

Signages:

1.0 ACP sheet signage on Existing Pole/ New Pole:

1.0.1 Materials :

Material shall be as per item description and material specifications of approved make. Contractor shall approve ACP sheet and reflective vinyl before procurement.

The sign board and matter of sign board should be as per drawing.

ACP sheet – 4mm thick, approved shade, bubble free, cutting with CNC cutter in any shape and size as per drawing.

Reflective vinyl – of 3M for matter, letter, graphic pasting as per design.

The sign board and matter of sign board should be as per drawing.

1.0.2 Workmanship:

Module of signage shall be fixed on new or existing pole or column as per drawing.

Workmanship shall be of best quality as described and approved by EIC / Architect.

1.0.3 Mode of Measurements and Payment:

The item shall be measured and paid for a unit of Sqmt. of only one side elevation area of the sheet as per actual measurement at site without wastage.

Rate shall be inclusive of all labour, material, scaffolding, fixing and finishing for all height but exclusive the cost of structural steel work.

2.0 ACP sheet signage on Existing Pole/ New Pole for Vehicular Signages:

Relevant tender specifications shall be followed as per item no 1 except additional backing and sides with ACP sheet is considered as per drawing without vinyl area and included in the rates with UV stabilized lamination.

2.1 Mode of Measurements and Payment:

The item shall be measured and paid for a unit of Sqmt. of only one side elevation area of the sheet as per actual measurement at site without wastage and without backing and sides..

Rate shall be inclusive of all labour, material, scaffolding, fixing and finishing for all height but exclusive the cost of structural steel work.

3.0 Structural steel for item no 3 to 5

Relevant specifications as per item no. 11 shall be followed except the material specified in item and as per drawing.

4.0 SS Plate Signs:

Materials :

Material shall be as per item description and material specifications of approved make. Contractor should approve SS plate and paint before procurement.

SS plate – 2mm thick, brush finish, etching, cutting with CNC cutter in any shape and size as per drawing.

Paint – Duco paint as infill material of approved make and shade.

The sign board and matter of sign board should be as per drawing.

4.1 Workmanship:

Module of signage shall be fixed on wall, door, partition, wall mounted or hung from ceiling as per drawing. Fixing / hanging accessories, adhesive shall be as per drawing and as approved. Workmanship shall be of best quality as described and directed by EIC.

4.2 Mode of Measurements and Payment:

The item shall be measured and paid for a unit of Sqmt. of actual area of Stainless steel sheet as per actual measurement at site without wastage.

Rate shall be inclusive of all labour, material, and scaffolding, fixing and finishing for all height all level.

5.0 Vinyl Stickers:

5.1 Materials :

Material shall be as per item description and material specifications of approved make. Contractor shall approve reflective vinyl before procurement.

The sign board and matter of sign board should be as per drawing.

Reflective vinyl – of 3M for matter, letter, graphic pasting as per design of approved shade, bubble free, of any shape and size as per drawing.

The sign board and matter of sign board should be as per drawing.

5.2 Workmanship:

Reflective vinyl shall be paste on any existing surface as per drawing. It shall be bubble free.

Workmanship shall be of best quality as described and directed by EIC.

5.3 Mode of Measurements and Payment:

The item shall be measured and paid for a unit of Sqmt. of elevation area of vinyl stickers as per actual measurement at site without wastage.

Rate shall be inclusive of all labour, material, and scaffolding, fixing and finishing for all height all level.

6.0 Providing and fixing sinages film of reflectorised Micro Prismatic Grade Sheet (Type-XI) of require size suitable for fixing on existing Traffic Bollard /Sinages boards of approved make

6.1 Measurement for payment

The measurement shall be in Sq.m. of Actual size used and fixed

7.0 SS signage: (For names in Entrance)

Relevant specifications as per item no. 6.0, 7.0 shall be followed except the material shall be SS along with channels as specified in item and as per drawing.

8.0 SS plate with vinyl

Relevant specifications as per item no. 6.0, 7.0 shall be followed except the material shall be vinyl along with SS plates as specified in item and as per drawing.

9.0 Structural steel

Structural Steel shall conform to CPWD specification clause no. 10.1.1 shall be followed.

9.1 Workmanship

9.2 Laying Out

9.2.1 Nabhi's commentary on CPWD specifications clause no. 10.3.1 shall be followed.

9.3 Preparation of Surface

9.3.1 Surfaces which are to be welded together shall be free from loose mill scale, rust paint, grease or foreign matters. A coating of linseed oil shall be permitted.

9.4 Fabrication

9.4.1 Nabhi's commentary on CPWD specifications clause no. 10.3.2, 10.4.2.1, 10.4.2.2, 10.4.2.3 10.4.2.4, 10.4.2.5, 10.4.2.6 shall be followed.

9.5 Erection

9.5.1 Nabhi's commentary on CPWD specifications clause no. 10.3.3, 10.4.2.7 shall be followed.

Grouting shall be done with cement mortar 1:3 (1 cement: 3 coarse sand) or nonshrink free flow cement grout of approved make as per manufacture's specification as directed by engineer-in-charge.

9.6 Precautions

- 9.6.1 Nabhi's commentary on CPWD specifications clause no. 10.4.2.3 shall be followed.
- 9.6.2 The following points shall be borne in mind during the process of welding
 - (a) Welds shall be made in flat position wherever practicable.
 - (b) Arc length, voltage and amperage shall be suited to the thickness of material, type of groove and other circumstances of the work.
 - (c) The segments of welding shall be such that where possible, the members which offer the greatest resistance to compression are welded first.
 - (d) Proper care shall be taken while welding, for shrinkage and distortions, as the drawing dimensions are the finished dimensions of the structure.
- 9.6.3 The defective welds which shall be considered harmful to the strength shall cut out and re-welded.
- 9.6.4 Finished welds and adjacent part shall be protected with clean boiled linseed oil and after all stag has been removed welds and adjacent parts shall be painted after the same are approved.
- 9.6.5 All the members shall be thoroughly cleaned of rust, cakes, dust etc. and given a priming coat of zinc chromate red oxide before fixing them in position. All fabricated members shall be suitably packed to be protected from any damage while transportation, if any.
- 9.6.6 Grinding to the finished level is to be done, if directed by Engineer in charge. All exposed weld shall be ground smooth. Welds which have not been ground shall be scrubbed with a 10% solution of Hydrochloric acid which shall be washed of with water before painting unless alkali resistant paint is used.

9.7 Painting

- 9.7.1 Nabhi's commentary on CPWD specification clause no. 10.2.2 shall be followed except paint shall be as per Item description.
- 9.7.2 First priming coat of zinc chromate yellow oxide is to be applied on the fresh steel arrived at site.
- 9.7.3 Once the cutting, fabrication, grinding work gets completed second coat of primer and first coat of enamel paint is to be applied on the priming coat.
- 9.7.4 After paint has been already dried erection is done as specified in the item or as directed by engineer-in-charge.
- 9.7.5 After the erection final coat or second coat of paint is to be applied on the structural steel.

9.8 Mode of Measurement and Payment

- 9.8.1 The weight of steel plates, sections and strips shall be taken from relevant IS Codes, based on 7.85 kg/m² for every mm. sheet thickness, if steel is supplied by the Contractor, otherwise, the weight shall be calculated on the actual weight basis on which steel is supplied to the Contractor by the Client. If the steel is supplied by the client, testing & checking as per relevant IS code, recording and intimation of quality of steel (to client and consultant) shall be sole responsibility of the contractor.
- 9.8.2 For forged steel and steel castings, weight shall be calculated on the basis of 7850 kg/m³.
- 9.8.3 Rolling Margin and wastage shall not be considered when weight is determined by standard weight on the basis of IS codes.
- 9.8.4 The rate includes cost of all material, labor involved in all operations as described above

like erection, hoisting, scaffolding, painting as specified in item description, safety measures and sundry required for proper completion of the item of work, at all heights, all shapes and all places. This shall also include conveyance and delivery, handling, loading, unloading and storing etc. required for completion the item described above including necessary wastage involved.

9.8.5 The rate shall be for an unit of one Kg.

9.8.6 Relevant specifications of item no. 10.01.a shall be followed except the work is to be carried out for monkey ladder, railing, spiral staircase, railing, gate, insert plate, cattle trap, rain water spout etc. as specified in the item description and 1 coat of epoxy primer of 50 to 60 micron DFT(dry film thickness), 2 top coats of Metal PU Paint of having DFT 40 to 50 micron of approved shade of ICI or equivalent paint is to be applied.

10.0 PU Paint

PU Painting for poles and other structural steel elements. The rate shall include preparation of rust free surface manually or mechanically, metal putty to make the surface even and smooth if required, 1 coat of Metal PU Paint of having DFT 40 to 50 micron of approved shade of MRF or equivalent paint as per manufacture's specification over all the surfaces of the steel sections or as specified in the drawing.

10.1 Painting: Painting shall be done with Single coat of PU Paint with spray only. General specifications of oil paint for cleaning, preparations for Surface and mode of Measurement is applied.

11.0 Extra for any Equipment/Scaffolding for colour of pole height more than 4.00 mtr

Extra for any Equipment/Scaffolding for colour of pole height more than 4.00 mtr
The measurement shall be in No basis