

# STREET WORKS PROPOSALS RELATING TO DEVELOPMENT WORKS

## M&E Submission Requirements for CG Stage

The following requirements are designed to assist QPs in ensuring that sufficient detail is included in the submission. LTA approval subject to compliance with design requirements. LTA reserves the right to reject incomplete submissions.

No	Item	Requirement	Included in Submission?
<b>A</b>		<b>General</b>	
A1	Title	To include the project title, drawing title and project and drawing reference number.	
A2	Name and Endorsement	<ul style="list-style-type: none"> <li>All drawings to include LEW endorsement</li> <li>All lightning protection system drawings, documents and calculations to include electrical PE endorsement.</li> <li>To include the full name of the design firm, contractor, client, as well as personnel who developed, checked &amp; approved the drawing.</li> </ul>	
A3	Scale	Drawings to be A3 / A1 size. <ul style="list-style-type: none"> <li>Site Plan: 1:100, 1:500, or 1:1000</li> <li>Details/ Cross Section: 1:20, 1:10, or 1:5</li> <li>Key Plan: 1:20,000, 1:10,000, or 1:5,000</li> </ul>	
A4	Key Plan	To include key plan showing location of accesses, key public transport (PT) nodes and surrounding road network.	
A5	Compass & Coordinates	To include north arrow / compass rose and reference coordinates.	
A6	Legend	To include legend.	
A7	RRL	To indicate the road reserve line (RRL).	
A8	Project scope	To indicate the extent of works to be carried out under this submission.	
A9	Changelog	To cloud changes in drawings and describe changes in resubmission annex.	
A10	Product Selection (apples to all equipment inc. lift and escalator)	<ul style="list-style-type: none"> <li>To provide the technical data, catalogues, relevant test certificates / certificates of compliance from accredited testing facilities for proposed equipment, cables, materials and accessories.</li> <li>To indicate in catalogue the specific product selected</li> <li>To provide warranty documentation (if applicable)</li> </ul>	
<b>B</b>		<b>Site Plan</b>	
B1	Colour Code	The colour for all proposed, existing to be retained and existing to be removed should be in magenta, cyan and yellow respectively.	

No	Item	Requirement	Included in Submission?
B2	Equipment	To indicate the location, dimensions, mounting/ support point, equipment type/name and rating of M&E equipment. To indicate clear headroom and depth of protrusion for equipment located over footpath/cycling path/ shared path.	
B3	Cable and trunking	To indicate the alignment, connected equipment and type of cable/ trunking/ conduit. To indicate if cable/ conduit/ trunking is located below ground or embedded in path slab, and provision of draw wires if applicable.	
<b>C</b>		<b>Electrical Details and Analyses</b>	
C1	Single line diagram	To provide single line diagram for OG box and distribution board. To include equipment rating in the diagram.	
C2	Calculation	To provide design calculations for electrical loading and cable sizing.	
C3	Lighting simulation	To include the lighting level simulation report with lux plots.	
C4	Lighting	<ul style="list-style-type: none"> <li>To indicate direction of light throw.</li> <li>To provide intelligent lighting detection system for covered POB.</li> <li>To include lighting layout plans and sections with detailed cable routes from the OG box to the respective light fittings are included.</li> <li>To provide alternate lighting circuits.</li> </ul>	
C5	Lightning Protection	To indicate the layout, section, installation details of all components of the lightning protection system, including air termination, earth pit and equipotential bonding.	
C6	OG Box	To indicate the plan, elevation, section and electrical connections of the OG box.	
C7	Mounting	To provide mounting details of all electrical fittings.	
C8	Surge protection	To provide surge protection device.	
C9	Lift and Escalator	<ul style="list-style-type: none"> <li>To include the location, section, elevation of lifts, escalators and their components. To provide landing, pit and shaft details, motor and power supply details, maintenance access ladder, etc</li> <li>To provide operating manual, control diagrams and design calculations.</li> <li>To furnish schedule of spare parts</li> </ul>	