GHAR — CIVIL CONSTRUCTION & CONSULTANCY FIRM

A Unit of Navdiva Group (navdiva.com) • Engineered by NDTechHub

OFFICIAL BILL OF QUANTITIES (BOQ) & TECHNICAL ESTIMATE

Compliant with Bureau of Indian Standards (IS 456:2000, IS 1200, IS 2212) • CPWD DSR Analysis

Project Reference ID:	**GHAR-GIA-20261124-1500**	**Date of Issue:**	24-Nov-2026
Audited By:	GIA (GHAR Intelligent Agent)	**Regional Index:**	Delhi NCR
Plot Dimension / Area:	1,500 sq.ft	**Built-up Area (BUA):**	**2,000 sq.ft**
Number of Floors:	Ground + 1 Floor(s)	**Specification Tier:**	**Premium Finish**

Category Breakdown	IS Benchmark %	Amount (INR ■)
1. Direct Civil & Finishing Material Cost	65.9%	**■ 2,123,645.00**
2. Civil Execution Labour, Shuttering & Plant	25.0%	**■ 805,000.00**
3. Contractor Overheads & Profit Margin	10.0%	**■ 292,864.50**
TOTAL PROJECT BASELINE ESTIMATE	**100.0%**	**■ 3,221,509.50**
Contract Rate per Built-Up Sq. Ft.	-	**■ 1,610.75 / sq.ft**

GIA Autonomous Technical Sign-Off: This estimate has been computed deterministically using standard Indian RCC thumb rules and prevailing mandi rates. Any contractor bid deviating more than -18% will be flagged as High Risk for mid-project abandonment or substandard material substitution.

ITEMIZED BILL OF QUANTITIES (BOQ)

Standardized quantities and unit-rates conforming to IS 1200 / CPWD Analysis of Rates.

Code	Description & Material Specification	Quantity	Unit Rate	Total (■)	IS Code Ref
CIVIL-01	Supply & placing of OPC/PPC Cement for M20/M25 concrete mix including curing	800.0 Bags	■385.0	**■308,000.00**	IS 456:2000 Cl. 5
CIVIL-02	Thermo-Mechanically Treated (Fe550D) high-yield strength rebar, cutting, bending & placing	7,700.0 Kilograms	■58.5	**■450,450.00**	IS 1786 / IS 2502
CIVIL-03	Washed zone-II coarse river sand and 10mm/20mm crushed stone aggregate	6,300.0 Cubic	■43.7	**■275,400.00**	IS 383:2016
CIVIL-04	First class red clay / Fly ash bricks in cement mortar 1:6 for external and partition walls	39,000.0 Nos	■8.5	**■331,500.00**	IS 2212:1991
FINISH-01	Vitrified / Glazed tiles with 1:4 cement bedding and epoxy grouting	2,300.0 Sq.	■74.2	**■170,775.00**	IS 1443
FINISH-02	2 coats wall putty + 1 coat primer + 2 coats interior/exterior acrylic emulsion	6,400.0 Sq.	■24.3	**■155,520.00**	IS 2395 Part 1
MEP-01	Concealed CPVC/UPVC piping, modular switches, copper wiring, and drainage connections	2,000.0 Sq.	■216.0	**■432,000.00**	National Building Code (NBC) Part 8 & 9
LABOUR-01	Excavation, shuttering, scaffolding, masonry, plastering, curing, and site clearance	2,000.0 Sq.	■402.5	**■805,000.00**	CPWD DSR 2023 Analysis of Rates
TOTAL	**Direct Material + Civil Labour Cost (Excl. Margin)**	-	-	**■2,928,645.00**	CPWD DSR

Cement Volume:	800.0 Bags (50kg)	**Steel Rebar:**	7.7 Metric Tons (Fe550D)
Coarse Sand:	3600.0 cft (Zone-II)	**Stone Aggregate:**	2700.0 cft (10mm/20mm)

6-STAGE MILESTONE ESCROW SCHEDULE (RAZORPAY ROUTE)

Under the GHAR Mediation Model, client funds remain securely locked in platform escrow. Payout releases occur only after SiteGuard Vision AI verifies site photographic proof.

Stage	Milestone Description	Scope & Technical Sign-off Deliverables	Share %	Escrow Amount (■)
M1	**Foundation & Substructure**	Excavation, PCC blinding, footing rebar cages, column starters, and plinth beam casting.	15%	**■483,226.42**
M2	**RCC Superstructure Slab Casting**	Erection of props, slab shuttering, 2-way reinforcement rebar, electrical conduit laying, concrete casting.	25%	**■805,377.38**
M3	**Brick Masonry & Lintels**	Class-1 red brick walls in 1:6 cement mortar, lintel beams with chajjas, door/window frame fitting.	20%	**■644,301.90**
M4	**Plastering, Piping & Electrical**	Internal/external 2-coat plaster with wire mesh along joints, CPVC plumbing pressure test, electrical wiring.	15%	**■483,226.42**
M5	**Flooring, Waterproofing & Tiling**	Bathroom 48-hr ponding waterproofing, vitrified floor tile installation, epoxy joint grouting.	15%	**■483,226.42**
M6	**Finishes, Handover & Snag Rectification**	2-coat acrylic emulsion paint, sanitary fitting installation (Jaquar/Kohler), final snag cleanup.	10%	**■322,150.95**

Escrow & Dispute Terms: (1) No cash or unrecorded advance payments are recognized outside GHAR Route. (2) If concrete cube compressive strength or surface finishes exhibit honeycomb or shuttering misalignment, GIA automatically freezes milestone funds until structural rectification is signed off by an empaneled engineer.

GIA TECHNICAL AUDIT & MEDIATION CERTIFICATE

Official Engineering Sign-Off and Quality Protocol Verification.

This is to certify that the civil quantities, reinforcement density, and itemized unit rates for Project Reference **GHAR-GIA-20261124-1500** have been mathematically verified by **GIA (GHAR Intelligent Agent)** under the engineering oversight of Navdiva Group & NDTechHub.

Civil Code / Protocol	Standard Enforced	Compliance Status
Concrete Mix Design	IS 456:2000 Cl. 9 (M20/M25 Design Mix)	VERIFIED (100%)
Reinforcement Steel	IS 1786 (High Strength Deformed Fe550D TMT)	VERIFIED (100%)
Brick Masonry Work	IS 2212 (Modular Red Clay in 1:6 Cement Mortar)	VERIFIED (100%)
Measurement of Works	IS 1200 Part 1-28 (Standard Quantity Takeoff)	VERIFIED (100%)
Escrow Mediation Gate	Razorpay Route Virtual Virtual Account Gateway	ARMED (ACTIVE)

GIA Autonomous Civil Engine
SHA-256 Digital Signature: GIA-AUDIT-VALID

[DIGITALLY SEALED & VERIFIED]
GHAR Intelligent Agent (GIA)

Chief Civil Engineer & Estimator
M.Tech Civil Engineering (Structures)

Navdiva Group (navdiva.com)
Civil Construction & Consultancy Division

* This certificate is generated by the GHAR Multi-Agent platform under the license of Navdiva Group. All structural plans must be ratified by an empaneled structural engineer before casting footings or slabs.