

# RISK ASSESSMENTS

All activities shall have their risk assessed in order to determine actions and conditions to be put in place in order to eliminate or reduce the risk.

The risk assessments shall be passed to the workers doing the work so that they will be familiar with the risks present and what they have to do to reduce them.

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| <b>Project :</b><br>SPORT BOULEVARD PROMENADE | <b>Activity:</b><br><b>EXCAVATION &amp; BACKFILLING</b><br><br><b>of TRIAL PITS</b>   | <b>Sheet:</b><br>QA-MS-CV-002 | <b>Completed By:</b><br>Jamal | <b>Date:</b><br>01 JUNE, 2021 |
| <b>Project No: 62297</b>                      | <b>People affected / at risk of being harmed: Al Bawani Workers, Consultant Representative, Concrete Supplier Personnel</b> |                               |                               |                               |

**MINIMUM PPE TO BE WORN FOR TASK AS WELL AS PER SITE REQUIRMENT PPE**



| No | Hazards   | Possible Affects / Harm   | Pre Control Risk Rating |     |     | Required Controls   | Post Control Risk Rating |     |     | Residual Controls  |
|----|---|---|-------------------------|-----|-----|---|--------------------------|-----|-----|--|
|    |   |   | High                    | Med | Low |   | High                     | Med | Low |  |
| 01 | <b>Survey and surface preparation</b><br><br>Underground services<br><br>Soil quality<br><br>Uneven /unsuitable surface<br><br>PPEs | Contact of equipment and underground services.<br><br>Mobile Equipment collapse due to unsuitable surface soil<br><br>Fall of equipment and personnel.<br><br>Damage due to no personnel protection.<br><br><br><br>Bruises, Bone fracture, organ loss,<br><br>Major property damage. | Y                       |     |     | Permit to work shall be issued for all excavation activities.<br><br>Ensure underground services are detected by competent person prior commence of excavation.<br><br>Check soil quality and suitable surface for parking mobile equipment and where required, ensure shoring prior sending operatives to excavated area.<br><br>Ensure all operatives, staff and visitora are wearing mandatory PPEs while entering to work site. |                          |     | Y   | Induction of all operatives<br><br>Conduct tool box talk<br><br>Ensure Supervision |

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| 02 | <p><b>Equipment operations</b></p> <p>Untrained operators</p> <p>Unauthorized Operators</p> <p>Movement of mobile equipment.</p> <p>Loose cloth</p> | <p>Lack of knowledge and experience could result in failure of Mobile equipment operation.</p> <p>Collision between mobile equipment or with personnel.</p> <p>Major injuries ( Laceration, Bone fracture, organ loss, permanent disability, fatality)</p> <p>Property damage ( Damage to equipment)</p> | Y |   |  | <p>Only trained and authorized operatives are allowed to operate equipment.</p> <p>Operators must be trained by 3<sup>rd</sup> party and available with competency certificate/License</p> <p>All equipment shall be inspected by 3<sup>rd</sup> party and available with certifications/License.</p> <p>Provide exclusion for mobile equipment operations.</p> <p>Ensure pedestrian walk way is provided where mobile equipment and personnel contact is possible.</p> <p>Display sufficient signs at site where equipment are in operation.</p> <p>Deploy dedicated signaller with each mobile equipment</p> <p>All equipment shall be inspected daily by authorized operators.</p> <p>All operatives shall wear body tight clothes .</p> |  |  | Y | <p>Conduct pre start meeting</p> <p>Record findings of equipment</p> <p>PPE to be worn.</p> <p>Ensure Supervision.</p> |
| 03 | <p><b>Manual labors work</b></p> <p>Manual handling</p> <p>Inadequate manual tools.</p>   | <p>Repetitive work and awkward position of manual labors in trenches.</p> <p>Release of heads from home made manual tools.</p> <p>Back pain, ligaments injury or temporary musculoskeletal disorder.</p> <p>Laceration due to sharp manual tools.</p>  |   | Y |  | <p>Use mechanical means where possible</p> <p>Train workers internally on manual handling</p> <p>Ensure supervision of activity</p> <p>Give frequent breaks to operatives involved in manual handling.</p> <p>Ensure manual tools are inspected and color coded . No home made tools are allowed at site.</p>   |  |  | Y | <p>HSE Monitoring</p> <p>Provide rest shelter</p> <p>Conduct Tool box talk</p>   |

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| 04 | <b>Excavation</b><br><br>Unprotected excavation<br><br>Inadequate access<br><br>Soil removal and dumping.<br><br>Loose soil and edges<br><br>Confined space<br>(excavation deeper than 1.2 meter) | Fall of personnel due to no protection and inadequate access.<br><br>Collapse of edge due to soil dumping.<br><br>Operatives stuck in excavation due to collapse of edges.<br><br>Lack of oxygen or enrichment of hazardous gases in confined space.<br><br><br>Bruises, Laceration, Bone fracture. Suffocation in confined space.<br><br>Property damage ( damage to mobile equipment) |  | Y |  | Protect excavated area using solid barriers.<br><br>Ensure adequate access and egress to excavated area.<br><br>Soil must be dumped minimum 3 meter away from the excavation.<br><br>Make sure a spotter is available to watch excavator and underground services contact.<br><br>Provide shoring to excavation where excavation is deeper than 5 feet. Or as advised by competent person.<br><br>Confined space protocols shall be followed where excavation is considered a confined space ( gas testing, PTW, Hole watcher, emergency response) |  |  | Y | Toolbox talks to be conducted.<br><br>PPE to be worn.<br><br>Constant Supervision.<br><br>Safety Officer to closely monitor the ongoing excavation |
| 05 | <b>Jack hammering and compaction</b><br><br>Noise, Dust and Vibration.  | Excessive use of Jack hammer and compactor could create noise, cause vibration and emit dusts.<br><br>Hearing loss/impairment due to noise.<br><br>Lungs damage due to inhalation of silica,<br><br>hand arm vibration syndrome due to prolong exposure to vibration.   |  | Y |  | Conduct pre start meeting prior activity<br><br>Avoid use of faulty equipment that generate noise and vibrations.<br><br>Equipments shall be available with proper casing.<br><br>Regular rest breaks for the operative involved.<br><br>Control dust with regular sprinkling.<br><br>Health surveillance of operatives are being carried out of operatives involved.<br><br>Provision of approved standard PPEs, ear plug, dust masks, gloves.  |  |  | Y | Toolbox talks to be conducted.<br><br>Regular health checks<br><br>PPEs to be worn.  |

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| 06 | <p><b>Adverse weather Conditions</b></p> <p>Rain</p> <p>Storm ,</p> <p>High heat and humidity.</p> | <p>Flooding and collapse of excavation due to rain</p> <p>Heat stress, Heat exhaustion and heat stroke due to work in high heat index.</p> | Y |  |  | <p>Weather forecast shall be regularly monitored.</p> <p>Work shall be stopped where weather conditions put workers at risk I.e flood, storms</p> <p>Cold drinking water and rest shelters shall be provided at work site.</p> <p>Work will not continue in summer restricted hours unless proper arrangements are made.</p> |  |  | Y | <p>Training on heat stress and stroke</p> <p>Heat stress campaign</p> <p>Daily health checks</p> |
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