

REPORT TO: POLICY AND RESOURCES COMMITTEE – 24 AUGUST 2015

REPORT ON: RECONSTRUCTION OF DUNDEE RAIL STATION CONCOURSE

REPORT BY: EXECUTIVE DIRECTOR OF CITY DEVELOPMENT

REPORT NO: 298-2015

1 PURPOSE OF REPORT

- 1.1 To advise members of the outcome of the tendering process for the construction contract for the Dundee Rail Station Concourse and to seek authority for the award of the contract.

2 RECOMMENDATION

- 2.1 It is recommended that the Committee:
- a note the progress made in bringing forward this transformational project for the city;
 - b authorise the acceptance of the tender by Balfour Beatty at a total amount of £28,052,809.18; and
 - c agree to the establishment of a Project Board to oversee the delivery of the redeveloped station concourse with four members from the Administration, two members from the major Opposition and two other members.

3 FINANCIAL IMPLICATIONS

- 3.1 In relation to the project costs detailed in Section 6 and the proposed funding detailed in Section 7, the Executive Director of Corporate Services has confirmed that the City Council's contribution can be contained within the Capital Plan 2015-2018 and future Revenue Budgets.

4 BACKGROUND

- 4.1 The origin of the Dundee Station Concourse project goes back to the preparation of a Development Brief in 2003 which sought its redevelopment as part of the Dundee Waterfront Masterplan. Over the last 12 years, the Council has determinedly taken the lead in working with a variety of partners to see the project implemented.
- 4.2 A key component of the proposals was the demolition of the existing poor quality concourse building and its direct replacement with a new high quality passenger concourse within a mixed use commercial development facing onto a new arrival square. The former concourse building was demolished last year and a temporary station has been in operation since then while the new facility is awaited.
- 4.3 In addition, the existing below-ground Victorian buildings, platforms and structures are to be retained, but the vertical connections between these and the new upper level concourse will be completely renewed. A key objective has been that the improved station will act as a major transport interchange hub for the city centre with considerable opportunities for intermodal journeys between rail, bus, taxi, cycling, walking and private cars including high quality onward travel information for interchanging passengers at the Station and for those travelling onwards via Whitehall Street and High Street bus facilities.
- 4.4 The proposed new Station Concourse building will occupy the site of the former concourse and it has been carefully designed to create an impressive new landmark within the Central Waterfront development and also an attractive new gateway into the city for rail passengers. The building comprises a double height ground floor which incorporates a passenger concourse, ticketing facilities, etc as well as a café/restaurant and new retailing unit(s). There

are three additional floors proposed above this to accommodate a new mid-market hotel. Careful consideration has been given to the mix of uses proposed in order to provide an appropriate range of support facilities for the rail station and also to create sufficient commercial value to fully cover the costs of the necessary prudential borrowing.

5 PROGRAMME

- 5.1 The works are programmed to commence this Autumn and take approximately 26 months to build with completion anticipated in late 2017. The station's completion in time for the opening of the V&A Museum of Design is critical to its business and travel planning.

6 TENDER PROCESS

- 6.1 The contract was advertised in OJEU in June 2014 and 5 notes of interest were received. Following a vetting process, 4 companies were invited to tender. During the tender period, 2 companies withdrew from the process and, therefore, only 2 tenders were received on 11 March 2015, those from BAM Construction Ltd and Balfour Beatty Ltd. Both of these tenders received did not fully comply with the specification and contract conditions.

- 6.2 On 24 April 2015, in order to permit direct discussions on the terms of their tenders, the Council gave notice to both parties that the restricted tender process was to be ended and that both parties were to be invited to participate in a negotiated process; both parties agreed to this and negotiations commenced on 8 May 2015. Revised tenders were received on 8 June 2015 as follows:

BAM	£29,445,661.00
Balfour Beatty	£28,052,809.18

- 6.3 The tender evaluation process was based on cost and quality and the quality scores for the tenders received were;

BAM	766/1000 (Good)
Balfour Beatty	914/1000 (Excellent)

The combined cost/quality scores for the tenders received are:

BAM	86/100
Balfour Beatty	100/100

It is therefore recommended that Balfour Beatty be appointed as the main contractor for the project's construction.

- 6.4 As part of the project, and included in the tender, is the creation of the underlying bridge and the station plaza. In addition to these and the main building construction cost, account has to be taken of the substantial enabling works carried out to date and provision is also needed for Network Rail costs, professional fees and a client contingency allowance; therefore, the total costs for the project are.

Main Building	£23.98m
Underlying Bridge Structure	£2.69m
Station Plaza	£1.38m

Sub Total for Balfour Beatty Contract	£28.05m
Enabling Works	£2.46m
Network Rail Costs	£1.47m
Professional Fees	£3.37m
Client Contingency	£1.25m

Non Contract Allowances	£1.40m
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TOTAL BUILDING COST	£38.00m
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- 6.5 Reference is made to Article XV of the Policy & Resources Committee of 20 May 2013 where a budget of £22.3m was approved for the construction of the Station Concourse. This, however, did not include works associated with the station plaza and bridge structure for which allowances of £3m have historically been in place within Waterfront budgets. Committee Approval has also been received for the enabling works related to the demolition of the original rail station and construction of the temporary station (Report 314-2013, Article V of the Minute of Meeting of the City Development Committee on 23 September 2013 and Report 91-2013, Article VI of the Minute of Meeting of the City Development Committee on 25 March 2013 refer).

7 PROPOSED FUNDING ARRANGEMENT

- 7.1 The following capital funding has already been secured for the construction of the overall project:

DCC Capital Programme (Rail Station)	£2.850m
DCC Prudential Borrowing	£13.135m
ERDF	£2.000m
Scottish Government	£1.000m
Network Rail	£3.315m

Sub Total per Previous Committee Approvals	£22.300m
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DCC Capital Programme (Waterfront)	£3.000m
DCC Capital Programme (Virements)	£0.800m
DCC Additional Prudential Borrowing (financed by increased rent)	£3.500m

TOTAL FUNDS SECURED	£29.600m
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- 7.2 There is therefore a requirement for additional funding of £8.4m in order to let the contract for the project's construction and this additional provision has been included within the newly revised Capital Plan for 2016-21 and a total of £38.0m can be secured to cover the construction of the Rail Station Concourse project including all fixtures and fittings, professional fees, other costs and contingencies. This figure includes the costs of the Station Plaza and the associated underground bridge works which are being funded by the Waterfront Project.

8 TENDER COST REVIEW

- 8.1 A detailed post-tender cost review has been carried out by the Project Consultant, Jacobs, in order to identify the reasons for the increase in costs and this is attached at Appendix 1. A pre-tender cost estimate for the contract was carried out in the sum of £21,030,000. The lowest tender received on 8 June 2015 was in the sum of £28,052,809.18. This represents an increase of approximately £7m over the pre-tender estimate for the contract. Additional advanced enabling works, increased hotel fit out costs, emerging rail station ticketing requirements, additional professional fees for various design changes and additional Network Rail fees/costs account for the remaining £1.4m increase over the budget secured.
- 8.2 The pre-tender estimate was prepared by Jacobs using the tender documents as the quantified basis with rates applied from projects of a similar size and nature. In addition, market testing was carried out for significant elements of the project to determine current market prices from major sub-contractors/suppliers. Cognisance was taken of the unusual nature of the project involving construction over a railway and the complete fitting out of a

hotel and comparisons were made at that time with other similar projects and a significantly higher than average cost applied. At this stage, a good degree of competition was anticipated.

- 8.3 As noted in 6.1 above, the contract was advertised in OJEU in June 2014 and 5 notes of interest were received. Following a vetting process, 4 companies were invited to tender. During the tender period, however, 2 companies withdrew from the process and, therefore, only 2 tenders were ultimately received. On close examination of the tendered rates it is clear that the limited number of contractors tendering has had a considerable effect on the overall tender price.
- 8.4 A review of the construction/building industry workload confirms that the few specialist contractors experienced in building and in rail related infrastructure are busy. The same is true for specialist sub-contractors. The recently issued tender price briefing by the Building Cost Information Service (BCIS) states that “the last three quarters of 2014 saw higher annual tender price increases, in the order of 6% to 9% as contractors were under pressure to cope with the sharp increase in workload”. As such, it is apparent that contractors and sub-contractors can be selective in the current market. It was particularly evident that there was a lack of competition with specialist sub-contractors with associated increased prices.
- 8.5 The risks associated with carrying out a rail related project have considerably influenced the tender return. There have been recent industry reports of contractors suffering significant losses due to having underestimated the implications of working on and adjacent to railways. Not only has this factor affected the number of available tenderers, but also has been reflected in the prices submitted by the contractors and sub-contractors. Due to the uncertainties surrounding access to the restricted rail environment and timescales, contractors are now unwilling to accept a large degree of risk and are pricing tender documents accordingly. Network Rail sources have advised that current tender returns for rail projects are generally 30% in excess of estimated costs. Mark Carne, Chief Executive, Network Rail advised on 26 June 2015 that “On the big items like electrification and capital projects, it was always part of the regulatory process that the costs and programme would be revisited as projects became properly defined. Unfortunately when these reviews have occurred, the more detailed project costs have been higher than assumed at the earliest stages of definition. As a result, the total enhancement programme cost now exceeds the available five-year budget. Some projects are also delayed beyond the original dates”.
- 8.6 The form of contract also puts the risk of construction inflationary costs onto the contractor and it is clear that substantially higher than anticipated allowances have been made in this regard.
- 8.7 Jacobs report concludes that the lack of competition in the marketplace combined with the current risk averse approach to rail related projects are the single most influential factors that have led to a tender price which is significantly in excess of that estimated. Given the limited numbers of suitably qualified and Network Rail certified contractors in the marketplace, Jacobs also advise that to retender the works would unlikely lead to a lower outturn price and would cause delays to the project with potentially significant additional inflationary costs.
- 8.8 Officers have worked with the design team and the bidding contractors to explore the potential to reduce these costs by amending the design of the building and its construction methodology, for example changing the building layout from crescent shaped to rectangular. However, it has not been possible to identify any substantial cost savings which do not have significant consequent impacts on the overall quality of the building and its relationship with its role as a major entry point into the city. These impacts are regarded as being so severe and detrimental that it is not recommended that these be pursued further. This conclusion has also been heavily influenced by the unacceptable consequent further delays to the project resulting in increasing cost pressures due to future construction cost inflation and the risk that the project would not be completed in time for the opening of the V&A Museum of Design.

- 8.9 While it has been concluded that the potential value engineering savings which have been explored should not be pursued, there are some other minor opportunities for savings which can be considered during the contract period. These include modifications to the steelwork, in particular the station entrance archway, mechanical and electrical specifications, external glazing and cladding, roof and floor finishes.

9 COMMUNITY BENEFITS

- 9.1 Benefits to the local economy as a result of the regeneration of Dundee Railway Station are many. In terms of jobs created during the construction phase, there will be the following direct benefits:
- a 122 construction jobs per year for the 2 years of the build;
 - b £5.826M of gross added value to the local economy per year, totalling £11.652M over the construction period; and
 - c type II Multipliers add in the induced effect of supply chain and spend of wages - this increases the total impact of the spend and creates 341 jobs per year and increases GVA impact to £13.98M per annum and £27.96M over the 2 year construction period.
- 9.2 On the opening of the station, additional jobs will be created in the new services being offered. The station will include:
- a a 120 bedroom hotel which would could create 30 to 35 jobs;
 - b a 341m² retail outlet/express supermarket would create up to 20 jobs; and
 - c a 436m² café/bistro which would create a further 20 jobs.
- 9.3 The community benefits clause in the tender for the station has identified a number of other local opportunities:
- a use suppliers within a 35-mile radius of the site wherever possible;
 - b hosting a meeting to identify potential local suppliers;
 - c providing training and mentoring to enable local companies to become suppliers;
 - d creating new start positions (7 minimum);
 - e offering work experience placements for young and unemployed people;
 - f providing training to sub-contractors in issues such as site supervision, management and leadership and health and safety; and
 - g develop positions for at least 6 new apprentices and 2 existing apprentices.
- 9.4 In direct response to further questioning regarding their commitments in these areas, Balfour Beatty have stated that they offer pay and benefits to all of their employees that exceeds the Living Wage, are committed to co-operating and maintaining good relationships with trade unions wherever they operate, are committed to creating local employment opportunities in the communities where they work and they are committed to providing and promoting training opportunities to all staff and apprentices.

10 CONCLUSION

- 10.1 The Station Concourse project presents a major opportunity for the city of Dundee to radically improve its transportation infrastructure; the contribution it will make to realising the Council's ambitions and strategies for the city are very significant and its completion and opening in 2017 will create a high quality new entry point into the city. This project, along with the V&A Museum of Design is a key part of the future regeneration of Dundee Waterfront and for the associated job creation opportunities.
- 10.2 The final cost of the project has increased above that which was originally estimated; however, an additional funding package can be delivered to enable the project to proceed as programmed and to the quality and standard expected by the citizens of Dundee and beyond.

11 POLICY IMPLICATIONS

- 11.1 This Report has been screened for any policy implications in respect of Sustainability, Strategic Environmental Assessment, Anti-Poverty, Equality Impact Assessment and Risk Management. There are no major issues, but there are considerable major positive contributions towards key Council policies; these relate mainly to the delivery of a highly sustainable new public transport facility, to job creation in the city and to a direct contribution to anti-poverty outcomes within the city. A revised Risk Register is being developed in order to manage and mitigate any remaining risks during the construction period.

12 CONSULTATIONS

- 12.1 The Chief Executive, the Executive Director of Corporate Services and Head of Democratic and Legal Services have been consulted and are in agreement with the contents of this report.

13 BACKGROUND PAPERS

- 13.1 None

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6 August 2015

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Dundee Central Waterfront Development

Rail Station Concourse, Hotel and Plaza

B1610900

Tender Cost Review

July 2015

Project Name: Dundee Rail Station Concourse, Hotel and Plaza

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Executive Summary

This report provides a comparison between the lowest tender received and the pre-tender estimate issued on 16th January 2015.

It should be borne in mind when considering the following comparison between tenders received and previously reported estimated costs that it was anticipated that a good degree of competition would be provided in the tendering exercise with a minimum of five contractors participating. The limited pool of contractors prepared and certified to carry out rail projects has clearly impacted on the cost of this project.

The pre-tender estimate narrative indicated that a potential factor which could affect the tender returns was the limited number of contractors submitting tenders. While this matter was considered and raised when compiling the pre-tender estimate, the estimated costs were not amended as the potential effect could not be quantified. It is clear on close examination of the tendered rates that this factor has had a considerable effect on the overall tender price. This was exacerbated by one of the tenderers withdrawing from the tendering exercise during the tender process reducing the competition to only two participants.

In addition, the risks associated with carrying out a rail related project have considerably influenced the tender return. There have been recent reports of contractors suffering significant losses due to having underestimated the implications of working adjacent to railways. Not only has this factor affected the number of available tenderers, but it has also influenced the prices submitted by the contractors and sub-contractors. Due to the uncertainties surrounding access and timescales, contractors are unwilling to accept a large degree of risk and are pricing tender documents accordingly. Anecdotal evidence has indicated that current tender returns for rail projects are generally 30% in excess of estimated costs. *“On the big items like electrification and capital projects, it was always part of the regulatory process that the costs and programme would be revisited as projects became properly defined. Unfortunately when these reviews have occurred, the more detailed project costs have been higher than assumed at the earliest stages of definition. As a result, the total enhancement programme cost now exceeds the available five-year budget. Some projects are also delayed beyond the original dates.”* (<http://www.networkrail.co.uk/news/2015/june/Network-Rail-confirms-review-of-five-year-CP5-plan/> 26/6/15).

This is partly explained by the recently issued tender price briefing by the Building Cost Information Service (BCIS) which states *“The last three quarters of 2014 saw higher annual tender price increases, in the order of 6% to 9%, as contractors were under pressure to cope with the sharp increase in workload”*. Lack of competition, given the minimal number of contractors certified to carry out rail related work, will only increase these figures.

We consider the lack of competition and the risk averse approach to a rail related project to be the two most influential factors that have led to a tender price which is significantly in excess of that estimated. Given the limited numbers of suitably qualified and Network Rail certified contractors in the marketplace, we would advise that to retender the works would unlikely lead to a lower outturn price and would cause delays to the project with potentially significant additional inflationary costs.

Dundee Station Rail Station Concourse, Hotel and Plaza Interim Report on Tenders

3rd July 2015
B1610900

1.0 Introduction

This report sets out to provide cost comparison information between the anticipated cost reported in the pre-tender estimate and the lowest tender submitted in the negotiated tender process.

It should be noted that, following the abandonment of the original tender process, changes were made to the tender documents to assist in obtaining compliant tenders. These changes were mainly as a result of matters raised by the tenderers during the original tender process.

As part of the tender rationalisation process, a number of post tender amendments were made to the Tender Sum to ensure that the Employers requirements were included in the contract documents. These amendments are articulated in the Final Report on Tenders issued separately.

2.0 Pre-Tender Estimate

The pre-tender estimate was prepared using the tender documents prepared for the original tender issue as the quantified basis. Rates from projects of a similar size and nature were applied where possible and published cost information was used where no rates were available. In addition, market testing was carried out for significant elements of the project to determine current market prices from major sub-contractors / suppliers as follows:-

- Piling
- Structural Steelwork
- External Cladding
- Roofing
- Internal Joinery items e.g. Doors, Furniture etc.
- Curtain Walling/Windows
- Various suppliers of Floor, Wall and Ceiling finishes
- Examination of current Mechanical & Electrical Installation costs

Where appropriate, percentages were applied to items such as Preliminaries costs, Daywork allowances etc. which were determined from historical data, current market trends and tenders received for projects of a similar size and nature.

In addition, the overall estimated cost of the project was compared to cost data from similar projects published by the BCIS (Building Cost Information Service). Due to the unusual nature of this project involving construction over a railway and the complete fitting out of the hotel, no directly comparable project costs were available however by isolating the “abnormal” costs such as the bridge construction and the hotel FF&E costs it was possible to obtain an indicative comparator for the superstructure works.

This comparison with the cost data available revealed that the pre-tender estimate was significantly higher than similar projects elsewhere in the country.

The comparator figures identified for hotel type construction are shown in the table below:-

Location	Storeys	Area (m2)	Cost / m2
London Business Park	5	3914	£ 1,342
Southwark, London	6	2170	£ 2,326
Chesterfield, Derbyshire	7	7338	£ 2,020
Aberdeen	7	4008	£ 1,785
Dundee Rail Station	5	7066	£ 2,468

It was considered that due to the complexity and associated risks of building over the railway and the items noted below, the higher than average cost was appropriate. In addition, much of the ground floor area and first floor is shell construction only which would attract a significantly lower cost/m2.

Item 6.0 of the pre-tender estimate highlighted the following factors which could potentially affect the level of tender returns:-

1. The lack of competition;
2. The requirement to estimate the cost of the number of railway possessions required to carry out the works and the requirement for the contractor to bear the risk of estimating this amount;
3. The volatility of the current building material market – in particular the fluctuation in the cost of steelwork
4. The potential lack of local labour resources due to the current level of local construction activities
5. The requirement to estimate the likely cost fluctuations due to inflation over the two year period and bear the risk of estimating this amount.

While these items were noted as having been considered at pre-tender stage, the approach taken by the tenderers to costing these items is entirely dependent upon their pricing strategy and their appetite for bearing risk. The tender costs submitted fluctuate significantly dependent upon the foregoing.

The pre-tender estimate was issued on 16th January 2015 in the sum of **£21,030,000** excluding VAT

3.0 Lowest Tender Amount

Tenders were originally received from two contractors in March 2015, however following detailed tender scrutiny, neither tender was found to be compliant and consequently, the Employer elected to enter into a negotiated tendering procedure.

As part of the negotiated tender process, tender documents were issued to both bidders in May 2015 and two tenders were subsequently received on 8th June.

The lowest tender amount received was in the sum of **£27,969,716.00** excluding VAT.

As a result of the post tender amendments to achieve a fully compliant tender, as detailed in the Final Report on Tenders, the lowest tender amount was increased by **£83,093.18** to **£28,052,809.18**

This equated to an increase of **£7,022,809.18** over the pre-tender estimate.

It should be noted that due to the delay in the procurement process, it was necessary for the contractors to re-affirm the prices previously submitted by their sub-contractors and to make any necessary amendments to their tender submissions.

4.0 Detailed Examination of Lowest Tender

4.1 General Summary

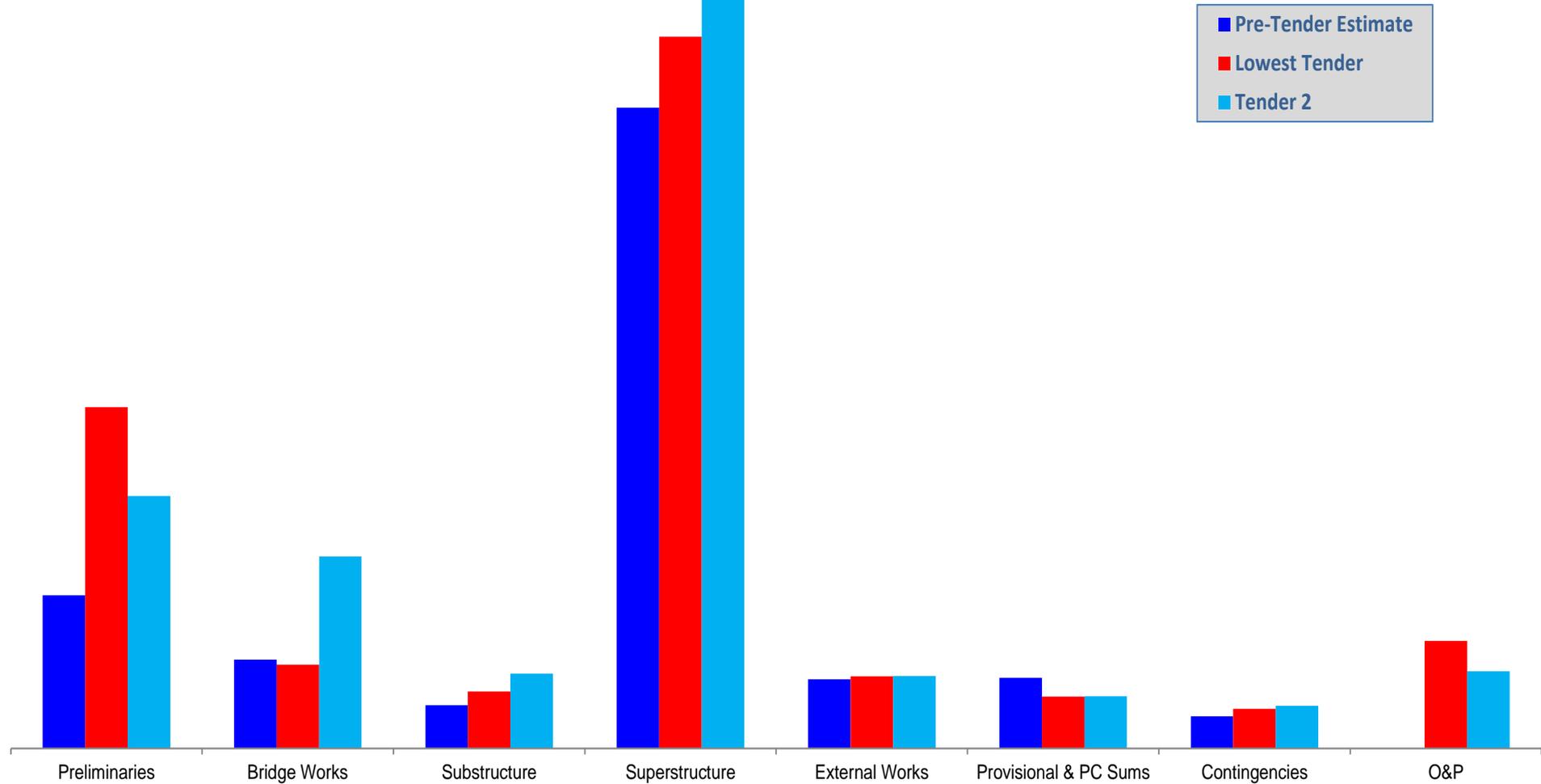
A fully detailed tender examination has been carried out to check for computational errors. A comparison of the rates between the two tenders received and the pre-tender estimate has also been carried out.

The detailed comparison of each of the tender rates extends to 283 pages and is not replicated in this report however a cost comparison summary of the main elements of the project is attached to this report as **Appendix A**.

A detailed examination was also carried out to identify the reasons for the increase of £7,022,809.18 over the pre-tender estimate, this follows under 4.2 to 4.6 and is summarised in **Appendix B**

A graphical representation of the tender comparison is attached overleaf:-

Comparison of Overall Costs



4.2 Preliminaries

Examination of the General Summary comparison (Appendix A – Table 1) indicates that the highest contributor to the increased cost is the Preliminaries section at over 51% of the increase – approximately **£3.61M** (excluding Overheads & Profit)

The pre-tender estimate was based on market testing and percentages obtained from projects of a similar size and complexity. The percentage allowance included for Preliminaries in the pre-tender estimate amounted to approximately 14%. Considering all factors associated with this project such as ease of access, degree of repetition etc., this percentage allowance was considered to be appropriate and was comparable with other similar projects.

The percentage of Preliminaries included within the lowest tender submission amounts to approximately 23% of the total cost of the work. This is considerably in excess of what would normally be expected for a project of this nature and it reflects the particularly risk averse approach taken by the tenderers to a rail related project. It is likely that the high Preliminaries costs are as a result of the matters highlighted in the pre-tender estimate noted at items 2, 3 and 5 of page 4 above.

A high level indication of the cost breakdown of the Preliminaries section of the tender document was submitted with the lowest tender. From the information supplied, it is not possible to accurately identify exactly the areas where additional costs have occurred. In addition, the allowances made in respect of Preliminaries costs in the pre-tender estimate were based on an overall percentage addition which cannot be directly compared to the indicative tender breakdown submitted with the tender. However the information made available has been used to provide the following indicative information as to where some of the additional costs may have occurred. It is stressed that the figures stated are indicative only:-

- The amount included in respect of Railway Possessions is estimated to be approximately 90% higher than anticipated. The number of Railway Possessions required is entirely dependent upon how the contractor executes the works and the risk of correctly assessing the required number rests firmly with the contractor. It is clear that this has significantly contributed to the higher than anticipated Preliminaries costs. It is estimated that this may have added approximately **£160K** to the tender amount.

The tenderers have priced on the basis of a significantly higher number of Possessions than was included in the pre-tender estimate to reflect the requirements of Network Rail. In addition to the cost of the additional Possessions, the tenderers will require to have allowed in their tender for additional labour, plant and running costs associated with operating outwith normal working hours. It is likely that this factor may have added approximately **£330K**

- The lowest tenderer has included significant costs in respect of the pre-purchase of materials. Again the risk for correctly assessing the inflationary effects on materials for the contract period rests with the contractor and they appear to have taken a particularly pessimistic view of the potential future markets. The overall cost effect of these items is reflected in the unit rates for the superstructure.

In addition, the tenderers have included specific allowances within the Preliminaries section in respect of inflation costs. It is likely that further inflationary costs are included within the measured rates in the Bills of Quantities. The potential effect of higher anticipated inflationary costs could amount to an addition of approximately **£400K**.

- The tenderer has included a specific sum in his preliminaries in respect of risk, however risk allowances are also be included in the general pricing of the Preliminaries section of the document e.g. additional supervisions costs etc. There is no detailed breakdown of the risk allowance but obvious significant issues would include:-
 - Adjacency to railway and supporting structures
 - Adjacency to main thoroughfare
 - Requirement to meet stringent acoustic and thermal standards
 - High quality public realm requirements
 - Availability of appropriate local labour
 - Additional Supervision and monitoring costs associated with working adjacent to railway and shift working
 - Risk transfer to contractor due to non-standard terms and conditions of contract

These items have clearly influenced the tenderers approach to assessing and costing risk and may have added up to **£750K** to the tender amount.

- The terms and conditions of contract required by Dundee City Council contain significant amendments to the Standard Form of Contract and insurance terms to comply with the requirements of the Network Rail Asset Protection Agreement (APA) and Hotel Operators Agreement for lease. In particular, a significant degree of risk has been transferred to the contractor and as a result, significantly higher risk allowances and insurance costs have been included. It is likely that these requirements have added up to **£420K** to the tender amount.

In addition, the contractual obligation on the contractor to have Employer's insurances in the joint names of both DCC and Network Rail in compliance with the Asset Protection Agreement has added approximately **£220K** to the tender amount. The contractor has experienced significant difficulties in sourcing the required insurance from the market and this has clearly contributed to the additional cost.

- Examination of the allowances in respect of scaffolding indicates that these are higher than would normally be expected. The costs associated with this item are method related and the tenderers have taken a cautious approach to the risks associated with this work as a result of the adjacency of the railway. It is likely that these costs exceed the pre-tender estimate by up to **£250K**.
- Site supervision and co-ordination costs are significantly higher than expected and may have added approximately **£300K** to the tender amount. It is likely that these additional costs reflect the complexities of working above the railway and the Contractors method of managing these risks.
- The pre-tender estimate was based on a percentage of the overall estimated cost of the measured works. As the lowest tender costs for measured works is significantly higher than the pre-tender estimate, this results in a corresponding difference of approximately **£400K**.
- In general, the remainder of the preliminaries costs relating to various items such as temporary works, temporary accommodation, site servicing, site management, site running costs etc., are generally higher than anticipated for a project of this nature. This equates to a difference of approximately **£380K**

4.3 Overheads & Profit (O&P)

The second highest contributor to the increased cost is the amount included by the tenderer in respect of O&P. The New Rules of Measurement require that the tenderers be afforded the opportunity to price their O&P separately in the tender documents rather than to include these costs in the individual measured rates. In this instance, both tenderers have elected to do so.

The rates used to price the pre-tender estimate included O&P in the measured rates and were based on a general allowance for O&P of 3%, equating to **£0.57m**. This would be considered to be the norm for a project of this nature and broadly in line with the current market.

It should be noted that the percentages included against the item for O&P are dependent upon the tenderers pricing strategy and are not necessarily indicative of the actual O&P costs included in the overall tender. However the declared O&P percentage at 8.5% is 5.5% higher than expected. It is likely that this additional cost is as a result of the lack of competition in the tendering exercise as highlighted in the pre-tender estimate (item 1 page 4 above). This has contributed to the overall increased cost by approximately **£1.5M**.

4.4 Measured Sections of the Bills of Quantities

The third highest contributor to the increased cost is the measured works section of the Bills of Quantities. This relates to the rates inserted by the tenderer against each of the measured items for all the elements of the work. This has contributed to approximately 25% of the increased cost – approximately **£1.57M** (Excluding O&P addition)

4.4.1 Bridge Construction

Examination of the cost of constructing the bridge appears to be marginally lower than anticipated at **-£100K** (excl. O&P) however it is known that the Preliminaries section includes the cost of pre-purchasing steelwork for the bridge which equates to approximately the same amount.

4.4.2 Substructure

The substructure costs are generally higher than anticipated in the pre-tender estimate by approximately **£260K (4%)**.

The rates for excavation and disposal are generally much higher than anticipated due to the assumptions made by the tenderers as to the likely ground conditions in respect of contamination.

During the tender period, additional site investigation works were completed and additional ground condition information became available which significantly increased the piling requirements. An amendment to the tender document was issued to the tenderers during the tender period in respect of this alteration. The costs associated with the increased piling requirements were not contained within the pre-tender estimate and have added approximately **£200K** to the tender amount. In addition, the rates for steel reinforcement were higher than market testing had indicated.

4.4.3 Superstructure

Superstructure costs have contributed most to the increased costs associated within the measured section of the tender returns - equating to an addition of **£1.356m**

A comparison of the superstructure costs in the lowest tender received, with the pre-tender estimate was carried out which identifies the cost and percentage differences against each element of the work.

The rates throughout the tender are, in general higher than would normally be expected. This may be reflective of the lack of available local labour resources as highlighted in the pre-tender estimate (item 4 Page 4 above)

The reasons for the increased cost of this element are described in detail in section 4.5 below

4.4.4 External Works

The external works section is broadly in line with the costs anticipated in the pre-tender estimate.

4.4.5 Provisional Sums

The provisional sums section has also generally been priced as anticipated in the pre-tender estimate. The percentage additions inserted by the tenderers against the daywork allowances are as expected and in line with the current industry norm.

This section of the tender indicates a significant reduction due to the removal of the provisional sums relating to the hotel fitting out works.

4.5 Detailed Consideration of Superstructure Costs

As would be expected in any tendering exercise, there is a large degree of fluctuation in the pricing of the document and this is largely down to each individual estimators approach towards pricing the document and the information received from the sub-contractors. While there may appear to be significant reductions and increases in some areas, this is reflective of the pricing strategies being adopted. Of note however, are the following items of additional cost:-

4.5.1 Structural Steelwork

Market testing of the current price of steelwork for this project indicated that a rate of approximately £1,700 per tonne would be appropriate (a recently published report by AECOM on tender prices indicates that structural steel prices at London rates are typically £1,400 - £1,500 per tonne). The average cost of the steelwork in the tender amounts to approximately £2,700 per tonne. The complexity of the steelwork erection is clearly a factor in the increased cost of the steel, however this was already factored in to the £1,700 per tonne which is significantly higher than for a standard rectangular steel framed building. In addition, it is known that the contractor has included a sum of money in the preliminaries section in respect of pre-purchasing steelwork in the order of £310K. This would indicate that the cost of the steelwork is approximately **£980K (43%)** in excess of the pre-tender estimate.

It appears likely that due to the risks associated with working over the railway and the difficulties in setting out a steel frame to a curve, the tender prices have been significantly inflated to allow for all costs associated with these matters. In addition, it is likely that the current volatility of this market has significantly influenced the tenderers' approach towards pricing this element of the work as highlighted in the pre-tender report (item 3 page 4 above)

4.5.2 Roofing

Market testing of the selected roofing material indicated that an all in cost for the roofing could be expected to be in the region of £105/m². The all in cost of the flat roofing in the tender amounts to £185/m². There is no obvious reason as to why this element should have been priced as highly,

however working over the railway will clearly have been a significant factor. The cost of this element is approximately **£130K (81%)** above the pre-tender estimate.

4.5.3 Internal Walls & Partitions

During the tender period, a tender amendment was issued to the tenderers in relation to the acoustic sealing of the partitions at the boundaries of the works. This has increased the costs from those included in the pre-tender estimate.

Tenderers may also have included allowances in excess of those anticipated in respect of working to the curvature of the building which makes setting out of the partitions more difficult. The individual rates in this section have been examined in detail for error however it would appear that this section has simply been priced at high rates, possibly as a result of the volume of construction work currently available in the area. The cost of this element is approximately **£370K (64%)** above the pre-tender estimate.

4.5.4 Internal Floor Finishes

The average all in cost of the high specification floor finishes e.g. terrazzo to the café area and the public areas of the hotel are generally higher than was allowed in the pre-tender estimate which again was based on market testing. The cost of this element is approximately **£200K (63%)** above the pre-tender estimate.

4.5.5 Ceiling Finishes

The rates generally inserted by the tenderer in respect of the suspended ceilings are marginally above those included in the pre-tender estimate. However, the rates inserted by the contractor in respect of the hotel corridors are significantly higher than those anticipated. The requirement to ensure continuity of the acoustic properties of the ceilings is a particularly onerous task and while allowances were included in the pre-tender estimate rates for these complexities, the rates included in the tender are significantly higher.

In addition, the feature ceiling in the restaurant area of the hotel is particularly complex to construct. Again, allowances were made in the pre-tender estimate for the construction of this feature, however the cost of this item is significantly higher than could have been foreseen.

Ceiling finishes are approximately **£80K (29%)** higher than anticipated with approximately **£38K** of this cost being attributable to the ceilings in the second floor area of the hotel (Restaurant/Lounge/Bar etc.).

4.5.6 Fittings and Furniture / Internal Finishes

The cost of the bespoke furniture (bar counter, reception desk, cabinets etc.) and internal finishes generally in the hotel areas is significantly higher than was anticipated for these items of work. The cost of this element is approximately **£90K (22%)** above the pre-tender estimate.

4.5.7 Superstructure Generally – Sub-contractors

Much of the superstructure work is to be carried out by specialist sub-contractors. On examination of the proportionate value of this work, it is noted that 49% of the value of the superstructure work has been priced by the same sub-contractors in both of the tenders received. This is symptomatic of the lack of competition in the tender returns and will undoubtedly have led to increased prices.

While it has been possible to partially identify additional costs associated with the inherent risks of this project in relation to the main contractor, it is not possible to do likewise for the sub-contractors costs. Any risk costs associated with the project will be included in the tendered rates.

On examination of the tendered rates, particularly in relation to the steelwork, roofing and to a lesser extent, the external cladding, it seems likely that the high tendered rates are as a result of working over or adjacent to the railway and the inherent lack of competition in the supply chain.

4.5.8 Mechanical Services Installation

The costs associated with the mechanical services installation are significantly higher than those anticipated in the pre-tender exercise, however the amount included in the electrical services installation is significantly lower. It appears likely that these differences are simply as a result of pricing strategy with the overall aggregate cost of these elements being within 2.8% of the pre-tender estimate.

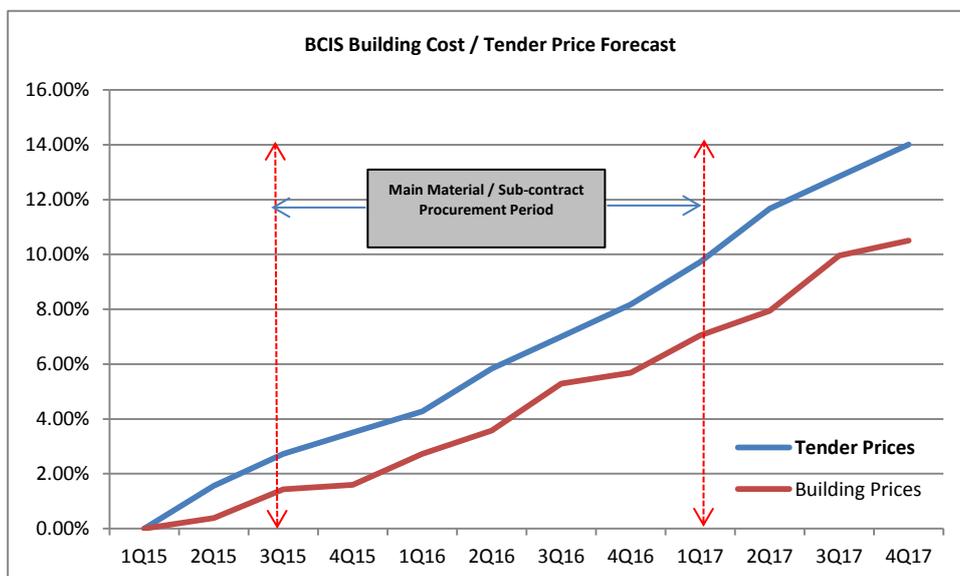
4.6 Contingencies

The contingency allowance is based on a 3% addition to the tender submission. With the exception of the contractor's O&P, all of the foregoing additional costs have also attracted a 3% increase in respect of the contingency allowance. This has added approximately **£145K** to the tender amount.

5.0 SUMMARY

There are a significant number of factors that have contributed to the surprisingly high tenders received from the contractors, many of which are explained in detail above. Both tenderers have expressed surprise at the level of prices being received from their sub-contractors who appeared to be resistant to any downward negotiations. However, there are general considerations which will undoubtedly also have increased the Tender Sum as was highlighted in the pre-tender estimate report. These general factors are:-

- Lack of competition – With only two tenderers submitting bids, there is a clear lack of competition. This has clearly affected the prices being received from sub-contractors (refer 4.4.7)
- Adjacent railway working – The tenderers have clearly included significant costs in their tender to address the risks associated with working adjacent and over the railway. While allowance was made in the pre-tender costs for this aspect, the tenderers appear to be taking a particularly pessimistic view of the degree of risk.
- Market price of materials – Inflationary effects on the price of materials was allowed for in the pre-tender estimate however from the information available, the tenderers appear to be taking a particularly pessimistic view of the rising price of materials going forward. The graph below indicates the potential for disparity in the pricing of materials



- Local Market – There are a number of large scale projects running concurrently with the programme for this project. There are few local contractors noted in the list of sub-contractors proposed by each of the tenderers which indicates that the local workforce is fully engaged elsewhere. This requirement to use sub-contractors from further afield will clearly increase prices.
- Construction market generally – There has been a major upturn in the amount of work available within the construction industry. This reflects the fact that only two main contractors were prepared to submit bids. Further, it is likely that the main contractors were experiencing similar responses when attempting to obtain prices from their sub-contractors

A general summation of the identified areas of additional costs is attached to this report as **Appendix B**

It is disappointing that the tender returns are significantly in excess of those anticipated in the pre-tender estimate, however it is clear that the contractors have taken a particular approach towards pricing certain aspects of this project in light of the current markets and circumstances. Given the mix of civil engineering, rail related work and residential accommodation, the contractors have clearly considered this as an unusual project and have taken a cautious approach towards pricing the risk elements in their tender submissions. In determining how best to proceed, consideration should be taken of the following:-

a) Preliminaries

The major factors contributing to additional costs in the preliminaries are:-

- a) Number of Railway Possessions
- b) Allowances in respect of inflation
- c) Risk associated with construction activities particular to the project
- d) Risk associated with contractual obligations

If the project were to be re-tendered on the same basis as before, it is unlikely that this would have a beneficial cost effect on any of the above items. The tenderers would likely make the same assumptions as before and include costs accordingly. With regard to item d) above, transfer of some of the risk back to DCC from the contractor would yield some minimal cost reduction but of course would increase the risk to DCC. With regard to item b) the time taken to re-tender the project would exacerbate the inflationary effects on the tender submissions, particularly in light of the rate of increase.

b) Overheads & Profit

The major factors that have influenced the additional cost of this item are:-

- a) Lack of competition
- b) Market conditions

If the project were to be re-tendered, it may be possible to introduce additional competition, however the number of additional contractors who are certified and prepared to price the work is extremely limited with only two other contractors considered appropriate in the previous exercise. Given the general level of construction activity at present, introduction of additional competition may not be possible and current market conditions indicate that O&P levels are increasing significantly. It is likely that any reduction in O&P costs that might be achieved through additional competition would be significantly reduced by the increased inflation costs.

c) Measured Works

It is considered likely that the two contractors who submitted tenders have thoroughly explored the market to obtain the best rates from sub-contractors prior to submitting their tenders. It is unlikely that a re-tendering exercise would yield any significant reduction in the overall cost of this item and would likely increase due to inflationary pressures.

APPENDICES

APPENDIX A

Comparison of the Pre-tender estimate with the lowest tender received

Comparison of the pre-tender estimate and the lowest tender received as amended to produce a compliant tender is as follows:-

TABLE 1 - GENERAL SUMMARY

Bill Section	Pre-tender estimate	Lowest Tender	+ / -	%
Preliminaries	£2,933,000.00	£6,540,403.46	£3,607,403.46	51.37%
Bridge Works	£1,701,733.00	£1,601,452.39	-£100,280.61	-1.43%
Substructure	£828,235.00	£1,087,151.96	£258,916.96	3.69%
Superstructure	£12,279,333.00	£13,635,264.97	£1,355,931.97	19.31%
External Works - General	£1,325,800.00	£1,379,788.31	£53,988.31	0.77%
Provisional & PC Sums	£1,349,150.00	£990,952.50	-£358,197.50	-5.10%
Contingencies	£612,518.00	£757,050.40	£144,532.40	2.06%
Overheads & Profit	incl	£2,060,745.19	£2,060,745.19	29.34%
TOTAL	£21,029,769.00	£28,052,809.18	£7,023,040.18	

The pre-tender estimate was priced on the basis of rates that were inclusive of Overheads & Profit (O&P) and this figure was not identified separately in the estimate. Consequently in order to obtain an overall comparison, the O&P costs included in the pre-tender estimate have been identified and the table below demonstrates the result:-

TABLE 2 - GENERAL SUMMARY - O&P APPORTIONED

Bill Section	Pre-tender estimate	Lowest Tender	+ / -	%
Preliminaries	£2,933,000.00	£7,096,337.75	£4,163,337.75	59.28%
Bridge Works	£1,701,733.00	£1,737,575.84	£35,842.84	0.51%
Substructure	£828,235.00	£1,179,559.88	£351,324.88	5.00%
Superstructure	£12,279,333.00	£14,794,262.49	£2,514,929.49	35.81%
External Works - General	£1,325,800.00	£1,497,070.32	£171,270.32	2.44%
Provisional & PC Sums	£1,349,150.00	£990,952.50	-£358,197.50	-5.10%
Contingencies	£612,518.00	£757,050.40	£144,532.40	2.06%
Overheads & Profit	incl		£0.00	0.00%
TOTAL	£21,029,769.00	£28,052,809.18	£7,023,040.18	

APPENDIX B

SUMMARY OF IDENTIFIED CAUSES OF ADDITIONAL COSTS

Item	Element	Item	Total	Amount	Outline Reason
1	Preliminaries			£3,610,000.00	See below
1.1		Railway possessions	£160,000.00		Number of railway possessions required are significantly more than anticipated - dependant on contractors method of work
1.2		Additional cost of out of hours working in connection with Railway Possessions	£330,000.00		Additional costs associated with item above
1.3		Inflation costs	£400,000.00		Higher than anticipated allowance in respect of future inflationary effects
1.4		Risk allowances	£750,000.00		Significantly higher risk allowance
1.5		Terms & Conditions	£420,000.00		Contract conditions impose further risk obligations to contractor
1.6		Insurances	£220,000.00		Additional cost of providing Joint Names insurance - market resistance
1.7		Scaffold costs	£250,000.00		Higher than expected scaffolding costs due to adjacency of railway
1.8		General Items	£1,080,000.00		Generally higher rates than anticipated due to lack of competition, market conditions, lack of local labour etc
2	Overheads & Profit			£1,500,000.00	Higher than market trends at the time of preparing the PTE
3	Measured Works			£1,570,000.00	See below
3.1		Substructure	£260,000.00		Additional site investigation information not available at PTE stage
3.2		Steelwork	£670,000.00		Excluding preliminaries pre-purchase. Market conditions causing higher than expected £/tonne
3.3		Roofing	£130,000.00		Higher rates than market testing was indicating
3.4		Internal walls	£370,000.00		Additional costs associated with acoustic sealing and fire protection details identified after PTE preparation
3.5		Floor finishes	£200,000.00		Higher rates than market testing was indicating
3.6		FF&E	£90,000.00		Higher rates than market testing was indicating
3.7		Sundries	-£150,000.00		Compensating reductions in other elements
4	Contingencies			£145,000.00	Proportionate increase based on percentage addition
		<i>Identified additional costs</i>		£6,825,000.00	
		Total additional cost		£7,022,809.18	
		Unallocated amount		£197,809.18	General rounding, External Works etc.