Committee report



Committee Strategy & Programmes

Date of meeting 18 May 2018

Date of report 25 April 2018

Report by Charles Hoskins

1. Object of report

To recommend to the Committee the award of the contract for Broomloan Stabling Shed Refurbishment to Clark Contracts Ltd.

2. Background

2.1 Historical context

The Stabling Shed at Broomloan Depot in Govan (see Figure 1 below) was originally constructed around 1897 (at that time called the Car Pit Shed) and housed the lifting equipment and pit to allow trains to be hoisted in and out of the tunnel system. It was constructed with a timber sarking (boarding) and slate roof on top of cast iron frames with brick outer walls and a sandstone south gable end. The north end was left open fronted for ease of future extension. The building was partially extended to the north in 1933 to provide greater accommodation space as part of the works to electrify the system. The extension was of similar construction to the original. The building then remained unchanged in its construction and operation until the 1970s.



Figure 1 – Stabling Shed Location

During the last modernisation of the Subway in the late 1970s, the live yard, ramps and turnouts were installed at the depot, removing the need for the lifting of vehicles in and out of the system. The stabling shed was still to be used to accommodate the train cars, but with the vard changes and the size of new fleet to be housed, the building needed to be modified to allow trains to drive in and out and provide the necessary storage space and internal train road and platform layouts. The sandstone gable to the south entrance was rebuilt in brickwork to allow the installation of train access doors, a deck was built over the old train lifting pit and a further extension

to the north on the east side of the building was completed with modern braced portals with roof sheeting. The roof slates were removed and replaced with galbestos sheeting (galvanised steel sheet with asbestos felt layer) on top of the timber sarking. Transparent lighting panels (fragile) in the roof were also installed in some areas of the roof to allow natural lighting below. The ventilation and fire systems were also mounted within the roof structure, in conjunction with some access ladders and walkways. The building has remained in constant operation since the 1970s modernisation with only limited reactive maintenance works undertaken in the intervening time.

2.2 Current operation and business need

The Stabling Shed continues to house the current Subway trains when not in service and will be required to accommodate part of the new rolling stock fleet when it comes into operation. Access to the roof is currently prohibited due to the deteriorated condition of the access walkways which severely limits routine inspection and maintenance.

Specialist condition surveys undertaken in 2016, identified concerns regarding the long term structural stability of the roof, due to age, life expired materials and also structural support deterioration from water ingress into the frame, supports and brick walls. Localised repairs were undertaken in 2017 to address the immediate concerns (including strengthening of brickwork, repointing, and improved drainage to the west wall), however larger scale refurbishment works were recommended to safeguard the longevity of this key asset. Additionally, the fire detection and sprinkler systems, although still operational, are outmoded and life expired and require replacement.

3. Outline of proposals

3.1 Option appraisal

A number of options for refurbishment of the roof were considered, including rebuilding and re-profiling the roof, a direct 'like for like' replacement or demolition and rebuilding. All options had to consider ensuring train storage and yard operation were not significantly affected. The most efficient option in terms of cost and operational impact was to maintain the existing roof profile whilst completely replacing the fabric of the roof with modern materials. The associated access and building safety systems were to be replaced irrespective of the roof construction option.

3.2 Scope of works

The scope of works proposed are to undertake a full roof refurbishment, replacing and improving the roof frame and wall supports as necessary. The works will be undertaken in a phased manner to minimise impact on train operations, with only two out of current six train roads in the shed out of commission at any time. Full isolation of working areas is required due to the risks of working at height, live third rail and train movements.

Works will include safe removal and disposal of all galbestos roof sheeting and replacement with a proprietary insulated roof sheeting system and replacement of timber sarking, where required. Structural repairs will be made on a number of steel members/frames where long-term settlement at ground level and/or corrosion is present in conjunction with associated repairs and strengthening to supporting brickwork walls.

All roof lights, vents, flashings, gutters and downpipes will be replaced and a new internal safe access stairway to the roof will be installed and all 'on roof' access walkways, guard rails and fall arrest systems replaced. As noted in the previous section, the building services associated with the fire detection, fire alarm and fire suppression systems will also be replaced to modern standards and specification and to be compatible with digital systems being installed elsewhere within Subway. Other

building services present will be protected or temporarily removed and reinstated including: LED lights, existing domestic power, intruder detection and alarms, CCTV system, PA system and radiant heaters with associated gas pipework.

3.3 Tender assessment process

The procurement route taken was a two stage process, advertised through the Public Contract Scotland website. Nine organisations noted an interest with four organisations ultimately submitting a compliant bid for assessment.

The tender was assessed within the basis of a 40:60 quality:cost split, with fixed quality criteria of 'Methodology, 'Health & Safety, 'Programme', Understanding of Requirements' and 'Added Value'.

3.4 Tender assessment results

Tenderer	Submitted Bid	Price	Quality	Combined
	(exc. VAT)	Score	Score	Score
Clark Contracts Limited	£2,466,817	60	34	94
John Graham Construction Limited	£3,194,561	46	40	86
Henry Brothers (Magherafelt) Limited	£4,071,497	36	37	73
Luddon Construction Limited	£6,973,444	21	17	38

The results of the assessment were as follows:

The top three bidders had close quality scores as all had understood the complexity and scale of the works and had adequately considered this in their methodology, programme and approach to safety. When quality and cost scores were combined, Clark Contracts Ltd presented the most economically advantageous tender. Further clarifications were sought to ensure their bid submission was fully technically and financially robust and deliverable for the price. The clarifications proved conclusive and Clark Contracts Ltd was confirmed as the most economically advantageous tender.

3.5 Outline programme

Pending approval to award, the work is scheduled to commence in Summer 2018 with a likely duration of just over one year, based on the recommended tender response. A detailed programme will be agreed with the contractor following Contract Award, specifically to take account of the more detailed phasing required within the operational environment.

4. Conclusions

The tender assessment has shown that Clark Contracts Ltd tender represents the most economically advantageous tender for the Broomloan Stabling Shed Refurbishment works.

5. Further Information

As noted in the background section, the stabling shed will be retained for stabling the new rolling stock, though additional space is required to stable the entire new fleet. The new

Rolling Stock & Control Systems Manufacture and Supply Agreement (MSA) will build the additional storage required but there was no scope within the MSA for improvement of the existing facility.

6. Committee action

The Committee is recommended to approve the award for the Broomloan Stabling Shed Refurbishment works to Clark Contracts Ltd for the value of £2,466,817.

7. Consequences

Policy consequences:	This project is complimentary to Subway Modernisation and assists in meeting the strategic priority of 'Revitalising the Subway Network'.	
Legal consequences	Contract Notice is not required to be posted in OJEU and the award is not subject to the statutory standstill period as this was a regulated process, but the unsuccessful bidders will be advised in the normal manner and offered debriefing meetings. Contract with Clark Contracts will require to be formally executed.	
Financial consequences	The project costs are contained within the 2018/19 Capital Programme, Broomloan Depot Improvements project.	
Personnel consequences	None identified	
Equalities consequences	None identified	
Risk consequences	The project requires to be undertaken to remove the safety risk for maintenance and risk of failure of the existing assets due to life expiry and deteriorating condition.	

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