



CITY OF HAMILTON

CORPORATE SERVICES DEPARTMENT
Financial Planning Administration and Policy Division
and
HEALTHY AND SAFE COMMUNITIES DEPARTMENT
Emergency Services, Fire Department
and
PUBLIC WORKS DEPARTMENT
Corporate Facilities and Energy Management

TO:	Mayor and Members General Issues Committee
COMMITTEE DATE:	May 1, 2024
SUBJECT/REPORT NO:	Second floor addition to new Waterdown Station for 911 Call Centre (FCS20082(e) / HSC20045(e) / PW22087(b)) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Tran Trang (905) 546-2424 Ext. 6151 Mike Rember (905) 546-2424 Ext. 3376 Robyn Ellis (905) 546-2424 Ext. 2616
SUBMITTED BY:	Mike Zegarac General Manager, Finance and Corporate Services Corporate Services Department
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Discussion of this Confidential Report in closed session is subject to the following requirement(s) of the City of Hamilton's Procedural By-law and the Ontario Municipal Act, 2001:

- A proposed or pending acquisition or disposition of land for City or a local board purpose

RATIONALE FOR CONFIDENTIALITY

Appendix "A" to Report FCS20082(e) / HSC20045(e) / PW22087(b) is being considered in Closed Session as it contains information regarding a land acquisition by the City.

RATIONALE FOR MAINTAINING CONFIDENTIALITY

Appendix "A" to Report FCS20082(e) / HSC20045(e) / PW22087(b) is to remain confidential as it was provided to the City in confidence.

RECOMMENDATIONS (CLOSED SESSION)

None

RECOMMENDATION (OPEN SESSION)

- (a) That the second-floor addition onto new Waterdown Station for a 911 Call Centre be approved with a budget totalling \$22,551,445, including new construction, dispatcher consoles, furniture, UPS, design fees, permits, tax, fees, infrastructure fit-up, per Appendix "A" to Report (FCS20082(e) / HSC20045(e) / PW22087(b)) and to be funded from tax supported debt; and,
- (b) That the estimated annual debt repayment of \$2.2M be referred to the 2025 budget process for consideration; and,
- (c) That the General Manager, Public Works Department be authorized and directed to execute any required agreement(s) and ancillary documents, with such terms and conditions in a form satisfactory to the City Solicitor; and,
- (d) That the incremental Operating Impact of Capital cost of \$300,000 for operating the larger facility footprint be referred to the 2026 capital budget process; and,
- (e) That the additional 1.0 temporary full-time equivalent (FTE), be approved for the duration of the project (up to 48 months), in Corporate Facilities and Energy Management, required to provide oversight to deliver the overall increase in large capital project delivery volume, be approved, with no impact to the tax levy; and,

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- (f) That the General Manager, Finance and Corporate Services, be authorized and directed to negotiate and confirm the terms for the placement and issuance of all debenture issue(s), in either a public or private market and / or bank loan agreements and debenture issue(s), in and / or variable interest rate bank loan agreement and debenture issue(s), in an amount not to exceed \$22,551,445 Canadian currency; and,
- (g) That the General Manager, Finance and Corporate Services, be authorized to engage the services of all required professionals to secure the terms and issuance of the debenture issue(s) described in recommendation (f) including, but not limited to, external legal counsel and fiscal agents; and,
- (h) That the General Manager, Finance and Corporate Services, be authorized and directed, on behalf of the City of Hamilton, to enter into and / or execute, all agreements and necessary ancillary documents to secure the terms and issuance of the debenture issue(s) described in recommendation (f), on terms satisfactory to the General Manager, Finance and Corporate Services and in a form satisfactory to the City Solicitor.

EXECUTIVE SUMMARY

As communicated through reports FCS20082(a) / HSC20045(a) / PW22087 and FCS20082(c) / HSC20045(c) / PW22087(a), a long-term 911 facility need still exists within the City of Hamilton. The prior report also advised of a future GIC report once a long-term facility direction is confirmed for a primary Public Safety Answering Point (PSAP) for the Hamilton Police Service (HPS). The need for primary and backup Public Safety Answering Points (PSAPs) is mandated by the Canadian Radio-television and Telecommunications Commission (CRTC) Telecom Regulatory Policy: CRTC 2017-182.

This Report, (FCS20082(e) / HSC20045(e) / PW22087(b)), presents a long-term 911 call centre facility option by adding a second floor 911 call centre and mechanical penthouse onto the existing Council-approved project of the upcoming construction of the new Waterdown Fire and Police Station. As the Hamilton Police Service (HPS) Central Station, at 155 King William, approaches end of life, that location will only be viable as a temporary backup 911 call centre location.

The following is the rationale for the report recommendations of adding a permanent 911 call centre onto the new Waterdown Fire & Police Station:

- Advantages of moving to two-site model
- Synergies of shared call centre between Hamilton Police Service (HPS) & Hamilton Fire Department (HFD)

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- Aging infrastructure at Hamilton Police Service (HPS) Central Station
- Efficiencies of constructing now while shovels are in the ground
- No additional land cost required (vertical addition)
- Ensuring adequate project oversight without adding levy impact

Report FCS20082(a) / HSC20045(a) / PW22087 had previously provided an estimated, unapproved facilities capital renovation and construction budget of \$24M. The short-term solution for the Hamilton Police Service (HPS) to serve NG9-1-1 requirements by remaining at existing HPS sites has reduced estimated anticipated facilities capital renovation costs from \$24M down to \$6.84M. Most of the reduction from the original budget number was because NG9-1-1 renovations at Stoney Creek City Hall were found to be no longer feasible at that site, therefore the location of the short-term technology solution pivoted to meet the legislated timelines.

The total incremental project budget of adding the 911 call centre to the second floor of the new Waterdown Fire and Police Station is \$22,551,445.

Alternatives for Consideration – See Page 10

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: The capital project incremental costs are recommended to be financed from tax supported external debt. Assuming an interest rate of 5.5% and a term of fifteen years, an issuance of \$22.551M will result in annual repayments of \$2.2M resulting in an average residential property tax impact of 0.2% beginning in 2025.

The capital project incremental cost of \$22.551M includes not only construction, but also technology, Uninterrupted Power Supplies (UPS), dispatcher consoles, furniture costs, and soft costs. Moving costs associated with relocation and consolidation of Hamilton Police Service (HPS) and Hamilton Fire Department (HFD) individual call centres to the new shared Waterdown call centre location is also budgeted for. No additional land acquisition was required to fulfil the second floor call centre addition and mechanical penthouse. Additionally, land costs were previously funded by DC and other strategies, and recently updated through separate Confidential Report to GIC PED22092(a) respecting the land acquisition. Details of these costs, including Confidential land costs, are outlined in Confidential Appendix “B” to report (FCS20082(e) / HSC20045(e) / PW22087(b)). Incremental project capital costs which can be made publicly available are outlined at a high level in Table 1 below:

Table 1: Incremental Project Capital Costs:

	Original Waterdown Station Scope, Class D Estimate, based on Council-approved budget in 2 Project IDs: HPS 3762041002 HFD 7401841801	Revised Estimate to include Second Floor Comms Centre & mechanical penthouse	Incremental Cost of Second Floor Comms Centre & mechanical penthouse
Construction (including contingency)	\$18,840,000	\$32,072,000	\$13,232,000
Soft costs, fees, internal Costs, Furniture, Contingencies, stormwater management	\$4,553,800	\$11,500,500	\$6,946,700
Technology Costs, including contingency	N/A	\$2,000,000	\$2,000,000
Fire vehicles	\$1,549,000	\$1,549,000	\$0
HST	\$538,748	\$911,493	\$372,745
Subtotal	\$25,481,548	\$48,032,993	\$22,551,445

Operating Impacts from Capital, as communicated through this Report (FCS20082(e) / HSC20045(e) / PW22087(b)) are expected to be \$300,000 annually for the incremental cost of operating the larger facility footprint beginning in 2026. This value is inclusive of all incremental Facilities costs, for example (but not limited to): utilities, life safety & HVAC & electrical systems maintenance, Uninterrupted Power Supply (UPS) maintenance, cleaning, as well as basic general repairs. It does not include IT, Hamilton Fire Department or Hamilton Police Services operating costs since those costs would be transferred from current operations at other sites. Operating cost increases due to the larger facility footprint will not be realized until at least 2026.

Prior reports respecting Council-approved Waterdown Fire and Police Station already approved Operating Impacts from Capital (OIC) of \$1.4M for HFD and Facilities (including 15 FTEs) and \$0.935M (including 0.5FTE) for HPS and Facilities. These approvals are highlighted in annual reporting accompanying the City’s Capital and Operating budgets.

Staffing: An in-year approval of 1.0 FTE in Corporate Facilities and Energy Management at a Level 7 Senior Project Manager is requested to provide adequate oversight to deliver the overall City-wide increase in large capital project delivery volume. There is no impact to the tax levy from this staffing increase because all staffing costs for Corporate Facilities and Energy Management capital delivery staff (including all internal and external costs) are already budgeted within each capital project. Project

length will exceed 2 years, which is the maximum timeframe permitted for temporary contracts.

Legal: N/A

HISTORICAL BACKGROUND

July 22, 2022, Corporate Facilities and Energy Management Division (a newly renamed Division) was tasked with identifying a minimum of two suitable locations to accommodate the new NG9-1-1 call handling systems including developing the scope of work required for the data centres and associated office operations. The site selection criteria included a list of requirements related to critical service environments including geographical distancing, site redundancy (primary and backup), risk mitigation capabilities, reliable and available communication infrastructure, technology supports and enhanced security.

The Stoney Creek Municipal Centre (SCMC) had previously been identified as a location for a future 911 call centre. However, as of March 2023, the project evolved. Updates regarding technology assets opened the possibility of new locations. Additionally, change of use at the SCMC, along with major renovations triggered a post-disaster requirement clause in the Ontario Building Code for 911 call centres. The Ontario Building Code requires all buildings be assigned an Importance Category of 'Low', 'Normal', 'High' or Post-disaster. The 'Post-disaster' category applies to buildings such as, hospitals, police facilities and telephone exchanges that need to remain operational following a disaster.

Upon review of this information, an interim solution was approved by Council as part of Report FCS20082(c) / HSC20045(c) / PW22087(a), whereby Central Station would temporarily remain as the primary Public Safety Answering Point (PSAP) for the Hamilton Police Service (HPS), and MATC would remain as their backup for much of the project delivery, at which point MATC would become HPS' primary PSAP. The Hamilton Fire Department would remain at the MATC for their primary and the Upper Sherman Ave would remain as their backup. This project is tracking on schedule to meet legislated timelines. Please refer to Appendix "E" to Report FCS20082(e) / HSC20045(e) / PW22087(b)) for the NG9-1-1 Project Schedule.

The temporary NG9-1-1 solution was previously presented to Council as an interim solution to meet legislated timelines and reflected an adjusted budget to a significantly lower estimated cost. However, a long-term NG9-1-1 facility need still exists within the City of Hamilton and staff had identified in the previous report that a future GIC report would be submitted once long-term facility direction is confirmed for a primary Public Safety Answering Point (PSAP) for the Hamilton Police Service (HPS). This Report (FCS20082(e) / HSC20045(e) / PW22087(b)) provides that long-term facility direction.

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The Waterdown Fire and Police Station capital project was Council-approved in prior years as two separate Project IDs: HPS 3762041002 and HFD 7401841801. The updated project budget as presented and Council approved as part of Report PED22092 / PW22043 is still accurate for the original scope of a shared, single story Fire and Police Station in Waterdown. However, the construction of the facility requires approval of additional funding to add on a 911 call centre via a second story and mechanical penthouse. Land costs were previously funded by DC and other strategies, and recently updated recently through separate Confidential Report to GIC PED22092(a) respecting the land acquisition.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

This project does not impact the migration to NG9-1-1 which is mandated and legislated through the Canadian Radio-television and Telecommunications Commission (CRTC) Telecom Regulatory Policy: CRTC 2017-182.

That said, it does represent a more permanent location for a two-site model for NG9-1-1 which presents improvements and best practices over the existing three-site model.

RELEVANT CONSULTATION

Consultation for this report took place as follows:

- Corporate Services:
 - Financial Planning, Administration and Policy Division
 - Information Technology Services
- Healthy & Safe Communities, General Manager
- Public Works, General Manager
- Corporate Facilities and Energy Management Director and Strategic Planning, Capital & Compliance and other Facilities teams
- Hamilton Police Service (HPS)
- Hamilton Fire Department (HFD)

ANALYSIS AND RATIONALE FOR RECOMMENDATION

The following is the rationale for the recommendations:

Advantages of moving to two-site model:

There are advantages of moving to a two-site Public Safety Answering Point (PSAP) model, in contrast to the current three-site model. This was previously communicated through reports FCS20082(a) / HSC20045(a) / PW22087 and FCS20082(c) / HSC20045(c) / PW22087(a).

The project team had at that time recommended a two-site model. However, finding two optimal sites that could be shared between Hamilton Police Service and Hamilton Fire Department and implementing NG9-1-1 prior to the legislated deadline was not considered feasible. An interim three-site model was developed and executed to ensure that the Hamilton Fire Department and Hamilton Police Service could be NG9-1-1 compliant. The goal still was to identify and develop a two-site model that would satisfy the technology, business continuity and long-term needs of the City of Hamilton Public Safety Answering Points (PSAPs). The current three-site model has been architected to enable a lift-and-shift of key technology components to create a two-site model.

The existing three-site model has two sites with local PSAPs that have supporting technology co-located and one remote PSAP relying on the supporting technology at the other two sites. There is risk of connection failure between the remote PSAP and the technology supporting it.

911 systems provide critical services and PSAPs should be engineered to reduce risks from single points of failure. To achieve this, current best practices include having the PSAPs co-located with the technology (servers, routers, Bell connections and other equipment) supporting them, and also having proper geodiversity between sites.

To continue with the existing three-site model as a long-term solution while reducing connection failure risks, additional local supporting technology will have to be added to the remote PSAP site, this will incur cost and increase complexity of the systems. In addition, the infrastructure needed to support this technology will ideally have to be re-engineered to minimize single points of failure.

The primary and backup PSAP sites for Hamilton Fire Department are considered too close to each other and could be impacted by any large-scale environmental incident that affects that general area. The new Waterdown site as one of their locations will improve geodiversity.

Moving to a 2-site model will simplify the complexity, increase geodiversity, and reduce connection risks.

Synergies of shared call centre between HPS & HFD:

A two-site model would enable both Hamilton Police Service and Hamilton Fire Department to share expensive equipment, associated maintenance, capitalize on redundant and diverse networks as well as protect the equipment with adequate infrastructure (power, security systems, building infrastructure that is appropriately rated, etc.). There are additional service delivery advantages of using a shared building to deliver a 911 call centre, including synergies with respect to shared spaces, training and program delivery.

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Aging at HPS Central Station:

Central Police Station, located at 155 King William, is the current location of one of HPS' 911 call centres, was constructed in 1976, and is approaching its fifty-year service life in 2026. A detailed site investigation was completed in 2022 and major mechanical upgrades were identified resulting in a Facility Condition Index reflecting a poor condition. As Central Station approaches end of life, that location is only viable as a temporary secondary 911 call centre (PSAP) location.

Efficiencies of constructing now while shovels are in the ground:

Construction outlined in Report (FCS20082(e) / HSC20045(e) / PW22087(b)) and Appendix "A" to Report (FCS20082(e) / HSC20045(e) / PW22087(b)) shall be procured through competitive procurement (Prequalification then Request for Tender). It is that more efficient and cost effective to tender and construct the additional story with the new Waterdown Station than to construct a new call centre as part of a separate project. Please refer to "D" to Report (FCS20082(e) / HSC20045(e) / PW22087(b)) for the project schedule comparison with and without the addition of the second-floor scope.

No additional land cost required (vertical addition):

The additional building footprint required for a new call centre at the new Waterdown Station would be accommodated entirely vertically by the addition of a 2nd floor addition, with an upper-level mechanical penthouse. This means that no additional land costs are required to add the call centre at this site. Please refer to Appendix "C" to Report (FCS20082(e) / HSC20045(e) / PW22087(b)) to review preliminary floor plans proposed for the expanded facility.

Ensuring for adequate project oversight without adding levy impact:

With the Council-approved award of the Transit Maintenance Storage Facility project, staff from Corporate Facilities and Energy Management have been seconded to oversee this significant capital project and investment without backfill. The Senior Project Manager, whose team is overseeing several of the large capital projects, sits in a temporary role. As the section continues to increase the number of Council-approved large capital projects for delivery, meanwhile continuing to deliver the infrastructure renewal and compliance programs it is necessary to allocate resources to achieve appropriate project oversight, reporting and accountabilities. Furthermore, delivery of this project, as well as other large capital projects will exceed a 2-year temporary contract delivery timeline. Increase in large project volume is a longer-term trend based on Council-approved 10-year capital plans.

There is no impact to the tax levy from this staffing increase because all staffing costs (including all internal and external costs) required for project delivery are already covered within capital budgets.

2023 Annual Repayment Limit (ARL):

The recommended financing strategy for tax supported debt aligns with the updated ARL and the Council Approved Tax & Rate Limit. As shown in Appendix “B” to Report (FCS20082(e) / HSC20045(e) / PW22087(b)), the City has \$174.6M available to commit to payments related to debt and financial obligations before the statutory limit is breached and corresponds to approximately \$1.8B of additional borrowing capacity (assuming a 15-year term and 5.5% interest rate).

ALTERNATIVES FOR CONSIDERATION

One alternative to adding a second-floor call centre to the Waterdown Fire and Police Station would be to proceed with the Council-approved scope and budget of a single-story station in Waterdown and to plan to include a long-term 911 call centre in a future HPS headquarters. That option would increase the wait time for the centre by several years because the timeline for a new Police headquarters is unknown. The total capital cost for this option would be expected to increase in coming years due to inflation and any rises in the construction price index. The impact of this alternative would include the following:

- Delay or preclude moving to a two-site 911 call centre model
- Delay or preclude the synergies of a new, shared Fire/Police 911 call centre
- Preclude realizing synergies of constructing while shovels are in the ground at the new Waterdown Station
- Preclude the savings of land costs

A prior Council Report in 2023, Report FCS20082(c) / HSC20045(c) / PW22087(a), identified preliminary estimates for delivering facilities for NG9-1-1, which originally exceeded \$24M. The majority of the original budget number was dedicated to renovations at Stoney Creek City Hall, which was deemed as no longer a feasible option. The interim NG9-1-1 solution presented in that report reflects an adjusted budget. However, a long-term NG911 facility need still exists within the City of Hamilton for a primary Public Safety Answering Point (PSAP).

With respect to matching project delivery oversight with the increase in large capital project volume, alternatives to consider may include adding additional management staff dedicated to large capital projects (e.g. Project Director). Those options would have an incrementally higher cost impact to capital projects, meanwhile it has been observed that Senior Project Management staff can provide effective oversight. It is not

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possible to provide improved project delivery oversight though outsourcing alone, since the management and reporting responsibilities still fall to internal staff.

APPENDICES AND SCHEDULES ATTACHED

Confidential Appendix “A” to Report (FCS20082(e) / HSC20045(e) / PW22087(b)) – Incremental Project Costing Estimates

Appendix “B” to Report (FCS20082(e) / HSC20045(e) / PW22087(b)) – Annual Repayment Limit

Appendix “C” to Report (FCS20082(e) / HSC20045(e) / PW22087(b)) - Preliminary Floor Plans

Appendix “D” to Report FCS20082(e) / HSC20045(e) / PW22087(b)) - Waterdown Station Project Schedule comparison with and without second floor addition

Appendix “E” to Report FCS20082(e) / HSC20045(e) / PW22087(b)) - NG9-1-1 Project Schedule