STAFF REPORT
ACTION REQUIRED

Improving the Procurement Process – Unbalanced Bids

Date: January 10, 2007
To: Audit Committee
From: Jeff Griffiths, Auditor General
Wards: All
Reference Number:

SUMMARY

During our various reviews on specific construction contracts, the issue of “unbalanced bids” has been identified by the Auditor General as a concern requiring attention by senior management. An unbalanced bid occurs in circumstances where a bidder on a contract places an unreasonably high price on certain items in a unit price contract and an unreasonably low price on other items within the same bid. Addressing concerns associated with the issue of unbalanced bids will improve the procurement process and further protect the City’s interests. We have discussed the issue of unbalanced bids with City Legal Services and it is clear that specific provisions within construction contracts require further review and analysis in order to clarify vendor and management expectations in regard to tender bids which are clearly unbalanced.

The intent of the recommendation in this report is to mitigate the risks associated with the award of unbalanced bids and minimize the possibility of additional costs to the City as a result of the award of contracts which are clearly unbalanced in terms of pricing.

RECOMMENDATIONS

The Auditor General recommends that:

1. The Deputy City Manager and Chief Financial Officer, in consultation with the City Solicitor, review the procurement process as it relates to tender bids which appear to be clearly unbalanced. Such a review to include:
   a  the feasibility of including in tender documents a specific clause which prohibits the submission of bids which are clearly unbalanced; and
   b  the establishment of specific criteria to be used in the determination of unbalanced bids.
FINANCIAL IMPACT

The recommendation will have no financial impact in the short term. In the long term, the recommendation will likely result in reduced construction contracting costs. Management’s response is attached as Appendix 1.

COMMENTS

Policies on Unbalanced Bids

Currently, there is no City policy which precludes the submission of an unbalanced bid by a bidder, nor is there any City provision explicitly disqualifying any bid which may be unbalanced. The only provision included in City tender documents relating to unbalanced bids is a clause which states that:

“If, in the opinion of the City, any Bidder has underestimated the value of the goods and/or services to be provided as reflected in its submitted price/fee, the City may reject its bid as unbalanced (i.e., not representative of the scope of the goods and/or services).”

This provision, in our view, does not adequately address the issue of unbalanced unit prices based on estimated quantities in major construction contracts. Based on our discussions with senior management in the Purchasing and Materials Management Division, we are not aware of any contract which has been rejected because it represents a bid which is unbalanced.

It is the responsibility of City staff to evaluate all bids appropriately to ensure that the City’s interests are protected. Awarding a contract to the lowest bidder in a case where the bid is clearly unbalanced has the potential in certain circumstances to expose the City to an unnecessary and unacceptable financial risk.

The difficulty in the evaluation process is determining whether or not a bid is unbalanced and if so to what extent. This difficulty is further compounded where the award of an unbalanced bid to a contractor may be appropriate in circumstances where unit prices and quantities are not amended during the contract.

Reasons for Submitting Unbalanced Bids

There are a number of reasons why a bidder may unbalance its prices in a bid including the likelihood of receiving large payments at the beginning of a contract (front-end loading). Secondly, a bidder may submit an unbalanced bid in order to maximize his profits. The bidder is able to do this by overpricing bid items he believes will be used in greater quantities than estimated in the tender bid document and underpricing items he believes will be used in significantly lesser quantities.
Examples of an Unbalanced Bid

The issue of unbalanced bids and the potential financial consequences to the City resulting from the award of an unbalanced bid are relatively complex. In order to provide background and context to the concept of unbalanced bids and illustrate the problems associated with the award of unbalanced bids, the following are hypothetical examples of two different bids for the same amount of work, one of which is clearly unbalanced and the other balanced.

These hypothetical examples represent bids submitted by two contractors for the same work as follows:

Contractor 1

<table>
<thead>
<tr>
<th>Work Required</th>
<th>Quantity</th>
<th>Unit Bid Price</th>
<th>Total Bid Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 - A</td>
<td>50</td>
<td>$5,000</td>
<td>$250,000</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>$4,000</td>
<td>$600,000</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>$4,000</td>
<td>$800,000</td>
</tr>
<tr>
<td>Stage 2 - D</td>
<td>100</td>
<td>$1,000</td>
<td>$100,000</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>$150</td>
<td>$37,500</td>
</tr>
<tr>
<td>Final Stage -</td>
<td>F</td>
<td>$1</td>
<td>$100</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>$1</td>
<td>$300</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>$1</td>
<td>$100</td>
</tr>
<tr>
<td>Total Bid</td>
<td></td>
<td></td>
<td>$1,788,000</td>
</tr>
</tbody>
</table>

Contractor 2

<table>
<thead>
<tr>
<th>Work Required</th>
<th>Quantity</th>
<th>Unit Bid Price</th>
<th>Total Bid Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 - A</td>
<td>50</td>
<td>$2,500</td>
<td>$125,000</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>$2,000</td>
<td>$300,000</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>$2,000</td>
<td>$400,000</td>
</tr>
<tr>
<td>Stage 2 - D</td>
<td>100</td>
<td>$250</td>
<td>$25,000</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>$1,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Final Stage -</td>
<td>F</td>
<td>$4,000</td>
<td>$400,000</td>
</tr>
<tr>
<td></td>
<td>G</td>
<td>$500</td>
<td>$150,000</td>
</tr>
<tr>
<td></td>
<td>H</td>
<td>$1,500</td>
<td>$150,000</td>
</tr>
<tr>
<td>Total Bid</td>
<td></td>
<td></td>
<td>$1,800,000</td>
</tr>
</tbody>
</table>

In the case of Contractor 1, it is clear that the bid is unbalanced as unit bid prices are front loaded in Stage 1 of the contract with minimal unrealistic costs attributed to work required towards the final stages of a contract.

Contractor 2 represents a balanced bid with unit bid prices representative of actual costs to conduct the work involved.

Contractor 1 is the lowest bidder and was awarded the contract.
Issues and Concerns – Front Loaded Payments

In the two examples, payments to the contractor in connection with each bid have a different and significant impact on the City of Toronto.

1. In the case of Contractor 1 at the end of stage 1 of the contract (phases A, B and C), the Contractor will be paid an amount of $1,650,000 or 92 per cent of the total contract price.

2. At the end of stage 1 of the contract (phases A, B and C), Contractor 2 would have been paid an amount of $825,000 or 46 per cent of the total contract price.

3. The difference in payments at this stage of the contract to the two contractors would be $825,000. The “prepayment” to Contractor 1 invariably has an interest cost to the City. If this interest cost is factored into the bid price of the contract, it could result in a situation where Contractor 1’s original tender bid is higher than Contractor 2.

Issues and Concerns – Renegotiated Quantities

During the course of any contract, it is possible that various quantities of material identified in the tender document may require amendment. As a result, in such circumstances, contracts generally include provisions for pricing changes. The City’s construction contracts usually include the following general provisions relating to changes in quantities:

“Where it appears that the quantity of work to be done and/or Material to be supplied by the Contractor under a unit price tender item will exceed or be less than the tender quantity, the Contractor shall proceed to do the work and/or supply the Material required to complete the tender item and payment will be made for the actual amount of work done and/or Materials supplied at the unit prices stated in the Tender except as provided below:

In the case of a Major Item where the quantity of work performed and/or Material supplied by the Contractor exceeds the tender quantity by more than 15 per cent, either party to the Contract may make a written request to the other party to negotiate a revised unit price for that portion of the work performed and/or Material supplied which exceeds 115 per cent of the tender quantity. The negotiation shall be carried out as soon as reasonably possible. Any revision of the unit price shall be based on the reasonable allowance for profit and applicable overhead.”

In addition, the City contracts clearly define what is meant by a “major item” which is defined as “any Tender Item that has a value, calculated on the basis of the actual or estimated Tender quantity, whichever is the larger, multiplied by its Tender unit price, which is equal to or greater than the lesser of $100,000 or 5 per cent of the total tender value calculated on the basis of the total of all the estimated tender quantities and the tender unit prices.”
Consequences of this Contract Provision on Unbalanced Bids

Increase in Quantities

The definition as to what constitutes a “major item” can have a significant impact on bids, which are unbalanced. For example, in the case of Contractor 1, if the quantities of the work required under “D” were to increase by an amount which exceeds 115 per cent of the tender quantity, this amount according to the contract qualifies for a renegotiation of price. In the case of Contractor 2, the same increases in quantities do not qualify for price renegotiation as the quantities in question are less than $100,000.

Assuming the quantities for work required under “D” in the contract increased from 100 units to 200 units and the renegotiation of prices in the case of Contractor 1 resulted in an increase of price from $1,000 per unit to $1,200 per unit, the additional costs to the City would be as follows:

<table>
<thead>
<tr>
<th></th>
<th>Original Quantities</th>
<th>Original Price</th>
<th>Original Bid Price</th>
<th>Revised Quantities</th>
<th>Revised Prices</th>
<th>Revised Bid Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractor 1</td>
<td>100</td>
<td>$1,000</td>
<td>$100,000</td>
<td>200</td>
<td>$1,200</td>
<td>$240,000</td>
</tr>
<tr>
<td>Contractor 2</td>
<td>100</td>
<td>$ 250</td>
<td>$ 25,000</td>
<td>200</td>
<td>$ 250</td>
<td>$ 50,000</td>
</tr>
</tbody>
</table>

Additional Costs $190,000

Because the bid is unbalanced, the City will find itself in a situation where it is at financial risk in three different ways:

- the prices qualify for negotiation in Contract 1 but not in Contract 2;
- the prices in Contract 1 at the outset are clearly inflated thus resulting in additional costs to the City; and
- the possibility exists that the already inflated prices in Contract 1 will be further increased through negotiation.

Conversely, it could be argued that the City would be in an advantageous position if items E, F, G and H were increased and renegotiated because the City would be in a position to take advantage of the lower unbalanced unit bid price existing in Contract 1. These circumstances, however, are less likely to occur as contractors are usually very well aware of quantities that are likely to increase and will structure their bids accordingly. Where the quantities do exceed the original tendered quantities, past experience suggests that contractors still force the City to negotiate the prices based on actual expenses.

Decrease in Quantities

Improving the Procurement Process – Unbalanced Bids
If there is a reduction in quantities in E, F, G or H, the credits or payment reduction to the City under Contractor 1 would be significantly lower when compared to Contractor 2.

Conversely, for bid items, which are overstated, any reduction in quantities arguably would result in significantly higher credits to the City. We would suggest that this situation is less likely to occur as contractors would have structured their bids to mitigate against such a possibility.

Other Potential Consequences

In certain circumstances, the City will include in a tender bid work to be conducted by the contractor, paid for by the City and recovered from a third party such as Toronto Hydro or Bell Canada for example. In the case of a tender bid which is clearly unbalanced, there are two potential consequences to the City. In the above examples, if we assume that the work required under section H is work to be conducted on behalf of Toronto Hydro or Bell Canada, the City will:

- not be reimbursed in the case of Contractor 1 for the full cost of the work; and
- not have awarded the contract to the lowest bidder as the net cost to the taxpayer in the case of Contractor 1 would be $1,787,900 and in the case of Contractor 2 would be $1,650,000 after accounting for third party costs.

Conclusion

Addressing the issue of unbalanced bids through a review of current City policies will minimize the potential adverse financial consequences which may arise if a contract is awarded to a contractor who has submitted an unbalanced bid.

CONTACT

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SIGNATURE

Jeff Griffiths, Auditor General

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Appendix 1: Management Response to the Auditor General’s Review of Improving the Procurement Process – Unbalanced Bids