**ACTIVITY :**  **MANTAP SHED ERECTION**

* Objective : - Safe Erection and maintenance of mantap shed
* Scope : - raw material yard; sand blasting painting shed
* Ref. : -
* Responsibility : - Engineer In charge and workmen at job

PPE –s to be used:

* Helmet, full body safety harness, shoes, gloves, safety goggle

**Aspect – impact**

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| --- | --- |
| Scrap generation | Resource Depletion |

**Work No 1: Mantap shed erection**

Hazards identified

**Mechanical Hazard**

1. Fall of person from height.
2. Piercing of wooden patterns in human body and eyes
3. Fall of sheets
4. Fall of mandap in heavy rain and wind
5. Fire in mandap (plastic / silapulins)
6. Trapping of human body between two objects.
7. Back pain while handling sudden or heavy load
8. Cut injuries from sharp edges of items
9. All hazards of fabrication and material handing while carrying out fabrication, painting and material handling

**Electrical hazard**

1. Electric shock from welding machines while working

**Human behavior**

1. Violation of procedure
2. Fall of dust in eye
3. Person working under alcohol
4. Horse play
5. Non use of PPE’s while carrying out the activity.

**Work No 1: Mantap shed erection**

1. Clear the area of scrap and level the area where the mantap shed is to be erected.
2. Measure & prepare a line out as per requirement.
3. Erect 4 inch nilgiri poles by digging at every 10 feet. Hole to be dug 1 ½ feet deep from ground level. Place the nilgiri pole and compact it with rubble for stability and cover with mud.
4. Erect scaffolding using bamboo horizontally at 2 ½ feet span. Bamboos to be tied to nilgiri poles by using coir rope.
5. Level the bamboos at 6 metre height at one end and 5 meter height at the other so as to keep slope for rain water.
6. Erect the steel frames on the bamboo structure (for supporting GI sheets) by using manilla rope. Ensure that people standing at height wear certified safety belts.
7. Place the bamboos horizontally on the steel frames for supporting of the GI sheets. Ensure that bamboos are secured firmly on the steel frame by tying coir ropes.
8. Provide bracings and supports to take care wind load.
9. Place GI sheets on the roof structure and secure them by placing bamboos horizontally on the roof. Ensure that sheet is firmly locked between two bamboos and coir ropes are tied properly.
10. Erect the silpaulin along the 3 sides of the shed and tie it to the horizontal bamboos by using binding wire. Ensure that 1 feet gap is kept from the top roof for air ventilation.
11. Monthly inspection of wooden supports, bracings should be carried out for stability of mandap

DO:

* Use certified safety harness while working at height.

DO NOT:

* Do not stand below while erection work is in progress.

**Amendement Record**

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| **Date** | **Manual Section Ref. & Para** | **Brief details of Revision** | **New Rev.** |
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| **Prepared By:**  Area Engineer | **Reviewed & Issued By:**  Management Representative | **Approved By:**  Mechanical Head |
| **Signature** | **Signature:** | **Signature:** |
| **Review Date: 12.12.22** | **Review Date: 12.12.22** | **Review Date: 12.12.22** |