## **INTERNAL ROADS AND GABION WALL**

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
	APPENDIX A : ROAD WORK				
	Earth Work Excavation				
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m 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				
	i) All kinds of soil	m <sup>3</sup>	3638		
2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means over areas (exceeding 30cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead upto 50m and lift from 1.5m to 3m , disposed earth to be levelled and neatly dressed.				
	i) All kinds of soil.	m <sup>3</sup>	1003		

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
3	Earth work filling inside premises with excavated earth available at Site . The earth is to be filled in layers not exceeding 20cm in depth, including watering, consolidating and rolling with 8-10T vibratory road roller etc complete as per specifications.	m <sup>3</sup>	2500		
4	SUB GRADE				
	Supplying sub grade material as per specifications/satisfying the grading given below:- Sieve sizes 4.76mm,2.0mm,0.6mm,0.4mm,0.2 mm corresponding percentage\passing by weight 60, 30, 10,5& 0 recepectively	m <sup>3</sup>	1055		
	Compacting with 8 to 10T tandem roller to a compacted thickness of 150mm and watering & recompacting to achieve a proctor dry density of 95% as per specifications.				
5	SUB BASE				

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
	Construction of granular sub-base by providing close graded Material conforming to specifications, mixing in a mechanical mix plant at OMC, carriage of mixed material by tippers to work site, for all leads & lifts, spreading in uniform layers of specified thickness with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications and directions of Architect With material conforming to Grade-I (size range 75 mm to 0.075 mm) having CBR Value-30	m <sup>3</sup>	702.00		
	Water bound macadam				
6	Supply and stacking at site 63 to 45mm size stone aggregate	m <sup>3</sup>	264		
7	Supply and stacking at site 53 to 22.4mm size stone aggregate	m <sup>3</sup>	264		

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
8	Laying, spreading and compacting stone aggregate of specified sizes to WBM specifications in uniform thickness, hand picking, rolling with 3 wheeled road / vibratory roller 8-10 tonne capacity 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				
a)	First layer for a consolidated thickness of 75mm	m <sup>3</sup>	264		
b)	Second layer for consolidated thickness of 75mm	m <sup>3</sup>	264		
9	Primer coat				
	Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.6 kg/sqm using mechanical means.	m <sup>2</sup>	3400.00		
10	Bituminus Concrete				

PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
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 equiped 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 HLL	m <sup>3</sup>	180		
40/50 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 Batch Type Hot Mix Plant of 100-120 TPH capacity.				

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
11	Seal coat Providing and laying seal coat over prepared surface of road with bitumen heated in bitumen boiler fitted with the spray set spraying using 98 kg of bitumen of grade VG - 10 and blinding surface with 0.90 cum of stone aggregate of 6.7 mm size (Passing 11.2 mm sieve and retained on 2.36 mm sieve) per 100 sqm of road surface, including rolling and finishing with power road roller all complete.	m <sup>2</sup>	3402		
12	Cast in Situ Cement Concrete M25 Kerb				
	Providing and laying at or near ground level factory made kerb stone of M- 25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of HLL	m <sup>3</sup>	60.00		
	APPENDIX B : TRENCHES, PATHWAY, MEDI	AN			
13	Excavation for Trenches				

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
	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.	m <sup>3</sup>	150		
14	PCC 1:3:6 in Foundation				
	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	m <sup>3</sup>	21		
15	Trench RCC wall and base				
	Providing and laying in position machine mixed 1:1 <sup>1</sup> / <sub>2</sub> :3 cement concrete for reinforced cement concrete work, but excluding the cost of centering, shuttering, finishing and reinforcement, as per direction of HLL	m <sup>3</sup>	70		
16	Centering and shuttering including strutting, propping etc. and removal of form. For walls including buttress attached pilaster etc.	m <sup>2</sup>	105		
17	Reinforcement				

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level. Using TMT bars of Fe 500D grade (steel will be supplied by HLL)	kg	4200		
18	Plastering inside trenches				
	Plastering with cement mortar 1:4 12mm thick one coat to walls inside at all heights, floated hard and trowelled to get a smooth finish, provision of grooves, scaffolding, at any height, curing etc. complete as directed by HLL	m <sup>2</sup>	645		

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
19	<b>Pre-cast RCC slab</b> Providing and placing in position 100mm thick factory made machine batched & machine mixed Precast RCC Rectangular Covers on drains of footpath of various sizes, of M-25 grade cement concrete for RCC work, including cost of centering, shuttering, reinforcement of 8mm dia TMT bars of Fe 500 grade @ maximum 100mm c/c on both ways , neat cement punning on finished surface, properly encased on all edges with 1.6 mm thick , 100mm wide MS sheet duly painted over priming coat reinforcement to be welded at edges with MS sheet and providing 2 Nos. 12 mm dia bar for hooks etc i/c cost of cartage ,all leads & lift, handling at site etc. all complete as per direction of HLL	m <sup>2</sup>	180		
20	Interlocking Paver block				

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
	Providing and laying factory made chamfered edge Cement Concrete paver blocks of required strength, thickness & size/shape, made by table vibratory method, to attain superior smooth finish using PU or equivalent moulds, laid in required Grey colour & pattern over 50mm thick compacted bed of coarse sand, compacting and proper embedding / laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with jamuna sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand in footpath, parks, lawns, drive ways or light traffic parking etc. all complete as per manufacturer's specifications & direction of Engineer -in-Charge: (a) 80 mm thick c.c. paver block of M-30 grade with approved color design and pattern.	m <sup>2</sup>	350.00		
21	APPENDIX C: GABION WALL				

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
	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.	m <sup>3</sup>	1320		
22	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 from 1.5 m to 3m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	m <sup>3</sup>	792		
23	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 from 3.0 m to 4.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	m <sup>3</sup>	660		

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
24	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 from 4.5 m to 6.0m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	m <sup>3</sup>	396		
25	Supply of Mechanically Woven Double Twisted Hexagonal Shaped Wire Mesh Gabion boxes 1m High,1M width,length will vary as per requirement ,Maccaferri or equivalent, with diaphragms (mesh)in every 1M, for gabions of length higher than 1.5M,as per standards as per IS 16014:2012, MoRTH Clause 2500(Revision 2013), of required sizes,				

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
	Mesh Type 10x12, Zn + PVC coated, Mesh Wire dia. 2.7/3.7mm (ID/OD), mechanically edged / selvedged, with partitions at every 1m interval, tying with lacing wire of dia 2.2/3.2 mm (ID/OD), supplied @ 5% by weight of gabion boxes, as per detailed specification conforming to codes in vogue all complete as per directions of engineer-in- charge. (Standard box sizes are $4x1x1$ , 3x1x1,2x1x1 and $1.5x1x1$ and will be arranged as per site condition). Detailed specifications and eligibility criteria given as annexure				
a)	Gabion Boxes of 0.5 M high	m <sup>3</sup>	880		
b)	Gabion Boxes of 1M high	m <sup>3</sup>	2112		
26	Supplying and laying of Thermally Bonded Non Woven Geo Textile,Polypropelene and Polyethylene composition, of minimum 110g/Sq.M, CBR puncture 1.5kN,Tensile strength 8kN/M,elongation 24% as per EN standards,roll width not less than 4.5M, as filter layer behind/under gabion/RR/DR retaining wall, with required laps, including all weistages and labour etc. complete.	m <sup>2</sup>	1060		

	PART 1 - HOSTEL BLOCK	UNIT	QTY	RATE	AMOUNT
27	Supplying & Filling granite rubble stones at site and packing in masonry condition inside the gabion boxes of approved section and drawing and as per construction manual of the approved manufacturer and placing in position to lines and levels suitably to form the gabion wall (with all leads and lifts) with all equipments, conveyance of materials, labour etc complete to the satisfaction of HLL	m <sup>3</sup>	2992		
	TOTAL (ROAD WORK)				