D.D.CONSTRUCTIONS

VISAKHAPATNAM, VIJAYAWADA, RAJAHMUNDRY, TIRUPATI, HYDERABAD

Office: # 6-175/20, Sheelanagar,

Visakhapatnam – 530 012.

Name of the work : Construction of RCC Residential Building (With G+2 foundation) i.e., providing all Civil Works, Flooring, Wood Work, Painting, Electrical, Plumbing & Sanitary Items, Septic Tank, Elevation etc., at **Sitarama Gardens Phase – IV Ext. Plot No. 202, 200, 117 & 116GF, FF** Narava Village, Pendurty Mandal, Visakhapatnam.

Tender No: : **DDC/VSP/01/2022-23**

Agreement No: : **DDC/VSP/01/2022-23**

Estimated Value : **Buildup area – 5408 Sft = Rs. 80,06,671/-**

Total value Rs. 80,06,671/- (Eighty Lakhs Six Thousand Six Hundred Seventy One Rupees only)

Tender Percentage :

Agreement Value :

INFORMATION AND INSTRUCTOINS FOR BIDDER FOR TENDERING FORMING PART OF BID DOCUMENT

S.NO.	Description	Details
1	**Tender No.**	**DDC/VSP/01/2022-23**
2	Name of Work & Location	Construction of RCC Residential Building (With G+2 foundation) i.e., providing all Civil Works, Flooring, Wood Work, Painting, Electrical, Plumbing & Sanitary Items, Septic Tank, Elevation etc., at **Sitarama Gardens Phase – IV Ext. Plot No. 202, 200, 117 & 116GF, FF** Narava Village, Pendurty Mandal, Visakhapatnam.
3	Estimated Value	Rs. /-
5	Period of Completion	180 days(6Months) for Ground floor building, 90days(3Months) for each floor above ground floor.

1. The Intending Bidder must read the terms and conditions carefully. He should only submit his bid if he considers himself eligible and he is in possession of all documents required.

2. Information and instructions for bidders from part of bid document

3. The Contractor submitting the bid should read the Specifications, Schedule of Quantities, Special conditions, additional conditions, Particular specifications and other terms and conditions given in the document and Drawings.

4. GST on all materials as well as GST on work contract etc., or any other taxes applicable in respect of this contract shall be payable by the contractor. Percentage rate quoted by him shall be inclusive of such taxes, levies etc and the client will not entertain any claim for reimbursement whatsoever in respect of the same. **The percentage rates of this contract shall be inclusive of GST, levies and nothing extra shall not be paid.** Further the percentage rate quoted by the contractor shall be inclusive of Labour welfare cess and the same be recovered from the contractors bills and will be remitted by the department.

   4.i. TDS will be deducted from the bill wise on the percentage of 1% on individual/in case of Company or firm 2% whichever is applicable.

5. Bid Document consisting of Plans, Specifications, the schedule of quantities of the various types of items to be executed and the set of terms and conditions of contract to be complied by the contractor whose bid may be accepted and other necessary documents can be seen in the office.

6. This work requires engaging more than 10 no's of Labour / workers and therefore all necessary licenses such as labour license, EPFO and ESIC, BOCW welfare registration etc., shall be taken by contractor within the time limits should be submitted EPFO and ESIC paid receipts along with bill copy.

7. The Document to be physically submitted shall be page numbered and each page shall be signed by the authorized signatory

8. Contractor shall not divert any advance payments or part thereof for any other persons than needed for completion of the contracted work. All advance payments received as per terms of contract are required to be reinvested in the contracted work to ensure advance availability of resources in terms of materials, labor, machinery needed for required pace of progress for timely completion of work.

9. For G+2 foundation additional cost Rs.50/- per Sft will be given.

10. For Slab extension beyond 6" 3 sides Rs.500/- per Sft.

SCHEDULES

SCHEDULE-'A': Schedule of Quantities for Civil

SCHEDULE-'B': General Conditions of Contract

Mile Stones

TABLE OF MILE STONES			
Time period allowed for Completion of Work : 180 days(6 Months)			
Stages	**Milestone Program**	**Time Allotted (From date of Start)**	**Amount to withheld in case of non-achievement of milestone**
1st Stage	RCC Work up to Plinth Level including Casting of Footings, Pedestals, Columns, Plinth / Grade beams	30 days	5% of item tender value
2nd Stage	Casting of Columns, RCC Beams & Slab	40 days	5% of item tender value
3rd Stage	Completion of Brickwork	25 days	5% of item tender value
4th Stage	Completion of Internal & External Plastering, Steel work, Door frames etc.,	25 days	5% of item tender value
5th Stage	Completion of Flooring, Water supply, Sanitary works, Drainage & Sewer lines	30 days	5% of item tender value
6th Stage	Completion of work in all respects including fixing of Doors, Windows, Hardware, Painting and final finishing works. Cleaning of Site and handing over	30 days	5% of item tender value

- **In case of non-achievement of milestones time lines of the stages repeatedly, the contract shall be cancelled without any notice and withheld amount 5% of item tender value will not be released/refundable.**

NOTE: -

1.Two Quality Control Engineer inspections required for every stage work.
2.QC Manager Certification is required for stage bill payment.
3.Deposit amount 2% deducted from every stage bill payment.
4.After removal of Quality rejected materials preapproval is required to restart the work
5.Any rectification occurred QC Engineer Approval required for further stage process.
6.Deposit amount and withheld amount will be released after six months from the date of completion and handover.

SCHEDULE –B

RESPONSIBILITY OF CONTRACTOR:

1. He shall protect and indemnify the Client and its officials & employees against any claim and /or liability arising out of violations of any such laws, ordinances, orders, decrees, by himself or by his employees or his authorized representatives. Nothing extra shall be payable on these Accounts.
2. The fee payable to statutory authorities for obtaining the various permanent service connections and Building Use Certificate for the building shall be borne by the Client**.**
3. The Contractor shall assume all liability, financial or otherwise in connection with this contract and shall protect and indemnify from any and all damages and claims that may arise on any account. The Contractor shall indemnify against all claims in respect of patent rights, royalties, design, trademarks- of name or other protected rights, damages to adjacent buildings, roads or members of public, in course of execution of work or any other reasons whatsoever, and shall himself defend all actions arising from such claims and shall indemnify the Department in all respect from such actions, costs and expenses. Nothing extra shall be payable on this account.

SUPERVISION OF WORK:

The contractor shall depute **Site Engineer – 2Nos & Jr. Engineers – 2Nos** as required for the work. He shall submit organization chart along with details of Engineers and supervisory staff. It shall be ensured that all decision making powers shall be available to the representatives of the contractor at work site itself to avoid any likely delays on this account. The contractor shall also furnish list of persons for specialized works to be executed for various items of work. The contractor shall identify and deploy key persons having qualifications and experience in the similar and other major works, as per the field of their expertise. If during the course of execution of work, the Engineer-in-charge is of the opinion that the deployed staff is not sufficient or not well experienced; the contractor shall deploy more staff or better-experienced staff at site as mentioned in the bid document to complete the work with quality and within stipulated time limit.

RATES:

1. The amount quoted by the Contractor are deemed to be inclusive of site clearance, setting outwork, profile, setting lay out on ground, establishment of reference bench mark(s), installing various signage, taking spot levels, with total station, construction of all safety and protection devices, compulsory use of helmet and safety shoes, and other appropriate safety gadgets by workers, imparting continuous training for all the workers, barriers, preparatory works, construction of clean, hygienic and well ventilated workers housings in sufficient numbers, working during monsoon or odd season, working beyond normal hours, working at all depths heights, lead, lift, levels and location and any other unforeseen but essential incidental works required to complete this work. Nothing extra shall be payable on this account and no extension of time for completion of work shall be granted on these accounts.

2. **The amount quoted by the tendered is including GST.**

3. Ancillary and incidental facilities required for execution of work like labour camp, stores, fabrication yard, offices for Contractor, watch and ward, temporary structure for plants and machineries, water storage tanks, installation and consumption charges of temporary electricity, telephone, water etc .required for execution of the work, liaison and pursuing for obtaining various No Objection Certificates from local bodies etc., protection works, and for taking samples etc. during execution or any other activity which is necessary (for execution of work and as

directed by Engineer-in-Charge), shall be deemed to be included in **amount** quoted by the Contractor. Nothing extra shall be payable on these accounts. Before start of the work, the Contractor shall submit to the Engineer-in-Charge, a site / construction yard layout, specifying areas for construction, site office, positioning of machinery, material yard, cement and other storage, steel fabrication yard, site laboratory, water tank, etc.

For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall be entertained on this account, not with-standing the fact that the Contractor may have to pay extra amounts for any reason, to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them. All material shall only be brought at site as per program finalized with the Engineer-in- Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

SAFETY MEASURES:

1. WARNING/ CAUTION BOARDS: All temporary warning / caution boards / glow signage Display such as "Construction Work in Progress", "Keep Away", "No Parking", Diversions & protective Barricades etc. shall be provided and displayed during day time by the Contractor, wherever required and as directed by the Engineer-in-Charge. These glow signage and red lights shall be suitably illuminated during night also. The Contractor shall be solely responsible for damage and accident caused, if any, due to negligence on his part. Also he shall ensure that no hindrance, as far as possible, is caused to general traffic during execution of the work. This signage shall be dismantled & taken away by the Contractor after the completion of work, only after approval of the Engineer - in - Charge. Nothing extra shall be payable on this account.

2. SIGN BOARDS: The Contractor shall provide and erect a display board of size and shape as required and paint over it, in a legible and workman like manner, the details about the salient features of the project, as required by the Engineer-in-Charge. The Contractor shall fabricate and put up a sign board in an approved location and to an approved design indicating name of the project, Client/Owner, Engineer-in-charges, Structural Consultants, Department etc. besides providing space for names of other Contractors, Sub-Contractors and specialized agencies within 15 days from issue of award letter. Nothing extra shall be payable on this account. In case of non-compliance/delay in compliance in this, a penalty @ Rs. 500/- per day will be imposed which will be recovered from the immediate next R/A Bill of the Contractor.

3. Necessary protective and safety equipment's such as helmet, safety shoes, gloves etc shall be provided to the Site Engineer, Supervisory staff, labour and technical staff of the contractor by the Contractor at his own cost and to be used at site.

4. No inflammable materials including P.O.L shall be allowed to be stored in huge quantity at site. Only limited quantity of P.O.L may be allowed to be stored at site subject to the compliance of all rules / instructions issued by the relevant authorities and as per the direction of Engineer-in Charge in this regard. Also all precautions and safety measures shall be taken by the Contractor for safe handling of the P.O.L products stored at site. All consequences on account of unsafe handling of P.O.L shall be borne by the Contractor.

QUALITY ASSURANCE:

1. Contractor shall have to engage well-experienced skilled labour and deploy modern T&P and other equipment to execute the work. For completing the work in time, the Contractor might be required to work in two or more shifts (including night shifts). No claim whatsoever shall been claimed on this account, not with-standing the fact that the Contractor may have to pay extra

amounts for any reason, to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour and other statutory bodies regulations and the agreement entered upon by the Contractor with them. All material shall only be brought at site as per program finalized with the Engineer-in- Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.

2. The contractor shall ensure quality construction in a planned and time bound manner. Any substandard material / work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-charge & contractor shall be bound to replace / remove such sub-standard / defective work immediately. If any material, even though approved by Engineer-In-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.

3. In addition to the supervision of work, Client Engineers shall also be carrying out regular and periodic inspection of the ongoing activities in the work and deficiencies, short comings, inferior workmanship pointed out by them shall be communicated by Client engineers to the contractor. Upon receipt of instructions from Engineer in Charge these are also to be made good by necessary improvement, rectification, replacement up to his complete satisfaction. Special attention shall be paid towards line and level of internal and external plastering, exposed smooth surface of RCC members by providing fresh shuttering plates, rubberized linings to all the shuttering joints, accurate joinery work in wooden doors and windows, thinnest joints in stone/tiling / cladding work, non-hollowness in floor and dado tiles work, protection of scratches over flooring by impounding layer of plaster of Paris, water tight pipe linings, absence of hollow vertical joints in brick masonry, proper compaction of filled up earth etc. to achieve an Institution of International standards and up keeping of quality assurance shall be of paramount importance, as such.

4. The Contractor shall submit, within **15 days** after the date of award of work, a detailed and complete method statement for the execution, testing and Quality Assurance, of such items of works, as directed by the Engineer-in-Charge. All the materials to be used in the work, to make the finished work complete in all respects, shall comply with the requirements of the specifications and shall pass all the tests required as per specifications as applicable or such specifications / standards as directed by the Engineer-in- Charge. However, keeping the Quality Assurance in mind, the Contractor shall submit, on request from the Engineer-in-Charge, his own Quality Assurance procedures for basic materials and such items, to be followed during the execution of the work, for approval of the Engineer-in-Charge.

5. The contractor shall at his own cost submit samples of all materials sufficiently in advance and obtain approval of Engineer-in-Charge. The materials to be used in actual execution of the work shall strictly conform to the quality of samples approved by the Engineer-in-Charge and nothing extra shall be paid on this account. The acceptance of any sample or material on inspection shall not be a bar to its subsequent rejection, if found defective.

6. All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Engineer-In-Charge. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples as per suggested list of brand names given in the tender document / particular specifications for approval of Engineer-In-Charge. For all other items, materials and fittings of ISI Marked shall be used with the approval of Engineer-In-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant specifications or IS codes and use the same only after getting the approval of Engineer-In-Charge.

7. The Contractor shall procure and provide all the materials from the manufacturers / suppliers as per the list attached with the tender documents, as per the item description and particular specifications for the work. The equivalent brand for any item shall be permitted to be used in the work, only when the specified make is not available. This is, however, subject to documentary evidence produced by the contactor for non-availability of the brand specified and also subject to independent verification by the Engineer-in-Charge. In exceptional cases, where such approval is required, the decision of Engineer-in-Charge as regards equivalent make of the material shall be final and binding on the Contractor. No claim, whatsoever, of any kind shall be entertained from the Contractor on this account. Nothing extra shall be payable on this account. Also, the material shall be procured only after written approval of the Engineer-in-Charge. All materials whether obtained from Govt. stores or otherwise shall be got checked by the Engineer-in-Charge or his authorized supervisory staff on receipt of the same at site before use.

8. The contractor has to establish field laboratory at site including all necessary equipment for field tests as given in Schedule All the relevant and applicable standards and specifications shall be made available by the contractor at his cost in the field laboratory. The contractor shall designate one of his technical representatives as Quality Assurance Engineer, who shall be responsible for carrying out all mandatory field/laboratory tests. The contractor shall also provide adequate supporting staff at his cost for carrying out field tests, packaging and forwarding of samples for outside laboratory tests and for maintaining test records.

9. The tests, as necessary and where no field laboratory facilities are available, shall be conducted in the laboratory approved by the Engineer–in- Charge. For materials for which field testing equipment is established at site, for those materials 90% of total tests shall be done at the laboratory established at site by contractor and remaining in the reputed laboratories approved by Engineer-in-charge. The samples shall be taken for carrying out all or any of the tests stipulated in the particular specifications and as directed by the Engineer-in-Charge or his authorized representative.

10. All the registers of tests carried out at Construction Site or in outside laboratories and all material at site (MAS) registers including cement register shall be maintained by the contractor which shall be issued to the contractor by Engineer-in-charge. All the entries in the registers will be made by the designated Engineering Staff of the contractor and same should be regularly reviewed by DDC Engineers. Contractor shall be responsible for safe custody of all the registers.

11. The Contractor shall at his own risk and cost make all arrangements and shall provide all such facilities including material and labour, the Engineer-in-Charge may require for collecting, preparing, forwarding the required number of samples for testing as per the frequency of test stipulated in the contract specifications or as considered necessary by the Engineer-in-Charge, at such time and to such places, as directed by the Engineer-in-Charge. Nothing extra shall be payable for the above.

12. The Contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case he or his authorized representative is not present or does not associate him, the result of such tests and consequences thereon shall be binding on the Contractor. The Contractor or his authorized representative shall remain in contact with the Engineer-in-Charge or his authorized representative associated for all such operations. No claim of payment or claim of any other kind, whatsoever, shall be entertained from the Contractor.

13. **The cost of test required for all the materials shall be borne by the Contractor.** However the cost of tests for the following materials/tests shall be borne by the Contractor if the test result does not conform to Specifications /relevant BIS codes or by the Department if the test results conform to Specifications/relevant BIS codes.

1) Fire check/Retardant Doors,
2) Wind Pressure Test in structural glazing work.
3) Tests like X-Ray, Dye-Penetration for structural welding.
4) Ascertaining the classification of Wood/Timber.
5) Ultrasonic Pulse Velocity Method of test for RCC.

In case of concrete and reinforced concrete work also the contractor shall be required to make arrangement for carrying out compression strength tests at his own cost. He shall render all assistance for the preparation of cubes, safe custody of the same, proper curing and carriage up to the laboratory where the test is to be performed.

14. All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested as per the design conditions before covering and their measurements in computerized measurement book duly test checked shall be deposited with Engineer in charge or his authorized representative, prior to hiding these items.

15. Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should confirm to bylaws and municipal body / corporation where CPWD Specifications are not available. The contractor should engage licensed plumbers for the work and get the materials (fixtures/fittings) tested by the Municipal Body/Corporation authorities wherever required at his own cost.

16. The contractor shall have to execute guarantee bonds in respect of water proofing works as per Performa enclosed.

17. The Contractor shall arrange electricity at his own cost for testing of the various electrical installations as directed by Engineer-in-Charge and for the consumption by the contractor for executing the work. Also all the water required for testing various electrical installations, fire pumps, wet riser / fire fighting equipment's, fire sprinklers etc. and also testing water supply, sanitary and drainage lines, water proofing of underground sump, overhead tanks, water proofing treatment etc. shall be arranged by the contractor at his own cost. Nothing extra shall be payable on this account.

TEMPORARY WATER/ ELECTRICITY:

1. Temporary water and electricity will be provided to the Contractor. The Contractor shall abide by all the rules/ bye laws applicable in this regard and he shall be solely responsible for any penalty on account of violation of any of the rules/byelaws in this regard. **Extra shall be payable on this account for each building Rs.15000/-**

CLEANLINESS OF SITE:

1. The contractor shall not stack building material/ melba/ muck on the land or road of the local development authority or on the land owned by the others, as the case may be. So the muck, rubbish etc. shall be removed periodically as directed by the Engineer-in-charge, from the site of work to the approved dumping grounds as per the local byelaws and regulations of the concerned authorities and all necessary permissions in this regard from the local bodies shall be obtained by the contractor. Nothing extra shall be payable on this account. In case, the Contractor is found stacking the building material / melba as stated above, the Contractor shall be liable to pay the stacking charges/penalty as may be levied by the local body or any other authority and also to face penal action as per the rules, regulations and bye-laws of such body or authority. The Engineer –in- Charge shall be at liberty to recover, such sums due but not paid to the concerned authorities on the above counts, from any sums due to the Contractor including amount of the Security Deposit and performance guarantee in respect of this contract agreement.

2. The contractor shall take instructions from the Engineer-In-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, services and compound walls are to be constructed.

3. The site of work shall be always kept clean due to constraints of space and to avoid any nuisance to the users of buildings in the adjacent plots. The Contractor shall take all care to prevent any water logging at site. The waste water, slush etc. shall not be allowed to be collected at site. It may be directly pumped into the creek with prior approval of the concerned authorities. For discharge into public drainage system, necessary permission shall be obtained from relevant authorities after paying the necessary charges, if any, directly to the authorities. The work shall be carried out in such a way that the area is kept clean and tidy. All the fees/charges in this regard shall be borne by the Contractor. Nothing extra shall be payable on this account

INSPECTION OF WORK:

In addition to the provisions of relevant clauses of the contract, the work shall also be open to inspection by Officers of DDC and their representatives .The contractor shall at times during the usual working hours and at all times at which reasonable notices of the intention of the Engineer-in-charge or other officers as stated above to visit the works shall have been given to the contractor, either himself be present to receive the orders and instructions or have a responsible representative duly accredited in writing, to be present for that purpose.

DEFECT LIABILITY PERIOD (Refund of Security Deposit):

The defect liability / maintenance period shall be **12 months** after the date of completion work for this contract agreement. The Security Deposit shall be released after the defect liability period of **12 months** after completion of entire project work and for this the contractor shall have to produce a certificate stating that no defects are pending for rectification from the Engineer-in-Charge, but subject to other provisions specified elsewhere in the contract agreement.

DE-WATERING

1. De-watering required, if any, shall be done conforming to BIS Code IS: 9759 (guide lines for dewatering during construction) and / or as per the specifications approved by the Engineer-in-Charge. Design of an appropriate and suitable dewatering system shall be the Contractor's responsibility. Such scheme shall be modified / augmented as the work proceeds based on fresh information discovered during the progress of work, at no extra cost. At all times during the construction work, efficient drainage of the site shall be carried out by the Contractor and especially during the laying of plain cement concrete, taking levels etc. The Contractor shall also ensure that there is no danger to the nearby properties and installations on account of such lowering of water table. If needed, suitable precautionary measures shall be taken by the Contractor. Also the scheme of dewatering adopted shall have adequate built in arrangement to serve as stand-bye to attend to repair of pumps etc. and disruption of power / fuel supply. Nothing extra shall be payable on this account.

2. In trenches where surface water is likely to get into cut / trench during monsoons, a ring bund of puddle clay or by any other means shall be formed outside, to the required height, and maintained by the Contractor. Also, suitable steps shall be taken by the Contractor to prevent back flow of pumped water into the trench. Nothing extra shall be payable on this account.

INSURANCE POLICIES:

Before commencing the execution of work, the Contractor shall, without in any way limiting his obligations and liabilities, insure at his own cost and expense against any damage or loss or injury, which may be caused to any person or property, at site of work. The Contractor shall obtain and submit to the Engineer-in-Charge proper Contractor All Risk Insurance Policy for an amount equivalent to contract value for this work, with Engineer-in- Charge as the first beneficiary. The insurance shall be obtained in joint names of Engineer-in-Charge and the Contractor (who shall be second beneficiary). Also, he shall indemnify the Department from any liability during the execution of the work. Further, he shall obtain and submit to the Engineer-in- Charge, a third party insurance policy for maximum Rs. 10 lakh for each accident, with the Engineer-in-Charge as the first beneficiary. The insurance shall be obtained in joint names of Engineer-in-Charge and the Contractor (who shall be second beneficiary). The Contractor shall, From time to time, provide documentary evidence as regards payment of premium for all the Insurance Policies for keeping them valid till the completion of the work. The Contractor shall ensure that Insurance Policies are also taken for the workers of his Sub-Contractors / specialized agencies also. Without prejudice to any of its obligations and responsibilities specified above, the Contractor shall within 10 days from the date of letter of acceptance of the tender and thereafter at the end of each quarter submit a report to the Department giving details of the Insurance Policies along with Certificate of these insurance policies being valid, along with documentary evidences as required by the Engineer-in-Charge. No work shall be commenced by the Contractor unless he obtains the Insurance Policies as mentioned above. Also, no payment shall be made to the Contractor on expiry of insurance policies unless renewed by the Contractor. Nothing extra shall be payable on this account. No claim of hindrance (or any other claim) shall be entertained from the contractor on these accounts.

PARTICULAR SPECIFICATIONS

1.EXCAVATION:

The contractor after obtaining the "construction drawing" from the client's office will orient the building according to the centre line drawing using his own specific instruments and the same will be cross checked by the engineer–in- charge. The contractor has to assist him with all tools and plants necessary for checking. Bottom level of excavation for foundation shall be inspected and passed before foundations are constructed. The bottom of all excavated area shall be inspected and passed before foundations are constructed. The bottom of all excavated area shall be trimmed, levelled, watered and well rammed, any undulations in rock bed including blasting if any, have to be levelled by the contractor at his cost, and for filling in pockets and undulations. No extra quantity or rate will be allowed to the contractor. For bailing out water, contractor will not paid be paid any extra payment. Only vertical excavation shall be done, no undermining is allowed. The side of loose earth is to be deposited away by at least 1.5meter or width of excavation whichever is more in classification of soils, version is final and binding. The following works shall not setting out works profiles etc, site clearance, such as cleaning grass and vegetation.

1) Unauthorized battering/benching.
2) Forming 'dead man' or leaving steps etc,
3) Excavation for insertion of planking and shuttering.
4) Removal of slips or falls of earth.
5) Bailing out water due to rains or sub-soil water.
6) Slinging or supporting pipes, electric cables, etc, Met during excavation.
7) TBM establishment in the project site is contractor scope for day to day cross verifications.

2.MORTAR:

Mortar shall be prepared as per specifications. Cement and Sand shall be measured in standard size box. No bulk age in sand is allowed unless the permission given by engineer-in-charge. The mortar shall be mixed separately allowing adequate quantity of good water and well mixed.

3.WATER:

Water used for both mixing and curing shall be free from injuries Amounts of Deleterious materials Potable waters are generally considered satisfactory for mixing and curing concrete. In case of doubt, the suitability of water for making concrete shall be ascertained by the compressive strength and initial setting time tests specified.

4.CONCRETING WORKS:

The metal for concrete shall be according to the specification, the Materials obtained from particular quarry shall be got approved by the client engineers. The nominal maximum size of aggregate, should be as large as possible within limits specified, but in no case greater one fourth of minimum thickness of the member provided. Concrete can be placed without difficulty so as to surround all reinforcement thoroughly for heavily reinforced concrete members as incase of ribs of main beams, the size of the aggregate should be 5mm. less than minimum cover, the size shall be thoroughly graded and it shall be free from all debris and vegetation's and washed. Sand shall be thoroughly screened according to the work and as per ISI specifications.

All the metal, sand, cement, etc, unless otherwise specified, are measured by volume/ weight basis, for all the concrete works. Mixing shall be done only by concrete mixer, for plain cement concrete works, ramming, consolidation and leveling should be done perfectly for reinforced cement concrete using of vibrator is very essential. Briquettes of required size using 1:2 mix using 6mm, and below chips shall be made and stocked for all concreting works for clear cover. Curing of all concrete works either plain or reinforced shall be covered by a layer of sacking, canvas, hessian, straw-mats or similar absorbent materials or a layer of sand and kept constantly wet.

Mini batching plant should be kept at site for concerting works due to project defines in mix design parameters.

The exposed surfaces of RCC works are to be made rough to receive the plastering.
To avoid segregation of materials, concrete mixtures shall be dropped not morethan1500mm height, needle vibrator /plate vibrator and compactors shall be used for column, beam and slab to avoid honeycombs.

5.BRICK WORK:

Bricks shall be first quality country bricks of uniform size and edges, confirming to standard specifications compressive strength around 35kg/sq.cm.., etc. Bricks shall be thoroughly soaked in water for 24hours before using for construction purpose. The brick work shall not be raised on any reason above 750mm in one day, for brick masonry using country bricks, the bricks shall be procured from the best available, subject to the approval of engineers.

6.STONEMASONARY:

The stone shall be quarried from approved and of best quality. The quarry dressed stone shallbeuniformsixe225x225x150mmapproximatelyusingofbondstonesof2400mmc/cisveryessential.
Only hard granite stones will be allowed.

7.SHUTTERING, CENTRING, AND SCAFFOLDING:

Shuttering shall be in general by wooden planks or ply wood sheets. Plywood/steel shuttering is permitted, provided the surface if required to be constructed with masonry or plastered the surface of contact it shall be thoroughly hacked by the contractor at free of cost. If the planks are used it shall be of minimum thickness of 35mm.Width not less than 300mm and length not less than2000mm with proper supports. The bottom of the base shall be single plank without joints. The sides of beams. Inlets, etc, shall be in one line with adequate intermediate shuttering, decoupling of shuttering will generally be as per ISI specifications. However, the decision of the engineer-in-charge shall be final.

8.PLASTERING:

The specified thickness of the plastering is approximate only, In all cases the plastering shall be of sufficient thickness to fillup all irregularities in surface of masonry and finishing surfaces of the plastering should be uniform texture and free from hair cracks. Before plastering the concrete surfaces it shall be thoroughly hacked. Edges shall be square finished to one line. Before plastering dots must be provided for evenness of plastering.

9.STEEL FABRICATION:

Steel reinforcement shall be fabricated according to the detailed drawing. The lap shall be minimum 50d. Hooks shall be uniform IS: 5525-1969 and IS:2502-1963 specification. Binding wire shall be18 gauge thicknesses.

10.WINDOWS AND VENTILATORS:

Wood windows/Ventilators shall as specified. Windows/Ventilators mat be assembled and fixed as per drawings, using special putty or wooden beadings. Windows/Ventilators shall have all necessary accessories such as handles, stays and lugs, etc,

11.WIREMESH:

This shall be of MS galvanized wire with Indian standard gauge designed 140 gauges with diameter 0.56mm or 0.71mm in both directions.

12.GLASS FOR WINDOWS AND VENTILATORS:

Material shall be approved make and thickness as stated in the schedule of quantities and visually clear when viewed from any direction. It shall be either clear or frosted. The glass panels shall be fixed glazing clips and putty with or without wooden beading as specified. No glass panels shall be fixed in position until steel or wood work is painted. With primer and one coat of paint, frosted glass panel shall be fixed with frosted face in side instead of plain glass if required without any extra cost.

13.PAINTING:

Painting shall be done after thoroughly cleaning the surface by corborandam stones or sandpapers. The surface will be made free from dirt's, dampness, grass, patches, cracks, etc,. Putty work ifnecessarymaybecarriedouttocoverundulationsandshallbedonebyroller.Paints shall be first quality manufacture, got approved from the Architect sand Engineers. Cement paint shall be cured thoroughly. Brushes shall be of first quality. Windows, doors, ventilators, rolling shutters, etc, should be cleaned after painting and made free from paints prays.

14.FLOORING & DADOING WITH VITRIFIED /GLAZED TILES:

Vitrified/Ceramic tiles with warping, edge chipping, crack sand pinholes shall not be used. Variation in tiles colour shall not be permitted. Before laying tiles are to be sorted out so that tiles laid in a particular rooms flooring/walls doodling shall all be of uniform size. All joints in the tile's flooring/dadoing shall be straight and not staggered unless otherwise specified. While fixing tiles in wall dado's skirting etc, the tile projection from the finished mortar surface just above the tile shall not exceed 15mm/flush skirting as choice of architect decision. Tiles are to be cut using tiles cutter only. Corner junction tiles edges are to be chamfered suitably as per architect decision is final.

The contractor shall be entirely and exclusively responsible for the horizontal and vertical alignment the levels and correctness of every part of the work. He shall rectify any errors or imperfections there in such rectifications shall be carried out by the contractor, at his own cost.

NOTE:

i. Temporary buildings requiring support have to be properly strengthened, supported, shoring and shuttering. If any have to be done by the CONTRACTORS without any extra payment.

ii. In case of any injuries, casualties, damages, loss, theft, etc,. Happening to the men, materials and machine of CONTRACTORS due to their fault or faulty application or on violating their spanor space of work the client will not be responsible.

iii. The CONTRACTORS are responsible for marinating peaceful and safe progress of work. If any conflicts among the group of workers, it is the CONTRACTORS responsibility to settle the same amicably without any liability of any form to the client during the progress of work and in future.

iv. Even though the client is the prime employer the contractor aggresses to take care of the ESI and PF of their employees and sub-contractors at his cost.

SPECIFICATIONS FOR INDIVIDUAL 2-BED HOUSE

Building Super structure :	RCC framed structure with G+2 Foundation with Column footing or Pile Foundation.
Basement Height :	3'.0" from the finishied BT Road level
Yard Level(Set back area) :	1'.6" feet from the finished BT Road
Slab Height :	10' clear height from floor level
Slab Extension :	6" all Three sides.
Slab RCC thickness :	Min. 5" thickness with neat Cement mortar finishing on M20 Grade concrete.
Staircase thickness :	Minimum 6" thickness
Concrete Grade :	M20(1:1.5:3) with OPC 43 Grade Cement.
Walls :	
External Walls :	9" thick brick wall with Flyash Cement Brick of min. compressive strength of 10KN/M2 (23 X 10 X 7.5cm) with 1:6 cement sand ratio.
Internal Walls :	4.1/2" thick Flyash cement brick wall with 1:4 cement and sand ratio.
Plastering :	
Internal plastering :	Single coat internal plastering 12mm thick with cement mortar ratio of 1:4
External plastering :	Single coat External plastering 15mm thick with cement mortar ratio of 1:4
Ceiling plastering :	Single coat plastering 6mm thick with cement mortar ratio of 1:3
Flooring :	600 X 600 double charged glossy finish Vitrified tiles flooring with 1:4 Cement Sand mortar ratio. Including grouting with white cement and matching pigment approved by management.
Kitchen platform :	Granite as per drawing with 15 to 18mm thick Black Granite with edge moulding (East & South side)
Kitchen :	Above platform dadoing upto window top level Ceramic glazed tiles of size 300 X 450mm over 12mm thick cement mortar bed of 1:3
Toilets :	Flooring : Rectified glazed Ceramic floor Tiles 300 X 300mm flooring with 1:4 Cement Sand mortar ratio. . Wall : Ceramic glazed digital concept tiles of size 300 X 450mm over 12mm thick cement mortar bed of 1:3
Plumbing :	a)Wall mixer set - 2 Nos. (3 in 1) b)Wash Basin - 2 Nos.-2BHK, 3Nos.-3BHK(580 X 400mm) c)Commode : Western/Indian Commode - 2 Nos. d)Tap points: Outside - 2 Nos. Kitchen Sink - 1No. Toilets - 2 Nos. in each Toilet
RCC Cupboards :	240Sft
Wood Work :	
Main Door(3'6" X 6'9") :	Polish Teak wood frame of 4"x5" with Teak wood shuter.
Outside Doors : (3'0"/2'6" X 6'9")	Country wood door frame and double/single shutter with painted Teak wood frame and Country wood internal panels.
Inside Doors(3'0" X 6'9") :	Country wood frame with flush Door shutter of 35mm thick

Toilet Doors(2'6" X 6'9") :	PVC frame with PVC door shutter. Note : No.of doors & windows as per drawing.
Windows :	
Main window	(3'3" X 4'6") or (4'6" X 4'6") as per plan Polish Teak wood frame and window shutter with smoke Glass - 1 No.
Ramaining windows	Country wood window frame and Teak wood window shutter with 4mm white pin headed glass. W1 - 4'6" X 4'6" W2 - 3'3" X 4'6" KW3 - 3'3" X 2'6" Lowers - 3'3" X 1'6" Note : No.of windows as per drawing **NOTE : FRAME SIZE FOR WINDOWS & DOORS : 4" x 3"**
Hardware :	
Main door & Main window :	Medium Brass item. Godrej lock for Main door.
Other doors & windows :	Medium Aluminium fixtures and powder coated hinges.
Kitchen :	Granite kitchen platform as per drawing with S.S Sink and dadoing upto kitchen window top level.
Loft :	Provided in kitchen as per drawing.
Water lines :	Concealed water lines with CPVC pipes.
Compound wall :	Front compound wall and Iron Gate 8' to 9'6" length with 4'6" height will be provided
Outside Flooring :	CC flooring around the building.
Painting :	Internal walls & Front Elevation with 2 coats of wall putty, external walls with 2 coats of Apex exterior emulsions. Doors and Iron grills etc., shall be painted with 2 coats of enamel paints. Compound wall inside and parapet wall inside two coats of white wash.
Elevation :	As per drawing or stairs closed elevation with elevation railing & Glass.
Electrical Points :	
Item	**No. of Points**
1. Light points :	25
2. Calling Bell point :	1
3. 2-Way light point :	3
4. 5Amps. Sockt & Switch	14
5. Fan point with regulator :	5
6. T.V.point	1
7. Refrigerator point :	1
8. A.C point (Provision only)	2
9. 15Amps. Socket :	2

10. Geyser point : 2
11. Washing machine point : 1
12.Inverter point : 1
13.Electrical power cable outside DB to Meter 16Sqmm. (provided with Copper wiring) Finolex or Polycab
14. Earth pit & connection
15.D.B with Phase change over

Approved material Makes :

Cement	OPC 43Grade RAMCO, Ultratec, Nagarjuna
Steel	Vizag TMT, TATA, JSW
Binding wire	TATA, JSW
Anti Termite	Pyramid, Anpex
Waterproofing compound	FOSROC, Mky
Electrical Pipes	Sudhakar
Electrical wires	Anchor, Finolex, Polycab
Switch boards	Anchor, Legrand, Switches - Anchor
CPVC pipes	Finolex, Sudhakar, Astral
PVC pipes "B" Type	Sudhakar, Astral
CP fittings	Plumber, Cera
Sanitary fittings	Cera, Parryware, Hindware
S.S Sink	Jindal, Z00M
Vitrified Tiles	Swastik, Khajaria, Johnson, Moto
Ceramic Tiles	Swastik, Khajaria, Johnson
Cement based wall putty	Birla, Latecrite
Paints Interior	Asian, Berger
Paints Exterior	Asian, Berger
Window shutter glass	Saint-Gobian
Hardware Brass	Medium Brass
Sand	Zone I & II Concrete works, Zone III Plastering
Compound wall gate	Jindal, Apollo, JSW
Elevation pipes Steel	Jindal, Apollo, JSW
Wood	
Main door & Main window Frames and shutters	1st class Teak wood
Door, window Frames	Country wood
Door Shutters	Flush shutters
Window Shutters	Country wood

Note : Management approval required for makes.

Scope of the works :

- Pile/footing depth as per drawing.
- Reinforcement as per drawing.
- Pile cap/footing bottom PCC -4" thickness of ratio 1:5:10.
- Beam bottom PCC 4" thickness of ratio 1:5:10.
- Basement Brick work up to basement beam bottom with both sides plastering with integral water proofing liquid.
- Sand filling under PCC flooring 1' thick.
- Anti-termite treatment should be done before flooring PCC.
- 5" thickness PCC with ratio 1:4:8 on sand cushion of 1' thick.
- D.P.C, Plinth, Basement beam as per drawing.
- In roof Slab Drop beam of 6" wide 23" depth should provided in portico.
- Time period for Slab de-shuttering up to 10' span Slab - 14 days
  Above 10' span Slab - 21 days
- Hacking should be done after de-shuttering of Slab.
- Lintel should cast all around the building with chajja of 450mm width wherever it required of size 9"X9" with 12mm dia. 4Nos. with 8mm stirrups of spacing C/C 8".
- 3" thickness Concrete belt should provide on 4.5" wall at every 2.5' height with 2Nos. of 8mm dia. steel.
- Fixing 6" wide wire mesh jali in joints of Brick work and column/beam junctions both sides and on electrical pipes.
- Integral water-proofing liquid should mix in external plastering.
- CC flooring on terrace with neat Cement mortar finishing.
- Septic Tank 12 Nos. RCC Rings of 3ft. internal dia. with plastering.
- 4" thick PCC in bottom of PVC pipes.
- Setback area should be filled with 6" thick (Sand /M. Sand).
- PCC in setback area should be 4" thick concrete of 1:5:10
- CC flooring with 2" thick concrete of 1:2:4.
- Water Tank Provision with tank bed on terrace.
- Stairs closed Elevation as per drawing.
- Compound wall Gate M.S. of 10' length 5' height management approved design.
- Pile foundation for compound wall beam.
- 9" width Brick work for compound wall up to yard level.
- 4.5" width Brick work for compound wall on basement up to 5'.
- Construction of Ramp with steps yard level to Road level with side sitting walls.
- Elevation railing and elevation pipes as per drawing.

PAYMENT SCHEDULE:

1. UPTO PILES/FOOTING COMPLETION LEVEL	**-8%**
2. UPTO PLINTH BEAM, BASEMENT BRICK & FILLING COMPLETED	**-15%**
3. UPTO BASEMENT BEAM, PCC, ROOF LEVEL COLUMNS & SLAB COMPLETED	**-20%**
4. UPTO BRICK WORK COMPLETED	**-15%**
5. UPTO PLASTERING AND CC SHELF COMPLETED	**- 10%**
6. UPTO TILES FLOORING & KITCHEN GRANITE O/S SANITARY LINE PCC	**- 12%**
7. PUTTY & PAINTINGS, DOORS, WINDOWS SHUTTERS, COMPOUND WALL, ALL FINISHING WORKS ELECTRICAL JOINERIE'S, SANITARY, WATER	**- 10%**
8.FINAL AMOUNT	**- 10%**

WORK SCOPE

PROPOSED GROUND FLOOR RESIDENTIAL BUILDING WITH BED ROOMS WITH ATTACHED TOILETS, HALL AND KITCHEN AS SPECIFIED IN DRAWINGS, TOTAL EXTENT AREA AS MENTIONED IN THE BELOW.

MEASUREMENTS TO BE CONSIDERED AS **SQUARE FOOT** COST OF **PLINTH AREA** OF THE BUILDINGS, FINAL PLINTH AREA WILL BE ARRIVED AT THE TIME OF FINAL BILLING.

SQUARE FOOT COST DEFINES INCLUDIG FOUNDATION, BASEMENT, SUB STRUCTURE, SUPER STRUCTRE, BRICK WORK, PLASTERING, FRONT COMPOUND WALL WITH GATE, ELEVATION, FINISHINGS LIKE INSIDE & OUTSIDE FLOORING, PLUMBING, PAINTING, SANITORY AND ELECTRICAL CONCELED CONDUITING, MAN HOLES –SEWAGE LINES /SEWER LINES) WITH ALL FIXTURES AND ACCOSSORIES(INCLUDING MATERIAL)

EXCLUDING: WOODEN CUPBOARDS, LIGHT FIXTURES LIKE FANS AND AIRCONDITIONERS.

NOTE: As per site condition, quantities may increase or decrease but rate is fixed, because this is a square foot rate fixed in the contract.

Rate Approved –Rs. /- Per Sq.ft

IN WORDS:----------

Total Cost – SFT X = Rs_____

WORK ORDER AMOUNT IN WORDS:

TIME OF COMPELTION OF THE PROJECT: 150days/ 5 (FIVE) MONTHS.

Signature of Contractor **Signature of Client's Authorised personnel**