

B.C. MINISTRY OF TRANSPORTATION

Vancouver Island Electrical Services Area

- LOCAL AREA SPECIFICATION #1

MOVABLE BRIDGE MAINTENANCE

17th Street Bridge (lift span, at Courtenay)

1. OBJECTIVE

To ensure safe and reliable service to highway users.

2. GENERAL PERFORMANCE SPECIFICATIONS

2.1 Routine Maintenance Services

All services for this Local Area Specification are Routine.

There is 1 Movable Bridge (Bridge) in this Service Area:

17th Street Bridge (lift span, at Courtenay).

The Contractor must perform Bridge systems maintenance of all Bridge electrical, electronic, communications and related mechanical equipment in accordance with this Local Area Specification, including Appendix 1 to the LAS entitled 'Clarification of Responsibilities'.

Bridge electrical, electronic, communications, and motor equipment includes, but is not limited to, all equipment associated with the lift span operations including PLC equipment, wireless communication links, traffic signals and controllers, hard wired electric motors, gate motors and associated circuitry and warning devices, street lighting, bridge up warning signs and all other equipment connected to or controlled from the Bridge power services.

2.2 Additional Services

Not applicable to this Local Area Specification.

3. DETAILED PERFORMANCE SPECIFICATIONS

3.1 Routine Maintenance Services

The Contractor must:

- a) notify the Province of any failure of electrical components of the Movable Bridge if the Bridge cannot be fully opened or fully closed;
- b) maintain, repair and replace electrical and mechanical components of the Movable Bridge that are unsafe or have the potential to become unsafe for Highway Users;
- c) maintain and repair the related electrical equipment as required to ensure the safe and efficient operation of the swing or lift mechanisms;
- d) maintain and repair electrical equipment (including overhead lighting, traffic and/or lane control signals, signage or directional lighting) as required to ensure proper operation.

Note: If it is estimated by the Contractor and confirmed by the Province that at any particular time, the cost of materials, per repair incident, for the Movable Bridge or associated components, exceeds \$1,000, the Ministry will re-imburse above the first \$1,000.

3.1.1 Performance Time Frames

The Contractor must:

- a) immediately report any seizures or failure of electrical or associated mechanical components of a Movable Bridge to the Province and immediately commence repairs;
- b) immediately, from the time the deficiency was detected by or reported to the Contractor, perform maintenance, repairs and replacement of electrical components of the Movable Bridge.

3.2 Additional Services

Not applicable to this Local Area Specification.

3.2.1 Performance Time Frames

Not applicable to this Local Area Specification.

3.3 Materials

Refer to the Introduction to the Specifications (Schedule 7).

4. WARRANTY

Not applicable to this Local Area Specification.

DEFINITION

A Movable Bridge is defined as a Bridge of any type having one or more spans capable of being raised, turned, lifted or slid from its normal vehicular and/or pedestrian service location to provide for the passage of vessels. The movements of the Superstructure may be produced either manually or by engine power.

APPENDIX 1

17th Street Bridge – Clarification of Responsibilities

General

RAYLEC – all ‘household lighting’ which includes light switches, fluorescent lights and receptacles, area heaters, and all ‘Emergency’ lighting components (boxes, batteries & lights) through out complex.

Chamber

Electrical Room – top west room

RAYLEC – all electrical switches and panels

EMCON – none

Basement West Room

RAYLEC – none

EMCON – none

Cylinder Chamber

RAYLEC – 2 limit switches on side wall and 3 lights

EMCON – hydraulic control switch next to cylinders & connected electrical cables

Basement East Room

RAYLEC – none

EMCON – sump pump

Mechanical Room (top east room)

RAYLEC – heater, 2 large switch panels and 3 electric motors only

EMCON – hydraulic components connected to ends of electric motor shafts; hydraulic switch controls & connected electrical cables; emergency diesel/gas motor & connected electrical cables, emergency operating board & connected electrical cables; hydraulic tank oil heater intercom.

Pier

RAYLEC – limit switches @ ends of span (4), navigation lights on dolphins (6) and navigation lights at end of stringers of span (2) (for when the bridge is in the air)

EMCON – none

Control Tower

RAYLEC – ALL ELECTRICAL AND HEATERS

EMCON – aeronometer & intercom

Gates

RAYLEC – all electrical including light on arms, motors (6), south kiosk

EMCON – hydraulics

Signals

RAYLEC – 2 signals (type F tables) & poles, 3 bridge up warning signs & poles, 2 warning bells and lights on signal poles, South Kiosk.

EMCON – none