

Manhole cable splicing - JSA - A

en-SG · Basic task controls · v1.0 · 2026-10-14 · Sources: article section 9

Site: | Item ID: | Work area:

Approval	Work supervisor	Technical reviewer	Release / handover authority

1. Job details and team signatures

Date / time	Location / area			Assessor		Supervisor	
Team signatures							

2. Conditions and hold points

Stage	Time	Location / area	Environment / readings	Item / condition	Controls	Plant / tools	Approval / signature
HP-0 Start							
HP-1 Authorise and monitor entry							
HP-2 Identify and isolate cable							
HP-3 Exit on changed conditions							
HP-4 Restore and hand over							

Complete after actual checks. Recheck after changes, defects or shift handover.

3. JSA risk assessment

Job stage	Hazards and effects	Failure factors	Technical and procedural controls	Site verification	P	S	R	A
1. Plan space and circuit	1. Asphyxiation 2. Water engulfment 3. Wrong cable cut	1. Sources unassessed 2. Inflows unknown 3. Circuit plan absent	1. Identify space hazards 2. Assess water/inflow sources 3. Plan circuit identification	1. Manhole/hazard IDs 2. Weather/water assessment 3. Circuit/isolation plan				
2. Authorise and monitor entry	1. Oxygen deficiency 2. Toxic exposure 3. Flammable atmosphere	1. Pre-entry test absent 2. Wrong sensors/locations 3. Attendant absent	1. Apply permit conditions 2. Test and monitor hazards 3. Maintain attendant/contact	1. Instrument/locations/time 2. Actual air/flow record 3. Entrant/contact roster				
3. Identify and isolate cable	1. Wrong-circuit shock 2. Backfeed 3. Induced/stored voltage	1. Label trusted alone 2. Sources missed 3. Charge not controlled	1. Verify circuit by procedure 2. Isolate all supplies 3. Verify de-energized state	1. Cable/both-end evidence 2. LEW isolation and test record 3. Charge/induction controls				
4. Prepare and splice	1. Knife injury 2. Insulation defect 3. Moisture inclusion	1. Strip dimensions wrong 2. Insulation scored 3. Dirty/wet kit	1. Follow matched kit dimensions 2. Use suitable tools 3. Maintain dry clean assembly	1. Cable/kit identity 2. Dimensions/insulation check 3. Clean/dry conditions				
5. Test and make safe	1. Test-voltage shock 2. Residual charge 3. Entry monitoring gap	1. Boundary unguarded 2. Discharge omitted 3. Attendant leaves	1. Control test boundary 2. Discharge/verify after test 3. Maintain entry controls	1. Test scope/results 2. Post-test safe state 3. Attendant/air status				
6. Restore and hand over	1. Person left inside 2. Unauthorised energisation 3. Public fall	1. Exit count missing 2. Restriction omitted 3. Cover unsecured	1. Reconcile entrants/tools 2. Control restoration authority 3. Secure cover and area	1. Entry/exit reconciliation 2. Electrical restoration authority 3. Cover/barrier restoration				

P/S/R/A: Complete only after actual site assessment using the site risk method.

4. Pre-work checklist

☐ Manhole/hazard IDs	☐ Instrument/locations/time	☐ Cable/both-end evidence
☐ Cable/kit identity	☐ Test scope/results	☐ Entry/exit reconciliation
☐ Circuit/isolation plan	☐ Clean/dry conditions	☐ Cover/barrier restoration