TERMS OF REFERENCE

Work Name	Fabrication and preparation of civil shed for 1 TPD bio-Gas Plant at Ayodhya
Project type	Shed preparation, brick work. RCC and PCC for civil work at Ayodhya
	Municipal Corporation
About TERI:	TERI is an independent, multi-dimensional organization, with capabilities in research, policy, consultancy and implementation. We are innovators and agents of change in the energy, environment, climate change and sustainability space, having pioneered conversations and action in these areas for over four decades.
Scope of Work	1. Earth work
	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sq.mt. on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.
	Qty. – 20 CUM
	2. RCC
	Reinforced cement concrete (RCC) work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, including cost of straightening, cutting, bending, placing in position and binding all complete up to plinth level and also including centering, shuttering, finishing and reinforcement: M20 grade concrete Steel 12mm Qty. – 20 CUM
	3. Brick work
	Brick work with common burnt clay F.P.S. (non-modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in : 6.4.1 Cement mortar 1:4 (1 cement : 6 coarse sand) including 12 mm thick cement plaster both side with tapered edges 1:3 (1 cement : 3 coarse sand) Qty. – 40 CUM
	4. Shed Work
	Providing and fixing Pre Painted Galvalume Sheet Roofing (PPGL) at all levels including fitting and fixing self-drilling, self-tapping screws complete (Roof trusses, purlins etc. to be measured and paid separately.) Qty. – 125SQM

5. Fabrication work -

A. column and purlins

Providing and fixing columns and Purlins for the sheet: made of MS square pipe $100 \times 100 \times 4$ mm thick with base plate welded at bottom of pipe $12" \times 12" \times 12$ mm thick and $76 \times 25 \times 4$ mm thick MS pipe for purlins.

Qty. - 720 KG

B. Roof and truss

Providing, fitting, hoisting and fixing of roof trusses fabricated out of combination of any two or all of the following sections (i) Square section (ii) Rectangular Hollow section of specification RSH/SHS and (iii) M.S. circular hollow section of Grade 210 including, bottom runners and providing M.S. cleat, M.S. angle base plank, bolts and nuts with red oxide primer including fitting bottom runner and cleat etc. for fixing Base plate for roof truss $12" \times 12" \times 8mm$ Thick Rectangular hollow pipe $40 \times 40 \times 4mm$ thick and $50 \times 50 \times 4mm$ thick

Qty. - 857 KG

6. Painting

Painting of all MS pipe, base plate, nuts, bolts etc with 3 coat of red oxide and two coat of enamel paint of approved brand and manufacture(Asian paint/ Berger paint/ ICI paint/ J & N paint/ Nerolac) to give an even shade including cleaning the surface of all dirt, dust and other foreign matter. at all height including the scaffolding

Qty. - 125 SQM

Timeline

• one months from the date of award of work order

Technical specifications for design of 1 TPD Bio-Gas Plant at ANN

Plan of shed for 1 TPD Bio-Gas Plant- Area requirement =250 Sq. Mt





