

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
1	Boring holes of 3.5 m depth in ordinary soil (for cast in situ piles) and getting out the soil and disposal of the surplus excavated soil as directed , following diameter of piles including single under reaming inside the bore holes for under reamed. 300mm dia. Single under reamed pile	90.00	No.			0.00
2	Providing and placing with tremie reinforced cement concrete M30 grade in bored cast in situ under reamed pile using 6 mm to 20 mm machine crushed well graded stone aggregate, natural or crushed sand of approved quality, Portland slag cement mixing in batch mix plant, transport, curing, casting of pile of any dia cut off level & chipping of pile up to cut off level, disposal of chipped material with all leads & lifts, etc. complete as per execution drawing & specification & as directed by engineer In charge. Including mobilization, demobilization, remobilization, transportation of required plant and machineries if required. as directed by engineer in charge. 1) Excluding reinforcement, pile load test and M.S. Liners.	40.00	Cum			0.00
3	Carrying out Static load test (Initial load test) as per standard procedure laid down in the IS 2911 specification and maintaining complete records of load v/s settlement on test any load and dia of pile constructed for the purpose including erection and removal of loading platform with all materials, labor, tools & plants, etc. complete with all necessary instrumentation, high capacity hydraulic jacks, etc. complete as per specification and for the test load as directed by Engineer-in-charge. 1) Load test shall be continued till test load or soil failure whichever is earlier. 2) Testing shall be carried out with loading frame with ground anchors/anchor piles/kentledge with platform including all necessary arrangement required for the test, as approved by Engineer-in-charge. 3) Boring, concreting & reinforcement of test pile shall be measured separately in respective items subject to successful completion of test. 4) If load test of pile is not completed successfully, payment shall not be made for this test item as well as boring, concreting and reinforcement of test pile for which test carried out and another test pile shall be constructed.	6.00	No.			0.00
4	Carrying out High strain Dynamic Test on any working pile / Test pile as selected by the Engineer-in-charge. The test shall be carried out by agency approved by engineer in charge as per IRC- Notification 54 and submitting results / reports in three hard copies with soft copy in CD. Item includes all necessary arrangements required for the test. (with guided frame arrangement) as directed by engineer in charge	16.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
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5	Performing Integrity Test (low strain) on all vertical pile. The item shall include chipping of weak concrete at the top of pile, levelling, bending of reinforcing bars, preparation of pile head including testing with pile driving analyser or approved equivalent. To be carried out at least 15 days after concreting of piles. A specialist approved Agency shall be employed by the Contractor for the test. The test shall be carried out as per relevant ASTM code. The item is including complete testing with approved apparatus, analysis of results and conclusions including submission of test reports in three hard copies with soft copy in CD.	552.00	No.			0.00
6	Earth work in Excavation for foundation etc. in all categories of soils, such as sand, clay, murrum, gravel, pebble, boulder, cobble, soft rock etc. as per specification for depth below ground level as mention. The rate is inclusive of contractor's own machinery and equipment, labour, taxes, temporary works, consumables. leading & lifting, shoring, strutting, timbering and buttressing with sand / clay bags and all such measures necessary to retain in position the sides of foundation pit and including refilling the approved excavated soil, clearing and carting excess earth as directed within site limit. The rate is also inclusive of dewatering by manual or mechanical means, if require. Depth from GL to 3.00 m	1960.00	Cum			0.00
6.1	Depth from 3.00 m to 6.00 m	280.00	Cum			0.00
7	Excavation for foundation upto following depth in all type of hard and soft soil including sorting out stacking of useful material and disposing of excavated stuff with all lead and lift etc. complete. 0.0 to 1.5 m.	2230.00	Cum			0.00
8	Providing and laying in positions machine mixed Plain Cement Concrete M15 grade for levelling course below foundation or below pile cap, pile cap beam, plinth beam etc. at other places as directed by Engineer-in-charge with graded broken stone aggregate from 6 mm to 40 mm including tamping, vibrating, levelling and curing complete with all formwork, dewatering wherever required including all materials, labours, plants, machineries & tools, all leads and lifts, etc. complete as per specification.	463.00	Cum			0.00
9	Providing and casting in-situ Reinforced Cement Concrete M30 grade controlled cement concrete in pile cap using 6 mm to 20 mm machine crushed well graded stone aggregate, sand of approved quality, Portland slag cement complete as per specification. The rate is inclusive of all materials, including necessary dewatering, mixing in batch mix plant, transport, curing, vibrating, placing in position, shuttering, formworks, deshuttering carefully, making good the damages, fixing embedment, inserts, pockets, wherever necessary, with all lead and lift with labour, tools & plants, machineries, as directed by engineer in charge.	10.00	Cum			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
10	Coal tarring two coats on new work using 0.16 Litre and 0.12 litre coal tar per sqm in the first coat and second coat respectively on foundations /concrete surfaces in contact with soil complete.	2610.00	Sqm			0.00
11	Providing and laying controlled cement concrete M25 with vibrating, curing etc. complete excluding the cost of form work & reinforcement for RCC work stated below etc. complete at any height as directed. Column	50.00	Cum			0.00
11.1	Tie Beam	40.00	Cum			0.00
11.2	Coping	20.00	Cum			0.00
12	Providing and laying controlled cement concrete M25 for manhole & chamber with vibrating, curing etc. complete excluding the cost of form work & reinforcement for RCC work stated below etc. complete at any height as directed. Base	20.00	Cum			0.00
12.1	Wall	30.00	Cum			0.00
12.2	Slab	5.00	Cum			0.00
13	Providing form work of ordinary timber planking so as to give a rough finish including centring. Shuttering strutting and propping etc. Height of propping and centring below supporting floor to ceiling not exceeding 4M. And removal of the same for in including reinforced concrete and plain concrete work in : Column	690.00	Sqm			0.00
13.1	Tie Beam, Plinth beam, Beam	3880.00	Sqm			0.00
13.2	Coping	110.00	Sqm			0.00
13.3	Base	280.00	Sqm			0.00
13.4	Wall	1984.00	Sqm			0.00
13.5	Column	1970.00	Sqm			0.00
13.6	Slab	3689.00	Sqm			0.00
13.7	Stair case	200.00	Sqm			0.00
13.8	Lintel & Chajja	580.00	Sqm			0.00
14	Extra for providing formwork with sheathing steel sheets so as to give a fair finish in strucure work:	11377.00	Sqm			0.00
15	Providing and fixing in position Corrosion resistance steel (CRS) TMT Fe500 conforming to IS 1786 reinforcing bars of various diameters for Pile, Pile cap, Column, Plinth beam, Coping etc. as per detailed designs and drawings and schedule complete as per specification and as directed by Engineer in charge.	612.60	MT			0.00
16	Masonry work using Aerated light weight concrete block having crushing strength not less than 35kg/sqcm for super structure above plinth level up to floor two level in cement mortar 1:5 (1cement : 5 fine sand) complete as per Technical Specification	1065.00	Cum			0.00
17	Providing and applying 20mm thick sand faced cement plaster on walls upto all floors above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement : 3-sand) and 8mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete. Including scaffolding, curing, finishing, making grooves, forming pattas etc. complete as directed by the Engineer-in-charge.	4450.00	Sqm			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
18	Providing 15mm thick cement plaster in single coat on Rough (Similar) side of single or half brick walls for interior plastering upto floor two level and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand)	6260.00	Sqm			0.00
19	Providing 15mm thick cement plaster in single coat on Rough (Similar) side of single or half brick walls for interior Above floor two level and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand) FOR THIRD FLOOR	870.00	Sqm			0.00
20	Providing 15mm thick cement plaster in single coat on Rough (Similar) side of single or half brick walls for interior Above floor two level and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand) FOR FOURTH FLOOR	70.00	Sqm			0.00
21	Providing 15mm thick cement plaster in single coat on Rough (Similar) side of single or half brick walls for interior Above floor two level and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand) FOR FIFTH FLOOR	60.00	Sqm			0.00
22	Applying two coats of putty & two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from moratr dropping and other foreign matter and sand papered smooth.	1380.00	Sqm			0.00
23	Finishing wall with weather proof exterior emulsion paint on wall surface (two coats) to give an required shape even shade after thoroughly brushing the surface to removal dirt, and remains of loose powdered materials.etc complete	5100.00	Sqm			0.00
24	Providing in line level plumb, fabricating and fixing three row horizontal barbed wire fencing and punched tape concertina coil of 9 turns per meter of 610 mm diameter fixed with clips on top of the angle iron posts. The punched tape concertina coil having sharp barbs at every 25 mm spacing shall be 0.5 mm thick and 19 mm width and weighing 13 kg/ 100 mtr. (Average) as per manufacture's specification. the rate shall also include providing and fixed 1.20 mt total long MS angle 40 x 40 x 6mm @ 3.00 mt c/c spacing embedded in RCC column, angle posts shall be painted with one coats of red oxide and two coats of enamel paint of approved quality at top of compound wall.	270.00	Rmt			0.00
25	Supplying, cleaning, cutting, bending, welding, fabricating, erecting structural steel in position irrespective of locations and levels as per drawing including handling and transport etc. complete including applying two coats of primer red oxide and two coats of approved quality of paint over it etc. complete as directed for Steel truss, stair, channel, beams, column, hollow pipe, solid pipe, plate, gusset plates etc. as per drawings. 2.1 m height and 6 m wide main and wicket gate	1000.00	Kg			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
26	<p>Carryout soil investigation work including drilling 150 mm dia bore holes in all sorts of soil, ordinary rock and hard rock, up to maximum depth as mentioned, collection undisturbed samples and conduction standard penetration tests alternate at an interval of 1.5 to 2.0 m depth, conducting necessary laboratory tests for all type of classification and determination of soil parameters if required, including submission of report in three copies covering investigation data and recommendation for SBC and the pile capacity considering the design criteria, all per specification.</p> <p>1) The rate is inclusive of submitting soil investigation report in three sets in hard copy as well soft copies.</p> <p>2) The rate is inclusive of all materials with contractor's labour, tolls and plants, machineries, as required.</p> <p>3) The rate is inclusive of all taxes including services tax. For up to 40Mt. depth.</p>	60.00	Rmt			0.00
27	<p>Carry out 1m x 1 m grid survey work by total station in reference to GTS benchmark or Benchmark suggested by engineer in charge along the corridor including marking of center line of alignment with GPS , taking ground level ,details of all existing structures, Electric poles, trees, overhead electrical lines including fixing necessary reference RCC pillars, establishing bench mark, establishing day light lines on ground and submission of Survey Drawing with readable spot level, longitudinal section, cross section and drawing report of survey work as directed.</p>	2.00	Hectare			0.00
28	<p>Laying and spreading available soil in the sub-grade on a prepared surface, pulverising, mixing the spread soil in place with Soil Stabilizer &amp; Binder Spreader with 2 per cent slaked lime using Binder spreader Machine, having minimum content of 70 per cent of CaO, grading with motor grader and compacting with the road roller at OMC to the desired density to form a layer of improved sub grade.</p>	209.00	Cum			0.00
29	<p>Box cutting the road surface to proper slope and camber for making a base for road work including removing the excavated stuff and deposit it as directed with all lead &amp; lift.</p>	7950.00	Cum			0.00
30	<p>Construction of earthwork with approved good soil material obtained from borrow pits with all lifts and leads, transporting to site spreading, grading to required slope and compacting to meet requirement to MoRTH table 300-2.in layers not more than 200 mm thick as directed by engineer in charge.</p>	840.00	Cum			0.00
31	<p>Construction of subgrade with approved material obtained from borrow pits with all lifts &amp; leads, transporting to site, spreading, grading to required slope and compacted to meet requirement of table No. 300-2) all complete as per MoRTH Specification Clause 305.</p>	3950.00	Cum			0.00
32	<p>Construction of granular sub-base (Grade - V) by providing coarse graded material, spreading in uniform layers with motor grader on prepared surface, mixing by mix in place method with rotavator at OMC, and compacting with vibratory roller to achieve the desired density, complete as per MoRTH clause 401.</p>	1420.00	Cum			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
33	Providing, laying, spreading and compacting graded stone aggregate to wet mix macadam (in two layers) specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub- base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density, complete as per MoRTH clause 406.	1560.00	Cum			0.00
34	Construction of dry lean cement concrete Sub - base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ cum, optimum moisture content to be maintain during construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver compacting with 8-10 tonnes vibratory roller, finishing and curing as per MoRTH clause 601	280.00	Cum			0.00
35	Cement Concrete Pavement (Construction of un-reinforced, dowel jointed, plain cement concrete pavement over a prepared sub base with 43 grade cement @ 440 kg per cum, coarse and fine aggregate conforming to IS 383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a batching and mixing plant as per approved mix design, transported to site, laid with a fixed form or slip form paver, spread, compacted and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints, joint filler, separation membrane, sealant primer, joint sealant, debonding strip, dowel bar, tie rod, admixtures as approved, curing compound, finishing to lines and grades as per drawing )	440.00	Cum			0.00
36	Providing and applying Prime coat with Slow Setting Bitumen Emulsion binder (SS- 1) @ rate of 7.5 Kg./10 sq.m. of road surface using Emulsion pressure sprayer etc., cleaning the road surface complete including cost of material labour etc complete as directed by engineer in charge.	2880.00	Sqm			0.00
37	Providing and laying Dense Graded Bituminous Macadam in layers (single layer not more than 75 mm ) using BT stone chips as per MoRTH gradation and specification with Bitumen Grade (VG 30) for mixing @ 45.00 Kg /MT of total Wt. of mix i.e (4.50 % of total weight mix)including tack coat @ 2.5 kg/10 smt with Bitumen Emulsion (Rapid setting) and mixing aggregate & asphalt by batch mix plant and spreading the same by sensor paver finisher including rolling & consolidation with 10-12 tonne vibratory roller & providing all materials equipment's tools & plants, fire wood, oil , kerosene,labour charges , using contractor 's own machinery etc Complete as directed by engineer in charge as per MoRTH Specification	630.00	MT			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
38	Providing and laying 30 mm thick of compacted Bituminous concrete using BT aggregate as per MORTH gradation ,specification and asphalt Grade VG 30 mixing @54.00 Kg /MT of total Wt. of mix i.e. (5.40% of total weight mix) including heating and mixing aggregate & asphalt by batch mix plant spreading the same by sensor paver finisher including rolling & consolidation with 10-12 tonne vibratory roller, Tandem Roller ,PTR & providing all materials equipment's tools & plants, fire wood, oil , kerosene,labour charges , using contractor 's own machinery etc. Complete as directed by engineer in charge as per MoRTH Specification	220.00	MT			0.00
39	Providing and laying hot applied thermoplastic compound of 2.5 mm thick including reflectorising glass beads @ 250 gm per sqm area. Thickness of 2.5mm is exclusive of surface applied glass beads as per IRC 35. The finished surface to be level uniform and free from streaks and holes etc. complete.	147.00	Sqm			0.00
40	Supply & Fixing cat eye (Stimsonite) made out from Acrilo beautilerine injection high compressed molding with reflector made of MMC (Prismatic type of size 12 cm x 6 cm x 2.5cm). Provided with bituminous adhesive 100g with each unit for fixing (High intensity Grade).	168.00	No.			0.00
41	Paver Block Laying Colored/ Grey 80 mm thk, M-40 Grade for Car Parking. Providing and laying Shot blasted Non- interlocking, Grey/ Colored brick type paver blocks of 80 mm thick M-40 grade machine made and blasting by automatic machine and high density of as per approved sample of Vyara, Alcock, Super, Nishu as mentioned in the drawing. Including providing and laying 30 to 50 mm thick average bedding layer of coarse sand below paver block as per required grading and specification. Laid paver block shall be mechanically compacted. The work of the paving blocks shall be executed in line and level by skilled mason of flooring work only. It should be laid in such a way that the no cutting of the paver block to be necessary. If cutting of paver block shall be required, than cut by machine only and laying to be done by skilled flooring mason. The Finished surface of the Paver Block shall have Coarse Sand Texture Finish. Paver blocks shall be compacted and shall be re-laid if necessary. Actual laid area shall be measured and paid without any wastage.	390.00	Sqm			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
42	Paver Block Laying Colored/ Grey 60 mm thk, M-40 Grade for pathway. Providing and laying Shot blasted Non- interlocking, Grey/ Colored brick type paver blocks of 60 mm thick M-40 grade machine made and blasting by automatic machine and high density of as per approved sample of Vyara, Alcock, Super, Nishu as mentioned in the drawing. Including providing and laying 30 to 50 mm thick average bedding layer of coarse sand below paver block as per required grading and specification. Laid paver block shall be mechanically compacted. The work of the paving blocks shall be executed in line and level by skilled mason of flooring work only. It should be laid in such a way that the no cutting of the paver block to be necessary. If cutting of paver block shall be required, than cut by machine only and laying to be done by skilled flooring mason. The Finished surface of the Paver Block shall have Coarse Sand Texture Finish. Paver blocks shall be compacted and shall be re-laid if necessary. Actual laid area shall be measured and paid without any wastage.	1870.00	Sqm			0.00
43	Providing and laying in positions machine mixed Plain Cement Concrete M10 grade for leveling course for kerb,manhole etc. as directed by Engineer-in-charge with graded broken stone aggregate from 6 mm to 20 mm including tamping, vibrating, leveling and curing complete with all formwork, dewatering wherever required including all materials, labours, plants, machineries & tools, all leads and lifts, etc. complete as per specification.	65.00	Cum			0.00
44	Providing & fixing M25 grade of concrete precast exposed finish kerb stones (manufactured on vaccume wet press machine with hydraulic pressing of wet concrete mixture to a minimum of 400 tons with simultaneous vacuuming, using ECO filters and developing texture finish) of Vyara and as per sample approved of following sizes. Kerbs shall be fixed on the foundation prepared of M10 grade concrete . The rate shall also include for erecting and fixing the pieces in position for complete Kerb systems with Chamfered type of kerbs including necessary accessories of kerb like Radius Kerbs, Angles and Quadrant Kerbs etc complete as per drawing. The rate shall also include the flush pointing in CM (1:2) for all joints of the kerbstones. (Sample must be approved). Protective coat of Hydrophobic silane-siloxane (silicon )to be applied on all exposed surface The contractor rate shall also include the cost of excavation and finish good, curing etc complete as directed by engineer in charge. (a) 600 mm (L) x 300 mm (H) x 150 (W) mm Half better (HB) type Kerb stone	1240.00	Rmt			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
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45	<p>Providing &amp; fixing M25 grade of concrete precast exposed finish kerb stones (manufactured on vacume wet press machine with hydraulic pressing of wet concrete mixture to a minimum of 400 tons with simultaneous vacuuming, using ECO filters and developing texture finish) of Vyara and as per sample approved of following sizes. Kerbs shall be fixed on the foundation prepared of M10 grade concrete complete. The rate shall also include for erecting and fixing the pieces in position for complete Kerb systems with Chamfered type of kerbs including necessary accessories of kerb like Radius Kerbs, Angles and Quadrant Kerbs etc complete as per drawing. The rate shall also include the flush pointing in CM (1:2) for all joints of the kerbstones. (Sample must be approved). Protective coat of Hydrophobic silane-siloxane (silicon )to be applied on all exposed surface The contractor rate shall also include the cost of excavation and finish good, curing etc complete as directed by engineer in charge.</p> <p>(a) 300 mm (H) x 150 (W) mm Half batter 90 degree angular corner kerb stones</p>	20.00	No.			0.00
46	<p>Providing &amp; fixing M25 grade of concrete precast exposed finish kerb stones (manufactured on vacume wet press machine with hydraulic pressing of wet concrete mixture to a minimum of 400 tons with simultaneous vacuuming, using ECO filters and developing texture finish) of Vyara and as per sample approved of following sizes. Kerbs shall be fixed on the foundation prepared of M10 grade concrete. The rate shall also include for erecting and fixing the pieces in position for complete Kerb systems with Chamfered type of kerbs including necessary accessories of kerb like Radius Kerbs, Angles and Quadrant Kerbs etc complete as per drawing. The rate shall also include the flush pointing in CM (1:2) for all joints of the kerbstones. (Sample must be approved). Protective coat of Hydrophobic silane-siloxane (silicon )to be applied on all exposed surface The contractor rate shall also include the cost of excavation and finish good, curing etc complete as directed by engineer in charge.</p> <p>(a) 1000 (L) x 300 mm (H) x 150 (W) mm Bull nose type Kerb stone</p>	180.00	Rmt			0.00
47	<p>Providing &amp; fixing M25 grade of concrete precast exposed finish kerb stones (manufactured on vacume wet press machine with hydraulic pressing of wet concrete mixture to a minimum of 400 tons with simultaneous vacuuming, using ECO filters and developing texture finish) of Vyara and as per sample approved of following sizes. Kerbs shall be fixed on the foundation prepared of M10 grade concrete. The rate shall also include for erecting and fixing the pieces in position for complete Kerb systems with Chamfered type of kerbs including necessary accessories of kerb like Radius Kerbs, Angles and Quadrant Kerbs etc complete as per drawing. The rate shall also include the flush pointing in CM (1:2) for all joints of the kerbstones. (Sample must be approved). Protective coat of Hydrophobic silane-siloxane (silicon )to be applied on all exposed surface The contractor rate shall also include the cost of excavation and finish good, curing etc complete as directed by engineer in charge.</p> <p>(a) 1000 (L) x 300 mm (H) x 150 (W) mm Dropper type Kerb stone</p>	10.00	Rmt			0.00

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48	Providing and fixing 1.50 Metre high Galvanised Chain link fencing with 2.0 Metre long M.S. Angle for posts & horizontal 50mm x 50 mm x 6 mm and oil painting 3 coats fixed at 2.5 Mt. c/c. with Chain link 2 10 x 10 gauge, strained and fixed to posts including Excavation, fixing the posts in ground with 0.3m x 0.3m x 0.75m block in R.C.C. M20, backfilling and CRS reinforcement etc. complete.	92.00	Rmt			0.00
49	Providing, laying & filling cement plum concrete in 1:3:6 with 40% plum stone including vibrating, ramming, labour for stone filling, curing etc. complete.	750.00	Cum			0.00
50	Providing and applying Synthetic Enamel Paint on Median & Footpath Kerb with one coat of white primer of cement paint and two or more coat of synthetic enamel paint including cleaning all dust, dirt and other foreign matters with all material labour equipments with all leads and lifts etc. complete and as directed by engineer in charge.	170.00	Sqm			0.00
51	Providing and laying controlled cement concrete M30 with vibrating, curing etc. complete excluding the cost of form work & reinforcement for RCC work for Vehicle parking Canopy etc. complete at any height as directed.	33.00	Cum			0.00
52	Providing and fixing Tensile structure for car parking including Supplying, cleaning, cutting, bending, welding, fabricating, erecting structural steel in position irrespective of locations and levels as per drawing with Fabric -700 gsm PVC with PVDF coated fabric - German make Sattler, transportation, installation, Paint on steel member as per drawing but excluding foundation,	260.00	Sqm			0.00
53	Empty boring to the required depth (measured from bottom of pile cap to founding level) by means of hydraulic pilling rig through all strata like soil, sand, clay, murrum, gravel, pebble, boulder, cobble, soft rock, etc. for pile of diameter as below, supported with the help of bentonite slurry including all required plant & machineries, disposal of excavated material with all leads & lifts, mobilisation demobilisation, remobilisation if required, transportation of required plant and machineries, etc. Method of boring shall be as per IS 2911-Part 1 - Section -II. 1.)Bore hole Drilling shall be done by use of hydraulic rig using temporary casing of required depth upto cut off level of pile, using bentonite slurry 2.)Reinforcement will be paid separately. 3.)Rate shall also include drilling and socketing in rock at required depth. 4.)Length of pile shall be measured from bottom of pile cap and upto the founding level. 5.)Rate is inclusive of empty boring through overburden (i.e. temporary working platform, etc.) 600 mm dia. Pile	820.00	Rmt			0.00
53.1	750 mm dia. Pile	3160.00	Rmt			0.00
54	Boring holes of 6.0 m depth in ordinary soil (for cast in situ piles) and getting out the soil and disposal of the surplus excavated soil as directed, following diameter of piles including double under reaming inside the bore holes for under reamed. 450 mm dia. Double under reamed pile	140.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
55	Providing and placing with tremie reinforced cement concrete M40 grade in bored hole using 6 mm to 20 mm machine crushed well graded stone aggregate, natural or crushed sand of approved quality, Portland slag cement mixing in batch mix plant, transport, curing, casting of pile of any dia cut off level & chipping of pile up to cut off level, disposal of chipped material with all leads & lifts, etc. complete as per execution drawing & specification & as directed by engineer In charge. Including mobilization, demobilization, remobilization, transportation of required plant and machineries if required. as directed by engineer in charge. 1) Excluding reinforcement, pile load test and M.S. Liners.	1930.00	Cum			0.00
56	Providing and casting in-situ Reinforced Cement Concrete M40 grade controlled cement concrete in pile cap using 6 mm to 20 mm machine crushed well graded stone aggregate, sand of approved quality, Port land slag cement complete as per specification. The rate is inclusive of all materials, including necessary dewatering, mixing in batch mix plant, transport, curing, vibrating, placing in position, shuttering, formworks, deshuttering carefully, making good the damages, fixing embedment, inserts, pockets, wherever necessary, with all lead and lift with labour, tools & plants, machineries, as directed by engineer in charge.	600.00	Cum			0.00
57	Applying general insecticide pest control treatment to floors, cupboards etc including labour material etc. complete. Using Heptachloride 20 EC. As Per 6113_pests Concentration Weight 0.50 percent is recommended one litre chemical emulsion dillute with 39 liter of water will give. Total dillute concentration will be 40 litre inclusive of one litre chemical emulsion application 0.5 Litre chemical /Sqm of surface is recommended as per I.S	1690.00	Sqm			0.00
58	Providing and laying controlled cement concrete M40 for Underground tank etc. with Portland slag cement, vibrating, curing etc. complete excluding the cost of form work & reinforcement for RCC work stated below etc. complete at any height as directed. Base	32.00	Cum			0.00
58.1	Wall	145.00	Cum			0.00
59	Providing and laying controlled cement concrete M40 with vibrating, curing etc. complete excluding the cost of form work & reinforcement for RCC work stated below etc. complete at any height as directed. Column	210.00	Cum			0.00
59.1	Plinth beam	144.00	Cum			0.00
59.2	Grade slab	275.00	Cum			0.00
59.3	Slab	570.00	Cum			0.00
59.4	Base	8.00	Cum			0.00
59.5	Wall	128.00	Cum			0.00
59.6	Floor beam	401.00	Cum			0.00
59.7	Stair case	25.00	Cum			0.00
59.8	Lintel & Chajja	49.00	Cum			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
60	Filling in foundation and plinth with local available sand including watering, ramming, consolidating and dressing etc. complete	890.00	Cum			0.00
61	Providing and fixing 25mm thick pre moulded asphalt filler joint as directed by engineer in charge.	1.00	Cum			0.00
62	Providing and laying 50 mm thick heavy duty cement concrete flooring in 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) including water proofing compound finishing with a floating of neat cement slurry etc complete laid in one layer on grade slab for fire truck parking.	570.00	Sqm			0.00
63	Providing and laying 50 mm thick heavy duty cement concrete flooring in 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including water proofing compound finishing with a floating of neat cement slurry etc. . complete laid in one layer on slab.	220.00	Sqm			0.00
64	Brick work using common burnt clay building bricks having crushing strength not less than 35kg / Sq. C. M. in ramp, steps and Foundation & Plinth in cement mortar 1:5 (1 cement : 5 coarse sand) including racking out joints, curing, scaffolding required if any etc. complete, as directed.	82.00	Cum			0.00
65	Providing material and labour for Brick work using common burnt clay building bricks having crushing strength not less than 35 kg./Sq.Cm. in superstructure above plinth level upto floor two level (B) Cement Mortar 1:5. (1- Cement : 5 -fine sand) in any shape and thickness including finishing, racking of joints, curing, scaffolding for all height all level etc. complete as directed by engineer-in-charge.	50.00	Cum			0.00
66	Providing cement vata (10cm. X 10cm. size) quarter round in cement mortar 1:1 including neat cement finishing, watering etc. complete.	360.00	Rmt			0.00
67	Providing and fixing plastic moulded reinforced steps with TOR steel bar with plastic polypropylene (P.P.) material (vergin).	270.00	No.			0.00
68	Providing and fixing D.I. frame and cover for underground / O.H. water tank, rate also including loading, unloading and fixing the frame in line and complete as per instruction by engg. in charge.	9.00	No.			0.00
69	Providing and laying white glazed tiles 6mm thick in O.H. water tank base & wall on 10 mm thick water proofing cement plaster 1:3 (1-cement : 3-coarse sand) and jointed with white cement slurry.	740.00	Sqm			0.00
70	Supplying, cleaning, cutting, bending, welding, fabricating, erecting structural steel in position irrespective of locations and levels as per drawing including handling and transport etc. complete including applying two coats of primer red oxide and two coats of approved quality of paint over it etc. complete as directed for Steel truss, stair, channel, beams, column, hollow pipe, solid pipe, plate, gusset plates, purlinn etc. as per drawings.	7.30	MT			0.00
71	Providing 10mm thick cement plaster in single coat on ceiling upto floor two level and finished even and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand)	4100.00	Sqm			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
72	Providing 10mm thick cement plaster in single coat on ceiling Above floor two level and finished even and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand). <b>At Third floor</b>	670.00	Sqm			0.00
73	Providing 10mm thick cement plaster in single coat on ceiling Above floor two level and finished even and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand). <b>At Forth floor</b>	40.00	Sqm			0.00
74	Providing 10mm thick cement plaster in single coat on ceiling Above floor two level and finished even and finishing with a floating coat of neat cement slurry (i) Cement mortar 1:3 (1-cement:3-sand). <b>At Fifth floor</b>	40.00	Sqm			0.00
75	Providing 15 mm thick cement plaster (1:3) with floating coat of neat cement slurry in water tank wall & Soffit of tank at all levels including scaffolding, curing, etc. complete. This rate shall include moulding where specified. The rate shall include 2% approved quality water proofing compound (by weight) of cement.	460.00	Sqm			0.00
76	Applying two coats of Birla(white cement based) or Asian (acryliclapy putty) or equivalent & two coats of primer of approved brand and manufacture on new wall surface to give an even shade including thoroughly brushing the surface free from mortar dropping and other foreign matte rand sand papered smooth.	9000.00	Sqm			0.00
77	Distempering (two coats) with oil bound distemper of approved brand and manufacture and or required shade on undecorated wall surface to give an even shade, over and including a priming coat with distemper primer of approved brand and manufacturer after thoroughly brushing the surface free from mortar dropping and other foreign matter also including preparing the surface even and sand papered smooth. Wall	8400.00	Sqm			0.00
77.1	ceiling	2310.00	Sqm			0.00
78	Providing and laying 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 ( 1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with colour cement slurry including finished with flush pointing & cleaning the surface etc. complete for light shade	180.00	Sqm			0.00
79	Providing and laying Vitrified tiles 8 to 10mm thick, 24"x24" in dedo on 10mm thick cement plaster 1:3 (1-cement:3-coarsesand) and jointed with white cement slurry	740.00	Sqm			0.00
80	Providing and laying Vitrified tiles 8to10mm thick, 24"x24" in skirting on 10mm thick cement plaster 1:3 (1-cement: 3-coarse sand) and jointed with white cement slurry	90.00	Sqm			0.00
81	Providing and laying polished Kota stone slab flooring over 20 mm (average) thick base of cement mortar 1:6 (1 cement : 6 coarse sand) laid over and jointed with grey cement slurry including rubbing and polishing etc. 30 mm thick	869.00	Sqm			0.00
82	Providing and laying marble stone slab flooring over 20mm (average) base of cement mortar 1:6 (1-cement:6 coarse sand) or L.M. 1:1.5 (1-lime putty:1.5-coarse sand) laid and jointed with gray cement slurry including rubbing and polishing complete.(A) Marble slab 25mm thick for flooring	240.00	Sqm			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
83	Providing and laying marble stone slab flooring over 20mm (average) base of cement mortar 1:6 (1-cement:6 coarse sand) or L.M. 1:1.5 (1-lime putty:1.5-coarse sand) laid and jointed with gray cement slurry including rubbing and polishing complete.(A) Marble slab 25mm thick for Skirting	20.00	Sqm			0.00
84	Providing and laying polished Kota stone slab 25 mm thick in riser of steps, dado & pillars, skirting, laid on 10 mm thick cement mortar 1:3 (1 cement : 3 coarse sand) and jointed with grey cement slurry including rubbing and polishing etc. complete	60.00	Sqm			0.00
85	Design supply & installation of suspended Spider Glazing system designed to withstand the wind pressure as per IS 875 (Part-III). The Suspended System held with Spider Fittings of SS-316 Grade Steel of approved manufacturer with glass panel having 12 mm thick clear toughened glass held together with SS- 316 Grade Stainless steel Spider & bolt assembly with laminated glass fins 21 mm thick. The Glass fins and glass panel assembly shall be connected to Slab/beams by means of SS- 316 Grade stainless steel brackets & Anchor bolts and at the bottom using SS channel of 50x25x2 mm using fastener & anchor bolts, non staining weather sealants of approved make, Teflon/ nylon bushes and separators to prevent bi-metallic contacts, all complete to perform as per specification and approved drawings. The complete system to be designed to accommodate thermal expansion & seismic movements etc. The joints between glass panels (6 to 8 mm) and gaps at the perimeter & in U channel of the assembly to be filled with non staining weather sealant, so as to make the entire system fully water proof & dust proof. The rate shall include all design, Engineering and shop drawing including approval from structural designer, labour, T&P, scaffolding, other incidental charges including wastage, enabling temporary services all fitting fixers nut bolts, washer, Buffer plates, fastener, anchors, SS channel laminated glass etc. all complete. For the purpose of payment, actual elevation area of Glazing including thickness of joints and the portion of Glass panel inside the SS channel shall be measured.	30.00	Sqm			0.00
86	Providing and fixing flush door shutters, solid core construction with frame of first class hardwood with cross board and face veneer or plywood face panels, including anodised aluminum butt hinges with necessary screws. (B) Non-decorative type and block board core anodised aluminum butt hinges in flush door shutters (2) 35 mm thick.	278.00	Sqm			0.00
87	Providing and fixing 35mm thick shutters for Doors, windows and clear story windows including blackenamelled M.S. butt hinges with necessary screws.(A) Indian teak wood. (i) Fully Panelled.	56.00	Sqm			0.00
88	Providing and fixing pvc paneled aluminum shutter with aluminum frame door.	20.00	Sqm			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
89	Providing and fixing window having extruded aluminum Colour anodized section frame main outer size 95mm x 24mm x 1.17 mm (of Jindal Section no : 2459 @ wt. of 0.738 Kg/mt), horizontal Three track member size 92mm x 31.75 mm x 1.30 mm (of Jindal Section no. 8688, @ Wt. 1.07 Kg/mt), vertical member of size 92mm x 31.75mm x 1.50 mm (of Jindal Section no. 8933, @ Wt. 1.06 Kg/mt.) with sliding shutters of horizontal member size 40mm x 18mm x .29 mm (of Jindal section no. 8947 @ wt. 0.456 Kg/mt.) vertical member of size 40mm x 18mm x 1.29mm (of Jindal Section no. 8949 @ wt. of 0.456 Kg/mt with 5 mm thick transparent bronze colour tinted float glass with powder coated aluminum fittings and fixtures and transparent silicon sealant glass fixing to frame as per details etc.	204.00	Sqm			0.00
90	Providing and fixing M.S. round or square bars with M.S. flats at required spacing in frames of windows and clerestory windows.	1830.00	Kg			0.00
91	Providing and fixing standard extruded of aluminum section of size 63mm x 38.10mm x 1.2mm (Jindal Section : 2434, @ Wt. 0.643 Kg/mt.) with color powder coated aluminum frame for ventilation with 5 mm thick frosted glass as details etc. complete for Ventilation	29.00	Sqm			0.00
92	Providing and fixing 20 mm thick Granite gang saw cut, mirror polished, premoulded and prepolished, machine cut for wall cladding, platforms, vanity counters, window sills, facades, in linear as well as curvilinear surfaces and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with epoxy matching pigment, epoxy touch ups, including rubbing, curing, molding and polishing to edges to give high gloss finish etc. complete at all levels. Including fixing granite stone, over and above corresponding basic item, in facia, wall cladding, Skirting and drops with chemical adhesive, including cleaning etc. complete. For all wall Cladding and Copping work also as per drawing including all colour and texture. (Brand for Adhesive: MYK Laticrete, Weber, Kerakoll)	450.00	Sqm			0.00
93	water proofing on Terrace: Providing and applying 1.5 mm thick SBS based self-adhesive waterproofing membrane SuperTene of STP Limited topped with hdpe cross laminated film with the following technical properties: Compound Elongation (ASTM D-638) > 200 %; Puncture Resistance 260 N as per ASTM E 154, Moisture Vapour Transmission (ASTM E-96) < 0.3 gm/m²/hr; including cleaning the surface, priming the surface with cold applied bituminous primer ShaliTex Primer @ 0.15-0.3 kg/sqm, properly sealing the joints & maintaining 75 mm overlap over longitudinal selva & 100 mm overlap on the transverse joints of the membrane over the slab.	1090.00	Sqm			0.00
93	Providing and laying 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 ( 1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with colour cement slurry including finished with flush pointing & cleaning the surface etc. complete for antiskid	810.00	Sqm			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
94	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 ( 1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finished with flush pointing & cleaning the surface etc. complete for antiskit– Terrace	1090.00	Sqm			0.00
95	Providing composite water proofing treatment to floor and walls of water tank, w.c.bath area, through approved agencies preparing floor and wall for water proofing work by chasing/cutting as per the companies requirement. First by providing and applying cementitious crystalline based waterproofing for concrete rafts, walls, water tanks, slabs, concrete floors etc. with Krystol T2 or equivalent system. Cementitious based dry Krystol T2 Crystalline powder capable of creating Crystals to seal the pores, intercrises and micro cracks in the concrete. The application to be done from positive side on a wet open pore concrete surface with brush @ to 1 kg/ sqm as per mfg.'s specification. After testing with ponding after 7 days, a layer of plaster with waterproofing compound/ admixture about 25 mm thick in the floor / depression and about 18 mm on the sidewalls / depression upto the floor level shall be provided over the surface treated with crystalline powder. The waterproof plaster about 18 mm thick to be continued on the walls above the floor level for a height of 600 mm with surface suitable to receive further finishing treatment all complete as per companies specifications and instructions and as directed for all heights and floors. The round vata shall be included in this in sq.mt. and shall be taken upto top of round on wall	180.00	Sqm			0.00
96	Providing & fixing Locks Godrej Mortice lock cover (with 3 sets of key) with all required tools and tackles, gaskets, screws in line and level at the height mentioned in the drawing, cutting and core the doors in exact dimensions, without damaging the shutter or frames up to the satisfaction of engineer in charge with Standard warranty of 1 year	124.00	No.			0.00
97	Providing & fixing S.S. Pipe Handle of 30 Cm size of ASIS 316 Grade with all required tools and tackles, gaskets, screws in line and level at the height mentioned in the drawing up to the satisfaction of engineer in charge. (Brands KICH, OZONE AND ENOX)	160.00	No.			0.00
98	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISi, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete. (Brand Ozone, Kich, Enox)	40.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
99	Waterproofing over PCC for Horizontal Area (External) below Raft slab of Watertank: Supplying and installing 1.2 mm thick HDPE membrane ShaliHDPE SA of STP Limited (sand finish or self adhesive type), having puncture resistance of 1000N as per ASTM E 154, Tensile strength of min 23 MPa as per ASTM D412, Elongation of 700% as per ASTM D 412, Resistance to hydrostatic head > 60M as per ASTM D 5385, Peel adhesion to concrete 900 N/m as per ASTM D 1000 and water absorption <0.30% as per ASTM D-570 and suitable for the requirements of UG waterproofing of structures, as per manufacturer's recommendation, including surface preparation.	274.00	Sqm			0.00
100	Waterproofing over Vertical Area (External) Walls of UG Watertank Providing and applying 1.5 mm thick SBS based self-adhesive waterproofing membrane SuperTene of STP Limited topped with hdpe cross laminated film with the following technical properties: Compound Elongation (ASTM D-638) > 200 %; Puncture Resistance 260 N as per ASTM E 154, Moisture Vapour Transmission (ASTM E-96) < 0.3 gm/m²/hr; including cleaning the surface, priming the surface with cold applied bituminous primer ShaliTex Primer @ 0.15-0.3 kg/sqm, properly sealing the joints & maintaining 75 mm overlap over longitudinal selvage & 100 mm overlap on the transverse joints of the membrane over the slab.	570.00	Sqm			0.00
101	Protection of Membrane on Vertical Areas before backfill: Installation of protection cum drain board on the retaining wall to avoid mechanical damage or puncture during back filling by ShaliDrain Board, a 500 microns HDPE dimple board having 8 mm height with dimple side facing the soil over the membrane on the entire retaining wall for protection and easy drainage of sub-soil water during top-down percolation or bottom-up rise.	570.00	Sqm			0.00
102	Preparing of angle fillets all around the periphery of the wall with polymer modified mortar with ShaliSBR Latex also applied as a bonding coat.	80.00	Rmt			0.00
103	Providing and fixing water tight construction or expansion joints. 180 mm dia dum belled type as shown in drawing.	470.00	Rmt			0.00
104	Providing throating or plaster drip and moulding to R.C.C. Chhajja.	230.00	Rmt			0.00
105	Dismantling of flexible pavements (Bituminous surface and Crust) and disposal of dismantled materials with all lead and lift, stacking	10.00	Cum			0.00
106	Dismantling of the existing structure including removing and stacking the dismantled materials as and where directed (b) R.C.C	10.00	Cum			0.00
107	Providing and supplying ISI Standard R.C.C. pipes (of SRC Pipe) in standard lengths of following class and diameter suitable for rubber ring joints including all taxes, insurance, transportation, freight charges, octroi, inspection charges, loading, unloading, conveyance to departmental stores, stacking etc. complete. (IS - 458/ 1989) RCC NP3 300dia Pipe	230.00	Rmt			0.00
107.1	RCC NP3 450dia Pipe	50.00	Rmt			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
108	Lowering, laying and jointing R. C. C. pipes of following diameters in proper position, grade and alignment at all level as directed by Engineer-in-charge including conveyance from stores to site of work, labour, giving hydraulic testing as per ISI code. 300 dia pipes	225.00	Rmt			0.00
108.1	450 dia pipe	50.00	Rmt			0.00
109	Providing bedding incl. ramming, watering, levelling consolidating etc. complete as per standard and instruction of engineer in charge as above with required quality sand brought from outside including all lead	250.00	Cum			0.00
110	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20 cm. in depth consolidation each deposited layer by ramming and watering as directed by engineer in charge	2120.00	Cum			0.00
111	Constructing curb inlet with catch basin of size 0.75 x 0.75 m depth upto 1.0 m including excavation, refilling, 23 cms thick in RCC M20, including perforated precast concrete heavy duty type frame & cover in M20 Grade, plastic moulded reinforced steps with 10 mm TOR steel bar with plastic polyproclene (P.P.) material etc. complete.	20.00	No.			0.00
112	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete : For 300 dia	5.00	No.			0.00
112.1	For 450 Dia	5.00	No.			0.00
113	Reinstatement of Bituminous road including with 50 mm thick bituminous concrete with 2.5 kg/10 Sqm , 7.5 sqm/10 smt prime coat , 150 mm thick WMM ,200 mm thick CTSB with necessary excavation / loosening and recompacting ground as per respective MoRTH specification and as directed by engineer in charge	140.00	Sqm			0.00
114	Reinstatement of 60 mm thick with 35 mm sand bedding on 200 mm thick WMM & 150 mm GSB with necessary excavation/ loosening and recompacting ground as per respective MoRTH specification and as directed by engineer in charge	70.00	Sqm			0.00
115	<b>Point Wiring</b> Point wiring for Light / Bell with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in/ on surface on wall/ceiling complete with 6A Modular type switch / bell push & accessories and earth continuity of following type, erected on PVC / Metallic box, single mounting base frame covered with textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected, with necessary Lamp holder/ceiling rose / H.D.Connector as directed. with medium class Rigid PVC pipe and accessories	340.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
116	Point wiring for secondary light point with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling, complete with earth continuity and necessary connection with primary light with accessories erected on Metal / PVC box covered with 3 mm thick PC(Polycarbonet) / Acrylic sheet for open / concealed wiring. with necessary Lamp holder / ceiling rose / H.D.Connector as directed. with medium class 25 MM DIA Rigid PVC pipe and accessories	219.00	No.			0.00
117	Primary light point controlled by one SP MCB ( Same as above item but controlling with SP MCB )	5.00	No.			0.00
118	Point wiring for Two Way Controlled Light Point with 2-1.5 sq.mm & earth wire of 1.5 sq.mm (green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multi strand copper wires up to 10 mtr length, in following type of pipe to be erected concealed in / flushed on wall / ceiling complete with 6A Tissino Type ISI marked accessories with earth continuity erected on Metal/PVC//Wooden box covered with 3 mm thick PC(Polycarbonate) / Acrylic sheet. with necessary Lamp holder/ceiling rose / H.D.Connector as directed. (a) with medium class Rigid PVC pipe and accessories erected flushed on wall/ceiling complete	32.00	No.			0.00
119	Point wiring for FAN with 2-1.5 sq.mm & earthwire of 1.5 sq.mm (Green) both are of .ISI marked 1.1 KV Grade FRLS PVC insulated multistrand copper wires, in following type of pipe to be erected concealed in / flushed on wall/ceiling complete with 6A Modular type switch and hum free EME four or more step type electronic fan regulator with separately mounted and accessories with earth continuity of following type erected on PVC / Metallic box, single mounting base frame covered with textured/metallic front plate modules erected on / in wall / ceiling as per pipe erected. with necessary ceiling rose / H.D.Connector as directed.	108.00	No.			0.00
120	Point wiring for Looped Plug with 6A Modular type switch & 5 pin socket erected on PVC / Metallic box, single mounting base frame covered with textured / metallic front plate modules erected on / in wall / ceiling with following type accessories	230.00	No.			0.00
121	Point wiring for Individual Plug with & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch & 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [I] For 6A Plug with 2-1.5 sq.mm Cu. Wire	154.00	No.			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
122	Point wiring for Individual Plug with & earthwire of 1.5 sq.mm (Green) both are of ISI marked 1.1 KV grade FRLS PVC insulated multistrand copper wires, in following type of to be erected concealed in / on surface of wall / ceiling complete with Modular type switch & 5 pin Plug erected on PVC / Metallic box covered with appropriate front plate modules erected on / in wall / ceiling as per pipe erected with following type of accessories. [II] For 16A Plug with 2-2.5 sq.mm Cu. Wire	80.00	No.			0.00
123	Wiring for the 250 volts single phase and neutral 16 amps switched socket outlet with 4.0 sq.mm FRLS flexible copper conductor 1100 volts grade wires of approved make with concealed or surface mounted 25 mm dia medium gauge PVC Conduit including providing and fixing of 16 amps 5 pin switch socket outlet of approved quality color make & design in 2 mm thick GI box and earthing of fixtures and the outlet box with 2.5 sq.mm PVC insulated copper conductor stranded flexible "FRLS" wire.	42.00	No.			0.00
124	Providing & erecting Switch board for Computer or electric apparatus consisting of following items in single board erected on PVC / Metal board with 3 mm thick PC (Polycarbonate) / Acrylic sheet erected as directed 1 no. 6A/16A universal plug-switch combined. 4 nos. 6A Switch 4 nos. 6A 5 pin Plug For Modular Type Accessories	6.00	No.			0.00
125	Providing and erecting 1.6 - 1.8 mm thick FIA approved and ISI mark (embossed) RIGID PVC PIPES of following size complete erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following type of erection.2) For erecting concealed in RCC / Brick wall/slab or Open along with continuous fish wire to draw mains, laid in approved manner with plastering by cement mortar & finishing the surface to match the wall/ceiling. Supply and laying of 25 mm rigid PVC pipe of 1.6-1.8 mm thickness	1200.00	Mtr.			0.00
126	Providing and erecting 1.6 - 1.8 mm thick FIA approved and ISI mark (embossed) RIGID PVC PIPES of following size complete erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following type of erection.2) For erecting concealed in RCC / Brick wall/slab or open along with continuous fish wire to draw mains, laid in approved manner with plastering by cement mortar & finishing the surface to match the wall/ceiling. Supply and laying of 32 mm rigid PVC pipe of 1.6-1.8 mm thickness	500.00	Mtr.			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
127	Providing and erecting 1.6 - 1.8 mm thick FIA approved and ISI mark (embossed) RIGID PVC PIPES of following size complete erected with necessary PVC fittings & Junction boxes fixed with adhesive solution & Clamps with following type of erection.2) For erecting concealed in RCC / Brick wall/slab along with continuous fish wire to draw mains, laid in approved manner with plastering by cement mortar & finishing the surface to match the wall/ceiling. Supply and laying of 40 mm rigid PVC pipe of 1.6-1.8 mm thickness	400.00	Mtr.			0.00
128	MAINS : ( not for Point wiring ) Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. Supplying and Laying of 4 nos. of 10 sq mm Cu. FRLS flexible wires with 2 nos 4 sqmm Cu. FRLS flexible wires	20.00	Mtr.			0.00
129	Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size Supplying and Laying of 4 nos. of 6 sq mm Cu. FRLS flexible wires with 2 nos 2.5 sqmm Cu. FRLS flexible wires	200.00	Mtr.			0.00
130	Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size Supplying and Laying of 2 nos. of 6 sq mm Cu. FRLS flexible wires with 1 nos 2.5 sqmm Cu. FRLS flexible wires	500.00	Mtr.			0.00
131	Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected in / on wall / ceiling with 2.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size Supplying and Laying of 2 nos. of 4 sq mm Cu. FRLS flexible wires with 1 nos 2.5 sqmm Cu. FRLS flexible wires	1500.00	Mtr.			0.00
132	Mains with 1.1 KV grade FRLS PVC insulated ISI marked stranded Copper conductor wire in following type of pipe to be erected concealed in /flushed on wall/ceiling, with 1.5 sq. mm copper conductor FRLS PVC insulated stranded wire of green colour for earth continuity of following size Supplying and Laying of 2 nos. of 2.5 sq mm Cu. FRLS flexible wires with 1 nos 1.5 sqmm Cu. FRLS flexible wires	5000.00	Mtr.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
133	Distribution Board Supply, Assembling, grouting, leveling Connecting & testing D.B of IP 43 of specified make. Distribution Board-VTPN Supply, Erecting, testing and commissioning of only VTPN D.B. PPI type with space for FPMCB as incoming and space for DPELMCB and 4 TPMCB as outgoing per phase (i.e. 4 way VTPN D.B.)	1.00	No.			0.00
134	Distribution Board-TPN Supply, Erecting, testing and commissioning of only TPN D.B. PPI type with space for FPMCB as incoming and space for DPELMCB and 8 SPMCB as outgoing per phase (i.e. 12 way per phase D.B.)	1.00	No.			0.00
135	Supply, Erecting, testing and commissioning of only TPN D.B. PPI type with space for FPMCB as incoming and space for DPELMCB and 4 SPMCB as outgoing per phase (i.e. 8 way per phase D.B.)	4.00	No.			0.00
136	Distribution Board-SPN Supply, Erecting, testing and commissioning of SPN D.B. PPI type with space for DPELMCB as incoming and 12 SPMCB as outgoing per phase (i.e. 16 way D.B.)	12.00	No.			0.00
137	Supply, Erecting, testing and commissioning of SPN D.B. PPI type with space for DPELMCB as incoming and 8 SPMCB as outgoing per phase (i.e. 12 way D.B.)	1.00	No.			0.00
138	Supply, Erecting, testing and commissioning of SPN D.B. PPI type with space for DPELMCB as incoming and 4 SPMCB as outgoing per phase (i.e. 8 way D.B.)	2.00	No.			0.00
139	MCB providing and erecting Miniature circuit breaker single pole 0.5A to 2A system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark	30.00	No.			0.00
140	Miniature circuit breaker single pole suitable to operate on 240 V A.C. system and having breaking capacity 10 KA to be erected in existing box. confirming to IS 8828/1996 with ISI Mark 6 to 25 A SP MCB	238.00	No.			0.00
141	40Amp SP MCB	10.00	No.			0.00
142	Providing & erecting 240 V MCB double pole switch for motor & inductive load (C Curve) having 10 KA breaking capacity & confirms to IS : 8828 in existing box having following capacity 6 to 32 A DP MCB	20.00	No.			0.00
143	40 A DP MCB	5.00	No.			0.00
144	Approved make ELCBs / RCCBs conforming to IS: 12640 and having sensitivity of 30 mA and Short Circuit withstand capacity of 6 KA and suitable for operation on single phase 240 V. having characteristic of quick action & tripping with all advance feature & do not incorporate any electronic component. for following Max. rating erected as directed 25 to 32A / 30mA/100 mA DP ELMCB	68.00	No.			0.00
145	40 A / 100 mA DP ELMCB	10.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
146	Providing & erecting 415 V MCB three Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (a) 6 to 32 Amp. Cat.III	6.00	No.			0.00
147	Providing & erecting 415 V MCB three Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity (b) 40 Amp. Cat.III	3.00	No.			0.00
148	Providing & erecting 415 V MCB Four Pole for Motor & Inductive Load (C Curve) having 10KA breaking capacity & confirms to IS :8828 in existing box having following capacity 6 to 32A FP MCB	16.00	No.			0.00
149	40 A FP MCB	5.00	No.			0.00
150	63 A FP MCB	5.00	No.			0.00
151	Approved make four pole moulded case circuit breaker having breaking Capacity ICU of 35KA. At 415 V, having normal current rating up to 125A. With fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections & complete erected in existing 16 G.M.S. housing. ICS= 100% of ICU only.	1.00	No.			0.00
152	Approved make four pole moulded case circuit breaker having breaking Capacity ICU of 35KA. At 415 V, having normal current rating up to 200A. With fixed thermal & magnetic release suitable to work on A.C. supply 50 c/s. with all internal connections & complete erected in existing 16 G.M.S. housing. ICS= 100% of ICU only.	1.00	No.			0.00
153	Supplying & erecting approved make Digital time switch having lithium cell 6 years operative and operate battery backup 1 channel day clock with 14 memory programme, suitable to operate on 240V + 5%, 16A with, floating contacts Minimum switching setup time 1 minimum & LCD display. Also comprised permanent ON/OFF switching. Programming switches & housed in fire proof thermoplastic enclosure & transparent cover erected as required with necessary connection erected as directed.	2.00	No.			0.00
154	25 Amp DP Dinrail Mounted Contactor	5.00	No.			0.00
155	SITC of 40 Amp DP Dinrail Mounted Contactor	5.00	No.			0.00
156	SITC of IP65 Polycarbonate enclosure for DP MCB	17.00	No.			0.00
157	SITC of IP65 Polycarbonate enclosure for FP MCB	5.00	No.			0.00
158	SITC of IP65 Polycarbonate enclosure for FP MCCB	5.00	No.			0.00
159	SITC Of 32A x 250 Volt single phase Power socket outlet point having IP rating of IP:65 at convenient location with MCB.for outdoor duty.	5.00	No.			0.00
160	SITC Of 32A x 415 Volt three phase Power socket outlet point having IP rating of IP:65 at convenient location with MCB.for outdoor duty.	5.00	No.			0.00
161	Cable Trench Making trench in soft soil of suitable width of 90 cms deep for laying cable or locating the fault all over the run and backfilling the same and making the surface proper. Providing and erecting iron clad cable route marker duly marked with ELE.CABLE of size 23 cms.X 12 cms. Flushed with ground in cement foundation as directed by Engineer in charge. The width shall be as per requirement	250.00	Mtr.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
162	Covering of cable with second class bricks laid cover the cable crosswise & also on both sides with covering of 7.5 Cms. layer of sand above & below cable (cable shall be laid in 0.9mtr.deep & 0.4 Mtr.wide trench). Where there are more than one cable in the trench on either side of the cable, 5 Cms. over lapping of bricks shall be provided.	250.00	RMT			0.00
163	Providing cement concrete for foundation or for concrete filling in 1:2:4 ratio with 20 to 25 mm stone metal duly plastered with necessary curing for pole muffing or any other purpose.	10.00	Cu.Mtr			0.00
164	Providing burnt brick masonry with 1:6 cement concrete duly plastered including watering, stacking joint on exposed faces, rocking at joints on exposed faces and watering complete	10.00	Cu.Mtr			0.00
165	Construction of brick masonry pulling chamber 450 mm x 450 mm inside clear size and depth up to 0.6 meter with 350 mm thick masonry in cement mortar proportion 1:5, cement finish cement plaster in CM proportion of 15 mm thickness from inside with 150 mm thick PCC at bottom with top slab minimum 200 mm thickness in M20 grade with reinforcement. The rate shall be inclusive of excavation and back filling & clearing the site by removing debris & Shifting of the debris & making site good As per the Instruction of the Engineer In charge complete in all respect.	8.00	No.			0.00
166	Construction of brick masonry pulling chamber 600 mm x 600 mm inside clear size and depth up to 0.60 meter with 350 mm thick masonry in cement mortar proportion 1:5, cement finish cement plaster in CM proportion of 15 mm thickness from inside with 150 mm thick PCC at bottom with top slab minimum 200 mm thickness in M20 grade with reinforcement. The Rate shall be inclusive of excavation and back filling & clearing the site by removing debris & Shifting of the debris & making site good As per the Instruction of the Engineer In charge complete in all respect.	4.00	No.			0.00
167	Construction of brick masonry pulling chamber 750 mm x 750 mm inside clear size and depth up to 0.75 meter with 350 mm thick masonry in cement mortar proportion 1:5, cement finish cement plaster in CM proportion of 15 mm thickness from inside with 150 mm thick PCC at bottom with top slab minimum 200 mm thickness in M20 grade with reinforcement. The Rate shall be inclusive of excavation and back filling & clearing the site by removing debris & Shifting of the debris & making site good As per the Instruction of the Engineer In charge complete in all respect.	4.00	No.			0.00
168	Construction of brick masonry pulling chamber 1000 mm x 1000 mm inside clear size and depth up to 1.0 meter with 350 mm thick masonry in cement mortar proportion 1:5, cement finish cement plaster in CM proportion of 15 mm thickness from inside with 150 mm thick PCC at bottom with top slab minimum 200 mm thickness in M20 grade with reinforcement. The Rate shall be inclusive of excavation and back filling & clearing the site by removing debris & Shifting of the debris & making site good As per the Instruction of the Engineer In charge complete in all respect.	14.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
169	Providing & fixing of the FRP recessed type cover with frame size 600 x 600mm size total weight of cover and frame to be withstand up to 25 ton. with including Cement Mortar 1:5 (1- Cement: 5- Coarse sand) (1) 25 ton Cap. Recessed type cover( Cover-600 x 600mm ) ( Frame:- 812 x 812mm)	30.00	No.			0.00
170	Cable Tray Providing and fixing approved make Ladder type cable tray. Made from M.S sheet. The cable tray should be bended as per IS 2062/1079 shall be fabricated of double bended channel section longitudinal members with single bended Channel section. Rungs of members welded to the base of the longitudinal members at 250 mm c/c spacing . as per IS and shall be coated with hot dip galvanizing as per IS 2629/4759. with coupler plate / Fish plate and GI hardware like nut - bolt and washers etc. erected on existing support as per Specification and as per instruction of engineer in charge.. 900 X 100 X 2 mm Thick	5.00	Mtr.			0.00
171	600 X 100 X 2 mm Thick	5.00	Mtr.			0.00
172	400 X 100 X 2 mm Thick	10.00	Mtr.			0.00
173	Providing and fixing approved make Perforated C type cable tray. Made from CR sheet steel. The cable tray should be single or double bended as per required and as per IS 2062/1079 and shall be coated with hot dip galvanizing as per IS 2629/4759. with coupler plate / Fish plate and GI hardware like nut - bolt and washers etc. erected on existing support as per Specification and as per instruction of engineer in charge.. (2) 100 X 50 X 1.6 mm Thick	30.00	Mtr.			0.00
174	(5) 300 X 50 X 2 mm Thick	20.00	Mtr.			0.00
175	(6) 450 X 50 X 2 mm Thick	20.00	Mtr.			0.00
176	(7) 600 X 50 X 2 mm Thick	10.00	Mtr.			0.00
177	Fabrication Supplying , fabricating and installation of various sizes MS race way / junction boxes/clamps/hangers for Cable Tray, Light Fixture made out of specified size sheet/Angle/Flat/rod/ channel etc as per design with all necessary accessories like bend, junction boxes, coupler, Anchor fastener, Bolt Nuts, etc.. & work from MS structure for other work with anchor fastener of Hilti make and necessary hardware with necessary welding has to be done to complete the job from ISA / ISMC / PLATE. The job also includes to paint the structure with two coats of red oxide and two coats color of enamel paint as approved and recommended by consultant. Complete in all respect to be installed at any height with all necessary arrangements. Contractor has to complete the work up to satisfaction of Consultant	700.00	Kg			0.00
178	Cables Providing and erecting XLPE(IS:7098)(I)-88 ISI armoured cable multistrand Aluminium conductor for 1.1 KV. to be laid on wall with necessary clamps or in existing trench / pipe of following size of cables 150 sq.mm x 3.5c Al. XLPE Arm. Cable	20.00	Mtr.			0.00
179	120 sq.mm x 3.5c Al. XLPE Arm. Cable	20.00	Mtr.			0.00
180	95 sq.mm x 3.5c Al. XLPE Arm. Cable	100.00	Mtr.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
181	70 sq.mm x 3.5c Al. XLPE Arm. Cable	150.00	Mtr.			0.00
182	50 sq.mm x 3.5c Al. XLPE Arm. Cable	70.00	Mtr.			0.00
183	35 sq.mm x 3.5c Al. XLPE Arm. Cable	100.00	Mtr.			0.00
184	25 sq.mm x 4 c Al. XLPE Arm. Cable	50.00	Mtr.			0.00
185	16 sq.mm x 4 c Al. XLPE Arm. Cable	200.00	Mtr.			0.00
186	10 sq.mm x 4 c Al. XLPE Arm. Cable	300.00	Mtr.			0.00
187	Providing & erecting XLPE(IS:7098) (I)-88 ISI armoured cable multistrand copper conductor for 1.1 KV. To be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size cable. 6 sq.mm x 4 c cu. XLPE Arm. Cable	50.00	Mtr.			0.00
188	Providing & erecting XLPE(IS:7098) (I)-88 ISI armoured cable multistrand copper conductor for 1.1 KV. To be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size cable. 4 sq.mm x 4 c cu. XLPE Arm. Cable	5.00	Mtr.			0.00
189	Providing & erecting XLPE(IS:7098) (I)-88 ISI armoured cable multistrand copper conductor for 1.1 KV. To be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size cable. 6 sq.mm x 3 c cu. XLPE Arm. Cable	200.00	Mtr.			0.00
190	Providing & erecting XLPE(IS:7098) (I)-88 ISI armoured cable multistrand copper conductor for 1.1 KV. To be laid on wall with necessary clamps or in existing trench / pipe at road crossing or floor of following size cable. 4 sq.mm x 3 c cu. XLPE Arm. Cable	50.00	Mtr.			0.00
191	Supplying & erecting XLPE (IS:7098)(I)-88 ISI unarmoured copper cable 1.1 KV grade to be erected as directed of following size 3 core 2.5 Sq.mm.	50.00	Mtr.			0.00
192	Cable Termination SITC of Cable end termination of the following XLPE insulated PVC sheathed aluminum/copper conductor armored cables of 1100 volt grade including supplying and fixing of bimetallic Long neck crimping lugs, double compression type Brass glands with earthing. 150 sq.mm x 3.5c Al. XLPE Arm. Cable	2.00	No.			0.00
193	120 sq.mm x 3.5c Al. XLPE Arm. Cable	2.00	No.			0.00
194	95 sq.mm x 3.5c Al. XLPE Arm. Cable	8.00	No.			0.00
195	70 sq.mm x 3.5c Al. XLPE Arm. Cable	2.00	No.			0.00
196	50 sq.mm x 3.5c Al. XLPE Arm. Cable	2.00	No.			0.00
197	35 sq.mm x 3.5c Al. XLPE Arm. Cable	6.00	No.			0.00
198	25 sq.mm x 4 c Al. XLPE Arm. Cable	2.00	No.			0.00
199	16 sq.mm x 4 c Al. XLPE Arm. Cable	20.00	No.			0.00
200	10 sq.mm x 4 c Al. XLPE Arm. Cable	28.00	No.			0.00
201	6 sq.mm x 4 c Al. XLPE Arm. Cable	4.00	No.			0.00
202	4 sq.mm x 4 c Al. XLPE Arm. Cable	4.00	No.			0.00
203	6 sq.mm x 3 c Al. XLPE Arm. Cable	28.00	No.			0.00
204	4 sq.mm x 3 c Al. XLPE Arm. Cable	4.00	No.			0.00
205	3 core 2.5 Sq.mm.	4.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
206	<p>"SITC of Main LT Panel (TTA as per IEC 61439)</p> <p>Incoming : From CSS</p> <p>250 amps FP MCCB (25 KA) with following accessories: 1 Sets</p> <p>i. LED type Phase indicating &amp; ON, OFF light shall be protected by 2 amps SP MCB's. - 5 nos.</p> <p>ii. 3 Nos. of Digital type 0-500 / 5 amps CTR digital ammeter with 3 nos 250 / 5 amps, 15 VA Class I CT's.</p> <p>iii. Digital type 0-500 Volt digital voltmeter with inbuilt selector switch &amp; shall be protected by 2 amp TP MCB's - 1 no.</p> <p>iv) Load Manager of Schneider make PM 5110 with RS 485 connectivity with 3 nos. of Class 1, 250 / 5 Amp. CT of 15 VA</p> <p>Bus Bars</p> <p>250 amps FP Tinned Cu. bus bars with colored heat shrinkable insulated sleeve.</p> <p>Bus coupler</p> <p>250 amps FP MCCB (25 KA) with following accessories: 1 Sets</p> <p>i. LED type Phase indicating &amp; ON, OFF light shall be protected by 2 amps SP MCB's. - 5 nos.</p> <p>ii. 3 Nos. of Digital type 0-500 / 5 amps CTR digital ammeter with 3 nos 250 / 5 amps, 15 VA Class I CT's.</p> <p>iii. Digital type 0-500 Volt digital voltmeter with inbuilt selector switch &amp; shall be protected by 2 amp TP MCB's - 1 no.</p> <p>iv) Load Manager of Schneider make PM 5110 with RS 485 connectivity with 3 nos. of Class 1, 250 / 5 Amp. CT of 15 VA</p> <p>Incoming : D.G.</p> <p>250 amps FP MCCB (25 KA) with following accessories: 1 Sets</p> <p>i. LED type Phase indicating &amp; ON, OFF light shall be protected by 2 amps SP MCB's. - 5 nos.</p> <p>ii. 3 Nos. of Digital type 0-500 / 5 amps CTR digital ammeter with 3 nos 250 / 5 amps, 15 VA Class I CT's.</p> <p>iii. Digital type 0-500 Volt digital voltmeter with inbuilt selector switch &amp; shall be protected by 2 amp TP MCB's - 1 no.</p> <p>iv) Load Manager of Schneider make PM 5110 with RS 485 connectivity with 3 nos. of Class 1, 250 / 5 Amp. CT of 15 VA</p> <p>Outgoing :</p> <p>125 amps 4 pole MCCB ( 16 KA) : 2 Nos.</p> <p>100 amps 4 pole MCCB ( 16 KA) : 1 No.</p> <p>63 amps 4 pole MCB (10KA) : 3 Nos.</p> <p>40 amps 4 pole MCCB (10KA) : 1 Nos.</p> <p><del>6 to 22 amps 2 pole MCB (10 KA) : 2 Nos.</del></p>	1.00	No.			0.00
207	<p>"SITC of 50KVAR APFCR Panel (TTA as per IEC 61439)</p> <p>1) Automatic &amp; Manual mode APFCR panels. It shall provide rated 50 KVAR in suitable nos. of steps &amp; of suitable rating of capacitors, as per specification. The panel shall also comply with following :</p> <p>a) 125 Amps FP MCCB incomer with 50KA breaking capacity to be provided :</p> <p>B) Digital type 0-125 / 5 amps CTR digital ammeter with in built selector switch with 3 nos 125 / 5 amps, 15 VA Class I CT's.</p> <p>c) Digital type 0-500 Volt digital voltmeter with inbuilt selector switch &amp; shall be protected by 2 amp TP MCB's</p> <p>2) Microprocessor 8 stage IPF controller shall continuously monitor all three phases and displays various Electrical Parameters like voltage, input current, capacitive current, KVA demand, KW, Power Factor, self diagnostic error code indication with printout facility of the above with RS 232C port. Controller should mounted on the front side of the panel.</p> <p>3) Zero cross over &amp; Fast response time of 'ON' capacitors 40-60 milliseconds.</p> <p>4) MCCBs and links of the proper rating to be used for grouping the capacitor banks.</p> <p>5) Necessary control and firing card with proper wiring and lugs of the required rating to be provided.</p> <p>6) Heavy duty exhaust fans to be provided for cooling</p> <p>7) LED indication for number of capacitor banks 'ON'.</p> <p>8) LED indication of Power Factor lagging or leading.</p> <p>9) The APFC system shall be provided with following:</p> <p>Protections :</p> <p>a) Over voltage.</p> <p>b) Voltage imbalance.</p> <p>c) Over temperature-system should be in standby mode and automatically restart after above condition restored.</p> <p>d) Earth leakage.</p> <p>Capacitor automatic control panel (400 KVAR)</p> <p>as described above &amp; Should be as per SLD. &amp; Specification</p> <p>Panel should be as per SLD &amp; Specifications</p>	1.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
208	<p>SITC of Residence Building Panel (TTA as per IEC 61439)</p> <p>Incoming :</p> <p>125 amps FP MCCB (16 KA) with following accessories: 1 Sets</p> <p>i. LED type Phase indicating &amp; ON, OFF light shall be protected by 2 amps SP MCB's. - 5 nos.</p> <p>ii. 3 Nos. of Digital type 0-500 / 5 amps CTR digital ammeter with 3 nos 125 / 5 amps, 15 VA Class I CT's.</p> <p>iii. Digital type 0-500 Volt digital voltmeter with inbuilt selector switch &amp; shall be protected by 2 amp TP MCB's - 1 no.</p> <p>iv) Load Manager of Schneider make PM 5110 with RS 485 connectivity with 3 nos. of Class 1, 125 / 5 Amp. CT of 15 VA</p> <p>Bus Bars</p> <p>125 amps FP Tinned copper bus bars with colored heat shrinkable insulated sleeve.</p> <p>TVSS (100KA) Ten Mode 330 Series of ASCO Make Unit with 100A FP MCCB as per SLD</p> <p>Outgoing</p> <p>40 amps 4 pole MCB ( 10 KA ) : 2 Nos.</p> <p>32 amps 4 pole MCB ( 10 KA ) : 2 Nos.</p> <p>6 to 32 amps 2 pole MCB ( 10 KA ): 20 Nos.</p> <p>Panel should be as per SLD &amp; Specifications</p>	1.00	No.			0.00
209	<p>SITC of Plumbing Panel (TTA as per IEC 61439)</p> <p>Incoming :</p> <p>100 amps FP MCCB (16 KA) with following accessories: 1 Sets</p> <p>i. LED type Phase indicating &amp; ON, OFF light shall be protected by 2 amps SP MCB's. - 5 nos.</p> <p>ii. 3 Nos. of Digital type 0-500 / 5 amps CTR digital ammeter with 3 nos 100 / 5 amps, 15 VA Class I CT's.</p> <p>iii. Digital type 0-500 Volt digital voltmeter with inbuilt selector switch &amp; shall be protected by 2 amp TP MCB's - 1 no.</p> <p>iv) Load Manager of Schneider make PM 5110 with RS 485 connectivity with 3 nos. of Class 1, 100 / 5 Amp. CT of 15 VA</p> <p>Bus Bars</p> <p>100 amps FP Tinned copper bus bars with colored heat shrinkable insulated sleeve.</p> <p>TVSS (100KA) Ten Mode 330 Series of ASCO Make Unit with 100A FP MCCB as per SLD</p> <p>Outgoing</p> <p>40 amps 4 pole MCB ( 10 KA ) : 3 Nos.</p> <p>32 amps 4 pole MCB ( 10 KA ) : 2 Nos.</p> <p>6 to 32 amps 2 pole MCB ( 10 KA ): 3 Nos.</p> <p>Panel should be as per SLD &amp; Specifications</p>	1.00	No.			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
210	SITC of IP 65 External Area lighting Panel (TTA as per IEC 61439) Incoming : 63 amps FP MCB (16 KA) with following accessories: 1 Sets LED type Phase indicating & ON, OFF light shall be protected by 2 amps SP MCB's. 3 Nos. of Digital type 0-63 / 5 amps CTR digital ammeter with 3 nos 63 / 5 amps, 15 VA Class I CT's. Digital type 0-500 Volt digital voltmeter with inbuilt selector switch & shall be protected by 2 amp TP MCB's Bus Bars 63 amps FP Tinned copper bus bars with coloured heat shrinkable insulated sleeve. TVSS (100KA) Ten Mode 330 Series of ASCO Make Unit with 63A FP MCB as per SLD Outgoing 40 to 63 amps 4 pole MCB ( 10 KA ) : 6 No. 6 to 32 amps FP 4 pole MCB : 2 no. 40 to FP Contactor : 6 no. Dual channel Timer : 3 nos. Panel should be as per SLD	1.00	No.			0.00
211	Light Fixture SITC of Any kind of Light Fixture with Basic Rate of Rs. 1000	439.00	No.			0.00
212	SITC of Any kind of Light Fixture with Basic Rate of Rs. 2000	26.00	No.			0.00
213	SITC of Any kind of Light Fixture with Basic Rate of Rs. 3000	5.00	No.			0.00
214	SITC of Any kind of Light Fixture with Basic Rate of Rs. 4000	5.00	No.			0.00
215	SITC of Any kind of Light Fixture with Basic Rate of Rs. 5000	10.00	No.			0.00
216	SITC of Any kind of Light Fixture with Basic Rate of Rs. 10000	70.00	No.			0.00
217	SITC of Any kind of Light Fixture with Basic Rate of Rs. 15000	5.00	No.			0.00
218	SITC of Any kind of Light Fixture with Basic Rate of Rs. 25000	5.00	No.			0.00
219	Exhaust Fans : Supplying & erecting approved make low noise decorative exhaust fan having size 200mm with 1350 RPM with square frame ABS body with inbuilt lowers & square frame.	11.00	No.			0.00
220	Supplying & erecting single phase approved make industrial exhaust fan suitable for medium duty ring mounted low noise operation suitable for medium duty having following dia size and maximum speed in RPM [A] 305 mm dia 900 RPM	32.00	No.			0.00
221	Providing & erecting Approved make Power Saving 50 Watt Ceiling Fan with double ball bearing ISI mark with Condenser 230 volt A.C. 50 Hz 1200 mm sweep complete having 3 blades with aluminium blades with , canopy & 30 cms. down rod erected with 24/ 0.2, 3 core flexible wire with earthing.(fan colour should be Gray)	108.00	No.			0.00
222	Supplying and erecting 19 / 20 mm. nominal bore Medium Class M.S. Pipe down rod erected duly painted for fan complete with necessary 24/ O.20, 3 core flexible wire with earthing.	108.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
223	<p>Street Light Pole</p> <p>Providing and fixing approved make Conical Poles (Medium Duty ) Made from CR sheet steel. The pole should be made as per IS. and shall be coated with hot dip galvanizing as per IS 2629/4759. with required base plate as erected on existing foundation. The length of poles are as below.</p> <p>(D) 6 Mtr. Long 70 mm Top X 160 mm bottom dia, 3 mm thickness.</p> <p>1) 4 way connector and 6A MCB</p> <p>2) 50 mm diameter DWC pipe for each cable entry. Pipe length is up to 3.5 mtr. Per cable</p> <p>3) Wiring up to the light fixture from the junction box using 3core x 1.5 sq.mm. flexible copper wires / Fixture of specified make.</p> <p>4) Concrete coping with foundation bolt with base plate with stiffener.</p> <p>5) Spiral/Coil Type Earthing from the 8 swg Cu. Wire of 2.5 mtr. With the suitable size pipe with clamps and painting.</p> <p>6) Radium strip of two color at suitable height &amp; Pole Numbering as per Client / Consultant's instruction</p> <p>7) Excavation &amp; back filling for erection of poles. Debris to be removed from the site to suitable location as per the instruction of the engineer in charge</p>	25.00	No.			0.00
224	<p>D.G. Set</p> <p>Supplying and erecting, commissioning and testing of Diesel Generating set confirming to IS: 4722:1968 &amp; BS:5514 having continuous rating, 3 phase, 415 volts, 50 cycles A.C. supply comprising of a totally enclosed air/water cooled diesel engine with multi-cylinders developing suitable BHP not less than following capacity at 1500 RPM with 10% overload for one hour in 24 hours with standard accessories like fly wheel, lubricating oil cooler, ""A"" class governor, heavy duty fuel wheel and lubricating oil filter, oil bath air filter, lubricating oil pressure gauge, end exhaust manifold, standard set of tools with adjustable spanners, screw drivers, cylinder head to cover, joint cylinder head to exhaust, element lube oil filter, 12 / 24 volts electric starting equipment complete with standard heavy duty battery, dynamo, cut-outs, ammeter, necessary wiring, pressure gauge, starter etc and heavy duty Residential type exhaust silencer and vertical hot air duct both logged with asbestos rope, save oil trays, exhaust piping of required length, standard wall/floor mounted fuel with level indicator and piping and drip proof alternator, self excited, self regulated, screen protected, with excitation system, capable of delivering the rated system output at 415 volts, 3 phase, 0.8 PF, 50 Hz, 4 wire, running at 1500 RPM, conforming to IS-4722- 1968 with voltage regulation +/- 5% of rated voltage from no load to full load. Both the engine and alternator fitted on a common fabricated steel base plate with antivibration mounting engine and alternator both connected to each other by flexible flange coupling and with floor/wall mounted control panel box comprising of voltmeter ammeter, selector switches, ACB / MCCB / MCB of adequate capacity, indicator lamps duly wired with HRC fuses. The alternator &amp; control panel shall be connected with provided suitable capacity armoured cable and complete with Acoustic enclosure (canopy) made out of 16 SWG CRCA Sheet, sound absorbing material Rockwool of 64 density &amp; 100 mm thick conforming to IS:8183 / PU Foam of 40 Density - at least 40 mm. The resin bonded rockwool covered from inside the canopy by perforated sheet with 3/4 mm holes, sound level not more than 75 dB at a distance of 1 mtr, as per PVCT norms. Erection, commissioning and satisfactory testing as per requirement with first filling of fuel, oil, etc. with guarantee / Warrantee of complete system for Two years. &amp; with obtaining all necessary certificate from Electrical Inspector. The Capacity and Ratings of DG sets are as below.</p> <p>(L) Continuous rating of 100 KVA ,BHP not less than 126 BHP</p>	1.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
225	<p>AMF Panel</p> <p>Providing &amp; erecting approved make AMF control panel suitable for following size of 3 phase, 415 V., 50 cycles, A.C. diesel generating set complete of scope as detailed below:</p> <p>1) Power module: A pair of electromechanically interlocked contactors (for mains &amp; generator) Overload relay for generator contactor Neutral contactor for mains and generator Power socket for connections.</p> <p>2) Control and metering module: Line voltage monitor. Generator voltage monitor Ammeter 3 items attempt start facility. Air circuit breakers/MCB/MCCB of suitable rating for auto/manual operation. Auto/manual switch. Emergency stop push buttons. Manual start push button. frequency meter. Engine hour meter. Two earthing studs.</p> <p>3) Protection module: The engine shutdown in the unlikely event of Low lube oil pressure High cylinder head temperature. V belt failure.</p> <p>4) Indicators with alarm Load on generator.</p> <p>5) Indicators Load on mains Engine fails to start . Emergency stop battery charger.</p> <p>The AMF Panel of following capacity (C) AMF Control Panel for 100 KVA/125 KVA 3 phase DG Set</p>	1.00	No.			0.00
226	<p>UPS</p> <p>Supplying and erecting approved make online Un-interruptible Power Supply system with IGBT Based rectifier and Inverter &amp; sealed maintenance free batteries. Three phase Input and Three Phase output with Inbuilt Isolation transformer with 0.9 load power factor with battery, over under voltage output with over load &amp; short circuit protection equipment. The system housed in CRC sheet duly powder coated paint with following capacity &amp; with Following size of batteries for 30 Min Backup (Minimum 8160 VAh) 5 KVA UPS with 34 AH, 20 Nos. Battery Certification : BIS (Including Five year free maintenance with guarantee)</p>	1.00	No.			0.00
227	<p>Lightning Arrestor</p> <p>SITC of Vertical Air Termination Solid aluminium with Base- 10 mm dia and 1000 mm long. Air Termination Base tested for conditioning, Ageing Test &amp; Lightning impulse current withstand test: 100 kA of 10/350µs waveform in an accredited Third party laboratory as per 6.3 &amp; 6.4 of IEC 62561-1 2017 protocol</p>	2.00	No.			0.00
228	<p>Supply of 8 mm dia solid Aluminium Conductor tested as per IEC 62561-2 conducted in the Govt. aggregated thirty party laboratory to meet the requirement of IS/ IEC 62305</p>	425.00	Mtr.			0.00
229	<p>Supply of Al. Straight Splicers for 8mm and 10 mm Conductor to meet the requirement of IS IEC 62305 tested for conditioning, Ageing Test &amp; Lightning impulse current withstand test: 100 kA of 10/350µs waveform in an accredited Third party laboratory as per 6.3 &amp; 6.4 of IEC 62561-1 2017 protocol</p>	14.00	No.			0.00
230	<p>Supply of Expansion Piece without connector to compensate the expansion and contraction of Solid Round Al. Conductor during temperature variations to be provided on conductors length over 20 meters to connect Solid Round Al. Conductor at both ends to meet the requirements of IS/IEC 62305.</p>	2.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
231	Supply of Cross splicer should be tested for conditioning, Ageing Test & Lightning impulse current withstand test: 100 kA of 10/350µs waveform in an accredited Third party laboratory as per 6.3 & 6.4 of IEC 62561-1 2017 protocol	10.00	No.			0.00
232	Supply of 8 mm dia solid Aluminium Conductor tested as per IEC 62561-2 conducted in the Govt. aggregated third party laboratory to meet the requirement of IS/ IEC 62305	150.00	Mtr.			0.00
233	Supply of 25 X 6 mm GI strip from AL Conductor to the earth pit station and further the same strip shall be used for interconnecting all the earth pits below ground level Zinc coating: 500 g/m square (Approx :70 micron coating) Should be tested and use exclusively for lightning protection ,earthing system and ring equipotential bonding	150.00	Mtr.			0.00
234	Holder -GI for fixing 25 x 6 mm GI Strip	22.00	No.			0.00
235	Each down-conductor should be provided with a test link in order to disconnect the earth termination system for enabling measurements. SS Test Link To connect Round to Flat conductor.	8.00	No.			0.00
236	Supply of Vertical Air Termination Solid aluminium with Base- 10 mm dia and 1000 mm long. Air Termination Base tested for conditioning, Ageing Test & Lightning impulse current withstand test: 100 kA of 10/350µs waveform in an accredited Third party laboratory as per 6.3 & 6.4 of IEC 62561-1 2017 protocol MAST 34mm dia 3 mtr long- Cold Galvanised for Side Mounting without Base Plate	7.00	No.			0.00
237	Holder -GI-C-type for fixing 34mm Dia mast on masonry wall all-side mounting	12.00	No.			0.00
238	Polyamide Holder for fixing 8mm dia Conductor	250.00	No.			0.00
239	Jet Earth Electrode Cu Bonded Steel Rod 14.2mm dia x 3000mm (250Microns) Eco Friendly rust proof heavy duty weather proof Polyethylene Earth Pit Chamber with following dimensions :254 mm dia (top), 330 mm dia (bottom) & 260 mm (height). 14.2 / OD SS Clamp Both Side Jet Eco Safe carbon based backfill compound - 50 Pounds	2.00	No.			0.00
240	Supply of concrete block for fixing/Mounting Vertical Air Termination/ Mast on RCC Floor with special concrete compound Quick and easy mounting of interception rod using anchor.	2.00	No.			0.00
241	Concrete block for Conductor fixing- 100x100x50mm thick	10.00	No.			0.00
242	Earthing Supplying & erecting funnel type earthing having earth plate of following size buried in specifically prepared earth pit 3 mtr. below ground with 40 kg. charcoal and salt with alternate layers of charcoal & salt, 20mm.dia. G.I. pipe with Funnel with a wire mesh for watering & bricks masonry block, C.I. Cover complete as per para 7.3 of IS 3043 with necessary length of double Galvanised Iron / copper earth wire No 6 SWG bolted with lug to the plate and covered in 12 mm dia. G.I. pipe 2.5 mtr long complete connected to the nearest switch gear with end socket as per direction & duly tested by earth tester confirming to IS (As per drawing) with following specification with 60 x 60x 0.315 cms. Copper earth Plate	2.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
243	Supplying & erecting in earthpit of minimum bore dia. 225mm size ASH or approved make Safe Earthing Electrode consisting Pipe-in-Pipe Technology as per IS 3043-1987 made of corrosion free G.I.Pipes having Outer pipe dia of 80 mm having 80-200 Micron galvanising, Inner pipe dia of 40 mm having 200-250 Micron galvanising, connection terminal dia of 14 mm with constant ohmic value surrounded by highly conductive compound with high charge dissipation suitable for following type of applications. For Electrical Installation covering Transformer Neutrals, Lightning arrester Earthing, A.C.Plant & Sensitive Computer System(like Automation, SCADA)i.e. independent Earthing located in other than normal soil i.e. Soft Rock, Marshy Soil etc.. -Length of Pipe : 3 Mtrs. -Back filling Compound :2 nos Bags of 25 Kg.	12.00	No.			0.00
244	Pipe type earthing with 40 mm dia 2.5 mtr long 'B' grade G.I. pipe with necessary coupling buch buried in specially prepared earth pit & G.I. earth wire of 8 SWG erected & connected as directed (For pole)	25.00	No.			0.00
245	Earth wire/strips : Providing and erecting HOT deep Galvanised iron strip wire 8 to 16 SWG.	650.00	Kg			0.00
246	Providing and erecting Annealed bare Copper wire 8 to 16 SWG.	200.00	Kg			0.00
247	Mains with ISI marked, 1.5KV grade electrolyte multi stranded, annealed copper conductor with heat resistant PVC insulated conforms to IS 694, IEC - 227 erected in existing pipe of following size (Specifically for control panel, relays, power switchgears, motor starters & control wiring) with required size of copper lugs, nuts and bolts if required. Supplying and Laying mains with 1 no. of 6 sq mm Cu. PVC insulated FRLS flexible wire ( Green Color Only )	100.00	Mtr.			0.00
248	SITC of Water Tight Junction Box With necessary clamp for mounting of the J.B. ( All the cable / wire connections to the JB shall be with the Water tight Glands only )	14.00	No.			0.00
249	Telephone Distribution Providing and installing of all conduiting and structured cabling for telephone system including providing and fixing of the following: 1) All necessary specials and fittings 2) Approved cover plates for inspection, junction and outlet boxes. 3) 2 mm thick outlet boxes (MDF) and junction boxes. 4) All fixing accessories such as clips, nails, screws etc. 5) Providing and fixing approved saddles, hooks and grouting the same as required, in the case of all exposed conduit work. 6) Embedding conduits and accessories in wall, floors etc. during construction and / or cutting chases and making good as necessary in the case of all concealed conduit work. Supply and installation, testing and commissioning following size telephone tag block in lockable 16 gauge sheet steel enclosure complete as required. 10 pair Krone type tag block	2.00	No.			0.00
250	5 pair Krone type tag block	5.00	No.			0.00
251	PVC & HDPE Conduits Supply & laying of 25 mm dia. rigid PVC conduit of 2.0-2.2 mm thick heavy gauge with all accessories.	350.00	Mtr.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
252	Supply & laying of 40 mm dia. rigid PVC conduit of 2.1 -2.3 mm thick medium gauge with all accessories.	100.00	Mtr.			0.00
253	EPABX SITC of Digital / PCM / TDM EPABX System having SMT design, system with flexible universal slots. Inbuilt Auto attendant facility, Minimum 15 Nos. conference, Analog extension line, Calling GSM, E&M line, PRI / EI & VOIP program me through Analog telephone digital key from Ethernet, public address cord, shall have unrestricted simultaneous dialing facility, QSIG protocol on PRI, 95 / STD / ISD / Local-Locking, Class of Service, Quick Dial-Single Digit dialing of any two external number, Once only ring device, Boss/Secretary-Do not disturb Facility, Power Down Mode, Hot Line, Hot Outward Dialing, Day Night Mode, Auto Call Back, Barge-in, Call Pick Up & Call Transfer, Call transfer while Ringing with Voice Guide System, (DISA), Caller ID (CLI), CLI Base ECF, CLI Base routing Internet Ready Port, External Music Port, Call Budgeting, Call Most Calculation (ASMDR), DID Direct Inverse Dialing, External Music Input, Fax Homing, Global Directory Printing with following capacities [A] No of Extension 16, No of Junctions 6, 8 Port IP Resource in-built, 4 Port Web base Video Conferencing, No of expandable ports : 48, Operators Console - 01 Compatible : ISDN	1.00	No.			0.00
254	Supplying & erecting push button type telephone instrument having speaker phone Caller ID & hands free dialling system & 30 memories with display system	1.00	No.			0.00
255	providing and erecting IP Phone with display with all IP system supported	1.00	No.			0.00
256	Telephone Point Wiring Supply and laying of specified make 0.51 mm dia Tinned copper telephone wire of specified make to be done in prelaidd PVC pipe of 25 mm dia/raceway of specified make, but without the cost of pipe or raceway. (the wire is to be drawn from Krone connector of respective area to outlet point ) 5 pair telephone wire	100.00	mtr			0.00
257	10 Pair Telephone Wire	10.00	mtr			0.00
258	Supply, Installation, Testing And Commissioning of Solid Cable Cat 6, 4 pair, UTP.	150.00	mtr			0.00
259	Telephone Outlet Point SITC OF PowerCat 6 DataGate Jack, 568A/B - Yellow with Dust Cover / Blank/ One Telephone Point to be done with Cat -6 Information outlet Socket, Back Box, Face Plate for all telephone point. Average Length to be considered as 50 Meter. Cable Laying, Labling, Ferrule, Testing, Certification to be included in cost. 20 Years of Certification is required. Test reports of Level-4 Scanners only.	10.00	No.			0.00
260	SITC OF DG+ Jack (Diecast)Cat6A 568A/B, Shtd- Black (Information Outlet for Data) with Faceplate, back box CAT-6A standards. Cable Laying, Labling, Ferrule, Testing, Certification to be included in cost. 20 Years of Certification is required. Test Reports of Level-4 Fluke Scanners Only.	10.00	No.			0.00
261	SITC OF 24 Port Layer 2 Fully Managed Network Switch with 24 10/100/1000Base T Ports and 4 GE SFP Ports. Include Limited Lifetime Warranty.	1.00	No.			0.00
262	Supply, installation, testing and commissioning of 24 Port loaded Patch Panel	1.00	No.			0.00
263	Supply, installation, testing and commissioning of Patch Cord-1m	20.00	No.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
264	Supply, Installation, Testing and Commissioning of Equipment rack / Console as per requirement	1.00	No.			0.00
265	CCTV Supply, Installation, Testing & Commissioning of Network TDN IR Mini Dome Camera, 1/2.9" CMOS, 5 MP @ 25fps, Triple stream, Min. Illumination required 0.25 lux @ color, WDR 120dB, Min. Pixels 2560 x 1920, Shutter Speed 1/30000 - 1/5; Advance Video Compression technology such as H.265 / H.264 / MJPEG, 3mm~8mm, MFZ lens, HLC, 3DNR, Minimum Edge Intelligence Video Analytics: Motion Detection, Camera Tampering, Intrusion/Object enter area; 4 nos Privacy Mask, Smart IR with upto 30m IR distance, AES-128/256, PCI Data Security Standard compliance, 128GB SD card support, DC12V, PoE (IEEE 802.3af) (Class 2), IP 66, IK10, Having Operating temp range : -10°C to 50° C. Certifications: ONVIF Profile S, G compliant, UL, CE/EN, FCC Part 15 & RoHS compliant along with mounting brackets suitable for Ceiling / Wall mounting & required accessories as per site requirement.	30.00	Nos.			0.00
266	Supply, Installation, Testing & Commissioning of 5MP IP Network TDN IR Bullet Camera, 1/2.8" CMOS, 5 MP @ 25fps, Triple stream, Min. Illumination required 0.05 lux @ F1.4 (color), WDR>120dB, Min. Pixels 2560 x 1920, Shutter Speed 1/30000 - 1/30; Advance Video Compression technology such as H.265 HEVC / H.264 / MJPEG, Smart Codec, 2.7-13.5 mm 5X motorized focus & zoom lens, P-IRIS, HLC, 3DNR, Minimum Edge Intelligence Video Analytics: Motion Detection, Video Tampering, Intrusion, Loiter, Line crossing, Unattended object, Missing object, Face detection; 5 nos Privacy Mask, 4 IR LEDs Smart IR with upto 60m IR distance, Stream encryption, AES-128/256, PCI Data Security Standard compliance, FIPS Chipset Built-In, 256GB SD card support with SD card encryption, Dual channel Audio G.711a / G.711 Mu / G.726, Alarm: 2 In/ 1out, In-built Heater; PoE+ (802.3 at) and 12V DC/24V AV; IP 66 / IP 67 / NEMA 4X, IK10, Having Operating temp range : -40°C to 60° C. Certifications: ONVIF Profile S, G compliant, UL, CE (EN 50130-4 & EN 55032) , FCC Part 15 & RoHS compliant along with mounting Brackets suitable for Pole / Wall mounting & required accessories.	3.00	Nos.			0.00
267	Supply, Installation, Testing and Commissioning of Number Plate Recognition Camera with Ultra-low illumination technology, 1/1.8" Progressive Scan CMOS, 0.004 lux color @ F1.53, 0 lux B/W with IR LEDs on @ F1.53, Slow shutter, 6 MP 25/30fps, 4.1 to 16.4 mm/F1.4 Motorized VF lens with Smart Focus, H.265 and H.264/MPEG4, Triple-Stream, Support SD/SDXC Card up to 128GB, IP67, IK10, DC12V/PoE, up to 50m IR range, Bracket & junction box included, Smart Feature-setAudio/Alarm IO UL, CE, FCC & RoHS compliant and Cyber Security Compliant.	1.00	Nos.			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
268	Supply Installation Testing & Commissioning of Network Storage Manager(NSM) supporting ONVIF Profile S & G, PSIA, real time streaming protocol (RTSP) standards, emerging technologies in the industry, like 4K resolution, H.265 video compression codec. System proposed shall have scalability of 4 to 120 cameras per NSM with sufficient licenses to record all the cameras in this requirement. NSM shall support simultaneous recording, live monitoring, playback/search of recorded video for up to 4K resolution on all cameras, taking snapshots and viewing presets for PTZ cameras and system management. NSM shall have integrated Dashboard to easily monitor the health and recording status, Flexible retention time / archive time for cameras, Smart Motion detection, Role-based operator privileges supporting Windows and local users, Video Archiving, Multi-stream support, Advanced security features with encryption support for communication between desktop client to NSM and secure https login for Web Client and Mobile apps, Event history and operator log reporting with export to PDF, Crystal Reports, MS Excel/MS Word. NSM Shall support scheduled backfilling of the recordings from the edge storage/SD card of cameras to the NSM using ONVIF Profile G for robust recording against temporary network failure, N+1/N+M recorder failover and failback automatically or manually to have maximum system uptime and recording continuity.	1.00	Nos.			0.00
269	Supply, Installation, Testing & Commissioning of Network Video Management & Monitoring Software (NVMMS) system with distributed architecture to collect, manage and present video from all the cameras and supports emerging technologies in the industry, like 4K resolution, H.265 video compression codec. The NVMMS shall have option to support database redundancy and 1+1 and N+M NSM failover features for unforeseen/maintenance scenarios for increased system reliability. NVMMS shall support NSM's licenses upto 100 cameras & 3 user clients without any additional version upgrade. The NVMMS should support network joystick controller, GPU rendering support for H.264 and H.265 decoding , video on demand, Adaptive video throttling, rule engine, operator role management, server based Video Motion Detection (VMD), edge storage backfill support, bookmark with manual comment, bookmark based search, timeline search, Preview search, synchronous playback from all NSMs, monitor wall support, surrounding camera mode, Cybersecured with features such as Digital Signing, compliance, HTTPS & SSL base, smart web client, secured firewall configuration, password expiry, non-recoverable password; support ANDROID & iOS phones, seamless integration with integrated security platform which provides HSDK&API for further integration with 3rd party systems. NVMMS shall support iLIDS certified Analytics like Licence plate recognition and intrusion/LoiteTrace.	1.00	Nos.			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
270	Intel® Core™ i7-12th generation, 4.0 GHz or better, Xeon 11th Generation 4.4 GHz or higher, Minimum 32GB RAM, Minimum 512 GB separate SSD hard drive for OS, DVD-R/W, 6 GB/s SAS/SATA RAID Card, RAID 1, 5, 10. 2 NIC cards supporting network throughput of 256 Mbps/425 Mbps for Incoming/outgoing, Graphics Adapter - Intel®IRIS XE Graphics or equivalent for local client GPU rendering support, Windows Server 2019 (64-bit OS versions recommended), Microsoft SQL Express 2012. Video rated or Enterprise drive, 7200 RPM SATA/SAS recommended, Video Monitor Resolution- 1280x1024 pixels, 32 bit with keyboard and mouse. The NSM shall be complete system for satisfactory surveillance operations with all necessary softwares, licenses, required PC Hardware, Storage, accessories etc., civil, electrical works & peripheral items, as required.	1.00	Nos.			0.00
271	Supply, Installation & Commissioning of NVMS workstation/PC with minimum Intel Core i7-12th Generation, 3.4GHz, 8GB RAM, Windows 10 Professional (64 Bit) OS, DVD R/W, Integrated Intel HD graphics 530 and NVIDIA Quadro NVS 315 1 GB PCIE x 16 LP supporting 4 Monitors. The NVMMS shall be complete system for satisfactory surveillance operations with all necessary softwares, licenses, required PC Hardware, storage, accessories etc., civil, electrical works & peripheral items, as required as per specification in Annexure A at site of work inline with the Engineer in Charge instructions.	1.00	Nos.			0.00
272	Supply, Installation, Testing And Commissioning of 55" 4k UHD resolution Monitor - 120 HZ for viewing the cameras	1.00	Nos.			0.00
273	Supply, Installation, Testing and Commissioning of Equipment rack / Console as per requirement	1.00	No.			0.00
274	SITC of HP 2530-48G-PoE+ Switch, 48 10/100/1000 PoE+ ports, 4 SFP ports 382W PoE+ (J9772A) + 1 number of SFP Module of Transceiver, MM, 850nm, 550m (J4858C)	1.00	No.			0.00
275	Supply, Installation, Testing And Commissioning of Layer 2 Managed Gigabit POE switch with 24 # 10/100/1000BaseT ports and 2 # Gigabit Combo ports(RJ45/SFP), 2 # Gigabit SFP Port.	2.00	No.			0.00
276	Supply, Installation, Testing And Commissioning of Layer 2 Managed Gigabit POE switch with 48 # 10/100/1000BaseT ports and 2 # Gigabit Combo ports(RJ45/SFP), 2 # Gigabit SFP Port.	1.00	No.			0.00
277	Supply, installation, testing and commissioning of 24 Port loaded Patch Panel	2.00	No.			0.00
278	Supply, installation, testing and commissioning of 48 Port loaded Patch Panel	1.00	No.			0.00
279	Supply, installation, testing and commissioning of Patch Cord-1m	30.00	No.			0.00
280	Supply and laying of PowerCat 6A U/FTP CM 4 Pair Cable, LSZH Sheath - Violet of specified make to be done in prelaidd PVC pipe of 25 mm dia / raceway of specified make, but without the cost of raceway or pipe ( the wire is to be drawn from HUB \ Switch of respective area to outlet point ) with the cost of the crimping with material.	1800.00	Mtrs.			0.00
281	Supply and laying of Cat-6 STP LSZH UV outdoor cable in PVC conduit with termination as per TIA	200.00	Mtrs.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
282	Fire Detection System Supply, Installation, Testing And Commissioning of UL864, 10th Edition Microprocessor based 4 loop, True Peer-to-Peer Networkable Addressable Fire Alarm Control Panel with minimum 600 characters LCD display, 4000 event plus 1000 alarm log history events, QWERTY keypad for programming. The panel should be equipped with sufficient numbers of loops considering 20% spare capacity in each loop. Each loop shall have a capacity of minimum 250 analog addressable devices. The panel shall work in degrade mode in case of CPU failure, Products not having this feature may offer Redundant CPU. Four access levels, flash EPROM, 240 volts AC power supply, automatic battery charger, 24 volts sealed lead acid batteries sufficient for 24 hours normal working and 30 mins in alarm condition. The panel shall be compatible with Integrated 8 channel Digital Voice Evacuation System Controller capable of broadcasting Evacuation Messages on same peer-to-peer Network and 2 ways Communication Fire Fighters System capable of supervising all the speaker circuits with adequate zone control and accessories. Failure of Fire Panel CPU shall not result in failure of DVC operation. The Fire Fighters Telephone System shall be capable of having minimum 30 Telephones in conference in multiple FFT Risers.	1.00	Nos.			0.00
283	Supplying, Installation, Testing and Commissioning of Network Repeater Panel with minimum 10" Color Touch Screen display with QWERTY Keypad, mapping minimum 2,00,000 points on network. The NRP shall act as an independent node communicating on the peer to peer network and shall not be dependant on the Fire Panel CPU for operation. Failure of Fire Panel CPU shall not result in failure of NRP operation.	1.00	Nos.			0.00
284	Supply, Installation, Testing And Commissioning of UL Listed Graphics User Interface for Monitoring & Control of complete Fire, Voice Evacuation & Telephone Talkback System. The GUI based main network software shall network with other panels on True Peer-to-Peer network. It shall be capable of graphically representing each facility being monitored with floor plans and icons depicting the actual locations of the various systems, and / or sensors' locations. It shall have the facility to change the sensitivity of any detector. The software shall be capable of monitoring 200 Nodes with 100 Mbps Transmission rate on Fibre Optics Network and 12 Mbps Transmission on cable and 2,50,000 network points. The software shall be capable to Monitor & Control all the Digital Voice Evacuation as well as 2 way communication from main control room using voice signals over Fire Network along with the Fire detection signal. The Graphic workstation shall act as an independent node communicating on the peer to peer network and shall not be dependant on the Fire Panel CPU for operation. Failure of Fire Panel CPU shall not result in failure of GUI.	1.00	Nos.			0.00
285	Supply, Installation, Testing And Commissioning of Automatic printer capable for interface with NCS and provided with RS 232/RS 485 protocol port. It shall be standard cartage with 80 characters per line as per all requirements of technical specifications & contracts works.	1.00	Nos.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
286	Supply, Installation, Testing And Commissioning of UL268, 7th Edition Addressable Multi-criteria Photo-Thermal Detector with sensitivity range of 0.5 to 4.0% obs/ft. The intelligent multi criteria detection device shall include the ability to combine the signal of the thermal sensor with the signal of the photoelectric signal in an effort to react hastily in the event of a fire situation. It shall also include the inherent ability to distinguish between a fire condition and a false alarm condition by examining the characteristics of the thermal and smoke sensing chambers and comparing them to a database of actual fire and deceptive phenomena. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches.	200.00	Nos.			0.00
287	Supply, Installation, Testing And Commissioning of UL Listed Addressable Rate of Rise Heat Detector rated at 8.3 deg C/min. The detector shall have twin bi-colour LED for 360 deg viewing. Addressing shall be with user friendly rotary decimal switches.	2.00	Nos.			0.00
288	Supply, Installation, Testing And Commissioning of UL listed Addressable Manual Call Point (Pull down / Break Glass Type). The device shall have an LED which shall blink in normal state & get steady on activation to monitor the health status of the device.	10.00	Nos.			0.00
289	Supply, Installation, Testing And Commissioning of UL Listed Sounder cum Strobe rated at 80 dBA @ 3m for Audible annunciation and 115cd flashintg at 1 Hz for visual indication. UL Listed	6.00	Nos.			0.00
290	Supply, Installation, Testing And Commissioning of Addressable Control Module for Sounders / Strobes / Sounder cum Strobes. The control module shall provide supervised NAC output rated at 24v DC, 2A. The device shall have an LED which shall blink in normal state & get steady on activation to monitor the health status of the device. Addressing shall be with user friendly rotary decimal switches. Module shall be supplied with mounting plate from OEM for ease of installation & maintenance.	2.00	Nos.			0.00
291	Supply, Installation, Testing And Commissioning of UL Listed Isolator Module for Isolating short / dewired / loose circuits with automatic resetting arrangement. Isolator Base can also be proposed, however in that case needs to be considered with each detector & module. The device shall have an LED which shall blink in normal state & get steady on activation to monitor the health status of the device. Module shall be supplied with mounting plate from OEM for ease of installation & maintenance.	4.00	Nos.			0.00
292	Supply, installation, testing & Commissioning of Battery pack suitable for back up of 4 hours with charger in case of Alarm condition.	2.00	Nos.			0.00
293	Supply, installation, testing & Commissioning of response indicator	5.00	Nos.			0.00
294	Supply, installation, testing & Commissioning Fire Exit Signage boards with 3hrs battery backup	6.00	Nos.			0.00
295	Supply & laying of 2 Core X 1.5 sq.mm. FRLS Armoured PVC Insulated copper cable	1600.00	Mtrs.			0.00
296	Supply & laying of 4 Core X 1.5 sq.mm. FRLS Armoured PVC Insulated copper cable	100.00	Mtrs.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
297	Miscellaneous Supplying & erecting carbon dioxide (CO2) fire extinguisher user of following capacity with necessary clamps made from 50 x 6 mm M.S. Flat with nut & bolts grouted in wall complete. For 4.5 Kg Capacity, including maintaining/ renewal validity of all Co2 fire extinguishers up to the completion of O&M period	4.00	no			0.00
298	Supplying rubber matting of following thickness as per IS : 15652/IEC61111 4mm	5.00	sq. mtr			0.00
299	Providing and erecting metallic vitrified danger notice board for MEDIUM VOLTAGE installation to be erected as per IS.	5.00	no			0.00
300	Providing printed instruction chart both in English and Gujarati and duly framed with front glasses, for treatment of person suffering from Electric shock	5.00	no			0.00
301	Providing the A0 Color size print of the Final Plan / SLD duly framed out on Glass for Electrical room & BMS Room	5.00	no			0.00
302	Providing the A1 Color size print of the Final Plan / SLD duly framed out on Glass for Electrical room & BMS Room	5.00	no			0.00
303	Providing the A2 Color size print of the Final Plan / SLD duly framed out on Glass for Electrical room & BMS Room	5.00	no			0.00
304	Providing the A3 Color size print of the Final Plan / SLD duly framed out on Glass for Electrical room & BMS Room	5.00	no			0.00
305	Providing & laying approved make Double walled corrugated pipes (DWC) of polyethylene(conforming to IS 14930 II )with necessary connecting accessories of same material at required depth for laying of cable. below ground / road surface for enclosing cable and back filling the same to make ground as per original. (A)50 mm dia	1200.00	mt			0.00
306	(B)90 mm dia	500.00	mt			0.00
307	(B)120 mm dia	500.00	mt			0.00
308	Air Conditioning System Providing and erecting Inverter based approved make split air-conditioning unit consisting of condensing unit with variable speed fan motor, inverter type hermetically sealed rotary compressor with accessories etc. duly connected separately erected evaporating unit and blower motor with its accessories by means of extra supplied proper insulated copper tubing,drain PVC pipes suitable for ( cost includes Eco Friendly green gas charging and 15A plug top & Remote Control & MS Stand) with necessary core cutting. (2)For 4/5 Star Rating of current year (B) for 1.5 ton capacity	2.00	no			0.00
309	(C) for 1.7 to 2 ton capacity-Premium Cat.	4.00	no			0.00
310	Providing and erecting Inverter based approved make Cassette type split air-conditioning unit consisting of condensing unit with fan motor, hermetically sealed scroll/rotary compressor with accessories etc. duly connected separately erected evaporating unit and blower motor with its accessories by Eco friendly Green gas charging & Internal copper wiring & Remote control ( 3 star and above of current year) with necessary core cutting. (B) for 2 ton capacity	2.00	no			0.00
311	(C) for 3 ton capacity- 3Phase	1.00	no			0.00
312	Supplying & installing MS standard type stand mounting for outdoor unit of Split A.C. upto 4 TR capacity erected with necessary hardware materials as directed.	9.00	Ea.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
313	Supplying and erecting insulated pair of soft copper tubing open or concealed including power and control cable,necessary PVC drain pipes for Split / Cassete AC machine up to 4 TR capacity	180.00	Rmt.			0.00
314	Supplying and installing MS angle , powder coated / Painted standard type of wall/floor stand mount for outdoor unit of split AC of following capacity, erected with necessary hardware materials as directed. (A) 25mm*25mm*3mm thick M.S angle suitable for upto 2 TR. Capacity of ac machine	9.00	Ea.			0.00
315	(B) 35mm*35mm*5mm thick M.S angle suitable for above 2 TR to 4 TR Capacity of ac machine	9.00	Ea.			0.00
316	4/5/6 Passengers LIFT, Ground plus 3 upper floors with Rated Speed of 1.0 m/sec. With General Specification Cat.III, As mentioned in Technical Specification E-16 Lift Work	1.00	no			0.00
317	8 / 10 Passengers LIFT, Ground plus 1 upper floor with Rated Speed of 1.0 m/sec., With General PLUS ADDITIONAL SPECIAL FEATURES Premium Category as mentioned in Technical Specification E-16 Lift Work	1.00	no			0.00
318	Liason / Follow UP with Supply Co. Filling the necessary application to supply co. following up and getting the supply filling the necessary test report to the supply co. inclusive. All official fees including security deposits will be paid by the client and out of pocket expenses shall be of contractor. 1. To get temporary power supply 2. To get the H.T. Connection 3. To get all approval from CEIG and supply company 4. To get Lift approval	1.00	job			0.00
319	Providing and fixing to wall ceiling and floor 6.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(A) 20mm for AC drain	415.00	Rmt			0.00
320	Providing and fixing to wall ceiling and floor 6.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(B) 25mm	165.00	Rmt			0.00
321	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(C) 32mm	90.00	Rmt			0.00
322	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(D) 40mm Wash Out Pipe	140.00	Rmt			0.00
323	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(E) 50mm Wash Out Pipe	90.00	Rmt			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
324	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure polythene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(F) 75mm ( Waste Pipe & Rain & Balcony Drain)	315.00	Rmt			0.00
325	Providing and fixing to wall ceiling and floor 10.0 Kg. F/Cm2 working pressure poluthene pipes of the following outside Dia. Low density, complete with special falnge compression type fittings, wall clipsetc. including making good the wall ceiling and floor.(G)110 mm ( Rain & Balcony Drain)	215.00	Rmt			0.00
326	Providing and fixing 600mm x 450mm bevelled edge mirror of superior glass mounted on 6mm thick A.C. sheet or plywood sheet and fixing to wooden pluge with C.P. brass screws and washers.	36.00	Each			0.00
327	Providing and fixing C.P. brass towel rail comlete with C.P. brass brackets fixed to wooden plugs with C.P. brass scews.(B) 600mm x 20mm size.	34.00	Each			0.00
328	Providing and fixing 600mm x 120mm glass shelf with C.P. brass bracket and guard rail complete mixed to wooden plug with C.P. brass screws.	34.00	Each			0.00
329	Providing and fixing toilet paper holder.(A) C.P. Brass	36.00	Each			0.00
330	Providing and fixing screw down bib taps of following size.(A) Brass screw down bib tap polished bright. (i) 15mm dia.	3.00	Each			0.00
331	Providing and fixing screw down bib taps of following size.(B) Brass chromium plated screws down Bib Tap. (i) 15mm dia.	3.00	Each			0.00
332	Providing and fixing screw down bib taps of following size.(C) Gun metal screw down bib tap. (i) 15mm dia.	3.00	Each			0.00
333	Providing and fixing pillar tap, capstan head, screw down high pressure with screws, shanks and back nuts. (i) 15mm dia.	3.00	Each			0.00
334	Providing and fixing brass screw down stop tap.(A) 15mm dia.	9.00	Each			0.00
335	Providing and fixing brass screw down stop tap.(C) 25mm dia.	9.00	Each			0.00
336	Providing and fixing Gun metal check or non-return fullway wheel valve.(A) 15mm dia.	25.00	Each			0.00
337	Providing and fixing Gun metal check or non-return fullway wheel valve.(B) 20mm dia.	25.00	Each			0.00
338	Providing and fixing Gun metal check or non-return fullway wheel valve.(C) 25mm dia.	25.00	Each			0.00
339	Providing and fixing Gun metal check or non-return fullway wheel valve.(D) 32mm dia.	25.00	Each			0.00
340	Providing and fixing Gun metal check or non-return fullway wheel valve.(E) 40mm dia.	25.00	Each			0.00
341	Providing and fixing chromium plated brass half trun flush cock of approved quality including fixing in pipe line etc. complete.(ii) 25mm dia.	3.00	Each			0.00
342	Providing and fixing chromium plated brass half trun flush cock of approved quality including fixing in pipe line etc. complete.(iii) 32mm dia.	3.00	Each			0.00
343	Providing and fixing ball cock of approved. quality as directed.(A) Copper Metal (i) 25mm dia.	5.00	Each			0.00
344	Providing and fixing ball cock of approved. quality as directed.(A) Copper Metal (ii) 50mm dia.	5.00	Each			0.00
345	Providing and fixing ball cock of approved. quality as directed.(B) Abonite (i) 25mm dia.	5.00	Each			0.00
346	Providing and fixing ball cock of approved. quality as directed.(B) Abonite (ii) 50mm dia.	5.00	Each			0.00
347	Providing and fixing C.I. Manhole cover 0.60 M. x 0.45M. size having weight not less than 35Kg.	15.00	Each			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
348	Providing and fixing G.I. Rain water spout of 50mm dia. and 30cm. length.	41.00	Each			0.00
349	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. [A] 15 mm.	500.00	Rmt			0.00
350	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. [B] 20 mm.	275.00	Rmt			0.00
351	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. [C] 25 mm.	325.00	Rmt			0.00
352	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. [D] 32mm.	300.00	Rmt			0.00
353	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. [E] 40mm.	375.00	Rmt			0.00
354	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete. [F] 50mm.	450.00	Rmt			0.00
355	Providing laying and jointing in true line and level 15mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX or equivalent as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be cancelled as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	100.00	Rmt			0.00
356	Providing laying and jointing in true line and level 25mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX or equivalent as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be cancelled as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	100.00	Rmt			0.00
357	Providing laying and jointing in true line and level 32mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX or equivalent as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be cancelled as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	200.00	Rmt			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
358	Providing laying and jointing in true line and level 40mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX or equivalent as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be cancelled as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	200.00	Rmt			0.00
359	Providing laying and jointing in true line and level 50mm dia. U.P.V.C. Pipe ( SCH- 40) for cold water including fittings make PRINCE / SUPREME / ASTRAL / FINOLEX or equivalent as approved by Engineer In Charge. Pipe shall be fixed on the wall with the help of clamp at every two metre C/C or shall be cancelled as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials.	300.00	Rmt			0.00
360	Providing, laying and jointing in true line and level 160 diameter U.P.V.C (Type B) conforming to IS 13592-1992 with one end plain and other end socketed with rubber ring, & fittings conforming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 160 mm diameter x 210 mm length x 196 mm heigh at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pipes and joints and jointed with adhesive solvent cement including cost of all materials.	150.00	Rmt			0.00
361	Providing, laying and jointing in true line and level 110 diameter U.P.V.C (Type B) conforming to IS 13592-1992 with one end plain and other end socketed with rubber ring, & fittings conforming to ISI 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 110 mm diameter x 149 mm length x 145 mm heigh at every 2000 mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pipes and joints and jointed with adhesive solvent cement including cost of all materials.	850.00	Rmt			0.00
362	Providing and fixing PVC SWR Nahni trap IS 14735 for drain - 100 mm diameter with jali of the following nominal diameter of self cleansing design with C.I scread down or hinged grating including the cost of cutting and making good the walls.	32.00	each			0.00
363	Providing and fixing PVC SWR Nahni trap IS 14735 for drain - 75 mm diameter with jali of the following nominal diameter of self cleansing design with C.I scread down or hinged grating including the cost of cutting and making good the walls.	95.00	each			0.00
364	DRAINAGE & SEWERAGE ITEM:- Excavation for pipes upto1.50 MT depth including sorting out and stacking of useful materials and disposing the excavated stuff up to 50 mt lead ( A ) loose or Soft Soil	1500.00	Cmt.			0.00
365	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight.(i) Square mouth traps. (A) 100mm x 100mm size P type. .	20.00	Each			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
366	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight.(i) Square mouth traps.(B) 150mm x 100mm size P or R type	20.00	Each			0.00
367	Providing and laying in trench Foamcore/ De-rex-HDPE/ ECO-drain PVC pipe as per IS-15328 class SN-4 pipes to the specified invert level and slope and full leak proof joining with rubber ring click ring jointing etc., complete with testing.(Supreme/ Astral Makes) Size:-160mm	175.00	Rmt			0.00
368	Providing and laying in trench Foamcore/ De-rex-HDPE/ ECO-drain PVC pipe as per IS-15328 class SN-4 pipes to the specified invert level and slope and full leak proof joining with rubber ring click ring jointing etc., complete with testing.(Supreme/ Astral Makes) Size:-200mm	300.00	Rmt			0.00
369	Providing and laying in trench Foamcore/ De-rex-HDPE/ ECO-drain PVC pipe as per IS-15328 class SN-4 pipes to the specified invert level and slope and full leak proof joining with rubber ring click ring jointing etc., complete with testing.(Supreme/ Astral Makes) Size:-250mm	50.00	Rmt			0.00
370	Constructing brick masonry chamber for underground C.I. Inspection chamber and bends with briocks having croshing strength not less than 35Kg. Cm2 in C.M. 1:5 C.I. cover with frame (Light duty) 455mm x 610mm intenal dimensions total weight of cover with frame to be not less than 38Kg. (Wt. of cover 23 Kg.) and Wt. of frame 15Kg. ) (R.C.C. top slabe with 1:2:4 mix (1-cement :2- coarse sand :4-graded stone aggregate 20mm size) foundation concrete 1:5:10 inside plaster 15mm thick with cement mortar 1:3 finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete.(iii) Inside dimensions 600mm x mm and 450mm deep for pipe lines with three or more inlets. .	15.00	Each			0.00
371	Constructing Manhole with R.C.C. top slab in 1:2:4 mix (1-cement :2- coarse sand : 4-graded stone aggregate 20mm nominal size) foundation concrete 1:3:6 mix (1-cement : 3- coarse sand :6-Brick bats 40 + 50mm size) inside plastering 15mm thick with Cement Mortar 1:5 (1-Cement : 5-coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1- Cement :2-Coarse sand :4-stone aggregate 20mm nominal size) finished smooth complete including curing and festing (i) Inside size 900mm x 1200mm and 1.5M. deep including C.I. cover with frame size 560mm diameter total weight of cover and frame to be not less than 128 kgs. (Wt. of cover 64 Kg. and Wt. of frame 64 Kg.)(A) With 230mm thick walls of brick msonry using brick having crushing strength not less than 35Kg. / Sq.cm. in Cement Mortar 1:5 (1- Cement: 5-Coarse sand) (1) A type depth 0.90 Metre for 150mm diameter sewer.	22.00	Each			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
372	Constructing Manhole with R.C.C. top slab in 1:2:4 mix (1-cement :2 coarse sand : 4-graded stone aggregate 20mm nominal size) foundation concrete 1:3:6 mix (1-cement : 3- coarse sand :6-Brick bats 40 + 50mm size) inside plastering 15mm thick with Cement Mortar 1:5 (1-Cement : 5-coarse sand) finished with a floating coat of neat cement and making channels in cement concrete 1:2:4 mix (1-Cement :2-Coarse sand :4-stone aggregate 20mm nominal size) finished smooth complete including curing and festing (i) Inside size 900mm x 1200mm and 1.5M. deep including C.I. cover with frame size 560mm diameter total weight of cover and frame to be not less than 128 kgs. (Wt. of cover 64 Kg. and Wt. of frame 64 Kg.)(A) With 230mm thick walls of brick msonry using brick having crushing strength not less than 35Kg. / Sq.cm. in Cement Mortar 1:5 (1- Cement: 5-Coarse sand) (2) B type depth 1.50 Metre for 150mm diameter sewer.	8.00	Each			0.00
373	Providing and fixing cast iron steps of size 500mm x 150mm x 22.5mm and painting with two coats of Anti-corrosive paint etc. complete.	175.00	Each			0.00
374	Supplying and fixing C.I. cover 300mm x 300mm without frame for Gulley trap (Standard pattern) te weight of cover to be not less 4.53 Kg.) .	40.00	Each			0.00
375	Providing & fixing of the FRP recessed type cover with frame size 600 x 600mm size total weight of cover and frame to be withstand up to 25 ton. with including Cement Mortar 1:5 (1- Cement: 5-Coarse sand) (1) 25 ton Cap. Recessed type cover( Cover-600 x 600mm ) ( Frame:- 812 x 812mm)	10.00	Each			0.00
376	Providing & fixing of the FRP recessed type cover with frame size 600 x 600mm size total weight of cover and frame to be withstand up to 25 ton. with including Cement Mortar 1:5 (1- Cement: 5-Coarse sand) (1) 40 ton Cap. Recessed type cover( Cover-600 x 600mm ) ( Frame:- 812 x 812mm)	10.00	Each			0.00
377	NSR-MR.ITEMS:-Supplying Installing and fixing wash down wall mounting EWC-P of approved shade, conforming to Pattern 2 of IS: 2556 (Part -II), with SWR Selfit Soil PVC pipe and plug bend as per specifications; glazed vitreous / Cloured European Water Closet with grouting the CI chair in side the floor/wall, rubber gaskets, connecting PVC 110mm dia soil pipe with PVC coupling, nuts, mounting cistern on WC., and solid verity heavy duty plastic seat cover as per IS-2548, of approved make; cutting and making jari work etc. complete. EWC-P : WALL MOUNT EWC WITH CONCEALED FLUSH TANK/ FLUSH PLATE/ SEAT COVER ETC. EWC:_ Code Jaquar-FLS-WHT-5953USFM) ( Tank:- Single Pease concealed tank-Chrome Plate-JCP-CHR-152415, ( Jaquar, Kohler, Cera or Eq. )	38.00	Each			0.00
378	Supplying Installing and fixing White glazed vitreous Wash Basin Over -Counter, size 550x460 mm dia., with supporting M.S. or C.I. Brackets, 1 no, 32 mm CP Bottle trap with extension piece to wall flange with rubber adopter for waste connection and waste coupling.; with rack bolt fittings. Over Counter Type Basin , Jaquar Code- FLS WHT-5603 , with including Jaquar - Cp-waste coupling, bottle trap CP Allied-Chrome Plate- ( Jaquar, Kohler, Cera or Eq. )	36.00	Each			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
379	Supplying Installing and fixing central hole basin wall mounted concealed mixer with pillar cock,flush plate etc basin wall mounted mixer with required pipes connection etc complete.Wsh Basin Mixer - Wall mounted type- Jaquar- FLR-CHR-5233NK & Plate- ( Jaquar, Kohler, Cera or Eq. )	36.00	Each			0.00
380	Supplying Installing & fixing of Single lever Diverter for Concealed Fitting with Built in Non return Valve , for hot and cold water supply controlling with Diverter Handle with provision for both telephone shower and overhead shower complete with bath spout..Single Lever Diverter Jaquar-FLR-CHR-5065NK-/ Over HEad Shower-OHD-CHR-1639/ Shower Arm-SHA-CHR-479L450./ Bath Spout- SPJ-CHR-54295,with plate etc. comp. ( Jaquar, Kohler, Cera or Eq. )	32.00	Each			0.00
381	Supplying Installing & fixing of 3 in 1 operation Open wall Mixer with over head shower assembly , for hot and cold water supply controlling with open wall mixer complete etc. Jaquar-FLR-5273UPR, Wall Mixer with Provision For Overhead Shower with 115mm Long Bend Pipe, On Upper Side, Connecting Legs & Wall Flanges etc. comp. ( Jaquar, Kohler, Cera or Eq. )	5.00	Each			0.00
382	Supplying Installing & fixing in position 15 mm C.P. brass bib cocks of best quality (as approved by the Engineer-in-Charge).FLR-5041N 2 Way Bib Cock With Wall Flange etc. comp. ( Jaquar, Kohler, Cera or Eq. )	38.00	Each			0.00
383	Supplying Installing & fixing of Hand Shower (Health Faucet), with 8mm Dia,1Rmt Long pvc Tube and Wall Hook accessories to complete the item. Jaquar- ALD-579 Hand Shower (Health Faucet) with 1 Meter Long Easy Flex Tube in Chrome Finish and Wall Hook with N.R.V (Back Flow Preventer) etc. comp. ( Jaquar, Kohler, Cera or Eq. )	38.00	Each			0.00
384	Supplying Installing & fixing 15mm C.P. brass angle valve with C.P. copper connecting pipe 450 mm long and nuts, washer and brass flange complete, including cutting and making good the wall where required. Jaquar-FLR-5053N Angular Stop Cock With Wall Flange ( Jaquar, Kohler, Cera or Eq. )	135.00	Each			0.00
385	Supplying Installing & fixing of concealed stop cock with wall flange and complete., for the following sizes. 15mm Jaquar-CON-069FTK Exposed Part Kit of Concealed Stop Cock with Operating Lever, Collor Bush & Adjustable Wall Flange (Compatible with ALD-069FT) ( Jaquar, Kohler, Cera or Eq. )	33.00	Each			0.00
386	Supplying Installing & fixing of concealed stop cock with wall flange and complete., for the following sizes. 25mm Jaquar-CON-1081KN Flush Cock with Wall Flange 25mm with Plain Knob type ( Jaquar, Kohler, Cera or Eq. )	36.00	Each			0.00
387	Supplying Installing & fixing white vitreous china flat back urinal of size 590x375x390mm as per IS-2556 (Part-2 ) with C.I. hangers and 15mm dia. C.P. spreader,15MM cCP angular Stop Cock ,Flexible pipe Connecion, 32mm dia CP bottle trap and pipe to wall with C.P. flange complete including cutting and making good the walls and floors wherever required. Jaquar-URS-WHT-13255 Urinal Without Sensor With Fixing Accessories, Size: 480x300x740 mm ( Jaquar, Kohler, Cera or Eq. )	13.00	Each			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
388	Supplying Installing & fixing of concealed type urinal sensor with concealed body, divertor, cock with wall flange and complete., for the following sizes. SNR-STL-51087 Sensor Concealed Type Flushing Valve for Urinal Complete Set with Installation Box with Control Cock (Battery Operated) ( Jaquar, Kohler, Cera or Eq. )	13.00	Each			0.00
389	Supplying Installing & fixing of Flush Valve Auto operation cock with wall Flange 32mm with lever knob complete in all respects including cutting and making good the walls etc. FLV-1085N Metropole Flush Valve Dual Flow 32mm Size (Concealed Body) with Exposed Shut Off Provision & Round Flange (3.0/6.0 Lts. Per Flushing) ( Jaquar, Kohler, Cera or Eq. )	2.00	Each			0.00
390	Supplying Installing & fixing of Pressmatic concealed flush Valve Auto operation cock with wall Flange 15mm with lever knob complete in all respects including cutting and making good the walls etc. for Urinal area Flsuh :- PRS-073 Auto closing Concealed Urinal Flush Valve With Wall Flange ( Jaquar, Kohler, Cera or Eq. )	2.00	Each			0.00
391	Supplying Installing & fixing of Pressmatic open type anguler cock concealed flush Valve Auto operation cock with wall Flange 15mm with lever knob complete in all respects including cutting and making good the walls etc. for Urinal area Flsuh :- PRS-077 Urinal Valve Auto Closing System with Built-in Control Cock & Wall Flange ( Jaquar, Kohler, Cera or Eq. )	2.00	Each			0.00
392	Supplying Installing & fixing of Pressmatic open type Bib Tap wall Monted type Auto operation cock with wall Flange 15mm with lever knob complete in all respects including cutting and making good the walls etc. for Press Matic Bib cock- Wall Mounted :- PRS-043 Bib Cock Auto Closing System with Built-in Control Cock With Wall Flange ( Jaquar, Kohler, Cera or Eq. )	2.00	Each			0.00
393	Supplying Installing & fixing of Pressmatic open type Bib Tap floor Monted type Auto operation cock with wall Flange 15mm with lever knob complete in all respects including cutting and making good the walls etc. for Press Matic Bib cock- floor Mounted :- PRS-031 Pillar Cock Auto Closing System ( Jaquar, Kohler, Cera or Eq. )	2.00	Each			0.00
394	Supplying Installing & fixing of manual operation type Bib Tap wall Monted type cock with wall Flange 15mm with lever knob complete in all respects including cutting and making good the walls etc. Bib cock :- CON-037KN Bib Cock Also available CON-047KN Bib Cock with Wall Flange ( Jaquar, Kohler, Cera or Eq. )	36.00	Each			0.00
395	Supplying Installing & fixing stainless steel sink, R.S. or C.I. Painted brackets painted, 40mm dia. C.P. waste, C.P. brass chain and rubber plug, strainer with necessary C.P. brass unions complete including painting the fittings and cutting and making good the walls wherever required, with CP sink cock with raised "J" shaped swinging spout. NIRALI - GRACE - PLAIN - 510 X 432 MM (ONLY BOWL) SINK COCK WALL MOUNTED WITH J-SHAP SWIING OPERATION - ( Nirali-Jaquar, Kohler, Cera or Eq. )	24.00	Each			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
396	Providing ,Supplying Installing and fixing of electrical instantaneous and Storage type water Geyser of approved make. 6 LTR. CAP. JAQUAR/KOHLER A-O SMITH JAQUAR/KOHLER/ RECOLD/ SPEARHOT/ KHOLAR MAKES	34.00	Each			0.00
397	Providing Supplying Installing and fixing of Gas LPG based instantaneous and Storage type water Geyser of approved make.16 LPM / BENCHMARK/ SPEARHOT/ RECOLD / JAQUAR/KOHLER A-O SMITH MAKES	3.00	Each			0.00
398	providing and fixing 9 mm thick nitrial electrometic insulation tube over pipes in wall chase and filling the wall chase as per manufature's specifications for hot water insulation with over aluminium tape covering over the insulation. Open Line work : covered installation/) (Tharmaflex, Acccoflex, Superloan Makes)15mm pipe Size	118.00	Rmt			0.00
399	providing and fixing 9 mm thick nitrial electrometic insulation tube over pipes in wall chase and filling the wall chase as per manufature's specifications for hot water insulation with over aluminium tape covering over the insulation. Open Line work : covered installation/) (Tharmaflex, Acccoflex, Superloan Makes)20mm pipe Size	33.00	Rmt			0.00
400	providing and fixing 9 mm thick nitrial electrometic insulation tube over pipes in wall chase and filling the wall chase as per manufature's specifications for hot water insulation with over aluminium tape covering over the insulation. Open Line work : covered installation/) (Tharmaflex, Acccoflex, Superloan Makes)25mm pipe Size	7.00	Rmt			0.00
401	providing and fixing 9 mm thick nitrial electrometic insulation tube over pipes in wall chase and filling the wall chase as per manufature's specifications for hot water insulation with over aluminium tape covering over the insulation. Open Line work : covered installation/) (Tharmaflex, Acccoflex, Superloan Makes)32mm pipe Size	7.00	Rmt			0.00
402	providing and fixing 9 mm thick nitrial electrometic insulation tube over pipes in wall chase and filling the wall chase as per manufature's specifications for hot water insulation with over aluminium tape covering over the insulation. Open Line work : covered installation/) (Tharmaflex, Acccoflex, Superloan Makes)40mm pipe Size	7.00	Rmt			0.00
403	Supply, Installation, Testing and Commissioning of 25 mm dia. air release valve. ( Zoloto/ Audco/ R.B. or Eq. Make)	15.00	Each			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
404	Supply, installation, testing & commissioning of VFD based Hydropneumatic system with FRP tank, pump-motor set, suction delivery valves & pipe, all instrumentation viz. Pressure switch, pressure gauge, level indicator, etc, starter panel (including one main pump & one trimmer pump shall have VFD), cables, etc. FRP Hydropneumatic Tank with inter connection and suitable connections such as inlet, drain, outlet, pressure gauge, union connection, isolation valve, outlet pipe (to be connected to the header pipe), pressure switch, outlet valves, mounting pads, etc. with all accessories. vertical booster pumps directly coupled with the motor with SS casing, SS impeller, SS shaft and driven by 415 V AC, 3 phase, 50 Hz. motor running at 2900 RPM speed and shall be supplied with all accessories viz. strainer / dry run protection/foot valve, base plate, coupling, etc. complete. The scope shall also include suction & delivery piping & valves. ( Domestic Booster Pump )( Grundfos, ITT Lowara, or Eq. Make) 10m <sup>3</sup> /hr @40mtr head each pump ( 1w + 1s. set) with booster tank 100 ltr. cap. at terrace lvl.	1.00	Job			0.00
405	Supplying, installing, testing and commissioning of centrifugal end suction / monoblock pumps with c.i. casing, Bronze impeller, SS Shaft and driven by 415 V AC, 3 phase, 50HZ., motor running at 2900 rpm speed and shall be supplied with all accessories viz., base plate, coupling, motor, starter panel, cabling up to panel, earthing, suction, delivery & header pipes & valves etc., complete. (Domestic water pumps : To pump UG tank to OHT Feed Water Tank)( Grundfos, ITT Lowara, or Eq. Make) Capacity : 10m <sup>3</sup> /hr. 2 Nos. main Pumps ( 1 Working + 1 Stand by Set)	1.00	Job			0.00
406	Supplying, installing, testing and commissioning of centrifugal end suction / monoblock pumps with c.i. casing, Bronze impeller, SS Shaft and driven by 415 V AC, 3 phase, 50HZ., motor running at 2900 rpm speed and shall be supplied with all accessories viz., base plate, coupling, motor, starter panel, cabling up to panel, earthing, suction, delivery & header pipes & valves etc., complete. (Flushing water pumps : To pump UG tank to OHT Feed Water Tank)( Grundfos, ITT Lowara, or Eq. Make) Capacity : 7.50 m <sup>3</sup> /hr. 2 Nos. main Pumps ( 1 Working + 1 Stand by Set)	1.00	Job			0.00
407	Supplying, installing, testing and commissioning of centrifugal end suction / monoblock pumps with c.i. casing, Bronze impeller, SS Shaft and driven by 415 V AC, 3 phase, 50HZ., motor running at 2900 rpm speed and shall be supplied with all accessories viz., base plate, coupling, motor, starter panel, cabling up to panel, earthing, suction, delivery & header pipes & valves etc., complete. (Garden & irrigation water pumps : To pump UG tank to Garden Feed Water Tank)( Grundfos, ITT Lowara, or Eq. Make) Capacity : 5 m <sup>3</sup> /hr. 2 Nos. main Pumps ( 1 Working + 1 Stand by Set)	1.00	Job			0.00
408	WATER COOLER ; Supply, installation, testing & commissioning of S.S. storage type water cooler with inbuilt with on line U.V. filtration along with built all interconnectio piping, supports and valve and other electrical requirement ,along with inbuilt storage tank with nessessary accessories, safety valve, air valve, drain arrangement, all insturumentation, base frame, necessary electrification, etc. complete for Drinking Water supply. ( Voltas, Blu star, Power H2o Make) Capacity : 80 storage capacity. Complete as directed by site eng. incharge.	1.00	Job			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
409	HEAT PUMP SYSTEM:-Supply, installation, testing & commissioning of centralized Hot water Generation Air to Water Heat Pump , with 500 ltr. Storage tank , Refrigerant type Compressor, Internal pump, Panels, Controls , all interconnection piping, supports and valve and other electrical requirement ,along with inbuilt controls with necessary accessories, safety valve, air valve, drain arrangement, all instrumentation, base frame, necessary electrification, etc. complete for Entire Residence. ( Solahart, A.O. Smith, Or Eq. Make)Heating capacity (output):- ( 200 to 250 ltr/hr)Instant and rated hot water output:- Max. 55°C to 60°C Compressor:- Refrigerant type Storage Tank:-450 to 500 Liters with storage tank capacity. SS-316 or M.S. with epoxy coating With insulation & Heat Control Panel, Internal Pump GRUNDFOS/ITT LOWARA/WILO/ MAKE ( Location At Terrace lvl.)	0.00	Job			0.00
410	Constructing Grit/ Silt chamber in brick masonry with cement mortar 1:4, waterproofing cement plastering 12mm thick for inside and outside using waterproofing compound, CC 1:4:8 bedding with 1:2 smooth finishing inside with chamfering, RCC M-20 slab in M-20 using black trap, san and cement with 150mm thick RCC slab and providing and fixing medium type FRP manhole cover and farm etc. comp.( Size 1500 x 1500 x up to 2.0mtr depth)	2.00	Job			0.00
411	PUDDLE SLEEVES:-Providing & Installing of the G.I. heavy duty Puddle Sleeve in the UGT & OHT water tanks , durring the construction of the RCC tanks. The pipe and flazes nut bolt material are as per the IS recommondation must be follow. all works must properly finishing as per site eng. Incharge slab & Beams where ever req. 200 mm pipe dia x 600mm length	3.00	Nos.			0.00
412	Providing & Installing of the G.I. heavy duty Puddle Sleeve in the UGT & OHT water tanks , durring the construction of the RCC tanks. The pipe and flazes nut bolt material are as per the IS recommondation must be follow. all works must properly finishing as per site eng. Incharge slab & Beams where ever req. ,150 mm pipe dia x 600mm length	5.00	Nos.			0.00
413	Providing & Installing of the G.I. heavy duty Puddle Sleeve in the UGT & OHT water tanks , durring the construction of the RCC tanks. The pipe and flazes nut bolt material are as per the IS recommondation must be follow. all works must properly finishing as per site eng. Incharge slab & Beams where ever req. ,100 mm pipe dia x 600mm length	15.00	Nos.			0.00
414	Providing & Installing of the G.I. heavy duty Puddle Sleeve in the UGT & OHT water tanks , durring the construction of the RCC tanks. The pipe and flazes nut bolt material are as per the IS recommondation must be follow. all works must properly finishing as per site eng. Incharge slab & Beams where ever req. ,80 mm pipe dia x 600mm length	16.00	Nos.			0.00
415	Providing & Installing of the G.I. heavy duty Puddle Sleeve in the UGT & OHT water tanks , durring the construction of the RCC tanks. The pipe and flazes nut bolt material are as per the IS recommondation must be follow. all works must properly finishing as per site eng. Incharge slab & Beams where ever req. ,50 mm pipe dia x 450mm length	21.00	Nos.			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
416	Providing ,Supplying Installing and fixing of electrical instantaneous and Storage type water Geyser of approved make. 6 LTR. CAP. JAQUAR/KOHLER A-O SMITH JAQUAR/KOHLER/ RECOLD/ SPEARHOT/ KHOLAR MAKES	34.00	Each			0.00
417	Providing Supplying Installing and fixing of Gas LPG based instantaneous and Storage type water Geyser of approved make.16 LPM / BENCHMARK/ SPEARHOT/ RECOLD / JAQUAR/KOHLER A-O SMITH MAKES	3.00	Each			0.00
418	Providian's Escape Signage:- Photoluminescent rigid plastic, 2mm thickness, printed on high quality glass paint with UV resistance, 5 year warranty, material used-non radioactive, non-phosphorous, non toxic and lead free. Available in different types & sizes, time after removing the light source (in minutes):- 60 minutes, luminescent intensity(milicandelas*per square meter-mcd/sqm):30 mcd/sqm. Luminescent intensity greater than 0.32 mcd/sqm, period of light decay* (in minutes) :3100 (1) "Fire Exits" ( Size 365 x 119 x 84 mm or nearest )	32.00	No.			0.00
419	(2)Fire exit signs of standard size ( Size 450 x 200 x 84 mm or nearest ) (photoluminous type.(glowing in dark type)Providing and fixing portable fire extinguishers of approved make ISI marked of following Capacity at the places shown on Drawing & mentioned in CFO letter	32.00	No.			0.00
420	Providing, fixing, testing and commissioning of below Auto Glow Signages. In Case of Fire do not use Lift ,Use Staircase 8"x 8"	32.00	No			0.00
421	(1) Providing and fixing 2kg. Stored pressure type, pressure gauge, gross weight 4.9kg, empty weight 2.9kg, can height 440mm, diameter 140mm, discharge time less than 9 sec., controllable discharge mechanism (squeeze grip with easy snap safety seal), range minimum 4 meters, applicable on class A,B and electrically started fire, very effective on class B fire, B Rating 144B, can construction: deep drawn & co., Mig welded , valve construction: Forging and Mechining, Internal coating of powder coating, sheet metal thickness: 1.60mm, 5 years warranty. with installer system with superior quality EPDM rubber hosepipe etc., complete. ( 2kg. Monnex Powder)	32.00	No			0.00
422	(2) Providing & fixing 4kg. Stored pressure type, pressure gauge, gross weight 7.4kg, empty weight 3.4kg, can height 480mm, diameter 160mm, discharge time less than 13 sec., controllable discharge mechanism (squeeze grip with easy snap safety seal), range minimum 4 meters, applicable on class A,B and electrically started fire, very effective on class B fire, B Rating 144B, can construction: deep drawn & co., Mig welded , valve construction: Forging and Mechining, Internal coating of powder coating, sheet metal thickness: 1.60mm, 5 years warranty. with installer system with superior quality EPDM rubber hosepipe etc., complete. ( 4kg. Monnex Powder)	32.00	No			0.00
423	(8) Providing & Fixing four bucket stand along with bucket compete.	25.00	Set			0.00
424	Providing and fixing Trolley type foam fire extinguishers cap. 50 liters. capacity	5.00	No			0.00
425	Providing and fixing Trolley type Co2 gas fire extinguishers cap. 9 liters will be provided for transformer area.	5.00	No			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
426	FIRE WET RISER SYSTEM :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., Note : The piping installation has to be put to hydraulic test to1.5 times Working pressure before applying paint or pipe coating and wrapping etc. Complete. (1) 150mm (Wet Riser hydrant )	130.00	Rmt			0.00
427	FIRE WET RISER SYSTEM :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., Note : The piping installation has to be put to hydraulic test to1.5 times Working pressure before applying paint or pipe coating and wrapping etc. Complete. (2) 100mm	450.00	Rmt			0.00
428	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve, check valve, strainers etc. (1) 150 mm diameter	6.00	No			0.00
429	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve, check valve, strainers etc.(2) 100 mm diameter	12.00	No			0.00
430	Fire hydrant system supplying installing, testing and commissioning of 63 mm diameter (2.1/2") N.B. hydrant Single outlet gun metal hydrant valve with flange, inlet, stop valve, spindle and cast iron han wheel. It has a female instantaneous outlet with blank cap and is hydrostatically tested to 21kgf/cm2 pressure having a flow rate of 900 LPM at 7 kgf/cm2 of pressure with blank cap and wheel as per IS 5290 etc. complete.	21.00	Nos.			0.00
431	Supplying installing , testing and commissioning of reinforced rubber lined RRL fire hose of 63mm diameter 15 m length as per IS 8423 binded with one set of male and female instantaneous gunmetal coupling as per IS 903 .	21.00	Set			0.00
432	Supplying installing, testing and commissioning of 19mm diameter 36.50m length hose with rubber lining smooth borre, reinforced of natural/ synthetic fibers, a rubber cover finish shall be smooth , fluted or fabric marked with minimum thickness of 1.50mm and to with stand a working pressure of 10kg.sqcm. conforming & tested as per IS 444.	21.00	Nos.			0.00
433	Supplying and fixing 2 way Fire Brigade service inlet of size 150 mm dia. with 2 No. 63mm (2.1/2") size GM male outlets (bronze male coupling) including metallic cover of mild steel and glass front, indicator plates, 150mm BFV and schematic mimic diagrams on metallic plate for easy operation as directed by Architect etc.complete to system.	3.00	Set			0.00
434	Providing and fixing heavy quality Drain pipe & valves approved by site eng. In cherge etc. complete. For draining of sprinkler riser. (1) Ball Valve : 50 mm diameter, PN 1.0	6.00	Nos.			0.00
435	Providing and fixing heavy quality Drain pipe & valves approved by site eng. In cherge etc. complete. For draining of sprinkler riser. (2) Drain pipe : 50 mm M.S.pipe & Fittings (class-C heavy duty : IS 1239)	45.00	Mtr.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
436	Supplying Installing , testing and commissioning of Hose Cabinet made out 18gauge M.S. Sheet with double glass door with locking arrangement and painted with two coats of fire red enamel paint at outer use of the Box and two coats of white enamel paint at inner side of the box is to accommodated 2 nos., of fire hose box 20" x 24" x 10" complete.	21.00	Nos.			0.00
437	Providing, fixing, testing and commissioning of MS air cushion tank on top of each riser fabricated from 6mm thick MS plate, 200mm in diameter and 1200mm in height and dished ends fabricated from 8mm thick MS plate with Air release valve with stop cock.	3.00	No			0.00
438	Supplying Installing , testing and commissioning of Gun metal branch pipe size of 63mm diameter x 19mm diameter as per IS 903 complete	21.00	No			0.00
439	Supplying and fixing specially designed gunmetal orifice plates on hydrant outlets of landing valves including distant pieces of suitable size for adjustment of delivery pressure of 3.5 kg/ sq.cm as required by LPA complete with necessary companion flanges, nuts, bolts, gaskets etc. complete.	21.00	Nos.			0.00
440	Flow Switch on 80 mm Diameter pipe	2.00	Nos.			0.00
441	Supplying Installing, testing and commission of Hose reel cabin M.S. Pressed reel 600mm diameter swinging type motion which allows a 180deg. Swing and conforms to IS: 884/85.	21.00	Nos.			0.00
442	Supplying Installing, testing and commission of reinforced Rubber line RRL Fire hose of 63mm diameter 15m. Length as per IS 8423 binded with one set of male and female instantaneous Genmetal coupling as per IS 903.	42.00	Nos.			0.00
443	Wrapping and Galing of U/G pipe line work includes one coat of anti corrosion paint ( Black) and two coats of Bituminous cloth. (1) 150mm	150.00	Rmt			0.00
444	Wrapping and Galing of U/G pipe line work includes one coat of anti corrosion paint ( Black) and two coats of Bituminous cloth. For M.S.pipe & Fittings (2) 100mm	350.00	Rmt			0.00
445	Supplying and fixing specially designed gunmetal orifice plates on hydrant outlets of landing valves including distant pieces of suitable size for adjustment of delivery pressure of 3.5 kg/ sq.cm as required by LPA complete with necessary companion flanges, nuts, bolts, gaskets etc. complete.	21.00	Nos.			0.00
446	MAIN FIRE PUMP ROOM ,TANK AND ACCESSORIES :- Supplying installing testing and commissioning approved make centrifugal pump end suction type couple to eclectic mortar of suitable HP, Fitted on a common base frame and rated for fire duty, Including 2 nos. pressure gauge fitted on suction & delivery side of the pump. the pump shall run on 400/440V, 3ph, 50 hz electric supply, duty of pump 2850 LPM, @ 55 mtr head, control panel shall be specification . ( cost of control panel is not included)	1.00	Nos.			0.00
447	Supplying installing testing and commissioning of fire hydrant multistage pump capable of delivering 2850 LPM, @ 55 mtr head coupled to water cooled diesel engine of adequate HP. It shall be fitted with radiator on a common base from which complete ancillary units such as cooling system, non return valve, Y strainer, fuel tank of adequate capacity, pressure gauge , pressure switch, control panel shall be as per specification ( cost of control panel is not included)	1.00	Nos.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
448	Supplying installing testing and commissioning electrically driven jockey pump of capacity 180 LPM at 55mtr head with all the necessary accessories viz., pressure gauges etc, operating on 3PH 50 hz, 400/440 VAC supply including foundation, bolts etc. complete control panel shall be per specification ( cost of control panel is not included )	1.00	Nos.			0.00
449	Supply and installation, testing and commissioning of COMMON control panel for fire fighting system consisting of electrical mortar driven 60 HP main fire pump, Jokey pump and 10 Hp consisting of the following. INCOMING: 1no. set of phase inducing lamps with SFU rate suitable A 1no set of SuitableAmps. TPNE Ai, bus bars 1no. Suitable Amps. Ammeter. 1no. Suitable V voltmeter with phase selector switch, isolating switch 400 A outgoing for main electrical pump: 1 no Suitable amps MCB 1 no. S/D starter suitable for 60 hp 1 no. single phase preventer suitable for the pump described for 10HP 1 no. single phase preventer suitable for the pump described above 1 no. set on/off indicating lamps, 1 no auto manual selector switch outgoing for jokey pump 1no. Suitable amps MCB 1 no. dol starter suitable for 200 hp 1no. single phase preventer suitable for the pump described above 1 no. set of on/off indicating lamps 1 no. auto manual selector switch ENGINE control selection no.1 diesel engine for stand by pump:a) Main switch 2 pole on/off -1 no.b) Battery charger with transformer with rectifier resistance DC ammeter, DC voltmeter, T/B selector switch -1 set c) Indicating lamps for fault communication ( Battery charger supply on, control on , engine running, low oil pressure, high water pressure and engineer over speed) - ^ nos. push buttons for starter, stop reset- 4 nos. e) selector switches ( engine control, mode selector)- 2 nos . f) auxiliary relays/ contractors / timer for driven pump battery charger shall be taken separately sequenence operating for starting and stopping of the engine-1 -g) Hooter for audio alarm ( Industrial type) -1 no. Accessories for outgoing supply for the mortars GI SWD earthing wire for the above mortar accessories for outgoing supply for diesel engine: copper conductor armored cable Suitable sq.mm of Suitable core x 2 runs a ) battery 2 strans b) Engineer on/off 2 strands e) water temperature 2 strands f) Spare 1 strand the cost of control panel shall also include necessary pressure switches with necessary cabling & inter locked with the panel to enable sequential operation of pumps. Including terrace mortar necessary earthing all the components shall be housed in a common cubical, however, the feed cable for diesel engine hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc. ( Make:- L & T, Siemens, Schinder, ABB)	1.00	Unit			0.00
452	Providing, fixing, testing and commissioning of precharged air vessel (size 450 mm diameter & 2000 mm height) for pressurization of hydrant / sprinkler system complete with adequate pressure switches (as per design / requirement) with valve.	1.00	No			0.00
453	Supplying and fixing 4 way Fire Brigade service inlet of size 150 mm dia. with 4 No. 63mm (2.1/2") size GM male outlets ( bronze male coupling) including metallic cover of mild steel and glass front, indicator plates,150mm BFV and schematic mimic diagrams on metallic plate for easy operation as directed by Architect etc.complete to UGR.	1.00	Set			0.00
454	Supplying, installation testing and commissioning of approved quality ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc.,Note : The piping installation has to be put to hydraulic test to 1.5 times Working pressure before applying paint or pipe coating and wrapping etc. Complete (1) 150mm (Suction and discharge header)	35.00	Rmt			0.00
455	Supplying, installation testing and commissioning of approved quality G.I..pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc.,Note : The piping installation has to be put to hydraulic test to 1.5 times Working pressure before applying paint or pipe coating and wrapping etc. Complete (3) 80 mm	25.00	Rmt			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
456	Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc.,Note : The piping installation has to be put to hydraulic test to 1.5 times Working pressure before applying paint or pipe coating and wrapping etc. Complete (4) 50 mm	25.00	Rmt			0.00
457	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc., (4) 80 mm size	2.00	No			0.00
458	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc., (4) 50 mm size	2.00	No			0.00
459	Supply, installation testing and commissioning pressure switch assembly with following components (1) Approved pressure switches with required cable	3.00	No			0.00
460	Supply, installation testing and commissioning pressure switch assembly with following components (2) Ball Valve 50 mm diameter	3.00	No			0.00
461	Supply, installation testing and commissioning pressure switch assembly with following components (3) Ball Valve 20 mm diameter	3.00	No			0.00
462	Supply, installation testing and commissioning pressure switch assembly with following components (4) 20 mm diameter pipe as per specification, Providing and fixing of M.S/ G.I. Pipe.	5.00	Mtr.			0.00
463	Supply, installation testing and commissioning pressure switch assembly with following components (5) 50 mm diameter pipe as per specification, Providing and fixing of M.S./ G.I. Pipe.	5.00	Mtr.			0.00
464	Providing and laying the PVC insulated & sheathed FRLS Armoured cables of 1.1 K.V. Aluminium Conductor 3 core x 95 sq.mm	25.00	Mtr.			0.00
465	Providing and laying the PVC insulated & sheathed FRLS Armoured cables of 1.1 K.V. Aluminium Conductor 3 core x 10 sq.mm (cable from pump room to terrace for booster pump)	50.00	Mtr.			0.00
466	Providing and laying the PVC insulated & sheathed FRLS Armoured cables of 1.1 K.V. Aluminium Conductor 3 core x 16 sq.mm (cable for jockey pump)	25.00	Mtr.			0.00
467	Providing and fixing in position copper cable end termination glands for above mentioned cables 3 core x 95 sq.mm	3.00	No			0.00
468	Providing and fixing in position copper cable end termination glands for above mentioned cables 3 core x 10 sq.mm (cable from Booster Pump to terrace Remort Panel )	3.00	No			0.00
469	Providing and fixing in position copper cable end termination glands for above mentioned cables 3 core x 16 sq.mm (cable for jockey pump)	25.00	No			0.00
470	Providing, installation, testing, & commissioning of Remote Panel for fire fighting terrace pump with push buttons for manual operation (the remote panel shall be located at ground level) all complete.	1.00	No			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
471	Supplying, laying and connecting of following size 1.1 kV grade copper conductor armoured control cable on wall or on existing cable tray with clamping, dressing or drawn in existing ducts all as required (For remote panel for fire fighting terrace pump). 3 core x 6 sq.mm	50.00	Mtr.			0.00
472	Providing and fixing fire retardent / extinguishing electrical insulated synthetic mat of 5mm thick $\pm 10\%$ conforming to latest BIS doc no.- ET-02(5440) meeting requirements of IS 3043 / IS 5216 (Part I, II & III), IS 8437 & IEC 479 suitable for all voltages not exceeding 3.3 KV AC supply and having minimum width of 1000mm $\pm 20$ mm and including supply of required quantity of adhsvie / compound and fixing the same at site as per site requirement.	6.00	Mtr.			0.00
473	Fabricating and installing following size of perforated G.I.cable trays including horizontal and vertical bends, reducers, tees, cross members and other accessories as required and duly suspended from the ceiling with M.S. suspenders including painting, etc., as required. 150mm width x 50mm depth x 1.6 mm thickness.	15.00	Mtr.			0.00
474	Providing & fixing 25 mm x 5 mm G.I. Strip in on surface or in recess for connections etc as required.	15.00	Mtr.			0.00
475	Providing & fixing 25 mm x 5 mm G.I. Strip in 40 mm dia GI pipe from earth electrode as required.	15.00	Mtr.			0.00
476	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	3.00	Each			0.00
477	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	3.00	Each			0.00
478	TERRACE (BOOSTER) PUMPS ,TANK ,PIPING AND ACCESSORIES :- Supplying installing testing and commissioning electrically driven terrace pump of capacity 900 lpm, at 35 mtr head with all the necessary accessories viz., pressure gauges etc., operating on 3ph 50 hz, 400/440V ac supply including foundation, bolt etc., and complete control panel shall be as per the specification 87.	2.00	No			0.00
479	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc. (1) Size 100 mm size(for jockey pump suction)	8.00	No			0.00
480	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc. (2) 80 mm size	4.00	No			0.00
481	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc. (4) 50 mm size	4.00	No			0.00
482	Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (1) 100mm	125.00	Rmt			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
483	Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (2) 65mm	40.00	Rmt			0.00
484	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (1) 150 mm dia.	10.00	Rmt.			0.00
485	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (2) 100 mm diameter	25.00	Rmt.			0.00
486	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (3) 80 mm dia.	50.00	Rmt.			0.00
487	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (4) 65 mm diameter	15.00	Rmt.			0.00
488	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (5) 50 mm diameter	50.00	Rmt.			0.00
489	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (6) 40 mm dia.	50.00	Rmt.			0.00

Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
490	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (7) 32 mm diameter	50.00	Rmt.			0.00
491	SPRINKLER PROTECTION (Suppression system) :- Supplying, installation testing and commissioning of approved quality G.I.pipe & Fittings ( class-B) conforming to as per IS 1239 such as tee, elbows, check nuts, flangeer, nipples etc., including cutting welding, trending fixing on walls, ceiling (using 41- tech pipe/ M.S. Angle supports work includes two coats of metal primer and two coats of red enamel paint etc., (8) 25 mm diameter	100.00	Rmt.			0.00
492	Supplying Installing , testing and commissioning of approved make 15mm diameter sprinkler bulb pendent/ wall mounted type designed to operated 68 degrees centegrad make Tyco/HD Fire complete ( color code of bulb liquid inside glass bulb type pendent as per IS 9972: 57 deg. C. orage , 68 deg. - Red, 79de. C. -Yellow, 93 deg.C.- Green, 141deg. C. - Blue, !82deg. C - Mauve, 227/260 deg.C.- Black)Make and quality to operate at 68 degrees c.etc. complete. Note : If space between slab & false ceiling is 800 mm & more, upright sprinklers to be provided by Contractor	25.00	Nos.			0.00
493	Providing ,fixing, testing ,commissioning approved make flow switche on 80 mm supply line for connecting to main fire alarm panel operating at 24-V at BMS room/security room including 2 core 1.5 sq.mm cabling,	1.00	Nos.			0.00
494	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc., (1) 25mm diameter (Drain Valve)	1.00	Nos			0.00
495	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc., (2) 100mm diameter Gate Valve	1.00	Nos			0.00
496	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc., (3) Ball Valve 20 mm diameter ( test drain)	1.00	No			0.00
497	Supply and installation, testing and commissioning of hydraulic allying operated sprinkler cabit valve with water meter gong bell and trims as required, pressure gauges, drain valve, ball valve , check valve, strainers etc., (4) 150 mm ALARM VALVE with all accessories like motor gong test valve etc	0.00	No			0.00
498	Rossete Plate:-Providing, installation, testing & commissioning of adjustable rosette plate for 15mm dia in white finish UL Listed or FM approved complete as required.	25.00	No			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
499	Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, center bracket, stockbar of following sizes complete as required.1200mm	25.00	No			0.00
500	Providing and fixing dial type pressure gauge with isolation cock and copper pipe on main header Dial diameter 100 mm celebration 0-15 / sq. cm.	2.00	No			0.00
501	Providing & fixing 25mm dia gunmetal inspecting & testing assembly with ball valve(3 nos.), gunmetal sight glass, by pass valve & connected to drain line.	2.00	No			0.00
502	Supplying, Installation, Testing and commissioning of 2 C X 1.5 Sqmm Copper Armoured for Flow Switch Cabling from Annunciation panel	75.00	Rmtr.			0.00
503	Supplying, Installation, Testing and commissioning of Annunciator panel for flow control switch, providing Audio/Visual indicating of actuation of automatic sprinkler system for each zone complete as per specifications with provision for 3 zones (2 working and 1 spare for future). 'Indication of zone fire, 'Indication of zone fault, 'Fire/Fault hooter, 'Alarm cancel for fire/fault, 'Battery for emergency	2.00	No			0.00
504	Manual Fire Alram System. Providing, fixing, testing and commissioning of Manual Call Point.	11.00	No			0.00
505	Providing, fixing, testing and commissioning of Hooter	11.00	No			0.00
506	Providing, fixing, testing and commissioning of Conventional Fire Alarm Panel 12 Zone	2.00	No			0.00
507	Providing, fixing, testing and commissioning of 2 Core X 1.5 Sqmm Flexible copper Cable with PVC Conduit.	75.00	Rmtr.			0.00
508	Providing, fixing, testing and commissioning of 3 Core X 1.5 Sqmm flexible copper Cable with PVC Condiut.	75.00	Rmtr.			0.00
509	On - Off Pump Trigger System. :- Providing, fixing, testing and commissioning of On -Off Switch.	11.00	No			0.00
510	Fire Resistant Door Double Leaf Hinge Type (2 Hour Fire Rated) 1.00 mm thick GI Sheet claddd 40mm thick shutter complete with GI frame (Single Ribet – Frame Profile 100 x 57mm) made from 1.20mm thick GI Sheet & Fixing arrangements AS PER BS 476 PART- 20 & 22 & IS: 3614 Part - II for Integrity, Stability.Door Size: 2000mm (W) x 2100mm (H) Including below Accessories S.S. Ball Bearing Hinges- 6 Nos Vision Panel with Fire Glass of Size: 200 x 300mm - 2 Nos Heavy Duty Door Closer - 2 Nos Heavy Duty Door Closer - 2 Nos Panic Exit Device for Double Leaf Door - 1 No. External Trim Bar (Panic Latch) - 1 No.	5.00	No			0.00
511	ADDITIONAL WORK:- Core Cutting in RCC wall, beam, columns and roof as required locations of required size & depth and repairing , making it goods complete . Size 40mm to 80mm dia ( avarge depth 200)	20.00	No			0.00
512	Core Cutting in RCC wall, beam, columns and roof as required locations of required size & depth and repairing , making it goods complete :- Size 100mm to 200mm dia ( avarge depth 200)	20.00	Nos.			0.00
513	Providing and fixing cast iron following size complete with bolts, nuts, washers and neoprene gaskets as per specifications. 200mm dia y strainer in main suction header	2.00	Nos.			0.00



Item No.	Description of Item (with brief specification and reference to book of specification)	Quantity	Unit	Rate		Amount
				In Figure	In Words	
514	Charges for liasoning with CFO and getting all approvals and permissions & NOC 's required for fire fighting at various stages & after completion of the project.(All official and receipted payments would be submitted and Reembursed)	3.00	Lumsum.			0.00
					Total =	0.00

(G-4)

55 m Road

20 m Road

20 m Road

28.5 m Road

PR-4

C-7/2

Proposed Community Facilities

FP - 53  
Area - 12447.66 Sq. Mtr.

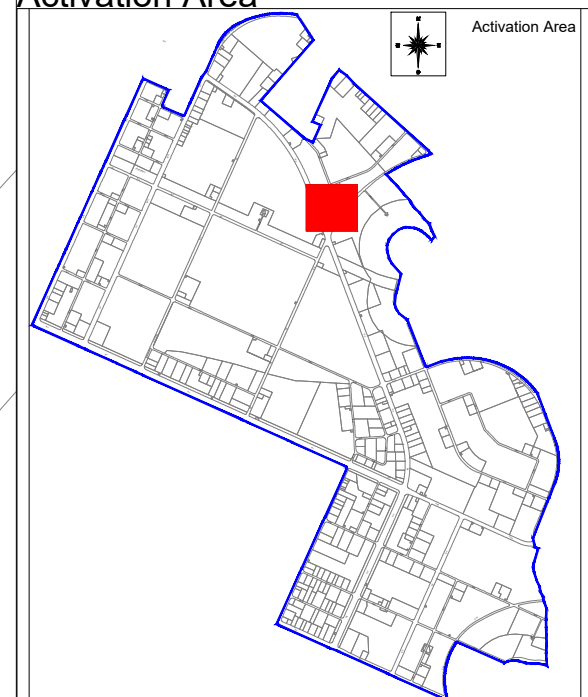
Proposed  
Community Center

FP - 54 (Part-2)  
Proposed Hospital Boundary  
Area - 7048 Sq. Mtr.

FP - 54 (Part-3)  
Area - 6399 Sq. Mtr.  
Proposed Fire Fighting  
Boundary

FP - 54 (Part-1)  
Proposed School Boundary  
Area - 34529 Sq. Mtr.

Activation Area



Sr. No.	FP	X Co-ordinates	Y Co-ordinates
1	54 (Part-I)	212109.843	2459921.382
2	54 (Part-I)	212106.914	2459930.501
3	54 (Part-I)	212108.401	2459936.242
4	54 (Part-I)	212113.362	2459940.330
5	54 (Part-I)	212158.394	2459957.380
6	54 (Part-I)	212197.996	2459972.375
7	54 (Part-I)	212243.406	2459989.569
8	54 (Part-I)	212280.707	2460003.692
9	54 (Part-I)	212285.129	2460005.014
10	54 (Part-I)	212289.880	2460004.356
11	54 (Part-I)	212293.337	2460002.046
12	54 (Part-I)	212295.255	2459999.254
13	54 (Part-I)	212303.166	2459978.430
14	54 (Part-I)	212319.101	2459936.346
15	54 (Part-I)	212325.135	2459920.408
16	54 (Part-I)	212326.426	2459916.487
17	54 (Part-I)	212325.967	2459910.298
18	54 (Part-I)	212301.320	2459873.897
19	54 (Part-I)	212270.981	2459827.517
20	54 (Part-I)	212239.472	2459775.918
21	54 (Part-I)	212226.223	2459753.163
22	54 (Part-I)	212218.115	2459742.035
23	54 (Part-I)	212199.355	2459735.124
24	54 (Part-I)	212181.859	2459741.522
25	54 (Part-I)	212171.138	2459759.460
26	54 (Part-I)	212154.981	2459802.139
27	54 (Part-I)	212131.084	2459865.268

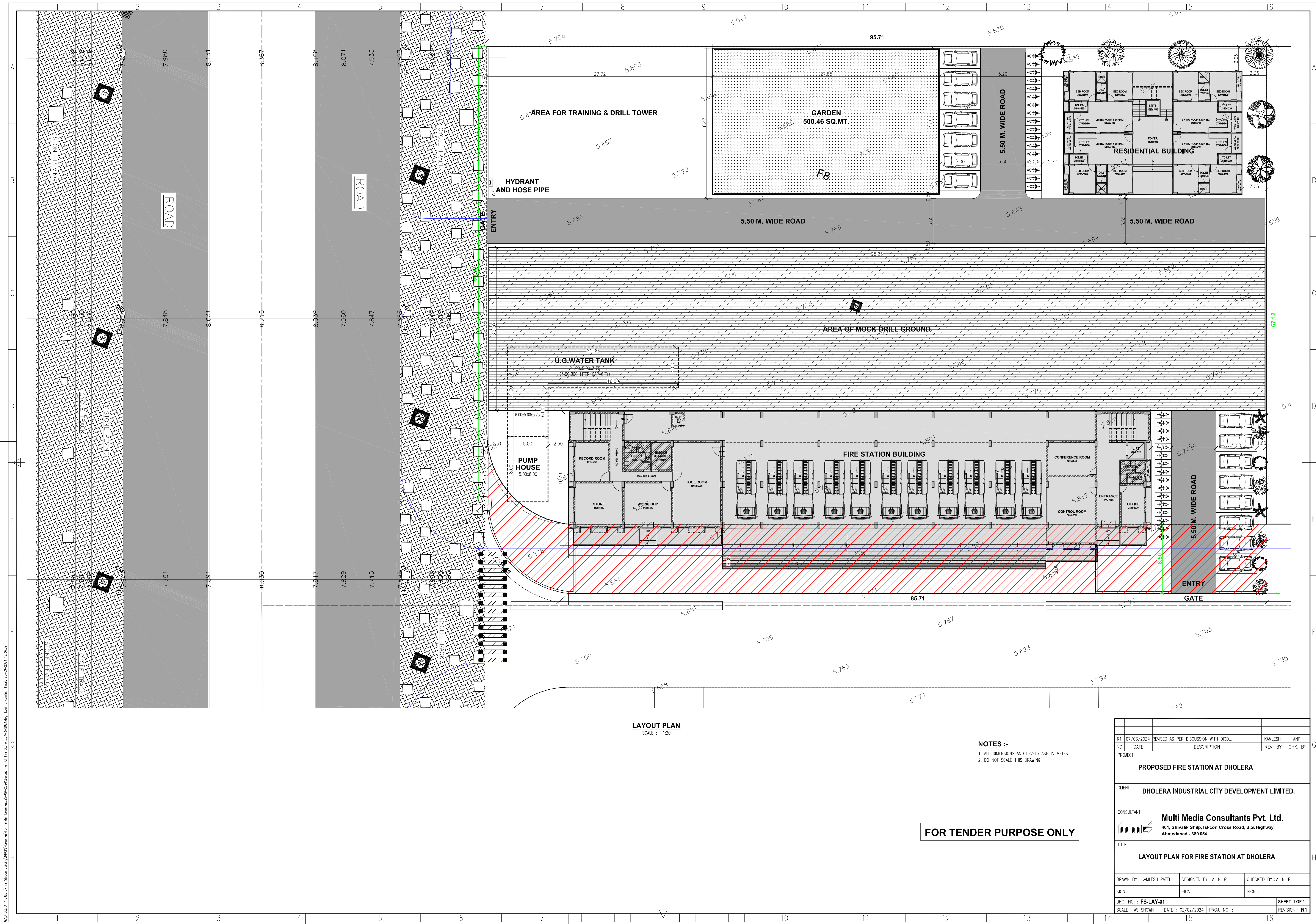
Sr. No.	FP	X Co-ordinates	Y Co-ordinates
1	54 (Part- II)	212186.441	2459989.385
2	54 (Part- II)	212173.046	2460024.759
3	54 (Part- II)	212162.663	2460052.178
4	54 (Part- II)	212211.658	2460070.736
5	54 (Part- II)	212261.122	2460089.465
6	54 (Part- II)	212270.410	2460064.936
7	54 (Part- II)	212281.464	2460035.731
8	54 (Part- II)	212281.815	2460030.524
9	54 (Part- II)	212280.795	2460027.704
10	54 (Part- II)	212277.562	2460024.161
11	54 (Part- II)	212230.995	2460006.255

Sr. No.	FP	X Co-ordinates	Y Co-ordinates
1	54 (Part-III)	212092.927	2459966.066
2	54 (Part-III)	212096.157	2459961.475
3	54 (Part-III)	212099.864	2459959.365
4	54 (Part-III)	212105.848	2459959.011
5	54 (Part-III)	212123.276	2459965.469
6	54 (Part-III)	212144.371	2459973.456
7	54 (Part-III)	212186.441	2459989.385
8	54 (Part-III)	212173.043	2460024.766
9	54 (Part-III)	212162.663	2460052.178
10	54 (Part-III)	212117.909	2460035.239
11	54 (Part-III)	212073.156	2460018.294
12	54 (Part-III)	212083.290	2459991.524

Note - Plot Boundary shall be as per the actual demarcation on site jointly carried out by both Parties.

FP-54 Plot Co-ordinates  
Detail





LAYOUT PLAN  
SCALE :- 1:20

NOTES :-  
1. ALL DIMENSIONS AND LEVELS ARE IN METER.  
2. DO NOT SCALE THIS DRAWING.

FOR TENDER PURPOSE ONLY

R1	07/03/2024	REVISED AS PER DISCUSSION WITH DICDL	KAMLESH	ANP	
NO	DATE	DESCRIPTION	REV. BY	CHK. BY	
PROJECT					
PROPOSED FIRE STATION AT DHOLERA					
CLIENT					
DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.					
CONSULTANT					
Multi Media Consultants Pvt. Ltd. 401, Shivvalik Shilp, Iskon Cross Road, S.G. Highway, Ahmedabad - 380 054.					
TITLE					
LAYOUT PLAN FOR FIRE STATION AT DHOLERA					
DRAWN BY : KAMLESH PATEL		DESIGNED BY : A. N. P.		CHECKED BY : A. N. P.	
SIGN :		SIGN :		SIGN :	
DRG. NO. : FS-LAY-01		DATE : 02/02/2024		PROJ. NO. :	
SCALE : AS SHOWN		DATE : 02/02/2024		PROJ. NO. :	
				REVISION : R1	



SCHEDULE OF OPENINGS GROUND FLOOR					
MKD.	SIZE	SILL HT.	INTEL HT.	NOS.	REMARK
D1	1050 x 2100	-	2100	4	SOLID CORE FLUSH DOOR AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D2	900 x 2100	-	2100	12	SOLID CORE FLUSH DOOR AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D3	750 x 2100	-	2100	8	PVC paneled aluminum shutter with aluminum frame
W1	1200 x 1200	900	2100	10	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
W2	1200 x 1050	1050	2100	4	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
W3	750 x 1050	1050	2100	8	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
V1	600 x 600	1500	2100	8	ALUMINUM GLAZED LOUVERED VENTILATOR WITH BIRD SCREEN WITH EXHAUST FAN (300W)

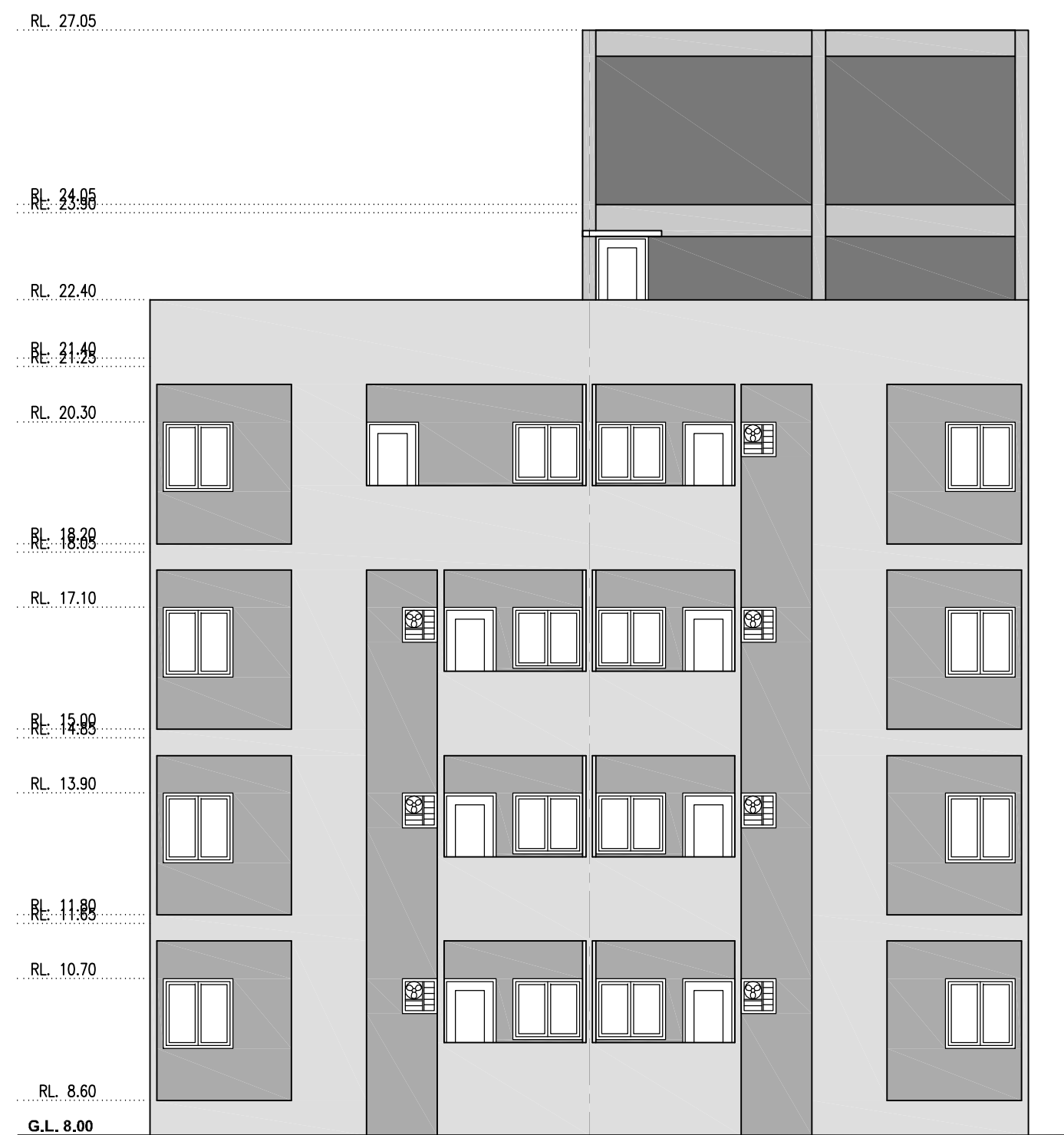
SCHEDULE OF OPENINGS FIRST & SECOND FLOOR (PER FLOOR)					
MKD.	SIZE	SILL HT.	INTEL HT.	NOS.	REMARK
D1	1050 x 2100	-	2100	4	SOLID CORE FLUSH DOOR AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D2	900 x 2100	-	2100	12	SOLID CORE FLUSH DOOR AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D3	750 x 2100	-	2100	8	PVC paneled aluminum shutter with aluminum frame
W1	1200 x 1200	900	2100	10	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
W2	1200 x 1050	1050	2100	4	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
W3	750 x 1050	1050	2100	8	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
V1	600 x 600	1500	2100	8	ALUMINUM GLAZED LOUVERED VENTILATOR WITH BIRD SCREEN WITH EXHAUST FAN (300W)

SCHEDULE OF OPENINGS THIRD FLOOR					
MKD.	SIZE	SILL HT.	INTEL HT.	NOS.	REMARK
D1	1050 x 2100	-	2100	2	SOLID CORE FLUSH DOOR AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D2	900 x 2100	-	2100	10	SOLID CORE FLUSH DOOR AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D3	750 x 2100	-	2100	6	PVC paneled aluminum shutter with aluminum frame
W1	1200 x 1200	900	2100	12	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
W2	1200 x 1050	1050	2100	2	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
W3	750 x 1050	1050	2100	6	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
V1	600 x 600	1500	2100	6	ALUMINUM GLAZED LOUVERED VENTILATOR WITH BIRD SCREEN WITH EXHAUST FAN (300W)

SCHEDULE OF OPENING TERRACE FLOOR					
MKD.	SIZE	SILL HT.	INTEL HT.	NOS.	REMARK
D2	900 x 2100	-	2100	2	SOLID CORE FLUSH DOOR AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME



SECTION A-A  
SCALE :- 1:100



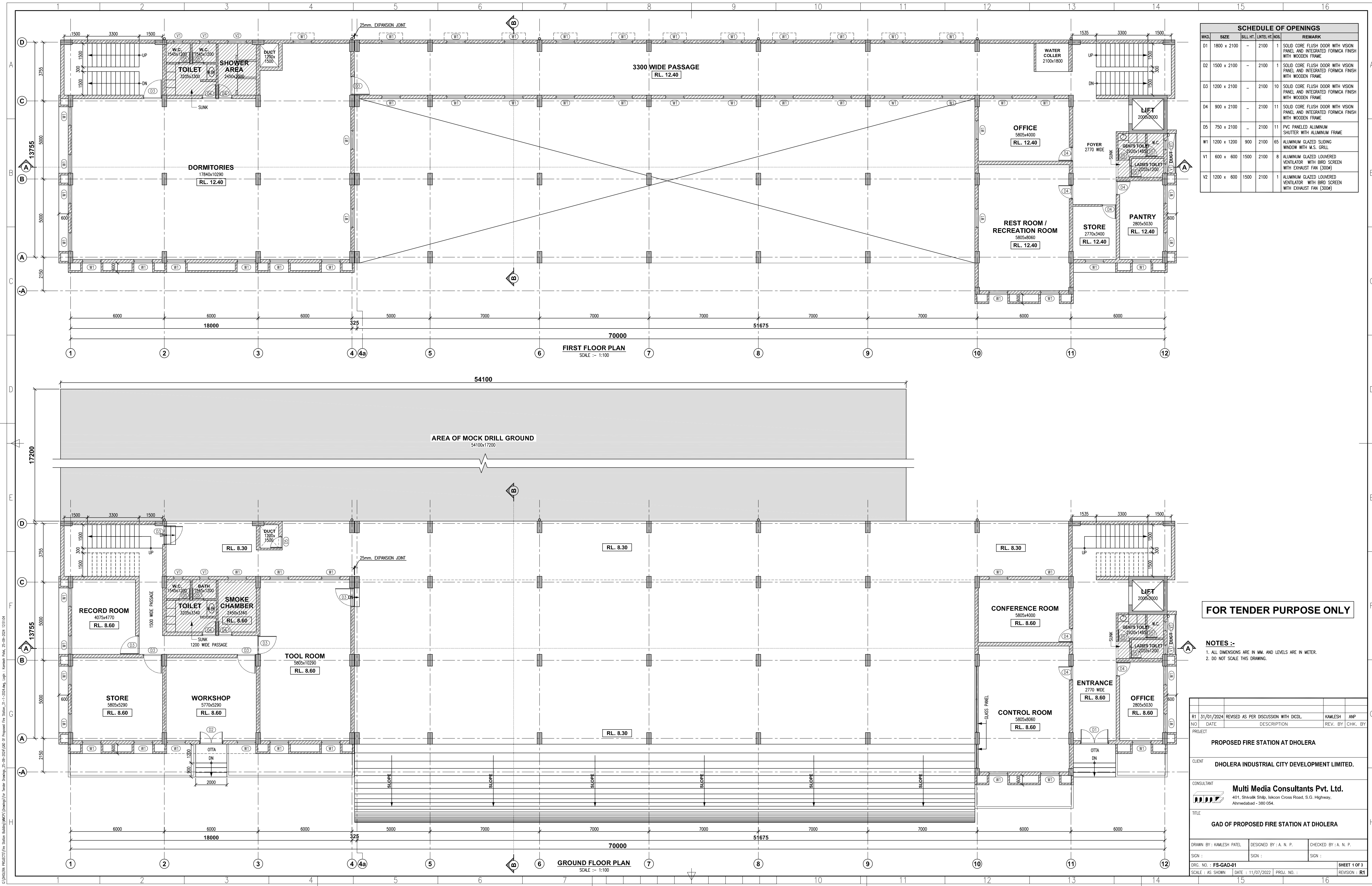
ELEVATION - B  
SCALE :- 1:100

FOR TENDER PURPOSE ONLY

NOTES :-

1. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN METER.
2. DO NOT SCALE THIS DRAWING.


NO.	DATE	DESCRIPTION	REV.	BY	CHK.	BY
PROJECT						
PROPOSED FIRE STATION AT DHOLERA						
CLIENT						
DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.						
CONSULTANT						
Multi Media Consultants Pvt. Ltd. 401, Shivalik Ship, Iskon Cross Road, S.G. Highway, Ahmedabad - 380 054.						
TITLE						
GAD OF PROPOSED RESIDENTIAL BUILDING AT DHOLERA						
DRAWN BY : KAMLESH PATEL		DESIGNED BY : A. N. P.		CHECKED BY : A. N. P.		
SIGN :		SIGN :		SIGN :		
DRG. NO. : RB-GAD-01		DATE : 12/07/2022		PROJ. NO. :		SHEET 1 OF 1
SCALE : AS SHOWN		DATE : 12/07/2022		PROJ. NO. :		REVISION : R0

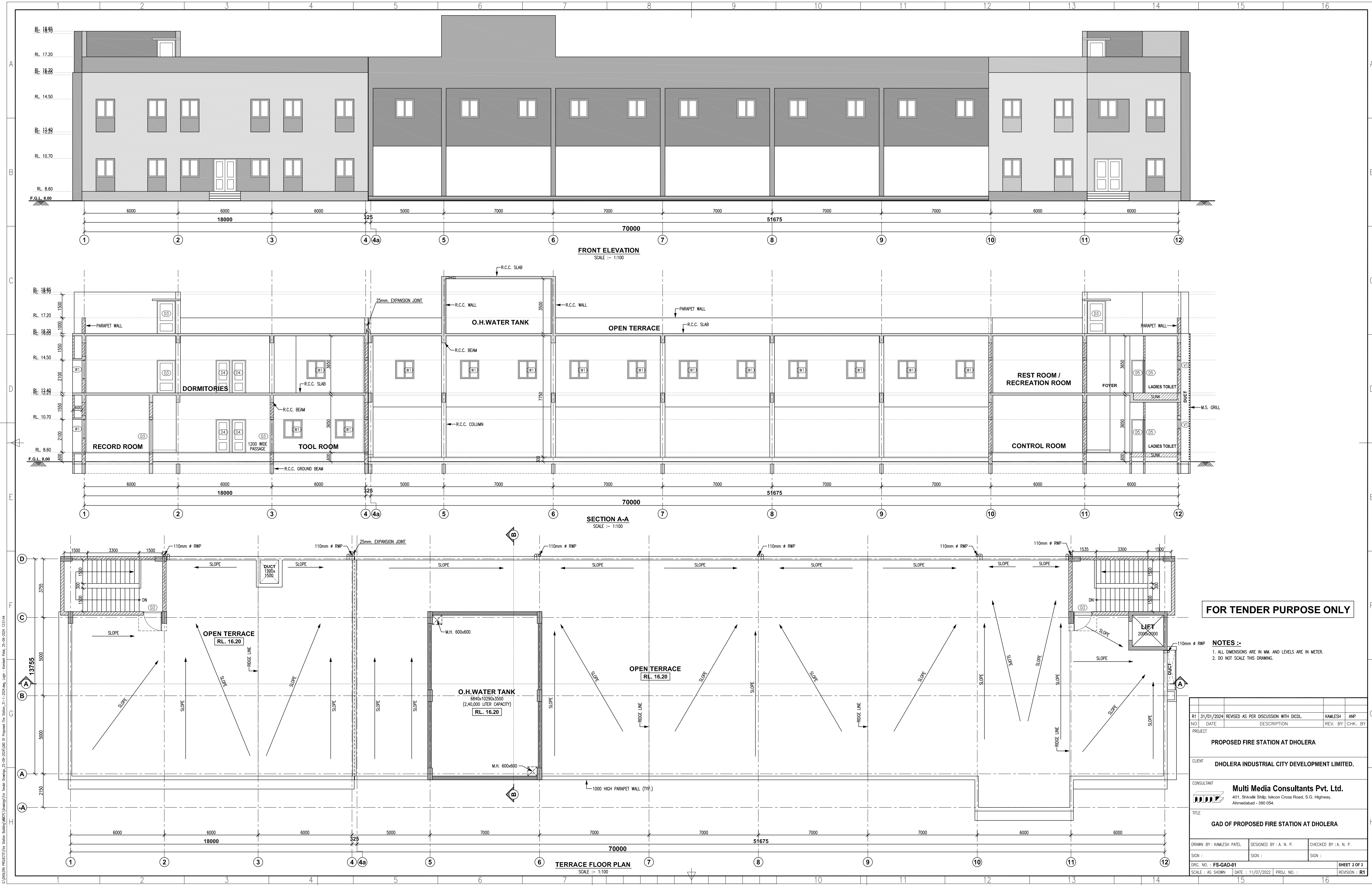


SCHEDULE OF OPENINGS					
MKD.	SIZE	SILL HT.	LINTEL HT.	NOS.	REMARK
D1	1800 x 2100	-	2100	1	SOLID CORE FLUSH DOOR WITH VISION PANEL AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D2	1500 x 2100	-	2100	1	SOLID CORE FLUSH DOOR WITH VISION PANEL AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D3	1200 x 2100	-	2100	10	SOLID CORE FLUSH DOOR WITH VISION PANEL AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D4	900 x 2100	-	2100	11	SOLID CORE FLUSH DOOR WITH VISION PANEL AND INTEGRATED FORMICA FINISH WITH WOODEN FRAME
D5	750 x 2100	-	2100	11	PVC paneled aluminum shutter with aluminum frame
W1	1200 x 1200	900	2100	65	ALUMINUM GLAZED SLIDING WINDOW WITH M.S. GRILL
V1	600 x 600	1500	2100	8	ALUMINUM GLAZED LOUVERED VENTILATOR WITH BRD SCREEN WITH EXHAUST FAN (3000)
V2	1200 x 600	1500	2100	1	ALUMINUM GLAZED LOUVERED VENTILATOR WITH BRD SCREEN WITH EXHAUST FAN (3000)

FOR TENDER PURPOSE ONLY


- NOTES :-
1. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN METER.
  2. DO NOT SCALE THIS DRAWING.

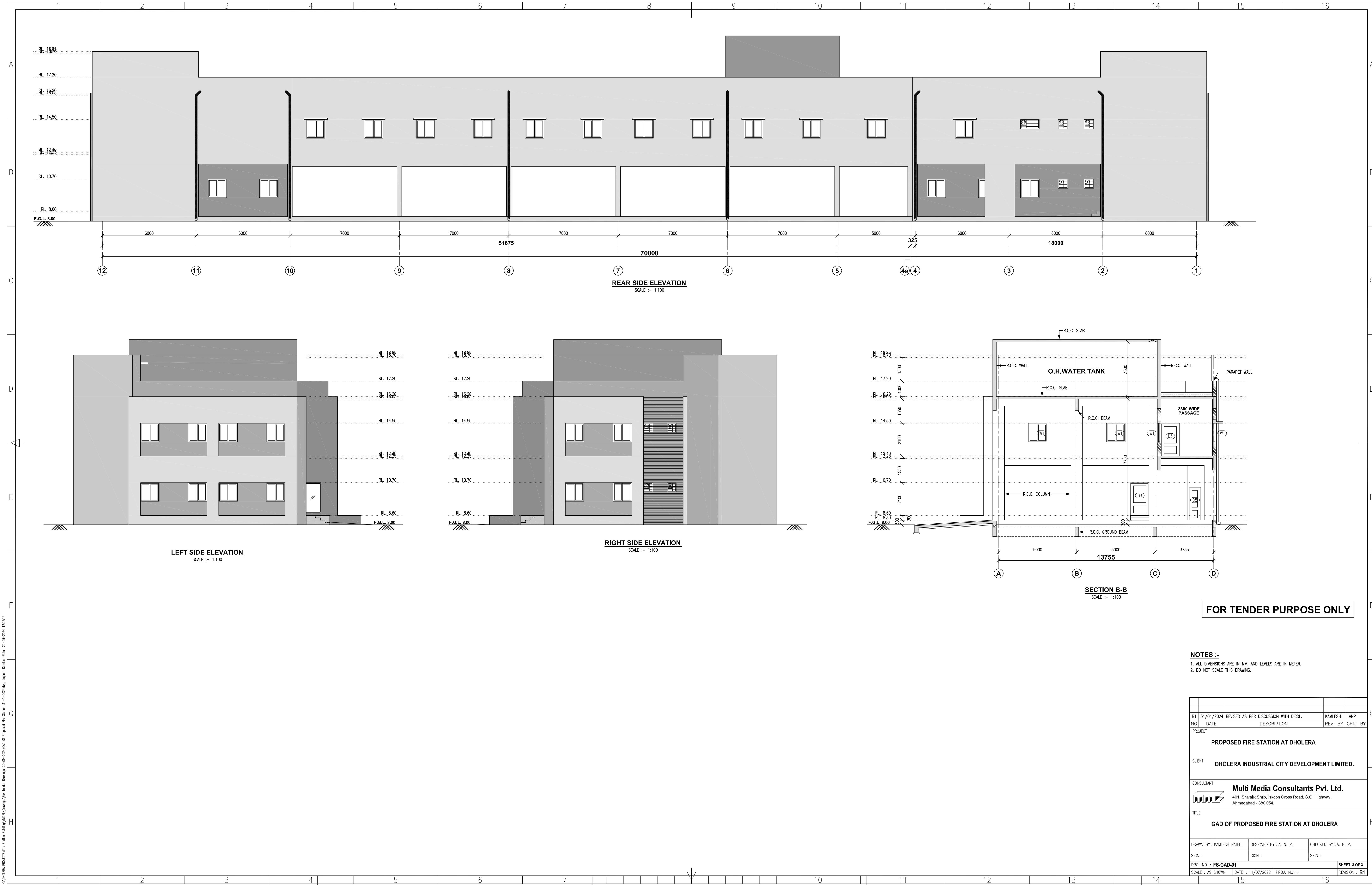
R1	31/01/2024	REVISED AS PER DISCUSSION WITH DICDL.	KAMLESH	ANP	
NO	DATE	DESCRIPTION	REV. BY	CHK. BY	
PROJECT					
PROPOSED FIRE STATION AT DHOLERA					
CLIENT					
DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.					
CONSULTANT					
<div></div> <div>Multi Media Consultants Pvt. Ltd. 401, Shivalki Ship, Isakon Cross Road, S.G. Highway, Ahmedabad - 380 054.</div>					
TITLE					
GAD OF PROPOSED FIRE STATION AT DHOLERA					
DRAWN BY: KAMLESH PATEL		DESIGNED BY: A. N. P.		CHECKED BY: A. N. P.	
SIGN :		SIGN :		SIGN :	
DRG. NO. : <b>FS-GAD-01</b>					
SCALE : AS SHOWN		DATE : 11/07/2022		PROJ. NO. :	
				SHEET 1 OF 3	
				REVISION : R1	



FOR TENDER PURPOSE ONLY

NOTES :-  
1. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN METER.  
2. DO NOT SCALE THIS DRAWING.

R1	31/01/2024	REVISED AS PER DISCUSSION WITH DICDL.		KAMLESH	ANP
NO.	DATE	DESCRIPTION		REV. BY	CHK. BY
PROJECT					
PROPOSED FIRE STATION AT DHOLERA					
CLIENT					
DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.					
CONSULTANT					
<div>Multi Media Consultants Pvt. Ltd. 401, Shivalki Ship, Isakon Cross Road, S.G. Highway, Ahmedabad - 380 054.</div>					
TITLE					
GAD OF PROPOSED FIRE STATION AT DHOLERA					
DRAWN BY : KAMLESH PATEL		DESIGNED BY : A. N. P.		CHECKED BY : A. N. P.	
SIGN :		SIGN :		SIGN :	
DRG. NO. : <b>FS-GAD-01</b>					
SCALE : AS SHOWN		DATE : 11/07/2022		PROJ. NO. :	
				SHEET 2 OF 3	
				R1	

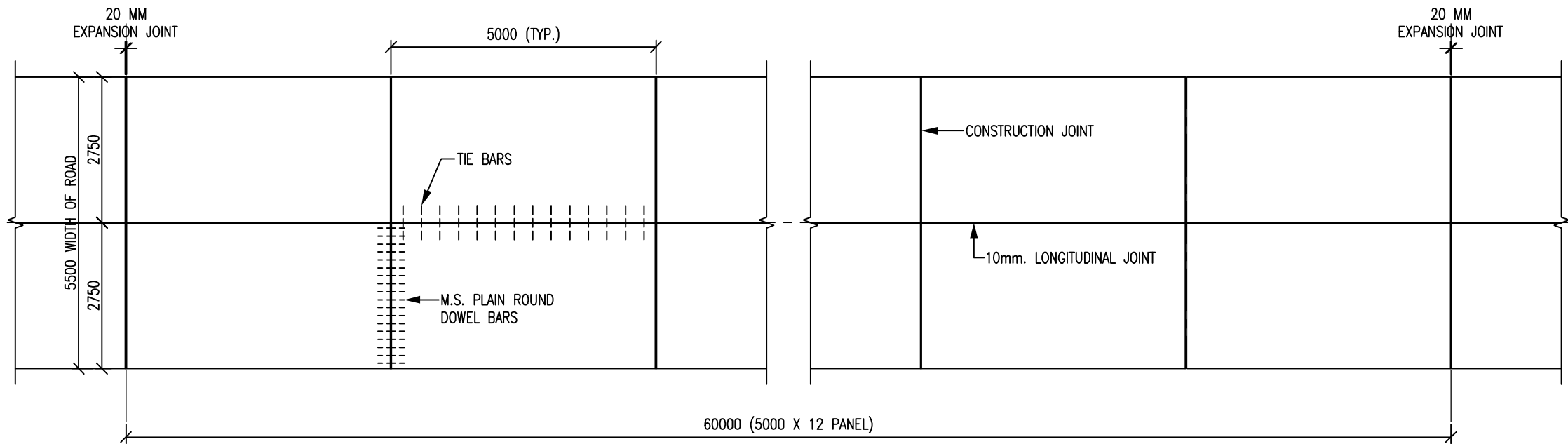


FOR TENDER PURPOSE ONLY

- NOTES :-**
1. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN METER.
  2. DO NOT SCALE THIS DRAWING.

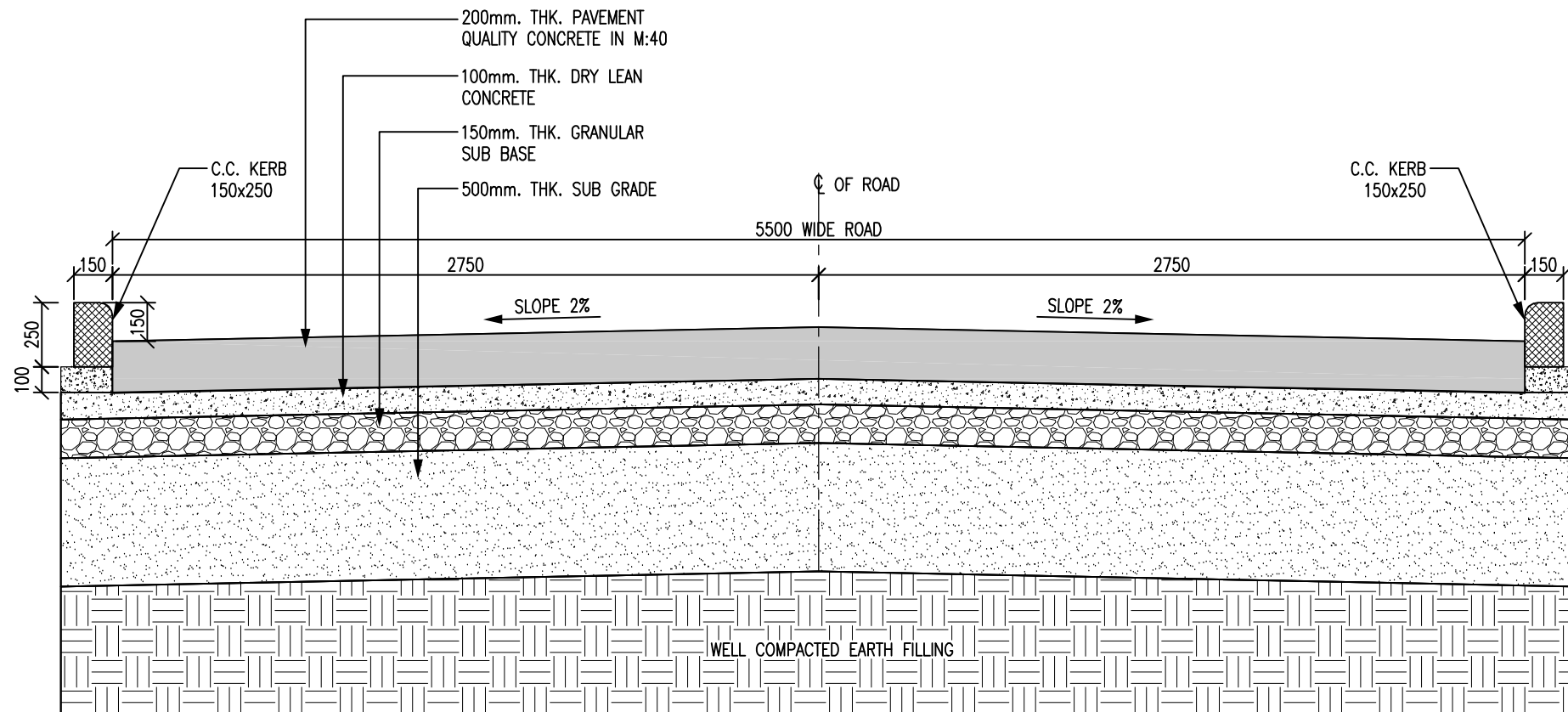
R1	31/01/2024	REVISED AS PER DISCUSSION WITH DICDL	KAMLESH	ANP
NO	DATE	DESCRIPTION	REV. BY	CHK. BY
PROJECT				
PROPOSED FIRE STATION AT DHOLERA				
CLIENT				
DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.				
CONSULTANT				
Multi Media Consultants Pvt. Ltd.				
401, Shivalki Ship, Iskon Cross Road, S.G. Highway, Ahmedabad - 380 054.				
TITLE				
GAD OF PROPOSED FIRE STATION AT DHOLERA				
DRAWN BY : KAMLESH PATEL		DESIGNED BY : A. N. P.		CHECKED BY : A. N. P.
SIGN :		SIGN :		SIGN :
DRG. NO. : FS-GAD-01		DATE : 11/07/2022		PROJ. NO. :
SCALE : AS SHOWN		REVISION : R1		SHEET 3 OF 3

G:\DHOLERA PROJECTS\Fire Station Building\MMCP\Drawings\For Tender Drawings\_25-09-2024\GAD OF 5.50 M Wide Road.dwg, Login : Kamlesh Patel, 25-09-2024 12:32:30



**TYPICAL PLAN OF 5.50 M. WIDE ROAD**  
SCALE :- 1:100


**FOR TENDER PURPOSE ONLY**



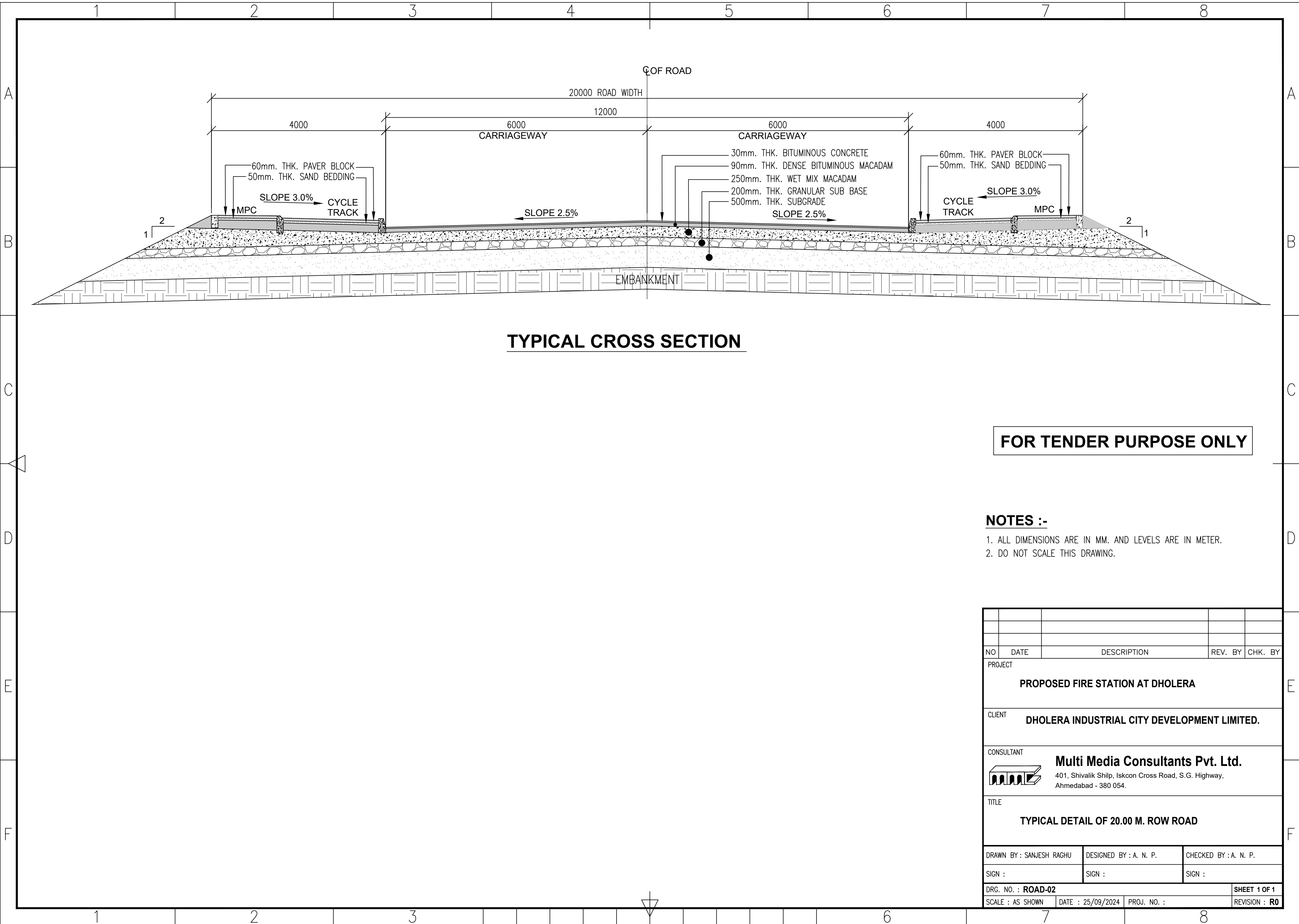
**TYPICAL CROSS SECTION OF 5.50 M. WIDE ROAD**  
SCALE :- 1:25

**NOTES :-**

1. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN METER.
2. DO NOT SCALE THIS DRAWING.

NO	DATE	DESCRIPTION		REV. BY	CHK. BY
PROJECT					
PROPOSED FIRE STATION AT DHOLERA					
CLIENT					
DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.					
CONSULTANT					
<div></div> <div><b>Multi Media Consultants Pvt. Ltd.</b> 401, Shivalik Shilp, Iskon Cross Road, S.G. Highway, Ahmedabad - 380 054.</div>					
TITLE					
TYPICAL DETAIL OF 5.50 M. WIDE ROAD AT DHOLERA					
DRAWN BY : KAMLESH PATEL		DESIGNED BY : A. N. P.		CHECKED BY : A. N. P.	
SIGN :		SIGN :		SIGN :	
DRG. NO. : ROAD-01					SHEET 1 OF 1
SCALE : AS SHOWN		DATE : 19/07/2022		PROJ. NO. :	
					REVISION : R0






TYPICAL CROSS SECTION

FOR TENDER PURPOSE ONLY

NOTES :-

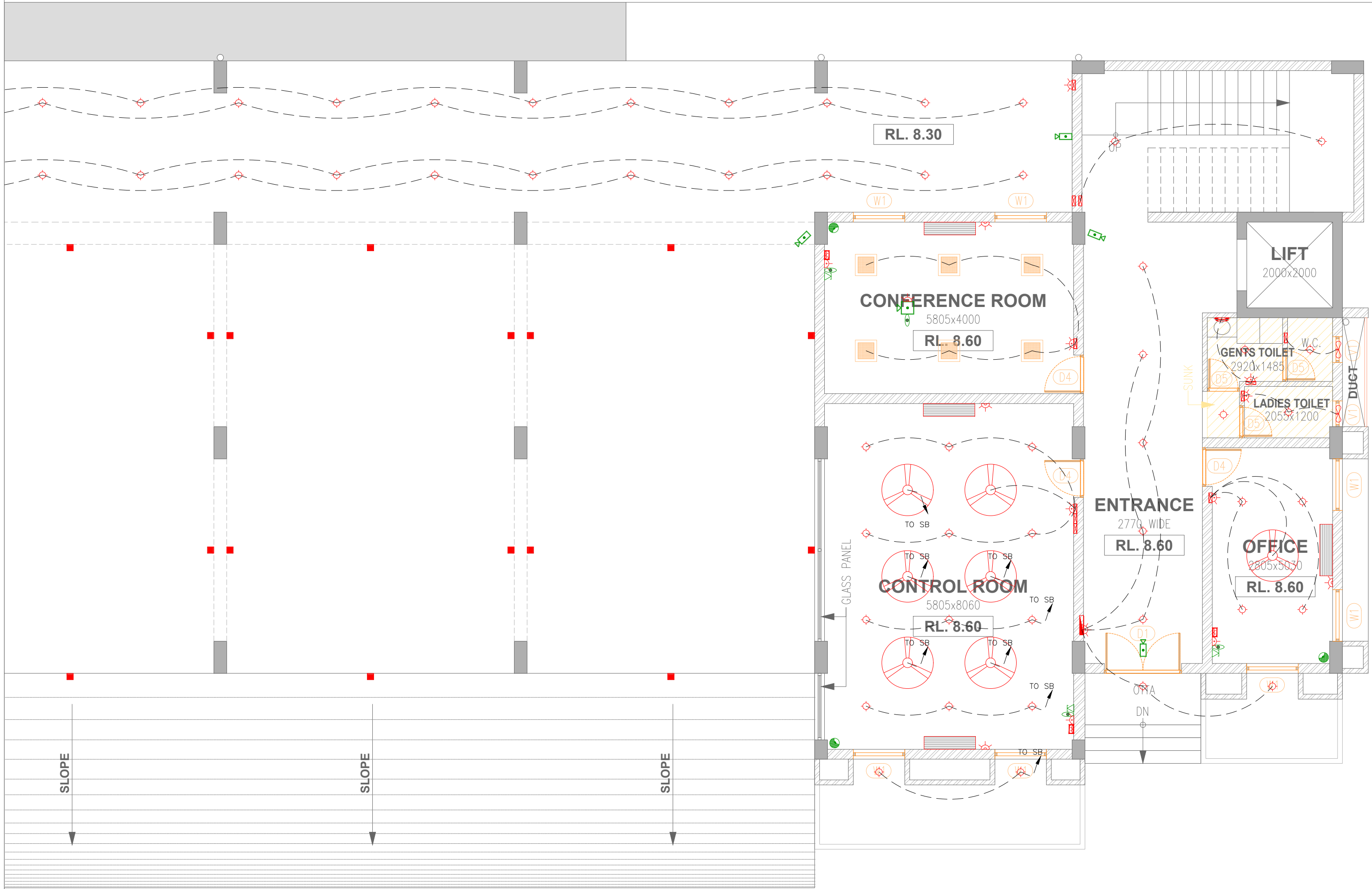
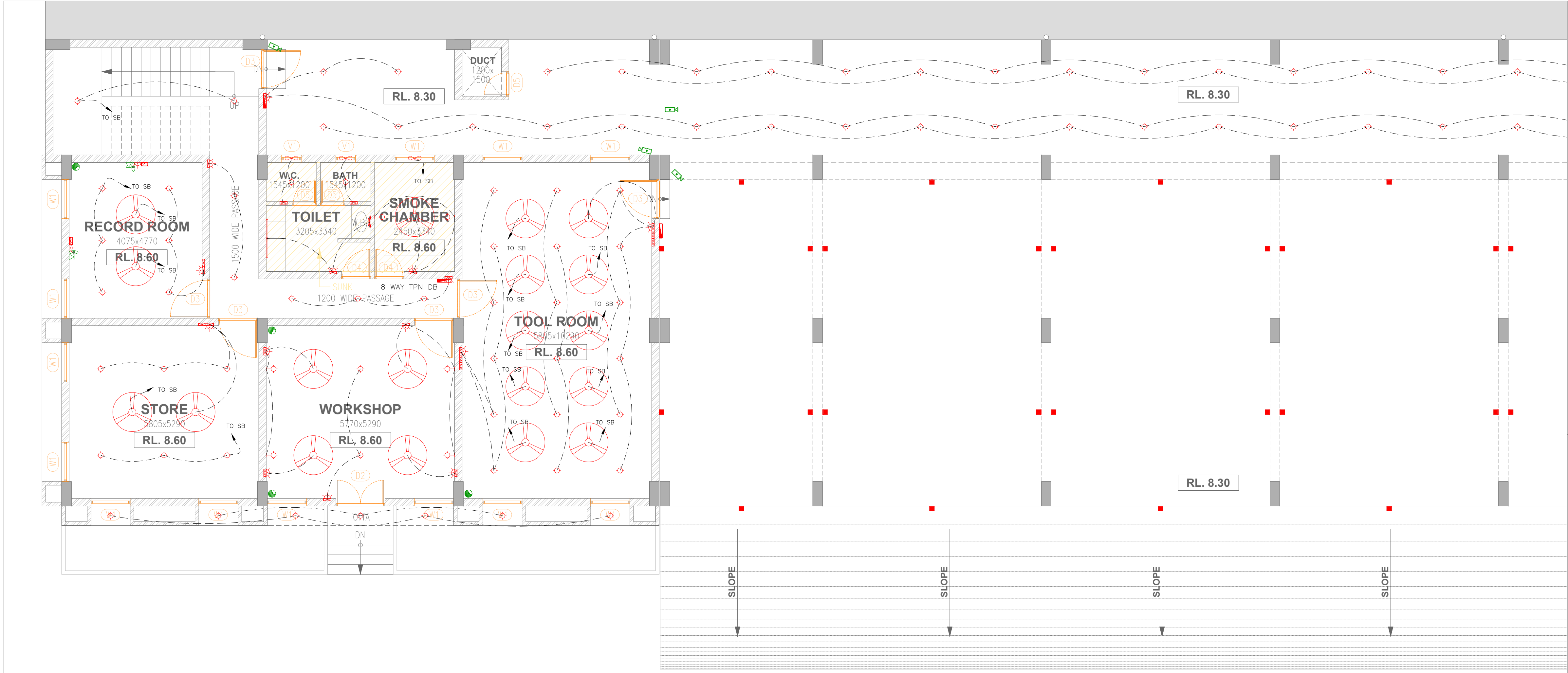
- 1. ALL DIMENSIONS ARE IN MM. AND LEVELS ARE IN METER.
- 2. DO NOT SCALE THIS DRAWING.

NO	DATE	DESCRIPTION	REV. BY	CHK. BY
PROJECT				
PROPOSED FIRE STATION AT DHOLERA				
CLIENT				
DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.				
CONSULTANT				
<div><div></div><div><div>Multi Media Consultants Pvt. Ltd.</div><div>401, Shivalik Shilp, Iskcon Cross Road, S.G. Highway, Ahmedabad - 380 054.</div></div></div>				
TITLE				
TYPICAL DETAIL OF 20.00 M. ROW ROAD				
DRAWN BY : SANJESH RAGHU		DESIGNED BY : A. N. P.	CHECKED BY : A. N. P.	
SIGN :		SIGN :	SIGN :	
DRG. NO. : ROAD-02				SHEET 1 OF 1
SCALE : AS SHOWN	DATE : 25/09/2024	PROJ. NO. :		REVISION : R0



DRG. NO. : E_LTG_DFS_SP_01			SHEET 1 OF 1
SCALE :	DATE : 22-04-2024	PROJ. NO. :	REVISION : R0





PART-1

PART-2

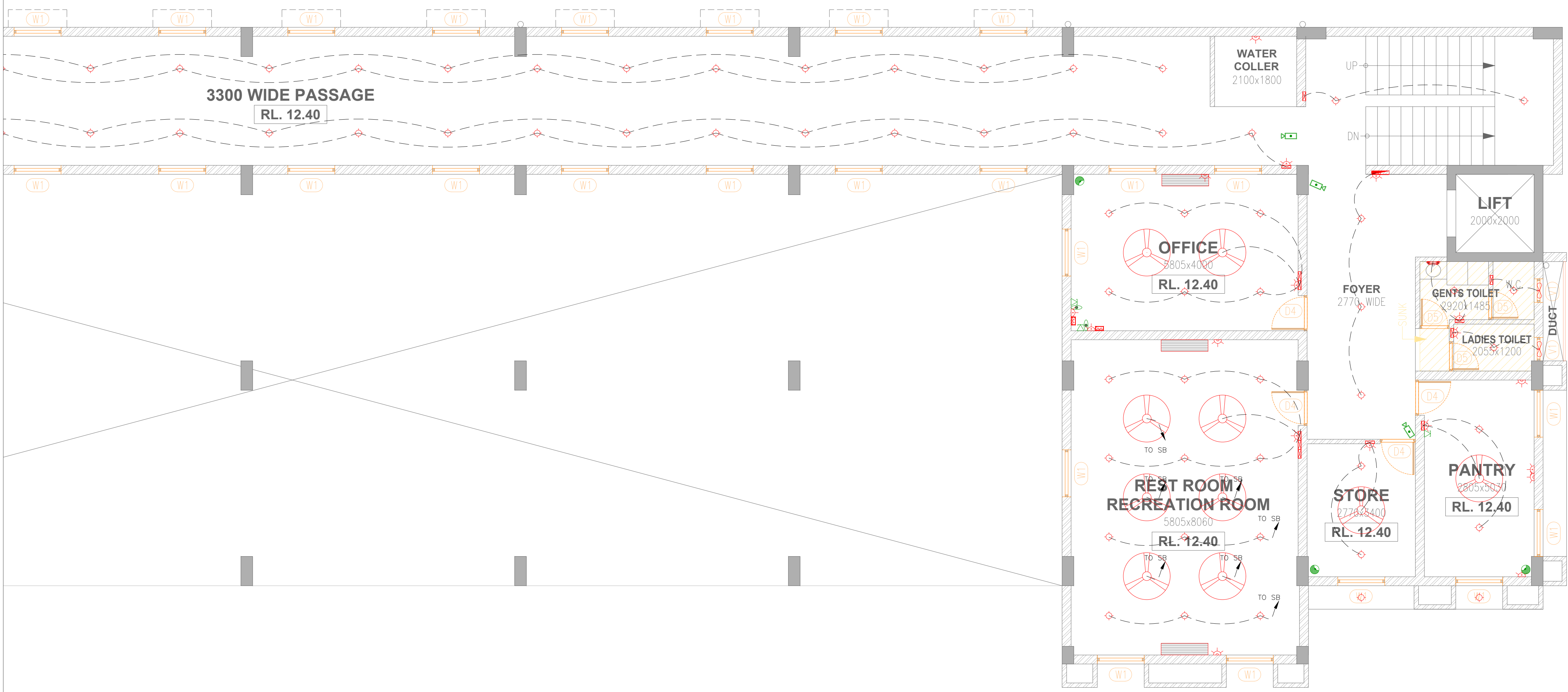
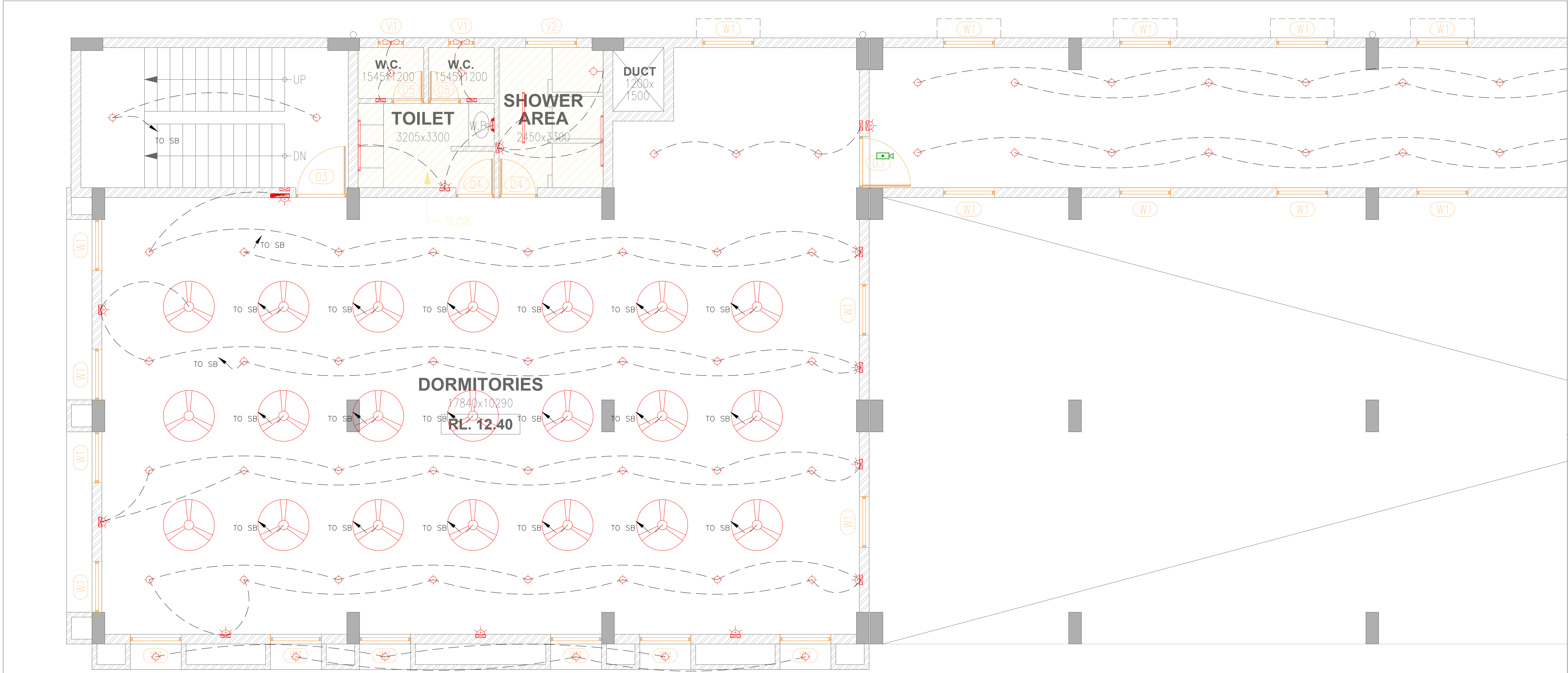
ELECTRICAL LEGEND :

	F	FAN
	EF	EXHAUST FAN
	CL	CEILING LIGHT POINT
	BL	BRACKET LIGHT
	T	TUBE LIGHT
	SL	SQUARE LIGHT
	FL	FLOOD LIGHT
	M	MIROLTA LIGHT
	SB	SWITCH BOARD
	B	BELL PUSH POINT
	P	6A PLUG POINT
	PP	6/16A PLUG POINT
	ACPP	AIR CONDENSER POINT
	CPP	COMPUTER PLUG POINT
	BZ	BUZZER POINT
	DB	DISTRIBUTION BOARD
	TV	TELEVISION POINT
	TP	TELEPHONE POINT
	DP	DATA POINT
	CCTV	CCTVPOINT
		CONTROLLING

FOR TENDER PURPOSE ONLY

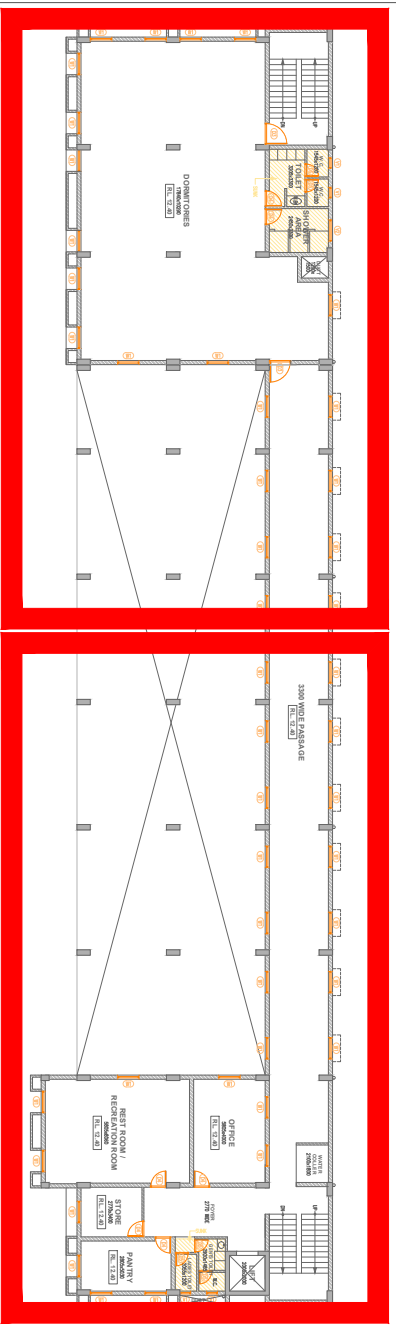
NO	DATE	DESCRIPTION	REV. BY	CHK. BY
PROJECT	PROPOSED RESIDENTIAL BUILDING AT DHOLERA FIRE STATION			
CLIENT	DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.			
CONSULTANT	<b>Multi Media Consultants Pvt. Ltd.</b> 401, Shivalik Shilp, Iskcon Cross Road, S.G. Highway, Ahmedabad - 380 054.			
MEPF CONSULTANT	<b>Jit Engineering Services Consultants</b> 401,402 Punit Plaza, B/H Navgujarat college, Usmanpura, Ahmedabad -380013 Ph. : 079 - 4006 9038. EMAIL ID : info@jescgroup.com WEBSITE: www.jescgroup.com			
TITLE	ELECTRICAL LIGHTING LAYOUT OF GROUND FLOOR			
DRAWN BY:KETAN	DESIGNED BY: N.P.	CHECKED BY: J.J.		
SIGN :	SIGN :	SIGN :		
DRG. NO. : E_LTG_RB_GF_01	SHEET 1 OF 1			
SCALE :	DATE : 22-04-2024	PROJ. NO. :	REVISION : R0	





PART-1

PART-2



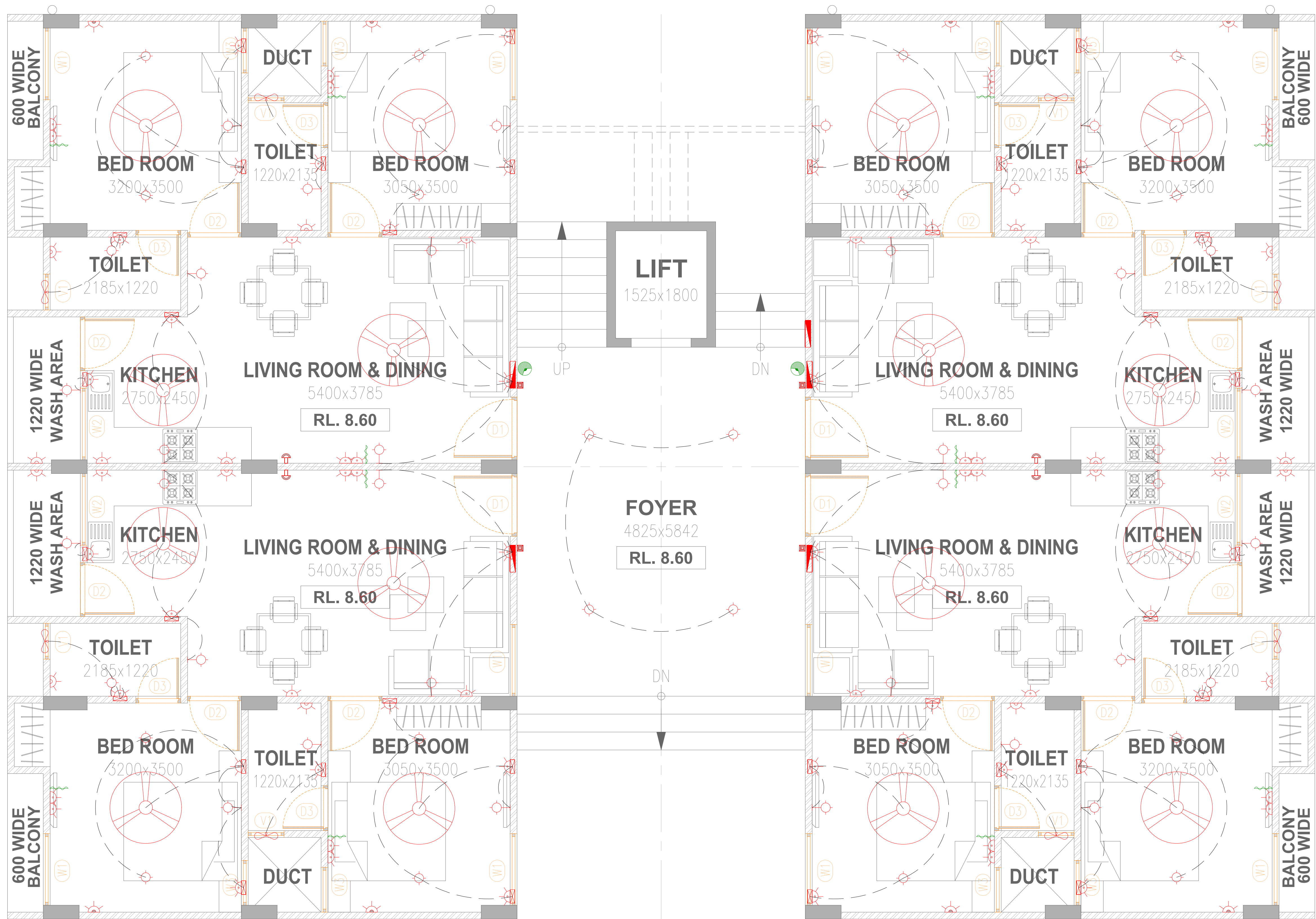
ELECTRICAL LEGEND :

	F	FAN
	EF	EXHAUST FAN
	CL	CEILING LIGHT POINT
	BL	BRACKET LIGHT
	T	TUBE LIGHT
	SL	SQUARE LIGHT
	FL	FLOOD LIGHT
	M	MIROLTA LIGHT
	SB	SWITCH BOARD
	B	BELL PUSH POINT
	P	6A PLUG POINT
	PP	6/16A PLUG POINT
	ACPP	AIR CONDENSER POINT
	CPP	COMPUTER PLUG POINT
	BZ	BUZZER POINT
	DB	DISTRIBUTION BOARD
	TV	TELEVISION POINT
	TP	TELEPHONE POINT
	DP	DATA POINT
	CCTV	CCTVPOINT
		CONTROLLING

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY
PROJECT	PROPOSED RESIDENTIAL BUILDING AT DHOLERA FIRE STATION			
CLIENT	DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.			
CONSULTANT	<b>Multi Media Consultants Pvt. Ltd.</b> 401, Shivalik Shilp, Iskon Cross Road, S.G. Highway, Ahmedabad - 380 054.			
MEPF CONSULTANT	<b>Jit Engineering Services Consultants</b> 401,402 Punit Plaza, B/H Navgujarat college, Usmanpura, Ahmedabad -380013 Ph. : 079 - 4006 9038. EMAIL ID : info@jescgroup.com WEBSITE: www.jescgroup.com			
TITLE	ELECTRICAL LIGHTING LAYOUT OF FIRST FLOOR			
DRAWN BY : KETAN	DESIGNED BY : N.P.	CHECKED BY : J.J.		
SIGN :	SIGN :	SIGN :		
DRG. NO. : E_LTG_RB_FF_01	SHEET 1 OF 1			
SCALE :	DATE : 22-04-2024	PROJ. NO. :	REVISION : R0	





GROUND FLOOR PLAN (2BHK FLOOR LAYOUT)

SCALE :- 1:100

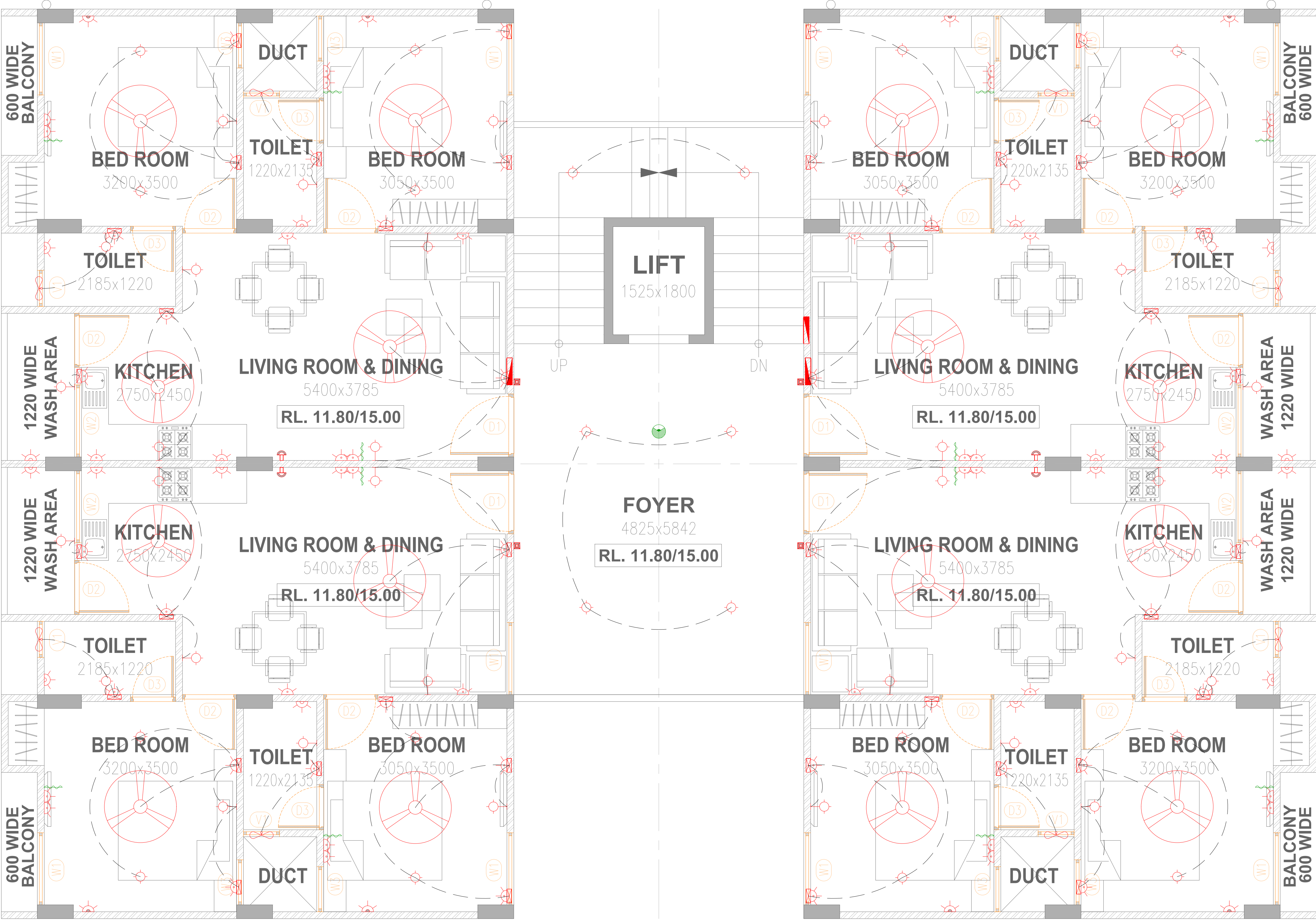
ELECTRICAL LEGEND :

	F	FAN
	EF	EXHAUST FAN
	CL	CEILING LIGHT POINT
	BL	BRACKET LIGHT
	WTBL	WATER TIGHT BRACKET LIGHT
	M	MIROLTA LIGHT
	SB	SWITCH BOARD
	B	BELL PUSH POINT
	P	6A PLUG POINT
	PP	6/16A PLUG POINT
	BZ	BUZZER POINT
	ACPP	AIR CONDENSER POINT
	DB	DISTRIBUTION BOARD
	TV	TELEVISION POINT
	TP	TELEPHONE POINT
	CCTV	CCTVPOINT
		CONTROLLING

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY
PROJECT	PROPOSED RESIDENTIAL BUILDING AT DHOLERA FIRE STATION			
CLIENT	DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.			
CONSULTANT	<b>Multi Media Consultants Pvt. Ltd.</b> 401, Shivalik Shilp, Iskon Cross Road, S.G. Highway, Ahmedabad - 380 054.			
MEPF CONSULTANT	<b>Jit Engineering Services Consultants</b> 401,402 Punit Plaza, B/H Navgujarat college, Usmanpura, Ahmedabad -380013 Ph. : 079 - 4006 9038. EMAIL ID : info@jesgroup.com WEBSITE: www.jesgroup.com			
TITLE	ELECTRICAL LIGHTING LAYOUT OF GROUND FLOOR			
DRAWN BY :KETAN	DESIGNED BY : N.P.	CHECKED BY : J.J.		
SIGN :	SIGN :	SIGN :		
DRG. NO. : E_LTG_RB_GF_01	SHEET 1 OF 1			
SCALE :	DATE : 22-04-2024	PROJ. NO. :	REVISION : R0	





FIRST & SECOND FLOOR PLAN (2BHK FLOOR LAYOUT)

SCALE :- 1:100

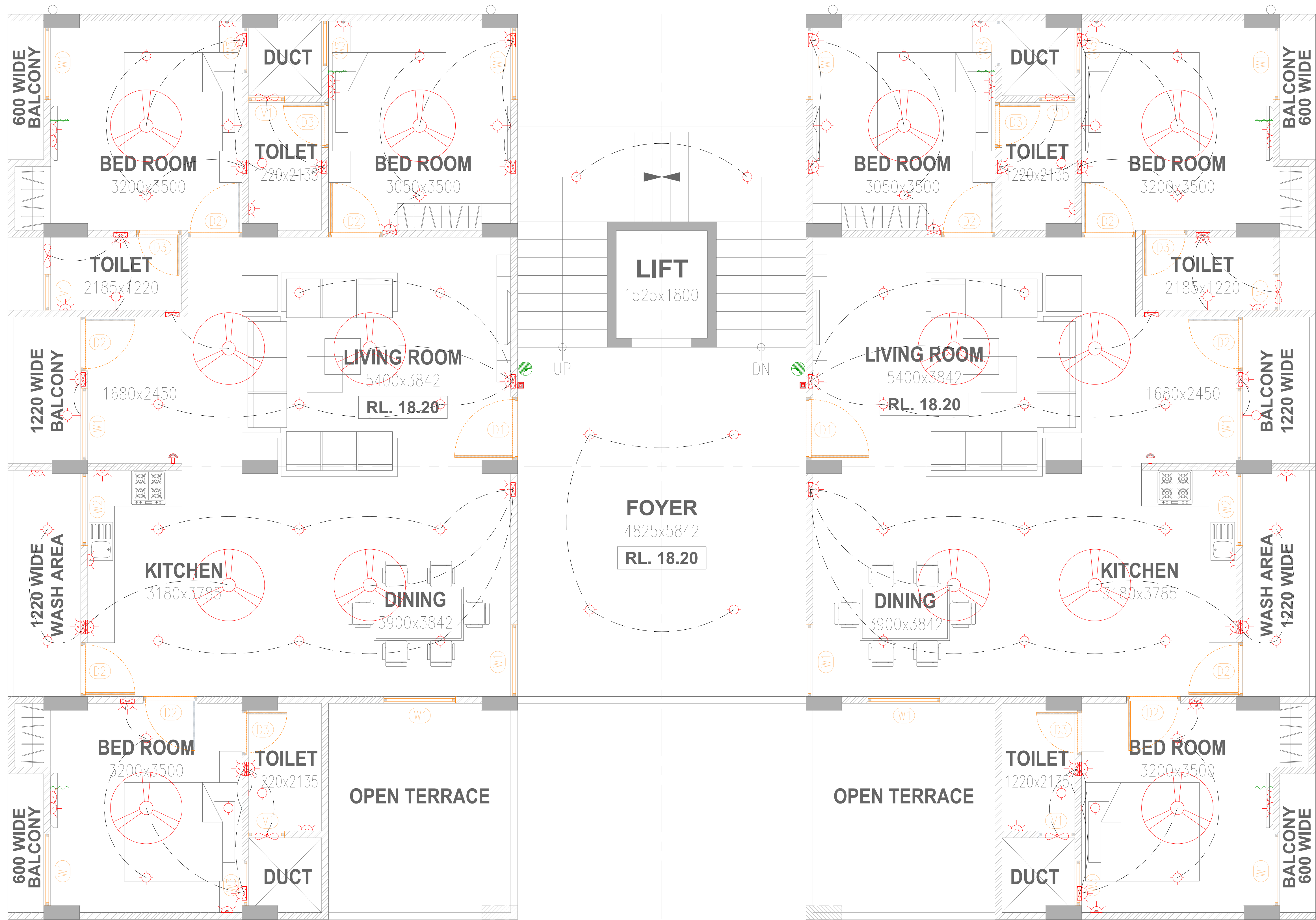
ELECTRICAL LEGEND :

	F	FAN
	EF	EXHAUST FAN
	CL	CEILING LIGHT POINT
	BL	BRACKET LIGHT
	WTBL	WATER TIGHT BRACKET LIGHT
	M	MIROLTA LIGHT
	SB	SWITCH BOARD
	B	BELL PUSH POINT
	P	6A PLUG POINT
	PP	6/16A PLUG POINT
	BZ	BUZZER POINT
	ACPP	AIR CONDENSER POINT
	DB	DISTRIBUTION BOARD
	TV	TELEVISION POINT
	TP	TELEPHONE POINT
	CCTV	CCTVPOINT
		CONTROLLING

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY
PROJECT	PROPOSED RESIDENTIAL BUILDING AT DHOLERA FIRE STATION			
CLIENT	DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.			
CONSULTANT	<b>Multi Media Consultants Pvt. Ltd.</b> 401, Shivalik Shilp, Iskcon Cross Road, S.G. Highway, Ahmedabad - 380 054.			
MEPF CONSULTANT	<b>Jit Engineering Services Consultants</b> 401, 402 Punit Plaza, B/H Navgujarat college, Usmanpura, Ahmedabad - 380013 Ph. : 079 - 4006 9038. EMAIL ID : info@jesgroup.com WEBSITE: www.jesgroup.com			
TITLE	ELECTRICAL LIGHTING LAYOUT OF 1ST & 2ND FLOOR			
DRAWN BY: KETAN	DESIGNED BY: N.P.	CHECKED BY: J.J.		
SIGN :	SIGN :	SIGN :		
DRG. NO. : E_LTG_RB_FF_02	SHEET 1 OF 1			
SCALE :	DATE : 22-04-2024	PROJ. NO. :	REVISION : R0	





THIRD FLOOR PLAN (3BHK FLOOR LAYOUT)

SCALE :- 1:100

ELECTRICAL LEGEND :

	F	FAN
	EF	EXHAUST FAN
	CL	CEILING LIGHT POINT
	BL	BRACKET LIGHT
	WTBL	WATER TIGHT BRACKET LIGHT
	M	MIROLTA LIGHT
	SB	SWITCH BOARD
	B	BELL PUSH POINT
	P	6A PLUG POINT
	PP	6/16A PLUG POINT
	BZ	BUZZER POINT
	ACPP	AIR CONDENSER POINT
	DB	DISTRIBUTION BOARD
	TV	TELEVISION POINT
	TP	TELEPHONE POINT
	CCTV	CCTVPOINT
		CONTROLLING

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY

PROJECT **PROPOSED RESIDENTIAL BUILDING AT DHOLERA FIRE STATION**

CLIENT **DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.**

CONSULTANT  
 **Multi Media Consultants Pvt. Ltd.**  
401, Shivalik Shilp, Iskon Cross Road, S.G. Highway, Ahmedabad - 380 054.

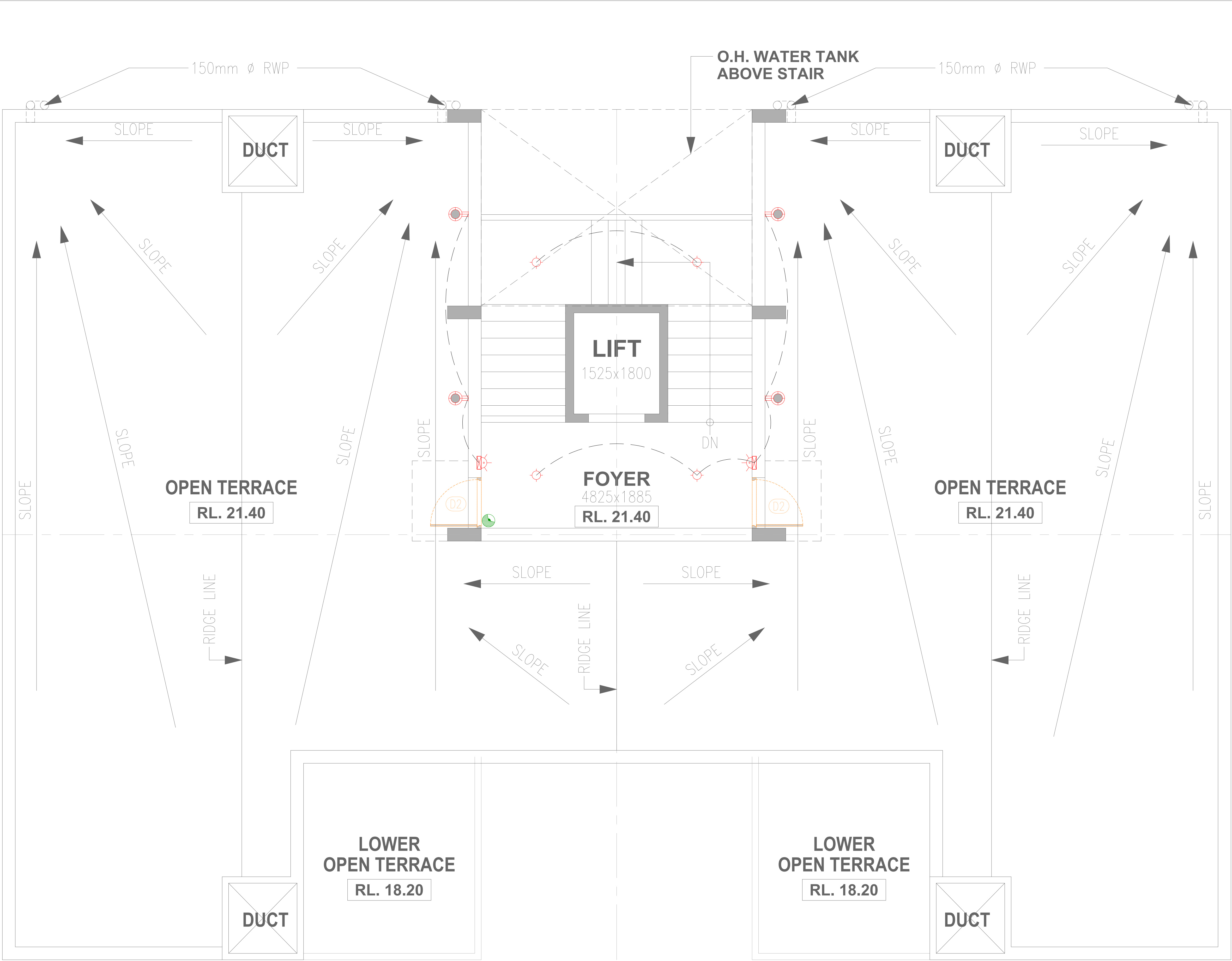
MEPF CONSULTANT  
 **Jit Engineering Services Consultants**  
401,402 Punit Plaza, B/H Navgujarat college, Usmanpura, Ahmedabad -380013  
Ph. : 079 - 4006 9038. EMAIL ID : info@jescgroup.com  
WEBSITE: www.jescgroup.com

TITLE **ELECTRICAL LIGHTING LAYOUT OF 3RD FLOOR**

DRAWN BY :KETAN	DESIGNED BY :N.P.	CHECKED BY : J.J.
SIGN :	SIGN :	SIGN :

DRG. NO. : <b>E_LTG_RB_TF_03</b>	SHEET 1 OF 1
SCALE :	DATE :22-04-2024
PROJ. NO. :	REVISION : <b>R0</b>





TERRACE FLOOR PLAN

SCALE :- 1:100

ELECTRICAL LEGEND :

	F	FAN
	EF	EXHAUST FAN
	CL	CEILING LIGHT POINT
	BL	BRACKET LIGHT
	WTBL	WATER TIGHT BRACKET LIGHT
	M	MIROLTA LIGHT
	SB	SWITCH BOARD
	B	BELL PUSH POINT
	P	6A PLUG POINT
	PP	6/16A PLUG POINT
	BZ	BUZZER POINT
	ACPP	AIR CONDENSER POINT
	DB	DISTRIBUTION BOARD
	TV	TELEVISION POINT
	TP	TELEPHONE POINT
	CCTV	CCTVPOINT
		CONTROLLING

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY

PROJECT **PROPOSED RESIDENTIAL BUILDING AT DHOLERA FIRE STATION**

CLIENT **DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.**

CONSULTANT  
**Multi Media Consultants Pvt. Ltd.**  
401, Shivalik Shilp, Iskcon Cross Road, S.G. Highway, Ahmedabad - 380 054.

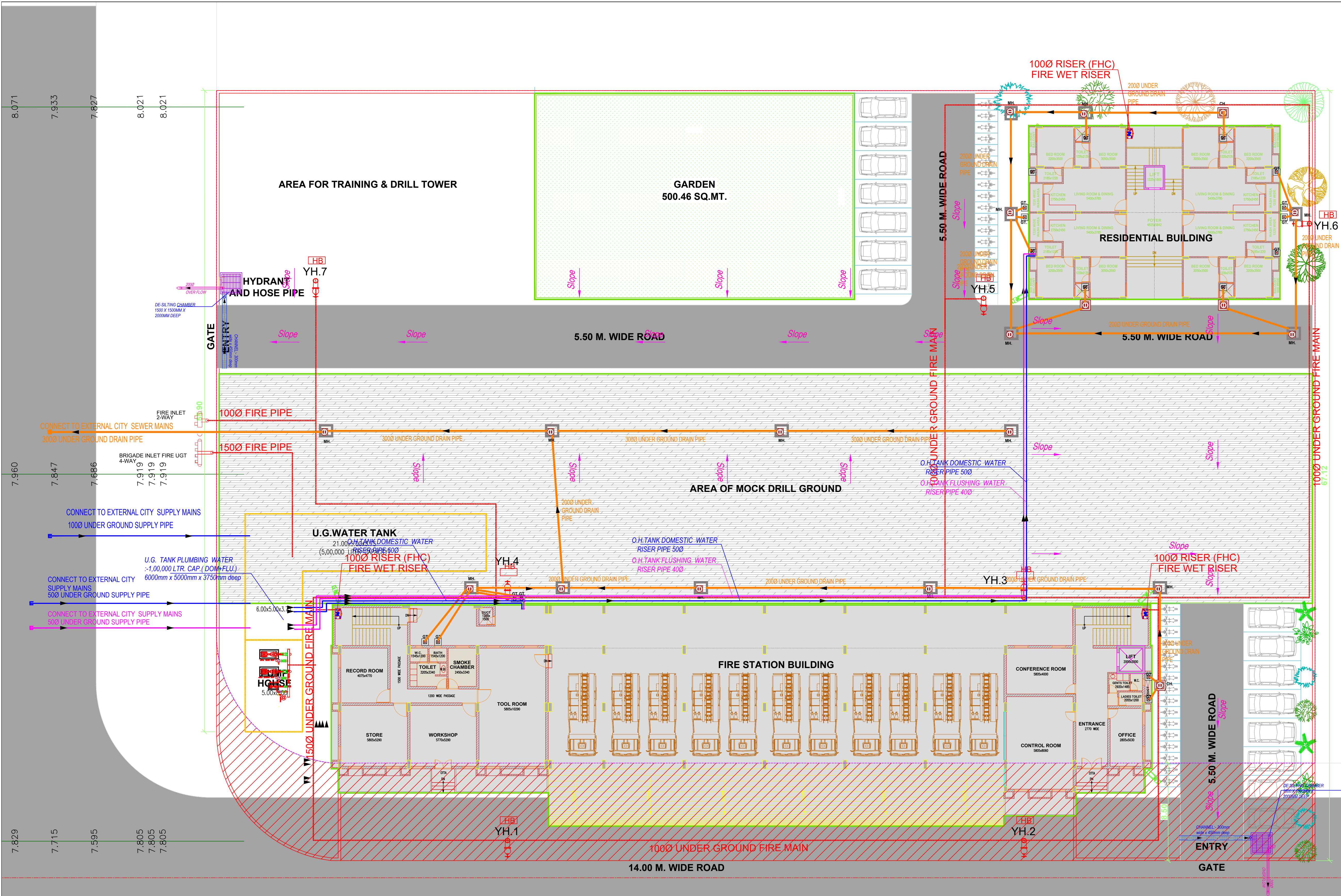
MEPF CONSULTANT  
**Jit Engineering Services Consultants**  
401,402 Punit Plaza, B/H Navgujarat college, Usmanpura, Ahmedabad -380013  
Ph. : 079 - 4006 9038. EMAIL ID : info@jescgroup.com  
WEBSITE: www.jescgroup.com

TITLE **ELECTRICAL LIGHTING LAYOUT OF TERRACE FLOOR**

DRAWN BY :KETAN	DESIGNED BY :N.P.	CHECKED BY : J.J.
SIGN :	SIGN :	SIGN :

DRG. NO. : <b>E_LTG_RB_TF_04</b>	SHEET 1 OF 1
SCALE :	DATE :22-04-2024
PROJ. NO. :	REVISION : <b>R0</b>





LEGEND:- PLUMBING

	SWP	SOIL WATER PIPE	(A)	1100 (4'0)
	WWP	WASTE WATER PIPE	(B)	1100 (4'0)
	DWS	DOMESTIC WATER PIPE	(C)	500 (2'0)
	HWSP	HOT WATER SUPPLY PIPE	(D)	400 (1.1/2'0)
	HWRP	HOT WATER RETURN PIPE	(E)	250 (1'0)
	DWR	DOMESTIC WATER RISER PIPE	(F)	400 (1.1/2'0)
	RWP	RAIN WATER DOWN PIPE	(G)	1100 (4'0)
	CWP	CORPORATION WATER PIPE	(H)	400 (1.1/2'0)
	FWP	FLUSH/GARDEN WATER PIPE	(I)	400 (1.1/2'0)
	FLOW	FLOW DIRECTION		
	SL	PIPE RCC/WALL SLEEVE		
	CV	CONTROLLED VALVE		
	NT	NAHNI TRAP (FLOOR DRAIN)		

LEGEND:- PLUMBING

	WM-SH	OPEN WALL MIXER SHOWER
	AC	ANGLE COCK
	2.BC	2 WAY BIB COCK/ HEALTH FAUCET
	P.T.	PILLAR TAP BASIN
	BIB TAP	
	G	GEYSER
	WB	WASH BASIN
	EWC	EUROPEAN WATER CLOSET WALL MOUNTED TYPE
	EWC	EUROPEAN WATER CLOSET WITH FLUSH TANK
	METROPOLE	FLUSH VALVE
	GT	GULLY TRAP ( 300 X 300MM)
	CH	CHAMBER( 600 X 600MM)

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY

PROJECT	PROPOSED FIRE STATION AT DHOLERA
---------	----------------------------------

CLIENT	DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.
--------	--

CONSULTANT	<b>Multi Media Consultants Pvt. Ltd.</b> 401, Shivalik Shilp, Iskcon Cross Road, S.G. Highway, Ahmedabad - 380 054.
------------	--

MEPF CONSULTANT	<b>Jit Engineering Services Consultants</b> 401,402 Punit Plaza, B/H Navgujarat college, Usmanpura, Ahmedabad -380013 Ph. : 079 - 4006 9038. EMAIL ID : info@jescgroup.com WEBSITE: www.jescgroup.com
-----------------	--

TITLE	PLUMBING SYSTEM FOR SITE PLAN
-------	-------------------------------

DRAWN BY : KETAN	DESIGNED BY : N.P.	CHECKED BY : J.J.
------------------	--------------------	-------------------

SIGN :	SIGN :	SIGN :
--------	--------	--------

DRG. NO. : PL_SP_01	DATE : 26-09-2024	PROJ. NO. :	SHEET 1 OF 1
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SCALE :	REVISION : R0
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FFTG LEGEND :-

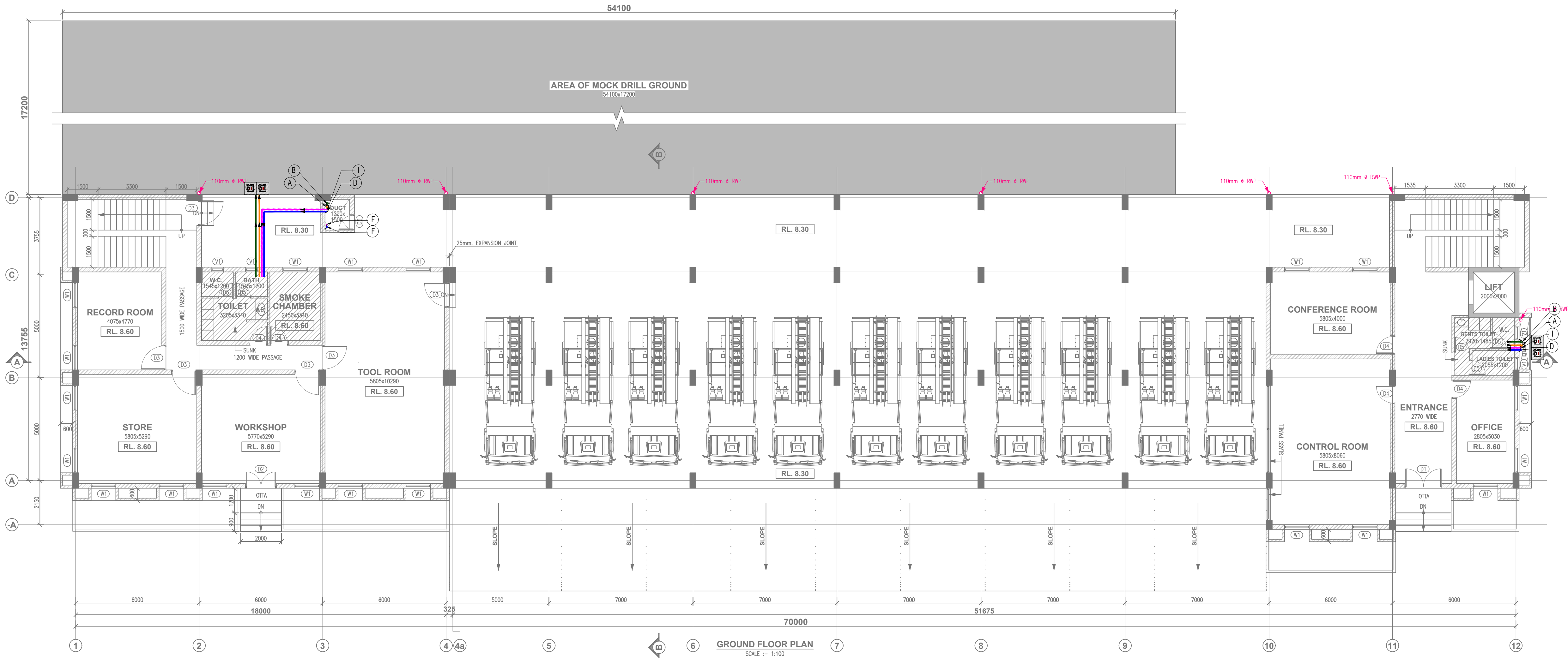
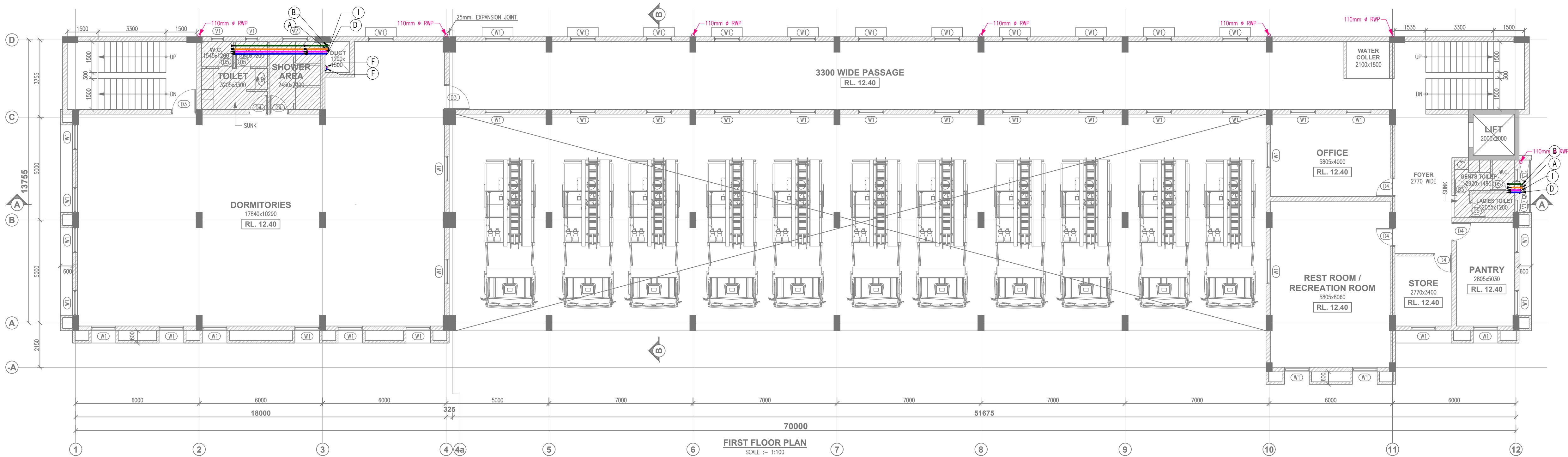
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02		FIRE SPRINKLER PIPE LINE
03		M.S. FABRICATED HOSE BOX
04		YARD HYDRANT
05		HOSE REEL
06		AIR RELEASE VALVE
07		BALL VALVE
08		FLOW SWITCH
09		CEILING MOUNTED (PENDENT TYPE) SPRINKLER.
10		REDUCER
11		5 KG DCP EXTINGUISHER
12		CARBON DIOXIDE (CO2) TYPE EXTINGUISHER OF 4.5 KG.

LEGEND

	PENDENT SPRINKLER
	UPRIGHT SPRINKLER
	FIRE PIPE LINE
	YARD HYDRANT
	HOSE BOX
	FFTG SHAFT
	DRAIN PIPE
	BALL VALVE
	BUTTERFLY VALVE
	NON RETURN VALVE
	FLOW SWITCH
	FOUR WAY FIRE BRIGADE INLET
	TWO WAY FIRE BRIGADE INLET

SITE PLAN LAYOUT





LEGEND:- PLUMBING			
	SWP	SOIL WATER PIPE	(A) 1100 (4"0)
	WWP	WASTE WATER PIPE	(B) 1100 (4"0)
	DWS	DOMESTIC WATER PIPE	(C) 500 (2"0)
	HWSP	HOT WATER SUPPLY PIPE	(D) 400 (1.1/2"0)
	HWRP	HOT WATER RETURN PIPE	(E) 250 (1"0)
	DWR	DOMESTIC WATER RISER PIPE	(F) 400 (1.1/2"0)
	RWP	RAIN WATER DOWN PIPE	(G) 1100 (4"0)
	CWP	CORPORATION WATER PIPE	(H) 400 (1.1/2"0)
	FWP	FLUSH/GARDEN WATER PIPE	(I) 400 (1.1/2"0)
	FLOW	FLOW DIRECTION	
	SL	PIPE RCC/WALL SLEEVE	
	CV	CONTROLLED VALVE	
	NT	NAHHI TRAP (FLOOR DRAIN)	

LEGEND:- PLUMBING	
	WM-SH - OPEN WALL MIXTER SHOWER
	AC - ANGLE COCK
	2.BC - 2 WAY BIB COCK/ HEALTH FAUCET
	P.T.- PILLAR TAP BASIN
	BIB TAP
	G - GEYSER
	WB - WASH BASIN
	EWC- EUROPEAN WATER CLOSET WALL MOUNTED TYPE
	EWC- EUROPEAN WATER CLOSET WITH FLUSH TANK
	METROPOLE FLUSH VALVE
	GT. GULLY TRAP ( 300 X 300MM)
	CH. CHAMBER( 600 X 600MM)

#### FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY

PROJECT **PROPOSED FIRE STATION AT DHOLERA**

CLIENT **DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.**

CONSULTANT  
 **Multi Media Consultants Pvt. Ltd.**  
401, Shivalik Shilp, Iskcon Cross Road, S.G. Highway,  
Ahmedabad - 380 054.

MEPF CONSULTANT  
 **Jit Engineering Services Consultants**  
401,402 Punit Plaza, B/H Navgujarat college,  
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WEBSITE: www.jescgroupp.com

TITLE **PLUMBING SYSTEM FOR GR & 1ST.FLOOR PLAN**

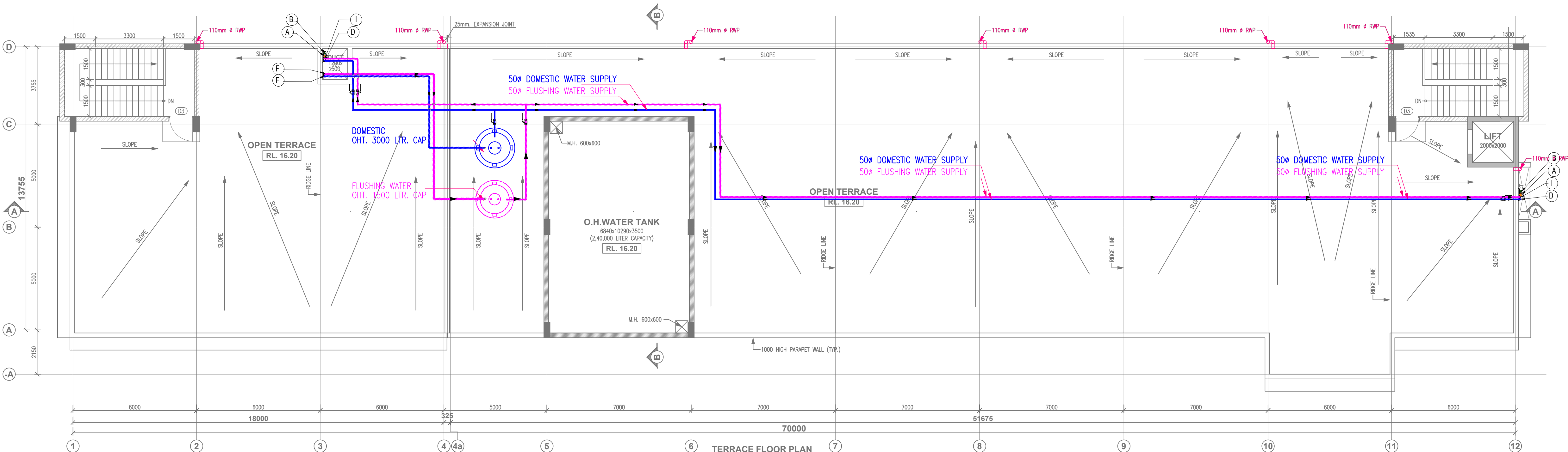
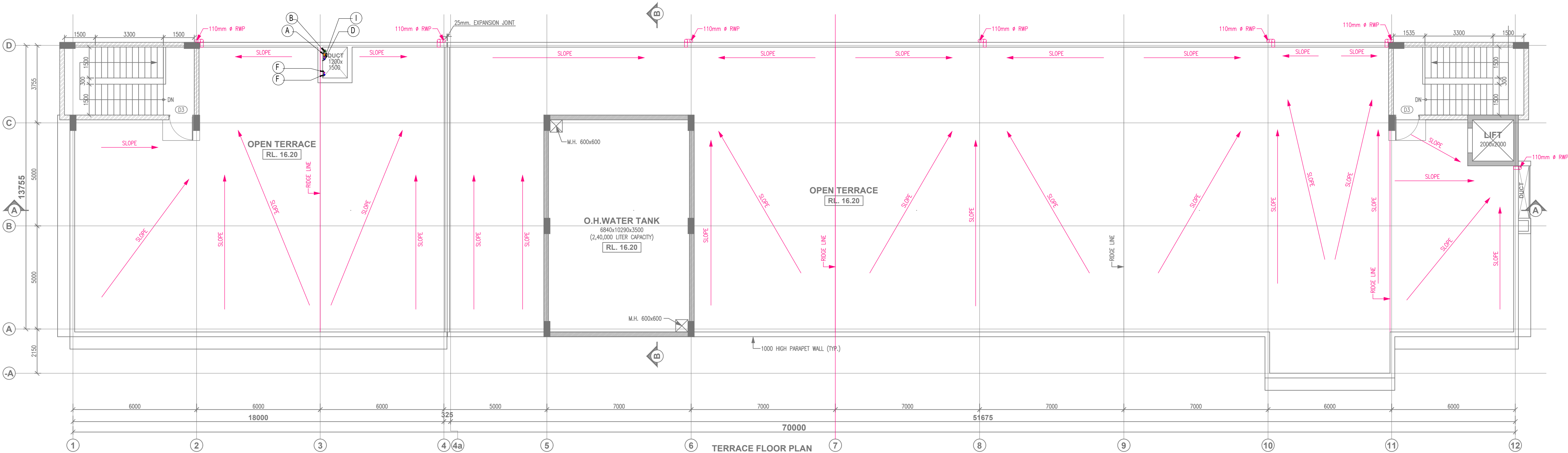
DRAWN BY: KETAN      DESIGNED BY: N.P.      CHECKED BY: J.J.

SIGN :      SIGN :      SIGN :

DRG. NO. : **P\_FP\_02**      SHEET 1 OF 1

SCALE :      DATE : 26-09-2024      PROJ. NO. :      REVISION : **R0**





LEGEND:- PLUMBING			
	SWP	SOIL WATER PIPE	(A) 1100 (4"0)
	WWP	WASTE WATER PIPE	(B) 1100 (4"0)
	DWS	DOMESTIC WATER PIPE	(C) 500 (2"0)
	HWSP	HOT WATER SUPPLY PIPE	(D) 320 (1.1/4"0)
	HWRP	HOT WATER RETURN PIPE	(E) 250 (1"0)
	DWR	DOMESTIC WATER RISER PIPE	(F) 400 (1.1/2"0)
	RWP	RAIN WATER DOWN PIPE	(G) 1100 (4"0)
	CWP	CORPORATION WATER PIPE	(H) 400 (1.1/2"0)
	FWP	FLUSH/GARDEN WATER PIPE	(I) 400 (1.1/2"0)
	FLOW	FLOW DIRECTION	
	SL	PIPE RCC/WALL SLEEVE	
	CV	CONTROLLED VALVE	
	NT	NAHHI TRAP (FLOOR DRAIN)	

LEGEND:- PLUMBING	
	WM-SH - OPEN WALL MIXTER SHOWER
	AC - ANGLE COCK
	2.BC - 2 WAY BIB COCK/ HEALTH FAUCET
	P.T.- PILLAR TAP BASIN
	BIB TAP
	G - GEYSER
	WB - WASH BASIN
	EWC- EUROPEAN WATER CLOSET WALL MOUNTED TYPE
	EWC- EUROPEAN WATER CLOSET WITH FLUSH TANK
	METROPOLE FLUSH VALVE
	GT. GULLY TRAP ( 300 X 300MM)
	CH. CHAMBER( 600 X 600MM)

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY

PROJECT **PROPOSED FIRE STATION AT DHOLERA**

CLIENT **DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.**

CONSULTANT  
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TITLE **PLUMBING SYSTEM FOR TERRACE FLOOR PLAN**

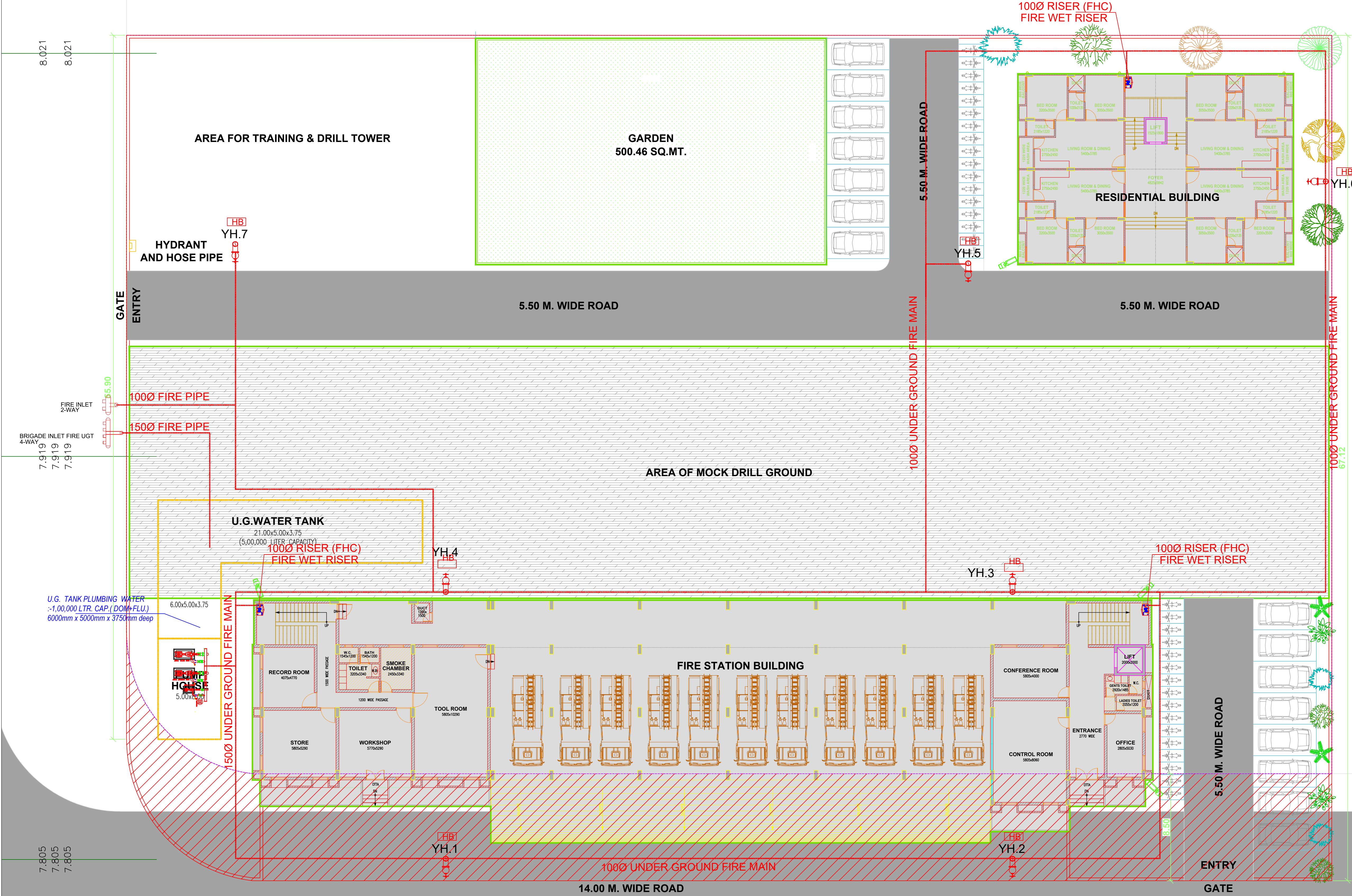
DRAWN BY :KETAN      DESIGNED BY : N.P.      CHECKED BY : J.J.

SIGN :      SIGN :      SIGN :

DRG. NO. : **P\_FP\_03**      SHEET 1 OF 1

SCALE :      DATE : 26-09-2024      PROJ. NO. :      REVISION : **R0**





FFTG LEGEND :-

01		FIRE HYDRANT PIPE LINE
02		FIRE SPRINKLER PIPE LINE
03		M.S. FABRICATED HOSE BOX
04		YARD HYDRANT
05		HOSE REEL
06		AIR RELEASE VALVE
07		BALL VALVE
08		FLOW SWITCH
09		CEILING MOUNTED (PENDENT TYPE) SPRINKLER
10		REDUCER
11		5 KG DCP EXTINGUISHER
12		CARBON DIOXIDE (CO2) TYPE EXTINGUISHER OF 4.5 KG.

LEGEND	
	PENDENT SPRINKLER
	UPRIGHT SPRINKLER
	FIRE PIPE LINE
	YARD HYDRANT
	HOSE BOX
	FFTG SHAFT
	DRAIN PIPE
	BALL VALVE
	BUTTERFLY VALVE
	NON RETURN VALVE
	FLOW SWITCH
	FOUR WAY FIRE BRIGADE INLET
	TWO WAY FIRE BRIGADE INLET

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY

PROJECT **PROPOSED FIRE STATION AT DHOLERA**

CLIENT **DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.**

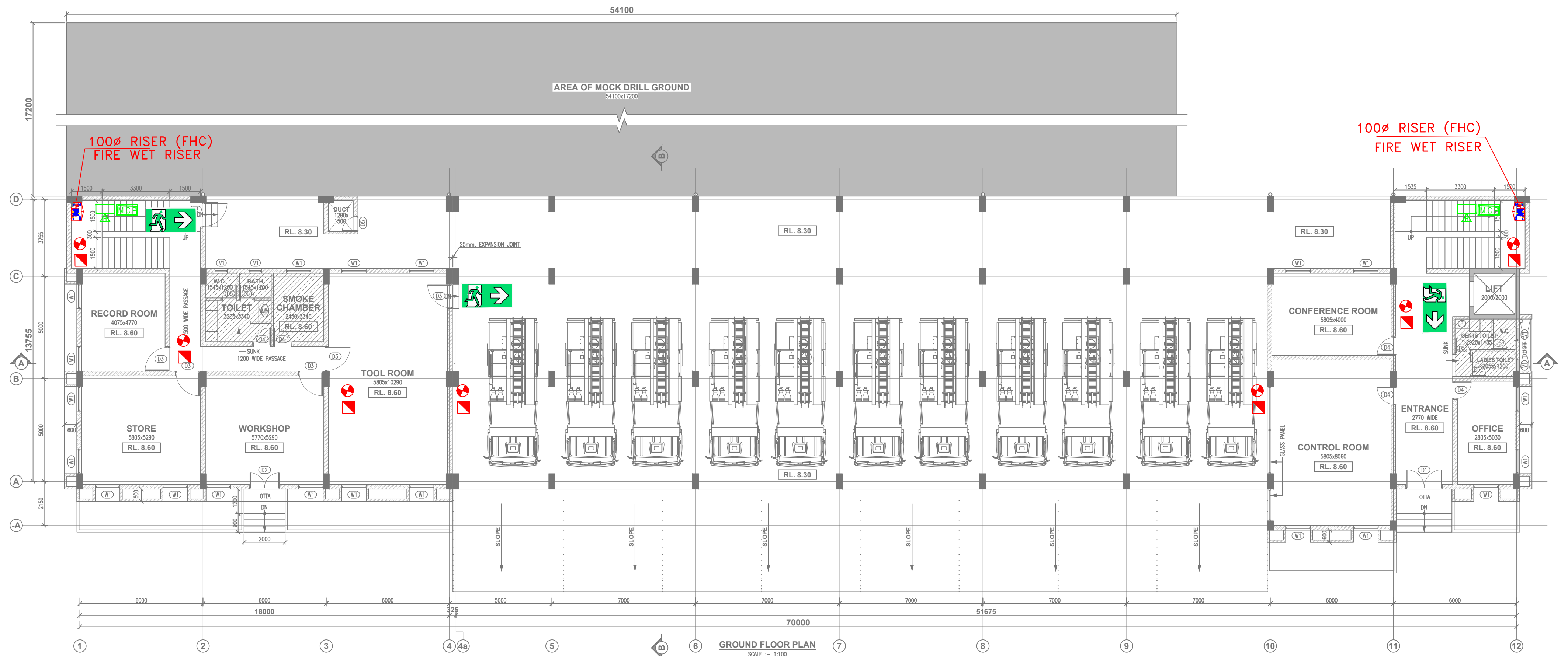
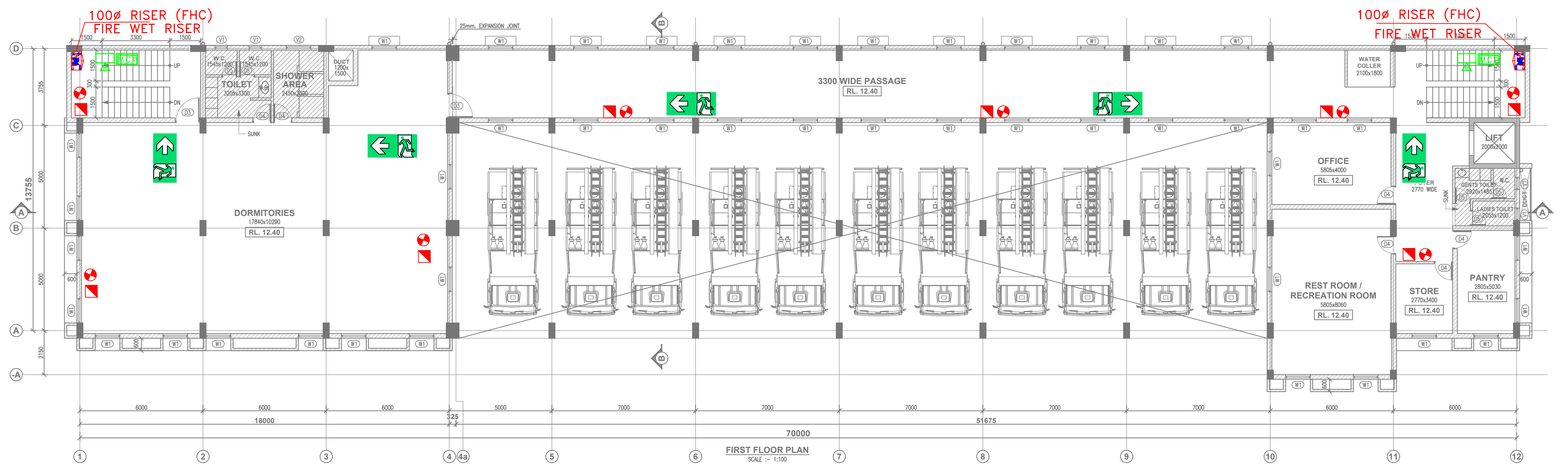
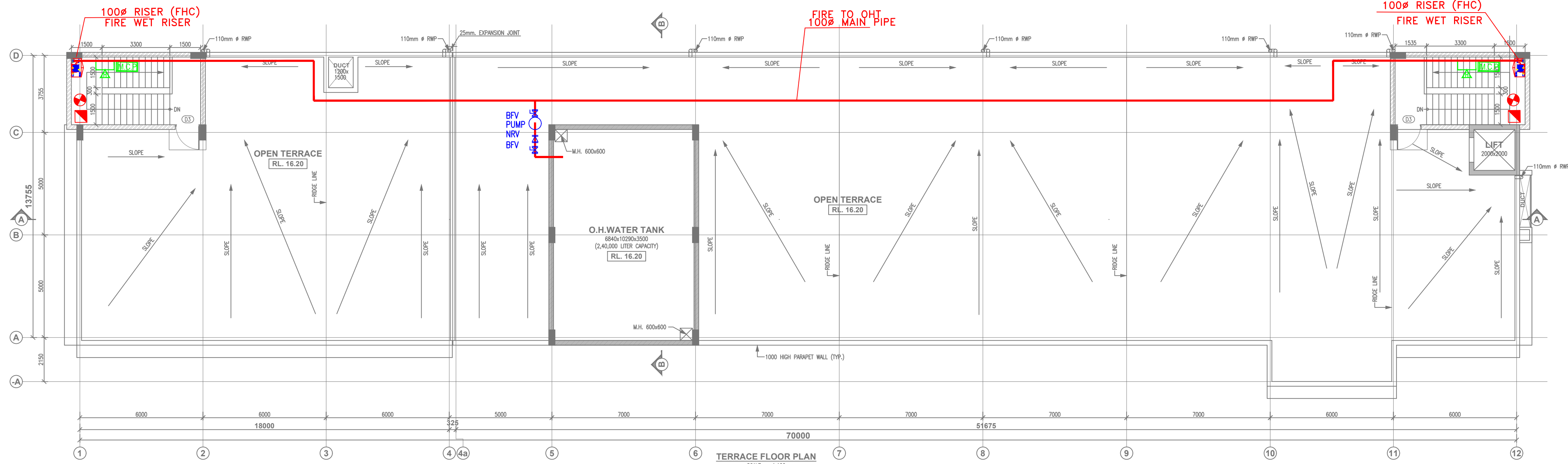
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TITLE **FIRE FIGHTING SYSTEM FOR SITE PLAN**

DRAWN BY :KETAN	DESIGNED BY :N.P.	CHECKED BY : J.J.
SIGN :	SIGN :	SIGN :
DRG. NO. : <b>FF_SP_01</b>	DATE :26-09-2024	PROJ. NO. :
SCALE :	REVISION : <b>R0</b>	SHEET 1 OF 1





FIRE LEGEND	
	PENDENT SPRINKLER
	UPRIGHT SPRINKLER
	FIRE PIPE LINE
	YARD HYDRANT
	HOSE BOX
	FFTG SHAFT
	DRAIN PIPE
	BALL VALVE
	BUTTERFLY VALVE
	NON RETURN VALVE
	FLOW SWITCH
	FOUR WAY FIRE BRIGADE INLET
	TWO WAY FIRE BRIGADE INLET

FFTG LEGEND :-		
01		FIRE HYDRANT PIPE LINE
02		FIRE SPRINKLER PIPE LINE
03		M.S. FABRICATED HOSE BOX
04		YARD HYDRANT
05		HOSE REEL
06		AIR RELEASE VALVE
07		BALL VALVE
08		FLOW SWITCH
09		CEILING MOUNTED (PENDENT TYPE) SPRINKLER.
10		REDUCER
11		5 KG DCP EXTINGUISHER
12		CARBON DIOXIDE (CO2) TYPE EXTINGUISHER OF 4.5 KG.

FOR TENDER PURPOSE ONLY

NO	DATE	DESCRIPTION	REV. BY	CHK. BY

PROJECT PROPOSED FIRE STATION AT DHOLERA

CLIENT DHOLERA INDUSTRIAL CITY DEVELOPMENT LIMITED.

CONSULTANT  
  
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TITLE FIRE FIGHTING SYSTEM FOR FLOOR PLAN

DRAWN BY : KETAN DESIGNED BY : N.P. CHECKED BY : J.J.

SIGN : SIGN : SIGN :

DRG. NO. : FF\_FP\_02 SHEET 1 OF 1

SCALE : DATE : 26-09-2024 PROJ. NO. : REVISION : R0