

**Subject: Third Party Infrastructure Agreement for the detailed design, tender and construction of the Richmond West Pump Station Reservoir Expansion and third well integration**

**File Number: ACS2023-PRE-PS-0063**

**Report to Agriculture and Rural Affairs Committee on 6 July 2023  
and Council 12 July 2023**

**Submitted on June 7, 2023 by Derrick Moodie, Director, Planning Services,  
Planning, Real Estate and Economic Development**

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**Ward: Rideau-Jock (21)**

**Objet : Entente avec des tiers relative aux infrastructures pour la conception détaillée, le processus de soumission et la construction de l'agrandissement du réservoir de la station de pompage de Richmond Ouest et l'intégration d'un troisième puits**

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**Rapport au Comité de l'agriculture et des affaires rurales**

**le 6 juillet 2023**

**et au Conseil le 12 juillet 2023**

**Soumis le 7 juin 2023 par Derrick Moodie, Directeur, Services de la planification,  
Direction générale de la planification, des biens immobiliers et du développement  
économique**

**Personne-ressource : Adam Brown, Gestionnaire, Examen des demandes  
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**Quartier : Rideau-Jock (21)**

## **REPORT RECOMMENDATIONS**

**That Agriculture and Rural Affairs Committee recommend that Council delegate authority to the General Manager, Planning, Real Estate and Economic Development department to enter into Third Party Infrastructure Agreements Caivan (Richmond North) Limited and Mattamy (Jock River) Limited for the detailed design, tender and construction of the required expansion to the drinking water reservoir and integration of a third well for the Richmond West Pump Station.**

## **RECOMMANDATIONS DU RAPPORT**

**Que le Comité de l'agriculture et des affaires rurales recommande au Conseil de déléguer au directeur général de la Planification, de l'Immobilier et du Développement économique le pouvoir de conclure des ententes avec des tiers relatives aux infrastructures, notamment avec Caivan (Richmond North) Limited and Mattamy (Jock River) Limited, pour la conception détaillée, le processus de soumission et la construction de l'agrandissement requis du réservoir d'eau potable de la station de pompage de Richmond Ouest et l'intégration d'un troisième puits.**

## **BACKGROUND**

### **Richmond West Pump Station (RWPS) Reservoir Expansion**

The Village of Richmond is located in the southwestern end of rural Ottawa, south of Kanata in Rideau-Jock Ward 21. Richmond is currently the second largest village in the City of Ottawa.

The Richmond Western Development lands are an area identified within the Official Plan and Richmond Secondary Plan as an area to experience significant development growth. The residences in this area are serviced by communal well system facility that was commissioned in 2019.

The Village of Richmond Water & Sanitary Master Servicing Study (MSS), finalized July 22, 2011, was prepared as a supporting technical document for the long-term village development objectives and vision as per Richmond Community Design Plan. The MSS conducted according to Schedule "C" of the Municipal Class Environmental Assessment (Class EA) evaluated and selected preferred solutions for upgrades/expansions to the water and wastewater infrastructure to service existing and future development within the entire Richmond Village boundary. The selected preferred alternative was a new public communal well system, where water is pumped from deep aquifer to provide servicing for large, planned growth areas (the western, southern and north/east parts of

the village) and through system expansions, to supply households in the entire village should there be a need to in the future.

The Richmond West Pumping Station (RWPS) facility, consisting of a communal water well, storage, pumping and distribution system, was constructed and commissioned to service the new **Mattamy (Jock River) Limited** and **Caivan (Richmond North) Limited** subdivision development called the Western Development Lands. Construction started in 2017 and the RWPS was commissioned in March 2019

This facility currently supports the developments of the Western Development Lands up to 5,796 people with water supply provided by two wells. For the purpose of redundancy, the required supply must be provided, when the largest well is out of service, this is referred to as the station's 'firm capacity'. The projected build-out population of the western development land is 7,890 people and associated "max day" water demands are 38.51 L/s. This would exceed the present firm water supply capacity of 28.2 L/s. To fully support the total combined population, a third well, having a capacity of at least 10 L/s, will be required to raise the firm supply, to match the maximum daily demand of 38.51 L/s.. This will be done by activating and integrating an already drilled and tested well that has a proven capacity of 15 L/s. The well is located within few meters from the existing wells.

The latest fire flow requirements for the service area are based on current housing densities, City of Ottawa Design Guidelines, the Fire Underwriters Survey (FUS) and requirements of the Ministry of the Environment, Conservation and Parks. The total storage capacity required to meet these needs at build out is 2,529 cubed metres. As the current storage capacity is 1,175 cubed metres, an expansion of reservoir storage by 1,359 cubed metres is required.

## **DISCUSSION**

Based on the evaluation of the Richmond West Pumping Station, two projects to expand the facility are required to allow the contemplated continued residential development to proceed as per the Richmond Secondary Plan.

The scope of the projects for the RWPS Reservoir Expansion include structural works for reservoir expansion, process piping and interconnections between cells, baffles in expanded cells, instrumentations for integration with supervisory control and data acquisition (SCADA) system consultation, followed by the integration of an operational third well into the facility.

The Richmond West Reservoir Expansion will provide fire flow capacity required for the Western Development Lands to build-out and will improve the station's reliability and the ability of Operations staff to safely operate and efficiently maintain the facility.

The integration of a third production well will ensure reliable service to ensure water can be provided to residents when the largest of the two existing wells may be out of service in the future.

As these projects only serve the Western Development Lands, they are considered a local service. As a local service, the costs are entirely the responsibility of the developer and are not funded by development charges, the tax base, or the water rate. In most cases, the developer would undertake construction of local services themselves and upon completion, turn the asset over to the City, as was the approach when the RWPS was initially constructed. Now that the system is operational, given the inherent risks and responsibilities associated with a live drinking water system, the City requires that these construction projects be managed by the City. The developers will advance the projects through the design phase, and the City will undertake the procurement process and manage the construction. There will be two separate projects undertaken by City staff, both funded by the developers: one for the reservoir expansion followed by one for the integration of the third well.

Due to the unique nature of this arrangement, Staff do not have delegated authority to enter into an agreement to accept funds from the developers to undertake the work on their behalf.

In order for this project to proceed in an effective manner, staff is recommending that Council grant delegated authority to the General Manager, Planning, Real Estate and Economic Development department to enter into a third party infrastructure agreement with **Caivan (Richmond North) Limited** and **Mattamy (Jock River) Limited** for the tender and construction of both phases (expanded reservoir and third well) of the expansion to the Richmond West Pump Station.

The estimate for the RWPS reservoir expansion project, including project management, soft costs and contingencies is \$3,900,000, plus taxes if applicable.. The estimate for the integration of the third well into the RWPS, including project management, soft costs and contingencies is \$2,800,000, plus taxes if applicable. Staff is recommending that delegated authority be granted to enter into agreements as necessary. Due to the uncertainty related to tender prices, and the fact that there would be no impact to City budgets, staff are also recommending that the authority granted to the General Manager, Planning, Real Estate and Economic Development not be bound by an upset limit, provided there is no use of City funds. Prior to releasing the tender, the City will

require the financial contribution from the developers to be paid or secured completely through a letter of credit.

### **RURAL IMPLICATIONS**

The expansion project for the RWPS will allow for the orderly development of the Richmond West lands as contemplated in the Official Plan and Richmond Secondary Plan.

### **COMMENTS BY THE WARD COUNCILLOR(S)**

Councillor Brown is aware of the report and has no concerns.

### **LEGAL IMPLICATIONS**

There are no legal impediments to implementing the recommendation of this report.

### **RISK MANAGEMENT IMPLICATIONS**

The expansion of the RWPS will ensure risks are mitigated by increasing reservoir capacity and adding a new well to ensure redundancy in the municipal drinking water system for Richmond West.

### **ASSET MANAGEMENT IMPLICATIONS**

The proposed agreement has no Asset Management Implications. However, implementation of this project will increase the availability of water for fire fighting purposes to existing development connected to the system and will ensure sufficient supply to meet the needs of future development to be connected to this system. The additional infrastructure will increase the inventory of assets that will need to be operated, maintained and renewed at end-of-life.

### **FINANCIAL IMPLICATIONS**

100 per cent of costs associated with the detailed design, tender and construction of the required expansion to the drinking water reservoir and integration of a third well for the Richmond West Pump Station are the responsibility of the developers (**Caivan (Richmond North) Limited** and **Mattamy (Jock River) Limited**).

To limit the financial risk of the City the developers will be required to provide a letter of credit or full cash contribution for the total cost of works prior to the award of tender.

Pending an executed agreement, if a letter of credit is provided, invoices will be submitted to the developers for cost of works as outlined in the agreement. The agreement will require any funds incurred to date to be paid to the City upon execution

and subsequent funds to be provided to the City in advance of the City incurring expenditures.

Any increases in costs for the projects after execution of the agreement are the responsibility of the developers (**Caivan (Richmond North) Limited** and **Mattamy (Jock River) Limited**).

Pending council approval budget authority for capital account 911130 Richmond West Reservoir Expansion will be increased to reflect the total estimate, plus taxes if applicable, 100 per cent funded by the developers (**Caivan (Richmond North) Limited** and **Mattamy (Jock River) Limited**). The current estimate is \$6,700,000, plus taxes if applicable, which is subject to change due to the uncertainty related to tender prices.

### **ACCESSIBILITY IMPACTS**

There are no accessibility impacts.

### **CONCLUSION**

The Planning, Real Estate, and Economic Development department recommends Council delegates authority to the General Manager such that City staff can complete the works, uses funds from the benefitting developers.

### **DISPOSITION**

Following Council approval, the Planning, Real Estate and Economic Development department, in consultation with Legal Services and Financial and Corporate Services, will complete Third Party Infrastructure Agreements between the City and **Caivan (Richmond North) Limited** and **Mattamy (Jock River) Limited** for the detailed design, tender and construction of the two-stage expansion of the Richmond West Pump Station reservoir.