

**No. 100-28/2014- USIS (RGKA)  
Government of India  
Ministry of Youth Affairs & Sports  
Department of Sports  
Mission Directorate - RGKA**

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**Cafeteria Building,  
Pragati Vihar Hostel,  
CGO Complex, Lodhi Road,  
New Delhi- 110003  
Dated: 29<sup>th</sup> April, 2015.**

To

**Principal Secretary/Secretary of States/UTs**

**Subject: Technical Specifications and Designs of different types of Synthetic Athletic Track, Synthetic Hockey Turf, Swimming pool and Multi-purpose indoor hall and various schemes of Department of Sports, Ministry of Youth Affairs & Sports (MYAS).**

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Sir/Madam,

The need to standardize the Technical Specifications, designs and estimated costs for construction of Synthetic Athletic Track, Synthetic Hockey Turf, Multi-purpose Indoor Hall and Swimming pool under different schemes of Department of Sports, Ministry of Youth Affairs & Sports (MYAS), Govt. of India got the attention of the Department of Sports, Ministry of Youth Affairs & Sports. The estimates and other details for different works were worked out and the same were vetted by the Technical Advisory Committee constituted under Department of Sports, Ministry of Youth Affairs & Sports (MYAS).

2. Accordingly, the estimates for

- (1) Construction of Synthetic Hockey Turf : International (Global) level category is enclosed as Annexure 1 : Rs. 7.23 crores.
- (2) Construction of Synthetic Hockey Turf : National level category : Water based is enclosed as Annexure 2: Rs. 5.76 crores.
- (3) Construction of Synthetic Hockey Turf : Non-water based : District level: Annexure 3: Rs. 4.27 crores.
- (4) Construction of Synthetic Hockey Turf : Non –water based: Below district level : - Annexure 4: six-a-side: Rs. 3.69 crore.
- (5) Construction of Synthetic Athletic Track : International standard : Annexure 5 : Rs. 7.79 crore.
- (6) Construction of Synthetic Athletic Track : National standard : Annexure 6: Rs. 6.75 crores
- (7) Construction of Multi-purpose Indoor Hall : National standard Annexure 7 : Rs. 7.96 crores.
- (8) Construction of Multi-purpose Indoor Hall (60 x 40m) pre-cast Technology : National standard : Annexure 8.
- (9) Construction of Swimming pool complex (25m x 10 m ) : International standard (Olympic size) Annexure 9 : Rs. 4.30 crores.

3. In addition, it is also decided that –

- (a) The Global (International) standard Synthetic Hockey Turf, Synthetic Athletic Track, Swimming pool and Multi-purpose indoor hall will come up at nine Metropolitan cities, namely, New Delhi, Kolkata, Chennai, Mumbai, Bengaluru, Hyderabad, Ahmedabad (Gujarat), Surat (Gujarat) and Indore (Madhya Pradesh).

Contd.....2/-

 29/4/15

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- (b) The National standard facilities : Synthetic Hockey Turf, Synthetic Athletic Track, Multi-purpose Indoor Hall with pre-cast Technology may be taken at State Capitals/other cities.
- (c) Non-water based Synthetic Hockey Turf (Rs. 4.27 crores) will come up at District Head Quarters.
- (d) Non-water based Synthetic Hockey Turf (Rs. 3.69 crores) - six-a-side, will come up at places other than District Head Quarters.
- (e) The estimated cost, including foundation cost will change slightly from site to site depending on subsoil status, Earth quake Zone, Cyclone prone areas (Particularly for Multi-purpose indoor Hall ) etc.,
- (f) Multi-purpose indoor hall to pre-cast technology may come up in cyclone/earthquake prone areas.

4. This issues with the approval of the competent authority.

  
(Arun Kumar Singh)

Under Secretary to the Government of India  
Tele No. (011) 24361823  
Fax No. (011)24361820

Copy to:


1. The Director General, Sports Authority of India, Near Jawahar lal Nehru Stadium, Lodhi Road, New Delhi- 110003.
2. Registrar, Laxmibai National Institute of Physical Education (LNIPE), Shakti Nagar, Mela Road, Gwalior – 474002, Madhya Pradesh.

  
(Arun Kumar Singh)

Under Secretary to the Government of India

Copy also to:

1. Secretary (Sports)
2. Joint Secretary (Development)
3. Joint Secretary (Sports)
4. Director (Scheme)
5. Director (Sports)

  
(Arun Kumar Singh)

Under Secretary to the Government of India



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Annexure -1

ESTIMATE FOR SINGLE KEY TURF GLOBAL Category WITH SUBBASE						
S No	Description of items	Unit	Qty	Rate	Amount	Remark
1	Supplying FIH approved global category synthetic hockey and laying, jointing and fixing the same on the bituminous sub base with minimum 15mm thick rubberized under layer as per the FIH requirements and the pasting of synthetic grass as per specification of the Global Category FIH competition including all marking on the surface as per FIH rules and standard etc. complete as per the instructions of the engineer-in-charge.	Sqm	5764.24	5,250.00	35,512,260.00	
2	Consolidation of subgrade with power road roller of 8 to 12 tonne capacity to required slope including making good the undulations etc. with earth or quarry spoils etc. and rerolling the subgrade.	Sqm	8050	45.00	362,250.00	
3	Providing, laying, spreading and compacting 200mm of specified graded crushed stone (GSB) in sub base course including premixing the material at OMC in pug mill (mechanical mixer) carriage of mixed material, laying in uniform layers with motor grader, F.E. loader on a prepared surface and compacting with vibratory compactor to achieve the desired density including all material, labour machinery (MORTH specification clause 40) including all lead and lifts	Cum	1498	2,700.00	4,044,600.00	
4	Providing, laying, spreading and compacting 200mm thick stone aggregate for wet mix macadam (as per table 400-10 and 400-11) specification including premixing the material with water to OMC in wet mix plant as per approved design mix, carriage of mixed material by tipper to site, laying in uniform layers with motor grader/ front end loader in sub base/ base and compacting with vibratory roller to achieve the desired density (MORTH specification clause 406) by mechanical means with all lead.	Cum	1498	2,850.00	4,269,300.00	
5	Providing and applying primer coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the surface of WMM as per specifications using @ 0.75 kg/sqm.	Sqm	6630	102.00	676,260.00	
6	Providing and applying tack coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications using @ 0.25 kg/sqm.	Sqm	13260	57.00	755,820.00	
7	Providing, Laying and compacting 50mm thick bituminous macadam grade -II conforming to specification clause no. 504 of table no. 500-4G-II and 113.3 of MORTH (4th Revision 2001/latest edition), work with a bitumen (80/100 grade) content of 3.5%. The material to be mixed in hot mix plant & laid with sensor pavers to desired level accurately.	Cum	331.5	14,250.00	4,723,875.00	
8	Providing, Laying & consolidation 30mm thick bituminous concrete on prepared surface with specified graded crushed aggregate and binder conforming to MORTH specification 508 for Wearing course including loading aggregate with F.E. loader, heating & mixing the aggregate and binder in 100 TPH capacity hot mix plant, transporting the mixed material with tipper and laying with 100 TPH capacity mechanical paver finisher with sensor to the required level, rolling with vibratory roller of 8 - 10T static weight, power roller of 8-10 Tonnes capacity and tandem roller to achieve the desired density including hire and operational charges of all T&P, cost and conveyance of all materials, seigniorage charges, labour charges for all operations, diversion of traffic etc., Bitumen @ 5% of mix (60/70 grade) for complete but excluding cost of tack coat for finished item of work.	Cum	198.90	18,750.00	3,729,375.00	
10	Providing & Laying high strength interlocking precast cement concrete block of approved design in pavements i/c setting in position over average 50mm thick bedding layer of Coarse sand brushing and end cutting leveling to finish and compaction with plane vibrator etc. excluding the pcc bed in complete including filter media at drainage outlet as per specification and direction of Engineer-in-Chief, a) M30 grade, 60mm thick paver block with colour topping (as per MORTH clause 1000/1700)	Sqm	950	1,875.00	1,781,250.00	
11	Supplying and fixing of aluminum goal post of FIH approved drawing and design including all fitting and net.	Nos	2	412,500.00	825,000.00	
12	Supply and fixing of water trays around the turf at entrance gate	job	2	112,500.00	225,000.00	
13	providing and construction of R.C.C. storage tank sumpwell of 55000 liter to 80,000 liter capacity complete including all excavation and earth work, disposal of surplus soil to distance 250 mtr. Atleast or as desired by engineer -in-charge and to his satisfaction. One maintenance hole cover and iron ladder to be provided as per the diction of the Engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the Government.	job	1	1,500,000.00	1,500,000.00	
14	supply and installation of fully computerized, automatic and single key operation pop-up sprinkler system specifically designed for synthetic sports hockey surfaces including all fittings and accessories including earth work in excavation and re-filling (earth work includes 450mm of soil cover over the pipe and width of 300) HDPE pipe dia 150/110mm class pe 100 grade 12.5g/cm2 including carriage of materials within all leads and lifts and other incidental the rates are inclusive of octroi, royalty, malkhana tolltax sale tax or other taxes imposed by the government.	job	1	2,625,000.00	2,625,000.00	

	supplying and installation of 40 h.p coupled pumping set with electronic roller etc or equivalent, making connections suitable for T W/D.C.B/ well, the job includes screwing and welding of flanges on GI B-class pipes, installation of complete fittings and accessories with riser pipes, jointing of electrical cable and other connections. layout of the same along with details of product is to be got approved by the engineer-in-charge including carriage of materials within all leads and lifts and other incidentals. The rates are inclusive of octroi, royalty, malkhana, toll tax	job	1	150,000.00	150,000.00	
16	construction of pump house with brick masonry with RCC roof slab incl. one door, two window all as per drawing and a security life (floor area 16 sqm) as per instruction of the engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax other taxes imposed by the Government.	job	1	300,000.00	300,000.00	
17	Constructing drain as per drawing (including the PCC base) excluding cost of cover and plaster, but placing 0.4 x 0.75m (zero point forty five into zero point sixty metre) the same design and sample to be first got approved having a slope of Max. 1:300 to 1:400 minimum of Reinforced cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 Stone aggregate of 12.5 mm nominal size) & inside surface plastered smooth with neat cement finish, along with side of the Synthetic Hockey Surface.	Rm	350	7,200.00	2,520,000.00	
18	plastering with C.M 1:3, 10mm thick using fine river sand including curing and finishing neatly complying with standard specification and as directed by the departmental officers etc., complete	Sqm	562.5	450.00	253,125.00	
19	providing and fixing PRE-CAST drains cover size 600x600mm (five hundred into four hundred fifty millimetre) (M-30 grade concrete) with proper fixing top of the drain, so that top of the cover lies 10mm below the synthetic hockey surface, for easy drainage of water as per the design and sample approved by engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the government.	Sqm	230	4,200.00	966,000.00	
20	Earth work in excavation for structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto any lead dressing of sides and bottom and backfilling in trenches with excavated suitable materials including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, malkhana, toll tax, sale tax or other taxes imposed by the Government.	Cum	300	375.00	112,500.00	
21	providing and laying mechanically mixed and vibrated and met concrete for plain/reinforced concrete in open foundation for all types structure (complete of plain cement concrete grade M-10 (M-ten) nominal mix 1:3:6 (1 cement : 3 sand : 6 graded crushed stone aggregate 20mm (twenty millimetre) nominal size in or under water and curing complete including pumping or bailing out water, de-watering, removal of slush as required at site which may arise at the time of laying under water complete for all heights/depths including the cost of form work as per drawing and technical specification	Cum	60	8,700.00	522,000.00	
22	first class brick work using common burnt clay building bricks in cement mortar 1:3 (cement : 3 sand) in foundation and plinth including carriage of materials within all leads and other incidental. The rates are inclusive of octroi, Royalty, malkhana, toll tax, sale tax or taxes imposed by the Government.	Cum	150	9,300.00	1,395,000.00	
22	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete.					
a	300 mm dia. R.C.C. pipe	Rm	120	3,450.00	414,000.00	
b	450mm dia RCC Pipe	Rm	75	4,500.00	337,500.00	
24	providing and fixing security chain link fencing around hockey ground 2.00 meter high made with 65 mm GI pipe 2"x2" of 8 SWG hot dip galvanized chain link fixed with split line/wire for tightening angle iron and frame size 3x2 mtr and complete including fixing in position in concrete complete in all respect to the entire satisfaction of engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the Government.	sqm	1600	2,700.00	4,320,000.00	
	Total				72,320,115.00	
1	Note - Rate for turf does not include any tax and Custom duties. Duty Exemption can be arranged from THE DIRECTOR OF SPORTS - State GOVT. by the client himself					
2	Sample testing and field testing by FIH accredited lab					



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ESTIMATE FOR HOCKEY TURF GLOBAL Category WITH SUBASE

	Description of items	Unit	Qty	Rate	Amount	Remark
1	Supplying & fixing FIH approved National level category synthetic hockey with infill Sand and laying, jointing and fixing the same on the bituminous sub base as per the FIH requirements complete as per the instructions of the engineer-in-charge.	Sqm	6764.24	4,500.00	30,439,080.00	
2	Consolidation of subgrade with power road roller of 8 to 12 tonne capacity to required slope including making good the undulations etc. with earth or quarry spoils etc. and rerolling the subgrade.	Sqm	8050	45.00	362,250.00	
3	Providing, laying, spreading and compacting 200mm of specified graded crushed stone(GSB) in sub base course including premixing the material at OMC in pug mill (mechanical mixer) carriage of mixed material, laying in uniform layers with motor grader, F.E. loader on a prepared surface and compacting with vibratory compactor to achieve the desired density including all material, labour machinery. (MORTH specification clause 40) including all lead and lifts	Cum	1498	2,700.00	4,044,600.00	
4	Providing, laying, spreading and compacting 200mm thick stone aggregate for wet mix macadam (as per table 400-10 and 400-11) specification including premixing the material with water to OMC in wet mix plant as per approved design mix, carriage of mixed material by tipper to site, laying in uniform layers with motor grader/ front end loader in sub base/ base and compacting with vibratory roller to achieve the desired density (MORTH specification clause 406) by mechanical means with all lead.	Cum	1498	2,850.00	4,269,300.00	
5	Providing and applying primer coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the surface of WMM as per specifications using @ 0.75 kg/sqm.	Sqm	6630	102.00	676,260.00	
6	Providing and applying tack coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications using @ 0.25 kg/sqm.	Sqm	6630	57.00	377,910.00	
7	Providing, Laying and compacting 50mm thick bituminous macadam grade -H conforming to specification clause no. 504 of table no. 500-4G-II and 113.3 of MORT&H (4 <sup>th</sup> Revision 2001/latest edition), work with a bitumen (80/100 grade) content of 3.5%. The material to be mixed in hot mix plant & laid with sensor pavers to desired level accurately.	Cum	331.5	14,250.00	4,723,875.00	
10	Providing & Laying high strength interlocking precast cement concrete block of approved design in pavements i/c setting in position over average 50mm thick bedding layer of Coarse sand brushing and end cutting leveling to finish and compaction with plane vibrator etc. excluding the pcc bed in complete including filter media at drainage outlet as per specification and direction of Engineer-in-Chief, a) M30 grade, 60mm thick paver block with colour topping (as per MORT&H clause 1000/1700)	Sqm	950	1,875.00	1,781,250.00	
11	Supplying and fixing of aluminum goal post of FIH approved drawing and design including all fitting and net.	Nos	2	412,500.00	825,000.00	
17	Constructing drain as per drawing ( including the PCC base ) excluding cost of cover and plaster .but placing 0.4 x 0.75m(zero point forty five into zero point sixty metre) the same design and sample to be first got approved having a slope of Max. 1:300 to 1:400 by Brick Work with Cement mortar 1:5 inside surface plastered smooth with neat cement finish, alongwith side of the Synthetic Hockey Surface,	Rm	350	5,250.00	1,837,500.00	
18	plastering with C.M:1:3,10mm thick using fine river sand including curing and finishing neatly complying with standard specification and as directed by the departmental officers etc., complete	Sqm	562.5	450.00	253,125.00	
19	providing and fixing PRE-CAST drains cover size600x600mm(five hundred into four hundred fifty millimetre)(M-30 grade concrete) with proper fixing top of the drain, so that top of the cover lies 10mm below the synthetic hockey surface, for easy drainage of water as per the design and sample approved by engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the government.	Sqm	230	4,200.00	966,000.00	
20	Earth work in excavation for structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto any lead dressing of sides and bottom and backfilling in trenches with excavated suitable materials including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, malkhana, toll tax, sale tax or other taxes imposed by the Government.	Cum	300	375.00	112,500.00	
21	providing and laying mechanically mixed and vibrated and met concrete for plain/reinforced concrete in open foundation for all types structure complete of plain cement concrete grade M-10(M-ten)nominal mix 1:3:5(1 cement:3 sand: 5 graded crushed stone aggregate 20mm(twenty millimetre)nominal size in or under water and curing complete including pumping or bailing out water, de-wetring, removal of slush as required at site which may arise at the time of laying under water complete for all heights/depths including the cost of form work as per drawing and technical specification.	Cum	60	8,700.00	522,000.00	

	class brick work using common burnt clay building bricks in cement mortar 1:3 (cement :3 sand) in foundation and plinth including carriage of materials within all leads and other incidental. The rates are inclusive of octroi, Royalty, malkhana, toll tax, sale tax or taxes imposed by the Government.	Cum	150	9,300.00	1,395,000.00	
22	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					
a	300 mm dia. R.C.C. pipe	Rm	120	3,450.00	414,000.00	
b	450mm dia RCC Pipe	Rm	75	4,500.00	337,500.00	
24	providing and fixing security chain link fencing around hockey ground 2.00 meter high made with 65 mm GI pipe 2"x2" of 8 SWG hot dip galvanized chain link fixed with split line wire for tightening angle iron and frame size 3x2 mtr and complete. including fixing in position in concrete complete in all respect to the entire satisfaction of engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the Government.	sqm	1600	2,700.00	4,320,000.00	
	Total				57,657,150.00	
1	Note:- Rate for turf does not include any tax and Custom duties. Duty Exemption can be arranged from THE DIRECTOR OF SPORTS - State GOVT., by the client himself					
2	Sample testing and field testing by FIH accredited lab					



## ESTIMATE FOR HOCKEY TURF National Category-NON WATER BASED WITH SUBASE

S.No	Description of items	Unit	Qty	Rate	Amount	Remark
1	Supplying & fixing FIH approved National level category synthetic hockey with infill Sand and laying, jointing and fixing the same on the bituminous sub base as per the FIH requirements complete as per the instructions of the engineer-in-charge.	Sqm	6764.24	3,000.00	2,02,92,720.00	*
2	Consolidation of subgrade with power road roller of 8 to 12 tonne capacity to required slope including making good the undulations etc. with earth or quarry spoils etc. and rerolling the subgrade.	Sqm	8050	30.00	2,41,500.00	
3	Providing, laying, spreading and compacting 200mm of specified graded crushed stone(GSB) in sub base course including premixing the material at OMC in pug mill (mechanical mixer) carriage of mixed material, laying in uniform layers with motor grader, F.E. loader on a prepared surface and compacting with vibratory compactor to achieve the desired density including all material, labour machinery.(MORTH specification clause 40) including all lead and lifts	Cum	1498	1,800.00	26,96,400.00	
4	Providing, laying, spreading and compacting 200mm thick stone aggregate for wet mix macadam (as per table 400-10 and 400-11) specification including premixing the material with water to OMC in wet mix plant as per approved design mix, carriage of mixed material by tipper to site, laying in uniform layers with motor grader/ front end loader in sub base/ base and compacting with vibratory roller to achieve the desired density (MORTH specification clause 406) by mechanical means with all lead.	Cum	1498	1,900.00	28,46,200.00	
5	Providing and applying primer coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the surface of WMM as per specifications using @ 0.75 kg/sqm.	Sqm	6630	68.00	4,50,840.00	
6	Providing and applying tack coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications using @ 0.25 kg/sqm.	Sqm	6630	38.00	2,51,940.00	
7	Providing, Laying and compacting 50mm thick bituminous macadam grade -II conforming to specification clause no. 504 of table no. 500-4G-II and 113.3 of MORT&H (4 <sup>th</sup> Revision 2001/latest edition), work with a bitumen (80/100 grade) content of 3.5%. The material to be mixed in hot mix plant & laid with sensor pavers to desired level accurately.	Cum	331.5	9,500.00	31,49,250.00	
10	Providing & Laying high strength interlocking precast cement concrete block of approved design in pavements i/c setting in position over average 50mm thick bedding layer of Coarse sand brushing and end cutting leveling to finish and compaction with plane vibrator etc. excluding the pcc bed in complete including filter media at drainage outlet as per specification and direction of Engineer-in-Chief, a) M30 grade, 60mm thick paver block with colour topping (as per MORT&H clause 1000/1700)	Sqm	950	1,250.00	11,87,500.00	

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Annexure - 3

Hockey Turf  
Non water Based

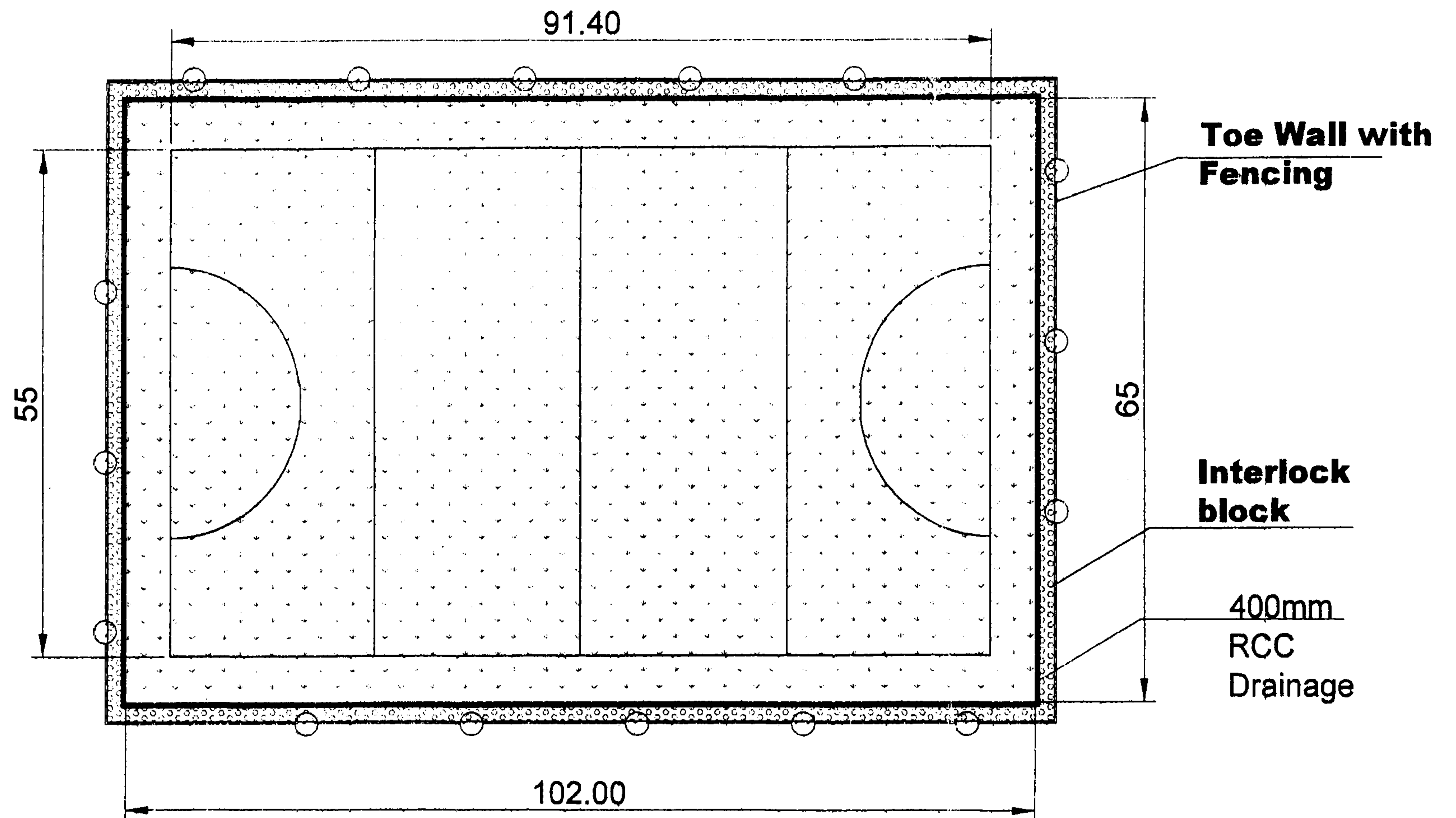
11	Supplying and fixing of aluminum goal post of FIH approved drawing and design including all fitting and net.	Nos	2	2,75,000.00	5,50,000.00	
17	Constructing drain as per drawing ( including the PCC base ) excluding cost of cover and plaster .but placing 0.4 x 0.75m(zero point forty five into zero point sixty metre) the same design and sample to be first got approved having a slope of Max. 1:300 to 1:400 by Brick Work with Cement motorar 1:5 inside surface plastered smooth with neat cement finish, alongwith side of the Synthetic Hockey Surface,	Rm	350	3,500.00	12,25,000.00	
18	plastering with C.M1:3,10mm thick using fine river sand including curing and finishing neatly complying with standard specification and as directed by the departmental officers etc., complete	Sqm	562.5	300.00	1,68,750.00	
19	providing and fixing PRE-CAST drains cover size600x600mm(five hundred into four hundred fifty millimetre)(M-30 grade concrete) with proper fixing top of the drain, so that top of the cover lies 10mm below the synthetic hockey surface, for easy drainage of water as per the design and sample approved by engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the government.	Sqm	230	2,800.00	6,44,000.00	
20	Earth work in excavation for structures as per drawing and tehinical specification. including setting out ,construction of shoring and bracing ,removal of stumps and other deleterious materials and disposal upto any lead dressing of sides and bottom and backfilling in trenches with excavated suitabel materials inculding carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi,malkhana,toll tax,sale tax or other taxes imposed by the Government.	Cum	300	250.00	75,000.00	

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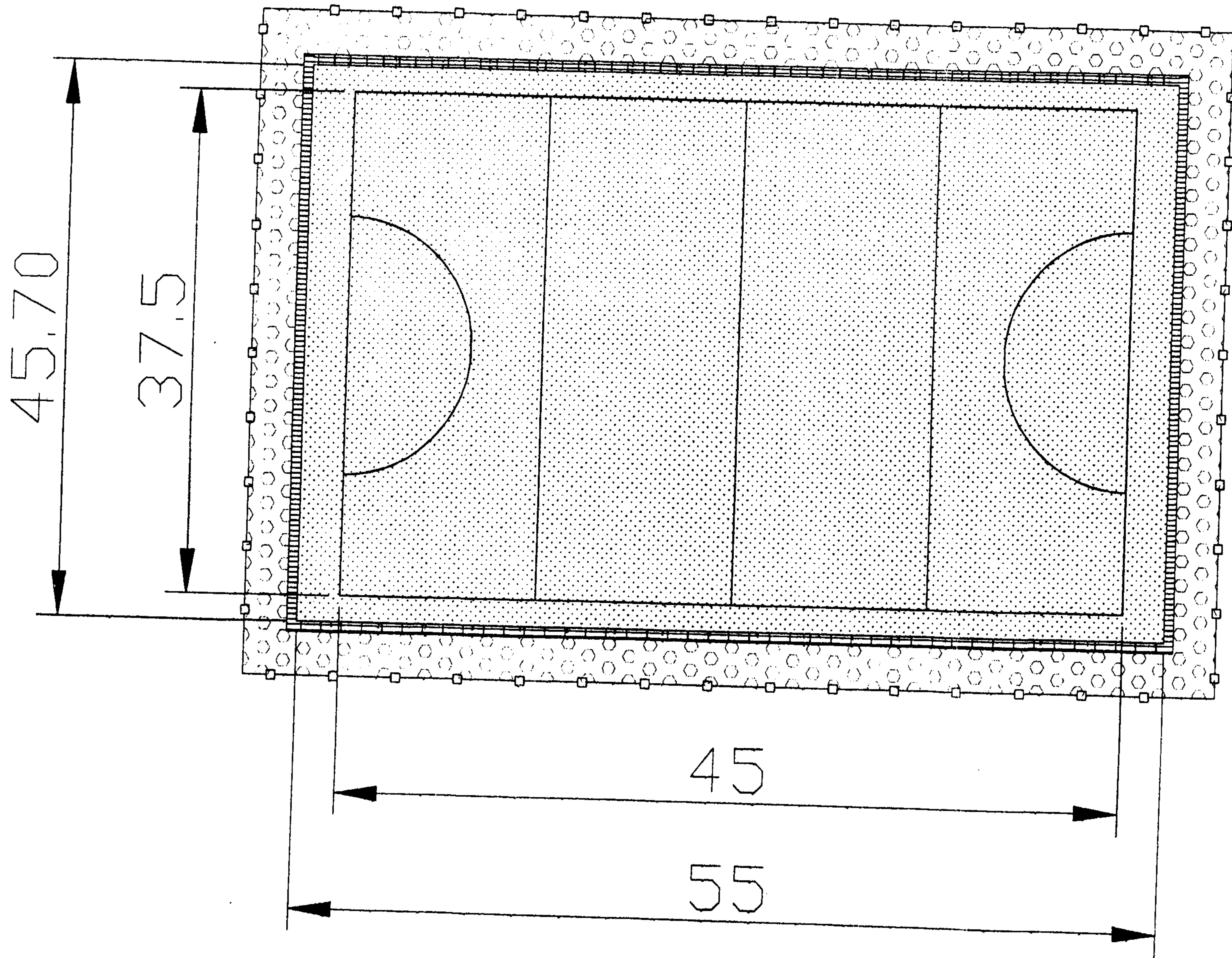
2	providing and laying mechanically mixed and vibrated and met concrete for plain/reinforced concrete in open foundation for all types structure complete of plain cement concrete grade M-10(M-ten)nominal mix 1:3:6(1 cement :3 sand :6 graded crushed stone aggregate 20mm(twenty millimetre)nominal size in or under water and curing complete including pumping or bailing out water , de-wetering, removal of slush as required at site which may arrise at the time of laying under water complete for all heights/depths including the cost of form work as per drawing and technical specification	Cum	60	5,800.00	3,48,000.00	
22	first class brick work using common burnt clay building bricks in cement mortor 1:3 (cement :3 sand)in foundation and plinth including carriage of materials within all leads and other incidental .The rates are inclusive of octori, Royalty,malkhana,toll tax,sale tax or taxes imposed by the Government.	Cum	150	6,200.00	9,30,000.00	
22	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :					
a	300 mm dia. R.C.C. pipe	Rm	120	2,300.00	2,76,000.00	
b	450mm dia RCC Pipe	Rm	75	3,000.00	2,25,000.00	
24	proviting and fixing security chain link fencing around hockey ground 2.00 meter high made with 65 mm GI pipe 2"x2" of 8 SWG hot dip galvanized chian link fixed with spilt line/wire for tighting angle iron and frame size 3x2 mtr and complete. including fixing in position in concrete complete in all respect to the entire satisfaction of engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octori,roylity,malkhana, toll tax, sale tax or other taxes imposed by the Government.	sqm	1600	1,800.00	28,80,000.00	
	Total				3,84,38,100.00	
	Adding Contingencies @ 3%				1153143.00	-
					39591243.00	
	Adding Agency Charges @ 8 %				3167299.44	-
						-
1	Grand Total				4,27,58,542.44	-
2	Note:- Rate for turf does not include any tax and Customduties. Duty Exemption can be arranged from THE DIRECTOR OF SPORTS - State.GOVt., by the client himself					
	Sample testing and field testing by FIH accredited lab					

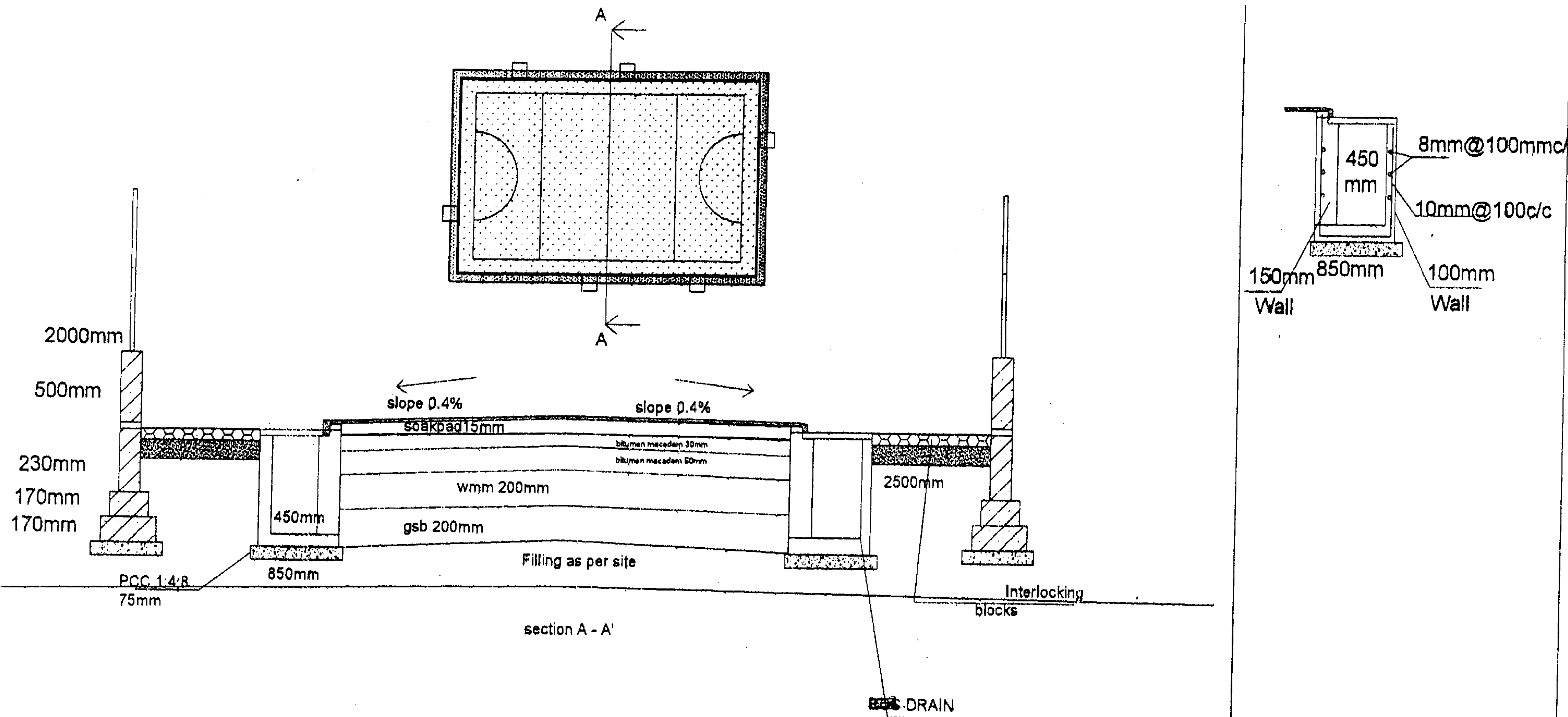


Layout Dimension Drawing



9







ESTIMATE FOR HOCKEY TURF GLOBAL Category WITH SUBASE-SIX a Side

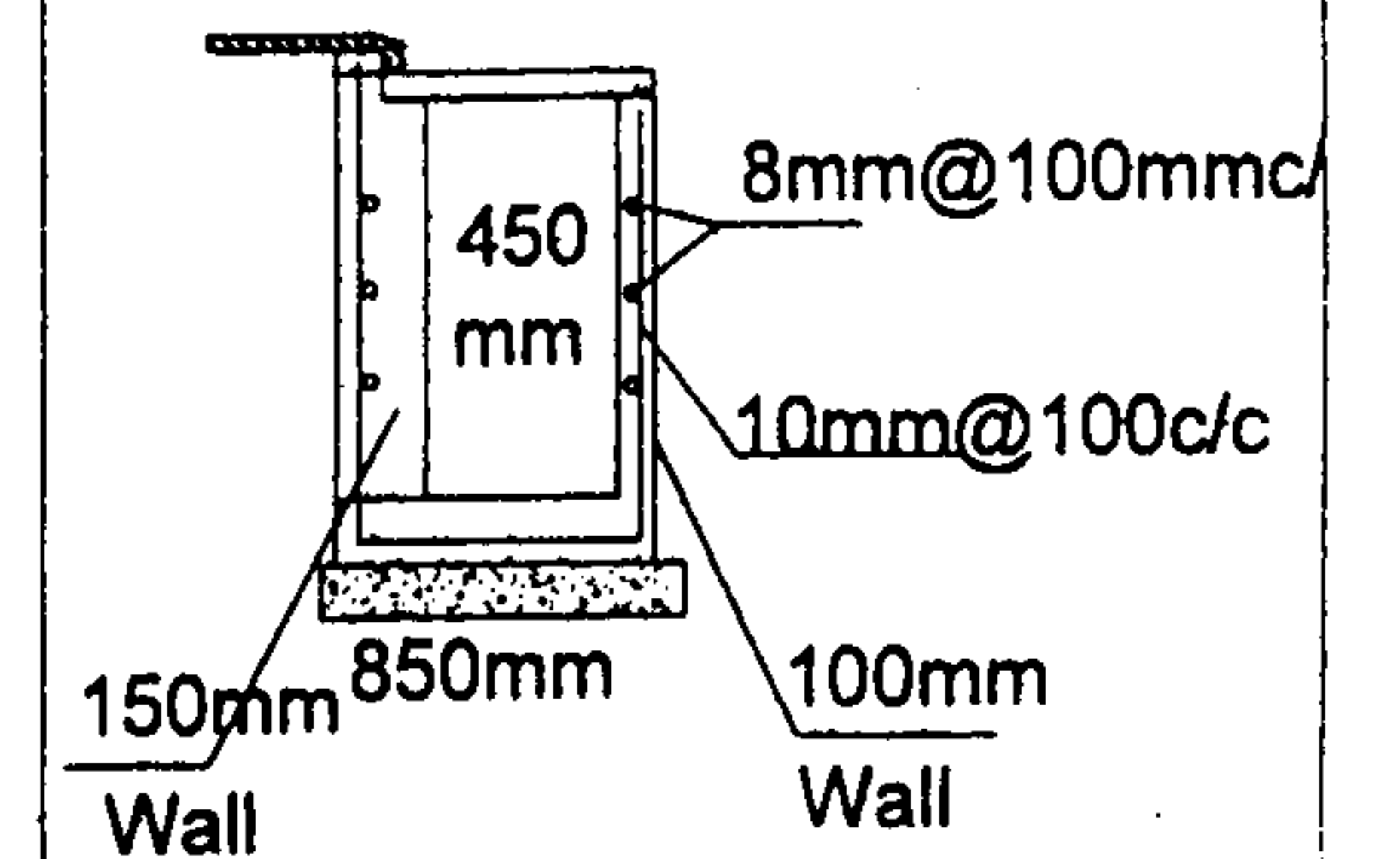
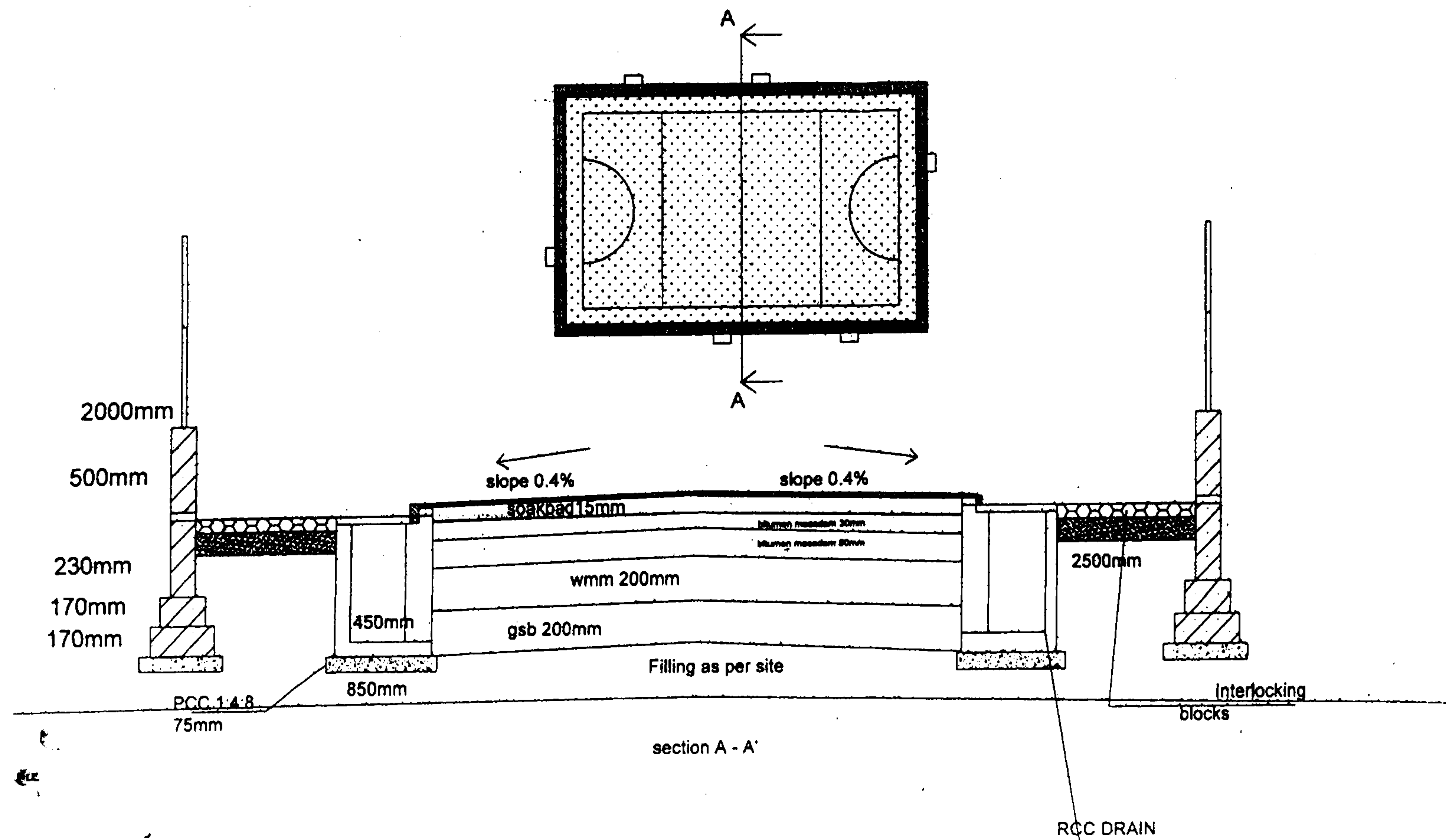
	Description of items	Unit	Qty	Rate	Amount	Remark
1	Supplying FIH approved global category synthetic hockey and laying, jointing and fixing the same on the bituminous sub base with minimum 15mm thick rubberized under layer as per the FIH requirements and the pasting of synthetic grass as per specification of the Global Category FIH competition including all marking on the surface as per FIH rules and standard etc. complete as per the instructions of the engineer-in-charge.	Sqm	2910.6	5,250.00	15,280,650.00	
2	Consolidation of subgrade with power road roller of 8 to 12 tonne capacity to required slope including making good the undulations etc. with earth or quarry spoils etc. and rerolling the subgrade.	Sqm	3500	82.50	288,750.00	
3	Providing, laying, spreading and compacting 200mm of specified graded crushed stone (GSB) in sub base course including premixing the material at OMC in pug mill (mechanical mixer) carriage of mixed material, laying in uniform layers with motor grader, F.E. loader on a prepared surface and compacting with vibratory compactor to achieve the desired density including all material, labour machinery. (MORTH specification clause 40) including all lead and lifts	Cum	600	2,700.00	1,620,000.00	
4	Providing, laying, spreading and compacting 200mm thick stone aggregate for wet mix macadam (as per table 400-10 and 400-11) specification including premixing the material with water to OMC in wet mix plant as per approved design mix, carriage of mixed material by tipper to site, laying in uniform layers with motor grader/ front end loader in sub base/ base and compacting with vibratory roller to achieve the desired density (MORTH specification clause 406) by mechanical means with all lead.	Cum	600	2,850.00	1,710,000.00	
5	Providing and applying primer coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the surface of WMM as per specifications using @ 0.75 kg/sqm.	Sqm	2824.6	102.00	288,109.20	
6	Providing and applying tack coat using bitumen emulsion (Rapid Setting) complying with IS 8887:1995, spraying the bitumen emulsion with mechanically operated spray unit, cleaning and preparing the existing road surface as per specifications using @ 0.25 kg/sqm.	Sqm	5649.2	57.00	322,004.40	
7	Providing, Laying and compacting 50mm thick bituminous macadam grade -II conforming to specification clause no. 504 of table no. 500-4G-II and 113.3 of MORTH (4 <sup>th</sup> Revision 2001/latest edition), work with a bitumen (80/100 grade) content of 3.5%. The material to be mixed in hot mix plant & laid with sensor pavers to desired level accurately.	Cum	141.25	14,250.00	2,012,812.50	
8	Providing, Laying & consolidation 30mm thick bituminous concrete on prepared surface with specified graded crushed aggregate and binder conforming to MORTH specification 508 for Wearing course including loading aggregate with F.E. loader, heating & mixing the aggregate and binder in 100 TPH capacity hot mix plant, transporting the mixed material with tipper and laying with 100 TPH capacity mechanical paver finisher with sensor to the required level, rolling with vibratory roller of 8 - 10T static weight, power roller of 8-10 Tonnes capacity and tandem roller to achieve the desired density including hire and operational charges of all T&P, cost and conveyance of all materials, seigniorage charges, labour charges for all operations, diversion of traffic etc., Bitumen @ 5% of mix (60/70 grade) for complete but excluding cost of tack coat for finished item of work	Cum	84.74	18,750.00	1,588,875.00	
10	Providing & Laying high strength interlocking precast cement concrete block of approved design in pavements i/c setting in position over average 50mm thick bedding layer of Coarse sand brushing and end cutting leveling to finish and compaction with plane vibrator etc. excluding the pcc bed in complete including filter media at drainage outlet as per specification and direction of Engineer-in-Chief, a) M30 grade, 60mm thick paver block with colour topping (as per MORTH clause 1000/1700).	Sqm	352	1,875.00	660,000.00	
11	Supplying and fixing of aluminum goal post of FIH approved drawing and design including all fitting and net	Nos	2	412,500.00	825,000.00	
12	Supply and fixing of water trays around the turf at entrance gate	job	2	112,500.00	225,000.00	
13	providing and construction of R.C.C. storage tank sumpwell of 45000 liter capacity complete including all excavation and earth work, disposal of surplus soil to distance 250 mtr. Atleast or as desired by engineer -in-charge and to his satisfaction. One maintenance hole cover and iron ladder to be provided as per the dirction of the Engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the Government	job	1	1,200,000.00	1,200,000.00	
14	supply and installation of fully computerized, automatic and single key operation pop-up sprinkler system specifically dsigned for synthetic sports hockey surfaces including all fittings and accessories including earth work in excavation and re-filling (earth work includes 450mm of soil cover over the pipe and width of 300) HDPE pipe dia 150/110mm class pe 100 (grade 2 5g/cm2) including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi royalty, malkhana tolltax, sale tax or other taxes imposed by the government	job	1	2,250,000.00	2,250,000.00	

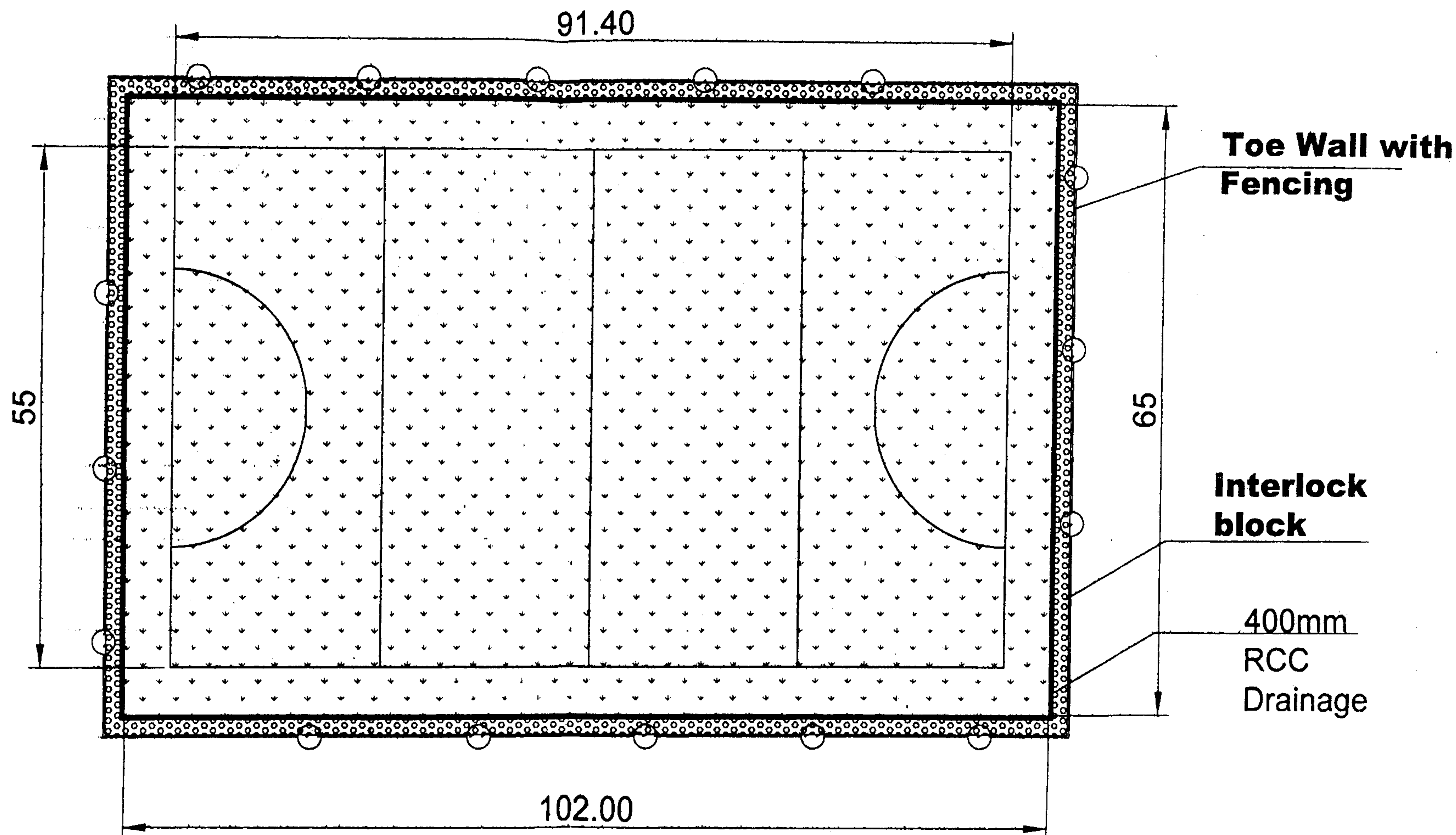


	supplying and installation of 40 h.p coupled pumping set with electronic controller etc. or equivalent, making connections suitable for T.W.D.C.B/... In well the job includes screwing and welding of flanges on GI B-class riser pipes, installation of complete fittings and accessories with riser pipes, jointing of electrical cable and other connections. layout of the same along with details of product is to be got approved by the engineer-in-charge including carriage of materials within all leads and lifts and other incidentals. The rates are inclusive of octroi, royalty, malkhana, toll tax	job	1	150,000.00	150,000.00	
16	construction of pump house with brick masonry with RCC roof slab incl. one door, two window all as per drawing and a security life (floor area 16 sqm) as per instruction of the engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax other taxes imposed by the Government.	job	1	300,000.00	300,000.00	
17	Constructing drain as per drawing (including the PCC base) excluding cost of cover and plaster, but placing 0.4 x 0.75m (zero point forty five into zero point sixty metre) the same design and sample to be first got approved having a slope of Max. 1:300 to 1:400 by Brick Work with Cement mortar 1:5 inside surface plastered smooth with neat cement finish, along with side of the Synthetic Hockey Surface,	Rm	225	5,250.00	1,181,250.00	
18	plastering with C.M:1:3, 10mm thick using fine river sand including curing and finishing neatly complying with standard specification and as directed by the departmental officers etc., complete	Sqm	337.5	450.00	151,875.00	
19	providing and fixing PRE-CAST drains cover size 600x600mm (five hundred into four hundred fifty millimetre) (M-30 grade concrete) with proper fixing top of the drain, so that top of the cover lies 10mm below the synthetic hockey surface, for easy drainage of water as per the design and sample approved by engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, royalty, malkhana, toll tax, sale tax or other taxes imposed by the government.	Sqm	135	4,200.00	567,000.00	
20	Earth work in excavation for structures as per drawing and technical specification, including setting out, construction of shoring and bracing, removal of stumps and other deleterious materials and disposal upto any lead dressing of sides and bottom and backfilling in trenches with excavated suitable materials including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi, malkhana, toll tax, sale tax or other taxes imposed by the Government.	Cum	300	375.00	112,500.00	
21	providing and laying mechanically mixed and vibrated and met concrete for plain/reinforced concrete in open foundation for all types structure complete of plain cement concrete grade M-10 (M-ten) nominal mix 1:3:6 (1 cement : 3 sand : 6 graded crushed stone aggregate 20mm (twenty millimetre) nominal size in or under water and curing complete including pumping or bailing out water, de-wetters, removal of slush as required at site which may arise at the time of laying under water complete for all heights/depths including the cost of form work as per drawing and technical specification.	Cum	37.5	8,700.00	326,250.00	
22	first class brick work using common burnt clay building bricks in cement mortar 1:3 (cement : 3 sand) in foundation and plinth including carriage of materials within all leads and other incidental. The rates are inclusive of octroi, Royalty, malkhana, toll tax, sale tax or taxes imposed by the Government.	Cum	112.5	9,300.00	1,046,250.00	
22	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete					
a	300 mm dia. R.C.C. pipe	Rm	75	3,450.00	258,750.00	
b	450mm dia RCC Pipe	Rm	50	4,500.00	225,000.00	
24	providing and fixing security chain link fencing around hockey ground 2.00 meter high made with 65 mm GI pipe 2"x2" of 8 SWG hot dip galvanized chain link fixed with split line/wire for tightening angle iron and frame size 3x2 mtr and complete, including fixing in position in concrete complete in all respect to the entire satisfaction of engineer-in-charge including carriage of materials within all leads and lifts and other incidental. The rates are inclusive of octroi royalty, malkhana, toll tax, sale tax or other taxes imposed by the Government.	sqm	~ 1600	2,700.00	4,320,000.00	
	Total				36,910,076.10	
1	Note: - Rate for turf does not include any tax and Custom duties. Duty Exemption can be arranged from THE DIRECTOR OF SPORTS - State GOVT., by the client himself					
2	Sample testing and field testing by FIH accredited lab					



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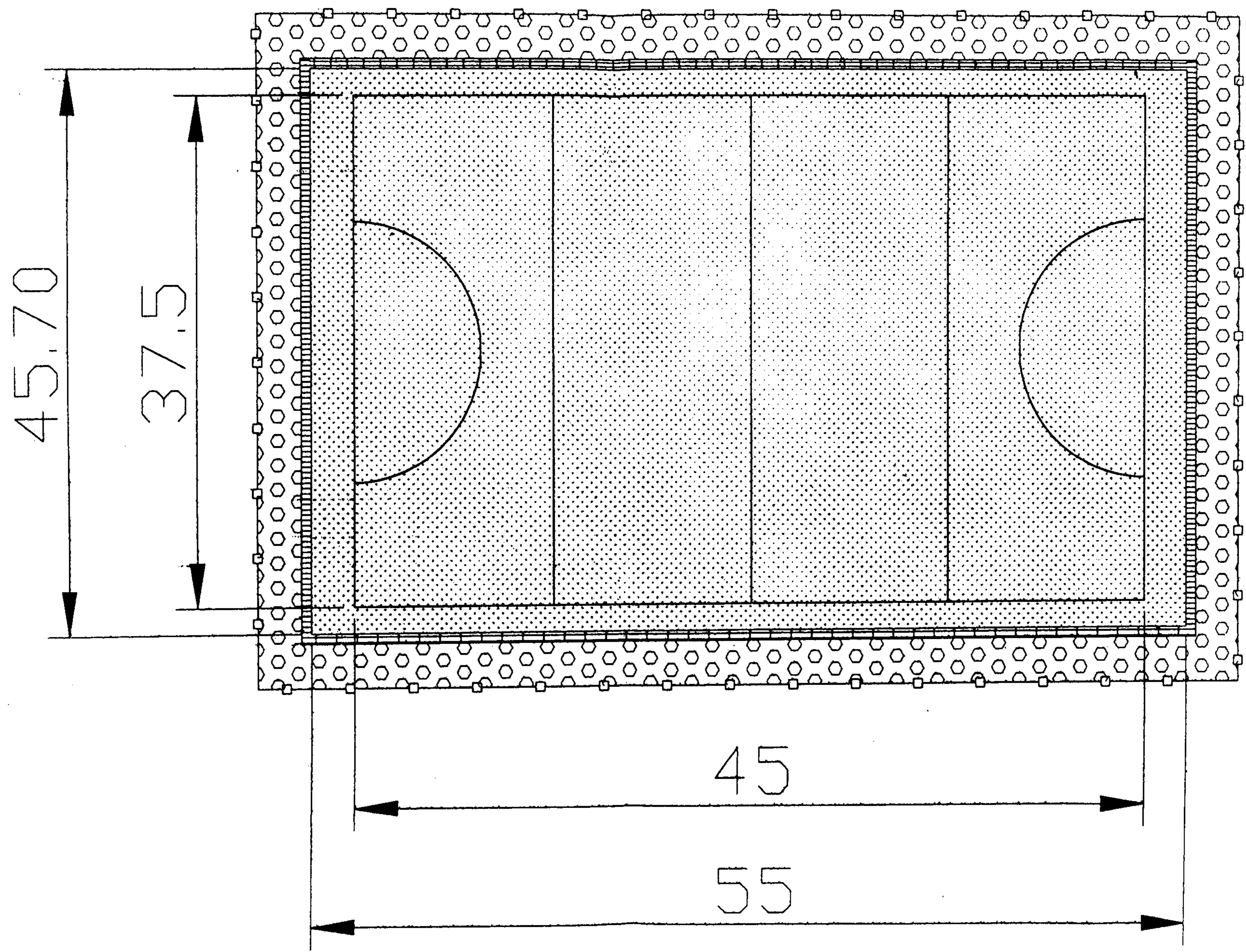




Layout Dimension Drawing



15



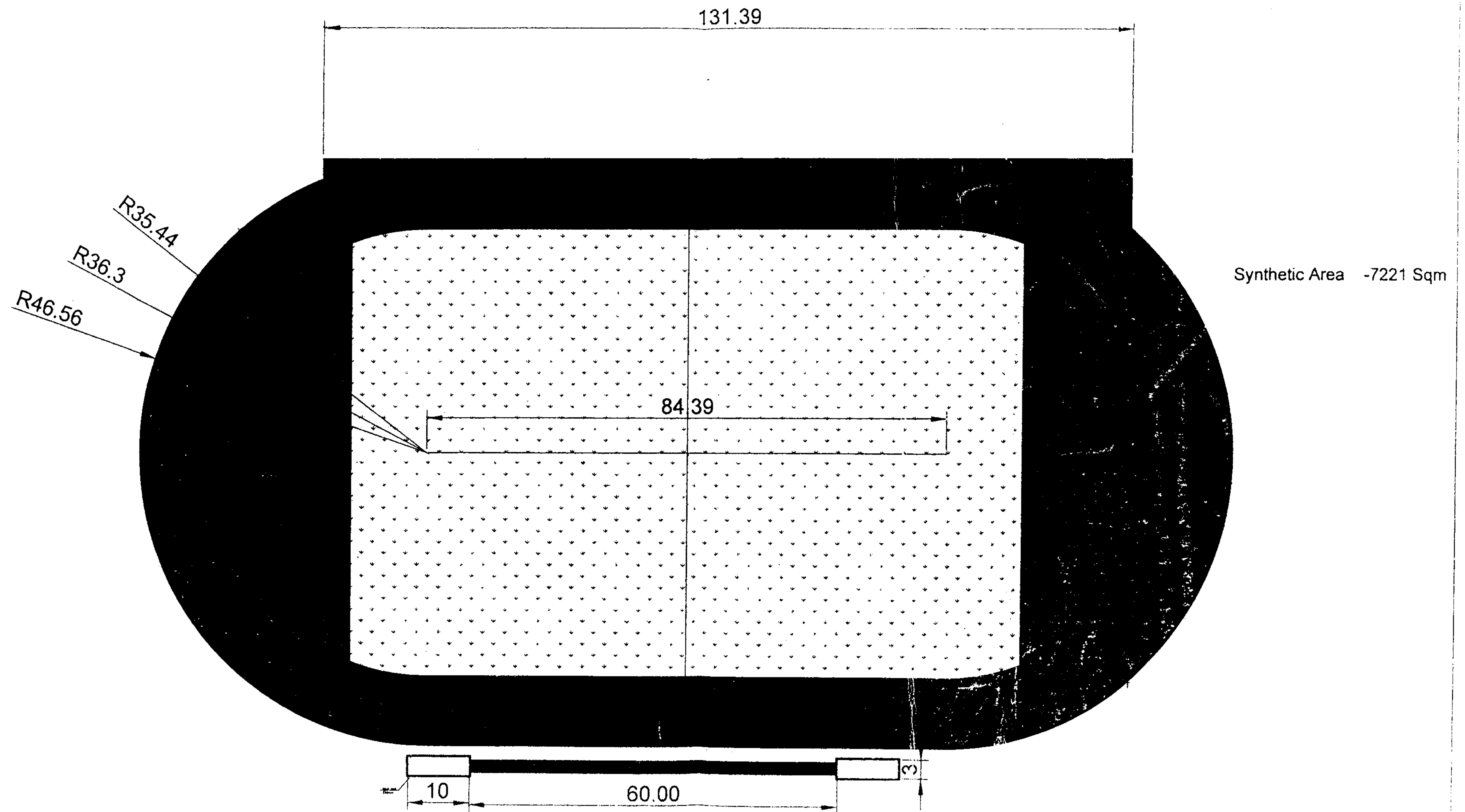
NAME OF WORK : Providing & Laying IAAF approved Synthetic Athletics Track Surface cast-in-situ including base work complete .....						
Item No	Description	Unit	qty	Rate in Figure (INR)	Amount	Remark
11	SUB HEAD- SYNTHETIC TRACK					
Item No	Description	Unit	qty	SW SYSTEM	Amount	
	Providing and laying Synthetic Athletics Track PUR based Sandwich Surface including markings on the surface all complete as per requirements/specifications laid down by IAAF class -II certification and as per direction of the Engineer-in-charge.					
	(i) Normal Stress Areas with a minimum thickness of 13mm of finished track surface	sqm	7050	5535	39,021,750.00	
	(ii) High Stress Areas with a minimum thickness of 20 mm of finished Track Surface.	sqm	240	5,658.00	1,357,920.00	
	(iii) High Stress Areas with a minimum thickness of 25 mm of finished Track Surface.	sqm	25	5,781.00	144,525.00	
12	Construction of Sand filling in jumping pits, including cost and conveyance of all materials and labour charges to the site to fill the sand in pits and complete finished item as per drawing and as directed by Engineer-in-Charge.			0		
	Construction of Sand filling in jumping pits, including cost and conveyance of all materials and labour charges to the site to fill the sand in pits and complete finished item as per drawing and as directed by Engineer-in-Charge.	Nos	2	112500	225,000.00	
	Construction of Steeplecase pit inside North D portion as per IAAF drawing and as directed by Engineer-in-Charge.	Nos	1	52500	52,500.00	



④

NAME OF WORK :	Providing & Laying IAAF approved Synthetic Athletics Track Surface cast-in-situ including base work complete .....					
Item No	Description	Unit	Qty	Rate in Figure (INR)	Amount	Remark
13	Preparation of proper slope of sokker field and laying of zolotian ( selection no.1 ) grass by dibbling process , clearing of weeds and giving the grass in perfect condition, green , free of weeds and in carpet like condition including necessary watering from source provided by client	sqm	7800.00	375	2,925,000.00	
14	Supply of sports equipment material for conducting various event			0		
a	Polevault boxes	Nos	4	37500	150,000.00	
b	Covers for polevault including synthetic top	Nos	4	37500	150,000.00	
c	Take off tray	Nos	8	37500	300,000.00	
d	Take off wooden board	Nos	8	37500	300,000.00	
e	Dummy board with synthetic top	Nos	8	37500	300,000.00	
f	Short put rings	Nos	4	37500	150,000.00	
g	Hammer cum Discuss RING with cage	Nos	1	412500	412,500.00	
h	Discuss Ring with cage	Nos	1	337500	337,500.00	
i.	Aluminum Kerbing	Nos	1	262500	175,000.00	
j	Waterjump hurdle	Nos	1	52500	52,500.00	
	TOTAL				46,054,195.00	
Final budget for 8 lane athletic track					77,917,225.00	
NOTE:- Rate for Synthetic track will be 30% more if custom duty exemption is not provided by client						
Sample Testing from IAAF approved accredited lab + Class-II certificate from IAAF						

# 8 lane Standard IAAF approved Synthetic Athletic track with one long jump run way





Bill of Quantities					
Providing and laying of 400 mtr. Synthetic Athletic track with sub-base					
S.No.	DSR No.	Description of item	Unit	Qty.	Rate(DSR 2013)
		<b>DSR ITEMS -2013</b>			
		<b>EARTH WORK</b>			
	2.6	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth, 1.5m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift upto 1.5m, disposed earth to be levelled and neatly dressed.			
	2.6.1	All kinds of soil.	Cu.M.	3850.00	146.50
					5,64,025.00
	2.8	Earth work in excavation by mechanical means (hydraulic excavator) / manual means in <b>foundation trenches</b> or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out			-
	2.8.1	All kinds of soil.	Cu.M.	283.50	148.25
					42,028.88
	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering, lead up to 50m and lift upto 1.5m.	Cu.M.	70.88	101.50
					7,193.81
	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level.			-
	4.1.3	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	Cu.M.	10.00	4921.70
					49,217.00
	4.1.5	1:3:6 ( 1 cement : 3 coarse sand : 6 graded stone aggregate 20 nominal size).	Cu.M.	15.19	4408.55
					66,965.87
	4.1.8.	1:4:8 ( 1 cement : 4 coarse sand : 8 graded stone aggregate 40 nominal size).	Cu.M.	21.94	3920.65
					86,019.06
	5.3	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	Cu.M.	15.00	6107.15
					91,607.25
	5.9	Centring and shuttering including strutting, propping etc. and removal of form for:			-
	5.9.16	Edges of slabs and breaks in floors and walls			-
	5.9.16.1	Under 20 cm wide	Metre	1000.00	111.70
					1,11,700.00

5.16	Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in shelves including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centring, shuttering and finishing with neat cement punning on exposed surfaces but excluding the cost of reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5mm nominal size).	Cu.M.	30.71	11104.30	3,41,013.05
					-
5.22.	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.				-
					-
5.22.6	Thermo-Mechanically Treated bars.	Kg.	3500.00	66.50	2,32,750.00
					-
6.1.	Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in:				-
					-
6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand).	Cu.M.	93.15	4646.50	4,32,821.48
					-
6.4	Brick work with F.P.S. bricks of class designation 75 in superstructure above plinth level upto flooe Fifth level in all shapes and sizes in:				-
					-
6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand).	Cu.M.	10.00	5325.10	53,251.00
					-
13.4	12 mm cement plaster of mix:				-
					-
13.4.2.	1:6 (1 cement : 6 coarse sand)	Sq.M.	405.00	142.25	57,611.25
					-
13.9	Cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement.				-
					-
13.9.2	20 mm cement plaster	Sq.M.	75.00	269.00	20,175.00
					-
15.60	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all loads including all lifts involved.	Cu.M.	3080.00	123.85	3,81,458.00
					-
16.1	Preparation and consolidation of sub grade with power road roller of 8 to 12 tonne capacity after excavating earth to an average of 22.5 cm. depth, dressing to camber and consolidating with road roller including making good the undulations etc. and re-rolling the sub grade and disposal of surplus earth with lead upto 50 metres.	Sq.M.	7700.00	73.55	5,66,335.00
					-
16.3	Supplying and stacking at site.				-
					-
16.3.1	90 mm to 45 mm size stone aggregate	Cu.M.	990.00	1121.90	11,10,681.00
					-
16.3.2	63 mm to 45 mm size stone aggregate	Cu.M.	750.00	1272.90	9,54,675.00
					-
16.3.3	53 mm to 22.4 mm size stone aggregate.	Cu.M.	750.00	1296.15	9,72,112.50
					-
16.3.6	Stone screening 13.2 mm nominal size (Type A).	Cu.M.	330.00	1410.20	4,65,366.00
					-
16.3.7	Stone screening 11.2 mm nominal size (Type B).	Cu.M.	125.00	1453.80	1,81,725.00
					-



(21)

16.4	Laying spreading and compacting stone aggregate of specified sizes to WBM specifications including spreading in uniform thickness, hand picking , rolling with 3 wheeled road / vibratory roller 8-10 tonne in stages to proper grade and camber, applying and brooming requisite type of screening / binding material to fill up interstices of coarse aggregate watering and compacting to the required density .	Cu.M.	3850.00	388.85	14,97,072.50
					-
16.31	Providing and applying tack coat using bitumen emulsion conforming to IS: 8887, using emulsion pressure distributor including preparing the surface & cleaning with mechanical broom.				-
					-
16.31.1	With rapid setting bitumen emulsion.				-
					-
16.31.1.1	On W.B.M @ 0.4kg/sqm.	Sqm	7700.00	15.25	1,17,425.00
					-
16.31.1.2	On bituminous surface @ 0.25kg/sqm.	Sqm	7700.00	10.05	77,385.00
					-
16.54	Providing and laying Dense Graded Bituminous Macadam using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers as per specifications to achieve the desired compaction and density, complete as per specifications and directions of Engineer-in-Charge.				-
					-
16.54.1	50 mm compacted thickness with bitumen of grade VG-30 @5% (percentage by weight of total mix) and lime filler @ 2% (percentage by weight of Aggregate) prepared in Batch Type Hot Mix Plant of 100-120 TPH capacity.	Cu.M.	385.00	8724.75	33,59,028.75
					-

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16.57	Providing and laying Bituminous concrete using crushed stone aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site by tippers, laying with paver finisher equipped with electronic sensor to the required grade, level and alignment and rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction and density as per specification, complete and as per directions of Engineer-in-Charge.				-
					-
16.57.5	35 mm compacted thickness with bitumen of grade VG-30 @5.5% (percentage by weight of total mix) and lime filler @ 3% (percentage by weight of Aggregate) prepared in drum Type Hot Mix Plant of 60-90 TPH capacity.	Cu.M.	275.00	9261.60	25,46,940.00
					-
18.9	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings This includes jointing of pipes & fittings with one step CPVC solvent cement ,trenching ,refilling & testing of joints complete as per direction of Engineer in Charge.				-
					-
18.9.10	150 mm nominal inner dia .Pipes	Rm	250	3408.80	8,52,200.00
					-
18.17	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				-
					-
18.17.3	40 mm nominal bore	Each	4	584.20	2,336.80
					-
19.29	Constructing brick masonry road gully chamber 110x50x77.5 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame and vertical grating complete as per standard design :				-
					-
19.29.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	8	7166.70	57,333.60
					-
	<b>Total of DSR Items</b>				<b>1,52,98,452.80</b>
	<b>add for anticipation cost index @ 6.5% for Delhi region</b>				<b>9,94,399.43</b>
	<b>Total of DSR Items</b>				<b>1,62,92,852.23</b>
	<b>NSR ITEMS</b>				
1	Making drain Holes in RCC Slabs by Providing and embedding 40mm dia & 75mm long ( Approx.) long pieces of ordinary PVC pipe, in RCC Precast slabs (Drain Covers), during casting of the slabs complete.	NO	2700	6.00	16,200.00



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	2	Providing and laying minimum 15 cm thick cement concrete slab over the existing sub base with a nominal mix of 1:1:2 (1 cement: 1 coarse sand: 2 graded stone aggregate 20mm nominal size) for making throwing circles for Discus/Hammer/Shot put in required diameter/size incl. cost of providing expanded metal mesh of size 20* 60mm and strands 3.25mm wide 1.6mm thick weighing 3.64 kg per sqm as reinforcement, centering and shuttering and cost of fixing the required throwing circle rings for discus/hammer/shot put with necessary fixing arrangements and providing and fixing brass tube of 4mm dia centering hole and providing and laying required drainage pipes in desired position and level including necessary making all complete as per requirement/specification laid down by IAAF and as per the direction of engineer in charge the finished surface of concrete base slab shall have required non skid/non slippery finish and gradient as per requirement/specification. (the cost of throwing circle rings is not included in this item and shall be paid as part of competition equipment).	Cum	5	8560.00	42,800.00
	3	Providing and laying synthetic athletics track surface (FULL PUR Type) including markings on the surface, All complete as per requirements/ specifications laid down by IAAF and as per direction of the Engineer-In- Charge.				
	a)	Nominal Stress Area with a minimum thickness of 15 mm of finished track surface.	Sqm.	7165	5250.00	3,76,16,250.00
	b)	High Stress Area with a minimum thickness of 20mm of finished track surface.	Sqm.	735	6000.00	44,10,000.00
	c)	Nominal Stress Area with a minimum thickness of 25mm of finished track surface.	Sqm.	35	5500.00	1,92,500.00
	4	Providing and fixing of IAAF approved instrument.				
	a)	Discus Throwing Circle/Ring	Each	2	25000.00	50,000.00
	b)	Hammer Throwing Circle/Ring	Each	1	30000.00	30,000.00
	c)	Shot Put Throwing Circle/Ring	Each	2	30000.00	60,000.00
	d)	Take of boards alongwith plasticine indication boards and Banking boards for Long jump.	Each	4	24,000.00	96,000.00
	e)	Take of boards alongwith plasticine indication boards and Banking boards for triple jump.	Each	3	24000.00	72,000.00
	f)	Stop Board for shot	Each	2	20000.00	40,000.00
	g)	Throwing safety cages with required poles and net incl. the ground fixing sleeves and ground hooks etc. for Discus and Hammer Throw.	Each	1	10,00,000.00	10,00,000.00
	h)	Aluminum Track kerbing with fixing arrangements.	Job	1	5,00,000.00	5,00,000.00
	j)	Aluminum fixing arrangement to fix hurdles for water pit/jump in steeple chase along with hurdle.	Each	1	3,50,000.00	3,50,000.00
	k)	Pole Vault Box alongwith Blanking Board	Each	2	50000.00	1,00,000.00
		<b>Total of non DSR Items</b>				<b>4,45,75,750.00</b>
		<b>Sub Total</b>				<b>6,08,68,602.23</b>
		<b>Adding Contingencies @ 3%</b>				<b>18,26,058.07</b>
		<b>Adding Agency Charges @ 8%</b>				<b>48,69,488.18</b>
		<b>Grand Total</b>				<b>6,75,64,148.48</b>
						excluding service tax

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INDOOR SPORTS HALL - 2400 SQM			
SUMMARY OF COST			
Sl. No	Description	Built-Up Area in	Amount
(i)	SPORTS COMPLEX	2400.00	6,63,26,661.84
	TOTAL BUILT UP AREA & COST	2400.00	6,63,26,661.84
	TOTAL COST OF BUILDING	A	6,63,26,661.84
(ii)	External development - DELETED		
	TOTAL COST OF BUILDING EXCLUDING EXTERNAL	C	6,63,26,661.84
	AAD FOR CPWD COST INDEX OF 105 FOR DELHI REGION AS ON 01/04/2014		6,96,42,994.93
(iii)	EXTRA FOR		
	ELECTRICAL WORKS AND SOLAR LIGHTING PANELS	LS	20,00,000.00
	SUB TOTAL	E	7,16,42,994.93
	Add for Contingency @ 3%	3%	21,49,289.85
			7,37,92,284.78
	Add for Agency charges @ 8 %	8%	59,03,382.78
GRAND TOTAL PROJECT COST			7,96,95,667.56
<b>SAY Rs. 7.96 CRORES</b>			
Service tax, Labour Cess & Statutory Charges is not included in above Cost.			

04/08/14



**INDOOR SPORTS HALL - 2400 SQM**  
**SCHEDULE OF QUANTITIES**

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Item No	Item Description	Quantity	UNIT	Tender Rate	Amount
<b>1</b>	<b>Foundation upto plinth</b>				
a)	Excavation : Excavation in soft / existing strata upto 300mm deep, 380mm wide				
b)	PCC in Foundation : Providing 100mm thick PCC 1:4:8 as a complete item of work				
c)	BBM : Providing 230mm thick Burnt Brick Masonry 400mm high i.e. 200mm below ground level & 200mm above ground level with CM 1:6				
d)	Coping : Providing 100mm thick Coping in CM 1:6 over the existing Brick masonry as a complete item of work				
e)	Backfilling : Murum filling of 200mm thickness in the existing plinth upto Masonry height, well compacted as a complete item of work				
f)	PCC Plinth : Providing 100mm thick PCC 1:4:8 over the existing murum fill as a complete item of work				
g)	IPS Floor : Providing 40mm thick IPS flooring over the existing plinth after the Erection work being completed, as a complete item of work				
h)	Providing 12mm thick plaster in CM 1:4 in the existing plinth as a complete item of work	2400	sqm	1500	36,00,000.00
<b>2</b>	<b>External &amp; Internal Walls</b>				
	Providing & fixing 75mm thick non asbestos Fibre reinforced aerated cement sandwich modules made of light weight fiber reinforced aerated cement / concrete core composed of portland cement, flyash, binders etc. and 4mm thick non asbestos fibre IS 14862:2000 on either side of the core, having tongue and groove on longitudinal side of the modules. These Solid Wall Panel modules are erected / installed using Galvanised Iron Steel tracks of 1mm thick & of size 25 x 76 x 25 mm as a top and bottom track for fixing to the floor & top of the wall respectively including all necessary material required for erecting and fixing the wall panel complete as per direction of Engineer-in-charge.	5000	sqm	1522.5	76,12,500.00
<b>3</b>	<b>Structural Steel</b>				
a)	Fabrication & erection of Structural Steel for Columns, Trusses & purlins, joint plates, bolts, components, etc including two coats of red oxide primer as a complete item of work as per the detailed drawing	250000	kgs	89.25	2,23,12,500.00
b)	Finishing with Epoxy paint (two or more coats) at all locations prepared and applied as per manufacturer's specifications including appropriate priming coat, preparation of surface, etc. complete. On steel	37500	sqm	109.8	41,17,500.00
<b>4</b>	<b>Roofing</b>				
	Supply & fixing of Pre painted Galvanised Iron Sheets on existing Structural Steel ( Columns, Trusses & Purlins ) i.e trusses in gable shape firmly fixed on base plate with components as a complete item of work	2316	sqm	646.1175	14,96,408.13
<b>5</b>	<b>DOORS</b>				
a)	Door Frame : Supply & fixing of cold -rolled steel sections of size 40x 50x 33 mm with three mild steel hinges duly welded on one side as a complete item of work				
	Door Shutter : Supply & Fixing of 30mm thick Flush Door shutter including one all drop, two handles, one tower bolt	30	nos	7200	2,16,000.00

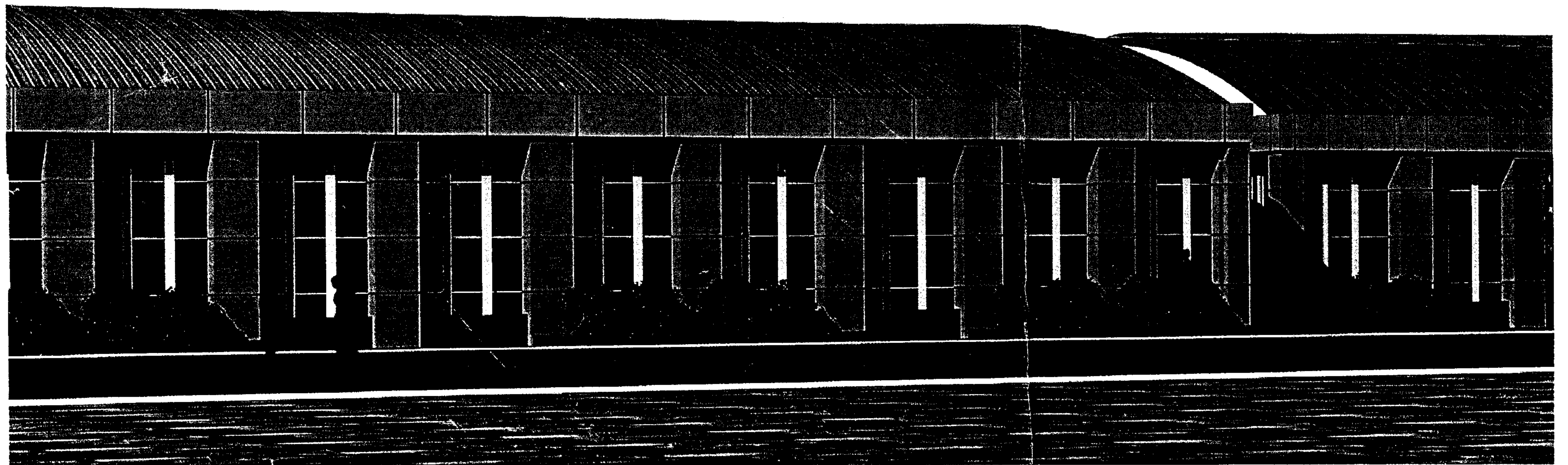
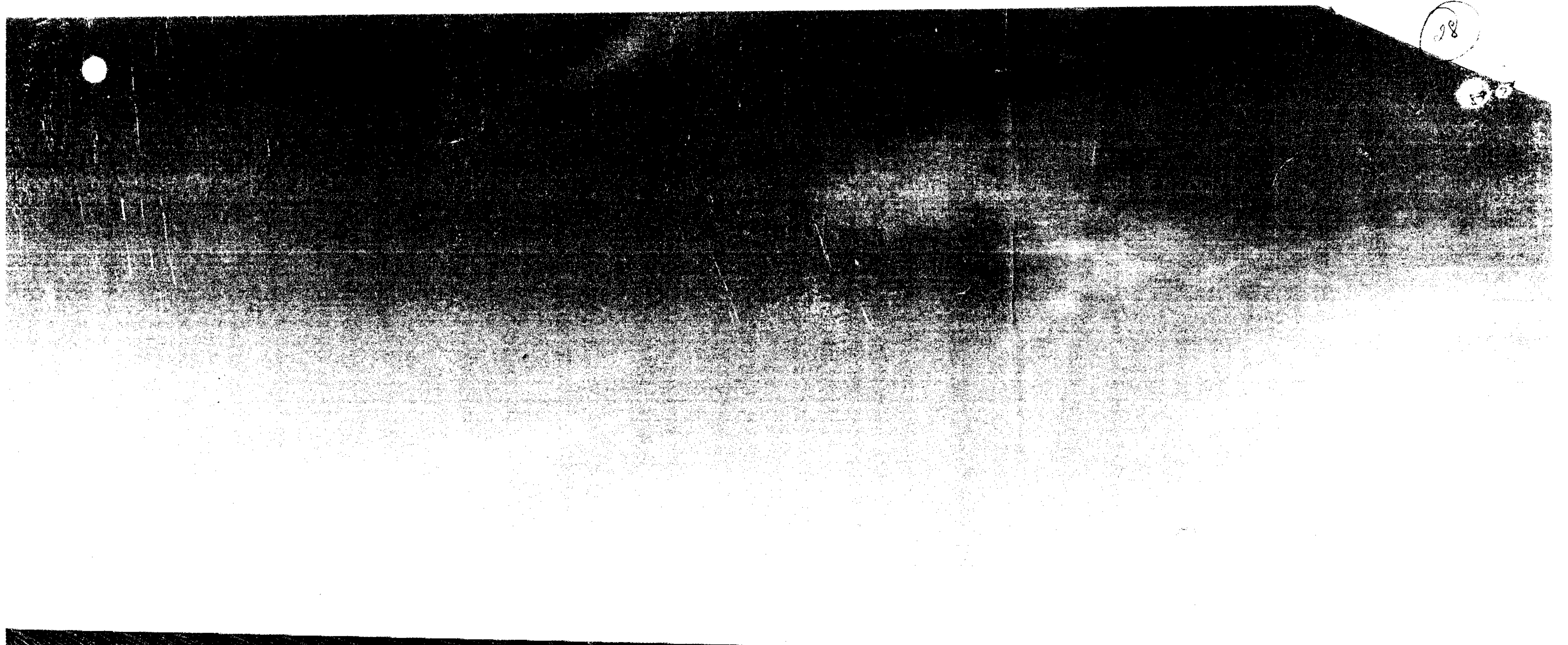




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6	<b>WINDOWS :</b>				
	Supply & fixing of cold – rolled steel sections of size 40x 50x 28 mm including 8mm guard bars @125mm c/c.				
	Window Shutter : Supply & fixing of mild steel Z sections of size 25 x 25 mm fixed with two hinges & two handles, two stay rods as per required size given in the drawing with 3mm thick obscured glass as panel inserts in the MS shutter.	80	nos.	4800	3,84,000.00
7	<b>FALSE CEILING</b>				
	Providing and Fixing 15 mm thick densified tegular edged eco friendly light weight calcium silicate false ceiling tiles of approved texture spintone/cosmos / Hexa or equivalent of size 595 x 595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanising @ 120 grams per sqm including both side) consisting of main 'T' runner suitably spaced at joints to get required length and of size 24x38 mm made from 0.33 mm thick (minimum) sheet, spaced 1200 mm centre to centre, and cross "T" of size 24x28 mm made out of 0.33 mm (Minimum) sheet, 1200 mm long spaced between main 'T' at 600 mm centre to centre to form a grid of 1200x600 mm and secondary cross 'T' of length 600 mm and size 24 x28 mm made of 0.33 mm thick (Minimum) sheet to be inter locked at middle of the 1200x 600 mm panel to form grid of size 600x600 mm, resting on periphery walls /partitions on a Perimeter wall angle pre-coated steel of size(24x24X3000 mm made of 0.40 mm thick (minimum) sheet with the help of rawl plugs at 450 mm centre to centre with 25 mm long dry wall screws @ 230 mm interval and laying 15 mm thick densified edges calicum silicate ceiling tiles of approved texture (Spintone / Cosmos/hexa) in the grid, including, cutting/ making opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc., wherever required. Main 'T' runners to be suspended from ceiling using G.I. slotted cleats of size 25x35x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm G.I. adjustable rods with galvanised steel level clips of size 85 x 30 x 0.8 mm, spaced at 1200 mm centre to centre along main 'T' , bottom exposed with 24 mm of all T-sections shall be pre-painted with polyster baked paint, for all heights, as per specifications, drawings and as directed by engineer-in-charge. Note :- Only calcium silicate false ceiling area will be measured from wall to wall. No deduction shall be made for exposed frames/opening (cut outs) having area less than 0.30 sqm. The calcium silicate ceiling tile shall have NRC value of 0.50 (Minimum), light reflection > 85%,				
		2880	sqm	1695.12	48,61,945.60
8	<b>FINISHING</b>				
a)	Distempering with 1 st quality acrylic washable distemper ( ready mixed ) of approved manufacturer and of required shade and colour complete as per manufactuer's specification.				
	Two or more coats on new work				
b)	Finishing walls with Acrylic Smooth exterior paint of required shade :				
	New Work ( Two or more coat applied @ 1.67 ltr/10 sum over and including base coat of water proofing cement paint applied @ 2.20kg/10 sum)				
c)	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:				
	Two or more coats on new work	9632	sqm	102	9,82,508.11







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NAME OF WORK: PROPOSED MULTI PURPOSE INDOOR HALL AT AGRICULTURAL COLLEGE BAPATLA.		
S.NO	Description	Amount Market Rate
1	CHAPTER - I : EARTH WORK AND EXCAVATION	2,251,418.65
2	CHAPTER - II : PLAIN AND REINFORCED CEMENT CONCRETE	43,776,942.22
3	CHAPTER - III : BRICK WORK	1,906,741.60
4	CHAPTER - IV : WOODEN AND PVC WORK	234,779.60
5	CHAPTER - V : STEEL WORK	1,070,745.50
6	CHAPTER - VI : FLOORING	2,859,456.10
7	CHAPTER - VII : FINISHINGS	82,122.75
8	CHAPTER - VIII : SANITARY INSTALLATIONS	422,604.10
9	CHAPTER - IX : SEWAGE	442,236.44
10	CHAPTER - X : WATER SUPPLY	484,364.10
11	CHAPTER - XI : ALUMINIUM WORK.	645,294.60
12	CHAPTER - XII : INTERNAL ELECTRICIFICATION	1,063,596.00
	TOTAL Rs (A)	56,051,001.61
	Grand Total	<b>56,051,001.61</b>
	Grand Total in Lakhs	<b>560.51</b>
	WCT @ 5%	2,802,550.08
	Labour Cess @ 1%	560,510.02
	Total	<b>59,414,061.71</b>
	NBCC Charges	5,941,406.17
	Tax	734,357.80
	Total	<b>66,089,825.69</b>

NAME OF WORK: PROPOSED MULTI PURPOSE INDOOR HALL AT AGRICULTURAL COLLEGE BAPATLA.		
S.NO	Description	Amount Market Rate
1	CHAPTER - I : EARTH WORK AND EXCAVATION	2,251,418.65
2	CHAPTER - II : PLAIN AND REINFORCED CEMENT CONCRETE	7,745,798.22
3	CHAPTER - III : BRICK WORK	1,906,741.60
4	CHAPTER - IV : WOODEN AND PVC WORK	234,779.60
5	CHAPTER - V : STEEL WORK	1,070,745.50
6	CHAPTER - VI : FLOORING	2,859,456.10
7	CHAPTER - VII : FINISHINGS	892,777.70
8	CHAPTER - VIII : SANITARY INSTALLATIONS	422,604.10
9	CHAPTER - IX : SEWAGE	442,236.44
10	CHAPTER - X : WATER SUPPLY	484,364.10
11	CHAPTER - XI : ALUMINIUM WORK.	645,294.60
12	CHAPTER - XII : INTERNAL ELECTRICIFICATION	1,063,596.00
	TOTAL Rs (A)	20,019,857.61
	Grand Total in Lakhs	200.20



(31)

SCHEDULE 'A'						
NAME OF WORK: PROPOSED MULTI PURPOSE INDOOR HALL AT AGRICULTURAL COLLEGE BAPATLA.						
STATION : BAPATLA ,GUNTUR DIST A.P						
S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
<b>A- BUILDING INCLUDING INTERNAL SERVICES:</b>						
<b>CHAPTER -I : EARTH WORK AND EXCAVATION</b>						
1	2.8	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
	2.8.1	a) Lift upto 1.5 m	Cum	1,276.00	157.15	200,523.40
	2.26.1	b) Lift 1.5m to3m	Cum	327.00	201.45	65,874.15
2	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	1,116.00	107.60	120,081.60
3	2.28	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5 m.				
	2.28.1	All kinds of soil	sqm	1,591.00	119.20	189,647.20
4	2.27	Supplying and filling in plinth with local sand under floors including, watering, ramming consolidating and dressing complete.	Cum	1,662.00	894.30	1,486,326.60
5	2.34	Supplying chemical emulsion in sealed containers including delivery as specified.				
a)	2.34.1	Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	Lit	716.00	258.70	185,229.20
b	2.35	Diluting and injecting chemical emulsion for POSTCONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) :				
i	2.35.1	Along external wall where the apron is not provided using chemical emulsion @ 7.5 litres / sqm of the vertical surface of the substructure to a depth of 300 mm including excavation channel along the wall & rodding etc. complete:				
		With Chlorpyriphos/ Lindane E.C. 20% with 1% concentration.	Meter	159.00	9.00	1,431.00
ii	2.35.2	Along external wall below concrete or masonry apron using chemical emulsion @2.25 Ltrs per linear meter including drilling and plugging holes etc.				
	2.35.2.1	With Chloropyriphos / lindane emulsifiable concentrate of 20% with 1% concentration.	Meter	159.00	14.50	2,305.50
		TOTAL C/O TO SUMMARY				2,251,418.65

S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
<b>CHAPTER -II : PLAIN AND REINFORCED CEMENT CONCRETE</b>						
1	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All works upto plinth level.				
a)	4.1.8	1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)	Cum	103.00	4,612.80	475,118.40
2	4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All works upto plinth level.				
a)	4.1.11	1:5:10 (1 Cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size)	Cum	90.00	3,852.09	346,688.05
3	4.2	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor, etc., up to floor five level, excluding the cost of centering, shuttering and finishing :				
	4.2.3	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	Cum	3.00	9,263.20	27,789.60
4		Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of cantering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 380 kg/cum. Excess cement required as per design mix over and above the specified cement content there in will be borne by the contractor and same will not be paid extra)				
		All works upto plinth level.				



S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
CHAPTER - III : BRICK WORK						
		Foundation and plinth in:				
1	7.1	Random Rubber Masonary with Hard Stone in foundation and plinth Including levelling Of with Cement Concrete 1:6:12(1 Cement:6 Core Sand:12Graded Stone aggregate 20mm nominal size ) upto plinth level with				
a)	7.1.1	Cement mortar 1:6 (1 cement : 6 coarse sand) (Below plinth level)	Cum	184.00	4,999.20	919,852.80
2	6.4	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in ::				
a)	6.4.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	139.00	5,749.30	799,152.70
3	6.13	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.Extra for providing and placing in position 2 Nos. 6mm dia. M.S. bars at every third course of half brick masonry.				
a)	6.13.2+ 6.15	Cement mortar 1:4 (1 Cement : 4 coarse sand)	sqm	281.00	668.10	187,736.10
		TOTAL C/O TO SUMMARY				1,906,741.60

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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
<b>CHAPTER - IV : WOOD AND PVC WORK</b>						
1	9.2	Providing and fixing ISI marked flush door shutters conforming to IS :2202 (Part I) decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters.		-		
	9.20.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	59.00	2,590.40	152,833.60
				-		
2	9.21	Providing and fixing ISI marked flush door shutters conforming to IS :2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters :		-		
a)	9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	-		
b)	9.21.2	30 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	Sqm	43.00	1,601.20	68,851.60
				-		
3	9.100.1	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :		-		
		Two or more coats on new work over an under coat of suitable shade with ordinary paint of approved brand and manufacture	Sqm	186.00	70.40	13,094.40
		TOTAL C/O TO SUMMARY				234,779.60



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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
<b>CHAPTER - V : STEEL WORK</b>						
1	9.48	Providing and fixing M.S. grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc. including priming coat with approved steel primer all complete.				
a)	9.48.1	Fixed to steel windows by welding	kgs	5,712.00	117.61	671,788.32
2	10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing, staircase railing and similar works, including applying priming coat of approved steel primer.				
a)	10.26.1	M.S. tube	kgs	3,024.00	98.27	297,168.48
3	10.14	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, including M.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strikeplate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineerin-charge				
a)	10.14.2.1	Fixing with adjustable lugs with split end tail to each jamb (single Rebeat of size 125x60mm)	Metre	247.00	412.10	101,788.70
		<b>TOTAL C/O TO SUMMARY</b>				<b>1,070,745.50</b>

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S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
<b>CHAPTER -VI : FLOORING</b>						
1	16.86	Providing and laying gang saw cut 18 mm thick, mirror polished pre moulded and pre polished machine cut granite stone of required size and shape of approved shade, colour and texture in footpath, flooring cut granite stone of required size and shape of approved shade, colour and texture in footpath, flooring in road side plazas and similar locations, laid over 20mm thick base of cement mortar 1:4 (1cement : 4 coarse sand) including grouting the joints with white cement mixed with matching pigment, epoxy touch ups etc. complete as per direction of Engineer-in-Charge.				
	16.86.1	Area less than 0.50 sqm.	Sqm	108.00	3,268.20	352,944.00
2	11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand) :				
	11.26.1	25 mm thick	Sqm	460.00	1,153.20	530,472.00
3	11.9	40 mm thick marble chips flooring rubbed and polished to granolithic finish, under layer 34 mm thick cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) and top layer 6mm thick with white, black, chocolate, grey, yellow or green marble chips of sizes from 1 mm to 4 mm nominal size, laid in cement marble powder mix 3:1 (3 cement : 1 marble powder) by weight in proportion of 4:7 (4 cement marble powder mix : 7 marble chips) by volume, including cement slurry etc. complete :				
	11.9.2	Light shade pigment with white cement	Sqm	45.00	606.00	27,270.00
4	MR	S& F of Vinyl Flooring with 1.5mm or higher thick in rolls including cost and conveyance of all materials in site.	Sqm	291.00	1,400.00	407,400.00
5	MR	Vinyl plastic flooring.	Sqm	437.00	1,718.00	750,766.00
						-
6	MR	Providing Clading/Skirting with High Polished Granite 16 to 18 mm thick up to 8'-00 (2.43 M) other than black and regular colours set over base coat of CM (1:3) 12mm thick with Grey cement slurry of honey like consistency spread at the rate of 3.3 Kgs of cement per Sq.m and jointed with cement to full depth (joints of stone should be flushed)including cost and conveyance of all materials like cement, sand, water, etc., to site including cost of seigniorage charges on all materials cost of base coat all labour charges like dressing to the required size, mixing of mortar, curing and lift charges including cutting the brick wall to place the stones and redoing the surface smooth complete for finished item of works (APSS No.707 & 701). The skirting should flush online with plastering.	Sqm	64.00	4,500.00	288,000.00

S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
						-
7	11.37	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer) of 1st quality conforming to IS : 15622 of approved make in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement : 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete.	Sqm	105.00	840.50	88,252.50
8	16.68	Providing and laying 60mm thick factory made cement concrete interlocking paver block of M -30 grade made by block making machine with strong vibratory compaction, of approved size, design & shape, laid in required colour and pattern over and including 50mm thick compacted bed of coarse sand, filling the joints with fine sand etc. all complete as per the direction of Engineer-in-charge.	Sqm	147.00	578.60	85,054.20
9	11.36	Providing and fixing 1st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	434.00	758.70	329,275.80
				-		
		TOTAL C/O TO SUMMARY				2,859,456.10





S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
CHAPTER -VII : FINISHING						
1	13.2	15 mm cement plaster on full brick or half brick wall of mix.				
	13.2.2	1:6 (1 cement : 6 fine sand)	Sqm	3,067.00	166.60	510,962.20
2	13.42	Distemping with 1st quality acrylic washable distemper (ready mixed) of approved manufacturer and of required shade and colour complete. as per manufacturer's specification.				
	13.42.1	Two or more coats on new work	Sqm	4,088.00	47.00	192,136.00
3	13.47	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
	13.47.1	New work (Two or more coats applied @ 1.43 ltr/ 10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/ 10 sqm)	Sqm	1,995.00	95.10	189,724.50
		TOTAL C/O TO SUMMARY				892,822.70

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S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
CHAPTER - VII : SANITARY INSTALLATIONS						
1	17.3.1	Providing and fixing unplasticised P.V.C. connection pipe with brass unions,30 cm length,15 mm nominal bore W.C. pan with ISI marked white solid plastic seat and lid Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, 10 litre low level white vitreous china flushing cistern & C.P. flush bend with fittings & C.I.brackets, 40 mm flush bend, overflow arrangement with specials of standard make and mosquito proof coupling of approved municipal design complete, including painting of fittings and brackets, cutting and making good the walls and floors wherever required: W.C. pan with ISI marked white solid plastic seat and lid	Each	11.00	7,631.80	83,949.80
2	17.1	Providing and fixing water closet squatting pan Hindware (ORISSA PAN Cat.No:20004)/Parryware/equivalent Indian type W.C. pan with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required :				
	17.1.1	White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	2.00	4,999.20	9,998.40
3	17.25	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings				-
	17.25.6	Surgeon type wash basin of size 660x460 mm	Each	10.00	3,218.20	32,182.00
4	17.31	Providing and fixing 600 x 450 mm beveled edge mirror of superior glass (of approved quality) complete with 6 mm thick hard board ground fixed to wooden cleats with C.P. brass screws and washers complete.	Each	10.00	767.90	7,679.00
5	17.73	Providing and fixing PTMT towel rail complete with brackets fixed to wooden cleats with CP brass screws with concealed fittings arrangement of approved quality and colour.				-
a)	17.73.2	600 mm long towel rail with total length of 645 mm, width 78 mm and effective height of 88 mm, weighing not less than 190 gms	Each	10.00	1,469.67	14,696.70
						-



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S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
6	17.72	Providing and fixing PTMT towel ring trapezoidal shape 215 mm long, 200 mm wide with minimum distances of 37 mm from wall face with concealed fittings arrangement of approved quality and colour, weighing not less than 88 gms.				
a)			Each	27.00	1,260.00	34,020.00
7	7509	PTMT Soap Dish/Holder 138x102x75 mm	Each	27.00	805.90	21,759.30
				-		-
8		Providing and fixing UPVC Soil and Waste pipes confirming to IS 4985 (4 kg/sqm) of SWR type jointed with solvent cement/ rubber ring joints and further protected with fiberglass paste. Including all specials such as bends, tees, reducers etc., with or without door as required including any cutting & making good of floors/ walls that may be necessary, clamps and stays as per requirements.				-
a)	MR	200 mm dia	Rmt	140.00	1,028.00	143,920.00
						-
b)	MR	110 mm dia	Rmt	30.00	413.00	12,390.00
						-
c)	MR	75 mm dia	Rmt	40.00	276.60	11,064.00
						-
9		Supplying and fixing of the following dia UPVC Vent pipe of approved brand and quality etc., complete.				-
						-
a)	MR	110 mm dia	Rmt	36.00	231.60	8,337.60
						-
b)	MR	75 mm dia	Rmt	36.00	205.90	7,412.40
						-
10		Supplying and fixing of UPVC cowl for the following dia of approved brand, quality etc., all complete.				-
						-
a)	MR	110 mm dia	Each	24.00	111.90	2,685.60
						-
b)	MR	75 mm dia	Each	24.00	42.50	1,020.00
						-
						-
11	17.6	Providing and fixing PVC trap of self cleansing design with CP brass grating with or without vent arm complete including cost of cutting and making good the walls & floors.				-
a)	17.60.2	100 mm inlet x 75 mm outlet.Sand Cast Iron S&S as per IS 1729	Each	40.00	376.90	15,076.00
				-		-
12	MR	Providing and fixing C.P. brass double coat hook of Jaguar make (Continental cat no. CAN-1161N) conforming to IS 8931.	Each	27.00	607.90	16,413.30
				-		

VI

S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
		TOTAL C/O TO SUMMARY				422,604.10



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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
CHAPTER - VIII : SEWAGE						
1	19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-				
	19.2.3	200 mm diameter S.W. pipe	Rmt	140.00	936.30	131,082.00
2	19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
	19.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	12.00	1,502.69	18,032.28
3	19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	10.00	8,492.50	84,925.00
4	19.7.3	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :				
	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	6.00	24,183.90	145,103.40

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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
5	19.15.2	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :With 20 mm diameter round bar	Each	96.00	244.81	23,501.76
6	2.10.1.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	Rmt	140.00	282.80	39,592.00
		TOTAL C/O TO SUMMARY				442,236.44



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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
CHAPTER - VIII : SEWAGE						
1	19.2	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-				
	19.2.3	200 mm diameter S.W. pipe	Rmt	140.00	936.30	131,082.00
2	19.4	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design :				
	19.4.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	12.00	1,502.69	18,032.28
3	19.7.1.1	Constructing brick masonry manhole in cement mortar 1:4 ( 1 cement : 4 coarse sand ) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	10.00	8,492.50	84,925.00
4	19.7.3	Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (heavy duty) 560 mm internal diameter, total weight of cover and frame to be not less than 208 kg (weight of cover 108 kg and weight of frame 100 kg) :				
	19.7.1.1	With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	6.00	24,183.90	145,103.40

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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
5	19.15.2	Providing M.S. foot rests including fixing in manholes with 20x20x10 cm cement concrete blocks 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) as per standard design :With 20 mm diameter round bar	Each	96.00	244.81	23,501.76
6	2.10.1.2	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	Rmt	140.00	282.80	39,592.00
		TOTAL C/O TO SUMMARY				442,236.44

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S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
<b>CHAPTER -IX : WATER SUPPLY</b>						
		(INTERNAL)				
1	MR	Providing and fixing Single lever 3 - inlet exposed parts kit consisting of operater wall flange & button only (suitble for Item ALD-193) (Florentine Cat No: FLR 5193K/Equivalent)nominal bore.				
a)		15 mm nomunal bore Short body:	Each	27.00	1,511.70	40,815.90
2	MR	Providing and fixing C.P. brass <b>two way</b> bib cock of Jaguar make (CLARION Cat No. CQT23041/Equivalent) conforming to IS 8931.				
a)		15 mm nomunal bore :	Each	10.00	1,029.30	10,293.00
						-
3		Providing and fixing Sink cock with round swinging spout table mounted with Jaquar make (Florentine Cat No:FLR-5357 /Equivalent) with flanges nominal bore.				-
a)	MR	15 mm nomunal bore Long Body.	Each	40.00	2,150.00	86,000.00
						-
4	18.53	Providing and fixing C.P. brass angle valve for basin mixer and geyser point approved quality conforming to IS :8931				-
a)	18.53.1	15 mm nomunal bore :	Each	27.00	707.60	19,105.20
						-
5	18.16	Providing and fixing C.P. brass stop cock of approved make conforming to IS :8931				-
a)	18.16.1	15 mm nomunal bore :	Each	10.00	1,061.40	10,614.00
						-
6	17.34	Providing and fixing toilet paper holder:C.P. brass.				-
a)	17.34.1	C.P. brass	Each	13.00	833.20	10,831.60
						-
7	18.22	Providing and fixing C.P. brass shower rose with 15 or 20mm inlet.				-
a)	18.22.1	100mm dia	Each	14.00	1,479.60	20,714.40
						-
8	MR	Providing & fixing CP brass health faucet with 8mm dia 1mt flexible tube fixed to wall of Jaguar make (ALLIED Cat No - ALD 573/Equivalent) with all complete as specified and directed by engineer-in-charge.	Each	11.00	1,704.70	18,751.70
						-
9		Providing and fixing PTMT Bottle Trap for Wash basin and sink.				-
	17.70.1	Bottle trap 31mm single piece moulded with height of 270 mm, effective length of tail pipe 260 mm from the centre of the waste coupling, 77 mm breadth with 25 mm minimum water seal, weighing not less than 260 gms	Each	9.00	1,193.60	10,742.40
						-
10		Providing and fixing Chlorinated Polyvinyl chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain& brass threaded fittings including fixing the pipes with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the samd including testing of joints complete as per directions of Engineer-in- charge.(Concealed work including cutting chases and making good the walls etc.,)				-
a)	18.8.1	15 mm nominal outer dia Pipes	Rmt	234.00	217.60	50,918.40
						-



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S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
11		Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes SDR 7.4 U V stabilized & anti-microbial fusion welded,hving thermal stability for hot & cold water supply including all PP- R plain & brass threaded polypropylene fandum fittings including trenching, refilling & testing of joints complete as per direction of Engineer-in-charge.(External Work)				-
a)	18.6.3	PN - 16 Pipe, 25 mm OD (SDR - 7.4)	Rmt	20.00	252.80	5,056.00
						-
b)	18.6.4	PN - 16 Pipe, 32 mm OD (SDR - 7.4)	Rmt	50.00	369.20	18,460.00
						-
12		Providing and placing on terrace(at all floor levels) polyethylene water storage tank with ISI: 12701 marked with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.(Sintex/Equivalent)				-
a)	18.48	1000 Litres	Each	10,000.00	7.52	75,200.00
						-
13	18.17	Providing and fixing Gun metal gate valve with C.I. wheel of approved quality (screwed end)				-
a)	18.17.1	25 mm nominal bore	Each	6.00	450.30	2,701.80
b)	18.17.2	32 mm nominal bore.	Each	3.00	527.50	1,582.50
						-
		APPLY (EXTERNAL)				-
						-
14	18.12	Providing and fixing G.I. pipes complete with G.I. fittings including trenching and refilling etc.				-
a)	18.12.5	40 mm dia nominal bore	Rmt	50.00	346.80	17,340.00
						-
15	18.17	Providing and fixing Gun metal gate valve with C.I. wheel of approved quality (screwed end)				-
a)	18.17.3	40 mm dia nominal bore	Each	2.00	617.60	1,235.20
						-
16	19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :				-
a)	19.6.2	150 mm dia. R.C.C. pipe	Metre	10.00	361.60	3,616.00
				-		-
17	2.1	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m :				-
a)	2.10.1.2	Pipes, cables etc. exceeding 80 mm dia. but not exceeding 300 mm dia	Metre	50.00	282.80	14,140.00
						-
18	2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.				-
			Metre	30.00	107.60	3,228.00
						-

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S No.	DSR CODE	Description	Unit	Qty	RATE AS PER	AMOUNT AS PER MARKET
19	18.34	Constructing masonry Chamber 90x90x100 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve,with C.I. surface box 100 mm top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size ) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design :				-
a)	18.34.1	With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	Each	6.00	10,503.00	63,018.00
		TOTAL C/O TO SUMMARY				484,364.10

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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
<b>CHAPTER-X : ALUMINUM WORK</b>						
1	21.1	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :				
a)	21.1.1.2	Powder coated aluminium (minimum thickness of powder coating 50 micron)	kgs	547.00	395.40	216,283.80
b)	21.1.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (fittings shall be paid for separately)				
	21.1.2.1	Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of grade AC 15)	kgs	340.00	418.40	134,436.00
2	21.3	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge . (Cost of aluminium snap beading shall be paid in basic item):				
a)	21.3.1	With float glass panes of 4.0 mm thickness	Sqm	218.00	757.90	165,222.20
3	21.11	Providing and fixing stainless steel (SS 304 grade) adjustable friction windows stays of approved quality with necessary stainless steel screws etc. to the side hung windows as per direction of Engineerin- charge complete.		-		
a)	21.11.1	205 x 19 mm	Each	218.00	225.10	49,071.80
4	9.97	Providing and fixing aluminium hardware ISI marked colour anodised (anodic coating not less than grade AC 10 as per IS :1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete.				
		Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade, with necessary screws etc. complete :		-		
a)	9.97.3	200x10 mm	Each	134.00	80.40	10,773.60
b)	9.1	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete :				
	9.100.1	125mm	Each	134.00	70.40	9,433.60
c)	9.96	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete :(Aldrops)				



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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER MARKET	AMOUNT AS PER MARKET
	9.96.1	300x16 mm	Each	13.00	227.10	2,952.30
d)	9.96.2	250x16 mm	Each	34.00	190.20	6,466.80
e)	MR	Providing and fixing aluminium Rubber Cleats of 50mm size	Each	19.00	36.00	684.00
f)	9.84	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.	Each	13.00	1,088.80	14,154.40
g)	MR	Providing and fixing aldrop with lock ( Kadi-tala 275mm ) cat no : chrome 5094 LKYLPA602 , Make : Godrej locks .	Each	25.00	1,355.20	33,880.00
						-
h)	MR	PVC Wall stopper.	Each	19.00	101.90	1,936.10
		TOTAL C/O TO SUMMARY				645,294.60

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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER DSR 2013	RATE AS PER MARKET	AMOUNT AS PER DSR 2013	AMOUNT AS PER MARKET
<b>CHAPTER - XI : INTERNAL ELECTRICIFICATION</b>								
1	1.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit,with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.						
	1.10.3	Group C	point	234.00	727.00		170,118.00	
							-	
2	1.11	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / medium class PVC conduit, 2 way modular switch, modular plate, recessed suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.	point	2.00	782.00		1,564.00	
3	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required					-	
	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	Metre	400.00	140.00		56,000.00	
	1.14.3	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	500.00	171.00		85,500.00	
	1.14.9	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	Metre	40.00	371.00		14,840.00	
							-	
4	1.18.2	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required	Metre	80.00	23.00		1,840.00	
				-			-	
5	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.		-			-	
	1.24.1	5/6 amps switch	Each	10.00	77.00		770.00	
	1.24.3	15/16 amp switch	Each	12.00	114.00		1,368.00	
	1.24.4	3 pin 5/6 amp socket outlet	Each	10.00	101.00		1,010.00	
	1.24.5	6 pin 15/16 amp socket outlet	Each	12.00	163.00		1,956.00	
	1.24.6	Telephone socket outlet	Each	2.00	92.00		184.00	
				-			-	
6	1.25	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required	Each	21.00	362.00		7,602.00	
				-			-	
7	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.		-			-	
	1.21.2	25 mm	Metre	80.00	72.00		5,760.00	
				-			-	
8	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc as required.		-			-	
	1.27.1	1 or 2 Module (75mmX75mm)	Each	2.00	159.00		318.00	
				-			-	
9	1.28	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.		-			-	
	1.28.1	1 or 2 Module	Each	2.00	73.00		146.00	
				-			-	
10	MR	Supply and fixing of Indoor decorative luminaire suitable for surface as well as recessed mounting. Suitable for 1xTL-D36W.CAT NO: TCS306 1xTL-D36W Philips/MIC or Equivalent.	Each	38.00		2,675.00	-	101,650.00
				-			-	

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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER DSR 2013	RATE AS PER MARKET	AMOUNT AS PER DSR 2013	AMOUNT AS PER MARKET
11	MR	Supply and fixing of Surface mounted downlight luminaire suitable for use with 1x13W/18W PL-C compact fluorescent lamp.FCS100 1xPL-C/2P18W I 240V Philips / MIC or Equivalent.	Each	87.00		1,350.00	-	117,450.00
				-			-	-
12	MR	Supply and fixing of Indoor decorative luminaire suitable for surface as well as recessed mounting. Suitable for 2xTL-D36W.CAT NO: TCS306 2xTL-D36W HF EBT 236Philips / MIC or Equivalent.	Each	27.00		3,800.00	-	102,600.00
				-			-	-
13	MR	Supply and fixing of TL5 HIGHBAY:WACRYLIC L X TL5,54W HO.CAT NO: TPS325 4xTL5-54W EBP AC. Philips/ MIC / Havell or Equivalent.	Each	21.00		8,700.00	-	182,700.00
				-			-	-
14	MR	Supply and fixing of batten holder / slanting holder in lieu of ceiling rose of light point complete with all connections and all labour charges with 18W CFL bulb (for new installation).	Each	28.00		260.00	-	7,280.00
				-			-	-
15	MR	Supply of 1200 mm (48") sweep and 5 Star rated 230V, A.C 50 Hz.Ceiling fan with 3 Blades and double ball bearings with all standard accessories and labour charges for fixing of Ceiling fan including transportation and giving connections with twin core wire etc., complete. Makes: Crompton / Havells/ Orient / Usha /Suguna or Equivalent.	Each	21.00		2,350.00	-	49,350.00
				-			-	-
16	MR	Supply of fresh air exhaust fan of light duty 250V A.C.50Hz.. 225 mm (9") / 300mm size (12") 1350 R.P.M fan with wire guard etc., complete. of makes Crompton / Bajaj / Havells / Orient.	Each	12.00		2,450.00	-	29,400.00
				-			-	-
17	1.41	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc. directly on ceiling/ wall, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	152.00	82.00		12,464.00	-
				-			-	-
18	1.42	Installation, testing and commissioning of pre-wired, fluorescent fitting / compact fluorescent fitting of all types, complete with all accessories and tube etc., including supplying and fixing ball and socket arrangement, 2 no. down rods of 20 mm dia X 1.6 mm thick steel conduit upto 30 cm length, painting and wiring the down rods and connection with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable and earthing etc. as required.	Each	21.00	218.00		4,578.00	-
				-			-	-
19	1.44	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable etc. as required.	Each	21.00	87.00		1,827.00	-
				-			-	-
20	1.5	Installation of exhaust fan in the existing opening, including making good the damage, connection, testing, commissioning etc. as required.		-			-	-
a	1.5.1	Upto 450 mm sweep	Each	12.00	189.00		2,268.00	-
				-			-	-



S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER DSR 2013	RATE AS PER MARKET	AMOUNT AS PER DSR 2013	AMOUNT AS PER MARKET
21		Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without B/RCCB/Isolator)		-			-	-
	2.4.4	4 way (4 + 12), Double door	Each	1.00	1,833.00		1,833.00	-
				-			-	-
22		Supplying and fixing following ways surface/ recess mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's, with provision of 100 amps TP 16 KA MCCB as incomer, interconnection between incomer MCCB and bus bars (but without MCB's/ MCCB) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)		-			-	-
	2.6.1	4 Way TP	Each	1.00	5,260.00		5,260.00	-
				-			-	-
23	2.2.1	Providing and fixing following rating and breaking capacity and pole MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required	Each	1.00	3,032.00		3,032.00	-
				-			-	-
24	2.1	Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.		-			-	-
a	2.10.1	Single pole	Each	48.00	146.00		7,008.00	-
b	2.10.4	Triple pole	Each	1.00	610.00		610.00	-
c	2.10.5	Triple pole and neutral	Each	1.00	784.00		784.00	-
				-			-	-
25	5.2	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.	Each	2.00	3,753.00		7,506.00	-
				-			-	-
26	5.7	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.		-			-	-
(a)		3.5C X 25 Sq.mm	Metre	40.00	25.00		1,000.00	-
				-			-	-
27	19.6	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :		-			-	-
	19.6.2	150 mm dia. R.C.C. pipe	Metre	100.00	575.00		57,500.00	-
28	7.1	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.		-			-	-
a	7.1.1	Upto 35 sq. mm	Metre	100.00	181.00		18,100.00	-
				-			-	-
29	9.1	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.		-			-	-
a	9.1.20	3½ X 25 sq. mm (28mm)	Each	2.00	210.00		420.00	-

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S No.	DSR CODE NO	Description	Unit	Qty	RATE AS PER DSR 2013	RATE AS PER MARKET	AMOUNT AS PER DSR 2013	AMOUNT AS PER MARKET
		TOTAL C/O TO SUMMARY					473,166.00	590,430.00

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## ANALYSIS OF RATES

### SUB DETAIL

#### 1). Sub Detail : DSR Item no.2.8.1

2.8 Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.

##### a) 2.8.1 All kinds of soil

#### Details of cost for 10.00 Cum

##### MACHINERY

0020	Hydraulic Excavator (3D) with driver and fuel.	Day	0.04125	8000.00	330.00
0018	Hire and running charges of loader.	Day	0.04125	5000.00	206.25

##### LABOUR

0128	Mate	Day	0.40	328.00	131.20
0115	Coolie	Day	4.10	297.00	1217.70

Cost of 10Cum

Sub Total = 1,885.15

Rate for Unit Quantity

188.50

#### 2). Sub Detail : DSR Item no.2.25

2.25 Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m

#### Details of cost for 10.00 Cum

##### A). MATERIAL

##### B). LABOUR

0128	Mate	Day	0.20	328.00	65.60
0115	Coolie	Day	2.50	297.00	742.50
0101	Bhisti	Day	0.20	328.00	65.60

Cost of 10Cum

Sub Total = 873.70

Rate for Unit Quantity

87.40

#### 3). Sub Detail : DSR Item no.2.26

2.26.1 Extra for every additional lift of 1.5 m or part thereof in. All kinds of soil.

#### Details of cost for 10.00 Cum

##### A). MATERIAL

##### B). LABOUR

0128	Mate	Day	0.10	328.00	32.80
0114	Beldar	Day	1.10	297.00	326.70

Cost of 10Cum

Sub Total = 359.50

Rate for Unit Quantity

36.00



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## ANALYSIS OF RATES

### SUB DETAIL

#### 4). Sub Detail : DSR Item no.3.3

3.3 Cement Mortar 1 : 3 (1 Cement : 3 Fine sand)

Details of cost for 1.00 Cum

##### MATERIAL

(0.375 Cum of cement = 0.51 tonne)

0367	Portland cement	Tonne	0.51	6600.00	3366.00
2209	Cement	Tonne	0.51	94.80	48.35
0983	Fine sand	Cum	1.07	446.00	477.22
2203	Coarse sand	Cum	1.07	106.64	114.10

##### LABOUR

0114	Beldar	Day	0.75	297.00	222.75
0101	Bhisti	Day	0.07	328.00	22.96
9999	Hire & Running Charges of mixer	L.S.	26.91	1.70	45.75
9999	Sundries	L.S.	13.52	1.70	22.98

Cost of 1Cum

Sub Total = 4,320.11

Rate for Unit Quantity

4,320.10

#### 5). Sub Detail : DSR Item no.3.4

3.4 Cement Mortar 1 : 4 (1 cement : 4 fine sand)

Details of cost for 1.00 Cum

##### MATERIAL

(0.268 cum. of cement = 0.38 tonne)

0367	Portland cement	Tonne	0.38	6600.00	2508.00
2209	Cement	Tonne	0.38	94.80	36.02
0983	Fine sand	Cum	1.07	446.00	477.22
2203	Coarse sand	Cum	1.07	106.64	114.10

##### LABOUR

0114	Beldar	Day	0.75	297.00	222.75
0101	Bhisti	Day	0.070	328.00	22.96
9999	Hire & Running Charges of mixer	L.S.	26.91	1.70	45.75
9999	Sundries	L.S.	13.52	1.70	22.98

Sub Total = 3,449.79

Rate for Unit Quantity

3,449.80

#### 5). Sub Detail : DSR Item no.3.6

3.6 Cement Mortar 1 : 6 (1 Cement : 6 Fine sand)

Details of cost for 1.00 Cum

##### MATERIAL

(0.178 Cum of cement = 0.25 tonne)

0367	Portland cement	Tonne	0.25	6600.00	1650.00
2209	Cement	Tonne	0.25	94.80	23.70
0983	Fine sand	Cum	1.07	446.00	477.22
2261	Fine sand	Cum	1.07	106.64	114.10

##### LABOUR

0114	Beldar	Day	0.75	297.00	222.75
0101	Bhisti	Day	0.07	328.00	22.96
9999	Hire & Running Charges of mixer	L.S.	26.91	1.70	45.75
9999	Sundries	L.S.	13.52	1.70	22.98

Sub Total = 2,579.47

Rate for Unit Quantity

2,579.50

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## ANALYSIS OF RATES

### SUB DETAIL

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## ANALYSIS OF RATES

### SUB DETAIL

#### 6). Sub Detail : DSR Item no.3.8

3.8 Cement Mortar 1 : 3 (1 Cement : 3 coarse sand)

Details of cost for 1.00 Cum

##### MATERIAL

(0.357 Cum of cement = 0.51 tonne)

0367	Portland cement	Tonne	0.51	6600.00	3366.00
2209	Cement	Tonne	0.51	94.80	48.35
0982	Coarse sand	Cum	1.07	1120.00	1198.40
2203	Coarse sand	Cum	1.07	106.64	114.10

##### LABOUR

0114	Beldar	Day	0.75	297.00	222.75
0101	Bhisti	Day	0.07	328.00	22.96
9999	Hire & Running Charges of mixer	L.S.	26.91	1.70	45.75
9999	Sundries	L.S.	13.52	1.70	22.98

**Sub Total = 5,041.29**

Rate for Unit Quantity

**5,041.30**

#### 7). Sub Detail : DSR Item no.3.9

3.9 Cement Mortar 1 : 4 (1 cement : 4 coarse sand)

Details of cost for 1.00 Cum

##### MATERIAL

(0.268 cum. of cement = 0.38 tonne)

0367	Portland cement	Tonne	0.38	6600.00	2508.00
2209	Cement	Tonne	0.38	94.80	36.02
0982	Coarse sand	Cum	1.07	1120.00	1198.40
2203	Coarse sand	Cum	1.07	106.64	114.10

##### LABOUR

0114	Beldar	Day	0.75	297.00	222.75
0101	Bhisti	Day	0.070	328.00	22.96
9999	Hire & Running Charges of mixer	L.S.	26.91	1.70	45.75
9999	Sundries	L.S.	13.52	1.70	22.98

**Sub Total = 4,170.97**

Rate for Unit Quantity

**4,171.00**

#### 8). Sub Detail : DSR Item no.3.10

3.10 Cement Mortar 1 : 5 (1 cement : 5 coarse sand)

Details of cost for 1.00 Cum

##### MATERIAL

(0.214 cum. of cement = 0.31 tonne)

0367	Portland cement	Tonne	0.31	6600.00	2046.00
2209	Cement	Tonne	0.31	94.80	29.39
0982	Coarse sand	Cum	1.07	1120.00	1198.40
2203	Coarse sand	Cum	1.07	106.64	114.10

##### LABOUR

0114	Beldar	Day	0.75	297.00	222.75
0101	Bhisti	Day	0.070	328.00	22.96
9999	Hire & Running Charges of mixer	L.S.	26.91	1.70	45.75
9999	Sundries	L.S.	13.52	1.70	22.98

**Sub Total = 3,702.33**

Rate for Unit Quantity

**3,702.33**



## ANALYSIS OF RATES

## SUB DETAIL

## 9). Sub Detail : DSR Item no.3.11

3.11 Cement Mortar 1 : 6 (1 cement : 6 coarse sand)

Details for

1.00 Cum

MATERIAL

(0.178 cum. of cement = 0.25 tonne)

0367	Portland cement	Tonne	0.25	6600.00	1650.00
2209	Cement	Tonne	0.25	94.80	23.70
0982	Coarse sand	Cum	1.07	1120.00	1198.40
2203	Coarse sand	Cum	1.07	106.64	114.10

LABOUR

0114	Beldar	Day	0.75	297.00	222.75
0101	Bhisti	Day	0.070	328.00	22.96
9999	Hire & Running Charges of mixer	L.S.	26.91	1.70	45.75
9999	Sundries	L.S.	13.52	1.70	22.98

Sub Total = 3,300.65

Rate for Unit Quantity

3,300.60

## 10). Sub Detail : DSR Item no.4.1.3

4.1 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level

4.1.3 1:2:4 ( 1 Cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)

Details of cost for

1.00 Cum

A). MATERIAL

0295	Stone Aggregate 20 mm nominal size	Cum	0.670	1385.00	927.95
0297	Stone Aggregate 10 mm nominal size	Cum	0.220	1485.00	326.70
2202	Stone aggregate below 40mm size	Cum	0.890	106.64	94.91
0982	Coarse sand	Cum	0.445	1120.00	498.40
2203	Coarse sand	Cum	0.445	106.64	47.45
0367	Portland cement	Tonne	0.320	6600.00	2112.00
2209	Cement	Tonne	0.320	94.80	30.34

0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum wit	Day	0.07	800.00	56.00
0012	Vibrator (Needle type 40mm)	Day	0.07	325.00	22.75
9999	Sundries	L.S.	14.30	1.70	24.31

4140.81

B). LABOUR

0155	Mason (average)	Day	0.10	377.00	37.70
0114	Beldar	Day	1.63	297.00	484.11
0101	Bhisti	Day	0.70	328.00	229.60

751.41

TOTAL A+B 4,892.22

Add Water Charges on Total (A+B) @ 1% C 48.92

TOTAL A+B+C D 4,941.14

Add 15% for Contractor's profit and OverHeads 15% E 741.17

Cost of 1Cum TOTAL D+E F 5,682.31

Rate for Unit Quantity

5,682.30

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## ANALYSIS OF RATES

### SUB DETAIL

#### 10). Sub Detail : DSR Item no.4.1.8

4.1 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level

4.1.8 1:4:8 (1 Cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size)

#### Details of cost for 1.00 Cum

##### A). MATERIAL

0293	Stone Aggregate 40 mm nominal size	Cum	0.65	1340.00	871.00
2206	Stone aggregate above 40mm size	Cum	0.65	115.92	75.35
0295	Stone Aggregate 20 mm nominal size	Cum	0.24	1385.00	332.40
2202	Stone aggregate below 40mm size	Cum	0.24	106.64	25.59
0982	Coarse sand	Cum	0.47	1120.00	526.40
2203	Coarse sand	Cum	0.47	106.64	50.12
0367	Portland cement	Tonne	0.17	6600.00	1122.00
2209	Cement	Tonne	0.17	94.80	16.12
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum wit	Day	0.07	800.00	56.00
0012	Vibrator (Needle type 40mm)	Day	0.07	325.00	22.75
9999	Sundries	L.S.	13.52	1.70	22.98

**3120.71**

##### B). LABOUR

0155	Mason (average)	Day	0.10	377.00	37.70
0114	Beldar	Day	1.63	297.00	484.11
0101	Bhisti	Day	0.70	328.00	229.60

**751.41**

TOTAL A+B 3,872.12

Add Water Charges on Total (A+B) @ 1% C 38.72

TOTAL A+B+C D 3,910.84

Add 15% for Contractor's profit and OverHeads 15% E 586.63

Cost of 1Cum TOTAL D+E F **4,497.47**

Rate for Unit Quantity **4,497.50**

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## ANALYSIS OF RATES

### SUB DETAIL

#### 11). Sub Detail : DSR Item no.4.1.10

4.1 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level

4.1.10 Cement concrete 1:5:10 (1 Cement: 5 coarse sand : 10 graded stone aggregate 40mm

Details of cost for 1.00 Cum

#### A). MATERIAL

0293	Stone Aggregate 40 mm nominal size	Cum	0.650	1340.00	871.00
2206	Stone aggregate above 40mm size	Cum	0.650	115.92	75.35
0295	Stone Aggregate 20 mm nominal size	Cum	0.240	1385.00	332.40
2202	Stone aggregate below 40mm size	Cum	0.240	106.64	25.59
0982	Coarse sand	Cum	0.470	1120.00	526.40
2203	Coarse sand	Cum	0.470	106.64	50.12
0367	Portland cement	Tonne	0.130	6600.00	858.00
2209	Cement	Tonne	0.130	94.80	12.32
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum wit	Day	0.07	800.00	56.00
0012	Vibrator (Needle type 40mm)	Day	0.07	325.00	22.75
9999	Sundries	L.S.	13.52	1.70	22.98
					<b>2852.92</b>

#### B). LABOUR

0155	Mason (average)	Day	0.10	377.00	37.70
0114	Beldar	Day	1.63	297.00	484.11
0101	Bhisti	Day	0.70	328.00	229.60

**751.41**

TOTAL A+B 3,604.33

Add Water Charges on Total (A+B) @ 1% C 36.04

TOTAL A+B+C D 3,640.37

Add 15% for Contractor's profit and OverHeads 15% E 546.06

Cost of 1Cum TOTAL D+E F 4,186.43

**Rate for Unit Quantity 4,186.40**



## ANALYSIS OF RATES

## SUB DETAIL

## 12). Sub Detail : DSR Item no.4.1.11

4.1 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work upto plinth level

4.1.11 Cement concrete 1:5:10 (1 Cement: 5 fine sand : 10 graded stone aggregate 40mm

Details of cost for 1.00 Cum

## A). MATERIAL

0293	Stone Aggregate 40 mm nominal size	Cum	0.670	1340.00	897.80
2206	Stone aggregate above 40mm size	Cum	0.670	115.92	77.67
0295	Stone Aggregate 20 mm nominal size	Cum	0.220	1385.00	304.70
2202	Stone aggregate below 40mm size	Cum	0.220	106.64	23.46
0983	Fine sand	Cum	0.470	446.00	209.62
2261	Fine sand	Cum	0.470	106.64	50.12
0367	Portland cement	Tonne	0.130	6600.00	858.00
2209	Cement	Tonne	0.130	94.80	12.32
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum wit	Day	0.07	800.00	56.00
0012	Vibrator (Needle type 40mm)	Day	0.07	325.00	22.75
9999	Sundries	L.S.	8.97	1.70	15.25
					<b>2527.69</b>

## B). LABOUR

0155	Mason (average)	Day	0.10	377.00	37.70
0114	Beldar	Day	1.63	297.00	484.11
0101	Bhisti	Day	0.70	328.00	229.60

Sub Total = 751.41

TOTAL A+B 3,279.10

Cost of 1Cum TOTAL D+E F 3,279.10

Rate for Unit Quantity **3,279.10**

## ANALYSIS OF RATES

## SUB DETAIL

## 13). Sub Detail : DSR Item no.4.2.3

4.2 Providing and laying cement Concrte in retaining walls, return walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping bed blocks, anchor blocks, plain window sills, fillets etc upto floor five level, excluding the cost of centring, shuttering and finishing:

4.2.3 1:2:4 (1 cement: 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)

Details of cost for 1.00 Cum

## A). MATERIAL

0295	Stone Aggregate 20 mm nominal size	Cum	0.67	1385.00	927.95
0297	Stone Aggregate 10 mm nominal size	Cum	0.22	1485.00	326.70
2202	Stone aggregate below 40mm size	Cum	0.89	106.64	94.91
0982	Coarse sand	Cum	0.445	1120.00	498.40
2203	Coarse sand	Cum	0.445	106.64	47.45
0367	Portland cement	Tonne	0.32	6600.00	2112.00
2209	Cement	Tonne	0.32	94.80	30.34
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum wit	Day	0.07	800.00	56.00
0012	Vibrator (Needle type 40mm)	Day	0.07	325.00	22.75
9999	Scaffolding	L.S.	114.40	1.70	194.48
9999	Sundries	L.S.	14.30	1.70	24.31
					<b>4335.29</b>

## B). LABOUR

0114	Beldar	Day	0.90	297.00	267.30
0115	Coolie	Day	0.78	297.00	231.66
0101	Bhisti	Day	0.70	328.00	229.60
0123	Mason 1st class	Day	0.06	393.00	23.58
0124	Mason 2nd class	Day	0.06	361.00	21.66
					<b>773.80</b>

TOTAL A+B 5,109.09

Add Water Charges on Total (A+B) @ 1% C 51.09

TOTAL A+B+C D 5,160.18

Add 15% for Contractor's profit and OverHeads 15% E 774.03

Cost of 1Cum TOTAL D+E F 5,934.21

Rate for Unit Quantity **5,934.20**

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## ANALYSIS OF RATES

### SUB DETAIL

#### 14). Sub Detail : DSR Item no.4.2.5

4.2.5 Cement concrete blocks 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)

		Details of cost for		1.00 Cum	
<b>A). MATERIAL</b>					
0295	Stone Aggregate 20 mm nominal size	Cum	0.70	1385.00	969.50
0297	Stone Aggregate 10 mm nominal size	Cum	0.24	1485.00	356.40
2202	Stone aggregate below 40mm size	Cum	0.94	106.64	100.24
0982	Coarse sand	Cum	0.47	1120.00	526.40
2203	Coarse sand	Cum	0.47	106.64	50.12
0367	Portland cement	Tonne	0.22	6600.00	1452.00
2209	Cement	Tonne	0.22	94.80	20.86
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum wit	Day	0.07	800.00	56.00
0012	Vibrator (Needle type 40mm)	Day	0.07	325.00	22.75
9999	Scaffolding	L.S.	114.40	1.70	194.48
9999	Sundries	L.S.	13.52	1.70	22.98
					<b>3771.73</b>
<b>B). LABOUR</b>					
0114	Beldar	Day	0.90	297.00	267.30
0115	Coolie	Day	0.78	297.00	231.66
0101	Bhisti	Day	0.70	328.00	229.60
0123	Mason 1st class	Day	0.06	393.00	23.58
0124	Mason 2nd class	Day	0.06	361.00	21.66
					<b>773.80</b>
				TOTAL A+B	4,545.53
Add Water Charges on Total (A+B) @ 1%				C	45.46
				TOTAL A+B+C	4,590.99
Add 15% for Contractor's profit and OverHeads				15%	688.65
<b>Cost of 1Cum</b>				TOTAL D+E	5,279.64
<b>Rate for Unit Quantity</b>					<b>5,279.60</b>



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## ANALYSIS OF RATES

### SUB DETAIL

#### 15). Sub Detail : DSR Item no.5.3

5.3 Reinforced cement concrete work in beams, suspended floors, roofs having slope upto 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centring, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).

		Details of cost for		1.00 Cum	
<b>A). MATERIAL</b>					
0295	Stone Aggregate 20 mm nominal size	Cum	0.67	1385.00	927.95
0297	Stone Aggregate 10 mm nominal size	Cum	0.22	1485.00	326.70
2202	Stone aggregate below 40mm size	Cum	0.89	106.64	94.91
0982	Coarse sand	Cum	0.445	1120.00	498.40
2203	Coarse sand	Cum	0.445	106.64	47.45
0367	Portland cement	Tonne	0.32	6600.00	2112.00
2209	Cement	Tonne	0.32	94.80	30.34
0002	Hire charges of Concrete Mixer 0.25 to 0.40 cum wit	Day	0.08	800.00	64.00
0012	Vibrator (Needle type 40mm)	Day	0.08	325.00	26.00
9999	Scaffolding	L.S.	14.30	1.70	24.31
					<b>4152.06</b>
<b>B). LABOUR</b>					
0155	Mason (average)	Day	0.24	377.00	90.48
0114	Beldar	Day	2.75	297.00	816.75
0101	Bhisti	Day	0.90	328.00	295.20
<b>Sub Total =</b>					<b>1,202.43</b>
				TOTAL A+B	5,354.49
Add Water Charges on Total (A+B) @ 1%				C	53.54
				TOTAL A+B+C	D 5,408.04
Add 15% for Contractor's profit and OverHeads				15%	E 811.21
<b>Cost of 1Cum</b>				TOTAL D+E	F 6,219.24
<b>Rate for Unit Quantity</b>					<b>6,219.20</b>

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## ANALYSIS OF RATES

### SUB DETAIL

#### 16). Sub Detail : DSR Item no.5.9.3

5.9 Centering and shuttering

5.9.3 Suspended floors, roofs, landings, balconies and access platform.

**Detail of cost for a room 4.50m (L) x3.0m (W) x3.5m (H)**

**13.50 Sqm**

Contact area = 1x4.50mx3.0m = 13.50 Sqm

**Details of cost for 13.50 sqm**

#### A). MATERIAL

Assuming shuttering will become unserviceable after use of 40 times

Add maintenance charges @ 10% of cost of material

Less salvage value of material after full use @ 25% of cost of material

Assuming shuttering will become unserviceable after use of 40 times

Add maintenance charges @ 10% of cost of material

Less salvage value of material after full use @ 25% of cost of material

1. Plates (size 0.75x0.60)

Angle 40x40x5mm 2x0.75= 1.50 m +2x0.60= 1.20 m

= 2.70 m @ 3.00 Kg/m = 8.10 Kg

Sheet 1.6 mm thick 0.75x0.60 = 0.45 Sqm

0.45 sqm @ 12.55Kg/sqm = 5.65Kg

Weight of one plate = 13.75Kg

Add for wastage @ 5% = 0.69 Kg Total = 14.44Kg

Total weight of all plates = 5x6x14.44 =433.20 Kg.

Qty taken for cost using once = 433.2x0.85/40 = 9.206 Kg.

( X )	10.1	Rate as per subdetail as DSR item no 10.1	Kg	9.2055	66.80	614.93
	7342	Adjustable span ESO+SI (2.35-3.40)	Each	0.1063	1900.00	201.88
		Qty taken for cost of using once = 5x0.85/40 = 0.106				
	7343	Adjustable telescopic prop 3 m (2.02-3.75 m)	Each	0.1275	1200.00	153.00
		Qty taken for cost of using once = 6x0.85/40 = 0.1275				
	9999	Assembly for nut & bolts	L.S.	22.10	1.70	37.57
		Qty taken for cost of using once =1040x0.85/40 = 22.10				
	9999	Sundries for Carriage	L.S.	130.00	1.70	221.00
						<b>1228.37</b>

#### B). LABOUR

0116	Fitter (grade 1)	Day	3.00	393.00	1179.00
0114	Beldar	Day	6.00	297.00	1782.00
9999	Sundries	L.S.	78.00	1.70	132.60
9999	Sundries	L.S.	49.70	1.70	84.49
					<b>3,178.09</b>

TOTAL A+B 4,406.46

Add Water Charges on Total (A+B) Except on 'X' @ 1% C 37.92

TOTAL A+B+C D 4,444.38

Add 15% for Contractor's profit and OverHeads Except on 'X' 15% E 574.42

**Cost of 13.5sqm** TOTAL D+E F 5,018.80

**Rate for Unit Quantity 371.80**

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## ANALYSIS OF RATES

### SUB DETAIL

#### 17). Sub Detail : DSR Item no.5.12

5.12 Pre-cast RCC Slab

Details of cost for 1.00 Cum

#### A). MATERIAL

Deformed steel bars = 1.00 q

Add 5% wastage =0.05

4.5	CC 1:2:4 as per sub detail Item # 5.3	Cum	1.00	6219.20	6219.20
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#### B). LABOUR

Extra for Laying CC in RCC Work

0114	Beldar	Day	0.10	297.00	29.70
0101	Bhisti	Day	0.20	328.00	65.60
0123	Mason 1st class	Day	0.04	393.00	15.72
0124	Mason 2nd class	Day	0.04	361.00	14.44
0128	Mate	Day	0.04	328.00	13.12

Sub Total = 138.58

TOTAL A+B 6,357.78

Add Water Charges on Total (A+B) @ 1% C 1.39

TOTAL A+B+C D 6,359.17

Add 15% for Contractor's profit and OverHeads 15% E 20.99

Cost of 1Cum TOTAL D+E F 6,380.16

Rate for Unit Quantity 6,380.20



## ANALYSIS OF RATES

### SUB DETAIL

#### 18). Sub Detail : DSR Item no.5.22.1

5.22.1 Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.

5.22.1 Mild steel bars

Details of cost for 1 Quintal or 100.00 Kg

#### A). MATERIAL

Deformed steel bars = 1.00 q

Add 5% wastage =0.05

1004	Average rate of Mild steel round bars for reinforcements	Quintal	1.05	4500.00	4725.00
2205	Steel 1.05/10 = 0.105 t	Tonne	0.11	94.80	9.95
9999	Cover Block	L.S.	26.00	1.70	44.20
7335	Binding wire	Kg	0.70	53.00	37.10
					<b>4816.25</b>

#### B). LABOUR

For straightening, cutting, bending, binding and placing in position

0102	Blacksmith 1st class	Day	1.00	393.00	393.00
0114	Beldar	Day	1.00	297.00	297.00
9999	Sundries	L.S.	26.91	1.70	45.75
					<b>735.75</b>

			TOTAL A+B	5,552.00
Add Water Charges on Total (A+B) @ 1%			C	55.52
			TOTAL A+B+C	D 5,607.52
Add 15% for Contractor's profit and OverHeads			15%	E 841.13
Cost of 100Kg			TOTAL D+E	F 6,448.65
Rate for Unit Quantity				<b>64.50</b>

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## ANALYSIS OF RATES

### SUB DETAIL

#### 19). Sub Detail : DSR Item no.6.1.1

6.1.1 Brick work with F.P.S. bricks of class designation 75 in foundation and plinth in Cement mortar 1:4 (1 cement : 4 coarse sand)

#### Details of cost for 1.00 Cum

<b>A). MATERIAL</b>					
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	0.494	4800.00	2371.20
2201	Bricks	1000 Nos	0.494	284.39	140.49
3.9	Cement mortar 1:4 as per sub detail	Cum	0.25	4171.00	1042.75
9999	Sundries	L.S.	2.73	1.70	4.64
				<b>A</b>	<b>3559.08</b>
<b>B). LABOUR</b>					
0123	Mason 1st class	Day	0.36	393.00	141.48
0124	Mason 2nd class	Day	0.36	361.00	129.96
0115	Coolie	Day	1.37	297.00	406.89
0101	Bhisti	Day	0.20	328.00	65.60
				<b>B</b>	<b>743.93</b>
				<b>TOTAL A+B</b>	<b>4,303.01</b>
				<b>Cost of 1Cum</b>	<b>4,303.01</b>
				<b>Rate for Unit Quantity</b>	<b>4,303.00</b>

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## ANALYSIS OF RATES

### SUB DETAIL

#### 20). Sub Detail : DSR Item no.9.32

9.32 Providing 50x50x50mm 2nd class teak wood plugs including cutting brick work and fixing in cement mortar 1:3 (1 cement: 3 fine sand) and making good the walls etc.

Details of cost for 100.00 Nos.

#### A). MATERIAL

Teak wood (2nd class) 100x(50x50x50) mm  
=0.0125 Cum, Add wastage @ 10% = 0.0013 Cum  
Total =0.0138 cum.

1189	Second class teak wood in scantling	Cum	1.40	660.00	924.00
2204	Timber	Cum	0.014	121.88	1.71
3.3	Cement mortar 1:3 (1 cement : 3 fine sand).	Cum	0.002	0.00	0.00
					<b>925.71</b>

#### B). LABOUR

0112	Carpenter 2nd class	Day	0.75	361.00	270.75
0124	Mason 2nd class	Day	0.75	361.00	270.75
0114	Beldar	Day	0.75	297.00	222.75

Cost of 100Nos.

Sub Total = **764.25**

		TOTAL A+B	1,689.96
Add Water Charges on Total (A+B) @ 1%		C	16.90
		TOTAL A+B+C	D 1,706.86
Add 15% for Contractor's profit and OverHeads		15%	E 256.03
Cost of 100Nos.		TOTAL D+E	F 1,962.88
Rate for Unit Quantity			<b>19.60</b>



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## ANALYSIS OF RATES

### SUB DETAIL

#### 21). Sub Detail : DSR Item no.10.1

10.1 Structural steel work in single section fixed with or without connecting plate including cutting, hoisting, fixing in position and applying coat of approved steel primer all complete.

		Details for one Quintal	100.00 Kg		
		<b><u>MATERIAL</u></b>			
1007	Structural steel such as tees, angles channels	Quintal	1.05	4650.00	4882.50
	Steel 100Kg + wastage 5% = 105Kg = 1.05Qtl.				
2205	Steel	Tonne	0.105	94.80	9.95
				A	4892.45
		<b><u>LABOUR</u></b>			
0116	Fitter (grade 1)	Day	0.50	393.00	196.50
0103	Blacksmith 2nd class	Day	0.75	361.00	270.75
0114	Beldar	Day	1.00	297.00	297.00
		<b><u>PRIMING COAT</u></b>			
	Rate as per subdetail DSR item no 13.50.3	Sqm	3.00	21.70	65.10
9999	Sundries	L.S.	20.67	1.70	35.14
				B	864.49
		TOTAL A+B			5756.94
		Add Water Charges on Total A+B @ 1%		C	56.92
		TOTAL A+B+C		D	5,813.86
		Add for contractors profit and overheads (E)@ 15%		E	862.31
		TOTAL			6,676.18
		Cost of 100Kg		Sub Total =	66.80
		Rate for Unit Quantity			66.80

## ANALYSIS OF RATES

## SUB DETAIL

## 22). Sub Detail : DSR Item no.10.10

10.10 Fixing standard steel glazed doors, windows and ventilators in walls with 15x3mm lugs 10 cm long embedded in cement concrete blocks 15x10x10cm of 1:3:6 (1 cement: 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) or with wooden plugs and screws or rawl plugs and screws or with fixing clips or with bolts and nuts as required, including fixing of float glass panes with glazing clips and special metal-sash putty of approved make, or metal beading with screws (only steel windows with lugs, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.)

Details of cost for one door 2 x 0.76m =1.52 Sqm

15.00 Kg

Details for one Quintal

15.00 Kg

A). MATERIAL

Cement concrete blocks 6Nos.x15x10x10cm =	Cum	0.009	773.80	6.96
0.009 Cum (Rate as per sub detail)				

B). LABOUR

0102	Blacksmith 1st class	Day	0.17	393.00	66.81
0123	Mason 1st class	Day	0.08	393.00	31.44
0124	Mason 2nd class	Day	0.08	361.00	28.88
0114	Beldar	Day	0.50	297.00	148.50
0119	Glazier	Day	0.17	361.00	61.37
9999	Carriage of materials	L.S.	134.55	1.70	228.74

Cost of 15Kg

Sub Total = 565.74

TOTAL A+B 572.70

Add Water Charges on Total (A+B) @ 1% C 5.73

TOTAL A+B+C D 578.43

Add 15% for Contractor's profit and OverHeads 15% E 86.76

Cost of 15Kg TOTAL D+E F 665.19

Rate for Unit Quantity 44.30

## ANALYSIS OF RATES

## SUB DETAIL

## 23). Sub Detail : DSR Item no.13.6.1

13.6.1 20 mm cement plaster of mix 1:4 (1 cement: 4 coarse sand)

Details for 10.00 Sqm

MATERIAL

3.9	Rate as per Item Number 3.9 of SH: Mortars	Cum	0.224	4171.00	934.30
9999	Scaffolding & Sundries	L.S.	12.61	1.70	21.44
<u>LABOUR</u>					
0155	Mason (average)	Day	0.94	377.00	354.38
0115	Coolie	Day	1.02	297.00	302.94
0101	Bhisti	Day	1.10	328.00	360.80

**Cost of 10Sqm**  
**Rate for Unit Quantity**

**Sub Total = 1,973.86**  
**197.40**

## 24). Sub Detail : DSR Item no.13.9.1

13.9.1 12 mm cement plaster 1:3 (1 cement: 3 coarse sand) finished with a floating coat of neat cement.

Details for 10.00 Sqm

MATERIAL

3.8	Cement mortar 1:3 (1 cement : 3 coarse sand).	Cum	0.224	4141.45	927.68
9999	Scaffolding & Sundries	L.S.	12.61	1.70	21.44
0367	Portland Cement	Tonne	0.02	6400.00	128.00
2209	Carriage Cement	Tonne	0.02	59.11	1.18
<u>LABOUR</u>					
0155	Mason (average)	Day	0.67	185.57	124.33
0115	Coolie	Day	0.75	147.73	110.80
0101	Bhisti	Day	0.92	154.85	142.46
0155	Mason (average)	Day	0.27	185.57	50.10
0115	Coolie	Day	0.27	147.73	39.89
9999	Sundries	L.S.	8.06	1.70	13.70

**Cost of 10Sqm**  
**Rate for Unit Quantity**

**Sub Total = 1,559.59**  
**156.00**



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## ANALYSIS OF RATES

### SUB DETAIL

#### 25). Sub Detail : DSR Item no.13.45.1

13.45 Finishing walls with textured exterior paint of required shade :

13.45.1 New work (Two or more coats applied @ 3.28 ltr/10 sqm) over and including base coat of water proofing cement paint applied @ 2.20kg/10 sqm

Details for 10.00 Sqm

#### MATERIAL

8507	Textured exterior paint	Litre	3.28	200.00	656.00
0851	Water proofing cement paint	Kg	2.20	45.00	99.00
9999	Carriage	L.S.	1.560	1.70	2.65

#### LABOUR

0131	Painter 1st class	Day	0.60	361.00	216.60
0115	Coolie	Day	0.30	297.00	89.10
0101	Bhisti	Day	0.05	328.00	16.40
9999	Sundries	L.S.	15.08	1.70	25.64

Cost of 10Sqm

Sub Total = 1,105.39

Rate for Unit Quantity

110.55

#### 25). Sub Detail : DSR Item no.13.50.3

13.50.3 Applying priming coat with ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/steel works:

Details for 10.00 Sqm

#### MATERIAL

4202	Red oxide Zinc chromate primer	Litre	0.54	70.00	37.80
9999	Carriage	L.S.	0.520	1.70	0.88
A					38.68

#### LABOUR

0131	Painter 1st class	Day	0.24	361.00	86.64
0115	Coolie	Day	0.24	297.00	71.28
9999	Sundries	L.S.	10.79	1.70	18.34

B 176.26

TOTAL A+B 214.95

Add Water Charges on Total A+B @ 0%

C 2.15

TOTAL A+B+C

D 217.10

Add for contractors profit and overheads (E)@ 0%

F -

TOTAL 217.10

Rate for Unit Quantity

21.70

75

## ANALYSIS OF RATES

### SUB DETAIL

#### 26). Sub Detail : DSR Item no.13.61

13.61 Painting with synthetic enamel paint of approved brand and manufacture to give an even shade: Two or more coats on new work

		Details for	10.00 Sqm		
		<u>MATERIAL</u>			
0833	Synthetic enamel paint in black or chocolate shade	Litre	1.16	130.00	150.80
9999	Material for filling holes & Cracks etc. Putty	L.S.	5.330	1.70	9.06
9999	Brushes & Sand paper etc.	L.S.	6.760	1.70	11.49
9999	Carriage	L.S.	1.430	1.70	2.43
		<u>LABOUR</u>			
0131	Painter 1st class	Day	0.54	361.00	194.94
0115	Coolie	Day	0.54	297.00	160.38
9999	Sundries	L.S.	8.06	1.70	13.70

Cost of 10Sqm

Sub Total = 542.81

Rate for Unit Quantity

54.30

#### 27). Sub Detail : DSR Item no.13.65.1

13.65.1 Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade: Two or more coats on new work.

		Details for	10.00 Sqm		
		<u>MATERIAL</u>			
0828	Anticorrosive bituminous paint (black)	Litre	0.95	90.00	85.50
9999	Material for filling holes & Cracks etc. Putty	L.S.	0.550	1.70	0.94
9999	Brushes & Sand paper etc.	L.S.	5.330	1.70	9.06
		<u>LABOUR</u>			
0131	Painter 1st class	Day	0.54	361.00	194.94
0115	Coolie	Day	0.54	297.00	160.38
9999	Sundries	L.S.	8.06	1.70	13.70

Cost of 10Sqm

Sub Total = 464.52

Rate for Unit Quantity

46.50

#### 2). Sub Detail : DSR Item no.14.70

14.70 Melamine polishing on wood work (one or more coats)

		Details of cost for	10.00 Sqm		
		<u>MATERIAL</u>			
7241	Melamine polish	Litre	0.65	300.00	195.00
0006	Hire charges of Spraying machine including electric charges	Day	0.78	250.00	195.00
9999	Sundries	L.S.	4.42	1.70	7.51
		<u>LABOUR</u>			
0131	Painter 1st class	Day	0.35	361.00	126.35
0115	Coolie	Day	0.35	297.00	103.95
9999	Sundries	L.S.	4.42	1.70	7.51

Sub Total = 635.33

Rate for Unit Quantity

63.55

**SUB DETAIL**

**ANALYSIS OF RATES**

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ANALYSIS OF RATES

SUB DETAIL

28). Sub Detail : DSR Item no.16.8.1  
16.8.1 Brick Edging with FPS Bricks

		Details for	10.00 Sqm		
<u>MATERIAL</u>					
2602	Common burnt clay F.P.S. (non modular) bricks class designation 7.5	1000 Nos	0.049	4800.00	235.20
2201	Material for filling holes & Cracks etc. Putty	1000 Nos	0.049	284.39	13.94
<u>LABOUR</u>					
0123	Mason 1st class	Day	0.04	393.00	15.72
0124	Mason 2nd class	Day	0.04	361.00	14.44
0115	Coolie	Day	0.09	297.00	26.73
9999	Sundries	L.S.	4.16	1.70	7.07
Cost of 10Sqm			Sub Total =		313.10
Rate for Unit Quantity					31.35

## ANALYSIS OF RATES

### SUB DETAIL

#### 29). Sub Detail : DSR Item no.16.43B

16.43B Annexure 'B' to Item number 16.43

		Details for	8.50 Sqm		
		STEEL FORM WORK: Part-1 Cost of materials :			
		Assuming that pavement 30m long 22.5m wide and 0.30m deep having panel size 6.15x4.6lx0.30m or 8.50cum laid in a day of 8 hrs.			
		Hence form work to be provided for 2 days.			
		Material for 61.5m long 46.10m wide pavement			
		22x30.75 = 676.50			
		2x46.10 = 92.20			
		Total = 768.70m.			
		768.70 @ 83.10 kg/ m = 25.44 M.T. Assuming that channel will become unserviceable after use for 5000 slab (100 times) and salvage value of steel shall fetch 20% of its basic cost.			
		Steel 254.44 qx4/5x 1/5000 = 0.0407104 q			
		Carriage of steel 25.44x4/5x1/5000= 0.00407104 tonne			
		<b><u>MATERIAL</u></b>			
1007	Structural steel	Quintal	0.0407104	4650.00	189.30
2205	Material for filling holes & Cracks etc. Putty	Tonne	0.0407104	94.80	0.00
		Part-II Labour for assembling, erection, dismantelling and cleaning the shuttering.			
		Assuming that 255 labour for steel shuttering shall be required as compared to timber shuttering. Contact area of 50 slabs of steel shuttering.			
		Long channel = 11x20x0.30 = 66.00			
		= 2x45.10x0.30 = 27.06			
		Total= 93.06			
		<b><u>LABOUR</u></b>			
0103	Blacksmith 2nd class	Day	2.86	361.00	1032.46
0114	Beldar	Day	2.86	297.00	849.42
		Carriage of steel for extra lead of runway			
0114	Beldar	Day	5.73	297.00	1701.81
		Cost of 8.5Sqm		Sub Total =	3,773.00
		Rate for Unit Quantity			443.90

RATE ANALYSIS FOR ELECTRICAL WORKS

## 1 POINT WIRING

Light point 1Light with 1switch (Analysis for 8 points)

## a) For Exhaust Fan Point

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	1.5sq.mm Copper wire (2runs)	mtr	48	23.50	30%	16.45	
2	Heavy Guage 25mm dia Conduit	mtr	24	30.85	30%	21.60	
3	6A switch (Legrand make)	each	8	134.00	30%	93.80	
4	Metal box (8 module)	each	1	134.00	30%	93.80	
5	switch plate (8module)	each	1	252.00	30%	176.40	
6	1.5sq.mm Copper earth wire(1run)	mtr	24	23.50	30%	16.45	
7	Junction boxes	each	8	29.70	30%	20.79	
8	Bends & Elbows	each	8	11.70	30%	8.19	
	Total						
9	Transportation, packing and forwarding charges						
10	Installation,Testing and commissioning charges		8			239.60	12.36%
	WIREMAN G-1	day	0.2	301		60.2	
	MASON G-2	day	0.25	273		68.25	
	KHALLASI	day	0.45	247		111.15	
						<u>239.60</u>	

## 11 Overheads and Profits

## 12 Works Contract Tax @ 4%

## 13 Labour cess @1%

## 14 Restricted area @5%

Rate per each

Say



b) Ceiling fan point with 1 switch & Electronic regulator(Analysis for 1 points)

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	1.5sq.mm Copper wire (2runs)	mtr	6	23.50	30%	16.45	0.0%
2	Heavy Guage 25mm dia Conduit	mtr	3	30.85	30%	21.60	0.0%
3	6A switch (Legrand make)	each	1	134.00	30%	93.80	0.0%
4	Metal box (3 module)	each	1	64	30%	44.80	0.0%
5	switch plate (3module)	each	1	118	30%	82.60	0.0%
6	1.5sq.mm Copper earth wire(1run)	mtr	3	23.50	30%	16.45	0.0%
7	Junction boxes	each	1	29.70	30%	20.79	0.0%
8	Bends & Elbows	each	1	11.70	30%	8.19	0.0%
9	300 W Electronic regulator	each	1	696	30%	487.20	0.0%
	Total						
10	Transportation, packing and forwarding charges						
11	Installation,Testing and commissioning charges		1			239.6	12.36%
	WIREMAN G-1	day	0.2	301		60.2	
	MASON G-2	day	0.25	273		68.25	
	KHALLASI	day	0.45	247		111.15	
						239.6	
12	Overheads and Profits						
13	Works Contract Tax @ 4%						
14	Labour cess @1%						
15	Restricted area @5%						
	Rate per each						
	Say						

d) 5A Socket (In Lighting board) (for one point) (Dependant Socket)

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	6A switch	each	1	134.00	30%	93.8	
2	6A 3Pin socket	each	1	216	30%	151.2	
3	MS box (3 module)	each	1	64	30%	44.8	
4	Switch Plate (3module)	each	1	118	30%	82.6	
5	Accessories	each	1	20		20	
	Total						
6	Transportation, packing and forwarding charges						
7	Installation,Testing and commissioning charges		1			38.3	12.36%
	WIREMAN G-1	day	0.04	301		12.04	
	KHALLASI	day	0.04	247		9.88	
	MASON G-2	day	0.06	273		16.38	
						38.3	
8	Overheads and Profits						
9	Works Contract Tax @ 4%						
10	Labour cess @1%						
11	Restricted area @5%						
	Rate per each						

Call bell point with Bell push & Buzzers (Analysis for 8 points)

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	1.5sq.mm Copper wire (2runs)	mtr	48	23.50	30%	16.45	0.0%
2	Heavy Guage 25mm dia Conduit	mtr	24	30.85	30%	21.60	0.0%
3	Bell push (Legrand make)	each	8	176.00	30%	123.20	0.0%
4	Metal box (8 module)	each	1	134.00	30%	93.80	0.0%
5	switch plate (8module)	each	1	252.00	30%	176.40	0.0%
6	1.5sq.mm Copper earth wire(1run)	mtr	24	23.50	30%	16.45	0.0%
7	Junction boxes	each	4	29.70	30%	20.79	0.0%
8	Bends & Elbows	each	4	11.70	30%	8.19	0.0%
9	Buzzers Legrand Mosiac	each	8	828.00	30%	579.60	0.0%
<b>Total</b>							
9	Transportation, packing and forwarding charges						
10	Installation,Testing and commissioning charges		8			261.52	12.36%
	WIREMAN G-1	day	0.2	301		60.2	
	MASON G-2	day	0.25	273		68.25	
	KHALLASI	day	0.45	247		111.15	
	WIREMAN G-1	day	0.04	301		12.04	
	KHALLASI	day	0.04	247		9.88	
						261.52	

82

4/4

11 Overheads and Profits

12 Works Contract Tax @ 4%

13 Labour cess @1%

14 Restricted area @5%

Rate per each

Say

Two way light point controlled by 2Nos 6 A 2 way switch

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	1.5sq.mm Copper wire (2runs)	mtr	10	23.50	30%	16.45	
2	Heavy Guage 25mm dia Conduit	mtr	5	30.05	30%	21.04	
3	6A switch (Legrand make) two way	each	1	156.00	30%	109.20	
4	2 MODULE BOX		1	64	30%	44.80	
5	2MODULE FRONT PLATE		1	110	30%	77.00	
6	1.5sq.mm Copper earth wire(1run)	mtr	5	23.50	30%	16.45	
7	Junction boxes	each	1	19.20	30%	13.44	
8	Bends & Elbows	each	1	8.85	30%	6.20	
	Total						
9	Transportation, packing and forwarding charges						
10	Installation,Testing and commissioning charges		1			346.40	12.36%
	WIREMAN G-1	day	0.3	301		90.3	
	MASON G-2	day	0.35	273		95.55	
	KHALLASI	day	0.65	247		160.55	
						<u>346.40</u>	

11 Overheads and Profits

12 Works Contract Tax @ 4%

13 Labour cess @1%

14 Restricted area @5%

Rate per each





## CIRCUIT WIRING

2 Run of mains : 2R X 2.5 sq.mm with 1R x 1.5Sq.mm PVC conduit (Analysis for 50 mtr)

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	2.5sq.mm copper circuit wires(2runs)	mtr	100	37.83	30%	26.48	0.0%
2	1.5sq.mm Copper earth wire(1run)	mtr	50	23.50	30%	16.45	0.0%
3	Heavy Guage 25mm dia Conduit	mtr	50	30.85	30%	21.60	0.0%
4	Junction boxes	each	15	29.70	30%	20.79	0.0%
5	Bends & Elbows	each	4	11.70	30%	8.19	0.0%
	Total						
6	Transportation, packing and forwarding charges						
7	Installation,Testing and commissioning charges		50			64.08	12.36%
	WIREMAN G-1	day	3	301		903	
	MASON G-2	day	3	273		819	
	KHALLASI	day	6	247		1482	
						<u>3204.00</u>	

8 Overheads and Profits

9 Works Contract Tax @ 4%

10 Labour cess @1%

11 Restricted area @5%

Rate per meter

Say

3

## a) TMS020 1xTL5 28W HF

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	TMS020 1xTL5 28W HF FITTING		1	680.00	30%	476.00	
	28W LAMP		1	50.00		50.00	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation, Testing and commissioning charges		1	100		100.00	10.30%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						

## b) Bulk head fixture

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	Bulk head fixture FXC 101 1xPL - S / 2P 9W AC GR	each	1	1000	0.3	700	
2	9 W CFL lamps	each	1	150	0.3	105	
	Total						
3	Transportation, packing and forwarding charges						
4	Installation, Testing and commissioning charges		1			21.92	0.1236
	WIREMAN G-1	day	0.04	301		12.04	
	KHALLASI	day	0.04	247		9.88	
						21.92	
5	Overheads and Profits						
6	Works Contract Tax @ 4%						
7	Labour cess @1%						
8	Restricted area @5%						

Rate per each

Say

## c) SRP202 1xSON150W

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	SRP202 1xSON150W	each	1	8000	0.3	5600	
2	150 W SV lamp	each	1	200	0.3	140	
	Total						
3	Transportation, packing and forwarding charges						
4	Installation, Testing and commissioning charges		1			1000	0.1236

85

5 Overheads and Profits

6 Works Contract Tax @ 4%

7 Labour cess @1%

8 Restricted area @5%

Rate per each

Say

85

8/8

#### 4 Ceiling Fans

a) 1200mm Ceiling Fan

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	1200mm Ceiling Fan		1	2045	0.2	1636	

Total

2 Transportation, packing and forwarding charges

3 Installation, Testing and commissioning charges

WIREMAN G-1

day

1

301

68.5

0.1236

KHALLASI

day

1

247

247

548

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%



UNIT	QTY.	LP	DIS	LP Rate	ED
------	------	----	-----	---------	----

1	2200	20%	1760
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Total

## 2 Transportation, packing and forwarding charges

### 3 Installation, Testing and commissioning charges

1	361.68	12.36%
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WIREMAN G-1

day	0.33	301	99.33
-----	------	-----	-------

Mason G-2

day	0.33	301	99.33
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## KHALLASI

day	0.66	247	<u>163.02</u>
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361.68

#### 4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

88

10/10

## 6 5A socket (Independent type) (Analysis for 1 point)

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	1.5sq.mm Copper earth wire(2wires)	mtr	6	23.50	30%	16.45	0.0%
2	Heavy Guage 25mm dia Conduit	mtr	3	30.85	30%	21.60	0.0%
3	6A switch	each	1	134	30%	93.80	0.0%
4	6A 3Pin socket	each	1	216	30%	151.20	0.0%
5	MS box (3 module)	each	1	64	30%	44.80	0.0%
6	Switch Plate (3module)	each	1	118	30%	82.60	0.0%
7	1.5sq.mm Copper earth wire(1wire)	mtr	3	23.50	30%	16.45	0.0%
8	Bends & Elbows	each	1	11.7	30%	8.19	0.0%
9	Accessories		1	10		10.00	
	Total						
10	Transportation, packing and forwarding charges						
11	Installation,Testing and commissioning charges		1			179.4	12.36%
	WIREMAN G-1	day	0.2	301		60.2	
	MASON G-2	day	0.25	273		68.25	
	KHALLASI	day	0.45	247		111.15	
						179.4	
12	Overheads and Profits						
13	Works Contract Tax @ 4%						
14	Labour cess @1%						
15	Restricted area @5%						
	Rate per each						

89

**7 MCB DB**

a) 4 WAY SPN DB

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	4 WAY SPN DB IP 42 LEGRAND		1	1166	30%	816.2	
	40 A DPMCB		1	1034	30%	723.8	
	6-32 A SP MCB		4	220	30%	154	

Total

2 Transportation, packing and forwarding charges

3 Installation, Testing and commissioning charges 1 700 700 12.36%

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

say

98

12/12

b) 4 WAY TPN DB

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	4 WAY TPN DB IP 42 LEGRAND		1	2948	30%	2063.6	
	63 A FPMCB		1	2048	30%	1433.6	
	6-32 A SP MCB		12	220	30%	154	
	CABLE END TERMINATION BOX		2	840	30%	588	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation, Testing and commissioning charges		1	700		700	12.36%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						
	say						

8 WAY TPN DB

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	8 WAY TPN DB IP 42 LEGRAND		1	3332	30%	2332.4	
	63 A FPMCB		1	2048	30%	1433.6	
	6-32 A SP MCB		24	220	30%	154	
	CABLE END TERMINATION BOX		2	840	30%	588	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation, Testing and commissioning charges		1	700		700	12.36%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						
	say						



**POWER WIRING**

## 1) a) 16 A / 6 A 6 PIN UNIVERSAL SOCKET WITH SWITCH CONTROL

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	16 A / 6 A SOCKET , LEGRAND		1	306	30%	214.2	
	16 A SWITCH, LEGRAND		1	206	30%	144.2	
	4 MODULE BOX		1	84	30%	58.8	
	4 MODULE FRONT PLATE		1	126	30%	88.2	

Total

## 2 Transportation, packing and forwarding charges

3 Installation, Testing and commissioning charges			1			50.34	12.36%
WIREMAN G-1	day	0.04	301			12.04	
KHALLASI	day	0.04	247			9.88	
WIREMAN G-1	day	0.04	301			12.04	
MASON G-2	day	0.06	273			16.38	
						50.34	

## 4 Overheads and Profits

## 5 Works Contract Tax @ 4%

## 6 Labour cess @1%

## 7 Restricted area @5%

92

14/14

b) 16 A / 6 A 6 PIN UNIVERSAL SOCKET WITH SWITCH CONTROL

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	16 A / 6 A SOCKET , LEGRAND		1	306	30%	214.2	
	16 A SWITCH, LEGRAND		1	206	30%	144.2	
	4 MODULE BOX		1	84	30%	58.8	
	4 MODULE FRONT PLATE		1	126	30%	88.2	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation,Testing and commissioning charges		1			38.3	12.36%
	WIREMAN G-1	day	0.04	301		12.04	
	KHALLASI	day	0.04	247		9.88	
	MASON G-2	day	0.06	273		16.38	
						38.3	

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

## 2) RUN OF MAINS

a) Run of mains : 2R X 4 sq.mm with 1R x 2.5Sq.mm PVC conduit (Analysis for 50 mtr)

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	4sq.mm copper circuit wires (2runs)	mtr	100	55.78	30%	39.04	0.0%
2	2.5sq.mm copper circuit wires(1run)	mtr	50	37.83	30%	26.48	0.0%
3	Heavy Guage 25mm dia Conduit	mtr	50	30.85	30%	21.60	0.0%
4	Junction boxes	each	15	29.70	30%	20.79	0.0%
5	Bends & Elbows	each	4	11.70	30%	8.19	0.0%

Total

6 Transportation, packing and forwarding charges

7 Installation, Testing and commissioning charges 50 64.08 12.36%

WIREMAN G-1 day 3 301 903

MASON G-2 day 3 273 819

KHALLASI day 6 247 1482

3204

8 Overheads and Profits

9 Works Contract Tax @ 4%

10 Labour cess @1%

11 Restricted area @5%

Rate per meter

SAY

2) G I Pipe Earth Station

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
	Providing G.I.Earth Station, with 40 mm dia 2500mm long G.I. pipe including construction of brick pedestal providing meshed funnel, CI cover and ther civil Engineering works, spreadng a homogenous mixture of salt, charcoal around the pipe etc., completely as per IS3043, 1987 or latest revision.						
1		Mtr	1	2610.00		2610.00	
	As per quotation						
	Total						
2	Transportation, packing and forwarding charges					2.00	

3 Overheads and Profits

4 Works Contract Tax @ 4%

5 Labour cess @1%

6 Restricted area @5%

say



95

## b) 8SWG GI Wire

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
	8SWG GI wire (0.131 Kg/Mtr)	KG	0.131	60	0%	60	0.0%

Total

2 Transportation, packing and forwarding charges

3 Installation, Testing and commissioning charges	1	4	4	12.36%
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4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

TEL CONDUIT

1 Conduit laying (Analysis for 100mtrs) 25mm Dia

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LPRate	ED
1	25mm dia PVC conduit	mtr	50	30.85	30%	21.595	0.0%
2	Conduit bends & elbows	each	4	11.7	30%	8.19	0.0%
3	Junction boxes	each	15	29.7	30%	20.79	0.0%
4	Sadles spacers	LS	1	75	30%	52.5	0.0%
6	Cement & sand	bag	1	250		250	0.0%
	Total						
2	Transportation, packing and forwarding charges						
3	Installation,Testing and commissioning charges		50			47.64	12.36%
	WIREMAN G-1	day	1.5	301		451.5	
	MASON G-2	day	3	273		819	
	KHALLASI	day	4.5	247		1111.5	
						2382	

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

Rate per meter  
say

97

**2 TELEPHONE SOCKET RJ 11**

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	RJ11 TELEPHONE SOCKET		1	148	30%	103.6	
	1 MODULE BOX		1	64	30%	44.8	
	1MODULE FRONT PLATE		1	106	30%	74.2	

Total

2 Transportation, packing and forwarding charges

3 Installation, Testing and commissioning charges 1 50.34 12.36%

WIREMAN G-1 day 0.04 301 12.04

KHALLASI day 0.04 247 9.88

WIREMAN G-1 day 0.04 301 12.04

MASON G-2 day 0.06 273 16.38

50.34

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

20/20

## 3 TELEPONE 2PAIR CABLE

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	2PAIR TELEPHONE CABLE		50	17.5	30%	12.25	

Total

2 Transportation, packing and forwarding charges

3 Installation, Testing and commissioning charges 50 21.92 12.36%

WIREMAN G-1

day

2

301

602

KHALLASI

day

2

247

494

---

1096

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%



(99)

## LIGHTENING ARRESTER AND AVATION LIGHT

i)

1	Providing and fixing of lightning conductor finial, made of 25 mm dia 300 mm long, G.I. tube, having single prong at top, with 85 mm dia 6 mm thick G.I. base plate including holes etc. complete as required.	1	174	174	
Total					
2 Transportation, packing and forwarding charges					
3 Installation, Testing and commissioning charges		1	25	25	12.36%
3 Overheads and Profits					
4 Works Contract Tax @ 4%					
5 Labour cess @1%					
7 Restricted area @5%					

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22/22

ii)

- 1 Jointing copper / G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.

1 33.5 33

Total

- 2 Transportation, packing and forwarding charges

- 3 Installation, Testing and commissioning charges

1 3 3 12.36%

- 4 Overheads and Profits

- 5 Works Contract Tax @ 4%

- 6 Labour cess @1%

- 7 Restricted area @5%

iii)

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For horizontal run)		1	32		32	

Total

2 Transportation, packing and forwarding charges

3 Installation, Testing and commissioning charges 1 3 3 12.36%

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

102

iv)

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	Providing and fixing G.I. tape 20 mm X 3 mm thick on parapet or surface of wall for lightning conductor complete as required.(For vertical run)		1	45		45	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation,Testing and commissioning charges		1	4		4	12.36%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						



103

v)

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	Providing and fixing testing joint, made of 20 mm X 3 mm thick G.I. strip, 125 mm long, with 4 nos. of G.I. bolts, nuts, chuck nuts and spring washers etc. complete as required.		1	32		32	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation, Testing and commissioning charges		1	3		3	12.36%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						

104

vi)

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	Providing and laying G.I. tape 32 mm X 6 mm from earth electrode directly in ground as required.		1	69.5		69.5	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation,Testing and commissioning charges		1	6.5		6.5	12.36%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						

105

vii)

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	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.		1	1870		1870	
	Total						
2	Transportation, packing and forwarding charges						
3	Installation, Testing and commissioning charges		1	185.5		185.5	12.36%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						

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viii) Supply and fixing of twin dome aviation obstruction lights of type BJAOL 2 with two nos no. 100 W GLS lamps

	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
	Supply and fixing of twin dome aviation obstruction lights of type BJAOL 2 with two nos						
	1 no. 100 W GLS lamps		1	1447		1447	
	Total						
	2 Transportation, packing and forwarding charges						
	3 Installation,Testing and commissioning charges		1			140.5	12.36%
	4 Overheads and Profits						
	5 Works Contract Tax @ 4%						
	6 Labour cess @1%						
	7 Restricted area @5%						



## ix) LT Cables, 3Cx2.5Sqmm

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	Supply of LT Cables, 3Cx2.5Sqmm		1	115.00	30.00%	80.50	12.36%
	Total						
2	Transportation, packing and forwarding charges						
3	Laying, Testing and commissioning charges		1	20		20.00	12.36%
4	Overheads and Profits						
5	Works Contract Tax @ 4%						
6	Labour cess @1%						
7	Restricted area @5%						

108

30/30

**x) Cable terminations 3cx2.5sqmm**

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	Single compression Brass glands 3C X 2.5 sq mm,		1	30.40	15.00%	25.84	
2	2.5 sq mm aluminium lugs		3	3.71	15.00%	3.15	
Total							
4	Transportation, packing and forwarding charges						
5	Installation,Testing and commissioning charges		1	10		10.00	12.36%
6	Overheads and Profits						
7	Works Contract Tax @ 4%						
8	Labour cess @1%						
9	Restricted						

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LP Rate	ED
1	Bulk head fixture FXC 101 1xPL - S / 2P 9W AC GR	each	1	1000.00	30%	700.00	
2	9 W CFL lamps	each	1	150.00	30%	105.00	
Total							
3	Transportation, packing and forwarding charges						
4	Installation,Testing and commissioning charges		1			21.92	12.36%
	WIREMAN G-1	day	0.04	301		12.04	
	KHALLASI	day	0.04	247		9.88	
						<u>21.92</u>	
5	Overheads and Profits						
6	Works Contract Tax @ 4%						
7	Labour cess @1%						
8	Restricted area @5%						
	Rate per each						
	Say						

**MPF922 1xMHNTD150W**

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	MPF922 1xMHNTD150W		1	5670.00	30%	3969.00	
	150W MH LAMP		1	200.00	30%	140.00	
Total							
2	Transportation, packing and forwarding charges						
3	Installation,Testing and commissioning charges		1	500		500.00	10.30%

(109)

- 4 Overheads and Profits
- 5 Works Contract Tax @ 4%
- 6 Labour cess @1%
- 7 Restricted area @5%

## TV RG6 COAXIAL CABLE

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	TV RG6 COAXIAL CABLE		50	34	30%	23.80	

Total

2 Transportation, packing and forwarding charges

3	Installation, Testing and commissioning charges		50			21.92	12.36%
	WIREMAN G-1	day	2	301		602	
	KHALLASI	day	2	247		494	
						<u>1096</u>	

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

## TV SOCKET

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
------	-------------	------	------	----	-----	---------	----

1	TV SOCKET		1	152	30%	106.4	
2	MODULE BOX		1	64	30%	44.8	
	2MODULE FRONT PLATE		1	110	30%	77	

Total

2 Transportation, packing and forwarding charges

3	Installation, Testing and commissioning charges		1			75.04	12.36%
	WIREMAN G-1	day	0.04	301		12.04	
	KHALLASI	day	0.04	247		9.88	
	WIREMAN G-1	day	0.04	301		12.04	
	MASON G-2	day	0.06	273		16.38	
	KHALLASI	day	0.1	247		24.7	

7 Restricted area @5%

[illegible]





9 Overheads and Profits

10 Works Contract Tax @ 4%

11 Labour cess @1%

12 Restricted area @5%

Rate per meter

SAY

Wall mounting fan

S.NO	DESCRIPTION	UNIT	QTY.	LP	DIS	LP Rate	ED
1	Wall mounting fan		1	2320	20%	1856	

Total

2 Transportation, packing and forwarding charges

3	Installation, Testing and commissioning charges		1			68.5	12.36%
	WIREMAN G-1	day	1	301		301	
	KHALLASI	day	1	247		247	
						<u>548</u>	

4 Overheads and Profits

5 Works Contract Tax @ 4%

6 Labour cess @1%

7 Restricted area @5%

Ceiling fan point with 1switch & Electronic regulator(Analysis for1 points)

450mm Exhaust Fan

Supplying and fixing batten / angle holder including connections etc., as required.

S.NO	DESCRIPTION	UNIT	QTY	LP	DIS	LP Rate	ED
1	Batten / angle holder	each	1	26.00	30%	18.20	
2	18 W CFL lamp	each	1	215.00	30%	150.50	
	Total						

112

3 Transportation, packing and forwarding charges

4 Installation,Testing and commissioning charges		1		21.92	12.36%
WIREMAN G-1	day	0.04	301	12.04	
KHALLASI	day	0.04	247	9.88	
				<u>21.92</u>	

5 Overheads and Profits

6 Works Contract Tax @ 4%

7 Labour cess @1%

8 Restricted area @5%

Rate per each  
Say

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
	14.5%	2.39	18.84	904.09
	5%	1.08	22.67	544.19
		0.00	93.80	750.40
		0.00	93.80	93.80
		0.00	176.40	176.40
	14.5%	2.39	18.84	452.05
	5%	1.04	21.83	174.64
	5%	0.41	8.60	68.80
				3164.36
	2%			63.29
				3227.65
269.21		0.00	269.21	2153.72

---

	5381.37
15%	323.06
	7858.14
4%	314.33
	8172.00
1%	81.72
	8254.00
5%	412.70
	8667.00
	1083.38
	<b>1083.00</b>

114

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	14.5%	2.39	18.84	113.01
0	5%	1.08	22.67	68.02
0		0.00	93.80	93.80
0		0.00	44.80	44.80
0		0.00	82.60	82.60
0	14.5%	2.39	18.84	56.51
0	5%	1.04	21.83	21.83
0	5%	0.41	8.60	8.60
0		0.00	487.20	487.20
				976.37
	2%			19.53
				995.90
269.2146		0.00	269.21	269.21

1265.11  
189.77  
1454.88  
58.20  
1513.00  
15.13  
1528.00  
76.40  
1604.00  
1604.00  
1604.00

15%  
4%  
1%  
5%



119

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
			93.8	93.80
			151.2	151.20
			44.8	44.80
			82.6	82.60
			20	20.00
				392.40
	2%			7.85
				400.25
43.03388		0	43.0339	43.03

				443.28
	15%			66.49
				509.77
	4%			20.39
				530.00
	1%			5.30
				535.00
	5%			26.75
				562.00
				562.00

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	14.5%	2.39	18.84	904.09
0	5%	1.08	22.67	544.19
0		0.00	123.20	985.60
0		0.00	93.80	93.80
0		0.00	176.40	176.40
0	14.5%	2.39	18.84	452.05
0	5%	1.04	21.83	87.32
0	5%	0.41	8.60	34.40
0		0	579.6	4636.80
				7914.65
	2%			158.29
				8072.94
293.8439		0	293.844	2350.75

116

38/38

15%	1563.55
	11987.25
4%	479.49
	12467.00
1%	124.67
	12592.00
5%	629.60
	13222.00
	1652.75
	1653.00

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
	14.5%	2.39	18.84	188.35
	5%	1.05	22.09	110.43
		0	109.20	109.20
		0	44.80	44.80
		0	77.00	77.00
	14.5%	2.39	18.84	94.18
	5%	0.67	14.11	14.11
	5%	0.31	6.50	6.50
				644.58
	2%			12.89
				657.47
389.22		0	389.215	389.22

	1046.69
15%	157.00
	1203.69
4%	48.15
	1252.00
1%	12.52
	1265.00
5%	63.25
	1328.00
	1328.00

117

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	14.5%	3.84	30.32	3032.34
0	14.5%	2.39	18.84	941.76
0	5%	1.08	22.67	1133.74
0	5%	1.04	21.83	327.44
0	5%	0.41	8.60	34.40
				5469.68
	2%			109.39
				5579.08
72.00029		0	72.0003	3600.01

9179.09
1376.86
10555.95
422.24
10978.00
109.78
11088.00
554.40
11642.00
232.84
233.00

15%

4%

1%

5%

118

40/40

ED Rate	Taxes	Taxes Rate	T.Rate	Amount
476.00	14.50%	69.02	545.02	545.02
50.00		0.00	50.00	50.00
				595.02
	2%			11.90
				606.92
110.30		0.00	110.30	110.30
				717.22
	15%			107.58
				824.80
	4%			32.99
				858.00
	1%			8.58
				867.00
	5%			43.35
				910.00

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
	0.145	101.5	801.5	801.5
	0.145	15.225	120.225	120.225
				921.725
	0.02			18.4345
				940.1595
24.62931		0	24.6293	24.629312

964.788812  
144.7183218  
1109.507134  
44.38028535  
1154  
11.54  
1166  
58.3  
1224  
1224  
1224

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
	0.145	812	6412	6412
	0.145	20.3	160.3	160.3
				6572.3
	0.02			131.446
				6703.746
1123.6		0	1123.6	1123.6

119

	7827.346
0.15	1174.1019
	9001.4479
0.04	360.057916
	9362
0.01	93.62
	9456
0.05	472.8
	9929
	9929
	9929



120

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
1636			1636	1636
				1636
	0.02			32.72
				1668.72
76.9666		0	76.9666	76.9666
				1745.6866
	0.15			261.85299
				2007.53959
	0.04			80.3015836
				2088
	0.01			20.88
				2109
	0.05			105.45
				2214

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
1760			1760	1760.00
				1760.00
	2%			35.20
				1795.20
406.38		0	406.38	406.38
				2201.58
	15%			330.24
				2531.82
	4%			101.27
				263300%
	1%			26.33
				2659.00
	5%			132.95
				2792.00

122

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
	14.5%	2.39	18.84	113.01
	5%	1.08	22.67	68.02
			93.8	93.80
			151.2	151.20
			44.8	44.80
			82.6	82.60
	14.5%	2.39	18.84	56.51
	5%	0.41	8.60	8.60
		0	10	10.00
				628.54
	2%			12.57
				641.11
201.5738		0	201.574	201.57

	842.69
15%	126.40
	969.09
4%	38.76
	1008.00
1%	10.08
	1018.00
5%	50.90
	1069.00

123

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
816.2			816.2	816.20
723.8			723.8	723.80
154			154	616.00
				2156.00
	2%			43.12
				2199.12
786.52		0	786.52	786.52
				2985.64
	15%			447.85
				3433.49
	4%			137.34
				3571.00
	1%			35.71
				3607.00
	5%			180.35
				3787.35
				3787.00

124

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
2063.6			2063.6	2063.60
1433.6			1433.6	1433.60
154			154	1848.00
588			588	1176.00
				6521.20
	2%			130.42
				6651.62
786.52		0	786.52	786.52
				7438.14
	15%			1115.72
				8553.87
	4%			342.15
				8896.00
	1%			88.96
				8985.00
	5%			449.25
				9434.25
				9434.00

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
2332.4			2332.4	2332.40
1433.6			1433.6	1433.60
154			154	3696.00
588			588	1176.00
				8638.00
	2%			172.76
				8810.76
786.52		0	786.52	786.52
				9597.28
	15%			1439.59
				11036.87
	4%			441.47
				11478.00
	1%			114.78
				11593.00
	5%			579.65
				12172.65
				12173.00



125

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
214.2		0	214.2	214.20
144.2		0	144.2	144.20
58.8		0	58.8	58.80
88.2		0	88.2	88.20
				505.40
	2%			10.11
				515.51
56.56202		0	56.562	56.56

	572.07
15%	85.81
	657.88
4%	26.32
	684.00
1%	6.84
	691.00
5%	34.55
	726.00

126

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
214.2		0	214.2	214.20
144.2		0	144.2	144.20
58.8		0	58.8	58.80
88.2		0	88.2	88.20
				505.40
	2%			10.11
				515.51
43.03388		0	43.0339	43.03
				558.54
	15%			83.78
				642.32
	4%			25.69
				668.00
	1%			6.68
				675.00
	5%			33.75
				709.00

127

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	14.5%	5.66	44.71	4470.59
0	14.5%	3.84	30.32	1516.17
0	5%	1.08	22.67	1133.74
0	5%	1.04	21.83	327.44
0	5%	0.41	8.60	34.40
				7482.34
	2%			149.65
				7631.98
72.00		0	72.00	3600.01
				11232.00
	15%			1684.80
				12916.80
	4%			516.67
				13433.00
	1%			134.33
				13567.00
	5%			678.35
				14245.00
				284.90
				285.00

128

50/50

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	5%	130.50	2740.50	2740.50
				<hr/> 2740.50
	2%			<hr/> 54.81
				<hr/> 2795.31
				<hr/> 2795.31
	15%			<hr/> 419.30
				<hr/> 3214.61
	4%			<hr/> 128.58
				<hr/> 3343.00
	1%			<hr/> 33.43
				<hr/> 3376.00
	5%			<hr/> 168.80
				<hr/> 3544.80
				<hr/> 3544.80
				<b>3545.00</b>

129

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	14.5%	8.7	68.7	9.00
				9.00
	2%			0.18
				9.18
4.49		0	4.49	4.49
				13.67
	15%			2.05
				15.73
	4%			0.63
				16.00
	1%			0.16
				16.00
	5%			0.80
				17.00



130

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	5%	1.08	22.67	1133.74
0	5%	0.41	8.60	34.40
0	5%	1.04	21.83	327.44
0	5%	2.63	55.13	55.13
0		0	250	250.00
				1800.70
	2%			36.01
				1836.72
53.5283		0	53.5283	2676.42

	4513.13
15%	676.97
	5190.10
4%	207.60
	5398.00
1%	53.98
	5452.00
5%	272.60
	5725.00
	114.50
	115.00

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
103.6		0	103.6	103.60
44.8		0	44.8	44.80
74.2		0	74.2	74.20
				222.60
	2%			4.45
				227.05
56.56		0	56.56	56.56
				297.29
	15%			44.59
				341.88
	4%			13.68
				356.00
	1%			3.56
				360.00
	5%			18.00
				378.00

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
12.25		5	17.25	862.50
				862.50
	2%			17.25
				879.75
24.63		0	24.63	1231.47
				2111.22
	15%			316.68
				2427.90
	4%			97.12
				252500%
	1%			25.25
				2550.00
	5%			127.50
				2678.00
				54.00

174	14.5%	50.46	224.46	224.46
				224.46
	2%			4.49
				228.95
28.09		0	28.09	28.09
				257.04
	15%			38.56
				295.60
	4%			11.82
				30700%
	1%			3.07
				310.00
	5%			15.50
				326.00

134

56/56

33	14.5%	9.57	42.57	42.57
				42.57
	2%			0.85
				43.42
3.37		0	3.37	3.37
				46.79
	15%			7.02
				53.81
	4%			2.15
				5600%
	1%			0.56
				57.00
	5%			2.85
				60.00



135

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
---------	-------	-----------	--------	--------

32 14.5% 9.28 41.28 41.28

41.28

2% 0.83

42.11

3.37 0 3.37 3.37

45.48

15% 6.82

52.30

4% 2.09

5400%

1% 0.54

55.00

5% 2.75

58.00

136

58/58

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
45	14.5%	13.05	58.05	58.05
				58.05
	2%			1.16
				59.21
4.49		0	4.49	4.49
				63.71
	15%			9.56
				73.26
	4%			2.93
				7600%
	1%			0.76
				77.00
	5%			3.85
				81.00

137

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
---------	-------	-----------	--------	--------

32 14.5% 9.28 41.28 41.28

41.28

2% 0.83

42.11

3.37 0 3.37 3.37

45.48

15% 6.82

52.30

4% 2.09

5400%

1% 0.54

55.00

5% 2.75

58.00

60/60

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
69.5	14.5%	20.155	89.655	89.66
				89.66
	2%			1.79
				91.45
7.30		0	7.30	7.30
				98.75
	15%			14.81
				113.56
	4%			4.54
				11800%
	1%			1.18
				119.00
	5%			5.95
				125.00

139

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
---------	-------	-----------	--------	--------

1870	14.5%	542.3	2412.3	2412.30
				2412.30
	2%			48.25
				2460.55
208.43		0	208.43	208.43
				2668.97
	15%			400.35
				3069.32
	4%			122.77
				319200%
	1%			31.92
				3224.00
	5%			161.20
				<b>3385.00</b>



148

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
1447	14.5%	419.63	1866.63	1866.63
				1866.63
	2%			37.33
				1903.96
157.87		0	157.87	157.87
				2061.83
	15%			309.27
				2371.10
	4%			94.84
				246600%
	1%			24.66
				2491.00
	5%			124.55
				2616.00

(141)

ED Rate	Taxes	Taxes Rate	T.Rate	Amount
90.45	5.00%	4.52	94.97	94.97
				<hr/> 94.97
	2%			<hr/> 1.90
				<hr/> 96.87
22.47		0.00	22.47	<hr/> 22.47
				<hr/> 119.34
	15%			<hr/> 17.90
				<hr/> 137.25
	4.00%			<hr/> 5.49
				<hr/> 143.00
	1.00%			<hr/> 1.43
				<hr/> 144.00
	5.00%			<hr/> 7.20
				<hr/> <b>151.00</b>

ED Rate	Taxes	Taxes Rate	T.Rate	Amount
25.84	5.00%	1.29	27.13	27.13
3.15	5.00%	0.16	3.31	9.93
				27.13
	2%			0.54
				27.67
11.24		0.00	11.24	11.24
				38.91
	15%			5.84
				44.75
	4.00%			1.79
				47.00
	1.00%			0.47
				47.00
	5.00%			2.35
				49.00

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
	14.5%	101.50	801.50	801.50
	14.5%	15.23	120.23	120.23
				921.73
	2%			18.43
				940.16
24.63		0.00	24.63	24.63

964.79  
144.72  
1109.51  
44.38  
1154.00  
11.54  
1166.00  
58.30  
1224.00  
1224.00  
1224.00

ED Rate	Taxes	Taxes Rate	T.Rate	Amount
3969.00	14.50%	575.51	4544.51	4544.51
140.00	14.50%	20.30	160.30	160.30
				4704.81
	2%			94.10
				4798.90
551.50		0.00	551.50	551.50

143

	5350.40
15%	802.56
	6152.96
4%	246.12
	6399.00
1%	63.99
	6463.00
5%	323.15
	6786.00

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
23.80	14.5%	6.90	30.70	1535.10
				1535.10
	2%			30.70
				1565.80
24.63		0	24.63	1231.47

2797.27
15%
419.59
3216.86
4%
128.67
3346.00
1%
33.46
3379.00
5%
168.95
3548.00
70.96

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
106.4		0	106.4	106.40
44.8		0	44.8	44.80
77		0	77	77.00
				228.20
	2%			4.56
				232.76
84.31		0	84.31	84.31

	317.08
15%	47.56
	364.64
4%	14.59
	379.00
1%	3.79
	383.00
5%	19.15
	<b>402.00</b>

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
954.8		0	954.8	954.80
448		0	448	448.00

	1402.80
2%	28.06
	1430.86
168.54	168.54
	1599.40
15%	239.91
	1839.31
4%	73.57
	1913.00
1%	19.13
	1932.00
5%	96.60
	<b>2029.00</b>

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
0	14.5%	8.51	67.24	6723.69
0	14.5%	5.66	44.71	2235.29
0	5%	1.38	29.01	1450.52
0	5%	1.19	24.96	74.88
0	5%	0.68	14.24	28.49
0		0	500	500.00
				11012.88
	2%			220.26
				11233.14
72.00		0	72.00	3600.01



145

	14833.15
15%	2224.97
	17058.13
4%	682.33
	17740.00
1%	177.40
	17917.00
5%	895.85
	18813.00
	376.26
	<b>376.00</b>

ED Rate	Taxes	Taxes Rat	T.Rate	Amount
1856			1856	1856.00
				1856.00
	2%			37.12
				1893.12
76.97		0	76.97	76.97

	1970.09
15%	295.51
	2265.60
4%	90.62
	235600%
1%	23.56
	2380.00
5%	119.00
	<b>2499.00</b>

EDRate	Taxes	Taxesrate	T.RATE	AMOUNT
	14.5%	2.64	20.84	20.84
	14.5%	21.82	172.32	172.32
				<u>193.16</u>

146

68/68

	2%			3.86
				197.02
24.63		0.00	24.63	24.63

		221.65
15%		33.25
		254.90
4%		10.20
		265.00
1%		2.65
		268.00
5%		13.40
		281.00
		281.00
		281.00

NATIONAL BUILDINGS CONSTRUCTION CORPORATION LIMITED		
(A Govt of India Enterprises)		
COST SUMMARY- SWIMMING POOL COMPLEX -25m x10m		
Based on DSR 2013 and Market Rates		
S.No.	Description of Item	Amount
1	Building Works	1,05,60,868.47
2	Swimming Pool	1,11,77,728.99
3	Boundary Wall Works	31,04,714.58
4	E/M services for Filtration Plant and Accessories	76,34,625.00
5	Boring Works	7,57,375.00
6	Pump Room and Balancing Tank Works	36,08,952.08
7	Electrical Works	8,14,561.60
8	Plumbing Works	11,12,462.72
	TOTAL	3,87,71,288.44
	Adding 8% Agency Charges	31,01,703.08
	Adding 3% Contengencies	11,63,138.65
	GRAND TOTAL	4,30,36,130.17

Annexure - 9

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Bill of Quantities ( Civil works) For Construction of Olympic Size Swimming Pool at NERC GUWAHATI UNDER LNUPE, Gwallor									
S.No.	I	No.	Description of Item	Unit	Qty.	Rate	Amount		
			<b>DSR ITEMS</b>						
			<b>EARTH WORK</b>						
		2.6	Earth work in excavation by mechanical means (hydraulic excavator) / manual means over area ( exceeding 30 cm in depth, 1.5m in width as well as 10 sqm on plan ) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out						
		2.6.1	All kinds of soil	Cu.M.	2247.00	101.85	228856.95	146.5	329185.5
		2.25	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering, lead up to 50m and lift upto 1.5m.	Cu.M.	390.60	45.70	17850.42	101.5	39645.9
		2.26	Extra for every additional lift of 1.5.m or part thereof in.						
		2.26.1	All kinds of soil	Cu.M.	583.80	18.90	11033.82	41.75	24373.65
		2.27	Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming consolidating and dressing complete. ( 300 mm th below Tiles)	Cu.M.	191.10	301.50	57616.65	843.65	161221.515
			<b>CONCRETE WORK</b>						
			<b>Cement Concrete (Cast-In-Situ)</b>						
		4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centring and shuttering - All work upto plinth level.						
		4.1.10	1:5:10 ( 1 cement : 5 coarse sand : 10 graded stone aggregate 40 nominal size).	Cu.M.	177.80	2237.75	397871.95	3,672.80	653023.84
		4.12	Extra for providing and mixing water proofing material 'Impermo' or equivalent in cement concrete work @ 1 Kg/50 Kg of cement.	Kg.	5114.90	27.45	140404.01	44.36	226896.964
			<b>REINFORCED CEMENT CONCRETE</b>						
		5.1.	Providing and laying in position specified grade of reinforced grade of reinforced cement concrete excluding the cost of centring, shuttering, finishing and reinforcement - All work upto plinth level.						
		5.1.2.	1:1.5:3 (1 cement : 1.5 corase sand : 3 graded stone aggregate 20 mm nominal size)	Cu.M.	457.00	3732.00	1705524.00	5,552.25	2537378.25
			<b>Form Work</b>						
		5.9	Centring and shuttering Including strutting, propping etc. and remval of form for:						
		5.9.1	Foundations, footings, bases of columns etc. for mass concrete.	Sq.M	42.00	119.25	5008.50	186.4	7828.8



5.22.	Reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete.							
5.22.6	Thermo-Mechanically Treated bars.	Kg.	59369.00	42.70	2535056.30	66.5	3948038.5	
	<b>FINISHING</b>							
	<b>6 mm Cement Plaster</b>							
13.16.	6 mm cement plaster to ceiling of mix :							
13.16.1.	1:3 (1 cement : 3 fine sand)	Sq.M.	812.00	62.15	50465.80	120.35	97724.2	
	<b>WATER PROOFING</b>							
22.1	Providing and laying integral cement based treatment for waterproofing on horizontal surface at all depth below ground level for under ground structures as directed by Engineer-in-Charge and consisting of : i) 1st layer of 22mm to 25mm thick approved and specified rough stone slab over a 25mm thick base of cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound conforming to IS:2645 in the recommended proportion over the leveling course (leveling course to be paid separately). Joints sealed and grouted with cement slurry mixed with water proofing compound. ii) 2nd layer of 25mm thick cement mortar 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportions. iii) Finishing top with stone aggregate of 10mm to 12mm nominal size spreading @ 8 cum/sqm thoroughly embedded in the 2nd layer.							
22.1.1	Using rough kota stone.	Sqm	770.00	540.30	416031.00	844.1	649957	
22.2	Providing and laying integral cement based treatment for waterproofing on the vertical surface by fixing specified stone slab 22 mm to 25mm thick with cement slurry mixed with water proofing compound conforming to IS:2645 in recommended proportions with a gap of 20mm (minimum) between stone slabs and the receiving surfaces and filling the gaps with neat cement slurry mixed with water proofing compound and finishing the exterior of stone slab with cement mortar 1:3 (1 cement : 3 coarse sand) 20mm thick with neat cement punning mixed with water proofing compound in recommended proportion complete at all levels and as directed by Engineer-in-charge :							
22.2.1	Using rough Kota stone	Sqm	285.00	647.85	184637.25	1,036.90	295516.5	
	<b>Total of DSR Items</b>				<b>57,94,825.25</b>		<b>80,53,244.87</b>	
	<b>Adding Cost Index @ 5% over DSR Items</b>						<b>4,52,662.24</b>	
	<b>Sub Total</b>						<b>95,05,907.11</b>	
	<b>MR ITEMS</b>							
NS	Disposal of excavated earth by mechanical transport upto a lead of 1 km including loading, unloading and dressing complete as per direction of Engineer-In-charge.	Sq.M.	1326.00	56.25	74587.50			



		mm ( 5mm average) thick bed of adhesive mortar of Polymer modified cementitious adhesive ( Bal Endura gold star / letecrete / Rock force ) in conjunction with polymer modified liquid Bal Endura admix Adlor equivalent product of letecrete / Rock force mixed in required perportion as specified by manufacturer including filling / scaling of joints 2-3 mm thick between the tiles with epoxy grout of Bal Endura Epoxy grout / Letecrete / Rock force with matching colour pigment to make it water tight and finished neat complete as per direction of Engineer-in-Charge.	Sq.M.	648.00	1437.50	931500.00			
	3								
	NS	Providing and laying vitrified pool tile of size 247 mm X 122 mm and thickness 8mm conforming to BIS 13756 and FINA ( Federation International De Nation) Standard on vertical surface i.e. (walls in skirting / dado) in swimming pool / diving pool of approved manufacture and specified shade like Orient Blue / Dark Blue / new blue etc. fixed in approved pattern on 3-6 mm ( 5mm average) thick bed of adhesive mortar of Polymer modified cementitious adhesive ( Bal Endura gold star / letecrete / Rock force ) in conjunction with polymer modified liquid Bal Endura admix Adlor equivalent product of letecrete / Rock force mixed in required perportion as specified by manufacturer including filling / scaling of joints 2-3 mm thick between the tiles with epoxy grout of Bal Endura Epoxy grout / Letecrete / Rock force with matching colour pigment to make it water tight and finished neat complete as per direction of Engineer-in-Charge.	Sq.M.	164.50	1468.75	241609.38			
	NS	Providing and laying specially moulded vitrified internal cove of size 250 X 50 X9 mm made equivalent to FINA ( Federation International De Nation) Standard for pool tiles to be laid at internal cove of wall to floor and wall to wall junction in swimming pool / diving pool in conjunction with wall and floor pool tiles of approved manufactures laid on base of adhesive ( Bal Endura gold star / letecrete / Rock force ) in conjunction with polymer modified liquid admix Adl of ( Bal Endura / letecrete / Rock force )mixed in required proportion as specified by manufacturer and joints filled / sealed with epoxy grout of Bal Endura or equivalent product of Letecrete / Rock force with matching pigment to make it water tight finished neat complete as per direction of Engineer-in-Charge.	Metre	78.00	1187.50	92625.00			
	NS	Providing and laying specially moulded vitrified internal angle of wall floor junction of size 50 X 50 X9 mm made equivalent to FINA ( Federation International De Nation) Standard for pool tiles to be laid at internal angle of wall floor junction in swimming pool / diving pool in conjunction with wall and floor pool tiles of approved manufactures and matching shade on base of adhesive mortar Polymer modified cementious adhesive ( Bal Endura gold star / letecrete / Rock force ) in conjunction with polymer modified liquid admix Adl of ( Bal Endura or equivalent product of letecrete / Rock force and joints filled / Scaaled with Epoxy grout of Bal Endura / Letecrete / Rock force with matching pigment to make it water tight finished neat complete as per direction of Engineer-in-Charge.	No.	4.00	406.25	1625.00			
	NS	Providing and laying vitrified heavy duty chequered tiles confirming to IS : 4457 of size 300 mm x 300 mm and 10 mm thick for open deck area of approved manufacturer like Endura or Kajaria or equivalent in all colours and shade laid on a bed of 20 mm th cement mortar 1:4 ( 1 cement : 4 coarse sand) incl grouting the joints with matching pigment etc. and finished neat complete as per directions of Engineer in charge.	Sq.M.	455.00	725.00	329875.00			
		Total of MR Items				16,71,821.88			
		Grand Total				1,11,77,728.99			

NAME OF WORKS: Proposed Construction of Swimming Pool Complex										
NATIONAL BUILDINGS CONSTRUCTION CORPORATION LIMITED										
(A Govt of India Enterprises)										
Change Rooms & Entrance Lobby : Bill of Quantities ( Civil works)										
S.No.	DSR No.	Description of item	Unit	Qty.	Qty.	Rate	Amount	Amount	Rate	
				Change Room	Entrance Lobby		Change Room	Entrance Lobby		
		PREAMBLES								
1		Jungle clearance item will be operated with permission of Engineer - in charge for the other area than where the work is to be done.								
2		Making of groove at the junction of birck wall and slab inside the room shall not be paid								
3		Work shall be carried out as per latest CPWD specifications and NBCC guidelines.								
4		Skirting is 10 cm high.								
5		Nothing extra shall be paid for making drip course in projected slab.								
		DSR ITEMS								
		EARTH WORK								
2.8		Earth work in excavation by mechanical means (hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out								
2.8.1		All kinds of soil.	Cu.M.	250.36	52.57	103.40	25886.78	5436.22367	148.25	37115.23253 7794.19883
2.25		Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth: consolidating each deposited layer by ramming and watering, lead up to 50m and lift upto 1.5m.	Cu.M.	192.50	40.43	45.70	8797.35	1847.442654	101.5	19538.96315 4103.182262
2.27		Supplying and filling in plinth with Jamuna sand under floors including, watering, ramming consolidating and dressing complete.	Cu.M.	40.95	8.60	301.50	12348.43	2592.74925	843.65	34547.4675 7254.968175
2.28		Surface dressing of the ground including removing vegetaion and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5m.								
2.28.1		All Kinds of Soil.	Sq.M.	400.00	84.00	5.12	2048.00	430.08	1,124.60	449840 94466.4









6.13	Half brick masonry with F.P.S. bricks of class designation 75 in superstructure above plinth level up to floor V level.									
6.13.2	Cement mortar 1:4 (1 cement : 4 coarse sand)	Sq.M.	289.35	60.76	302.80	87616.00	18399.35949	647.9	187471.6143	39369.03901
6.15	Extra for providing and placing in position 2 Nos. 6 mm dia. M.S. bars at every third course of half brick masonry (with F.P.S. bricks).	Sq.M.	289.35	60.76	47.80	13831.06	2904.522403	69.5	20110.01265	4223.102657
8.3	Extra for providing edge moulding to 18mm thick marble stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge									
8.3.2	Granite work	Mts	33.60	7.06	97.60	3279.36	688.6658	210.65	7077.84	1486.3484
8.5	Extra for providing opening of required size & shape for wash basins/kitchen sink in kitchen platform, vanity counters and similar location in marble/stone work including necessary holes for pillar taps etc. including rubbing and polishing of cut edges	Each	32.00	6.72	151.00	4832.00	1014.72	350.8	11225.6	2357.376
9.1.1	Second class Teak wood	Cu.M.	1.41	0.30	52090.00	73339.92	15401.38392	90,495.80	127413.2279	26756.77786
9.21	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face									
9.21.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws.	Sq.M.	71.11	14.93	929.95	66129.91	13887.28046	1,684.75	119804.6784	25158.98247
9.22	Extra for providing and fixing flush doors with teak veneering									
9.22.1	On one side in item no. 9.21.1	Sq.M.	142.22	29.87	261.35	37169.85	7805.668579	394.9	56163.66525	11794.3697
9.23	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of shutters (over all area of door shutter to be measured) Over item no. 9.20 and 9.21	Sq.M.	71.11	14.93	284.55	20234.71	4249.288299	348.45	24778.71506	5203.530163
9.40	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete.									
9.40.1	2nd class teak wood									
9.40.1.1	50 X 12 mm	Mtr.	212.85	44.70	53.85	11461.97	2407.014225	110.5	23519.925	4939.18425
9.74	Providing and fixing aluminium tower bolts ISI marked anodised (anodiccoating not less than grade AC 10 as per IS : 1868 ) transparent or dyed to required colour or shade with necessary screws etc. complete :									
9.74.2	200x10 mm	Each	43.00	9.03	52.00	2236.00	469.56	226.7	9748.1	2047.101
9.74.3	150x10 mm	Each	43.00	9.03	42.75	1838.25	386.0325	186.05	8000.15	1680.0315



9.76	Providing and fixing bright finished brass 100 mm mortice latch and lock with 6 levers and a pair of lever handles with necessary screws etc. complete (best make of approved quality)	Each	43.00	9.03	332.65	14303.95	3003.8295	514.55	22125.65	4646.3865
9.100	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade with necessary screws etc. complete :									
9.100.1	125 mm	Each	86.00	18.06	48.80	4196.80	881.328	66.95	5757.7	1209.117
9.101	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.									
9.101.1	Single rubber stopper	Each	43.00	9.03	19.05	819.15	172.0215	33.75	1451.25	304.7625
STEEL WORK										
10.25	Steel work in welded in built up sections/framed work including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer coat of approved steel primer using structural steel etc. as required.									
10.25.2	In gratings, frames, guard bar, ladders railing, balcony railing, brackets, gates & similar works.	K.G.	155.00	32.55	51.2	7936.00	1668.56	86.5	13407.5	2815.575
10.26	Providing and fixing hand rail of approved size by welding etc. to steel ladder railing, balcony railing and staircase railing including applying a priming coat of approved steel primer									
10.26.3	G.I. pipes.	K.G.	30.00	6.30	68.00	2040.00	428.4	105.15	3154.5	662.445
FLOORING										
11.23	Marble stone flooring with 18mm thick marble stone (sample of marble shall be approved by Engineer-in-charge) over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with grey cement slurry including rubbing and polishing complete with :									
11.23.2	Raj Nagar plain	Sqm	14.48	3.04	892.15	12898.21	2708.624944	1,435.70	20756.56097	4358.877803
11.23.5	Udaipur green marble	Sqm	14.48	3.04	1112.55	16084.64	3377.773559	1,555.90	22494.34648	4723.812758
11.24	Extra for pre finished nosing to treads of steps of marble stone.	RM	40.72	8.55	105.20	4283.74	899.58624	248.9	10135.208	2128.39368
11.3	Cement concrete flooring 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate) finished with floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete.									
11.3.1	40 mm thick with 20 mm nominal size stone aggregate.	Sq.M.	13.60	1.00	192.95	2624.12	192.95	0.17	2.312	0.17
Kota Stone Flooring										
11.26	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab including rubbing and polishing complete with base of 1:4 (1 cement : 4 coarse sand):									
11.26.1	25 mm thick	Sq.M.	13.23	2.78	694.40	9186.91	1929.25152	1,071.70	14178.591	2977.50411











		Laying cement concrete using broken brick/brickbats 25 mm to 100 mm size with 50% of cement mortar 1:5 ( 1 cement : 5 coarse sand ) admixed with proprietary water proofing compound conforming to Is :2845 over 20 mm thick layer of cement mortar of mix 1:5 (1									
		After two days of proper curing applying a second coat of cement slurry admixed with proprietary water proofing compound conforming to Is:2845									
		Finishing the surface with 20mm thick jointing cement mortar of mix 1:4 (1 cement : 4 coarse sand ) admixed with proprietary water proofing compound conforming to Is:2845 and finally finishing the surface with trowel with neat cement slurry and making of 300									
		The whole terrace so finished shall be flooded with water for a minimum of two weeks for curing and for final test with average th of 120 mm and min thickness at khurra of 65 mm.									
22.7.1		With average thickness of 120 mm and minimum thickness at khurra as 65 mm	Sq.M.	364.00	76.44	536.40	195249.60	41002.416	882.6	321266.4	67465.944
		<b>ROOFING</b>									
12.21		Providing gola 75 x75mm in cement concrete 1:2:4 ( 1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :									
12.21.1		In 75x75mm deep chase	Mtr	80.60	16.93	67.35	5428.41	1139.9661	127.95	10312.77	2165.6817
12.22		Making khurras 45x45cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate of 20mm nominal size) over P.V.C. sheet 1mx 1mx400 micron, finished with 12mm cement plaster 1:3 (1 cement : 3 coarse sand) and a coat of neat cement rounding the edge and making and finishing the outlet all complete	Each	8.00	2.00	108.00	864.00	216	167.45	1339.8	334.9
5.11		Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc. including cost of de-shuttering and decentering at all levels, over a height of 3.5m, for every additional height of 1 metre or part thereof (Plan area to be measured)									
5.11.1		Suspended floors, roofs, landing, beams and balconies (Plan area to be measured).	sqm	38.50	8.09	108.2	4088.70	858.627	145.6	5605.6	1177.176
MR		Labour for injecting chemical emulsion for preconstructional anti-termite treatment and creating a chemical barrier under and around the column pits, wall trenches, top surface of plinth filling junction of wall and floor along the external perimeter of the building, expansion joints, surrounding of pipes, conduits etc. complete (plinth area of the building at ground floor only shall be measured).	Sqm	392.00	79.00	65	25480	5135	107.85	42277.2	8520.15
		<b>Total of DSR Items</b>					<b>47,93,896.24</b>	<b>9,66,212.91</b>			
		<b>Adding 5% enhancement on DSR items</b>								<b>415770.82</b>	<b>87127.68</b>
		<b>Sub Total</b>								<b>8731187.14</b>	<b>1829681.32</b>
		<b>Grand Total</b>								<b>1,05,60,868.47</b>	