

**CIVIL SOQ OF BOUNDARY WALL CONSTRUCTION WORK FOR
GUJARAT BIOTECHNOLOGY RESEARCH CENTER
AT GANDHINAGAR (GUJARAT)**

CIVIL WORK FOR CONSTRUCTION OF BOUNDARY WALL

Bidders are requested to please read the technical specification along with the SOQ for understanding the details & quality of works, to be executed under the respective item of works.

Item Number (upto 200 characters)	Item Description	UNIT (upto 50 characters)	Quantity (only figures)	Tender Rate (Upto 2 Decimals)	Amount (Upto 2 Decimals)
1	EXCAVATION MECHANICALLY FROM GL UPTO 1.5M DEEP-ALL SOIL Excavation manually in all types of soil, including murrum, soft rock for foundations of wall, columns, plinth beams, basement, raft, ducts, trenches, underground sumps, septic tanks, soak well, for underground piping etc. including shoring, strutting, bailing out water/pumping off water if required, re-filling the trenches, foundation pits, ramming, watering consolidating in 150 mm to 200 mm layers by using mechanical plate compactor/ vibro roller (manual compaction will be permitted under special condition and as per engineer's written instruction) finished to desire levels all as per drawings to get MPD of 95%. Removing and stacking simultaneously the excavated stuff any where within the site area and/or spreading soils in layers for site development, filling in plinth,trenches,jarries & back filling in the same building and consolidating etc. complete as directed - From existing ground level up to 1.5 m depth	CuM	550		
2	P&L M/C.MIXED PCC 1:4:8 Providing and laying machine mixed plain cement concrete (PCC) 1:4:8 in volumetric proportion (1 part of cement:4 part coarse sand : 8 part aggregates of size 37 mm and down) for specified thickness, for foundations below walls, column footings, sunk floor terraces at any height above plinth level raft at any depth below floors, pavements roads, plinth protection, etc. including centring and shuttering if required, laying spreading, ramming, consolidating as per requirement and curing etc. complete as directed.	CuM	45.0		
3	P&L M25 CONCRETE UPTO HIGHEST PLINTH LEVEL Providing & laying in position machine mixed and machine vibrated cement concrete of controlled grades for reinforced cement concrete structural elements in any shape, size, thickness or depth and design viz. foundations, columns, beams, slabs, raft, floor plinth beams, plinth beam ledges, window sills, copings, thin band beams, walls parapets boxes, folded plates, chajjas, mullions, retaining walls, fins, staircases, overhead and underground water and other fluid tanks, statically loaded foundation rafts/floor, water troughs, manhole slab, septic tank slab, soak well slab etc. its concrete elements in any shape, size, thickness/depth and design as per structural design and as directed in specified compressive strength compressed in N/mm2 at 28 days as per IS 456-2000 using 20 mm or as specified size of crushed stone aggregates including design of concrete mixes, auto weigh batched proportioning, cost of admixtures, necessary lift and lead as specified, finishing concrete surfaces, curing etc. complete but excluding centring/shuttering and reinforce-ment. The conversion of weigh batching to equivalent volumetric one, if permitted, should be got approved from Engineer before execution. For concrete grade M- 25 below and up to highest plinth level.	CuM	143.0		

4	P&L M-25 FOR RCC STRCUTURE TO ALL HEIGHT FROM HIGHEST PLINTH LEVEL Providing & laying in position machine mixed and machine vibrated cement concrete of controlled grades for reinforced cement concrete structural elements in any shape, size, thickness or depth and design viz. foundations, columns, beams, slabs, raft, floor plinth beams, plinth beam ledges, window sills, copings, thin band beams, walls parapets boxes, folded plates, chajjas, mullions, retaining walls, fins, staircases, overhead and underground water and other fluid tanks, statically loaded foundation rafts/floor, water troughs, manhole slab, septic tank slab, soak well slab etc. its concrete elements in any shape, size, thickness/depth and design as per structural design and as directed in specified compressive strength compressed in N/mm2 at 28 days as per IS 456-2000 using 20 mm or as specified size of crushed stone aggregates including design of concrete mixes, auto weigh batched proportioning, cost of admixtures, necessary lift and lead as specified, finishing concrete surfaces, curing etc. complete but excluding centring/shuttering and reinforce-ment. The conversion of weigh batching to equivalent volumetric one, if permitted, should be got approved from Engineer before execution. For concrete grade M- 25 to all height from highest plinth level.	CuM	60.0		
5	P&F SHALITEX board in expansion joint P&F SHALITEX board in expansion joint Providing & fixing Seltex/Shalitex board 25mm thick in all RCC members at expansion joint as per details given in drawing.	Sq.m.	25.000		
6	P&E STEEL / PLY WOOD SHUTTERING BELOW GL & UPTO HPL Providing and erecting in position form work shuttering & boxing using steel/plywood shuttering materials of approved quality for concrete elements vertical, horizontal, inclined, circular, curved etc. in all sizes, shapes and designs as per drawing including necessary staging at all intermediate levels, scaffolding, bolts/nuts, fastener nails, wires for keeping in position till concrete is laid and members have acquired required strength, removal thereafter, applying shuttering oil etc. complete as directed. At all levels below ground level and up to highest plinth level for all concrete elements of any shape, size & direction etc complete as directed.	Sq.m.	850		
7	P&E STEEL / PLY WOOD SHUTTERING UPTO ALL HEIGHTS FROM PL Providing and erecting in position form work shuttering & boxing using steel/plywood shuttering materials of approved quality for concrete elements vertical, horizontal, inclined, circular, curved etc. in all sizes, shapes and designs as per drawing including necessary staging at all intermediate levels, scaffolding, bolts/nuts, fastener nails, wires for keeping in position till concrete is laid and members have acquired required strength, removal thereafter, applying shuttering oil etc. complete as directed. Form Work in superstructure to all heights above highest plinth level for all concrete elements of any shape, size & direction etc complete as directed.	Sqm	640		
8	P&F TMT REINFORCEMENT STEEL 8 -32 MM AS PER IS 1786 - 1985 Providing, fabricating and fixing in position 8 to 32 mm dia. TMT reinforcement steel bars of minimum grade Fe 415/500 confirming to IS 1786 - 1985 of approved or equivalent make for RCC structures as per design including transporting, unloading and incidental charges for handling cutting, bending, and binding with two strands of annealed steel wire of 18 gauge, welding if necessary etc. complete as directed.	KG	22500		

9	FLY ASH B/W IN CM 1:6 UPTO HPL Providing Fly ash bricks masonry work using (230 /250 mm x 115/125 mm x 75 mm size) with minimum Crushing strength of 50 kg./sqcm. in cement mortar (1:6). Immersing the bricks in water before use in all type of massonary works in English / Flemish and other type of bonds for walls ,pillars, projections, splays cutting, circular molding for corbelling, trenches, septic tank ,Soak well,storm water channel,chambers, etc. with racking out the joints .The rates Including cost of conveyance, taxes & royalties , loading & unloading of all materials & cost of all Labours ,scaffolding, watering & curing for seven days, T.& P. etc .complete as per the direction of Engineer- in- charge. (Note : No holes for scaffolding will be permitted into the brickwork.) In foundation at all levels below and up to highest plinth level.	Cum	20		
10	FLY ASH B/W IN CM 1:6 IN SS AT ALL HT. ABOVE HPL Providing Fly ash bricks masonry work using (230 /250 mm x 115/125 mm x 75 mm size) with minimum Crushing strength of 50 kg./sqcm. in cement mortar (1:6). Immersing the bricks in water before use in all type of massonary works in English / Flemish and other type of bonds for walls ,pillars, projections, splays cutting, circular molding for corbelling, trenches, septic tank ,Soak well,storm water channel,chambers, etc. with racking out the joints .The rates Including cost of conveyance, taxes & royalties , loading & unloading of all materials & cost of all Labours ,scaffolding, watering & curing for seven days, T.& P. etc complete as per the direction of Engineer- in- charge. (Note : No holes for scaffolding will be permitted into the brickwork.) - In superstructure at all heights above highest plinth level .	Cum	205		
11	P&A 19 MM TH PLASTER IN CM 1:4 AT ALL HT. & BELOW PL Providing and applying 19 mm thick plain cement plaster finish in two layers with first coat of 12mm thick with Cement Mortar (CM) 1:4 (1 part cement: 4 parts sand- 50% coarse and 50% fine) in line, level and plumb and second coat of 7 mm thick with CM (1:2) (1 part cement : 2 part fine sand) to the walls, concrete elements, beams, ceiling, stair, columns, pardis, including making plaster bands, stripes, moulds, pattas, grooves etc, over any brick or concrete surface as specified including scaffolding, curing and finishing smooth, complete as directed at all heights and below highest plinth level.	Sq.m.	2175		
12	P&A 19 MM TH. SAND FACED CEMENT PLASTER AT ALL HT. Providing and applying 19 mm thick sand faced cement plaster in two coats at all heights below and above highest plinth level with first coat of 12 mm thickness with cement mortar 1:4 (1part cement: 4 part of coarse sand) and top coat of 7 mm thickness with cement mortar 1:3 (1part cement: 3 parts of coarse sand) finishing using sponge to give uniform finish, on all types of concrete/brick surfaces including making plaster bands, stripes, pattas, grooves, drip moulds as per drawing/details, including scaffolding, curing etc., complete as directed.	Sq.m.	350		
13	PROVIDING AND APPLYING APEX WEATHER PROOF EXTERIOR ACRYLIC EMULSION PAINT Providing and applying acrylic based Anti fungus exterior paint of approved make of desired shade on new work of smooth / sand faced / rough cast plaster finish.. Preparation of surface to be painted should be free from dust, grease any growth of fungus, algea or moss needs to be removed thoroughly by vigorous wire brushing and washing the surface with water, Freshly plastered surface to be allowed to cure completely. In case of surface imperfections such as holes, dent and cracks are to be filled only by using mixture of white cement and fine sand in the ratio of 1 : 3 at no extra cost (note - Any kind of putty is not recommended) for painting, applying primer of approved make, applying 2 coats of approved make paint as per specification at all heights below and above highest plinth level, scaffolding etc. complete as directed. (Measurement to be of the treated surface & nothing extra for rough / sand face surface)	Sqm	2525		
14	Supplying & Fixing of Barbed wire & CONCERTINA on Y angle Post over Boundary wall Fabricating & fixing of Y-shaped angle iron post 50x50x6, 600mm long in rcc column @ 3.0 m c/c in boundary at site including supplying,fixing of 600 mm dia spiral razor wire G.I. (CONCERTINA) coil alongwith 7 rows of G.I. barbed wire fencing including all necessary fittings ,screws, nails, nutbolts, labour, tools & tackles, scaffolding with one coat of primer and 2 coat of synthetic enamel paint.etc complete.	RMT	458		

15	P&F CPVC pipes 100 mm dia for weep holes Providing and fixing 100 mm dia pipe sleeve 3 meter c/c all completed	Nos.	154		
16	P&F Galvalume Sheets with MS Supports Providing and fixing GALVALUME sheet of 2.4 M height including MS Supports for temporary closure of the gate openings.	SQM	45		
17	P&I two way Boom Barrier Providing & Installing two way boom barrier (length 9 m) having both electrical & manual operational modes as per the manufacturer specification (Gandhi Automation or equivalent)	Nos.	1.0		
TOTAL					