# **Project Coversheet**

# [1] Ownership & Status

**UPI:** 11520

Core Project Name: Tower Bridge HV System Replacement and Increasing

Resilience

Programme Affiliation (if applicable): Bridge House Estate 50-Year Plan

Project Manager: Devjani Bal

**Definition of need:** Upgradation of High Voltage (HV) and Low Voltage (LV) electrical infrastructure at Tower Bridge and increasing its power resilience.

#### **Key measures of success:**

- 1. Achieve statutory compliancy of segregation of HV and LV switchgear
- 2. Reduce likelihood of power failure due to age and condition of existing electrical infrastructure.
- Increase power resilience in the event of a power outage
- 4. Maintain power and bridge operations during works

### **Expected timeframe for the project delivery:**

Original Timescales:

GW 1 - 2: Oct 2015,

GW 3 - 4: Jan 2016.

GW 5: Apr 2016.

No completion date was provided in the GW1-2

# Gateway 3 Timescales:

GW 1 - 2: Oct 2015,

GW 3: Sept 2019

GW 4: May 2020

GW 5: Dec 2020

Completion: Dec 2021

#### Gateway 4c Timescales:

GW 1 - 2: Oct 2015.

GW 3: Sept 2019

GW 4c: Nov 2020

GW 5: May 2021

Completion: Dec 2021

# G4c Revised Timescales (April 2021):

GW 1 – 2: Oct 2015,

GW 3: Sept 2019

GW 4c: Nov 2020

GW 5: July 2021

Completion: Feb 2022

#### Gateway 5 Timescales (April 2021):

GW 1 - 2: Oct 2015.

GW 3: Sept 2019

GW 4c: Nov 2020

GW 5: August 2021

Completion: July 2022

Current Timescales (June 2022):

GW 1 – 2: Oct 2015, GW 3: Sept 2019 GW 4c: Nov 2020 GW 5: August 2021 Completion: April 2023

## **Key Milestones:**

Gateway 3 Timescales:

Surveys & Procure Consultants: Oct-Dec 2019

Develop designs: Jan - May 2020

GW4: May 2020

Utility and planning applications: May - Aug 2020

Tender contractor: Sept - Nov 2020

GW5: Dec 2020 Start on site: Jan 2021 Complete: Dec 2021

Gateway 4c Timescales:

Surveys & Procure Consultants: Jan - Jun 2020

Develop designs: Jun - Oct 2020

GW4c: Nov 2020

Utility and planning applications: Sept 2020 - Feb 2021

Tender contractor: Jan – May 2021

GW5: May 2021

Start on site: May 2021 Complete: Dec 2021

Gateway 4c Revised (April 2021) Timescales: Surveys & Procure Consultants: Jan - Jun 2020

Develop designs: Jun - Oct 2020

GW4c: Nov 2020

Utility and planning applications: Sept 2020 - March 2021

Tender contractor: March – July 2021

GW5: July 2021

Start on site: July 2021 Complete: February 2022

Gateway 5 Timescales:

Surveys & Procure Consultants: Jan - Jun 2020

Develop designs: Jun - Oct 2020

GW4c: Nov 2020

Utility and planning applications: Sept 2020 - March 2021

Tender contractor: March – July 2021

GW5: August 2021

Contract Award: September 2021 Mobilisation: September 2021 Start on Site: October 2021

Complete: July 2022

Current (G5) Timescales:

Surveys & Procure Consultants: Jan - Jun 2020

Develop designs: Jun - Oct 2020

GW4c: Nov 2020

Utility and planning applications: Sept 2020 – March 2021

Tender contractor: March – July 2021

GW5: August 2021

Contract Award: Nov 2021

Mobilisation: Nov 2021 - Dec 2021

Start on Site: Jan 2022 Complete: April 2023

# Are we on track for completing the project against the expected timeframe for project delivery? N

There has been further 2 months delay since the last Board report due to extended period for the award of main works contract (to allow for bridge lifts and long material lead in times) with completion date 12 September 2022. Further additional time request for the long material (SCADA components and HV equipment) lead time due to global shortage and the contractor have advised they will require 7 additional months to the proposed programme. Re-revised completion date 20 April 2022.

# Has this project generated public or media impact and response which the City of London Corporation has needed to manage or is managing?

No public or media impact.

#### [2] Finance and Costed Risk

**Headline Financial, Scope and Design Changes:** BHE Committees approved the decision to explore the feasibility of 5 options proposed by City of London Corporation Engineers to fulfil the requirements of this project with the appointment of a consultant team. These options were discounted as non-workable solutions so then two alternative viable proposals were discussed. Of these two alternatives, Option B was recommended and approved by BHE committee. Option B the preferred solution following further design development.

### 'Project Briefing' G1 report (as approved by Chief Officer in Jan 2016):

- Total Estimated Cost (excluding risk): £500,000 £5,000,000
- Costed Risk Against the Project: none reported
- Estimated Programme Dates: (reported in initial GW1 2 report in Sept 2015)
  - GW 3 4: Jan 2016
  - Start on site: May 2016

# Scope/Design Change and Impact:

# 'Project Proposal' G2 report (as above):

- Total Estimated Cost (excluding risk): as above
- Resources to reach next Gateway (excluding risk): £35,000
- Spend to date:
- Costed Risk Against the Project:
- CRP Requested:
- CRP Drawn Down:

• Estimated Programme Dates: as above

### Scope/Design Change and Impact:

# 'Options Appraisal and Design' G3 report (as approved in October 2019):

• Total Estimated Cost (excluding risk): £5,800,000

Resources to reach next Gateway (excluding risk): £303,000

Spend to date: £26,059

Costed Risk Against the Project: £2,600,000

CRP Requested: £0CRP Drawn Down: £0

Estimated Programme Dates:

GW4: May 2020
GW5: Dec 2020
Start on site: Jan 2021
Completion: Dec 2021

### Scope/Design Change and Impact:

'Options Appraisal and Design' G3 issues report (approved by Project Subs on 21/10/20 and to be approved by Planning & Transportation on 27.10.20 and then Court of Common Council under urgency):

Total Estimated Cost (excluding risk): £5,800,000

Resources to reach next Gateway (excluding risk): £554,210

• Spend to date: £95,000

Costed Risk Against the Project: £2,600,000

CRP Requested: £0CRP Drawn Down: £0

Estimated Programme Dates:

GW4: Nov 2020GW5: May 2021

Start on site: May 2021\*Completion: Dec 2021\*

\*Note that the duration of the design periods and construction period were unknown at previous gateway, however since involving the design team better estimates has been provided. It was recognised that design would require more time and construction less.

#### Scope/Design Change and Impact:

# Detailed Design' G4c (approved by BHE and Project Subs committees in November 2020):

Total Estimated Cost (excluding risk): £5,687,003

Resources to reach next Gateway (excluding risk): £128,115

Spend to date: £152,000

Costed Risk Against the Project: £2,205,000

CRP Requested: £0CRP Drawn Down: £0

• Estimated Programme Dates:

o GW4: Nov 2020

o GW5: May 2021

Start on site: May 2021Completion: Dec 2021

### Scope/Design Change and Impact:

# Current G4 Issues (approved by BHE and Project Subs committees in April 2021):

Total Estimated Cost (excluding risk): £5,730,293

Resources to reach next Gateway (excluding risk): £0

• Spend to date: £505,000

Costed Risk Against the Project: £2,161,710

• CRP Requested: £0

CRP Drawn Down: £43,290Estimated Programme Dates:

GW4: Nov 2020GW5: July 2021

Start on site: July 2021Completion: Feb 2022

### Scope/Design Change and Impact:

Partial integration of the existing bridge lifting and new HV supervisory control and data acquisition (SCADA) systems – increase of 6 weeks to the project programme for additional design work required.

# 'Authority to start Work' G5 report (approved by BHE Board in August 2021 – Delegated Authority):

Total Estimated Cost (excluding risk): £5,914,318

Resources to reach next Gateway (excluding risk): £4,982,758

Spend to date: £768,328

Costed Risk Against the Project: £1,545,000

CRP Requested: £1,545,000

CRP Drawn Down (cumulative): £43,380

Estimated Programme Dates:

GW5: August 2021

Contract Award: Sept 2021
Mobilisation: Sept 2021
Start on site: Oct 2021

o Completion: July 2022

#### Scope/Design Change and Impact:

### Progress G5 report (to be approved by BHE Board in July 2022):

Total Estimated Cost (excluding risk): £5,914,318

Resources to reach next Gateway (excluding risk): £5,914,318

Spend to date: £1,837,142

Costed Risk Against the Project: £1,545,000

CRP Requested: £1,545,000

CRP Drawn Down (cumulative): £281,300

• Estimated Programme Dates:

o GW5: August 2021

o Contract Award: Nov 2021

o Mobilisation: Nov 2021 - Dec 2021

o Start on site: Jan 2022

o Completion of works with temporary solution for ventilation fan:

December 2022

o Completion: April 2023

Scope/Design Change and Impact: