

**Item No. 4** Providing and Fixing P.V.C. SWR Pipe I.S.13592 working Pressure in trenches excavation refilling the trenches with necessary fitting etc.Complete 160 mm dia.

## **1.0 Materials**

**1.1** The low density PVC SWR pipe of specified diameter with 10 KG./F. Sq. Cm. working pressure shall conform to I.S. 13592 SWR pipe. The specials and fittings required Shall be of best quality.

## **2.0. Workmanship**

**2.1.** The P.V.C. of specified diameter shall be fixed as directed. Due to thermal expansion of rigid P.V.C. due allowance shall be made particularly in over and under pipe lines for any change in length of pipe line which may occur during, installation or when pipe line is in service.

**2.2.** Above ground installation of rigid P.V.C. pipe should be undertaken after precautions are observed for protection against dirt sun ray and mechanical damage.

**2.3.** The rigid P.V.C. pipe lines should not be kept exposed above ground when it passes through public place, railway lines, roads, road side and footpaths.

**2.6.** The guide line indicated by the manufacturer regarding handling, transportation, storing, laying and jointing of pipes shall be kept in view during execution.

**2.7.** P.V.C. pipes shall be fixed in trenches by necessary excavation for proper slope and refilling the trenches directed by Engineer-in-charge.

## **2.8. Jointing the pipes**

**2.8.1.** The pipes and sockets shall be accurately cut. The ends of the pipes and fitting should be absolutely free from dirt and dust. The outside surface of the pipes and the inside of the fittings shall then be roughened with emery paper, and then solvent cement shall be applied to the matching surface and pushed home and joint. Since solvent cement is aggressive to P.V.C. care must be taken to avoid applying excessive cement to the inside of pipe sockets as any surplus cement cannot be wiped off after jointing. Empty solvent cement tins, brushes, rags, or paper impregnated with cement should not be buried in the trenches. They

should be gathered, not left scattered about, as they can prove to be a hazard to animals which may chew them.

**2.8.2.** If any manufacturer recommends its own methods of jointing the, same shall be adopted after necessary approval from the Engineer-in-charge.

## **2.9. Laying pipes in trenches**

**2.9.1.** The pipes shall be laid over uniform relatively soft fine grained soil found to be free of presence of hard objects such as large flints. rocky projections, large tree roots etc. The width of the trenches shall be minimum width required for working.

**2.9.2.** The pipes laid underground upto required depth. The pipe shall be positioned in the trenches so as to avoid any induced stresses due to reflection. Any deviation required shall be obtained by using proper type of rubber ring joints.

## **3.0. Mode of measurements & payment:**

**3. 1.** The description of this item shall unless otherwise stated be held to include where necessary conveyance and delivery, handling, unloading, storing, fabrication, hoisting it, labour for finishing to required shape and size, testing, fitting in position, straight, cutting and waste, return of packing rig etc. complete.

**3.2** The length shall be measured red on running meter basis of finished work. The length shall be taken along the centre line of the pipe and fitting. The pipes fixed to walls, ceiling, floors etc. shall be measured and paid under this item.

**3.3.** All the work shall be measured in decimal system as fixed in its place, subject to tolerance given in below unless otherwise stated ::

[i] Dimension shall be measured to the nearest 0.01 meter.

[ii] Area shall be worked out to the nearest 0.01 Sq. meter.

**3.4** All measurements of cutting shall unless otherwise stated be held to include the consequent waste.

**3.5** In case of fitting of unequal bore the largest bore shall be measured for the test.

- 3.6 Testing of pipe lines, fittings and joints includes, or providing all plant and appliances necessary for obtaining access to the work to be tested and carrying out the tests.
- 3.7 The rate includes P.V.C. tubing with special type flange compressions, screwed joints, together with all fittings (such as bends, sockets, springs, elbows, tees, crosses, short pieces, clamps and unions etc.) and fixing complete with clamping wall hooks, wooden plugs etc. and also cutting, screwing and waste and for making forged (or hand made) bends on piping as required connector shall be inserted. Mule required or directed. The rate also includes cutting through floors etc. and their making good and painting exposed threads with anti-corrosive paint it above and testing. Where tubes are to be fixed to wall, ceiling and flooring, the rate shall not include painting of pipes, sleeves and sand filling under floor for which separate payment shall be made.
- 3.8 The rate shall be for a unit of one running metre.

**Item No. 5** Refixing old damaged paver block surface including taking out whole damaged blocks, correcting depressions by levelling with sand/grit layer & again refixing of old paver blocks using 15% new paver blocks of same pattern filling the joints using fine sand etc. complete.

### **1.0 Material**

- i) Paver block of M-200 grade 60mm thick
- ii) Stone grit 6mm as per M-8, of general technical specification booklet.

### **2.0 Workmanship**

The work of refixing old damaged paver block shall be carried out in whole depression and damaged area of taking out whole damaged blocks and depressed block from the depression area and correcting the depressions of leveling with grit layer. Proper ramming and watering shall be done of the entire depressed area.

After preparation of base with stone grit, ramming and watering at depressed area refixing of old paver block available from the damaged area shall be fixed using necessary new paver block of same pattern in cement concrete M-200 grade having 60mm thickness in place of old damaged paver block.

After refixing the paver block the joints shall be filling using fine sand.

The entire work shall be carried out as per the instruction of Engineer-in-charge.

The payment of this item shall be on Sqmt basis of the refixing surface area.

**Item No. 6** Providing and fixing pre-cast Rubber Dye / steel Dye inter locking concrete block 60mm thick with grade of concrete M300 pneumatic compressed / vibrated mechanically and as per approved design Confirming to IS 15658 : 2006 including 35 mm Sand layer for levelling and filling the joint with sand in proper line and level as per guidelines of IRC : SP 63-2018 etc. Complete.

### **1.0 Material**

Pre-cast Rubber Dye/ Steel dye inter locking concrete block 60 mm thick with grade of concrete M30 compressed/ vibrated mechanically and as per approve design confirming to IS 15658: 2006 shall be used. Sand shall confirms to general Technical Specifications for building works I. No. M6.

### **2.0 Workmanship**

Work of sand layer shall be carried out as per General Technical specifications for Building works I. No. 4.24. Testing of the block shall be carried out in laboratory as per IS 15658: 2006. The work shall be carried out in true line and level as per guidelines of IRC : SP 63-2018 and as directed by the Engineer-in – charge.

### **3.0 Mode of Measurement and payment**

The rate shall be inclusive of the cost of all materials, tools, plants, labour etc. required for satisfactory completion of item.

The rate shall be for a unit of one Sqmt.

**Item No. 8** Providing and fixing precast R.C.C. Manhole cover with R.C.C. frame as directed.[C] 0.60 x 0.45 Mt.

### **1.0 MATERIALS**

The CC cover of 0.60 x 0.45 mt shall be casted either on work site or on contractor's workshop

### **2.0 Workmanship**

The cement concrete manhole cover with frame shall be precast carrying load capacity of 5.00 MT for inspection chamber of 0.60 x 0.45 mt the casting shall be done in a such manner that the CC cover shall have the load carrying capacity of required size. The CC cover shall be cured for a period required for jointing the concrete work. Proper care shall be taken to see there is no honey combing or any type of crack in CC cover if it is found it shall be replaced by new by the contractor at his own cost.

The CC cover and frame shall be fixed to the open ground as directed by the Engineer-in-charge.

### **3.0 Mode of Measurement and payment**

The rate shall be measured and paid for a unit of One No. of complete item.

**Item No. 9** Repairs to existing I.C. by required re-masonry work in Cement Mortar 1:5, re-water proof cement plastering in Cement Mortar 1:4 including providing 5.00 M.T. load carrying capacity Reinforced Cement Concrete cover with frame etc. complete.

**1) GENERAL ::**

The work in general shall be carried out as per general technical specification for building works.

**2) Materials ::**

Water shall conform to M-1, cement shall conform to M3, Bricks shall conform to M-15, sand shall conform to M6, stone grit shall conform to M8, coarse aggregate shall conform M-12

**3) Workmanship ::**

The precast Man hole frame and cover of 0.60 x 0.45cm. size having 5.00 MT load carrying capacity. Manhole frame and cover constructed at factory with proportion of Cement Concrete 1:2:4 (1-cement, 2-Coarse sand, 4-Graded stone aggregates 20mm nominal size) with curing. The precast manhole cover and frame shall be cured for at least 28-days factory site.

During casting of precast manhole total weight of cover shall be capable for load capacity of 5.00 M.T.

The precast man hole cover and frame shall be transported to the work site and proper care shall be taken at the time of loading and unloading of the same that the manhole cover may not be effected or damaged as any corner, if it is found it shall be replaced by the contractor at his own.cost.

Necessary brick Masonary works and water proof cement plaster work shall be carried out as per relevant specefication of item 24.44

Precast manhole cover and frame shall be fixed on to the Inspection Chamber as directed by the Engineer-in-charge. During coarse af placing proper care shall be taken for not-keeping any voids in the man hole and I.C.

**4) Mode of measurement and Payment ::**

The manhole frame and cover shall be measured per 1-No. basis supplied on site and fixed as directed.

The rate also include cost of all materials, labour, transportation and fixing of the same as directed.

Unit rate of payment of this item shall on 1-No. basis.

**Item No. 10** Removing existing damage or wrought Jali from alluminium section, window or door including providing new S.S. Jali of approved quality including necessary clips, rubber beading alluminium channel etc. as directed.

**1.0 MATERIAL;**

Jali from aluminum section shall confirm to M-31 and Aluminum section shall confirm to M-31 of GTS for Building works. S.S. Jali shall confirm to IS std.

**2.0 WORKMANSHIP;**

Item includes replacing damaged / wrought jali from aluminum section, window or door for all floors of existing building. The new jali from aluminum shall be fixed by clips, rubber, beading, aluminum channel as per requirement of site condition and as directed by the Engineer in Charge. Item includes disposal of damaged/ wrought jali from aluminum from site and cleaning the site.

**3.0 MODE OF MEASUREMENT AND PAYMENT:**

The finished work shall be measured in square meter.



**Item No. 11** Providing and fixing "RAJSHRI" or equivalent brand made PVC laminated kitchen and cup board shutter of 25mm thickness consisting of using 15mm thickness plain PVC ply shutter of M.S. frame made out of M.S. tube of 19 gauge thickness and size 15mm x 15mm Square pipe 15 mm PVC shutter ply all around boarder side size 50mm then and 15 mm pipe inserted all around the within M.S. frame and inner side 15mm PVC ply pieces coated with assembly by 5mm thick plain / prelam PVC sheet on the front side and 5mm plain PVC sheet rear side using solvent cement on both side shutter etc. complete as direction of Engineer - in - charge, manufacture's specification and drawing.

### **1.0 General ::**

The work in general shall be carried out as per P.W.D. Hand Book Volume I and II edition 1949 as revised from time to time in addition to this general specification for the building work shall be followed during the execution of this item of work.

### **2] Materials ::**

Fixtures and fastening shall conform to M-48, PVC ply are "Rajshri" rigid PVC sheets, and conforming to I.S. 6307 appendix – 4

The unique and ECO friendly "Rajshri" PVC cupboard stand's with the customer's specific needs of totally weather resistant termite proof. Water proof and dimensional stable cupboard's and cupboard shutter's. Rajshri PVC cupboard are totally weather resistant and maintenance free cupboard's.

5 mm thick and 18 mm plastic ply are "Rajshri" rigid PVC foam sheet's have unique technical properties.

- Fire retardant self extinguishing in nature conforming to IS 6307 appendix 4.
- Unique bond strength – excellent screw withdrawal strength – warp proof - hemogendrs condition – excellent compressive strength – Light weight – Damp proof – Stain resistant – Maching work biliti – energy saving etc.

**3] Workmanship ::**

The PVC cupboard shutter consisting of 30 mm thick PVC rigid foam shutter's. shutter's made of 5 mm thick prelain PVC sheet's one side and back side 5 mm plain sheet providing and fixing PVC cup board shutter's consisting of from made out of M.S. tube of 19 gauge thickness and size of 19 mm x 15 mm tube shall be cover and with 5 mm thick prelain PVC sheet and back side plain shutter's and solvent cement adhesive.

PVC cupboard frame;- Providing and fixing cupboard frame using 18 mm plastic ply and 5 mm prelain PVC sheet's frame size 18 mm x 50 mm.

**4] MODE OF MEASUREMENT AND PAYMENT**

The finished cupboard's furniture should be measured in Sqmt and rate shall be for a unit of One Sqmt.