/RISK ASSESSMENT AND ANALYSIS/تقييم المخاطر

RA Number(رقم تقييم المخاطر): PRJ-2026-0002	**:WORKPLACE/TASK/ACTIVITY/PROCESS NAME**132 **الموقع/المهمة/العملية/المعدة** kv cable installation	**DEPARTMENT/AREA(الإدارة/المنطقة):** Abu Dhabi
RA TEAM(Names) (:أسماء فريق التقييم) **1.** **2.** **3.**	**LEAN CONCRETE POURING**	**DATE(التاريخ):** **NEXT REVIEW DATE(تاريخ المراجعة القادم:** **APPROVED BY MANAGER/SUPERVISOR(اعتمد من قبل): Eng.** **Singniture (التوقيع):**

HAZARD IDENTIFICATION/تحديد الخطر				CONTROL/وسائل التحكم	RISK ASSESSMENT/تقييم المخاطر			ACTION PLAN/خطة العمل لتقليل الخطر					
Item #	**Workplace/ Activity/Process/Equipment/Material المواد/المعدات/العمل مهمة/العمل موقع**	**Hazards/الأخطار**	**Risks Issue (Possible incident) [What can go wrong] (Accident/ill health to persons, fire or property loss)**	**Existing Controls / وسائل التحكم المتوفرة**	**Consequence / الشدة**	**Likelihood / الاحتمالية**	**Risk Ranking / تصنيف الخطر**	**(Improve existing controls / implement new controls) وسائل التحكم والسيطرة الاضافية**	**Follow up by Whom (name) & By When (date) الجهة المعنية بالتنفيذ/التاريخ**	**Controls Implemented Yes/No هل تم التنفيذ؟ نعم/لا**	**Consequence / الشدة**	**Likelihood / الاحتمالية**	**Risk Ranking / تصنيف الخطر**
1	Complete HDPE Duct Infill	1. Vehicle movement and traffic hazards 2. Manual handling during loading/unloading 3. Uneven ground conditions	Personal injury, property damage	1. Implement traffic management plan 2. Designated walkways 3. Mandatory PPE 4. Speed limit enforcement	3	3	9	1. Comply with ADOSH SF CoP 27.0 2. Daily vehicle inspection 3. Toolbox talk			2	2	4
2	Site mobilization and setup of temporary	Passing high-speed public traffic and moving site vehicles	Personal injury, property damage	Approved TTM plan, high-visibility clothing (Class 3), physical water-filled/concrete barriers, advanced warning signs, and trained flagmen.	3	3	9	Deployment of Truck Mounted Attenuators (TMA) and enforcement of reduced speed limit zone in coordination with local traffic authorities.			2	2	4
3	Trench excavation and sub-surface ground preparation	Accidental strike on existing buried live electrical cables or gas utilities	Personal injury, property damage	Utility mapping review, CAT & Genny cable avoidance scanning, and manual trial pits (pot-holing) prior to mechanical excavation.	3	3	9	Mandatory Permit to Dig system, use of insulated hand tools near identified utilities, and continuous competent supervision.			2	2	4
4	Uncoiling, handling, and positioning HDPE pipe	Sudden release of stored mechanical spring energy in coiled HDPE pipe	Personal injury, property damage	Use of specialized pipe reeler/uncoiler frame, controlled strap cutting procedures, and establishing exclusion zones.	3	3	9	Mandatory deployment of safety restraints/bands before unstrapping and wearing high-impact resistant safety glasses and gloves.			2	2	4

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5	HDPE pipe jointing via electrofusion and	High-temperature heating elements, hot molten plastic, and portable electrical generators	Personal injury, property damage	Certified welding equipment, RCD-protected generators, heat-resistant safety gloves, and portable fire extinguishers nearby.	3	3	9	Hot Work Permit implementation, provision of localized exhaust ventilation or respiratory protection (FFP3) in confined areas.			2	2	4
6	Entry into underground chambers and manholes	Hazardous atmosphere (oxygen deficiency, toxic gases like H2S/methane), engulfment, or fall from height	Personal injury, property damage	Confined Space Entry Permit, pre-entry 4-gas atmospheric testing, forced air ventilation, and tripod rescue system with harness.	3	3	9	Continuous multi-gas monitoring during entry, dedicated trained top-person/standby monitor, and verified emergency rescue plan.			2	2	4
7	Mechanical winch pulling of HDPE sub-ducts	High-tension winch wire snap, rotating capstans, and pinch/nip points	Personal injury, property damage	Properly rated winching wire with calibrated weak-link swivel, emergency stop switches, and safety guards over rotating parts.	3	3	9	Integrated load monitoring with automatic shut-off at peak tension limits and strict exclusion zones along the tension line.			2	2	4
8	Duct proving (mandrel testing) and air	Uncontrolled high-pressure compressed air release and projectile ejection of foam pig or mandrel	Personal injury, property damage	Calibrated pressure relief valves, secure containment/catcher cage at receiving duct end, clear exclusion zone enforcement.	3	3	9	Mandatory Pressure Testing Permit, full-face protection shields for operators, and calibrated double-gauge manifolds.			2	2	4