submission of claims will be finalized by the Commissioner of Rural Development and Panchayat Raj in consultation with the Managing Director, Tamil Nadu Energy Development Agency. A copy of the agreed system should be sent to Government for record.
- (ix) At the District level the Collector and Chairman of District Rural Development Agency will implement and monitor the Scheme and ensure the completion of houses in time.
- (x) Orders for release of funds for implementation of the Scheme during 2011-12 will be issued separately.

5. This order issues with the concurrence of Finance Department vide its U.O.No.1978A/FS/P/2011, dated 05.08.2011

(By Order of the Governor)

N.S. PALANIAPPAN,
Principal Secretary to Government

To
The Principal Secretary to Government, Energy Department, Chennai-9.
The Secretary to Government, Information Technology Department, Chennai-9
The Commissioner of Rural Development and Panchayat Raj, Chennai-15.

The Managing Director, Tamil Nadu Energy Development Agency, Chennai-6.
All District Collectors (except Chennai)
All Project Directors, District Rural Development Agencies.
(through Commissioner of Rural Development and Panchayat Raj)
Pay and Accounts Officer (South), Chennai - 35.

Copy to

The Additional Chief Secretary/Secretary-I to the Hon'ble Chief Minister,
Chennai-9.
The Senior Personal Assistant to Hon'ble Finance Minister, Chennai-9
The Senior Personal Assistant to Hon'ble Minister for Electricity and
Prohibition and Excise, Chennai-9.
The Senior Personal Assistant to Hon'ble Minister for Municipal
Administration and Rural Development, Chennai-9.

//Forwarded by Order//

Section Officer

G.O.(Ms.) No.46, RD & PR (SGS1) Department, dated 17.08.2011

ANNEXURE - A

GUIDELINES OF CHIEF MINISTER'S SOLAR POWERED GREEN HOUSE SCHEME (CMSPGHS)

1. Introduction :

The Government in the Governor's address in Tamil Nadu Legislative Assembly on 3.6.2011 had announced that "This Government will launch a 'Solar Powered Green House Scheme' for the benefit of the poor in the rural areas and construct houses measuring about 300 square feet with an unit cost of Rs.1.80 lakhs by meeting the entire cost by Government". The scheme aims at providing solar powered green house for the poor living below poverty line in rural areas.

Accordingly it is proposed to construct 60,000 Solar Powered Green Houses of 300 square feet each, every year for the next five years commencing from 2011-12 at an unit cost of Rs.1,80,000/- per house. The scheme will be named as "Chief Minister's Solar Powered Green House Scheme (CMSPGHS)"

2. Salient features of the Scheme :

- i) All the people living below poverty line in rural areas will be eligible for Solar Powered Green Houses.
- ii) Each house will have an area of 300 square feet and will be constructed at an unit cost of Rs.1,80,000/- fully funded by the State Government.
- iii) Every house will have a living room, bed room, kitchen, toilet and verandah apart from Rain Water Harvesting provision.

iv) Each house will be provided with 5 solar powered lights, one each in bed room, living room, kitchen, toilet and verandah. All the lights will be of Compact Fluorescent Lamp (CFL). Every beneficiary will also have the option of an electric connection powered by TNEB which will be metered.

v) The unit cost will be Rs.1.80 lakhs per house @ Rs.1.50 lakh for construction and Rs.30,000/- for Solar Powered Lights. Solar Powered Lights estimate of Rs 30,000 is a rough cost estimate.

vi) The RD&PR Department will take up the construction of houses and Tamil Nadu Energy Development Agency (TEDA) will execute the solar lighting component.

vii) The green houses will be constructed either *in situ (replacing his/her existing dwelling structure)* or *in the land owned by the beneficiary elsewhere in the Village Panchayat*. No land acquisition is envisaged under this scheme. People only with pattas for their house sites will be eligible under this scheme.

viii) The supply, installation and commissioning of solar panels and lights will be undertaken directly by TEDA by following established procedures in co-ordination with the Project Directors of District Rural Development Agencies.

3. Type design and Unit cost :

i) Each house shall be constructed with a maximum plinth area of 300 sq.ft and the unit cost shall be Rs.1.80 lakhs per house. The houses will be built with a living room, bed room, kitchen and a toilet. Wherever possible, the toilet shall be constructed by dovetailing funds from the Total Sanitation Campaign. Rain Water Harvesting Structure shall be provided in all the houses. The Solar Powered lighting system will be installed by TEDA in co-ordination with the District officials.

- ii) An exclusive type design for this scheme has been developed and the construction of houses should not exceed the permissible limit of 300 sq.ft. To ensure uniformity in the design, no change of type design is permitted.
- iii) However, changes in type design, such as shifting of kitchen room or bedroom to another direction etc. shall be permitted without altering the total plinth area of 300 sq.ft.
- iv) The logo for this scheme printed on ceramic tiles shall be affixed visibly on all the houses as shown in the design. The sample logo will be circulated by the Directorate of Rural Development and Panchayat Raj to all Districts.
- v) The name of the scheme, beneficiary's name and year of construction shall be painted prominently on each completed house.
- vi) Cost effective technologies and fast track construction will also be permitted under the scheme. The usage, suitability and structural stability of the houses to be constructed using such technologies shall be approved by the Superintending Engineer (RD) of the Directorate of Rural Development and Panchayat Raj.

4. Installation of Solar Powered Home Lighting System :

The following modalities shall be followed in the installation, operation and maintenance of solar powered lights:-

- Each house shall have 5 CFL lights through Solar Photo Voltaic (SPV) System.
- The internal wiring will be done as part of the civil construction. TEDA will do up to the change over including the installation of the change over switch.

- There shall be a 2 year warranty period and 1/2/3 year Comprehensive Annual Maintenance Contract (CAMC) period for the systems supplied based on the rates quoted. The Suppliers should set up District level/ Block level Service Centres. A District level Helpline shall also be installed by the supplier/manufacturer.
- The amount of Rs.30,000/- per house for SPV Home lighting system will be drawn by the Commissioner of Rural Development and deposited with TEDA. The subsidy amount eligible for the solar lighting system shall be claimed by Rural Development and Panchayat Raj Department from Ministry of New and Renewable Energy (MNRE), GOI and remitted to Government of Tamil Nadu account. TEDA will facilitate claim of the subsidy from MNRE.
- Any savings and interest accrued by TEDA while implementing the scheme shall be remitted to the Government of Tamil Nadu account
- Tenders shall be floated by TEDA as per Transparency in Tenders Act.
- TEDA shall bring out Brochures/Hand outs and other training materials on the usage and maintenance of the SPV equipments. A Hand out on Dos and Don'ts should also be prepared by TEDA in the local language and distributed to the beneficiaries.

- Training Modules shall be prepared by TEDA to train the Panchayat Presidents, Panchayat Assistants, select SHG Members and other local functionaries deemed fit, so that they can have effective interface between the beneficiaries and Suppliers.

Execution of works :

The erection and commissioning agencies shall be responsible for two years warranty with additional 1/2/3 years comprehensive maintenance contract. TEDA will station one AEE/AE and one Junior Assistant cum Computer Operator at each DRDA who will liaise with PD DRDA for day to day coordination and supervision. PD DRDA shall provide TEDA a room in DRDA for housing TEDA office.

i. Quality Control & Inspection

TEDA will engage Project Management Consultants and a third party inspection agency, whose responsibility will be to ensure that all the materials used and the workmanship conform to the prescribed specifications. The inspection will cover quality checks of major materials at pre-shipment stage at the vendor's outlet.

The PMC will ensure that 100% of the lights are installed after inspection. Any defect in the SPV Home Lighting System will be brought to the notice of TEDA by the beneficiary/Panchayat/Block/District Administration for immediate rectification.

In case quality check reveals 'unsatisfactory' work, the implementing agency (TEDA) shall ensure that the contractor replace the material or rectifies the workmanship (as the case may be) within the time period stipulated. All works rated 'unsatisfactory' shall be re-inspected after a rectification report has been received from the contractor. Funds will be

released to the commissioning agencies only after receiving successful inspection reports. TEDA will designate an appropriate senior officer as incharge of the Monitoring system.

Ii.Maintenance of the System:

As part of the tender the commissioning agencies shall be responsible to train the beneficiaries as well as 4 SHG members in each Panchayat to do regular preventive and routine maintenance.

Iii.State Empowered Committee

State Empowered Committee constituted by the state under the Chairmanship of Chief Secretary, Government of TN with following members will sanction the projects, including revised costs estimates, monitor and review the implementation of the scheme in addition to issuing necessary guidelines from time to time for effective implementation of the scheme. This Committee will also approve the technical specifications and the tender documents, and will recommend the final bid price to the appropriate authority for acceptance.

CMD, TEDA- Member, Secretary

Secretary, Energy Department

Secretary, RD&PR Department

Secretary, Finance Department

Commissioner, RD&PR Department

Chairman TANTRANSCO

Dr Giridhar, CWET

Prof Ashok Jhunjunwala, Chairman RTBI, IIT Madras

iv. Funds release and Subsidy Claim:

The Commissioner of Rural Development and Panchayat Raj will draw the funds and release the same to TEDA. Funds to the companies shall be released based on the progress of installation. Final payment should be made after the satisfactory completion of the work duly getting a certificate relating to completion from the competent authority of TEDA. TEDA will facilitate the RD Department in obtaining the subsidy share (CFA) from the Ministry of New and Renewable Energy (MNRE), Government of India for reimbursing to the State Government. In this regard the RD Department would submit the application in the format stipulated by MNRE.

v. Warranty:

TEDA should ensure the norms for good quality as per the approved standards of Ministry of New & Renewable Energy (MNRE). There should be warranty for each item such as solar panel, Battery, etc. which is to be taken care in the agreement itself. The SPV lighting system will have a warranty of two years. Further, the rate for Comprehensive Annual Maintenance contract (CAMC) will be called for another 3 years (beyond 2 years warranty period) through a tendering process. Depending on the rates quoted and the funds available the number of years for CAMC will be finalized by TEDA.

vi. Training Materials:

TEDA will bring out Brochures/Hand outs and other training materials on the usage and maintenance of the SPV lighting equipments. A Handout on Dos and Don'ts will also be prepared and made available by TEDA.

vii. Facilitation and Co-ordination by District administration:

- The list of Village Panchayats selected along with the details of houses where SPV Home Lighting Systems are to be installed should be communicated to TEDA well in advance.
- Coordination with Project Management Consultant appointed by TEDA through District Managers of TEDA, for the installation of SPV Home Lighting Systems.
- The full address and contact phone numbers of the manufacturers / suppliers / installation and commissioning contractors (AMC holders) should be made available at the District level, Block level and at the Village Panchayat level by TEDA for easy and effective communication at times of need.

viii. Comprehensive Annual Maintenance Contract (CAMC):

The Warranty and the Comprehensive Annual Maintenance Contract (CAMC) entered with TEDA on behalf of the beneficiaries will be handed over to the beneficiaries after successful installation.

5. Eligibility of the Beneficiaries:

The beneficiary should:

- reside within the village panchayat ;
- find a place in the BPL permanent wait list of the village panchayat;
- own a site of not less than 300 sq.ft. area;
- have clear patta for the site/house in the name of the head of the family or any other member of the household.

- not own any other pucca concrete house in the village or elsewhere;
- not have benefited under any other housing scheme of the Government.

6. Selection of Beneficiaries :

- i) A permanent wait list of BPL for each Village Panchayat should be drawn and the poorest of the poor should be selected.
- ii) While preparing the list of beneficiaries, priority should be given to differently abled, widows, destitute and deserted women, women headed families, transgender, HIV/AIDS/TB affected who are certified by DD (Health Services) concerned and victims of natural calamities such as fire, flood, etc. Priority shall also be given to households having a mentally challenged person in the family.
- iii) Any eligible poor person whose name does not figure in the BPL list can apply to the Block Development Officer and an Assistant Director level officer of RD&PR Department may verify the fact and with the concurrence of District Collector, his name may be included in the BPL list and approval of Grama Sabha shall be obtained for the same. In the event of inclusion, his/her name will become a part of the permanent wait list and considered for selection accordingly.
- iv) The Village Panchayats should draw a list of eligible beneficiaries living below poverty line under this scheme and place it before the Grama Sabha for its approval.

7. Verification of the Beneficiaries :

The Village Panchayats should handover the list of selected beneficiaries to the concerned Block Development Officer (BP). Deputy Block Development Officer and the Overseer concerned should verify the

beneficiary list relating to land ownership, area etc. at field level and ensure eligibility of the beneficiary and availability of the site.

8. Allocation of Houses:

(i) At the State level, the Commissioner of Rural Development & Panchayat Raj shall allocate the no. of houses to be constructed under this scheme for each district in a year.

ii) At the District level, the District Collector shall decide the allotment of houses to the Village Panchayats.

iii) The Village Panchayats should allocate the houses to the selected beneficiaries based on the priority category of people found in the BPL Permanent Wait List approved by the Grama Sabha.

9. Issue of Work Order:

The Block Development Officer (BP) should issue the work order to the beneficiaries after confirming the eligibility of beneficiaries with reference to title and site by the officials of RD&PR Dept.

10. Marking of site:

The concerned Union Overseer of a particular Village Panchayat shall mark the site as per the type design approved by the Government for commencement of work.

11. Supply of materials:

Cement:

At the State level, necessary steps will be taken to ensure smooth supply of cement for construction of houses at village panchayats. Cement supply shall be arranged through M/s.TANCEM and the payment may be made by

DRDA at District level and the amount will be adjusted from the scheme fund.

Steel:

Similarly, Project Directors of DRDAs should take necessary steps to procure steel based on the needs of their district and payment will be made by DRDAs at District level and the amount will be adjusted from the scheme fund.

Doors and Windows:

Beneficiaries can themselves arrange for doors and windows. If the beneficiary is unable to arrange for doors & windows, PD, DRDAs should arrange for supply of the same and the cost will be deducted from the scheme fund.

For all the above procurements, PDs should work out the total quantity of materials needed for their district based on the no. of houses allocated to them.

12. Mode of Implementation:

- The administrative sanction for the scheme based on the district allocation for each year shall be accorded by the District Collector.
- The execution of the scheme is entrusted to the BDO(Block Panchayat).
- The Overseers shall be responsible for the construction and other technical aspects of construction. The Block Engineers shall check the progress of the houses.

- The Project Directors, DRDA and Executive Engineers and Assistant Executive Engineers (RD) should frequently inspect the execution and progress of the houses and ensure its early completion. They should also ensure no deviation from the type design or any other discrepancies under this scheme.

13. Documentation:

Photographs exhibiting the beneficiary positioned in front of the house in which they reside at present shall be taken. The same process has to be repeated after completion of the house. These processes have to be documented by the Block Development Officer (BP) before making final payment . Out of the fund allocation for the scheme, 1% is allocated for documentation and other Information Education and Communication (IEC) activities.

14. Monitoring :

The District Collector will review the progress of the construction of houses as well as the installation of SPV Home Lighting Systems with Block officials and officials of TEDA. Nodal Officers in the cadre of Assistant Director must be appointed by the District Collector to supervise the works. The District Collector and the Project Director, District Rural Development Agency are the Officers responsible for the proper implementation of the Scheme at District level and TEDA at the State level for the installation of SPV Home Lighting Systems.

15. Release of funds:

i) The Commissioner of Rural Development & Panchayat Raj is authorised to draw the annual allocation for **CMSPGHS** in two half-yearly installments. The fund in turn will be released to the districts at the rate of Rs.1,50,000/- per house. The balance amount at the rate of Rs.30,000/- per house shall be

deposited with Chairman & Managing Director, TEDA for the purchase and installation of materials relating to Solar Powered lighting system. The Districts shall release the funds directly to the respective Village Panchayats. The funds should not be routed through the Blocks.

ii) A separate District level Savings Bank Account at District Headquarters shall be opened exclusively for **CMSPGHS** by the District Collector/Chairman, DRDA. There shall be only one **CMSPGHS** Savings Bank Account at the district level.

iii) In the Village Panchayats where the **CMSPGHS** is implemented, **a sixth account**, namely, '**Village Panchayat CMSPGHS Account**' shall be operated. The receipt which shall be credited to, the types of expenditure that can be incurred out of and the mode of operation of Village Panchayat **CMSPGHS** Scheme Account are described as under:

a) Receipts: The receipts to be credited to the 'Village Panchayat CMSPGHS Account' shall be the funds received under CMSPGH Scheme.

b) Expenditure: The funds credited into the Village Panchayat CMSPGHS Account will be spent for payment of the works pertaining to the CMSPGH Scheme as prescribed.

c) Mode of Operation: The above account shall be operated jointly by the President and Vice-President of the Village Panchayats as is done for the Village Panchayat Fund Accounts concerned. However, Collectors should instruct all the concerned bank branches in writing to make suitable ledger/computer entries to honour the cheques signed by the President and Vice-President of the Village Panchayat only if they are accompanied by the release order in the form of proceedings of the BDO(BP) for the payment of works from the Village Panchayat CMSPGH Account concerned. The cheque leaf should also be stamped with "To be paid only if accompanied by

proceedings of the BDO (Block Panchayat)". No self-cheques or drawals based on withdrawal forms are to be permitted for this account.

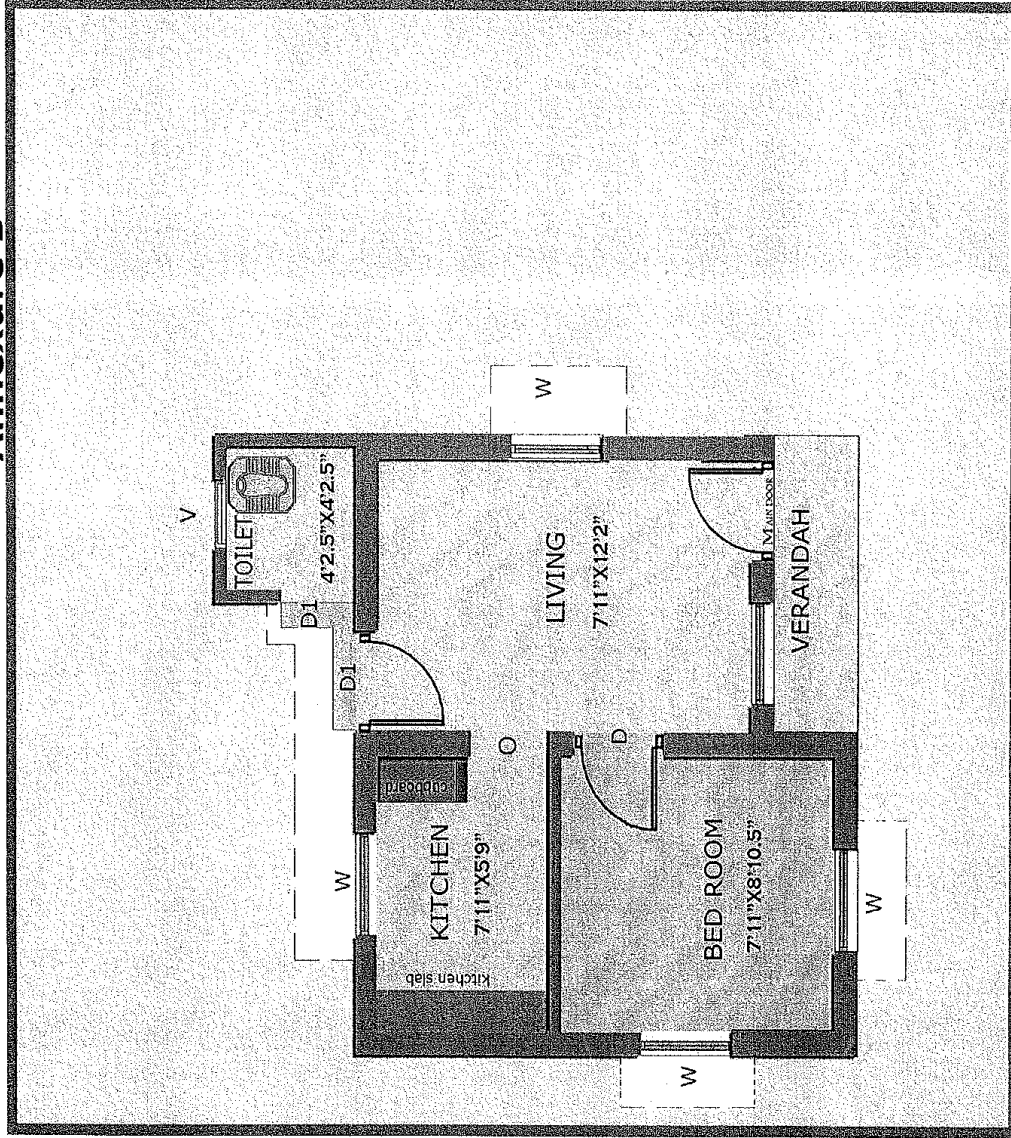
16. The Principal Secretary to Government, RD& PR Department, in consultation with the Commissioner of Rural Development & Panchayat Raj, is authorized to amend these guidelines based on the exigencies that may arise from time to time.

**N.S. PALANIAPPAN,
Principal Secretary to Government**

//True Copy//

Section Officer

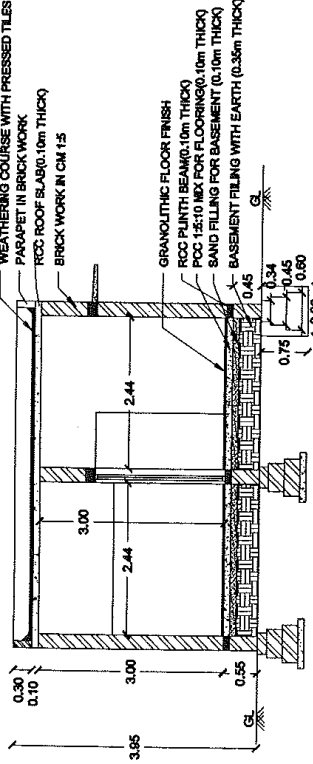
**G.O.(MS)No.46,RD&PR(SGS1)Dept.,dated:17.8.2011
Annexure B**



Area Detail

Living room	97 sft
Bed room	71 sft
Kitchen	46 sft
Toilet	18 sft
Wall area	68 sft

TOTAL AREA : 300 SQ.FT



SECTION ON A-A

PLINTH AREA : 28.00 sq.m / 300 sq.ft

SCHEDULE OF JOINERY

SL NO.	SL TYPE	SIZE		SILL	TOP	DESCRIPTION	REMARKS
		WIDTH	HEIGHT				
1	MD	800	2100	-	2100	STEEL DOOR WITH 18GMS SHEET SHUTTER	SINGLE LEAF
2	D	800	2100	-	2100	STEEL DOOR WITH 18GMS SHEET SHUTTER	SINGLE LEAF
3	D1	750	1800	-	1800	PVC DOOR	SINGLE LEAF
4	W	800	1200	800	2100	STEEL WINDOW WITH 18GMS SHEET SHUTTER & 10MM FRAMES	TWO LEAF
5	J	600	450	1850	2100	PRECAST JOLLY	-

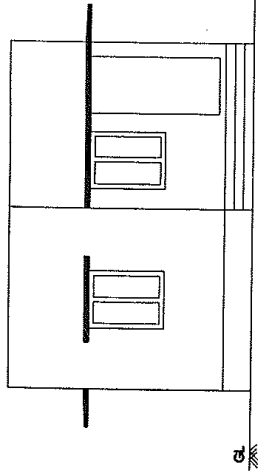
DIRECTORATE OF RURAL DEVELOPMENT

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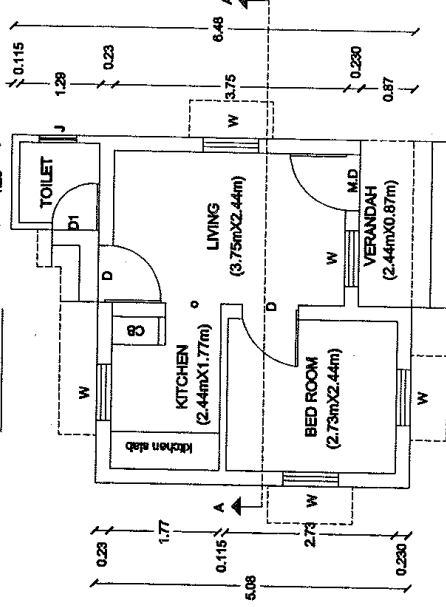
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TYPE DESIGN FOR PASUMAI VEEDU

PLAN, ELEVATION AND SECTION



ELEVATION



PLAN

IMPORTANT NOTES:

1. TYPE OF FOUNDATION, ITS WIDTH & DEPTH ETC TO BE DECIDED BASED ON THE SOIL SAFE BEARING CAPACITY.
2. THICKNESS OF R.C.C MEMBERS WILL BE BASED ON THE DESIGN.