Information Report



Service Area Infrastructure, Development and Enterprise Services

Date Friday, May 12, 2023

Subject Facility Needs Assessment Guelph-Wellington

Paramedic Services – Guelph Fire Department

Executive Summary

Purpose of Report

In 2022, City staff undertook a facility needs assessment for Guelph-Wellington Paramedic Services (GWPS) and the Guelph Fire Department (GFD). The scope of the report focused on the needs of the departments and the physical facilities to support the operations of the GWPS and the GFD for the short, medium and long term. The GFD has six stations located throughout the City of Guelph, and the GWPS have a total of eleven paramedic stations located within the City of Guelph and throughout Wellington County.

The overall objective of the needs assessment was to provide the City with specific recommendations regarding which GWPS and GFD stations are suitable to the needs of each individual department. Where the facilities cannot meet the needs of the department, and will impact departmental operations or expected service levels, the report provides recommendations to update, expand or replace facilities to ensure service levels to the community continue to be met and provides a time frame for each recommendation to allow for capital planning.

Key Findings

The recommendations from the consultant's report are summarized below and where appropriate, will be included as part of the multi-year budget, or long-term capital forecast. Recommendations where station replacements are required to meet the needs of the GWPS, will require co-ordination with the County of Wellington due to the shared funding arrangement for GWPS.

The following are the recommendations for the eleven GWPS stations from the Facility Needs Assessment Report, which align with the requirements of the Guelph – Wellington Paramedic Service Master Plan 2018 - 2022:

- 1. Replace the following paramedic stations / warehouses within the next three years as they do not currently meet the needs of the department:
 - Station No. 0 355 Elmira Road North, Unit 134 Melran Mall, Guelph
 - Station No. 2 285 Queen Street East, Fergus
 - Station No. 4 202 Industrial Drive, Mount Forest
 - Station No. 5 110 Smith Street, Arthur (Arthur Fire Station)
 - Station No. 6 122 Robertson Street, Harriston

- Station No. 8 5141 Wellington Road 27, Rockwood (Guelph Eramosa Fire Station)
- Station No. 10 2 Station Street, Hillsburgh (Hillsburgh Fire Station)
- Future Station No. 7 30 John Street, Drayton

It is not feasible to replace all these stations immediately and replacement of stations will need to be reviewed and prioritized to implement these recommendations over time.

- 2. Consider replacing the following station within 10 years:
 - Station No. 12 34 Gordon Street, Guelph
- 3. Consolidate the two current GWPS warehouse facilities (currently one on Elmira Road beside Station No. 0 in Guelph and one at Station No. 6 Harriston) into a single warehouse facility, with dedicated staffing to deliver supplies to the various GWPS stations, as this is currently the responsibility of GWPS supervisors.
- 4. Recognize that there is a need for training facilities, preferably one in the City of Guelph and one in the County of Wellington. This should be coordinated with the overall needs of the City so as to look for opportunities to share space. It should be noted that the City has recently managed to re-arrange training space allocations within the City to partially provide GWPS the space needed for their training needs.

The following are the recommendations for the six GFD stations:

- 1. Replace Fire Station No. 1 the Departmental HQ within the next 10 years.
- 2. Expand the size of Fire Station No. 3 and make changes to the interior layout within the next 5 years.
- 3. Recognize that Fire Station No. 2 should be replaced within the next 20 years.

As part of the facility needs assessment assignment, the consultants have also reviewed the GFD training requirements and the current use of a mobile burn trailer versus a burn tower. The life cycle costs were reviewed considering training opportunities afforded by each of the burn trailer and a burn tower structure. The conclusion was that the overall life cycle costs were negligible based on a fifty-year horizon and that the multitude of training opportunities offered by a burn tower structure makes it the most beneficial. It is recommended that when the burn trailer comes to a life cycle end in 2028, the portable burn trailer should be replaced with a permanent burn tower at a yet to be determined location.

Strategic Plan Alignment

The recommendations provided herein align with the strategic pillar of Working Together for our Future, by ensuring that the GWPS and GFD can continue to deliver or improve service to the greater community. These stations are the home to two of the City's emergency services and need to cater to the needs, challenges and stresses of the jobs that are performed to attract new employees and retain existing. The recommendations also align with the Building our Future pillar by managing existing infrastructure, or where required, build and develop new assets that respond to Guelph's growing and changing social, economic and environmental needs.

Finally, the recommendations herein will help support the Sustaining our Future pillar, by ensuring the GWPS and GFD buildings can support further initiatives within the pillar such as hybrid or electric vehicles and reduced operational energy requirements through increased building efficiencies.

Financial Implications

Recommendations in the Facility Needs Assessment report include the requirement for renovating or expanding capital assets or building new capital assets. Many of the capital project implications and associated operating costs have not been included in the capital and operating budget forecasts to date.

Regarding the GFD, of the total recommended work to be completed, \$32 million was already planned and included in the capital forecast, with \$14.5 million to be incorporated in the 2024-2033 update. This includes cost escalations on the replacement of fire headquarters, renovation requirements at certain stations and the investment in a burn tower once the current training apparatus reaches its end of life.

The recommendations for the GWPS means the construction of eight (8) new paramedic stations as soon as possible for a total estimated construction cost of \$68 million as per the consultant's report if the City were to construct all the stations, which excludes land acquisition. The County of Wellington currently has the construction of five (5) stations within their 10-year capital forecast with a sixth station identified beyond the 10-year capital forecast. The City would be responsible for budgeting the replacement the seventh station (Station 0 at 355 Elmira Road) within the City of Guelph and will be captured within the upcoming 2024-2033 multi-year budget with a total cost of \$11 million dollars. The eighth remaining station is to be included in an upcoming City or County capital budget, with an estimated \$7 million of new design and construction works to be incorporated into the budget. In addition to the stations, there are recommendations related to the assets and business processes associated with warehousing of medical supplies. There may be efficiencies to consolidate warehousing requirements and consider alternative staffing models, however, the business case would need to be further developed.

Report

In 2022, City staff undertook a facility needs assessment for Guelph-Wellington Paramedic Services (GWPS) and the Guelph Fire Department (GFD). The scope of the report focused on the needs of the departments and the physical facilities to support the operations of the GWPS and the GFD for the short, medium and long term.

The overall objective of the needs assessment was to provide the City with specific recommendations regarding which GWPS and GFD facilities are suitable to the needs of each individual department. Where the facilities cannot meet the needs of the department, and will impact departmental operations or expected service levels, the report provides recommendations to update, expand or replace facilities to ensure service levels to the community continue to be met and at what time each recommendation is required to allow for capital planning.

Background

The GWPS currently operates out of eleven facilities both within Guelph and throughout Wellington County which include the following:

- Paramedic Station No. 0 355 Elmira Road North, Unit 134 Melran Mall, Guelph
- Paramedic Station No. 2 285 Queen Street East, Fergus
- Paramedic Station No. 3 Clair Road Emergency Services Centre
- Paramedic Station No. 4 202 Industrial Drive, Mount Forest
- Paramedic Station No. 5 110 Smith Street, Arthur (within Fire Hall)
- Paramedic Station No. 6 122 Robertson Street South, Harriston
- Paramedic Station No. 7 16 Main Street, Drayton (within Fire Hall)
- Paramedic Station No. 8 5141 Wellington Road 27, Rockwood (within Fire Hall)
- Paramedic Station No. 10 2 Station Street, Hillsburgh (within Fire Hall)
- Paramedic Station No. 12 34 Gordon Street, Guelph
- Future Paramedic Station No. 7 and current County of Wellington Site for GWPS Community Paramedicine Project – 30 John Street, Drayton (old public works building)

The Guelph – Wellington Paramedic Service Master Plan 2018 – 2022 includes a station facility standardization and location plan and has recommendations for station replacement and relocations as well as a timeframe between 2018 and 2022. The Station Facility Standardization plan as proposed in the GWPS master plan is supplemented by this facility needs assessment to provide greater detail on the needs of GWPS and an actionable capital plan for the City.

The GFD currently operates out of six facilities located in Guelph, which include the following:

- Fire Station No. 1 / Headquarters (HQ) 50 Wyndham Street South
- Fire Station No. 2 74 Speedvale Avenue East
- Fire Station No. 3 115 Stone Road West
- Fire Station No. 4 21 Imperial Road South
- Fire Station No. 5 380 Elizabeth Street
- Fire Station No. 6 Clair Road Emergency Services Centre

A quick reference station index is provided as part of this information report in attachments 1 and 2.

Methodology

The Needs Assessment Report used various input factors to determine criteria to analyze the existing facilities for the GWPS and GFD to determine if departmental needs were being met. The factors included the review of existing condition assessments, previous operational reports, code and regulatory requirements, industry surveys, and City of Guelph policies and guidelines. Based on a review of the above-mentioned content, the consultants derived the following list of criteria against which the facilities were reviewed:

- Facility location and impact on turnout and response times of the department (turnout time means the time beginning when units receive notification of the emergency to the beginning point of response time).
- Facility layout to support the operational needs of the department and support the needs of a diverse employee population of first responder personnel.
- Building condition and age, through existing available building condition assessments or through site visits.
- Compliance with code, including the Ontario Building Code and the Accessibility for Ontarians with Disabilities Act.
- Hazardous materials on site.
 - Compliance of the building and site with provincial codes, zoning by-laws, site planning limitations, and City policies.

The report also considers the following:

- Whether each facility should be expanded or replaced with a new building.
- Functional indoor / outdoor space requirements for each facility that requires an expanded or new building.
- Whether a new site is required.
 - The estimated costs for the above.

For the GWPS the following criteria were deemed essential as part of the facility needs assessment:

- Suitable geographic location and site to minimize response times and support the recommended facility operational needs.
- A facility with adequate space and layout (as determined by the ideal GWPS station concept developed as part of this report).
- Each facility needs a dedicated report writing room.
- Area for GWPS personnel to decontaminate after returning from calls.
- A wellness and guiet space to support employee needs.
- Minimum two bathrooms per facility.
- Storage space for medical supplies.
- Adequate garage space, preferably with pull through parking.
- Backup power.

For the GFD the following criteria were deemed essential as part of the facility needs assessment:

- Suitable geographic location and site to minimize response times and support the recommended facility operational needs.
- A facility with adequate space and layout.
- A wellness and guiet space to support employee needs.
- Meets current code requirements for building, site.
- Adequate storage space for firefighting gear, meeting required standards.
- Adequate garage space, preferably with pull through parking.
- Backup power.

Attachment 4 – GWPS Needs Assessment Summary and Attachment 3 - GFD Needs Assessment Summary provide a tabulated summary of the consultant's findings from the report as to the current condition and deficiencies of the GWPS and GFD facilities respectively.

Deficiencies and Recommendations

The recommendations from the consultant's report are summarized below. The recommendations, where appropriate, will be included as part of the multi-year budget and long-term capital forecast.

Summary of recommendations for GWPS

Recommendations where station replacements are required to meet the needs of the GWPS will require co-ordination with the County of Wellington due to the shared funding for GWPS.

- 1. Replace the following paramedic stations / warehouses within the next three years:
 - Station No. 0 355 Elmira Road North, Unit 134 Melran Mall, Guelph
 - Station No. 2 285 Queen Street East, Fergus
 - Station No. 4 202 Industrial Drive, Mount Forest
 - Station No. 5 110 Smith Street, Arthur (Arthur Fire Station)
 - Station No. 6 122 Robertson Street, Harriston
 - Station No. 8 5141 Wellington Road 27, Rockwood (Guelph Eramosa Fire Station)
 - Station No. 10 2 Station Street, Hillsburgh (Hillsburgh Fire Station)
 - Future Station No. 7 and current County of Wellington Site for GWPS Community Paramedicine Project - 30 John Street, Drayton

Supporting rational from Needs Assessment: Replacement of these stations is recommended because of the deficiencies summarized in Attachment 4 – GWPS Needs Assessment Summary. In general, there are numerous deficiencies in these stations that affect the ability for the GWPS to properly service the community including:

- Inadequate space for employees to perform their duties, with some facilities having less than 150 square feet of dedicated space for a paramedic crew.
- Shared bathroom facilities with other user groups including public rental groups. This is problematic as GWPS personnel may need to decontaminate after a call. With shared bathroom facilities, there is a risk of contamination to the public or no access to the needed facilities.
- GWPS shares kitchen facilities in some of the fire halls that may be rented by the public.
- Lack of spaces for private report writing within some of the facilities.
- Lack of quiet space or wellness spaces to help support the needs of a diverse employee population.
- Lack of a proper decontamination area for GWPS coming back from calls to prevent further contamination of the public or employee spaces.
- Lack of proper storage or storage of medical supplies and equipment in vehicular bays.
- 2. Consider replacing the following paramedic station within 10 years
 - Station 12 34 Gordon Street

Supporting rational from Needs Assessment: Station 12 at 34 Gordon Street lease is up in 2030 and it is recommended that the City review options moving forward with the property should the lease not be renewable at that time.

- 3. Consolidate the two current GWPS warehouse facilities (currently one on Elmira Road in Guelph and one at Station 6, Harriston).
 - Supporting rational from Needs Assessment: Currently GWPS supervisors are responsible for dropping supplies off at stations from one of the two warehouse facilities that GWPS operates. This function could be managed more efficiently at a single warehousing facility and staff other than a GWPS supervisor could perform the function, freeing up senior GWPS resources to perform other specialized or high priority duties. Further analysis and business case will be required to support this recommendation.
- 4. Recognize that there is a need for training facilities, preferably one in the City of Guelph and one in the County of Wellington. These needs should be coordinated with the overall needs of the City so as to look for opportunities to share space. It should be noted that the City has recently redeployed training space allocations within the City to partially provide GWPS the space needed for their training needs.

Supporting rational from Needs Assessment: GWPS personnel are required to maintain various certificates and take various training courses within their job duties. The department needs readily available access to various training spaces to meet the training needs of the department, which includes adequate storage of training equipment and materials to facilitate the training.

Attachment 6 to this report provides a conceptual block planning diagram for a typical GWPS station that includes space for two ambulances and a supervisor. While not all stations require three vehicles, it is recommended that stations make provisions for a minimum of two ambulance bays with provisions for a third ambulance or supervisor vehicle.

Summary of recommendations for GFD:

Following are the recommendations from the report for the six GFD stations:

- 1. Replace Fire Station No. 1 the Departmental HQ within the next 10 years.
 - Supporting rational from needs assessment: Fire Station No. 1 and HQ have several operational and building deficiencies which include a poor layout affecting deployment times and an increased health and safety risk with dormitories on the second floor. There is also a lack of proper storage space for bunker gear and Personal Protective Equipment (PPE) and the building and 911 dispatch are located in a flood plain special policy area. The age of the building and code deficiencies makes renovations of the space problematic in the future as it would be extremely cost prohibitive.
- 2. Expand the size of Fire Station No. 3 and make changes to the interior layout within the next five years.
 - Supporting rational from needs assessment: Station No. 3 lacks proper space for storage of gear and equipment, along with spatial constraints in the dormitory and a lack of a wellness area.
- 3. Recognize that Fire Station No. 2 should be replaced within the next 20 years. Supporting rational from needs assessment: Fire Station No. 2 is suitable to meet the needs of the department in the short term, however given the current

location of the facility in the flood plain, there is a limit to the future renovations and expandability of the station, and it is recommended that the City plan the station be relocated in the long-term when the station reaches end of life.

Attachment 5 to this report provides conceptual block planning for Fire Station No. 1 and Headquarters replacement along with the proposed renovations to Station No. 3.

As part of the facility needs assessment assignment, the consultants also reviewed the GFD training requirements and the current use of a mobile burn trailer. The life cycle costs were reviewed considering training opportunities afforded by both a burn trailer and a burn tower structure. The conclusion was that the overall life cycle costs were negligible based on a 50-year horizon, with the burn tower having a capital cost of \$2.45 million, and a projected capital for three burn trailers over the same time-period having a capital cost of \$800 thousand each or \$2.4 million total. The burn tower requires capital to be spent earlier which is offset by potential revenue and operational savings throughout the lifecycle. Since the burn tower has a greater multitude of training opportunities offered, including high angle rescue, high rise situations, and has the potential to offer varied training scenarios, it is the preferred training tool moving forward to meet the GFD's mandated training requirements.

Financial Implications

Recommendations in the facility needs assessment report include the requirement for renovating or expanding capital assets or new capital assets. The requirements for these capital assets will inevitably require capital funding, to be allocated through the multi-year budget and long-term capital forecast. Overall, identified new capital investment not currently incorporated in the capital budget to be included in the 2024 – 2033 capital budget totals \$21.5 million for the GFD recommendations and GWPS station 0 replacement over the next 10 years. The forecasted new capital investments of \$21.5 million accounts for the capital expenditures that the County of Wellington currently has in their capital forecast for GWPS station replacements.

Concerning the GFD, the recommendation to replace the existing fire headquarters (FS0077) was included in the 2023-2031 capital forecast projected for the year 2030 at an estimated cost of \$30 million. This cost will need to be updated to align with a projected cost of closer to \$40 million based on the facility needs assessment report. The recommended renovations to Fire Station No. 3 at a cost of approximately \$2.5 million will be included in the 2024-2027 multi-year budget. The final recommendation of constructing a new Fire Station No. 2 will require land to be sourced, possibly to house both a Fire Station No. 2 and a GWPS Station No. 0. The financial impact of this is unknown at this time until a suitable location for both departments can be determined.

The facility needs assessment also reviewed the recommended path forward for a GFD training facility. Once the existing GFD training apparatus reaches the end of its useful life, currently projected to be around 2028, it is recommended that a new burn tower be constructed to replace the asset at the end of its useful life for a total cost of \$2.4 million dollars, with \$500 thousand already existing in the capital budget.

The City is proceeding with including costs for the relocation and replacement of Station 0 at 355 Elmira Road within the upcoming 2024-2033 capital forecast at a total cost of \$11 million including project soft costs and \$2 million for land acquisition for GWPS station 0 and future GFD Station No. 2. The City's multi-year budget currently includes \$4 million for a new paramedic station under PM0004 requiring an addition \$7 million in budget to be added. Included in the County of Wellington's 10-year capital forecast is the replacement of five (5) paramedic stations with a sixth outside of their 10-year capital forecast to lease back to the City. There is one remaining station to be replaced in the future that will be discussed between the City and County to determine the best solution for replacement.

The recommendations to consolidate the paramedics warehousing facilities could be completed through a leased space and would require an additional full-time employee to manage GWPS supplies and inventory. Currently, this task is the responsibility of the duty supervisor and could better utilize senior staff's time within the organization. The current paramedic warehousing facility in the City of Guelph is a leased space, along with Station No. 6 being a leased space and the recommendation would be to consolidate the lease to a single and more centralized location within the County of Wellington or City of Guelph with minimal overall financial impact to the GWPS departmental operation.

GWPS require adequate training space and storage space for training materials to ensure that staff are compliant with training requirements. Given the changes in space planning and hybrid work within the City, staff have partially addressed the training requirements in conjunction with the space planning project without further financial impacts to the City.

Attachments

Attachment-1: GFD Station Locations

Attachment-2: GWPS Station Locations

Attachment-3: GFD Needs Assessment Summary

Attachment-4: GWPS Needs Assessment Summary

Attachment-5: GFD Space Planning and Block Layout Diagram

Attachment-6: GWPS Generic Station Space Planning and Layout

Departmental Approval

Tara Baker, General Manager, Finance / City Treasurer

Stephen Dewar, Chief, Guelph Wellington Paramedic Services

Steven Goode, Acting Fire Chief, Guelph Fire Department

Report Author

Ian Scott, P. Eng, Manager, Facility Design & Construction

This report was approved by:

Antti Vilkko, P.Eng., MBA General Manager, Facilities and Energy Management Infrastructure, Development and Enterprise Services 519-822-1260 extension 2490 antti.vilkko@guelph.ca

This report was recommended by:

Jayne Holmes, P.Eng., PMP
Deputy Chief Administrative Officer
Infrastructure, Development and Enterprise Services
519-822-1260 extension 2248
jayne.holmes@guelph.ca

Colleen Clack-Bush
Deputy Chief Administrative Officer
Public Services
519-822-1260 extension 2588
colleen.clack-bush@guelph.ca