Project Audits¹

Date	Audit Name	Findings/Recommendations		Action
•	23rd Ave and Gateway Blvd Interchange Project Review	Rec. 1 - The OCA recommends that the City Manager explore alternate project management delivery strategies to improve the effectiveness of project delivery. This includes: a. Establishing a project management office, b. Developing best practice project management and cost estimating manuals, c. Training in the discipline of project management, d. Defining project appropriate level of planning and engineering standards, e. Appropriate monitoring and sign-off.	Completed 2013	First iteration of a Project Management Office was implemented in 2010. Became known as the Project Management Centre of Excellence (PMCE) in 2016. In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.
		Rec. 2 - The OCA recommends that the City Manager ensures that upon initiation of concept planning, the assigned project manager develop a comprehensive communication plan for all stages of the project to ensure: a. All participants are informed in a timely manner on matters that affect their contribution to project success, and b. If partnerships are used, formal	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.

¹ Office of the City Auditor reporting is available at: https://www.edmonton.ca/city_government/city_organization/oca-reports-master-listing

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		quantitative tools are implemented to evaluate the "health of a partnership" on a regular basis throughout each project.		
		Rec. 3 - The OCA recommends that the City Manager ensure that project managers as "project owners": a. Formally manage key processes, such as road safety audits, risk assessments, etc. to ensure that intended outcomes are complete and accurate, and b. Utilize the City's enterprise risk management process to assess risks not normally associated with the type of project being managed.	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.
		Rec. 4 - The OCA recommends that the City Manager ensure that benefit-cost ratios for planned projects are recalculated when there are significant changes to expected costs and/or benefits prior to awarding construction contracts.	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.

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	Rec. 5 - The OCA recommends that the City Manager ensure that costing models and quality assurance processes for major and/or complex projects are enhanced by: a. Working with the Chief Economist and Materials Management to develop appropriate escalation factors, b. Reengineering cost estimating tools and methodologies to facilitate effective trend analysis, project cost forecasting and cost estimate validation, c. Acquiring cost estimating expertise to ensure cost estimates are as accurate and complete as possible for each phase of a project, d. Incorporating appropriate contingency amounts for both construction and identified risk elements, and e. Developing appropriate quality standards and utilizing sign-offs at the end of each project phase (go/no-go decision points) to reduce the likelihood of rework.	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.

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		Rec. 6 - The OCA recommends that the Chief Financial Officer ensure that the capital priorities planning/budgeting process is adjusted to incorporate the following principles: a. Budgets should reflect current total project cost estimates in forecast year-of- expenditure dollars and include expected cost recoveries, and b. Significant changes to project estimates that occur after budget preparation should be communicated to Council prior to specific budget deliberations and approval.	Completed	Between 2011-2013 various improvements were put into place including Capital and Operating Budget System (COBS), red/yellow/green performance reporting and project information.
		Rec. 7 - The OCA recommends that the City Manager ensure that a corporate process is documented and formalized: a. That sets out the responsibilities of all stakeholders for approval of capital projects and any subsequent changes, and b. That sets out performance reporting requirements that address the needs of all stakeholders and assists Council in maintaining a strategic focus on project outcomes.	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.

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		Rec. 8 - The OCA recommends that the City Manager ensures continuity of project teams assigned to large/complex projects to minimize the risk of knowledge loss. The team comprised of: a. An experienced project manager/owner's representative with sufficient responsibility and authority to effectively and efficiently manage the project, and b. The appropriate number of support staff to satisfy the knowledge area requirements defined by the Project Management Institute.	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.
		Rec. 9 - The OCA recommends that the General Manager of Corporate Services, in consultation with the Transportation Department, review the tendering/contract processes and documents used for large/complex projects to ensure that risks are apportioned appropriately and that best industry practices are incorporated.	Completed 2014	In 2014, the Project Management Directive was put in place that directs staff to follow procurement processes and procedures to support open, fair and transparent procurement
_	Capital Construction Audit - Roads Design and Construction Branch	Rec. 1 - The OCA recommends that the Chief Financial Officer and Treasurer ensure that the enhancement of operating and capital budget systems are included in the scope of the SAP Financial Review.	Completed	In 2013/204 the COBS (Capital and Operating Budget System) was implemented.

Date Audit Name	Findings/Recommendations		Action
	Rec. 2 - The OCA recommends that the Chief Financial Officer and Treasurer review current budgeting practices and agree on roles, responsibilities and processes that ensure: a. Council is provided with accurate information on which to base decisions. b. The budget is maintained in a manner that facilitates effective management oversight.	Completed	Between 2011-2013 various improvements were put into place including Capital and Operating Budget System (COBS), red/yellow/green performance reporting and project information.
	Rec. 3 - The OCA recommends that the Chief Financial Officer and Treasurer ensure that capital project profiles are maintained in a manner that ensures Council and Administration have the information necessary to make informed decisions. This includes: a. Providing complete description of the project scope. b. Documenting reason for subsequent budget requests. c. Identification of total project budget and costs. d. Establishing criteria for the use of composite projects. e. Establishing a process to reduce composite projects when specific projects are initiated and to formally transfer responsibility and accountability. f. Working with the Project Management	Completed	Between 2011-2013 various improvements were put into place including Capital and Operating Budget System (COBS), red/yellow/green performance reporting and project information.

Date	Audit Name	Findings/Recommendations		Action
		Office to align capital budget and project management processes.		
		Rec. 4 - The OCA recommends that the General Manager, Capital Construction Department ensure that the Project Management Office has the responsibility and authority necessary to standardize project management practices across the corporation, (including developing and implementing industry standard performance measures to track project cost, schedule, quality and scope), create an action plan to maximize the benefits of defined processes, and ensure compliance with established project management practices.	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.
		Rec. 5 - The OCA recommends that the Branch Manager, Roads Design and Construction review and monitor internal resource and industry capacity to identify opportunities to build market capacity, ensure the City does not prematurely go to market and to proactively advise Council and other stakeholders on the ability to meet capital budget expectations.	Completed 2013	In 2013, PRMG process requirements were updated to include internal and external resources requirement evaluation to deliver the project to meet approved schedule.

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		Rec. 6 - The OCA recommends that the Director of the Project Management Office establish a quality control process to ensure that quality information is produced at each phase of a project to minimize the risks to project costs and schedule due to scope and contract changes. This includes ensuring that staff and consultants are required to undertake thorough risk assessments, develop appropriate mitigation strategies, and actively monitor and report on risks.	Completed 2013	In 2013, the Project Management Directive and Project Management Reference Guide were put in place for construction projects.
		Rec. 7 - The OCA recommends that the Branch Manager, Roads Design and Construction ensure that all contract change requests are adequately documented and researched prior to approval to maximize the benefits and minimize costs.	Completed 2013	In 2011, implementation of the Professional Services Agreement (PSA) included training on all change requests. In 2013, the implementation of PMRG required project change control on projects.
-	Capital Projects Advisory Assistance - Status Report	Minor recommendations for improvement to the Project Management Reference Guide: a. Full project cost reporting including escalation factors based on the year it is scheduled to be completed. b. Develop guidance on the role the City's project manager is to play c. Enhance meeting minutes to allow effective progress monitoring on critical action items	Complete.	Ongoing edits to PMRG were undertaken. In 2016/2017 the "Role of the Project Manager" initiative was undertaken by the IIS Department to clarify the PM role.

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		d. Appropriate use of contingency funds e. Update PMRG to clarify requirement for full costs to be reported f. Use of EVA for future capital projects		
,	Public Involvement Audit	No recommendations made		Continuous improvement and work on the Public Engagement Policy C593 - redefined the roles the public can have in construction projects: Advise, Refine, Create, Decide
	Proactive Audit Involvement in Capital Projects	No recommendations made		No action required
_	Metro Line LRT Signalling System Audit	Rec. 1 - The OCA recommends that the General Manager of Transportation Services ensure that for all major projects consistent principles and methodologies of Contract Administration are adhered to including quality assurance and quality control activities.	Completed March 2016	Administration assessed potential gaps in adhering to consistent Contract Administration principles and methodologies In 2016, implemented changes to improve contract management across the corporation
		Rec. 2 - The OCA recommends that the General Manager of Transportation Services ensure that project roles, responsibilities, lines of communication, management of working relationships, and decision authority levels are clearly defined, assigned, and communicated for all major projects.	Completed December 2015	Administration reviewed all major projects to ensure that Roles, Responsibilities and Authorities in place. In 2015, updated the Project Management Resource Guide to more clearly define roles and communication requirements and developed a project management reporting tool to convey the status of all significant capital projects to the Executive Leadership Team and City Council

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		Rec. 3 - The OCA recommends that the General Manager of Transportation Services in conjunction with Financial Services and Utilities' and the Corporate Centre for Project Management staff develop a standard corporate reporting methodology for major capital projects which includes schedule, scope, and budget status as well as overall risk assessment and quality management.	Completed June 2016	In 2016, a best practice scan was completed and resulted in the development of a standardized corporate reporting methodology for Corporate Projects incorporating Schedule, Scope, Budget, and Risk dimensions.
	Neighbourhood Renewal Program Audit	Rec. 1 - The OCA recommends the Branch Manager, Transportation Operations develop a consistent methodology to track, reconcile, and report on the progress of the Program as it is working toward the 30-year goal.	Completed December 2016	Finalized in 2016, this work was contained in the Road Renewal Strategy which was being completed in response to Recommendations 1, 2 and 3 made in the 2014 City Streets Audit.
		Rec. 2 - The OCA recommends the Branch Manager, Transportation Infrastructure implement changes to their existing processes to: a. Ensure that bonuses and site occupancy costs are appropriately verified and authorized, and b. Ensure change orders are used when required.	Completed December 2016	In 2016, Transportation Infrastructure developed a formalized process to ensure oversight and project completion where all bonus/penalties and site occupancy costs were reviewed and approved by the General Supervisor and Director. Following the City of Edmonton, Project Management Reference Guide, Transportation Infrastructure integrated the use of change orders as required throughout project delivery.
		Rec. 3 - The OCA recommends the Branch Manager, Transportation Infrastructure adapt their approach to resident communication to be more user-friendly and customer-focused.	Completed December 2017	In 2017, developed a plan to enhance citizens ability to readily access information about the construction process, project representatives and the process to escalate a concern, if required.

Date	Audit Name	Findings/Recommendations		Action
		This includes: a. Making information about the construction process easily available and accessible. b. Making contact information for Project Managers more easily available. c. Providing residents with the information about how to escalate a concern.		
		Rec. 4 - The OCA recommends the Branch Manager, Transportation Infrastructure establish a consistent process or system to appropriately document and manage inquiries.	Completed December 2018	In 2018, formalized, documented, responded to, monitored and assessed citizen inquiries.
_		Rec. 1 - The OCA recommends that the City, as part of the Construction Completion Certificate (CCC) process, reviews all previous tests results and inspections conducted to determine the appropriate course of action to ensure the City receives a multi-use trail that is in conformance with City Design and Construction Standards.	Completed August 2016	In 2016, PMRG process updated to reflect that CCC requires no deficiencies before a certificate can be completed.

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-	Change Order Process Audit	Rec. 1 - The OCA recommends that the City Manager develop a process and controls for the use and authorization of change orders in consultation with Corporate Procurement and Supply Services (CPSS) Branch staff, Department staff, and the staff in the City's Corporate Centre for Project Management. Specifically the new Directive, Procedure, related guidance, training, and compliance monitoring processes should address these issues identified in our testing: a. Guidance (including examples) for when a change order can be used and when it should not be used. b. A solution to ensure change order file documentation is complete and consistent. c. Guidance specifically relating to approval requirements for change orders (expenditures and contract changes). d. Standardized templates for obtaining approval for funding of change orders. e. Methods to approve change orders in a timely manner so as to not delay projects or cost the City money.	Completed June 2017	In 2017, Procure to Pay and Contract Management Transformation project initiated to review and revise corporate procurement, contract management (including change orders) and payment practices at the City of Edmonton to align with evolving public sector best practice and to respond to improvement opportunities raised. Administration also developed a contract management directive, procedure, related guidance, training, and compliance monitoring process.
•	Utilities Infrastructure Branch Audit	Rec. 1 - The OCA recommends that the Deputy City Manager, Integrated Infrastructure Services department	Completed December 2017	In 2017, Administration developed guidelines on the appropriate use and oversight of overtime.

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		implement guidelines to improve management oversight and the ability to identify alternate service delivery methods to reduce overtime costs.		
		Rec. 2 - The OCA recommends that the Deputy City Manager, Integrated Infrastructure Services department, needs to ensure that performance measures development process is complete and that the results align with Departmental requirements.	Completed December 2018	In 2018, performance measures development process completed in alignment with Department requirements.
_	Competitive Procurement Evaluation Process Audit	Rec. 1 - The OCA recommends that the Branch Manager of CP&SS ensure that the mandatory requirements set out in the tender documents are essential to the needs of the business area and easily identifiable.	Completed March 2018	In 2018, revised tender documentation templates to organize mandatory requirements into a clear and organized fashion.
		Rec. 2 - The OCA recommends that the Branch Manager of CP&SS develop a strategy to assist business areas in determining the appropriate tender weighting for price and evaluated business requirements.	Completed December 2017	In 2017, ensured implementation of training material for City staff to improve knowledge around how the impact of decisions made in developing the procurement strategy and evaluation plan affect the evaluation and selection of suppliers in the procurement process through the Procure to Pay initiative.
		Rec. 3 - The OCA recommends that the Branch Manager of CP&SS ensure that all tender evaluation plans include an appropriate number of evaluators, identify all evaluators participating prior to bids being evaluated, and that	Completed December 2017	In 2017, developed an Administrative Procedure that identifies the duties of City staff in identifying and determining the relevance of conflicts of interest with former City staff in the procurement of goods and/or services for City business.

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		evaluators with a known conflict of interest are not allowed to participate in the evaluation.		CPSS ensured that relevant information is included in the formalized training curriculum developed for City staff on the evaluation of procurement opportunities.
		Rec. 4 - The OCA recommends that the Branch Manager of CP&SS ensures that rationale for addenda are clearly documented and that adequate time is provided to bidders when addenda are issued.	Completed December 2017	Included rationale for addenda and changes to the procurement opportunities throughout the procurement lifecycle as part of the Procurement Outcome report that is signed off prior to awarding a contract. Additional requirements regarding the issuing of addenda and their impact on procurement opportunities were incorporated into procurement process.
		Rec. 5 - The OCA recommends that that the Branch Manager of CP&SS ensures tender open periods set out in tender documents adhere to minimum guidelines such that all potential bidders have sufficient time to prepare bids.	Completed December 2017	Minimum open periods for tenders to ensure bidders are not at a disadvantage in responding to opportunities were incorporated into procurement process to ensure compliance with Canadian European Trade Agreement (CETA) and Canadian Free Trade Agreement (CFTA).
				Tender open period standards were reviewed with similar organizations (including municipalities and other orders of government) and a baseline was established to meet or exceed CETA and DFTA standards. This was communicated to procurement staff to ensure consistent implementation for all City competitive procurement opportunities.

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		Rec. 6 - The OCA recommends that that the Branch Manager of CP&SS establishes minimum targets for expected bid responses to tenders, and consider cancellation or re-tendering is exercised when there is an insufficient response. Additionally, in cases where the City does not cancel or re-tender, we recommend that justification be included in the procurement file.	Completed December 2017	CPSS guidelines for procurement staff were updated to state that when only one bid is received to a tender, or the response to a tender does not meet the expectations of the business area or the CPSS Branch, discussions will be held to determine on a case by case basis whether the tender should be re-issued or canceled. Added justification for these changes to the Procurement Outcome Report which is signed off prior to the contract award. Training provided to ensure consistent application for all competitive procurement opportunities issued by the City of Edmonton.
		Rec. 7 - The OCA recommends that the Branch Manager of CP&SS ensures a checklist or similar document is prepared to record the review of all mandatory requirements and that this document be signed and dated by all parties participating in the review.	Completed December 2017	Administration developed a checklist that provides for the formal review of all mandatory requirements contained within a competitive procurement opportunity. This checklist gets completed and signed by all parties participating in the review of a competitive procurement opportunity.
		Rec. 8 - The OCA recommends that the Branch Manager of CP&SS ensures that the results of bid evaluations completed by individuals and teams are signed, dated, and retained in the procurement file and that the rationale for the final score assigned for business requirements is documented.	Completed December 2017	Administration incorporated addition of individual scoring into the procurement file and trained CPSS staff on change in requirements.

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	Capital Project Advisory - Canceled	Observed improvements and determined to audit needed		It was concluded that although the Office of the City Auditor adds value through their continued awareness and review of the work being done by the Project Management Centre of Excellence, they could achieve this through communication on a quarterly basis rather than structuring it as an audit project. As such, they chose to close this multi-year project at the end of 2017 and reallocate their audit resources to other capital and operational audit projects.
-	Waste Services Audit	Auditor recommends Waste Management adopt PMCE processes and align to Policy C591		
		Rec. 1 - The OCA recommends that the Waste Services Branch Manager develops and implements a formal Performance Management Framework procedural document, reviews performance measure targets, and reviews calculation methodologies to ensure they provide reliable, comparable, and consistent information to support management decision-making and demonstrate achievement of Corporate and Branch goals	Completed April 2019	Administration developed a new Waste Strategy to align new outcomes, measures and targets that follow a formal performance measurement framework. Administration developed a set of management and analytic processes that included formal procedural documentation to clearly define the roles, responsibilities, accountabilities,

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		Rec. 5 - The OCA recommends that the Waste Services Branch Manager designs and implements a process to ensure that information presented in business cases is complete, accurate, supported and retained to ensure Council and/or Utility Committee can make informed decisions impacting Waste Services. This process should align with corporate wide standards to support the development of strong business cases.	Completed November 2019	Administration completed the following actions: - Established greater discipline in capital program management, such as reviewing templates and developing procedures to ensure that Business Cases are consistent with the corporate Project Management Centre of Excellence standard - Documented and implemented these procedures to ensure business cases have clearly defined cases for change, comprehensive accounts of viable options and associated risks and rigorous, analysis-based recommendation sufficient to enable fully informed decision-making. Also included in the process is a new series of reviews by stakeholders, such as IIS, Finance, Business Performance and Customer Experience and Law, prior to final approval by Branch Leadership.

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		Rec. 6 - The OCA recommends that Waste Services Branch Manager ensures branch project management processes align with the corporate processes to ensure projects provide value-for-money and demonstrate sound stewardship.	Completed December 2018	Administration established and implemented a Branch wide project initiation, priority evaluation and decision making process to identify, recommend and manage future projects to align well with Branch's investment and budget priorities. City Operations's former Business Performance and Customer Experience Branch and the Integrated Infrastructure Services (IIS) Department's Project Management Centre of Excellence established a waste capital management framework. Waste Services worked closely with IIS to align to the Capital Project Governance Policy C591 and adopt the Project Development and Delivery Model. Projects are now managed per the department processes (Project Management Reference Guide and Project Development and Delivery Model) under the stewardship of IIS. All key staff were trained through the Checkpoint Orientation Sessions
		Rec. 7 - The OCA recommends that the Waste Services Branch Manager defines and documents a condition assessment and data verification procedure. This procedure should indicate when and how assets are assessed or inspected and who is responsible to verify the data. There should be collaboration on asset condition reporting between	Completed June 2018	Waste Services developed and implemented a condition assessment and data verification procedure. The procedure outlined the Branch Asset Management Framework and Plan, clarified roles and responsibilities between Waste Services and corporate partners, as well as different business areas within the Branch. Waste Services maintains a listing of all Branch

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		maintainers, operators and technical services.		assets, their condition, useful life, replacement value, and how critical they are to continue daily operations as well as schedules for ongoing asset condition inspections and replacement.
	Open Space Asset Transfer Audit	Rec. 1 - The OCA recommends formalizing the process to document inspections to ensure that information is complete and all deficiencies are compiled and addressed.	Completed December 2021	Administration has revised the inspection process to ensure the information is complete and verifiable. Both IIS and Urban Form and Corporate Strategic Development (predecessor of the Urban Planning and Economy department) follow a current process to perform Construction Completion Certificate (CCC)/Final Acceptance Certificate (FAC) inspections. Working in collaboration with Parks and Roads Services, both Integrated Infrastructure Services and Urban Planning and Economy aligned the process to reflect the roles and responsibilities of all parties, promote consistent application and ensure clarity of how the deficiencies are addressed.
		Rec. 2 - The OCA recommends establishing a formal process to ensure PARS is informed of and has the opportunity to attend all CCC and FAC inspections with open space assets.	Completed March 2022	Administration developed a process to inform all applicable parties about open space asset Construction Completion Certificate (CCC)/Final Acceptance Certificate (FAC) inspections. Integrated Infrastructure Services and Urban Planning and Economy were confirmed to be the accountable parties to ensure the City is receiving quality assets into its inventory in accordance with contracts and servicing agreements. As part of this process, inspections are scheduled by Integrated Infrastructure Services/Urban Planning and Economy with the option for Parks and Roads Services to attend inspections, as required. This

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				revised process ensures the Parks and Roads Services area has awareness and the opportunity to attend all Construction Completion Certificate (CCC)/Final Acceptance Certificate (FAC) inspections.
		Rec. 3 - The OCA recommends formalizing the process to input open space assets into the Spatial Land Inventory Management (SLIM) system to ensure that PARS is receiving complete information on a timely basis.	Completed December 2022	Administration formalized a process for inputting open space assets into the Spatial Land Inventory Management System.
	_	Rec. 1 - The OCA recommends that the Infrastructure Delivery Branch develop and report on performance measures for quality of transportation infrastructure projects.	Completed December 2022	Administration outlined a two-step approach to integrate the audit recommendation into Administration's Enterprise Performance Management program. The first step included research and development into the establishment of a quality measure and the second step included the integration and reporting of quality via the Enterprise Performance Management program.
_	Valley Line LRT P3 and Delivery Audit	No recommendations made		No action required. The Branch is overseeing the Valley Line LRT projects to achieve cost-effective and service delivery expectations.