

PTW NO-	Department:- Civil	Equipment	Location:- Unit # 3&4	Job description:- - Fixing of Demarcation Pillars along MGR track from Ch 6 / 669 Km to Ch 45 / 950 KM			
JSA performed by:	Signature	Review & Apprd. by	Signature	Date of Issue	Date of revision		Revision No-

HAZARD TEXT/TYPE (For reference to identify the Hazard type)

PHYSICAL HAZARDS	PHYSICAL HAZARDS	PHYSICAL HAZARDS	ELECTRICAL HAZARDS	CHEMICAL/ GAS HAZARDS	EXCAVATION	OTHERS	
Noise	Fall from height	Force (Push/Pull)	Shock/ Electrocution	Flammable/ Explosive substances	Collapse/Sliding	Fire	
Radiation	Fall (Slip/Trip)	Caught in/on or between	Static electricity	Inhalation of toxic fumes	Underground live cable / Live pipeline damage	Heavy Wind/Rain	
Confined space	Fall down/below	Struck by/against	Arcflash/ blast	Ingestion/Absorption	ERGONOMICS	Dust exposure	
Exposure to pressurised Steam/Air	Fall of Objects from height	Extreme weather (Hot/Cold)	BIOLOGICAL HAZARDS	Body/Eye Contact	Poor Posture	Oil spill	
Contact with Hot surface	Contact with moving parts	Poor illumination	Snake/Insect bite/Virus infection	Spillage	Repeatative motion	Human factor	
PPEs to be used	Safety Helmet, Safety Shoe, Safety goggle, Hand glove, Safety belt etc.						
Tools required							

Important Note- While deciding hazard control measures, consider hierarchy of hazard control steps in order of preference.

SEQUENCE OF BASIC STEPS	SAFETY, HEALTH & ENVIROMENT HAZARDS	SAFE JOB STEPS / HAZARD CONTROL MEASURES				Are control Measures adequate to mitigate the risk
		Elimination/ Substitution	Engineering	Administrative	PPE	
Work start-up & obtaining PTW	1.Unauthorized work. 2. Invalid permit . 3. Lack of competency 4. Lack or poor communication 5.Haste or shortcut	Access should be free without obstacle.	Responsible person will conduct inspection, monitor the work activities and have to ensure safety standards and procedures are strictly adhered	Obtain a valid work permit before starting the job. Adequate Supervision for the task to be done. Be attentive on the job.	Basic PPEs used	Supervisor must ensure that all work activities are carried out by competent personnel. Before start of the activity, Conduct pre-job briefing and have close monitoring for supervision.

Vehicles & Machinery Movement	1-Bodily injury to the road users/drivers/ helper. 2-Material/ equipment damage.	Road condition to be even/follow safe route.	Speed limit inside the plant should not be more than 20 KM/H.While reversing the trucks, Machinery flag man shall be available and away for prier guiding the vehicles.	Skilled & trained driver with Valid DL to be deployed.Vehicle shall be checked prior to start the work. Inspect the vehicle on daily basis through checklist & maintain the record. Vehicles should be in good working condition with back up alarms functioning.	Shoes, helmet, goggles, vest, face shield & hand glove , Nose mask.	Don't park the vehicle on passage of vehicle movement. Vehicle shall be checked prior to start the work.
Excavation Work	1.Collaps of soil. 2. Under ground Utilityline damage. 3. Hit by banksman. 4.Electrical hazard.	Hard barication to be provided. Clear access .Ensure lighting arrangement provided. Excavation soil kept away 2.0 m from the edge of the pit.Shoring to be provided	Equipment physical condition and valid documents to be ensured. Authrized oprator deployed. Excavation during banksman provided .	Area clearance electrical and all utility line must be checked. PTW system follows. Slope maintain as per approved drawing.	Basic PPE used.	
Covid -19 during work.	1.Lungs infection	1.Sanitization		1.Regular hand wash. 2.Hand sanitize time to time 3.Maintain Social distancing. 4. work area Sanitize. 5. Office chair ,table, two wheelr ,four wheelr vehical Sanitize. 6.Traning	Nose mask is mandatory	
Snake bite	1. Body infection 2. Death	1. Area survey 2. Housekeeping		1.Training (PJB/OJT) 2.carbolic Acid spray	All ppe,s mandatory	
DEWATERING	1.Electricution 2. Physical Injury	Access egress clear should be free of material. Joints cable should be avoided.	Main supply power cable should be double insulated. All the elctrical equipments should be through RCCB.	Permit to work system to be followed. Experience supervior to be assigned. Cables must be overheaded. Cable joints to be avoided.	Helmet. Shoes.rubber handgloves. goggles. Jacket, Gum boot etc.	Rotatary part to be gurded. Illumination system to be installed.
Lifting and Placing of PSC sleeper by Hydra	1- Serious injury. 2-Material damage.	Ensure the ground surface rigidity before Place the lifting equipment.	Adequate Supervision for the task to be done. Be attentive on the job.	Only skilled worker have to perform this activity.	Basic PPE used.	Double Tag lines should be held properly to avoid unwanted movement of the material.
HOUSE KEEPING WORK.	1. Tripping over loose objects on floors, stairs and platforms. 2. Being hit by objects. 3. Slipping on greasy,wet or dirty surface. 4. Striking against projecting, poorly stacked items. 5. Cutting,puncturing or tearing the skin of parts of the body	Clear on obstructed walk way.	Segregate the materials in designated place. Unwanted materials to be removed on regular basis.	PJB brifing on daily basis	Basic PPE used.	
Emergency Control Measures: Keep ready Foam Type Fire Extinguishers		Main Control Room- 7077743444, CHP Control Room- 8018084333, Fire- 07077225454/777, 222257, Ambulance- 07894035500/ 248/337				
Overall Job Risk Category- (High/Low) :						
JSA Review during PJB:						

