

# Site Location Study Pursuant to Bylaw 7188

## Hawrelak Park Renewal Final Report



Prepared for:

Prepared for:  
**City of Edmonton**  
Edmonton, Alberta

**Project Number EP-926**  
December 2021

Prepared by:  
**Spencer Environmental  
Management Services Ltd.**  
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15 December 2021  
File: EP-926

Dear Mr. Adhikari,

**Re: AA21-62 - Final Site Location Study Pursuant to Bylaw 7188 for Hawrelak  
Park Renewal**

We are pleased to submit this pdf copy of the above-mentioned final Site Location Study (SLS) for your files. This report is intended to fulfil Bylaw 7188 requirements regarding the project location in the river valley. At the City's request, replacement of a wooden stairway on the east slope of the park, west of Groat Road, has been added to the project description and to the drawings in Appendix A. A final EIA has been prepared for the proposed project and is provided under separate cover.

Please contact the undersigned if you require additional information.

Sincerely,

**Spencer Environmental  
Management Services Ltd.**



Andra Bismanis, M.Sc., P.Biol.  
Vice-President, Science Practice



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cc: Rachel Dumont, City of Edmonton

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## 1.0 INTRODUCTION AND PROJECT LOCATION

William Hawrelak Park (Hawrelak Park) is a 68 ha park, featuring a 5 ha anthropogenic lake, located in the central Edmonton river valley situated between Groat Road to the east and the North Saskatchewan River (NSR) to the west. It is the most intensively used park in Edmonton (Figure 1, Appendix A). The park comprises the lake, open grassy areas, a border of native forest, and supporting amenities including a main pavilion, Heritage amphitheatre, boathouse, three picnic shelters and a parks operations yard. The park hosts several major festivals and events and supports picnic and other day uses throughout the year. Hawrelak Park is over 50 years old and requires life cycle replacements of utilities, transportation, open spaces and facility infrastructure to better support the site's existing varied and intensive uses. For example, roadways, trails, buildings and open space furnishings are all beginning to deteriorate and are in need of improvements (Plates 1.1 to 1.5).



**Plate 1.1. Picnic Shelter #1 to be rehabilitated (20 October 2020).**



**Plate 1.2. Service yard near the park entrance to be rehabilitated (20 October 2020).**



**Plate 1.3. Roadway and parking area to be rehabilitated (20 October 2020).**



**Plate 1.4. Main Pavilion adjacent to the lake to be rehabilitated (20 October 2020).**



**Plate 1.5. Heritage Amphitheater to be rehabilitated (20 October 2020).**

In 2019, the City of Edmonton (City) completed the *William Hawrelak Park Rehabilitation Implementation Plan (Capital Investment Plan)* (RPK Architects *et.al.* 2019) to guide renewal of Hawrelak Park over the next 10 years. The plan considered the physical and functional condition of the assets, the current policies that are in effect and the operational requirements to maintain and sustain the park. It identified priorities for renewal, cost estimates, schedules and explored options for sequencing the work. That plan provided the roadmap for rehabilitation of the park and support for next steps. Currently, park rehabilitation is intended to be delivered in three phases: Phase 1 – Schematic Design and Design Development (current phase); Phase 2 – Working Documents; Phase 2a (if required because critical items are identified) – Construction of Emergent Items; and Phase 3 –

Construction and Post-Construction Services. The rehabilitation project is characterized as addressing renewed facilities, renewed infrastructure and improved open space. The scope includes both renewal and growth elements that have been funded to be addressed in Phase 1. All growth elements will require additional Council-approved funding through the 2023-2026 budget cycle prior to proceeding to future phases. It is anticipated that construction will proceed during the 2023-2026 budget cycle.

Hawrelak Park is located wholly within the boundaries of the City of Edmonton's North Saskatchewan River Valley Area Redevelopment Plan (NSRV ARP) (Bylaw 7188) and, therefore, triggers the need for an environmental review pursuant to that Bylaw. City of Edmonton ecological planners have determined that the appropriate level of review for this park renewal project is an Environmental Impact Assessment (EIA) subject to approval by City Planning and City Council. An EIA has been prepared and is provided under separate cover. A Site Location Study (SLS) is also required.

The project is currently in Phase 1 – Schematic Design and Design Development and the City retained Marc Boutin Architectural Collaborative Inc. (MBAC) to provide prime consulting services for rehabilitation of Hawrelak Park. The City has retained Spencer Environmental Management Services Ltd. (Spencer Environmental) as environmental consultant for this project, and to fulfill EIA and SLS requirements.

This report comprises the Bylaw 7188 SLS prepared for the Hawrelak Park renewal project. The SLS format and content follows a project-specific Terms of Reference (ToR) developed through scoping discussions held with a City of Edmonton ecological planner. This SLS addresses all components of the Hawrelak Park renewal project having potential to affect lands within the NSRV ARP. It is based on the Phase 1 schematic design report and information supplied directly by the City and project detail available to us as of 30 September 2021, with one exception. During review of the draft SLS City personnel indicated that detailed design would include replacement of a wooden stairway located on the east valley slope, just west of Groat Road, and requested that the SLS be adjusted to recognize that project element. . The intention is for the SLS and accompanying EIA (under separate cover) to act as a resource for park renewal planning, design and construction activities moving forward through the remainder of the 10-year planning horizon.

For the purposes of this SLS, the project is treated as a whole. While there are several individually proposed renewal components that may be considered major facilities, the renewal project can reasonably be treated as one facility as it does not provide for new park uses nor new infrastructure types or buildings.

## **2.0 PROJECT SCOPE**

### ***2.1 Project Description and Renewal Project Scope***

The proposed Hawrelak Park renewal/rehabilitation program will address the life-cycle rehabilitation of the park's many aging components [Marc Boutin Architectural Collaborative Inc. & PFS Studio (MBAC & PFS) 2021] and will include some growth

components and some ecological enrichment components. Broadly speaking, the project aims to achieve the following:

- Improvements to open space and trail systems
- Enhance circulation and accessibility throughout the park
- Renew existing facilities on site, including outdoor amenities and aging structures
- Improve accessibility of structures
- Improve functional programming (includes layout) of the service yard
- Improve and expand underground utilities
- Improve water quality in Hawrelak Lake

The MBAC & PFS (2021) schematic design report identifies specific improvements for the above park components at the schematic design level. It does not detail the work to be undertaken. Design details for project components will be provided in later project stages. All elements identified in the MBAC & PFS (2021) report have been funded for Phase 1 of the project (Schematic Design and Design Development) and design will advance on those components. The recommended improvements will be undertaken as funding is obtained, unless design reveals critical items that need to be addressed during the 2019-2022 budget cycle.

For context, following is a summary of project phasing:

- Phase 1 - Schematic Design and Design Development: This phase includes scope confirmation, assessments and studies, functional program of main service yard, schematic design, and design development. Phase 1 will be considered complete by the City's approval of the Design Development report and class 3 cost estimate.
- Phase 2 - Working Documents: This phase includes detailed design and will be considered complete by the City's approval of the Tender documents.
- Phase 2a (if required) - Construction of Emergent Items: This phase is subject to funding and will proceed only if the design reveals critical items that need to be addressed during the 2019-2022 budget cycle.
- Phase 3 - Construction and Post Construction Services: Phase 3 is subject to funding and includes construction implementation as identified in Phase 1. Unless critical components need to be addressed, it is anticipated that construction will proceed during the 2023-2026 budget.

Specific project components to be designed in Phase 1 and to be considered for construction are described below.

## **2.2 Renewal Component Description**

Proposed renewal items listed in the MBAC and PFS (2021) schematic design report, in combination with information provided by City of Edmonton to reflect decisions made by the City up to end of September 2021, form the basis of this detailed project description, with one exception. During review of the draft SLS City personnel indicated that detailed design would include replacement of a wooden stairway located on the east valley slope, just west of Groat Road, and requested that the SLS be adjusted to recognize that project element. Project components are quite varied in type, scale and location. For example, some components are limited to interior or exterior renovations of existing structures, others require shallow excavation or grading in small or extended areas of the park. Still others address widespread networks of below ground utilities. Some project components will be situated wholly within fully manicured locations in the park, others will be situated adjacent to or within more sensitive features, such as the lake, forest or areas of archaeological concern.

For SLS purposes, proposed project components have been organized into five categories and the primary anticipated renewal components items in each category listed. Together these components form the project that is the subject of this SLS. These components are listed here to provide a complete project characterization and an understanding of the overall scale and spatial extent of the full park renewal project.

Anticipated components comprise both rehabilitation and growth items, guided by the following definitions (RPK Architects *et.al.* 2019):

- Rehabilitation: The restoration of an existing element, so that it can continue to function as initially designed and installed.
- Growth: The provision of a new element, or system, that would augment existing infrastructure or park function.

All itemized project components listed below are proposed rehabilitation items, unless noted as growth items in parentheses. The majority of project components are shown conceptually in (Figures 2a, 2b and 2c) to provide a spatial perspective of anticipated works within the LSA. In general, renewal projects are widespread, located in most areas of the park.

### **2.2.1 Open Space, Outdoor Amenities, Wayfinding**

#### **Landscaping**

- Regrade and/or repair turf areas to address:
  - high use, compacted areas with poor growing conditions
  - areas experiencing poor surface drainage
- Regrade picnic sites to improve drainage and increase the number of accessible picnic sites that include an asphalt connection and wayfinding signage (Plate 2.1)
- Enhance the perimeter forest edges, where reasonable (Growth) (Plate 2.2)
- Add plantings around the park's entrance to create a 'gateway' (Growth)
- Identify and remove invasive species (Growth)

- Enhance native vegetation on margins of constructed wetland and anthropogenic creek that discharge recirculated water to the lake

For more on landscaping approach refer to section 2.3.



**Plate 2.1. Existing (left) and proposed (right) park space configurations – conceptual (MBAC and PFS 2021).**



**Plate 2.2. Conceptual extension of forest into the park (MBAC and PFS 2021).**

***Amenities***

- Replace existing furnishings with new, enhanced and accessible furnishings
- Improve the playground, including providing accessible circulation, updating equipment and providing more diverse play features that appeal to a wider range of ages
- Investigate the need to repair or replace the Hawrelak Lake dock with a removable option, and take action as necessary
- Replace existing 3m wide bridge at the creek/lake interface with a 3.0 m wide vehicle rated bridge

- Replace/update benches, picnic tables and garbage receptacles to adhere to the City's Access Design Guide v.3
- Install park benches and seating areas regularly along MUPs (Growth)
- Place moveable chairs and tables adjacent to the Main Pavilion (Growth)
- Install a new boardwalk, with integrated seating, along on the eastern lakefront (Growth)
- Install playful seating elements (e.g., hammocks) throughout the park (Growth)

### **Wayfinding**

- Update signage for the park using selected sign types from the City's river valley park sign family
- Install additional wayfinding signs based on park entry points transition areas and decision points (Growth)
- In particular, improve pedestrian, cyclist, and vehicular circulation with clear wayfinding to improve overall comprehension of the park on arrival

### **2.2.2 Circulation**

#### **Non-Vehicular Circulation**

- Rehabilitate existing trails/paths\* (Figure 2b, Appendix A)
- Replace one wooden stairway on east park slope\* (Figure 2a, Appendix A)
- Add new paths to create a circulation network that encompasses the entire park to reduce potential vehicle pedestrian/cycle conflicts (Figure 2b, Appendix A)
- Add signage that indicates the park's circulation road is a shared space for both cyclists and motorists (Growth)
- Create two primary interconnecting multi-use path (MUP) (4 m wide) loops, the forest loop and meadow loop, that link the park perimeter to the concentration of facilities and programming that occur at the center of the park (e.g., Main Pavilion, Heritage Amphitheatre, Community League Plaza) (Growth)
- Add more bike parking spots (Growth)
- Unify the Main Pavilion, boat house, Heritage Amphitheatre and the Community League Plaza into a single, interconnected node

#### **Vehicular Circulation**

- Add additional parking to the main parking lot and to Shelter #2 adjacent to existing parking to replace parking count lost due to narrowing of roadway
- Remove the existing D-loop road that provides access to the service yard and replace with a southbound lane on the main circulation road up to the southern most entrance to the service yard (Growth) (Figure 2b, Appendix A)
- Remove the turn-around loop gates
- Reconfigure the dedicated parking stalls from 90 to 60 degrees in the main parking lot
- Repave all roads based on usage
- Replace all curbing

- Install pedestrian crossing where all trails intersect with the circulation roadway and within parking areas
- Install a level 2 electric vehicle charging station within the southeast corner of the main parking lot (Growth)
- Increase bicycle parking to a total of 125 stalls (Growth)
- Re-design the circulating roadway to include traffic calming features (Growth)
- Add signage that indicates the park's circulation road is a shared space for both cyclists and motorists (Growth)

Note: In general, proposed roadwork can be described as replacement work, with some adjustments as described above. The intention is to improve traffic flow, not accommodate higher traffic volumes. There is no intention to expand the park paved road network.

### ***Circulation and Lighting Strategy***

- Install lighting that clearly defines routes of travel through the park. Lighting design will comply with the City's 2019 Light Efficiency Community Guidelines Light Efficiency Guidelines, with consideration to neighbouring communities
- Install new lighting at the access to the existing Buena Vista/Hawrelak Park pedestrian bridge.

Note: Roadway and SUP lighting will be updated as required by roadway, parking and paved pathway changes. Lighting along regional pathways will not change.

### ***2.2.3 Facilities***

Facilities to be updated are widely spaced throughout the park as shown in Figure 2a.

#### ***Main Pavilion***

- Replacement of the exterior deck
- Rehabilitate/renew the structure, mechanical and electrical systems
- Upgrade interior finishes and fixtures (e.g., lighting, washroom fixtures)
- Replace below-grade duct work with overhead duct work
- Upgrade glazing and floor finishes (including skate tile)
- Provide triple-glazed custom upgrades to the building envelope to renew sealant and provide better insulation
- Add lockers and seating in the locker/changing area
- Relocate the skate rentals to operate out of the north side of the building allowing for direct outdoor public access (Growth)
- Relocate the mechanical space to the west side of the building (Growth)
- Provide a universal washroom (Growth)
- Improve pavilion food service area (Growth)

#### ***Heritage Amphitheatre***

- Rehabilitate/renew the structure, mechanical and electrical systems
- Upgrade interior finishes and fixtures

- Reconfigure parking, road entry, turnaround and addition of pedestrian pathway
- Review Life Cycle assessment to determine renewal or replacement needs of existing outdoor seating
- Provide a universal washroom (Growth)
- Reconfigure green room including upgrades to shower facilities (Growth)
- Add lighting to support pedestrian access from the parking lot (Growth)
- Reconfigure the existing fence around the facility using a slatted system
- Add plantings along new fence (Growth)
- Incorporate built-in bike shelters or other amenities along the fence (Growth)
- Place crushed gravel throughout the vendor and backstage areas (Growth)
- Install a new irrigation pump facility along the west side of the fence line (Growth)
- Regrade the slope coming up to the main entry to a 1:20 slope to create a more accessible path (Growth)
- Reslope the stage access ramp (Growth)

### ***Boat Pavilion***

- Rehabilitate/renew the structure, mechanical and electrical systems
- Rehabilitate irrigation system equipment
- Investigate the washed-out fill below the boat pavilion and the potentially displaced column/beam support, and repair as necessary
- Replace concrete patio surrounding the facility
- Install additional lighting for security
- Repurpose Boat Pavilion interior to provide boat storage (Growth)
- Insulate the facility to support winter storage and provide heating for winter storage (Growth).

### ***Picnic Shelters***

- Rehabilitate/renew the structure, mechanical and electrical systems
- Upgrade interior finishes and fixtures in the washrooms
- Accessibility upgrades to washroom doors (Shelter #1 only)
- Demolish Washroom 3 and build new expanded facility
- Add gender inclusive washrooms to Shelter #1 and 2, and redevelopment of Shelter #3 to incorporate the gender inclusive concept. Add universal/family room which may result in the potential expansion of facilities (Growth)
- Add heating and necessary envelope upgrades to allow for year-round function (Growth)
- Add custodial closets (Growth)

***Service Yard*** - assumes that changes made within this currently well-defined operations area will not affect lands outside of the area – potential exceptions to that assumption are noted with

### ***Main Services Building***

- Rehabilitate/renew the structure mechanical and electrical systems

- Add a new shared office, storage unit, and two (2) open hoteling office stations (Growth)
- Reconfigure the kitchen and staff area (Growth)
- Add universal washroom with staff shower (Growth)
- Add screened staff lockers, addition of five (5) changing rooms and storage area with mounted key box (Growth)
- Add stairs up the east bank into the service yard and concrete flatwork beside the newly developed stairs to enable an outdoor staff lunch area (Growth)
- Extend the garage space of the main services building to provide a flexible workspace (Growth)

#### Vehicle Storage

- Demolish vehicle storage
- Rehabilitate/renew the structure mechanical and electrical systems
- Life Cycle assessment of exterior cladding and electrical to determine the need for rehabilitation or replacement
- Structural investigation of roof beam

#### South Garage

- Rehabilitate all building systems
- Relocate the overhead door to the south of the building

#### Other

- Demolish Quonset Hut and build new storage facility in same location
- Demolish the existing aggregate and fuel sheds and replace them with a new aggregate and fuel facility along the west side of the service yard (Growth)
- Remove the existing road on the west side of the yard and replace with a new gravel road located further west (Growth)
- Expand staff parking and the main entrance to include 8 m two-way circulation (Growth)

Note: in combination, the proposed service yard improvements are anticipated to result in an increase in the service yard area of ~ 40m<sup>2</sup>.

***Pumphouse (G)*** *(The pumphouse, situated near the riverbank, is part of a system that withdraws water from the river and distributes it to Hawrelak Lake)*

- Rehabilitate/renew the structure, mechanical and electrical systems
- Life Cycle assessment of building facade and pump to determine need for rehabilitation or replacement, with subsequent implementation as necessary
- Amour the pumphouse facility in graffiti-resistant metal cladding
- Remove surrounding chain link fence
- Repair or replace river intake pipe, which runs underground from the pumphouse to ~ 50 m under the riverbed and daylight into the river, as needed – assessment in preparation

Note: Newer facilities, such as the Edmonton Federation of Community Leagues Pavilion, are not part of the renewal program.

#### *2.2.4 Underground Utilities*

The underground scope of work consists of replacement, rehabilitation, and upgrades to deep utilities and shallow utilities throughout the park. Deep utilities are water, sanitary, and stormwater systems, which are buried greater than 2.5m below grade. Shallow utilities include primary/secondary power, gas, and telecommunication lines that are buried less than 2.5m below grade.

##### Water

- Rehabilitate the entire water distribution system within the park and expand the system as required to provide fire coverage at Washroom/Shelter #2, the Service Yard, Heritage Amphitheatre and Main Pavilion (Partial Growth) (Figure 2c, Appendix A)

##### ***Sanitary and Storm Sewer***

- Rehabilitate the sanitary and storm systems
- Relocate the storm sewer network and associated catch basins if parking and road realignments are made, to accommodate new drainage patterns (Growth)
- Repair or replace or otherwise improve structural elements of three outfalls located on the riverbank in the LSA and potentially abandon a fourth (Figure 2c, Appendix A). The extent of repairs will depend on final design of the proposed storm sewer system but works contemplated at time of writing include:
  - Outfall #27: erosion and concrete work to increase bank stability (Plate 2.3). Pipe condition does not warrant replacement.
  - Outfall#28: construct a headwall outfall. The existing outfall currently consists of a small pipe only (Plate 2.4). A proper outfall will be designed for construction at this location, and the pipe repaired/replaced as well.
  - Outfall #25: replace the pipe; outfall structure is in good condition and requires no work (Plate 2.5)
  - Outfall #26: This outfall, which is used to discharge water from the lake will need to be cleaned (rock debris removed from inside the pipe), and the pipe repaired/replaced.



**Plate 2.3. Hawrelak Park Stormwater Outfall 27 (erosion and concrete work to increase bank stability; pipe condition does not warrant replacement) on east bank of NSR downstream of the Pumhouse (20 October 2020).**



**Plate 2.4. Hawrelak Park Stormwater Outfall 28 (existing outfall currently consists of a small pipe only; a headwall outfall will be constructed and the pipe repaired/replaced) on the East Bank of the NSR Upstream of the Pumhouse (12 May 2021).**



**Plate 2.5. Hawrelak Park Stormwater Outfall 25 (replace pipe; concrete outfall structure in good condition, no works required) on the East Bank of the North Saskatchewan River (12 May 2021)**

### ***Irrigation***

- Abandon and replace irrigation line layout (Figure 2c, Appendix A)
- Relocate the controls for irrigation into the service yard
- Irrigation system will use lake water and have a potable back up source.
- Upgrade water source for irrigation (assumes this is an off-site source and therefore has no potential for impact) (Growth)

### ***Gas/Power/Telecommunications***

- Replacement, rehabilitation, and upgrade, as needed

Other than outfall and associated pipe work to the west of the park, the underground scope of work described above will be limited to within Hawrelak Park (this must be remembered when interpreting the conceptual layout shown in Figure 2c).

### ***General Construction Notes and Considerations***

The deep utility scope of work is influenced by weather and must be completed in the spring/summer/early fall. Ideally, the shallow utility work would be done at the same time but could be completed in cold temperatures, if necessary. Multiple options exist for sequencing and resource loading and selected options will be identified as design progresses. Typical methodology for the underground work will be to work from deep to shallow and in a complete path so that the hardscaping/landscaping and building scopes can be completed concurrently or follow close behind. Open cut trenches are assumed for now. Less invasive, trenchless methods of repair, such as CIPP linings, can be explored for utilities through sensitive areas such as forests.

### 2.2.5 *Hawrelak Lake*

- Dredge the lake to remove the sediment that has accumulated over the years (R. Dumont, *pers. comm.*), to the original lake bottom elevation
- Dredging may require lake dewatering to the river, depending on dredging method selected
- Install an 8 m wide planted buffer around the majority of Hawrelak Lake to deter geese (as a water quality improvement measure)(Growth)
- Establish woody vegetation in open areas on islands to deter goose nesting
- Establish deep marsh emergent vegetation along select shoreline
- Assess and replace (if necessary) river intake/lake outfall mechanical system

In combination, the existing project components are located throughout the park, with the exception of some forested areas (Figures 2b and 2c, Appendix A).

## 2.3 *Landscaping*

The proposed project is intended to be consistent with the City of Edmonton's C532 Sustainable Building Policy through conscious green space design to reduce the need for over-watering greenery (MBAC & PFS 2021). This will be achieved using a typical landscaping strategy that reduces a reliance on water through creating organic micro-zones. Trees/shrubs/vegetation that need to be removed to accommodate construction activities will be replaced with adaptive or native alternatives pursuant to the City's Corporate Tree Management Policy. Landscaping and Tree Protection Plans will be prepared as appropriate for each site-specific project when it is funded for construction. Landscaping will meet or exceed all applicable City guidelines. All soils will be handled appropriately to ensure protection of topsoil integrity and where needed new or augmented topsoil will be provided.

## 3.0 HAWRELAK PARK RENEWAL LOCATION ANALYSIS AND JUSTIFICATION

### 3.1 *Alternative Location Review*

As this project is a river valley park renewal project, no alternative locations *remote to the park or to the river valley* were examined. The project must occur within the NSRV ARP boundaries.

### 3.2 *River Valley Dependencies*

This project is wholly dependent on the park's river valley location.

### 3.3 *Overview of Bylaws/Plans/Policies*

Hawrelak Park is a highly valued, high-profile, popular, destination city park and represents a key open space city asset. The park is the site of casual public use and annual formal events of all scales and across many types. Existing park facilities and services are consistent with City plans and policies. The proposed renewal project consists primarily of

rehabilitation of existing aging facilities to ensure that the park continues to be a high quality experience for users. As noted in the project description, a limited number of proposed project components are considered to represent growth. These growth components are intended to meet increased visitor demand, modernize infrastructure, increase accessibility or improve existing operations. For example, the proposed concept will provide more benches and more bicycle parking, include installation of an electric vehicle charging station, create indoor paddle boat storage to protect the boats and extend their life, create universal and more accessible washrooms and improve operations yard layout. There are no project components that introduce new park uses; therefore, the proposed rehabilitation is consistent with City bylaws, plans and policies.

A few project components seek to improve the ecological conditions at the park, for example, forest augmentation in select locations and lake margin naturalization plantings to reduce the nesting population of Canada goose and ultimately improve lake water quality. Enhanced/expanded natural habitat is consistent with many city policies, including Breathe and the Ribbon of Green.

## **4.0 CONSTRAINTS ANALYSIS**

It is axiomatic that the proposed project must occur within the river valley as the project is intended to renew aging river valley park grounds and facilities. Nonetheless, to fulfill the SLS Terms of Reference, following is a modified analysis of the social, financial, environmental and institutional constraints that make this project's location within the NSRV ARP (Bylaw 7188) essential (i.e., that limit the feasibility of locating this project outside of the NSRV ARP). Here, the project is treated as a whole. While there are several individually proposed renewal components that may be considered major facilities, the renewal project can reasonably be treated as one facility as it does not provide for new park uses nor new infrastructure types or buildings. All buildings currently present are to remain present with more or less the same footprint but in a renovated form.

### **4.1 Financial Constraints**

Not applicable. Financial constraints do not influence the feasibility of this project outside of the river valley.

### **4.2 Institutional Constraints**

The project is motivated by the City's desire to continue to provide an outstanding river valley park to citizens of Edmonton that includes facilities in good repair that meet current City standards.

### **4.3 Social Constraints**

Because this is, by definition, a river valley project, social constraints are not relevant to the feasibility of this project outside of the river valley. There are, however, a few compelling social reasons for this project. Park renewal will cater to park safety by addressing aging structures, improving wayfinding and CPTED and improving vehicular and non-vehicular circulation, including the interface of all modes of transportation. The project also includes improved facility accessibility, broadening the sectors of population it can adequately serve (e.g., improved accessibility at washrooms, picnic sites and the amphitheatre).

### **4.4 Environmental Constraints**

Not applicable. Environmental constraints do not influence the feasibility of this project outside of the river valley. The environmental setting of each project component was, however, considered during park renewal concept development to minimize the impact of the project on natural park components.

## **5.0 CONCLUSION**

The project location in the NSRV ARP is essential as the project is intended to improve this showcase, public river valley park. The specific selected locations/facilities for improvement and the described proposed changes have been identified with the goal of maintaining or improving park ecological values and respecting its river valley setting.

## **6.0 LITERATURE CITED**

Marc Boutin Architectural Collaborative Inc. & PFS Studio. 2021. William Hawrelak Park Rehabilitation Schematic Design Report - Draft. Prepared for the City of Edmonton. Edmonton, Alberta.

RPK Architects Ltd. 2019. William Hawrelak Park Rehabilitation Implementation Plan. Prepared for the City of Edmonton. Edmonton, Alberta.

## **Appendix A. Figures**

Figure 1. Project Location

Figure 2a. Park Structures/Facilities to be Renewed

Figure 2b. Proposed Surface Works

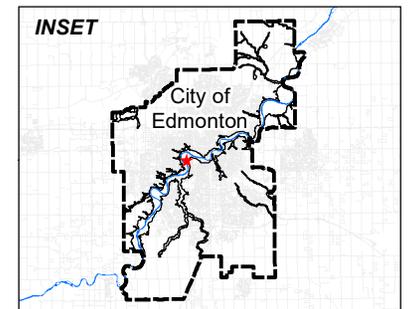
Figure 2c. Proposed Underground Works

**Figure 1.**  
**Project Location**  
*Hawrelak Park Renewal*



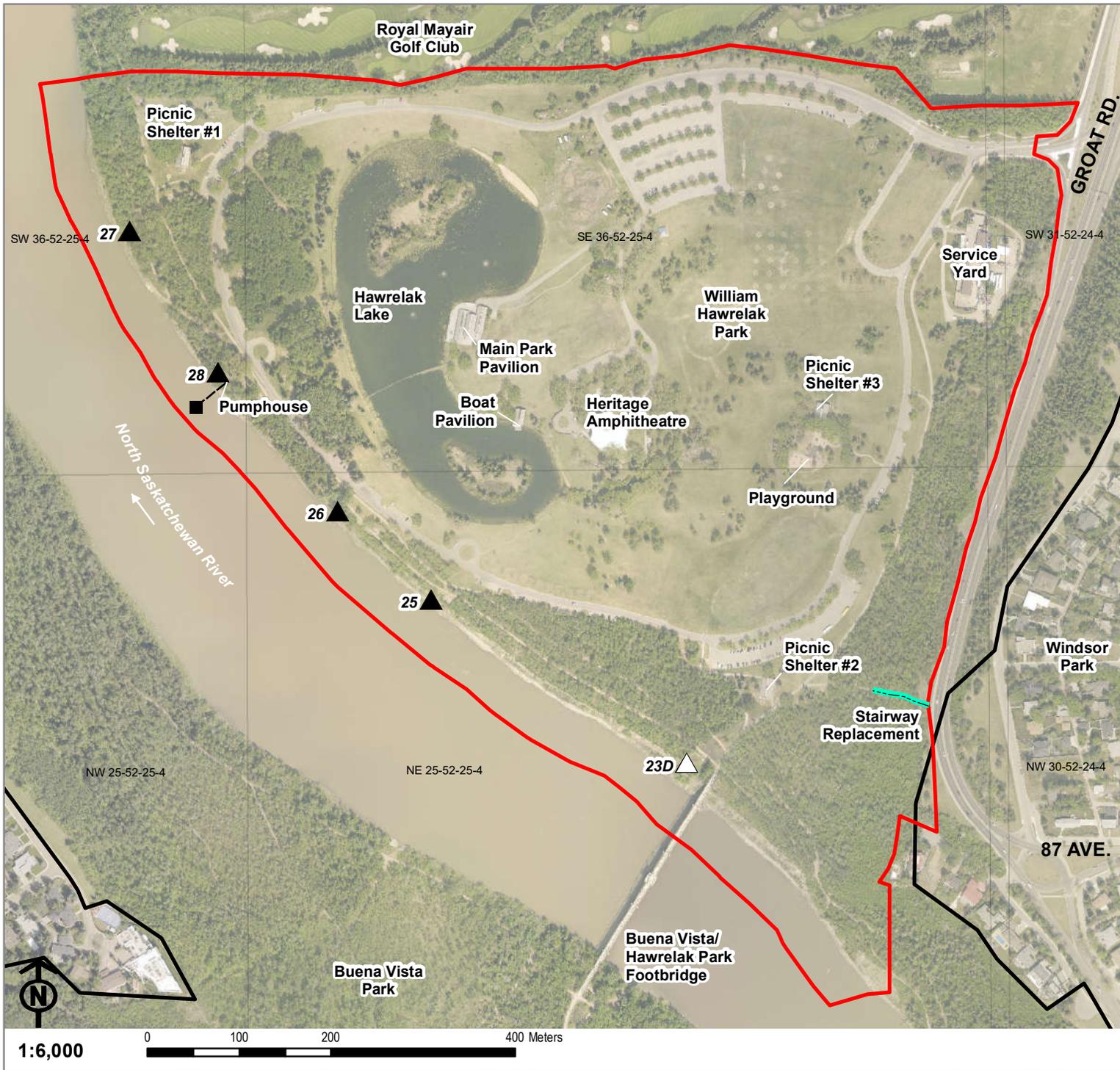
**Legend**

- Local Study Area
- Bylaw 7188 Boundary (COE 2008)



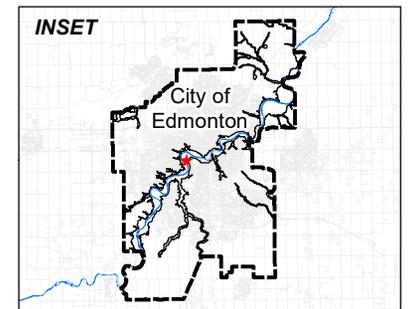
Map Date: 19 October 2021  
 Imagery Mosaic: May-July 2019 (COE)

**Figure 2a.**  
**Park Structures/Facilities**  
**to be Renewed**  
*Hawrelak Park Renewal*



**Legend**

- Local Study Area
- Bylaw 7188 Boundary (COE 2008)
- Drainage Outfalls (ID#) (COE 2019)**
- Existing Outfall with Proposed Works\*
- Existing Outfall
- Pumphouse River Intake & Pipe (on river bottom)\*

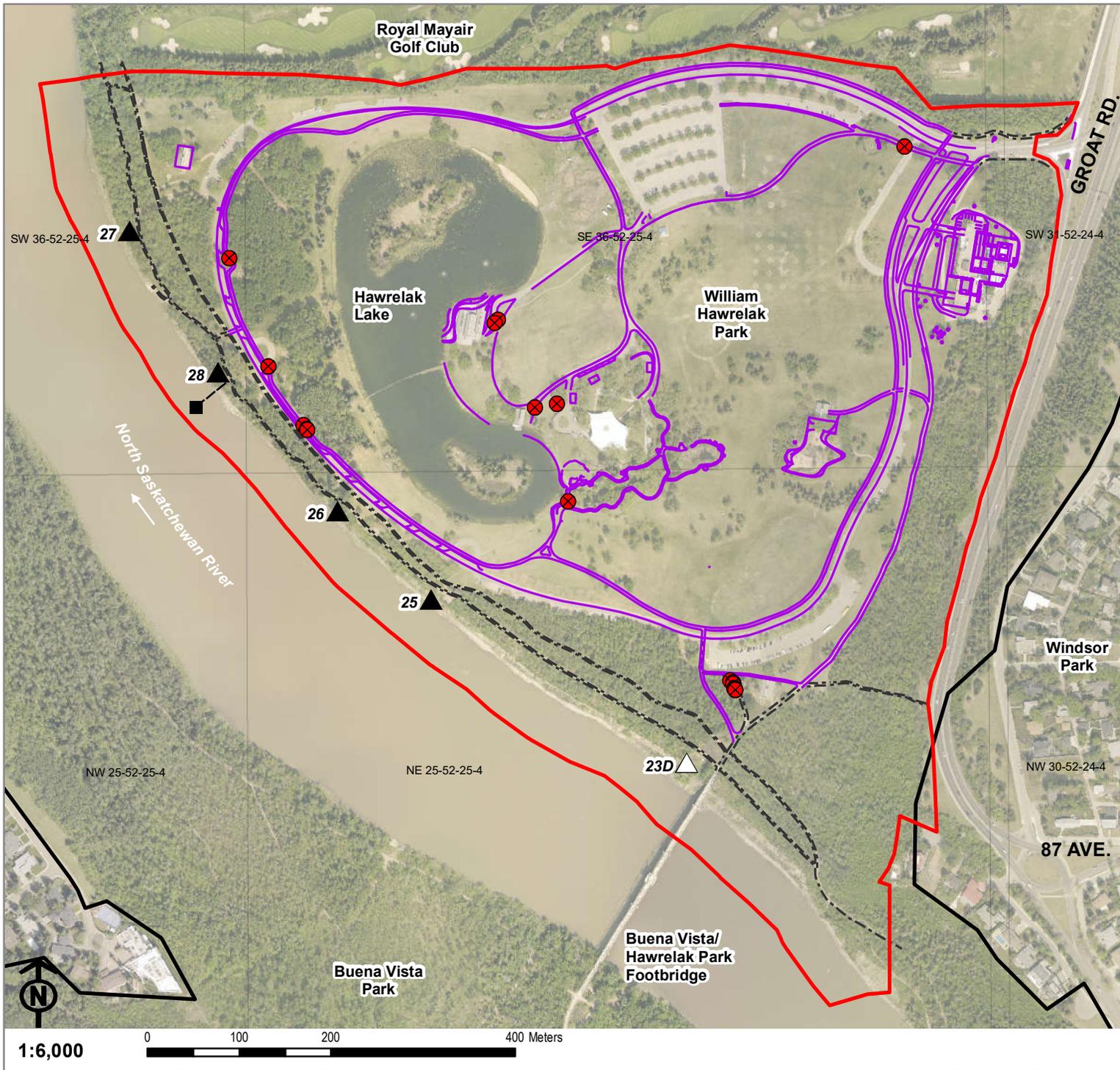


Map Date: 14 December 2021  
 Imagery Mosaic: May-July 2019 (COE)



\*Data provided by The Marc Boutin Architectural Collaborative Inc. (2021).

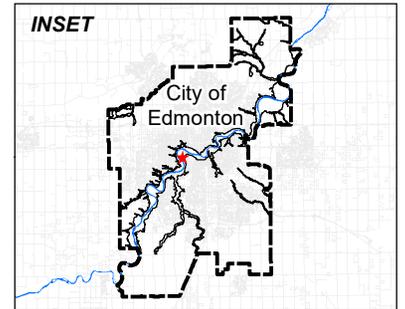
**Figure 2b.**  
**Proposed**  
**Surface Works**  
*Hawrelak Park Renewal*



**Legend**

- Local Study Area
- Bylaw 7188 Boundary (COE 2008)
- Drainage Outfalls (ID#) (COE 2019)**
- Existing Outfall with Proposed Works\*
- Existing Outfall
- Pumphouse River Intake & Pipe (on river bottom)\*
- X Proposed Tree Removal\*
- Proposed Surface Works\*
- Existing Regional Trails - No Change\*

*Proposed surface works are conceptual and intended to represent areas where surface works/changes, other than structure renewals, are likely to occur. Does not include picnic area additions, turfed area grading improvements. Does not include forest augmentation or Hawrelak Lake planting enhancements. Proposed lighting changes not shown here.*

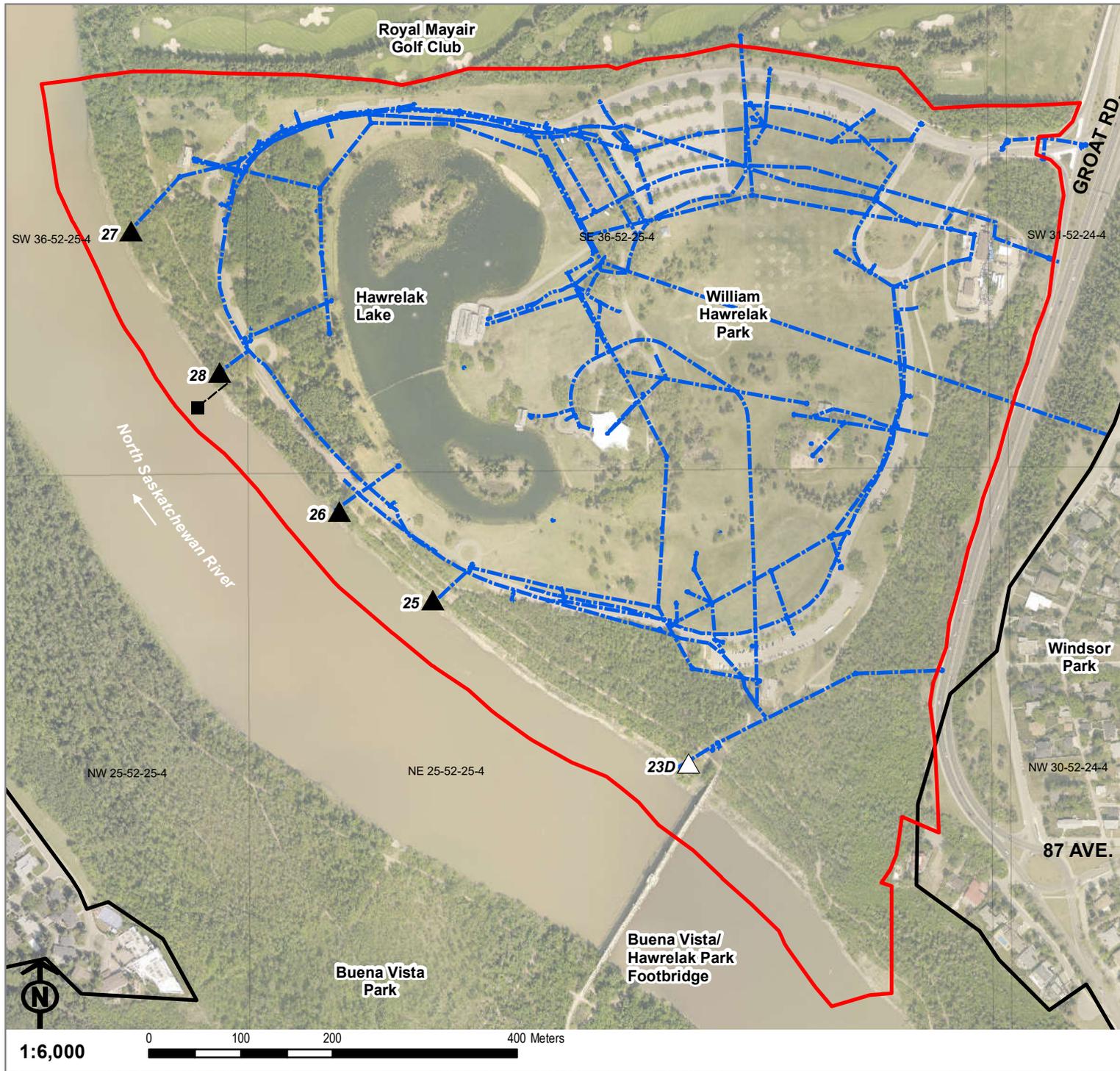


Map Date: 19 October 2021  
 Imagery Mosaic: May-July 2019 (COE)



\*Data provided by The Marc Boutin Architectural Collaborative Inc. (2021).

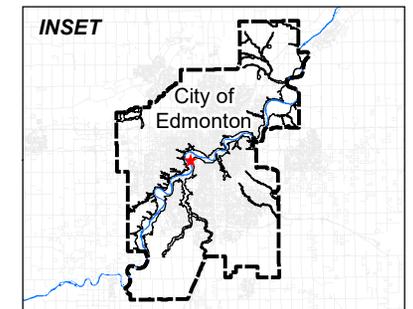
**Figure 2c.**  
**Proposed**  
**Underground Works**  
*Hawrelak Park Renewal*



**Legend**

- Local Study Area
- Bylaw 7188 Boundary (COE 2008)
- Drainage Outfalls (ID#) (COE 2019)**
- Existing Outfall with Proposed Works\*
- Existing Outfall
- Pumphouse River Intake & Pipe (on river bottom)\*
- Proposed Underground Works\*

*Proposed underground works are conceptual only and represent underground utility networks subject to renewal or other change. Not all system components shown will be subject to active work. For example, no work is contemplated on the east park vegetated slopes, near Groat Road.*



Map Date: 22 October 2021  
 Imagery Mosaic: May-July 2019 (COE)



\*Data provided by The Marc Boutin Architectural Collaborative Inc. (2021).