

GREEN WOODS LAYOUT ROADS & INFRA WORK ITEMS

Sl. No.	DESCRIPTION	Apprx. QTY	UNIT
1	EXTERNAL SEWERAGE SYSTEM		
1.1	Excavation in all types of soil(hard soil) for laying pipes upto 300mm dia. including forming bottom surface to required level, refilling with selected excavated earth around the pipe in layers 150mm thick, watering, consolidating and disposing off the surplus earth within the site as directed by the engineer with a lead of 200M etc., complete.		
	Depth upto 1.5 M.	2370	Cum.
1.2	Supplying, fixing and testing of PVC soil, waste water pipe confirming to IS 13592 and 4985, type B - 6 kg / sq.cm pressure rated with rubber ring (confirming to IS 5382)with solvent joint inclusive of all necessary specials like bends, tees, offsets, doorbends, junctions, screw type caps with rubber rings for cleanout pipe ends, etc.,		
	110mm dia	560	Rmt
	160mm dia	685	Rmt
	200mm dia	280	Rmt
	250mm dia	55	Rmt
1.3	Supplying, fixing and testing salt glazed stoneware Gully Trap with rebated top square bodies 150mm x 150mm, CI grating 100mm dia outlet set in 75mm thick PCC 1:4:8 bed, 115mm thick masonry chamber in CM 1:4, internal and external plastering 12mm thick in CM 1:6, supply and fixing 300mm x 300mm size CI frame and cover, jointing to drain in CM 1:1, excavating, refilling and ramming etc., complete. also include for necessary excavation.	2	Nos.
1.4	Construction of Circular Manhole / Inspection Chamber with 230mm best quality approved Table Molded bricks in CM 1:4 over a bed of 100mm thick PCC 1:4:8, internal wall surfaces plastered in CM 1:3 and external wall surfaces with CM 1:3 with sponge finish, benching and channelling in PCC 1:4:8. Supplying and fixing CI square frame & cover of size suitable for a clear internal size of chamber of 700mm (weight 110 Kgs.) and fixing PVC steps in position. The quoted rate shall also include necessary excavation and back filling. Clear internal size of the chamber 700 mm maximum depth not exceeding 1200mm.		
	700mm or equivalent standard size	22	Nos.

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1.5	Construction of Circular Manhole with best quality, approved table moulded bricks in CM 1:6, 500mm dia at top and 1200mm dia.at bottom over a bed of 250mm thick PCC 1:4:8, walls plastered smooth inside in CM 1:3 and outside with CM 1:3 with sponge finish, benching and channeling in PCC 1:2:4. supplying and fixing PVC steps as per drawing for maintenance. The manhole shall be provided with medium duty C.I frame and cover of weight 135 Kgs. Circular 660mm dia. Clear opening etc., complete. The quoted rate shall also include for necessary excavation, refilling, disposing off surplus earth with in a lead of 300M etc., complete.		
	Depth upto 1 to 1.5 Mtrs.	3	Nos.
1.6	STP 55KLD [ONLY CIVIL WORKS] - in RCC walls	92	Cum.
2	EXTERNAL WATER SUPPLY SYSTEM		
2.1	Providing & fixing of uPVC pipes conforming to ASTM standard D -1785 SCH-11/40 including all uPVC fittings like tees, elbows, bends, unions, coupling, reducer tees, collars etc. The work shall include cutting jointing with solvent cement pressure testing the joints / pipeline for 10 kg/sq.cm hydraulic pressure, for 2 hours hours etc., fixed on to the wall in vertical shafts / terrace with fabricated MS brackets of suitable size with GI 'U' clamps, bolts, nuts and GI washers , MS brackets including making good the walls and floors.		
	Notes: Strictly use SCH-11/40 grade - uPVC pipe and fittings for external cold water supply pipe		
	Notes: Rate Quoted shall be inclusive of cost of other consumables like hacksaw blade, solvent for uPVC pipe		
	20 mm dia	570	Rmt
	25 mm dia	75	Rmt
	40 mm dia	110	Rmt
	50 mm dia	485	Rmt
	65 mm dia	375	Rmt
	80 mm dia	255	Rmt
	100 mm dia	130	Rmt
	150 mm dia	30	Rmt
2.2	Supplying, installing, testing and commissioning CI butterfly (isolation) valves with standard lever conforming to IS standard 13039 with necessary flanges, nuts and bolts etc., complete.		
	a) 50 mm dia	5	Nos.
	b) 65 mm dia	4	Nos.
	c) 80 mm dia	2	Nos.
	d) 100 mm dia	2	Nos.
	e) 150 mm dia	1	Nos.
2.3	Supplying, installing and testing approved make GM ball valves conforming to IS 1703 with unions etc., complete.		
	40mm dia	2	Nos.

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2.4	Supplying and fixing in position approved make GM non-return valve conforming to IS 778 with unions etc., complete.		
	80 mm dia	1	Nos.
	100 mm dia	1	Nos.
2.5	Supplying, installing and commissioning approved make CI flanged brass `Y' strainer with necessary nuts and bolts, neoprene rubber gaskets, flanges, etc., complete.		
	80 mm dia	1	Nos.
	100 mm dia	1	Nos.
2.6	Construction of Valve chamber with 230 mm best quality TM bricks in CM 1:4 over a bed of 100mm thick PCC1:4:8, internal walls plastered smooth in CM 1:3 and external walls plasterd rough with sponge finish including curing with all necessary leads and lift and providing heavy duty cast iron cover with frame with locking arrangements etc., complete including Heavy duty cast iron cover of size(clear dimension)as per detail drawing.		
	600X600	2	Nos
2.8	Supplying & fixing OR make 20mm size Automatic Air release valve with 'O' ring seal, fixing to pipe work using required fixing materials, testing for leak proof, etc complete.	2	Nos
2.9	Supplying & fixing Hawk / equal approved make Pressure Reducing valve with pressure guage, fixing to threaded ends of pipe work using required fixing materials, setting to required pressure, testing for leak proof, etc., complete.		
	100 dia	1	Nos
2.10	Providing and constructing Catch Basin comprising burnt brick masonry walls built in CM1:4 over CC bed ,RCC cover slab benching in CC 1:2:4 internal faces plastered smooth in CM 1:4,15 mm thick and outside exposed faces with cm 1:6, 15mm thick including 600x600mm medium duty SFRC Manhole frame & cover with necessary earth work excavation returning and refilling and disposing surplus soil as directed by the Engineer in charge etc., complete		
	600x600mm size internal.	2	Nos
3	EXTERNAL STORM WATER DRAINAGE		
3.1	STROM WATER DRAIN		
3.1.1	Earth work Excavation	19717	CFT
3.1.2	PCC	3012	CFT
3.1.3	6" Block Work	9666	SFT
3.1.4	Plastering	14500	SFT

Sl. No.	DESCRIPTION	Apprx. QTY	UNIT
3.2	Construction of percolation well / rain water harvest pit of 1m dia and 1.5m deep with precast RCC rings, covering the top with RCC slab including supply and fixing of MH cover etc. The quoted rate shall include earth work excavation, back filling, removing excess earth and making good the floor. The percolation well harvest pit shall be constructed as per the detail drawings and specification shall consists of:		
a)	Allernate layers of brick bats, activated charcoal, gravel, pebbles and topped with fine sand for good infiltration.		
b)	5 Nos. bore holes of 160 mm dia from the bottom of percolation pit for a depth of 6m, drilled by using auger manually.		
c)	Bore hole to be filled with medium sized pebbles to provide mechanical strength to the holes and enhance infiltration.		
d)	Rate quoted shall be inclusive of earth work excavation, back filling, removing of excess earth as per the instructions of engineer - in charge.		
	Size 1000X450X1500	10	Nos
4	ROAD WORK		
4.1	Excavation and Gravel Filling		
	Box cutting, dry rolling, providing, laying and covering with good gravel for around 6" think, very good compaction, roller finishing, water curing. Ensuring the good preparation of hard base to form good quality of Road without any undulations	75071	SFT
4.2	WET MIX		
	Providing and laying minimum 5"(127 mm) (after compaction) wet max 30mm down size including 20mm, 15mm, 12mm, 6mm and dust 1% cement laying for Road work complete	75071	SFT
4.3	TAR Coat		
	Providing and laying with Machines (not Manual) good quality Tar coat over WBM/WMM surface treated with prime coat, using 3.5kg. of emulsion for 10 sq.m area. Including cost and conveyance of bituminous binder and including labor charges for preparing binder sprayer etc., all complete, as per clause 503 of MOST specification	75071	SFT
4.4	SEMI DENSE BITUMINOUS CONCRETE :		
	Providing and laying with Machines (not Manual) good quality Semi Dense Bituminous concrete, 20 mm thick (after compaction) using graded 20MM & 12MM metal as per clause 510 of most specification premixed with 80/100 bituminous grade and premixing by CMP with bituminous Binder 3.5 to 4% by the weight of the total mix, and filter with stone line, and Transporting the MIX by trucks or trailer and laid over the previously prepared surface, with a hydrostatic paver finisher with sensor controlled to the received grade levied and aligned and rolled with good roller to achieve the desired compaction complete, as per clause 508 of MOST	75071	SFT

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4.5	SEMI DENSE BITUMINOUS CONCRETE :		
	Providing and laying with Machines (not Manual) good quality Semi Dense Bituminous concrete, 20 mm thick (after compaction) using 12mm downsize graded metal as per clause 510 of most specification premixed with 80/100 bituminous grade and premixing by CMP with bituminous Binder 4.5 to 5% by the weight of the total mix, and filter with stone line, and Transporting the MIX by trucks or trailer and laid over the previously prepared surface, with a hydrostatic paver finisher with sensor controlled to the received grade levied and aligned and rolled with good roller to achieve the desired compaction complete, as per clause 508 of MOST	75071	SFT
4.6	SEMI DENSE BITUMINOUS CONCRETE (Seal Coat) - For Fine Finish		
	Providing and laying Semi Dense Bituminous concrete using graded metal as per clause 510 of most specification premixed with 80/100 bituminous grade and premixing by CMP with bituminous Binder 4.5 to 5% by the weight of the total mix, and filter with stone line, and Transporting the MIX by trucks or trailer and laid over the previously prepared surface, with a hydrostatic paver finisher with sensor controlled to the received grade levied and aligned and rolled with good roller to achieve the desired compaction complete, as per clause 508 of MOST.	75071	SFT
5	OTHER WORKS		
5.1	Removing of plants, shrubs, weeds, clearing and leveling the land by cutting and filling up pits and ponds all works to the satisfaction levels in the entire land.		
5.2	The excavated earth shall be used to fill the low areas of the site to allow the rain water to freely flow to the drain and doing proper leveling. The leftover excavated earth shall be cleaned from the site area and dumped outside the compound wherever is appropriate.		
5.3	Stone pitching to the open water drain of 3' depth and 260' length (approximate) part of the landscaping area to the proper finish and pointing with cement mortar in the gaps left between the stones.		
5.4	All the sites shall be marked with 6" x 6" size well finished marking stone molded in concrete with one foot above the ground and firmly fixed in the ground may be till 1' depth and painted with Yellow color on all visible sides.		
5.5	Firmly fixing the Site Number plates in the front side and middle of the sites with concrete.		
5.6	Constructing and providing the Culverts wherever required adjacent to the road.		
5.7	Laying the RCC Hume pipes wherever required in the road crossings and in the Club House area		
5.8	In front of Site No. 45, 47 & 48, in that road junction/circle area, one circular culvert to be built in size stone masonry with well finished boarders		

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5.9	Outside the main entrance of Green Woods layout, the storm water drain which is there in the north side of the Bellavi Road to be cleaned, side walls to be built to prepare the landscape adjacent to Green Woods compound wall. And, RCC pipes to be laid in the road area. Landscaping is not part of this scope. However, the drain and adjacent earth to be leveled		
5.10	Water Curing of all the works in this scope shall be taken care		