

Report Date: February 13, 2025

VanRIMS No.: 08-3000-30
Submit comments to the Board

TO: Park Board Chair and Commissioners

FROM: General Manager, Board of Parks and Recreation

SUBJECT: Memorial West Park - Statutory Right of Way Change

RECOMMENDATION

A. THAT the Board approves the new sub-surface sewerage infrastructure in Memorial West Park as described in this report; and

B. FURTHER THAT the Board authorize the modification or replacement of the existing right of way agreement as required for the development and operations of the new sewerage infrastructure in form and content satisfactory to the Park Board General Manager, City Engineer, and Director of Legal Services.

PURPOSE AND SUMMARY

The City currently owns and maintains a combined sewer main within Memorial West Park, aligned with Highbury Street. As part of the City's Healthy Waters Plan and ongoing efforts to separate combined sewers and reduce combined sewer overflows (CSO), the City plans to separate this major combined sewer to better serve this growing neighbourhood. The City will install the proposed separated storm and sanitary mains using trenchless methods. This construction approach is more expensive but was recommended to minimize the impact to the park users and trees and reduce the excavation footprint within the park. The City is seeking approval for widening the existing Statutory Right of Way under the pedestrian pathway that runs through the middle of the park, to accommodate the proposed new storm main.

BOARD AUTHORITY / PREVIOUS DECISIONS

As per the <u>Vancouver Charter</u>, the Park Board has exclusive jurisdiction and control over all areas designated as permanent and temporary parks in the City of Vancouver, including any structures, programs and activities, fees, and improvements that occur within those parks.

CONTEXT AND BACKGROUND

The Memorial West Trenchless Sewer Upgrade (MWTSU) project was initiated by the need to replace aging combined sewer infrastructure with separated sewer mains in the Dunbar West sewer catchment bounded by Camosun Street (West), Dunbar Street (East), W 37th Avenue (South), and W 15th Avenue (North).

Approximately 88% of the combined sewer infrastructure surrounding Memorial West Park (Figure 1) is at least 90 years old. The typical life expectancy of an underground sewer main is approximately 100 years. Separating combined sewer mains reduces the risk of CSOs, extends the separated sewer network, and enhances the system's overall capacity to serve the City's growing needs, all of which advance the City's Healthy Water Plan objectives. The Metro Vancouver Integrated Liquid Waste and Resource Management Plan (ILWRMP) requires the City to separate 1% of its combined sewer system per year and to eliminate combined sewer overflows by 2050.

Other scope in addition to replacing and separating the aged sewer infrastructure within Dunbar East catchment area is upgrading the sewer pipes to accommodate future population growth and to provide the appropriate service level for current and future climate conditions. An Archaeological Overview Assessment (AOA) was completed in 2022, identifying low archaeological potential for the project area and recommending the *General City of Vancouver Guidelines for Archaeological Chance Find Management* to be adopted.



Figure 1 – Project Location

Memorial West Trenchless Sewer Upgrade (MWTSU) Project Scope

- Installation of approximately 215 meters of 1200mm diameter precast concrete storm main using trenchless (micro tunnelling) technology.
- Installation of approximately 200 meters of 375mm diameter PVC sanitary sewer within the existing 750 mm combined sewer main using slip lining construction method.
- Installation of all storm and sanitary sewer service connections in the park.
- Restoration of all areas disturbed or otherwise affected by construction.

Rationale for Trenchless Sewer Installation through Memorial West Park

Trenchless construction methodology is more expensive than open trench construction but was recommended to achieve the following outcomes:

- Preserve the mature trees in the park (24 mature trees and other smaller trees as shown in Figure 2).
- Reduce surface impacts during construction.
- Minimize GHG emissions with less material hauling.
- Reduce impacts to the park users.
- Avoid additional 500 meters of sewer main installation and residential impact in the case of rerouting the sewer mains around the park.



Figure 2 – Proposed Storm Sewer Alignment (looking North)

Project Schedule

Memorial West Trenchless Sewer Upgrade (MWTSU) project was initiated in 2022, and engagement with Park Development, Urban Forestry, and other interest holders started in April 2022. Design progressed in 2024 by an external consultant, and construction commencement is expected in June 2025, pending Park Board and Council approvals. It is estimated that construction will require approximately five to six months to complete, including the service connections and the restoration of the park areas disturbed by construction.

DISCUSSION

Statutory Right of Way (SRW)

The Highbury Street alignment through Memorial West Park currently includes an existing registered Statutory Right of Way (316886M) containing the GVRD/Metro Vancouver 2900mm sewer interceptor at a depth of approximately 50 meters, built in 1962. The City's existing 750mm combined sewer main is contained within an overlapping Statutory Right of Way (J4361) at a depth of approximately 4 meters, installed in 1980.

The existing City SRW width is 15 feet (4.572 meters), representing a constraint for the installation and maintenance of the proposed 1200mm storm main within the current SRW limits (outlined red in Appendix A). Engineering Services recommends a widening of the SRW limit up to 4.1 meters to the East to accommodate the proposed storm main alignment (below the pedestrian pathway). The West SRW boundary would remain unchanged.

As shown in Appendix C, the portion of the park that is proposed to be added to the SRW approximately coincides with the footprint of the existing pathway that runs in the north-south direction through the middle of the park, aligned with Highbury Street. The existing SRW occupies approximately 1% of the total park property. The widened SRW will double the area of the SRW, to approximately 2% of the total park property.

Engineering Services requested support from Legal Services to update the existing SRW Agreement J4361 over the expanded SRW area; while ensuring it does not conflict with the GVRD/Metro Vancouver SRW 316886M. The Land Survey Branch has prepared a new survey plan over the expanded area required for the proposed City (as owner) to City (as regulator) SRW Agreement (Appendix B and C).

Impacts to Park During Construction

The construction activity at ground level in the park will be generally limited to nine (9) localized excavations required to make in-park storm and sanitary sewer service connections to the new sewer mains. These will be fenced off and staffed with traffic control persons as needed to protect park visitors. Tree protection fencing will be erected within the work zone.

All usual park activities will be able to proceed during the construction period. The playground is anticipated to remain open for park visitors. Park Board staff have discussed the project impacts with the Dunbar Community Centre Association and facilitated meetings with Dunbar Lawn Bowling Club and Dunbar Baseball Little League. The project team accommodated requests to mitigate the impact of construction during the busy season: all parking lots within the park will remain available to park visitors; street parking on West 33rd Avenue is expected to be maintained during construction; designated traffic control personnel will assist the local traffic during the trucking operations. Project information signs will be installed in and around the park and a notification letter providing information on the expected construction timeline will be mailed to all residents in the neighbourhood prior to the construction commencement. A construction noise and vibration impact assessment were conducted during the design phase and vibration monitoring measures will be implemented during construction.

Impacts to Park After Construction and Future Considerations

The SRW Agreement will increase constraints on future park amenities or park infrastructure development within the SRW, due in part to the necessity of ensuring maintenance access to the City's critical infrastructure. Staff note that there will be no impact to the current park programming, open space, or ecological value. Once construction is complete, there will be no observable change to the physical surface conditions of the park other than small inspection chambers (lids) above the sewer service connection points.

Engineering Services will carry out inspection and maintenance activities within the SRW as needed and provide advance notice of such activities to the Park Board as outlined in the new SRW Agreement.

FINANCIAL CONSIDERATIONS

The sewer separation upgrade in the Dunbar West catchment area and at Memorial West Park is funded by the City of Vancouver Engineering Services from the approved Capital Plan 2023-2026 (Sewer Main Renewal Program). No capital expenditures are required from Park Board.

The new storm and sanitary mains will be City assets, and Engineering Services will operate and maintain these assets once the construction works are complete. There are no operating expenses required from Park Board.

CONCLUSION AND NEXT STEPS

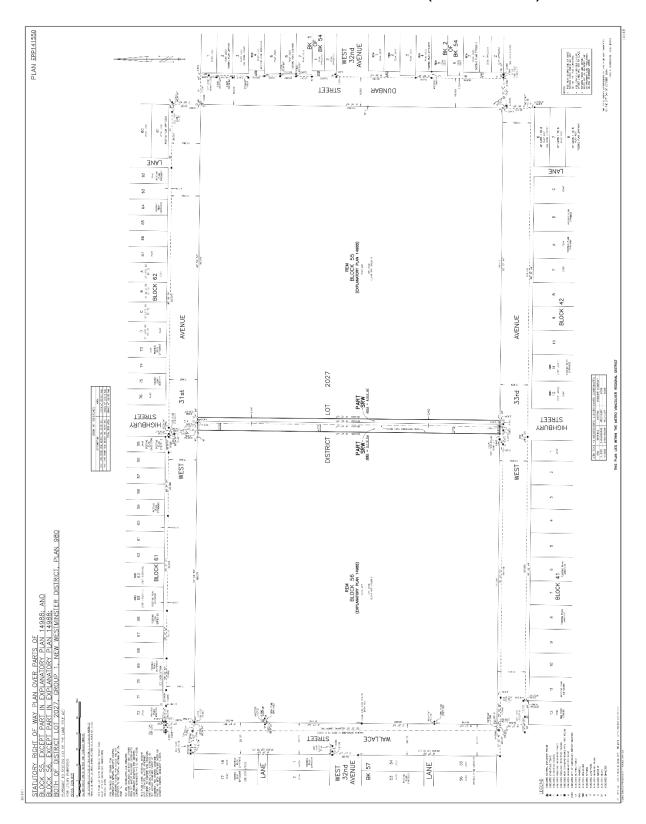
Upgrading and separating the existing sewer combined main within Memorial West Park, aligned with Highbury Street, is important to ensure Vancouver's critical infrastructure is well-managed and resilient. The project team will continue to work with Park Board Staff, Sewer & Drainage Design, Land Survey, and Legal Services to finalize and register the new SRW Agreement with the Land Title Office prior to the construction commencement.

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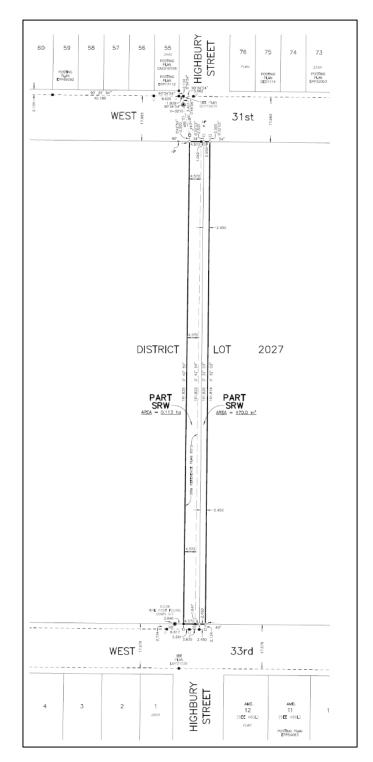
APPENDIX A EXISTING SRW AT MEMORIAL WEST PARK (SURVEY PLAN)

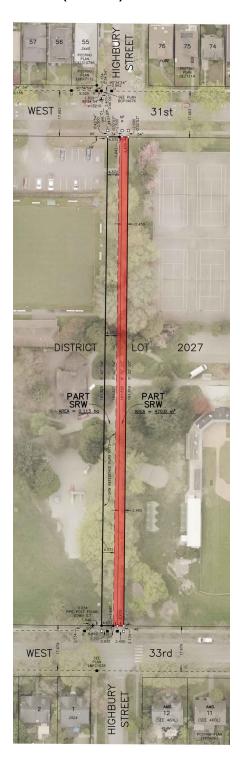


APPENDIX B
PROPOSED SRW AT MEMORIAL WEST PARK (SURVEY PLAN)



APPENDIX C
PROPOSED SRW AT MEMORIAL WEST PARK (DETAIL)





In the aerial image view (above, right) the proposed widening of SRW is shown hatched in red.