

V.3. Management of Professional Service Contracts

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1. INTRODUCTION

In order to achieve success in their daily operations and various projects, business units from the City of Montréal (the City) occasionally need to call upon external consulting experts (e.g., accountants, attorneys, engineers, architects and other specialists). This is often the case when business units are short-staffed due to a work overload or when the required skill sets are not readily available in-house.

Outside consulting firms are often retained to conduct studies (e.g., opportunity or preliminary studies, geotechnical investigations or environmental site assessments), to prepare drawings and specifications, to solicit and evaluate bids from potential contractors, to supervise work sites and even to manage projects.

To this end, the City employs two different types of contracts. Project-specific contracts are individual and clearly defined in scope (e.g., a contract pertaining to a single park development project) while open contracts are more complex (e.g., a contract for preparing drawings and specifications as well as supervising work sites related to various park development projects).

City officials must authorize the type of services and assets involved under project-specific contracts, their forecasted budget and their implementation schedule. A separate authorization must be obtained when soliciting bids and awarding contracts.

Open contracts are also subject to a contract award process that requires the approval of city authorities. In this case, however, contracts usually deal with various engagements that are assigned to selected firms to meet the needs of business units without exceeding the maximum amount allowable for each contract awarded. These contracts are generally spread out over a period of one year or more. Consequently, the exact nature of services and assets involved and the implementation timeframe cannot be determined until the business units actually define their needs and assign official engagements to the selected firms.

The advantage of this approach is that it reduces administrative lead times for the business units since they do not have to launch a new contract award process and obtain the required authorizations each time an engagement is being assigned. However, this highly-flexible

approach requires the implementation of stringent in-house rules to ensure strict control over the budget allocated to each contract.

For the purpose of our audit, we selected a sample of 11 contracts (see Appendix A), some of which incurred requests for additional funding, to verify the planning and subsequent monitoring of the work performed under these contracts. We deliberately chose some open contracts to ascertain the management rules that were implemented to ensure effective budget control. Our sample of 11 professional service contracts was comprised of six project-specific contracts and five open contracts with a value ranging from \$60,000 to \$3.4 M, all of which were awarded by city authorities subsequent to calls for proposals or invitations to tender. With the exception of one project management contract, all of the other contracts dealt primarily with engineering or architecture services.

The financial data that we collected for the past few years indicates that the City's spending on professional fees is constantly increasing. Business units can fund these professional services under their three-year capital program or their operating budget, depending on whether or not the contracted services pertain to the development, construction or renovation of tangible assets. The total spending on professional fees for 2006, 2007 and 2008 was respectively \$79.8 M, \$102.4 M and \$125.8 M.

Given the magnitude of these amounts, we believe that the business units require suitable management frameworks and tools to ensure the proper planning of any professional services entrusted to external firms. Other tools and guidelines are also required to better monitor and control the provision of these services, their costs and their implementation schedules.

From the outset, we wish to stress that our current audit was initiated long before the major program launched by the Direction générale after the general auditor submitted his *Water Meters Report* in September 2009.

2. AUDIT SCOPE

Our audit of the management of professional service contracts consisted primarily in ensuring that contract terms were monitored in respect to the provision of services, their costs and their deadlines. We also reviewed other contract management elements, i.e. the planning of required services, the contract approval mechanisms, the sharing of roles and responsibilities for the management of awarded contracts and the reporting mechanisms on the status of contracted services.

Our audit focused on the central departments that incurred more than 80% of the City's professional fee expenses over the past few years. To ensure that we reviewed contracts for which work was nearly completed, we selected a sample of 11 contracts that were awarded in 2006, 2007 and 2008 within the following three central departments: the Service des infrastructures, transport et environnement (SITE), the Service de la mise en valeur du territoire et du patrimoine (SMVTP) and the Service du développement culturel, de la qualité du milieu de vie et de la diversité ethnoculturelle (SDCQMVDE) (see Appendix A).

Although our audit was not intended to assess compliance with the rules for awarding professional service contracts under section 573 of the *Cities and Towns Act* (CTA) (see Appendix B), our findings occasionally forced us to refer to these rules.

3. FINDINGS, RECOMMENDATIONS AND ACTION PLANS

3.1. PLANNING OF PROFESSIONAL SERVICES

3.1.A. Background and Findings

The decision to outsource professional services is generally determined by the nature of the work to be performed, the project size and the availability of in-house resources.

Depending on the type of services required, their costs can be estimated from the approximate number of hours needed to perform the task at hand (e.g., project manager). In other areas such as engineering or architecture (preparation of drawings and specifications, work site supervision, etc.), service cost estimates are generally calculated as a percentage of the project cost estimates (e.g., the costs of developing a park or building, rehabilitating or replacing certain infrastructure assets).

Since the costs of professional services and projects are so intertwined, any shortcomings in the initial definition of project requirements, objectives or risks will most likely result in underestimated project costs, thereby leading to underestimated professional fees and schedule overruns.

Our audit focused on verifying how business units determine the nature and scope of professional services. To this end, we interviewed key stakeholders and examined supporting documentation on file.

During our audit of project-specific professional service contracts, we primarily reviewed executive summaries¹ and tender documents (i.e. technical specifications, terms of reference and preliminary work schedules) to ascertain the approach through which business units define and delineate projects prior to implementation. We observed a thinking process and various steps whose outcomes included:

- a description of the project, its background and its goals;
- the results of any preliminary studies that were performed when necessary;
- a definition of the required services and related deliverables;
- a description of current issues;
- cost estimates for the project and the professional fees;
- the planned project schedule.

Four of the six project-specific contracts within our sample required additional budgetary funds of \$25,000, \$46,650, \$100,000 and \$480,000 after these contracts had been awarded (see Appendix A – sample items 4, 1, 2 and 5). Consequently, we felt compelled to assess the thoroughness of the project planning stage in these cases. Our findings are outlined below.

FINDING

For one of these project-specific contracts (see Appendix A – sample item 2), additional funding became necessary as a result of an incomplete project assessment that did not include all the preliminary studies required to clearly delineate the project scope.

In fact, when determining the type of work to be performed as part of this swimming pool upgrade project, nobody considered the new requirements under the *Regulation Respecting Water Quality in Swimming Pools and Other Artificial Pools* (c. Q-2, r.18). Among others, this regulation provides for specific architectural details pertaining to the filtration system (pipe dimension, number of bottom drains and skimmers, etc.). Failure to incorporate this regulatory environment had a significant impact on the project scope and its estimated costs. As a result, the initial \$90,000 professional service contract that dealt primarily with preparing the drawings and specifications and supervising the work had to be raised by \$100,000, representing an increase of 110%.

¹ These executive summaries were prepared to authorize calls for tenders and approve contracts.

FINDING

As for the other three cases, we discovered that additional budgetary funds were allocated following the expansion of the original professional service contracts awarded to these firms.

These costs were incurred through requests to contemplate other development scenarios, perform additional studies or address new requirements. These three projects received additional funds of \$25,000, \$46,650 and \$480,042, representing respectively an increase of 7%, 10% and 42% above the original winning bids of \$337,170, \$466,504 and \$1,130,521 (see Appendix A – sample items 4, 1 and 5).

When officials authorized these calls for tenders, they assumed that the cost estimates submitted to them were accurate and expected the ensuing projects to be completed on budget. However, under the circumstances described above, it is no wonder that there were budget overruns and that project-related professional fees increased as well.

FINDING

Moreover, any failure to properly plan and determine the project scope and costs from the get-go might create situations where business units use the wrong tender format.

In fact, this particular situation applies to the same professional service contract pertaining to the swimming pool upgrade project that required additional funds (see Appendix A – sample item 2). In this case, the professional service fees (\$75,000) were estimated as a percentage of the approximate total project cost (\$600,000) despite the fact that its scope had not been delineated precisely enough. As a result, those in charge proceeded with an invitation to tender (for services valued below \$100,000) rather than a call for proposals (for services valued above \$100,000). This limited competitive bidding might have prevented the City from obtaining better prices for the required services.

Our sample also included five open contracts for professional services (see Appendix A – sample items 7, 8, 9, 10 and 11). According to the information we obtained, the budget allocated to this type of contract is an approximate amount calculated as a percentage of the total budget available to the business unit under its three-year capital program.

When it comes to open contracts, authorities initially approve professional service agreements with selected firms that stipulate the maximum amount of allowable fees. Business units can then call upon these firms on an as-needed basis to perform various assignments (studies, preparation of drawings and specifications, work site supervision, etc.) within the approved budget. Correspondingly, service planning is a major component of every assignment that falls under open contracts.

These contracts provide added flexibility to business units from an administrative standpoint and expedite the launch of projects. Essentially, engagements can be assigned to any selected firm without resorting to another contract awarding process and re-obtaining the required authorizations from the appropriate officials. Nonetheless, in this scenario, the various business units involved must have clear guidelines for planning assignments. In our opinion, these guidelines should include mechanisms for documenting the steps taken to specify every engagement to be assigned. Among others, it is important to describe the overall project, its background and goals, the issues at hand, the type of engagement to be assigned to the selected firm, the estimated costs of the required services and their implementation schedule. Ultimately, this planning exercise should lead to a formal written service request to the selected firm.

To ascertain the approach used by business units involved in the management of open contracts within our sample, we reviewed nine engagements that were assigned under these contracts.

FINDING

We observed that there was no consistent approach, whether it be from one business unit to the next or within a single business unit, and that the planning and written description of assignments were not addressed with the same level of thoroughness across the board.

Specifically, we noticed that certain administrative units have adopted an internal planning procedure whereby they perform a thinking process leading to a written service request intended for the selected firm. Those contracts that were managed using good practices were sample items 9, 10 and 11 as evidenced by their service request that generally included:

- the scope and goals of the assignment;
- a background description (e.g., the issues at stake);
- supporting documentation (e.g., drawings, pictures, sketches and previous study reports);

- a description of the assignment;
- the target schedule.

FINDING

However, for other administrative units (see Appendix A – sample items 7 and 8), there was no evidence indicating any attempt to plan the engagement assigned to the selected firm. In fact, no formal service request was ever submitted to the firm. Instead, the required services were requested informally during a telephone conversation with its representative.

In our opinion, this approach does not allow for proper control over a budget that was previously approved by the authorities and makes it difficult to substantiate whether the firm's proposal fully addresses the requirements set forth by the administrative unit.

Although the adoption of internal planning rules helps to exert better control over the use of funds, the flexibility inherent in open contracts facilitates the financing of cost overruns through the overall budget allocated to the related professional service agreement or to other professional service agreements altogether.

One of the open contracts we reviewed is a clear example of this situation (see Appendix A – sample item 7). In this case, the entire authorized budget (\$625,000) was allocated to an assignment for supervising the reconstruction of a bridge. Subsequently, additional funds of \$275,000 were approved by the appropriate authorities.

Our audit revealed that the business unit responsible for assigning engagements had deliberately used the entire open contract budget (\$625,000) to cover cost overruns incurred under a different professional service contract reached in 2004 with another firm to prepare drawings and specifications and to supervise the work pertaining to the same bridge.

FINDING

This budget shortfall occurred because leaders failed to perform preliminary studies that would have clearly delineated the nature and scope of the work required for rebuilding the bridge during the preparation of their initial cost estimates. Instead, they used data from a similar past project even though it was not identical in every respect. In doing so, they disregarded the particular needs of the various project stakeholders, including the central departments and boroughs.

As it turned out, the open contract budget of \$625,000 would not have covered all of the fees for the required supervision services. Consequently, this business unit asked the authorities to approve additional funding of \$275,000, bringing the extra budget allocated to the supervision of the bridge reconstruction to \$900,000. The initial professional service contract of \$315,356 awarded in 2004 for the preparation of the drawings and specifications as well as work site supervision was increased by an additional \$134,644 in 2006. When the time came to assign the \$625,000 supervision engagement to a second firm, the first firm had to be given a new \$143,000 engagement to provide supervision support services.

FINDING

Overall, the professional fees associated with this project will likely cost an additional \$1,177,644 (i.e. \$134,644 + \$900,000 + \$143,000) in comparison with the initial estimate of \$315,356, representing a 373% increase. As a result of a poorly-defined work scope for this bridge, reconstruction costs and, consequently, professional fees were significantly underestimated.

In another vein, we also reviewed the efforts expended to estimate the costs of professional services during the planning stage. Essentially, we identified a need to better document estimates.

During our audit of project-specific contracts, we noticed that the overall estimated costs of professional services were included in the executive summary for the purpose of obtaining an authorization to solicit bids. However, in none of these cases, neither the detailed estimates nor the underlying assumptions used in their calculation were properly documented.

As for the nine engagements assigned under the open contracts within our sample, we did not find any cost estimates for the services required. According to the stakeholders we interviewed,

cost estimates for professional services are often derived from knowledge gained in past experiences or prices that applied to previous, similar engagements. When needed, we were told to refer to the *[Translation] Tariff of Fees for Professional Services Provided to the Government by Engineers* that was made by order of the Gouvernement du Québec (D. 1235-87). Among others, this regulation establishes the percentage of professional fees applicable to the estimated costs of the engineering work to be performed in accordance with its category and scope. Using category III² as an example, this means 8.2% when the estimated costs of work falls between \$150,000 and \$300,000, 7% when the estimated costs of work ranges from \$300 000 to \$600,000 and 6.2% when the estimated costs of work is between \$600,000 and \$1.6 M. In general, this type of assessment is rarely documented.

FINDING

We believe that the various stakeholders involved in either project-specific contracts or engagements assigned under open contracts would benefit from a better recording and documentation of all estimates for professional fees that are associated with any required services. Ultimately, this data would allow for a more objective assessment of bids, help explain discrepancies and protect the City from firms that might attempt to take advantage of the leeway available in open contracts to boost their fees.

FINDING

When planning assignments or projects, business units should document their assessment of the various possible scenarios, i.e. performing all the work in-house, calling upon external firms to complete all the work or combining both approaches by using internal and external resources. None of the contracts we examined showed evidence supporting this type of assessment. Only 7 of the 11 cases under audit included a brief justification to this effect in the executive summary submitted to authorities for approval of the corresponding professional service contracts.

We understand that business units are sometimes forced to award professional service contracts when they are understaffed, when the task at hand is too complex for their employees or when the required skill sets are not readily available in-house. Nonetheless, they should adopt mechanisms to document their analysis and the selected scenario in order to help authorities in making enlightened decisions. This is particularly important as the business units have been relying heavily on external firms over the past few years.

² According to order 1235 from the Gouvernement du Québec, this general engineering work category encompasses pumping stations and water filtration plants.

In light of the various findings outlined in this section, the unavoidable conclusion is that the different business units within the City of Montréal would all benefit from a common methodology based on best practices to better delineate the scope of their future projects and avoid jeopardizing other planned initiatives.

To this effect, we were informed that some administrative departments within the business units targeted by this audit have already adopted (or have started to establish) a project management approach. For instance, the Direction des grands parcs de la nature en ville of the SDCQMVDE implemented a project management methodology in 2006. However, we were unable to assess how this methodology is being applied since, as explained by the managers that we interviewed, it was not fully operational when the sample contracts were awarded. The SMVTP also has its own project management methodology, but it was irrelevant to the smaller contracts that we reviewed. For its part, the SITE created the Direction du bureau des projets to manage some larger projects. Although the Direction des transports of the SITE created the Division des projets Notre-Dame/Tramway/CDN-Remembrance, its project management tools were not ready at the time of our audit. Consequently, none of the SITE contracts that we reviewed was subjected to any project management methodology.

3.1.B. Recommendations

To promote consistent practices among the various municipal departments and help them delineate the scope of their future projects with greater precision, we recommend that the Direction générale of the City take any required measures to develop and subsequently disseminate a common methodology with guidelines, among others, on how to document:

- **the results of assessments that help determine such things as:**
 - **the needs and goals,**
 - **the type of work to be performed and the required services,**
 - **any relevant preliminary studies or analyses,**
 - **the risks and constraints associated with the project (e.g., legal or regulatory requirements),**
 - **the target schedule;**
- **cost estimates for professional fees;**
- **the analysis that supports the recommendation to call upon external service providers.**

3.2. APPROVAL OF PROFESSIONAL SERVICE CONTRACTS BY THE AUTHORITIES AND OTHER RELATED DECISIONS

When business units elect to call upon external service providers, city officials must first approve the calls for tenders and any ensuing professional service contracts (see Appendix C). Other project-related decisions that pertain in particular to engineering or architecture services might be required from authorities when soliciting bids or awarding contracts to service providers, among others. These decisions sometimes increase the costs of the professional services under the contracts involved. While projects are underway, authorities might also have to approve additional professional fees in the event that unforeseen delays result in project extensions, unplanned additional work is needed from contractors or when project costs were originally underestimated.

Regardless of the type of decision that needs to be made, authorities must have all the information needed to fully understand the scope of the professional service contracts and their related projects, including the contents, costs and schedules as well as any issues at stake and their potential impacts. Our audit consisted in verifying the information available to authorities during their decision-making process and determining whether this information was sufficient.

3.2.1. AUTHORIZATION TO SOLICIT BIDS

3.2.1.A. Background and Findings

City departments cannot solicit bids without proper authorization. However, this is merely an administrative practice and is not mandatory under section 573 of the CTA. In September 2005, the director general approved city-wide guidelines entitled *[Translation] Planning and Approval of Calls for Tenders for the Provision of Professional Services* that applied to every contract under our review.

According to this document, the executive committee must approve the tendering schedule for professional services and the corresponding bid assessment grids. These guidelines also empower the director general to authorize the solicitation of bids. In addition, this document indicates that any calls for tenders that are excluded from the pre-approved provisional schedule must be submitted to the executive committee for authorization.

Some of the calls for tenders pertaining to the contracts within our sample were included in the provisional schedule approved by the executive committee. The director general subsequently authorized these calls for tenders in compliance with the above guidelines. As for the remaining

contracts, the authorization to solicit bids was granted by the executive committee since these calls for tenders were not part of the provisional schedule.

Executive summaries are prepared to support the authorization process. For the authorization of a provisional tendering schedule, the executive summary includes a list of cases requiring calls for tenders over the next quarter, the tendering timeframe and the estimated costs of the professional service contracts.

An executive summary that is drafted to authorize a tendering process by either the executive committee or the director general must incorporate the following elements: a project description, the type of professional services required, the estimated professional fees, the estimated project costs and the target schedule.

In the case of obtaining an authorization for the tendering process pertaining to open contracts, the executive summary must outline the professional services required, the budget allocated to the various bidders (if applicable) and the contract duration.

FINDING

In our opinion, potential bidders could exploit executive committee decisions that are public knowledge to obtain privileged information on the estimated costs of professional fees or overall projects.

Executive summaries that were prepared to support the authorization of provisional tendering schedules from the end of 2008 to spring 2009 presented the cost estimates for professional fees in a separate, confidential document. However, there are confidentiality issues when it comes to calls for tenders that do not fall under any provisional tendering schedule. To make matters worse, the guidelines that were approved by the director general in 2005 were no longer applied after April 2009. Consequently, all authorization requests for tendering processes from that time and December 31st 2009 were submitted to the executive committee for approval, thereby making these decisions public knowledge.

Given that the requirement to authorize calls for tenders is dictated by an administrative practice as opposed to a regulatory obligation, we question the relevance of disclosing cost estimates for professional fees or entire projects to the public.

FINDING

We also have reservations about the common inclusion of project cost estimates in tender documents produced by business units that are soliciting bids for professional service contracts.

In our opinion, this practice works to the detriment of the City in efforts to obtain the best possible price for the requested services, as does the public disclosure of cost estimates for professional fees and entire projects when seeking authorization to solicit bids.

3.2.1.B. Recommendations

To ensure that the City receives the best quotes for any required services, we recommend that the Direction générale seriously consider discontinuing the practice of disclosing privileged information that could be exploited by future bidders such as:

- **cost estimates for professional fees and projects when seeking authorization for calls for tenders;**
- **project cost estimates in tender documents that are produced to solicit bids for professional services.**

3.2.2. PROVISION OF INFORMATION FOR CONTRACT APPROVAL

3.2.2.A. Background and Findings

Professional service contracts must be approved by the appropriate authorities or their delegates (see Appendix D). In addition, business units are required to prepare an executive summary for major contracts to be approved by officials.

Essentially, business units must provide authorities with all the information needed to help them make enlightened decisions about the merits of any contracts under consideration. When deciding on a specific contract, they must have, at the very least, a description of the required professional services and the scope of the related project, the amount of the winning bid, a list of all the bids received as well as information substantiating the comparison between the estimated costs and the winning bid.

FINDING

Most executive summaries that we reviewed were complete except for the occasional absence of comparison results between the winning bid and the estimated costs of professional fees. Several of the six project-specific contracts showed discrepancies exceeding 10% (in absolute terms) for which there were no explanation provided in the corresponding executive summary as submitted to authorities (see Appendix A – sample items 1, 2, 3, 4 and 6).

FINDING

This is particularly worrisome in the case of the two contracts showing the highest discrepancies (see Appendix A – sample items 1 and 4) with respective cost variations of -\$633,496 (i.e. 58% below the estimate) and \$212,170 (i.e. 169% above the estimate).

This situation is not conducive to helping authorities make enlightened decisions. In fact, any unexplained variation raises questions about the reliability of the initial cost estimates used for comparison purposes or the representativeness of the quoted prices vs. market prices. As it turns out, the business units involved indicated to us that these discrepancies were due to incomplete cost estimates which overlooked certain key elements.

FINDING

According to the information we obtained, business units do not have any guidelines to follow when estimated costs diverge significantly from bids submitted for the requested services.

For instance, such guidelines could serve to:

- establish an acceptable variation range between the estimated costs and the winning bids (e.g., from 0 to 20%) in support of the contract awarding process;
- plan actions to be taken whenever the discrepancy level falls beyond the acceptable range. For instance, the department involved could request an independent cost estimate from a third-party to confirm its position. Should the discrepancy remain inexplicable, the tender process might be cancelled;
- enforce the disclosure of information substantiating the comparison between estimated costs and winning bids in the executive summary.

When awarding open contracts, discrepancies between cost estimates and winning bids are unlikely since the maximum amount allowable under these contracts is pre-established. However, variations could occur when assigning engagements to selected bidders. This matter will be discussed in a later section of this report.

3.2.2.B. Recommendations

We recommend that the Direction générale adopt an administrative framework for the comparison of the estimated costs of professional fees with those of the winning bids to ensure the best possible prices for the City and help authorities make enlightened decisions. Among others, this framework should provide for:

- **an acceptable variation range between the estimated costs and the winning bids in support of the contract awarding process;**
- **actions to be taken whenever the discrepancy level falls beyond the acceptable range;**
- **the disclosure of information substantiating the comparison between estimated costs and winning bids in the executive summary.**

3.2.3. REQUEST FOR ADDITIONAL FUNDS

3.2.3.A. Background and Findings

Once project-specific contracts have been approved, authorities might have to make other related decisions, especially when issuing calls for tenders or awarding contracts to service providers. The exact value of these awarded contracts must then be reconciled with the estimated project costs that were used to calculate the professional fees. In the event that the project costs are higher than anticipated, additional funds for the professional services would have to be requested, thereby entailing the preparation of an executive summary for approval by the appropriate authorities.

Officials might also have to make decisions pertaining to open contracts when the budget available under these contracts is insufficient to cover all of the professional services assigned to these bidders.

In the “Planning of Professional Services” section, we indicated that additional funds were authorized for 5 of the 11 contracts within our sample (see Appendix A – sample item 1: \$46,650, sample item 2: \$100,000, sample item 4: \$25,000, sample item 5: \$480,082 and sample item 7: \$275,000). **For three of these five contracts, the initial contract value**

increased by 42% (sample item 5), 44% (sample item 7) and 110% (sample item 2) as a result of this additional funding. As for the other two contracts (sample items 1 and 4), their value increased by less than 10%.

FINDING

Although we did not focus specifically on verifying compliance with the contract awarding rules, we observed that the five follow-up contracts mentioned above were automatically awarded by mutual agreement with the original contractors. Given the amounts at stake and the legislation governing the rules for awarding professional service contracts (see Appendix B), we believe that we were fully justified in questioning whether these cases really represented the best contract awarding format (private agreements, calls for proposals or invitations to tender).

We understand that the type of services involved might make it more practical and even cost-effective to simply award follow-up contracts to existing suppliers. In fact, there are exceptions under the legislation that authorize private agreements with current suppliers³. Nonetheless, we feel that each of these cases should have been analyzed by subject matter experts.

For compliance purposes, we would have expected business units that are seeking authorization for additional funds from the appropriate authorities to automatically involve the Contentieux in the decision-making process and obtain its opinion on the reasons why the recommended contract awarding format should or should not be used. In the same vein, we feel that clear guidelines should exist regarding the conditions that need to be met and the acceptable budget increase threshold (%) (when applicable) for awarding follow-up contracts through private agreements.

FINDING

In fact, our audit revealed that the Contentieux was not called upon consistently during the decision-making process or that its comments on the recommended contract awarding format were not always fully explained.

Only one of the five contracts for which the authorities were asked to approve additional funding (see Appendix A – sample item 2) involved the Contentieux and included its comments in

³ For instance, a contract can be awarded automatically to the only firm that can provide the required services or to the original designer of drawings and specifications for any adaptation, modification or supervision work that involves these drawings and specifications provided that their initial design contract resulted from a call for tenders.

support of the recommended contract awarding format. There were two cases for which the Contentieux was not consulted (see Appendix A – sample items 1 and 7) and two others where it provided an opinion without any justification to validate the relevance of the recommended contract awarding format (see Appendix A – sample items 4 and 5). This occurred despite the fact that the additional funds constituted, in some cases, a significant portion of the initial contract value.

FINDING

According to the information we obtained, there are currently no guidelines on the conditions to be met and the maximum acceptable threshold for awarding follow-up contracts to the same firm through private agreement without initiating a new contract award process. Apparently, there is an unwritten rule whereby it is acceptable for business units to award a follow-up contract to the same supplier (when applicable) provided that the additional funds do not exceed 20% of the initial contract value.

To ensure compliance with the contract awarding process under section 573 of the CTA and promote enlightened decisions, we believe that the City should adopt clear guidelines with strict rules to follow when requesting additional funds for existing contracts.

Since authorities are involved throughout every project implementation stage, they need executive summaries that clearly outline the evolution of project costs from the initial estimates prior to approving any budget figures.

FINDING

Our audit indicated that authorities do not always have all the facts required to help them make enlightened decisions. Actually, they are presented with executive summaries that sometimes lack key information on the evolution of estimated project costs.

For instance, the estimated project costs associated with one of the contracts that we reviewed (see Appendix A – sample item 5) increased significantly following the addition of new requirements. However, none of the executive summaries used by authorities to approve additional funding for the required professional services and, subsequently, authorize the solicitation of bids and the awarding of the contract to the winning firm outlined the evolution of project costs over time. In fact, authorities approved a budget increase of \$480,042 for the

provision of these professional services and the awarding of a \$22.4 M contract for the project execution during a single meeting while the initial scenario was estimated at \$10 M. We understand that the addition of new requirements to the initial project would inevitably increase its costs. Nonetheless, to help them make informed decisions, authorities rightfully deserve to receive all the information on the evolution of project costs whenever their intervention is required. Without this key information, they might authorize projects that would otherwise have been refused or postponed.

3.2.3.B. Recommendations

To ensure compliance with the contract awarding process pursuant to section 573 of the *Cities and Towns Act* when additional funds are needed to maintain the provision of the required services under an initial contract, we recommend that the Direction générale adopt guidelines specifying:

- **the conditions to be met and the maximum threshold for additional funds that would allow business units to award professional service follow-up contracts to the same provider by private agreement;**
- **the requirement for business units to involve the Contentieux in the decision-making process and obtain its written comments on the relevance of the recommended contract awarding format.**

To ensure that authorities have all the information needed to make informed decisions about the awarding of contracts and other related decisions, we recommend that the Direction générale provide central departments with guidelines on how to use executive summaries in order to describe the evolution of project costs, schedule and scope from the time past decisions were made.

3.3. APPROVAL OF BIDS UNDER OPEN CONTRACTS

3.3.A. Background and Findings

In the case of open contracts, authorities initially approve professional service agreements with selected firms. Thereafter, business units can call upon these firms on an as-needed basis to perform various assignments for future projects. Essentially, these contracts are approved without any pre-determination of the exact nature of projects to be performed, their estimated costs and their target schedules.

For certain open contracts (see Appendix E), authorities also approve overall expenditures (i.e. the contract value plus net taxes and any applicable incidental expenses). This scenario provides the business units with a budget that is equivalent to the contract value when engagements are assigned to the selected firms. As soon as this type of contract is awarded, the corresponding funds are allocated in the SIMON accounting system as a single purchase order with a value equivalent to that of the contract. The authorization rules are those applicable when contracts are awarded (see Appendix D).

In the case of another type of open contracts that are referred to as master contracts (see Appendix E), authorities enable civil servants to approve expenditures pursuant to the *By-law Concerning the Delegation of Powers to Officers and Employees* (RCE 02-004, section 27). When needs arise (see Appendix D), funds are allocated in the accounting system as multiple purchase orders.

Regardless of any particularities concerning the appropriate authority to approve expenses associated with open contracts and the exact time when the related funds are allocated in the accounting system, business units are required to exert strict control over the use of these contracted amounts through an official assignment authorization process. Among others, this process should entail filing a written service request with the selected service provider outlining the predetermined requirements that need to be met. Subsequently, the corresponding formal proposal should be compared with the cost estimates to verify its reasonableness. Any variation should be analyzed and actions should be initiated if any discrepancies are discovered that exceed the acceptable threshold prior to its acceptance. Finally, a written assignment authorization should be transmitted to the service provider to confirm the nature, estimated costs and target schedule of its assignment. This authorization process should confirm the allocation of a budget that is sufficient to cover the assignment.

During our audit, we selected nine assignments among the five open contracts within our sample group in order to determine whether there was a well-structured assignment authorization process and subsequent follow-up on the use of the funds allocated to these contracts.

Only one of the five open contracts under audit was a master contract (see Appendix A – sample item 9) that was subject to the authorization rules under article 27 of the by-law respecting the delegation of powers (RCE 02-004) (see Appendix D). As for the other four open contracts (see Appendix A – sample items 7, 8, 10 and 11), engagements with the selected firms were authorized following internal administrative rules as adopted by the business units concerned.

FINDING

We observed that three of the five cases (see Appendix A – sample items 9, 10 and 11) incorporated a process to authorize assignments and related expenses.

Once the official designated by the business unit approved the service request, it was sent to the selected firm. According to the information we obtained, business units relied primarily on acquired knowledge and past experience to assess the reasonableness of written proposals from these firms. Any proposal that was overpriced led to discussions with the firm in an attempt to negotiate an agreement. Very few service proposals were refused outright.

FINDING

In addition, our audit did not reveal any evidence supporting the implementation of this reasonableness analysis.

When a proposal was deemed acceptable and it was demonstrated that the funds provided for in the contract were available, the proposal was generally approved in writing by an official and the budget monitoring spreadsheet was updated accordingly.

Our audit also addressed the authority level required to approve engagements assigned to selected firms under open contracts. In the case of the only master contract within our sample (see Appendix A – sample item 9), assignments were authorized in compliance with section 27 of the *By-law Concerning the Delegation of Powers to Officers and Employees* (see Appendix D). This particular section stipulates that an officer from any level (A, B, C, D or E) is generally allowed to authorize assignment-related expenses up to the maximum allocated budget and, consequently, to the total contract value.

FINDING

In other words, these officers have more signing authority than those responsible for awarding project-specific professional service contracts pursuant to section 22 of that same by-law (see Appendix D). Just prior to the completion of our audit, this situation was changed when the executive committee amended section 27 of that by-law on November 25th 2009, which set a maximum limit of \$50,000 for the authorization of professional service assignments under master contracts.

FINDING

As for the authorization of engagements assigned under the other two non-master open contracts (see Appendix A – sample items 10 and 11), we did not find any internal written rules governing authority levels according to the value of assignments.

In the first case, we noticed that the assignment authorization rules within the Direction de la production de l'eau potable of the SITE were revised during our audit to ensure that any assignment (regardless of its value) was to be approved from now on by the project leader, the engineering team leader, the section head, the division head and even the director (see Appendix A – sample item 10). Under the previous rules, only the engineering team leader overseeing the contract management was responsible for authorizing engagements assigned to the selected firms. In the second case (i.e. sample item 11), which involved two different administrative departments, we discovered that all assignments (regardless of their value) were approved by both the designated project leader from the Direction de la réalisation des travaux of the SITE and the section head from the Direction des grands parcs de la nature en ville of the SDCQMVDE.

FINDING

Essentially, authorization rules vary from one business unit to the next, even for the same category of open contracts. To minimize the risk of assignments being approved by individuals without the proper authority, we believe that standard rules should be adopted to establish the applicable threshold for authorizing expenditures, whether or not they fall under master contracts.

FINDING

As for the other two open contracts that we reviewed (see Appendix A – sample items 7, 8), there was no evidence of any formal process governing the authorization of assignments and related expenditures.

These contracts were managed jointly by two administrative departments, one of which was overseeing the budget and the definition of work to be performed while the other was primarily responsible for assigning and managing engagements. According to the information we obtained, these engagements were assigned to the selected firms over the phone without neither any written proposals from them nor the formal authorization of the business unit responsible for

budget matters. The latter never received the spreadsheet that outlined the use of budget funds. It was only informed of assignment expenditures when the invoices were recorded in the accounting system.

FINDING

We believe that the lack of any written proposals and documented cost estimates is not conducive to demonstrating the reasonableness of the proposed assignments. In addition, the business unit responsible for budget matters never received any information on the value of the engagements assigned to the selected firms, thereby making it difficult to monitor the use of funds within the available budget.

In our opinion, it is paramount to obtain authorization for every assignment and to control the use of contract funds in order to prevent firms from maximizing their assignment fees and to ensure the proper use of budgetary funds. This would also help monitor the costs and schedules of services being rendered.

3.3.B. Recommendations

To promote stricter control and more transparency over the use of contract funds, we recommend that the Direction générale establish an administrative framework to ensure that:

- **the selected firms receive formal service requests;**
- **these firms submit written proposals;**
- **submitted proposals are compared with the initial cost estimates for professional fees and comparison results are fully documented;**
- **any required actions are undertaken when the submitted proposals and the cost estimates for professional fees vary beyond the acceptable threshold;**
- **only individuals with the proper level of authority approve assignments and related expenditures according to their maximum allowable value.**

3.4. CONTRACT MONITORING

Business units responsible for the budget allocated to contracts must have the organizational structure and monitoring mechanisms needed to oversee the schedules and services rendered under assignments performed by external firms. This monitoring helps ensure compliance with the professional service agreements executed between the parties.

During the examination of the contracts within our sample, our first step was to determine whether the sharing of roles and responsibilities (including the segregation of duties) was clearly defined and properly implemented by the different contract management stakeholders. We subsequently reviewed various elements, including the monitoring of services rendered, the controls for validating the accuracy of the costs incurred by the City and the mechanisms used to track their evolution. Finally, we observed the approach followed to monitor the target schedules.

3.4.1. SHARING OF ROLES AND RESPONSIBILITIES

3.4.1.A. Background and Findings

The sharing of roles and responsibilities along with the clear segregation of duties are crucial in ensuring the proper workflow for professional service contracts. From an organizational standpoint, this element consists in:

- appointing an internal project leader who will ensure proper workflow, monitor the services rendered, their costs and their schedule as well as issue status reports;
- achieving an adequate segregation of duties by designating individuals to administrative tasks such as the authorization of invoices and other tasks pertaining to the City's SIMON management information system (MIS), including the creation and recording of purchase orders as well as the entry of invoices into the system for payment;
- entering into a professional service agreement with the contractor to specify its official role and obligations for the execution of the assignment.

We noticed that a city employee was designated to monitor every awarded contract within our sample, including the few engagements assigned under open contracts. According to our observations, this individual was generally appointed as project leader. In addition to being a liaison officer between the City and the designated contractor representatives, this person ensured proper workflow and the monitoring of costs, schedules and deliverables.

We also observed that separate employees were assigned to more administrative contract management tasks. Our review focused primarily on the creation and authorization of purchase orders in the SIMON system, the verification of invoices, their subsequent authorization by a manager with the appropriate authority level, their recording in the system and their payment. **For all of the contracts we reviewed, the segregation of tasks appeared to be adequate.**

In another vein, we reviewed the professional service agreements and their appendices to ascertain the sharing of roles and responsibilities between the parties. Our review raised questions about the roles and responsibilities assigned to the selected firms.

FINDING

In our opinion, some of the responsibilities assigned to the selected firms significantly limit the City's ability to supervise its projects and help in-house resources acquire further know-how.

FINDING

For instance, we noticed that the firms selected under certain contracts (see Appendix A – sample items 2, 4, 5 and 6) were assigned tasks such as preparing work cost estimates, participating in the tender preparation (e.g., drafting the specifications) and bid solicitation, evaluating bids and ultimately recommending a particular contractor.

Another contract was concerned with retaining the services of a project manager to supervise the rehabilitation of a municipal building on behalf of the City (see Appendix A – sample item 3). In addition to serving as liaison officer between the City and external stakeholders (e.g., architects and engineers), this individual was responsible for planning, coordinating, controlling and supervising the project execution phase, including the deadlines, the programs and the actual job site. Although this project manager was reporting to a designated SMVTP representative, we were puzzled by this approach.

According to the managers we interviewed, various long-term trends have produced a shortage of qualified staff within business units, thereby making it difficult for them to manage their projects internally. These trends include the creation of the new amalgamated city following the 2002 municipal mergers and the subsequent municipal reorganization, which partly contributed to the disintegration of many expert teams within the previous administrative departments of the City of Montréal. Our interview subjects also blamed a 2006 decision from the City's executive committee to order a hiring freeze in boroughs and central departments as a result of RASOP, a vast review of activities, services, operations and programs undertaken at that time. In general, they are of the opinion that this decision was a major contributor to the current state of affairs. We understand these allegations.

FINDING

However, we believe that having external firms fulfil the roles and responsibilities of the City increases its risk of overpaying for the goods and services requested. Since professional fees are often calculated as a percentage of the estimated project costs, the selected firms might be tempted to propose more expansive project scenarios or prepare estimates that are not necessarily cost-effective for the City (by proposing to use, for example, pricier materials).

FINDING

In this respect, we believe that all of the City's business units should review their practices for assigning responsibilities to external firms in order to regain control. In particular, during the preparation of cost estimates, we advocate that City stakeholders should have the option to call upon an independent team of cost estimate experts whenever it is warranted.

FINDING

In addition, we noticed that most engineering and architecture firms that were retained to prepare drawings and specifications were later asked to supervise subsequent work related to these drawings and specifications.

This practice might seem logical as these firms have in-depth knowledge of the work to be done. However, we wonder whether the City would benefit from dissociating these two tasks and assigning them to different firms.

FINDING

Finally, our audit revealed that professional service agreements do not generally comprise a clause requiring selected firms to submit regular progress reports to City representatives. This shortcoming deprives municipal authorities of valuable insight into the status of activities being performed and severely limits their ability to determine whether projects are on time and on budget.

Although city-appointed project leaders remain ultimately accountable for all supervision aspects, these reports would be extremely useful and relevant to them. In addition to promoting tighter supervision, this measure would provide additional information to help project leaders fulfil their

responsibilities in ensuring that assignments are successfully conducted and any corrective actions are taken in the event that projects are not unfolding as planned.

3.4.1.B. Recommendations

In order for the City to exercise full control over its projects, we recommend that the Direction générale:

- **analyze and reconsider current practices for assigning roles and responsibilities to external firms, thereby ensuring that key tasks are entrusted with city representatives;**
- **contemplate the possibility of assembling a team of independent cost estimate experts to make sure that the City always obtains the best prices for requested services.**

We recommend that the Direction générale examine other scenarios for awarding project supervision contracts and assess their benefits in light of the City's objectives.

To help monitor engagements assigned to external firms more closely, we recommend that the Direction générale amend professional service agreements with a clause requiring selected firms to submit regular progress reports to City representatives. These reports would give insight into the status of activities being performed and help determine whether projects are on time and on budget.

3.4.2. MONITORING OF SERVICE PROVISION

3.4.2.A. Background and Findings

Professional services must be monitored to ensure that they are satisfactorily provided and that deliverables are produced in compliance with the corresponding professional service agreements.

The services rendered under the contracts within our sample consisted primarily in conducting feasibility studies, preparing drawings and specifications for calls for tenders, drafting tender documents, analyzing bids, supervising job sites or providing technical expertise during projects. They lead to various deliverables, including reports, drafts or final drawings and specifications as

well as certificates confirming the completion of the work in compliance with the laws, the codes and the regulations in force and the readiness of the structure for its intended use.

Our audit focused on the mechanisms used to ensure that the selected firms performed the services for which they were retained in accordance with their contract.

In general, we noticed follow-up mechanisms to ensure that professional services were provided as planned. Our interview subjects indicated that they were in constant communication with the consulting firms to follow up on their services or comment on their deliverables. We found e-mails between city-appointed project leaders and those of the consulting firms to corroborate these interactions. We were also informed that city-appointed project leaders participated in the coordination or site meetings to ensure that work was being performed as planned. To this effect, most consulting firms provided the minutes of meetings that listed city-appointed project leaders in attendance.

FINDING

However, for sample item 6 (see Appendix A), we noticed that some meeting minutes had not been forwarded to the City despite a provision to this effect in the professional service agreement. In addition, our review of sample item 1 (see Appendix A) revealed that meeting minutes were never requested from the firm since there was no provision for this in the agreement.

In our opinion, it is important that the City receives all the minutes of meetings to substantiate its monitoring activities, the type of required services agreed upon by the parties and decisions that were made. In the event that a dispute arises or that rendered services are deemed to be non-compliant, the City could refer to this evidence, thus the importance of keeping it on file. To this effect, all professional service agreements should include a provision for the systematic reporting of meeting minutes by the selected firms.

According to the information we obtained, the monitoring of professional site supervision services entails impromptu site inspections from city-appointed project leaders as representatives of the “project owner”. During these visits, they ensure that contractors are on-site and that any major work such as the pouring of concrete is performed in accordance with the specifications. They are obligated to report any irregularity or non-compliance to the consulting firm in charge of site supervision.

FINDING

Our audit of contracts involving supervision services from consulting firms revealed that project leaders did not consistently report their observations in a log to provide evidence of their monitoring activities.

For the two contracts pertaining to the Direction des grands parcs de la nature en ville of the SDCQMVDE (see Appendix A – sample items 4 and 6), we found a log with the observations of the technical officer assigned to the supervision of active job sites. However, there was no log for the other contracts that we reviewed (see Appendix A – sample items 7 and 8).

FINDING

In addition, our review of professional service agreements indicated that there was no standard provision for the filing of site supervision reports from the consulting firms.

In some cases, they had to produce weekly reports. In others, they only produced reports upon request from the city-appointed representatives.

For the contracts pertaining to the Direction des grands parcs de la nature en ville of the SDCQMVDE (see Appendix A – sample items 4 and 6), we noticed that daily supervision reports were produced by the consulting firm and forwarded regularly to the City throughout the execution of the work. According to the information we obtained, these reports were kept on file in the event of any dispute, but were never used to monitor the supervision of services being provided.

FINDING

As for the other contracts involving supervision services (see Appendix A – sample items 2, 5, 7, 8, 9, 10 and 11), our audit revealed that the selected firms were not always required to submit supervision reports.

However, we believe that these reports along with impromptu site visits would have allowed for the effective monitoring of the services provided by these firms while pressuring them to fulfil their responsibilities adequately. In fact, these types of reports could be used, among others, to corroborate the professional fees charged by the firms.

Most professional service agreements stipulate that city directors or their authorized representatives must approve all deliverables. Some agreements explicitly state that this authorization must be provided in writing, while others are silent on this issue.

FINDING

In a nutshell, acceptance requirements are not clearly defined from one agreement to the next.

The minutes of coordination meetings indicate that deliverables are approved during these sessions. However, we believe that deliverables should be subject to a formal approval process providing evidence that they meet the City's expectations. To this end, we think that guidelines should be established to explain the purpose and format of this formal authorization process.

Finally, we consider that the services provided by external firms should be monitored to determine whether work is being performed as planned and certify that deliverables meet the City's expectations. This monitoring process can also be viewed as a way to control costs when invoices are received. To standardize practices and make project leaders accountable, we believe that there should be guidelines on the monitoring of professional services and the approval of deliverables.

3.4.2.B. Recommendations

To ascertain that services are being provided as planned and to help monitor them more closely, we recommend that the Direction générale provide central departments with guidelines to:

- **specify the responsibilities of project leaders for monitoring compliance with professional service agreements and keeping supporting evidence to that effect;**
- **refine the acceptance requirements for deliverables across all professional service agreements;**
- **standardize the production of minutes for coordination or site meetings and specify the frequency of site supervision reports from consulting firms through professional service agreements.**

3.4.3. COST TRACKING

It is important to track the costs of any awarded contract to ensure its compliance with the initial estimates and the timely detection of budget overruns. Cost tracking is also helpful in verifying the accuracy of any amount charged for services rendered under professional service agreements.

During our audit, we examined whether controls were applied to ensure that only services rendered were actually billed in accordance with the quoted prices. We also reviewed the cost tracking mechanisms or tools available to project leaders and how they were utilized.

3.4.3.1. COST CONTROLS

3.4.3.1.A. Background and Findings

Under contracts awarded to selected service providers, the City agrees to pay their professional fees in exchange for services rendered and the fulfillment of their obligations. Professional fees can be calculated in one of three ways, i.e. through a percentage-based, an hourly or a fixed-price method.

When using the percentage method, professional fees are calculated as a percentage of the estimated or actual work costs depending on the current stage of the project (e.g., planning or construction). The hourly method consists in paying fees based on the actual number of hours worked by the professionals on assignment. Finally, the fixed-price method entails the payment of a pre-determined amount to professionals.

Regardless of the billing method agreed upon by the parties, business units must track the fees charged by professional firms to verify their accuracy. Essentially, project leaders must apply controls on various aspects that are inherent in each of the billing methods to ensure that these fees correspond to the actual services rendered during the project for the period covered by the professional service agreement in accordance with its provisions.

For professional services that are billed using the percentage method, controls verify elements such as the percentage of the cost of the work stipulated in the professional service agreement, the estimated or actual work cost and the degree of completion of the work in the execution stage.

Controls over professional services billed according to the hourly method involve:

- the name of the individuals who provided services to ensure that they were part of the original team proposed by the firm or that any team member substitution was pre-authorized;
- the hourly rate of these individuals to ensure that it matches the rate quoted by the firm;
- the number of hours billed to ensure that they were dedicated to services provided as part of the project.

Finally, controls pertaining to the fixed-price billing method focus primarily in assessing the reasonableness of the fees that were charged versus the progress of the work to ensure that the City only pays for the services it actually received.

Whatever billing method is chosen, project leaders must apply all the required controls to protect the City against potential errors or overbilling.

As part of our audit, we assessed whether controls were implemented to ensure service billing accuracy and compliance with fee-related provisions under professional service agreements.

FINDING

The invoices we selected at random showed evidence of having been approved by project leaders and designated officials. Our review of invoices prepared using either the percentage or fixed-price method did not reveal any errors. However, we noticed that controls over the hourly billing method were not applied as thoroughly by all project leaders, whether or not they worked within the same business unit.

Although we do not intend to generalize, here are some shortcomings we observed:

- The individual service providers whose names appeared on invoices were not reconciled systematically with the team members outlined in the corresponding winning bid even though that bid had been selected based on the proposed appointment of particular individuals and their corresponding billing rates subsequent to a formal call for tenders (see Appendix A – sample items 7 and 8);
- We did not always find written evidence that designated city representatives had pre-authorized team member substitutions (see Appendix A – sample items 5, 7, 8, 10 and 11). Nonetheless, there were several cases where the name of individuals who were not part of the proposed team from the winning bid appeared on invoices;

- Some team members were billed at an hourly rate that was different from the one indicated in the winning bid (see Appendix A – sample item 1). In this case, their services were billed at an average rate rather than the prescribed hourly rate;
- Occasionally, the billing period preceded the closing date of the professional service agreement or the assignment start date even though the agreement specifically stated that the firm could not undertake any work without prior written authorization (see Appendix A – sample items 3 and 9).

In addition to those shortcomings, the City faces increased risks of overbilling. In fact, managers and project leaders admitted to us that they have difficulty monitoring the actual hours worked by external employees. Under these circumstances, we believe that measures must be taken to strengthen controls and standardize practices.

Although invoices had evidently been approved by the appropriate authorities (i.e. project leaders, engineering team leaders, section heads and division heads) for payment processing in the SIMON system, we question the relevance of this particular authorization in light of our findings.

In this respect, the Service des finances released in October 2009 a procedure entitled *[Translation] Receipt of Goods and Services* which states that individuals receiving goods or services must ascertain their quality and quantity.

To promote consistent practices and verify more thoroughly the validity of fees charged by professional firms, this procedure or any other guidelines should provide detailed explanations on how to perform this particular assessment, including the type of controls to be implemented and their objectives. Individuals who approve invoices could even be required to make a statement to the effect that the services were actually provided in compliance with the applicable professional service agreement.

3.4.3.1.B. Recommendations

To facilitate the assessment of professional services provided to the City in terms of quality and quantity and minimize the risks of errors or overbilling, we recommend that the Direction générale draft guidelines to:

- specify the tasks to be performed by project leaders and other managers prior to authorizing professional fee invoices;
- remind business units that work can never begin before a professional service agreement is signed with the selected firm or its assignments are duly authorized.

3.4.3.2. TRACKING MECHANISMS

3.4.3.2.A. Background and Findings

While the SIMON accounting system is used to record purchase orders, invoices and payments, contract costs are actually tracked through other applications.

In fact, we noticed that most project leaders tracked costs by recording received invoices in Excel spreadsheets or departmental applications such as the SIGI integrated property management system from the SMVTP. They then used this data to compare actual costs with budgeted costs.

FINDING

For two of the contracts we reviewed (see Appendix A – sample items 7 and 8), costs were not tracked in a manner that would guarantee the performance of engagements within the allocated budget by the winning firm.

These two open contracts primarily involved work supervision services for two administrative units within the same department. We noticed that city-appointed project leaders approved the invoices of these consulting firms even though no tracking tool was used to verify the costs associated with their assignments. However, the administrative unit overseeing the budget produced a spreadsheet that compiled all of the invoices recorded in the accounting system for each assignment. While this spreadsheet provided information on the costs incurred up to date, there was no attempt to reconcile this data with the prices quoted by these firms. This situation arose because the corresponding engagements had been assigned to them verbally by the other administrative unit involved. However, the total costs compiled in the spreadsheet were reconciled with the overall budget allocated in the contract.

FINDING

Although the administrative unit overseeing the budget compiled actual invoices, the current practice increases the risks of incurring costs that do not pertain to the assigned engagements and using open-contract budgets for unintended purposes such as covering cost overruns from other projects.

3.4.3.2.B. Recommendations

To promote better cost tracking and reporting, we recommend that the Direction générale provide guidelines for implementing mechanisms to support the ongoing reconciliation of actual costs with those approved for each engagement assigned to the selected firms.

3.4.4. PROGRESS TRACKING

3.4.4.A. Background and Findings

Schedule tracking mechanisms must be implemented to ensure that contracted work is performed within the allotted timeframe. Occasionally, there could be circumstances that delay the beginning of work as scheduled or result in the slippage of tasks (e.g., the postponing of the job site start date, the addition of new requirements or work stoppages). Such tools would allow stakeholders to promptly detect any task that may be delayed and avoid potential cost overruns due to unforeseen events. These tools should be used not only to document and monitor deadlines, but also to benchmark the actual status of projects against their anticipated progress. Ultimately, they should support stakeholders in making timely decisions regarding any potential corrective measures and facilitate the production of overall status reports.

Our audit focused on current progress tracking practices and tools.

FINDING

For most contracts, it appeared extremely difficult, if not impossible, to determine precisely whether deadlines were met.

We noticed several open contract engagements that were assigned verbally without any written service proposal from the selected firm. In other cases, the firm responded to a request for services with a written service proposal that did not, however, address scheduling issues.

FINDING

Without a formally agreed upon work schedule drafted by the parties, one can rightfully assume that there would be no way to monitor progress thoroughly. In addition, it could become very difficult to enforce the professional service agreement in the event that the selected firm does not fulfil its responsibilities with due diligence and fails to meet its deadlines.

FINDING

As for assignments (under project-specific or open contracts) that included a service agreement complete with a work schedule, our review of the available documentation and the information we obtained from city-appointed project leaders indicated that progress is rarely tracked using a computerized tool such as MS Project.

Yet, using this type of tool would have provided a clear picture of the situation by comparing the planned start and end dates of every assignment task with their actual start and completion dates. **Instead, assignment progress is tracked through e-mails or verbally during regular site or coordination meetings that are attended by representatives from the City and the consulting firm involved as well as any other required contractors. City representatives also perform site visits when it comes to professional services that involve work supervision.**

We believe that progress tracking is essential. It would allow city-appointed project leaders to become aware of issues with ongoing tasks and enable them to take timely action to facilitate their execution. In order to benefit from more structured and transparent progress tracking, we also promote the use of standardized tools to:

- ascertain the status of every assignment task against its anticipated progress to ensure that deadlines are met or help pinpoint the cause of any delay;
- provide project leaders who often have to monitor an overwhelming number of projects with a reliable tickler file;
- facilitate the transfer of knowledge on assignment status in the event of unforeseen changes in the composition of the monitoring staff;
- produce regular work status reports while facilitating the planning and execution of any other required tasks.

FINDING

Although the various business units that we visited did not systematically use computerized project monitoring tools, we noticed that some administrative departments have initiated steps in that direction.

The subjects that we interviewed mentioned the Direction de la production de l'eau potable as an example. In 2008, it required its project leaders to use the MS Project application to track the progress of projects under their responsibility. To further assist them with this task, an engineer specialized in project management joined the team to develop decision support and project monitoring tools.

3.4.4.B. Recommendations

To help monitor assignments more thoroughly, to simplify the production of status reports and to alleviate the impact of missing target deadlines, we recommend that the Direction générale develop and disseminate guidelines to:

- **remind stakeholders of the importance of entering into formal, documented agreements with external firms regarding their deadlines for the timely completion of any engagements assigned to them;**
- **specify the computerized status tracking tool that must be used by all city departments.**

3.5. STATUS REPORTING

3.5.A. Background and Findings

Reporting mechanisms are essential in keeping managers abreast of the progress of work performed under professional service contracts. To this end, management reports must be produced regularly and provide all the information needed to help make decisions on measures that support the target objectives.

During our audit, we reviewed the mechanisms implemented to report the progress of any work conducted under these contracts.

Project leaders are appointed by business units to monitor contracts awarded to external firms. Their responsibilities include tracking the costs, deadlines and deliverables stipulated in the professional service agreements.

FINDING

For 3 of the 11 contracts within our sample, we noticed that mechanisms were used to help track and report the progress of contract-related work.

With respect to sample item 1 (see Appendix A), we observed that the regular summary tables produced by the retained consultant assisted the project leader in reporting the progress of costs and deliverables associated with the related professional services. However, this information was never reconciled with the planned schedule. For sample items 5 and 10 (see Appendix A), contracts were monitored using a project planning spreadsheet that tracked all of the ongoing projects for the Direction de la production de l'eau potable under its three-year capital program. This spreadsheet compared budgeted costs with actual ones for professional services and overall projects. It also allowed for the monitoring of key project milestones, but could not be used for reporting the status of professional service contracts.

FINDING

As for the other contracts we reviewed, there was no evidence of any tracking report or log that outlined the overall progress of work assigned under professional service contracts.

FINDING

According to the managers and project leaders we interviewed, those business units that implemented tracking tools with reporting functionalities tended to communicate information on the status and performance of projects informally during regular meetings between the various stakeholders.

In order to provide managers with an overview of the progress of contracted work and allow them to better assess whether work is being performed on time and on budget, we believe that city-appointed project leaders should produce regular status reports (or logs) for each project under their responsibility. These reports could include information on:

- the actual costs in comparison with the allocated budget;
- the meeting of deadlines versus the original or revised schedule;
- the analysis of cost or schedule discrepancies;
- the actual work progress (i.e. the percentage of work completed) from cost and timetable perspectives;

- the main issues, risks or problems that could impact the costs, deadlines or deliverables;
- the alternatives being considered to alleviate these issues;
- the overall project status (e.g., “under control”, “ahead of schedule” or “critical”).

In addition, such information would allow managers to take timely action and make any required decisions in the event that the status reveals possible cost or schedule overruns.

Some of the managers we met during our audit indicated that steps have been taken towards the future implementation of status reports. For instance, the Direction des transports du SITE has undertaken measures to this effect.

For its part, the Direction des grands parcs de la nature en ville of the SDCQMVDE demonstrated that one of the business unit’s methodologies incorporated a status report template. Although the managers we met intended to promote the use of the methodological tools available in the short term, the status report template was not employed for any of the contracts we reviewed.

FINDING

We believe that progress reports should be prepared and submitted on a timely basis to elected officials for all major projects and contracts or those that constitute priorities for municipal authorities in order to keep them abreast of the status of ongoing projects.

3.5.B. Recommendations

To help make more timely and informed decisions, we recommend that the Direction générale develop and disseminate reporting guidelines for project leaders assigned to contract monitoring and require that they produce regular status reports on specific elements, including:

- the actual costs in comparison with the allocated budget;
- the meeting of deadlines versus the original or revised schedule;
- the analysis of cost or schedule discrepancies;
- the progress of work (i.e. the percentage of work completed) from a cost and timetable perspective;
- the main issues, risks or problems that could impact the costs, deadlines or deliverables;
- the alternatives being considered to alleviate these issues;
- the overall project status (e.g., “under control”, “ahead of schedule” or “critical”).

We also recommend that the Direction générale supplement these guidelines with reporting mechanisms to keep elected officials abreast of the status of prioritized or major projects and contracts.

Action Plan for the Business Unit Involved

[Translation] “Many of the issues raised in this report will be addressed in newly drafted or implemented documents, including specifically the:

- [Translation] Project and Program Management Framework;
- [Translation] Action Plan and Follow-up on the Report Concerning the Water Meters in IBIs and the Optimization of the Water System;
- [Translation] Guidelines for Drafting Executive Summaries;
- [Translation] Reference Guide for Awarding and Managing Professional Service Contracts.

Subsequent to your report on the management of professional service contracts, we referred to these documents as required for the purpose of shaping our recommended action plan into a coherent work.

As our action plan progresses, we will make every effort to determine the best way to deal with the more specific professional service contract management issues that were raised in this audit report.”

APPENDIX A – SUMMARY OF THE CONTRACTS REVIEWED DURING THE AUDIT

Table 1—Project-Specific Contracts¹ (six in total)

Sample item number	Type of professional services	Business unit	Estimated costs of professional fees	Winning bid	Variation between the estimated costs and the winning bid	Additional funding allocated)	Project costs		
							Estimated costs ²	Winning bid	Variation between the estimated costs and the winning bid
1	Professional services for assessing the quality of the City's real estate portfolio.	SMVTP (A)	\$1,100,000	\$466,504	\$633,496 -58%	\$46,650 +10%	N/A ³	N/A	N/A
2	Professional services in architecture as well as electrical, mechanical and structural engineering for upgrading the swimming pool and the pool house at Jarry park.	SMVTP (B)	\$75,000	\$90,000	\$15,000 +20%	\$100,000 +110%	\$600,000	\$1,650,000	\$1,050,000 +175%
3	Management of various realty projects pertaining to the city hall building.	SMVTP (B)	\$400,000	\$450,000	\$50,000 +13%	–	\$18,000,000	\$10,670,120	-\$7,329,880 -41%
4	Professional architecture and engineering services for the design, the production of drawings and specifications and the supervision of work pertaining to the development of trails, hydrologic structures and cliffs at the Saint Michel Environmental Complex.	SDCQMVDE (C)	\$125,000	\$337,170	\$212,170 +169%	\$25,000 +7%	\$260,000	\$1,126,269	\$866,269 +333%

¹ This data represents the situation that we observed during our spring 2009 audit.

² These project cost estimates were established during the calls for tenders for professional services.

³ Not applicable.

V. Information Technology (IT) and Value-for-Money Audit
V.3. Management of Professional Service Contracts

Sample item number	Type of professional services	Business unit	Estimated costs of professional fees	Winning bid	Variation between the estimated costs and the winning bid	Additional funding allocated)	Project costs		
							Estimated costs ²	Winning bid	Variation between the estimated costs and the winning bid
5	Professional engineering services for the preparation of drawings and specifications pertaining to the installation of an electrical utility line at the McTavish pumping station and the supervision of work for securing the power supply at the Atwater and Charles-J.-Des Bailleurs drinking water plants.	SITE (D)	\$1,165,000	\$1,130,521	\$34,479 -3%	\$480,042 42%	\$10,025,000	\$22,355,817	\$12,330,817 +123%
6	Professional architecture services for the design, the production of drawings and specifications and the supervision of work pertaining to the development of trails at Maisonneuve park (phase 2).	SDCQMVDE (C)	\$50,000	\$62,382	\$12,382 +25%	–	\$400,000	\$494,532	\$94,532 +24%

Table 2—Open Contracts⁴ (five in total)

Sample item number	Type of professional services	Business unit	Estimated costs of professional fees	Winning bid	Variation between the estimated costs and the winning bid	Additional funding allocated
7	Professional engineering services for the preparation of drawings and specifications as well as the supervision of work pertaining to the rehabilitation, reconstruction and development of bridges and tunnels.	SITE (E)	\$625,000	\$625,000	–	\$275,000 +44%
8	Professional engineering services for the preparation of drawings and specifications as well as the supervision of work pertaining to the rehabilitation, reconstruction and development of bridges and tunnels.	SITE (E)	\$1,390,000	\$1,390,000	–	–
9	(Master contract) Professional engineering services for the preparation of drawings and specifications as well as the supervision of work pertaining to the rehabilitation, reconstruction and development of bridges and tunnels.	SITE (F)	\$1,820,000	\$1,820,000	–	–
10	Professional engineering services for the preparation of drawings and specifications as well as the supervision of work pertaining to the construction, the replacement or the rehabilitation of main water lines, treatment plants, water tanks and drinking water pumping stations.	SITE (D)	\$3,000,000	\$3,000,000	–	–
11	Professional engineering services for geotechnical investigations and environmental site assessments, for the preparation of drawings and specifications as well as the supervision of environmental remediation work as part of development projects for large Montréal parks.	SITE and SDCQMVDE (G)	\$375,000	\$375,000	–	–

- (A) Direction stratégies et transactions immobilières
- (B) Direction stratégies et transactions immobilières and Direction des immeubles
- (C) Direction des grands parcs de la nature en ville
- (D) Direction de la production de l'eau potable
- (E) Direction des transports and Direction de la réalisation des travaux
- (F) Direction des transports
- (G) Direction des grands parcs de la nature en ville and Direction de la réalisation des travaux

⁴ This data represents the situation that we observed during our spring 2009 audit.

APPENDIX B – RULES FOR AWARDING PROFESSIONAL SERVICE CONTRACTS

**Table 3—General Rules for Awarding Professional Service Contracts
under Section 573 of the *Cities and Towns Act***

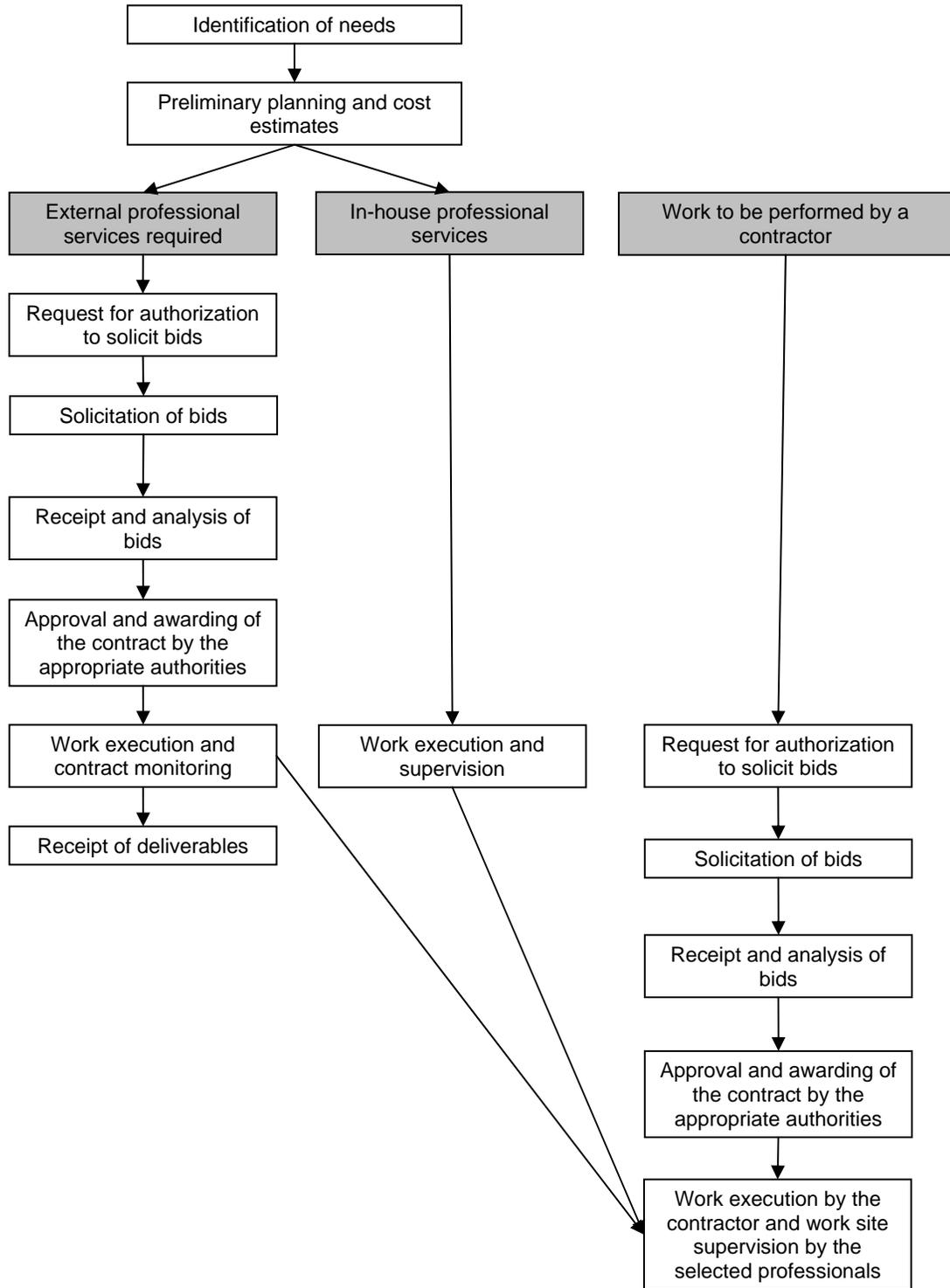
Type of contract	Contract value		
	From \$0.01 to \$24,999.99	From \$25,000.00 to \$99,999.99	\$100,000.00 or more
Provision of specialized professional services (architects, land surveyors, chartered accountants, engineers)	By private agreement	Double invitation (8-day timeframe)	Call for public tenders (15-day timeframe)
Provision of non-specialized professional services	By private agreement	Double invitation (8-day timeframe)	Call for public tenders (15-day timeframe)

Since January 1st 2002, a two-envelope bid weighting and evaluation system is mandatory for all requests for professional services (by invitation or call for public tenders).

This system is summarized below:

- The requisitioner (i.e. the City) must determine a minimum of four evaluation criteria in addition to price.
- Each of the criteria other than price must be assigned a maximum of 30 points out of a total of 100.
- Tender documents must specify all the requirements and criteria that will be used to evaluate the bids as well as the bid weighting and evaluation methods.
- A selection committee comprised of a minimum of three members must be created.
- Each committee member must evaluate the various tenders without knowing their price, which is kept in a separate, sealed envelope.
- An interim score is established for each tender prior to opening the second envelope with the price information.
- Envelopes containing the quoted price are only opened for those tenders who obtained an interim score of at least 70.
- Envelopes containing the quoted price are returned unopened to those tenders who did not obtain the minimal interim score of 70.
- The final score for each tender who obtained an interim score of at least 70 is calculated using the formula stipulated in the Act.
- The tender with the best final score is recommended to the authorities for approval.

APPENDIX C – STEPS IN MANAGING PROFESSIONAL ARCHITECTURE OR ENGINEERING SERVICE CONTRACTS



APPENDIX D – APPROVAL AND AUTHORIZATION RULES

Table 4—Rules for the Authorization of Contracts and Related Expenditures Related to Central Departments

Authorities	Approval of all types of contracts
	Expenditure authorization
City council or agglomeration council ¹	Over \$500,000 Over \$100,000 with one compliant tender only
Executive committee ¹	Less than \$500,000 Less than \$100,000 with one compliant tender only
Delegated officers (section 22)	Approval of professional service contracts
Director general	Less than \$50,000 ^{2,3}
Level A officer	Less than \$25,000 ²
Level B officer	Less than \$15,000 ²
Level C officer	Less than \$5,000 ²

¹ By virtue of decree 1229-2005 adopted on December 8th 2005, all agglomeration powers under the Charter of Ville de Montréal are exercised by the executive committee with a few exceptions, including the awarding of contracts valued at \$500,000 or more. Following a decision from the municipal authorities in January 2006, this limit also applies to all contracts valued at \$500,000 or more under the jurisdiction of the city council. In other words, non-agglomeration contracts with a value of \$500,000 or more should be approved by the city council, although the executive committee is legally authorized to award these contracts.

² Under section 22 of the *By-law Concerning the Delegation of Powers to Officers and Employees* – RCE 02-004, the executive committee has delegated its powers for awarding professional service contracts and authorizing related expenditures to officers and employees.

³ Pursuant to section 22.1 of the by-law concerning the delegation of powers, the awarding of professional service contracts for the implementation of the new water management program approved by resolution CE03 2407 and, consequently, the authorization of any contract-related expenditures are delegated to the director general when the contract is valued at less than \$100,000.

Remarks: Section 27 of the *By-law Concerning the Delegation of Powers to Officers and Employees* (RCE 02-004) also stipulates that the authorization of service expenditures incurred under a master contract is delegated to the director general or any level A, B, C, D or E officer according to the value of the expenditures as provided in the attached by-law schedule.

At the time of our audit, the maximum limit stipulated in the by-law schedule was “According to budget” in most cases. In practice, this meant that there was no pre-established threshold limit and that individuals with budget responsibilities could authorize expenditures up to the total budget amount. However, the executive committee amended the by-law at its November 25th 2009 meeting to limit the amount of assigned engagements to \$50,000.

APPENDIX E – OPEN CONTRACT MANAGEMENT PROCESS

