

JUNAGADH (R. & B.) DIVISION
JUNAGADH

**Name of work : Construction of Category D-1 & D Type unit Residential Quarters for Revenue Officer at Keshod
Dist. Junagadh.**

:: Civil Specification Index ::

Item No.	Description of Item	Item No / Page No of the applicable specification	Remarks
1	2	3	4
1	Excavation for foundation upto 1.5M depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto 50 Meter lead. (A) Loose & soft soil	General Specification Booklet P-21 Item 4.0.0 (a)	
2	Excavation for foundation upto 1.5M depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto 50 Meter lead. (B) Dense & hard soil	General Specification Booklet P-21 Item 4.0.0 (B)	
3	Excavation for foundation upto 1.5M depth including sorting out and stacking of useful materials and disposing of the excavated stuff upto 5 Meter lead. (D) Hard Murrum	General Specification Booklet P-22 Item 4.0.0 (C)	
4	Excavation for foundation for depth from 1.5 M. to 3. M including sorting out and stacking of useful materials and disposing of the excavated stuff upto 5 Meter lead. (D) Hard Murrum	General Specification Booklet P-25 Item 4.001 (C)	
5	Providing and laying ordinary cement concrete M.150 for curing complete excluding cost of formwork and reinforcement for reinforced concrete work in (A) Foundations, footings, Base of columns and Mass concrete	General Specification Booklet P-38 Item 5.8.1	
6	Providing and laying controlled C.C.M.250 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in foundation, footing bases of columns and the like and mass concrete.	General Specification Booklet P-40 Item 5.8.3	
7	Providing and laying controlled C.C. M.250 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Collumns, up to plinth.	General Specification Booklet P-40 Item 5.8.3	
8	Providing and laying cement concrete 1:3:6 (1-Cement : 3- coarse sand : 6- hand broken stone aggregates 40 mmnominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth.	General Specification Booklet P-30 Item 5.3.2 (A)	
9	White Stone Bela mesonry block in course found & plinth with stone of approved quality in Cement Mortar 1:5 (1-Cement : 5- course sand) including packing the joints etc. complete.	General Specification Booklet P-53 Item 7.0.0	
10	Filling available excavated earth (excluding rock) in trenches. plinth, sides of foundations etc. in layers not exceeding 2cm. in depth consolidating each disposed layer by ramming and watering.	General Specification Booklet P-27 Item 4.12	
11	Filling in foundation and plinth with murrum or selected soil in layers of 2cm. thickness including watering, ramming and consolidating etc. completed.	General Specification Booklet P-28 Item 4.004	

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12	Carrying out plinth treatment to post construction / existing structure by spraying chemical solution for termite control treatment incl, labour 7 material consisting with ISI specification.	General Specification Booklet P-137 Item 22007	
13	Providing and laying controlled C.C. M.200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Collumns, pillars, posts & struts upto floor two level for G.F.	General Specification Booklet P-39 Item 5.8.2	
14	Providing and laying controlled C.C.M.250 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Beam upto floor two level for G.F.(plinth Beam)	General Specification Booklet P-40 Item 5.8.3	
15	Providing and laying controlled C.C.M.200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Beam upto floor two level for G.F.	General Specification Booklet P-39 Item 5.8.2	
16	Providing and laying controlled C.C.M.200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Slabs ,landing, cantilevers for slabfor GF	General Specification Booklet P-39 Item 5.8.2	
17	Providing and laying controlled C.C.M.200 & curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in Vertical Fins	General Specification Booklet P-39 Item 5.8.2	
18	Providing and laying controlled cement concrete M.20 and curing complete excluding the cost of formwork and reinforcement for reinforced concrete work in (E) Staircases excluding landing upto floor two level for G.F. to F.F.	General Specification Booklet P-39 Item 5.8.2	
19	Providing and laying Controlled cement concrete M -200 for R.C.C.Lintels, including the finishing smooth with curing etc complete including the cost of form work but excluding the cost of reinforcement For G.F.	General Specification Booklet P-39 Item 5.8.2	
20	Providing and laying controlled cement concrete M-200 curing complete including the cost of form work but excluding the cost of reinforcement for reinforced concrete work in CHHAJJAS G.F.	General Specification Booklet P-39 Item 5.8.2	
21	Providing TMT Bar FE 500 reinforcement for R.C.C. work including bending, binding and placing in position complete upto floor two level All floors	Attached Separately	
22	White Stone Bela mesonry block in course in superstructure with stone of approved quality in Cement Mortar 1:6 (1-Cement : 6- course sand) including packing the joints etc. complete.	General Specification Booklet P-54 Item 7.0.0.4	
23	White Stone Bela mesonry work in partition walls upto 15 cm thickness in cement Mortar 1:4 (1- Cement : 4- course sand)	General Specification Booklet P-53 Item 7.0.0.2	
24	Providing and fixing FOUR track sliding window (3 Shutter + 1 Mosquito Net Shutter) : Using standard extruded color anodized aluminum section equivalent to eries E (30mm) section numbers: frame bottom track with weep holes 21198, frame top & sides 21176, shutter top & bottom rail 20993, interlock rails 20550, shutter side Handle - 20549 with one mosquito net shutter and remaining with 5mm thick transparent tinted float glass, with rubber gasket, air lock strip and finishing joints with transparent silicon sealant, with alluminium powder coated fittings and fixtures.	Attached Separately	

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25	Providing and fixing THREE track sliding window (2 Shutter + 1 Mosquito Net Shutter) : Using standard extruded color anodized aluminum section equivalent to eries E (30mm) section numbers: frame bottom track with weep holes 20928, frame top & sides 20837, shutter top & bottom rail 20993, interlock rails 20550, shutter side Handle - 20549 with one mosquito net shutter and remaining with 5mm thick transparent tinted float glass, with rubber gasket, air lock strip and finishing joints with transparent silicon sealant, with alluminium powder coated fittings and fixtures.	Attached Separately	
26	Providing and fixing Standard extruded of alluminium section of size 63 x 38.1 x 1.2mm (of Jindal Section No. 465, @ Wt. 0.643 Kg. per Rmt. with colour anodized alluminium frame with 5mm thick transparent glass as details for ventilation	Attached Separately	
27	Providing and fixing 35 mm thick shutters for Doors, windows and clearstory windows including lackenamelled M.S. butt hinges with necessary screws. (A) Indian teak wood. (i) Fully Panelled.	General Specification Booklet P-59 Item 10.12 (A) (I)	
28	Providing and fixing FRP frame size 100x50 mm and 28mm thick FRP depress panel shutter having extra reinforcement on sides & edges in Gel coat finish. The core of the shutter & frame is to be filed up with injected fire retardant grade polyurethane foam done in situ alongwith embedded wooden pieces for stiffening & also taking hinges & fintures. The whole FRP frame & shutter is to be water proof weather proof, termite proof & resistance to mild acid/alkali. Rates are to be inclusive of S.S hinges with necessary screws & alluminium fixtures & fastenings & fastener sleeve.	Attached Separately	
29	Providing and fixing M.S. grills of required pattern to wooden frames of windows etc. with M.S. flats at required spacings and frame around, square or round bars with round headed bolts and nuts or by screws. (A) Plain Grill.	General Specification Booklet P-66 Item 10.100 (A)	
30	Providing and laying broken chine mosaic flooring for terrace using 12 mm to 20 mm broken pieces of glazed tiles to be laid over cement mortar 1:3 to plain or slope and to be tempered to bring mortar creme out upto surface using white cement including rounding off junctions and extending them upto 15 cm along the wall,clearing with water and oxalic acid with C.C 1:2:4 flooring with 40 mm etc.(waterproofing 3 years bond for leakage) as directed.	Attached Separately	
31	Providing and fixing 25 mm thick shutters for cupboards etc. including black enamelled M.S. butt hinges with necessary screws. (A) Indian teak wood. (i) Fully Panelled. laminated Pro. required drawer, Partitation & direction of cup-board, lock, handle, cloth rail, stopper with inner site touch wood ,polishing etc. Comp.as per direction by Engineer-in-charge etc.comp.	Attached Separately	
32	Providing and fixing 25 mm thick shutters for cupboards etc. including black enamelled M.S. butt hinges with necessary screws. (A) Indian teak wood. (i) Fully Panelled. Kitchen Drawer Required S.S. tandem box drawer 45 kg Capacity , Partitation / Self of cup-board, handle, s.s roller channel, hing etc. with inner site touch wood ,polishing etc. Comp.as per direction by Engineer-in-charge etc.comp.	Attached Separately	

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33	Providing and Fixing Machine cut, free edges, machine polished Granite Telephonice Black stone sandwich type slab 18 mm thick for Doors/Windows Cill and Jambs cladding as per design including full molded round front edge and 1 cm nosing and laid on 10 mm thick cement mortar 1:3 (1 cement:3 coarse sand) jointed with grey cement slurry including rubbing and polishing finishing etc complete.	Attached Separately	
34	Constructing sand witch platform of 18 mm thick polished black granite at top and 25 mm thick Kota stone slab with 75cm height with necessary support using cement mortar 1:3 for sandwich and fitting at bottom & edges with waterproof rigid adhesives including making necessary grooves in walls with vertical kota stone 30 mm x 2 No. sandwich thick every 60 cm centre to centre including all labour material of approved quality including full molded round front edge fixed in wall for partition and jointed with grey cement slurry including rubbing and polishing etc. complete.	Attached Separately	
35	Providing 10mm thick Mala cement plaster in single coat on brick concrete walls for interior plastering upto floor two level and finished even and smooth in (i) Cement Mortar 1:4 (1-Cement:4 sand) incl. finishing Putty with a floating coat of neat cement slurry etc. G.F.	General Specification Booklet P-105 Item 17.58 (II)	
36	Providing 15mm thick Mala cement plaster in single coat on smooth finished (Similar)side of single or half masonry walls for interior plastering upto floor two level and finished even and smooth in (ii) Cement mortar 1:4 (1-cement :4-sand) incl. finishing Putty with a floating coat of neat cement slurry etc. G.F.	General Specification Booklet P-105 Item 17.58 (II) + P-106 Item 17.61 Consider 15mm instead of 20mm inside wall	
37	20mm thick sand faced cement plaster on walls upto height 10 metres above ground level consisting of 12mm thick backing coat of C.M. 1:3 (1-cement : 3- sand) and 8mm thick finishing coat of C.M. 1:1 (1-cement : 1-sand) etc. complete.	General Specification Booklet P-107 Item 17.95	
38	P & L 24" x 24" vitrified 8 mm thick tile flooring over 20 mm (average) base of cement mortar 1:6 (1 cement: 6 coarse sand) on new surface or fixing on existing flooring by adhesive material including dismantling of existing flooring and jointed with color cement slurry including finised with flush pointing & cleaning the surface etc. complete for DARK shade	Attached Separately	
39	Providing and laying Vitrified tiles 8 to 10 mm thick , in skirting risers of steps and dedo on 10mm thick cement plaster 1:3 (1-cement : 3-coarse sand) and jointed with white cement slurry	Attached Separately	
40	Providing and laying Ceramic tiles 6mm thick in flooring treads of steps and landing laid on a bed of 12mm thick cement mortar 1:3 (1-cement : 3-coarse sand) finishing with flush pointing in white cement.	Attached Separately	
41	Granite slab (telephonice Black) (18mm thick) in risers of steps dedo and pillars laid 10mm thick cement mortar 1:3 cement 3 coarse sand) and jointed with grey cement slurry including rubbing and polishing etc. comp. in single piece for stair steps with full molding(single piece not more than 150cm)including, the edge& manage three groove for thread	Attached Separately	
42	Providing and laying coloured glazed tiles/Degital wall tiles of the size 300mm x 300mm x 8mm / 300mm x 405mm x 8mm in skirting, risers of steps and dedo on 1mm thick cement plaster 1:3 (1-Cement : 3-Coarse sand) & jointed with white cement slurry.	Attached Separately	

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43	Providing and laying polished Kota stone slab flooring/skirting over 2mm (Average) thick base of cement mortar 1:6 (1-cement : 6-coarse sand) or L.M. 1:1.5 laid over and jointed with grey cement slurry including rubbing and polishing etc. complete.(A) 25mm thick	General Specification Booklet P-86 Item 14.43(A)	
44	Providing GI Pipe railing made from 50mm dia hollow made of 6.17kg/Rmt one black pipe medium grade 1mt c/c vertically supported special type of bracket made from 50mm dia black medium grade pipe with two coats of oil painting with red oxide paints etc complete vertical support 50mm pipe.	Attached Separately	
45	Finishing Wall with Weather Proof Exterior Emulsion Paint on Wall Surface (Two Coats) to give an required shape even shade after thoroghly brushing the surface to remove all dirt, and remains of loose powdered materials etc. complete	Attached Separately	
46	Applying two coats of putty & two coats of primer of approved brand and manufacture on new wall surface to give an even shade with Wall painting (two coats) with plastic emulsion paint of approved brand and manufacture on undecorated wall surface to give an even shade including throughly brushing the surface free from mortar droppings and other foreign matter and sand papered smooth.	Attached Separately	
47	Providing erecting fixing double coated Syntex of Equivalent PVC (ISI) Mark Water Tank of Required Capaicty each with all necessary fittings & connection etc.complete on Terrace.	Attached Separately	
48	Providing and fixing wash down water closet (European type, W.C. Pan) with integral P or S trap including jointing the trap with soil pipe in Cement Mortar 1:1 (1-Cement : 1-fine sand) (incl Seat and cover and jet spray (A) vitreous China Pattern : (i) in white colour with plastic seat cover.	General Specification Booklet P- 146 Item 23.112(A) (i)	
49	Providing and fixing washbasin with single hole for pillar tap with C.I. or M.S. brackets painted white including sutting holes and making good the same but excluding fittings. (A) Vitreous China: (ii) Flat Back washbasin 55 mm x v 4mm size. (i) In white colour. incl,C.P.brass waste 32mm dia. PVC connection & high pressure 15mm dia. pillar tap etc.comp.	General Specification Booklet P- 148 Item 23.127	
50	Providing and fixing C.P. brass shower rose with 15mm or 2mm inlet. (A) 100mm dia. Each	General Specification Booklet P- 149 Item 23.141(A)	
51	Providing and fixing C.P. brass towel rail comlete with C.P. brass brackets fixed to wooden plugs with C.P. brass scews. (B) 6mm x 2mm size.	General Specification Booklet P- 150 Item 23.144 (B)	
52	Providing and fixing PVC SWR Nahni Trap IS 14735 for drain with jali of the following nominal diameter of self cleansing design with C.I. Scrwed down or hinged grating including the cost of cutting and making good the walls. (A) 100mm diameter	General Specification Booklet P- 149 Item 23.139	
53	Providing and fixing S.W. gully trap with C.I. grating brick masonry chamber and water tight C.I. cover with frame of 300mm x 300mm size (inside) with standard weight. (B) 150mm x 100mm size Pof R type	General Specification Booklet P- 156 Item 24.19(I)	
54	Constructing masonry for under ground C.I, Inspection chamberand bends with brick having crushing strength not less than 35Kg./Sqm in C.M. 1:5 C.I. cover with frame (light duty) 455mm x 610mm internal dimensions total weight of cover not less than 35Kg(Weight of cover 23 Kg. and weight of frame 12Kg) with R.C.C. top slab with 1:2:4 mix foundation concrete 1;5:10 inside plaster 15mm thick with C.M. 1:3 finished smooth with floating coat of neat cement slurry on walls and bed concrete etc. comp. (A) Inside dimensions 455 x 610 and 450mm deep	General Specification Booklet P- 163 Item 24.44(II)	

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55	Providing and fixing chromium plated brass half turn flush cock of approved quality including fixing in pipe line etc. complete. (ii) 25mm dia.	General Specification Booklet P-152 Item 23.00.1(II)	
56	Providing and fixing brass screw down stop tap. (A) 15mm dia.	General Specification Booklet P-151 Item 23.96 A(I)	
57	Providing and fixing Gun metal check or non-return fullway wheel valve. (E) 40 mm dia.	General Specification Booklet P-152 Item 23.99 €	
58	Providing and fixing Gun metal check or non-return fullway wheel valve. (E) 25 mm dia.	General Specification Booklet P-152 Item 23.99 (D)	
59	Providing, laying and jointing in true line and level U.P.V.C. SWR Type B Pipe conforming to IS 13592-1992 with one end plain and other end socketed with rubbering & fitting conforming to IS : 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 16mm diameter x 21mm length x 196mm high at every 2mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pies and joints and jointed with adhesive solvent cement including cost of all materials. (B) 110 diameter	Item No. 23.8 Page No. 144 75 diameter U.P.V.C (Type B) conforming to IS 13592-1992 pipe shall be used	
60	Providing, laying and jointing in true line and level U.P.V.C. Pipe (SCH-4) line including fitting as approved by Engineer-in-Charge. Pipe shall be fixed on the wall with the help of clamp at every two meter C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. (D) 40 mm dia.	Item No. 23.8 (D) Page No. 144 U.P.V.C. Pipe (SCH- 40) pipe shall be used	
61	Providing, laying and jointing in true line and level U.P.V.C. Pipe (SCH-4) line including fitting as approved by Engineer-in-Charge. Pipe shall be fixed on the wall with the help of clamp at every two meter C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. (B) 25mm dia.	Item No. 23.8 (E) Page No. 144 U.P.V.C. Pipe (SCH- 40) pipe shall be used	
62	Providing, laying and jointing in true line and level U.P.V.C. Pipe (SCH-4) line including fitting as approved by Engineer-in-Charge. Pipe shall be fixed on the wall with the help of clamp at every two meter C/C or shall be concealed as directed including necessary fittings etc. including testing of pipe and joints and fixing the same with adhesive solvent, including cost of all materials. (a) 15mm dia.	Item No. 23.8 (A) Page No. 144 U.P.V.C. Pipe (SCH- 40) pipe shall be used	
63	Providing, laying and jointing in true line and level U.P.V.C. SWR Type B Pipe conforming to IS 13592-1992 with one end plain and other end socketed with rubbering & fitting conforming to IS : 14735-1999 of approved make for drainage system pipe line, pipe shall be jointed with each other with rubber lubricant, pipe shall be fixed on wall using of PVC clamp of the size 16mm diameter x 21mm length x 196mm high at every 2mm center to center or shall be concealed in walls as directed including necessary fittings such as bends, shoes etc. including testing of pies and joints and jointed with adhesive solvent cement including cost of all materials.(A) 160 m dia.	Item No. 23.8 Page No. 144 75 diameter U.P.V.C (Type B) conforming to IS 13592-1992 pipe shall be used	
64	(B) Providing sock pit of 5.00 Cu.M. Volume including excavating and filling brickbats with dry masonry work at top for 45cm. height including covering the top with stone including providing vatas in C.M. 1:3 with finishing, curing etc. complete as directed.	AS PER BUILDING SPECIFICATION BOOKLET Page-164 Item-24.00.2 (B)	

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65	Providing cement vata (1cm. x 1 cm. size) quarter round in cement mortar 1:1 including neat cement finishing, watering etc. complete.	Attached Separately	
66	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete.[A] 15 mm.	Item No. 23.8 (A) Page No. 144 C.P.V.C. Pipe (SCH- 40) pipe shall be used	
67	Providing and fixing concealed center point to wall ceiling & floor CPVC (SDR 13.5) PIPE having National Sanitation Foundation (NSF) seal for potable water of following dia. nominal bore tube fittings and clamps including making good the wall, ceiling and floor etc. complete.[A] 25 mm.	Item No. 23.8 (B) Page No. 144 C.P.V.C. Pipe (SCH- 40) pipe shall be used	
68	Providing and fixing SS Sink Glosy ASIS 304 Grade x 1mm thick with over all size 610x460 mm & bowl size 560x410x200.	ATTACHED SEPERATELY	
69	Providing and fixing inter locking Paver concrete block 60mm thick with grade of concrete M200 pneumatic compressed / vibrated mechanically and as per approved design including 75 mm Sand layer for levelling and filling the joint with sand in proper line and level as per Directed Engineer in charge.	ATTACHED SEPERATELY	
70	Box cutting the road surface to proper slope and camber for making a base for road work including removing the excavated stuff and depositing on the road side slope as directed upto 50Mt.lead.	ATTACHED SEPERATELY	
71	Providing & laying compacted W.B.M 100 mm thick Grade-I of machine crushed B.T.Metal of size 40 to 63mm with using 22% stone screening 13.20 mm size and 7% stone dust as a filler including spreading watering & consolidation by vibratory roller etc.comp.	ATTACHED SEPERATELY	
72	Rolling & watering of earthwork in layers with vibratory roller including filling in depressions which occurs during the process	ATTACHED SEPERATELY	
73	Providing and casting in situ controlled cement concrete M-200 for avg.200 mm thick road work laid as directed including providing and laying M.S. side rail of road thickness with necessary nut bolts plates fixing as per width applying plate vibrator (electric or diesel) on channel filling joints with bitumen as directed etc.complete.As per Directed Engineer in charge	ATTACHED SEPERATELY	
74	Providing and fixing pre-cast concrete kerb stone of gray cement based concrete block 30cm length,30cm height and 15cm thick of M250 grade concret as per approved design and including excavation for fixing in proper line and level,filling the joint with C:M 1:3 (1cement:3fine sand) etc complete.	ATTACHED SEPERATELY	
75	Supplying and fixing reinforced concrete heavy duty non-pressure pipes with collars for culverts carrying heavy traffic as per IS 458-1991 specifications including setting the pipes in C.M. 1:2 watering and laying (to level or slopes) of class NP3 of following internal daimeters.(ii) 450mm dia.	General Specification Booklet P-156 Item 24.22 Consider NP3 Pipe IS 458-1991	
76	Providing and fixing C.I. Cover with frame 455mm x 610mm size As per Directed Engineer in charge.	General Specification Booklet P-161 Item 24.35 frame 455mm x 610mm	
77	Providing and laying cement concrete 1:4:8 (1- Cement : 4- coarse sand : 8- Crushed stone aggregates 40 mm nominal size) and curing complete excluding cost of formwork in (A) Foundation and Plinth	General Specification Booklet P-30 Item 5.3.3 (A)	

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78	Structural steel work (Confirming to IS 4923-1997) riveted, bolted or welded in builtup for all type sections, in framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer and Two coat oil paint all complete as per the structural designs and directions of Engineer in charge.	ATTACHED SEPERATELY	
79	Providing corrugated G.I. sheet of class-3 roofing fixed with glavanished iron J or L Hooks, Bolts and nuts 8mm diameter with bitumen and G.I. limpet washer or G.I. limpet washer. filled with white lead complete excluding the cost of purlins, Rafters and Trusses.(1) 0.80 mm thick sheet.	General Specification Booklet P-91 Item 15.1 0.8 mm thick sheet class-3	
80	Drilling of 200 / 215 mm dia bore in over burden rocky or loose collapsible / boulder strata and lowering of UPVC / PVC / ERW casing pipe above 12 mt and upto 40 mt depth by DTH rig etc complete	ATTACHED SEPERATELY	
81	Drilling of 200 mm dia bore hole by DTH rig in rocky formation in All takuka of Zone III (o to 350 Mtr)	ATTACHED SEPERATELY	
82	Supply of "U" PVC Casing pipe CM type (B) 200 mm dia	ATTACHED SEPERATELY	
83	Providing and fixing bail plug {Bottom Cap } Suitable for 200mm dia. Pipe	ATTACHED SEPERATELY	
84	Heavy duty clamp made from 4" x 1.5" iron strip suitable for column pipe 1.5" to 2" length. (C) 65mm(2.1/2") dia. Pipe	ATTACHED SEPERATELY	
85	Supplying & erecting G.I. bend for pipe connections suitable for .(E) 65 mm(2.5")	ATTACHED SEPERATELY	
86	Supplying, & erecting C.I. swing, check type non-return (Reflux) Valve -ISI marked suitable for following size (B) 65 mm dia.	ATTACHED SEPERATELY	
87	Supplying submersible pump set Electric motor driven borewell submersible pump set confirming to IS 8034 and motor confirming to IS 9283 working at 3 phase 400 / 440 volt 50 Hz AC supply & 2900 RPM. (25) Cat o. 6.3, Discharge 400 LPM, 150 Mtr Head, 22.50 HP	ATTACHED SEPERATELY	
88	Auto transformer starter suitable for local & remote pump control application consisting of Auto Transformer (vacuum impregnated, air cooled having three (3) tappings at 50%, 65% and 80%), incomer MCCB / MPCB, overload relay and contactors as per Type II including digital MFM with RS 485 communication port, analogue type ammeter with selectorcoordination switch, run hour meter, required protective relays & control accessories.	ATTACHED SEPERATELY	
89	Providing and erecting ISI marked PVC insulated flat submersible cable as per detailed technical specifications of R/C of GWSSB conforming to IS 694, IEC 60227 / 60228.(e) 1 R x3 Core x 10 Sq. mm.	ATTACHED SEPERATELY	
90	Providing & fixing of ISI marked HDPE Pipes suitable for potable water as per IS specifications no 4984/1995 including SS-316 nipple at both ends having 11 TPI threads as per specifications, press fitted and bolted incl all taxes, transportation, freight charges, inspection charges, loading, unloading along with lowering and laying the pipe including the cost of all labour & material for 63mm dia (PN-10) 10.00 kg/cm2 pipe.	ATTACHED SEPERATELY	
91	Geohydrological ground water investigation including vehicle charges (b) For three phase DTH bore / DR tube well including water sample testing charges.	ATTACHED SEPERATELY	

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92	Providing & erecting Monobloc pump 3 phase 400/440 volt, 50 Hz AC Supply & 2800 RPM as per IS 9079 at departmental stores with following MOC: Casing: CI- FG260, Impeller: Bronze & Shaft: SS:410 @ 24 Mtr head, 285 LPM Discharge, 5-HP	ATTACHED SEPERATELY	
93	Supplying & erecting approved make DOL / Star Delta starter suitable for local & remote pump control application consisting of MPCB, overload relay and contactors as per Type II coordination including digital voltmeter, analogue ammeter with selector switch, run hour meter, required protective relays & control (C) D.O.L. up to 7.5 HP	ATTACHED SEPERATELY	
94	Clearing and grubbing road land including uprooting rank vegetation grass bushes,shrubs,sapling and trees girth up to 300 mm removal of stumps of trees cut earlier and disposal of unserviceable materials (C) By mechanical means in area of light jungle	ATTACHED SEPERATELY	

Executive Engineer
R. & B. Division
Junagadh