



## Site Location Study

Emily Murphy Park Renewal Project  
11904 Emily Murphy Park Road NW  
Edmonton, Alberta

November 17, 2020  
Trace Project No. 200-3007-01

**Prepared for:**

IBI Group Inc.  
Suite 300, 10830 Jasper Avenue  
Edmonton, Alberta T5J 2B3

and

City of Edmonton  
Integrated Infrastructure Services  
Building Great Neighborhoods  
Open Space Planning & Design

Project No.: CP-8747

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## DOCUMENT CONTROL

Revision	Description	Project Manager	File Location	Date Issued
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## EXECUTIVE SUMMARY

Trace Associates Inc. prepared this Site Location Study (SLS), on behalf of IBI Group Inc. (IBI Group), in support of the proposed Emily Murphy Park Renewal Project ("Project"), within Edmonton, Alberta. Emily Murphy Park is located at 11904 Emily Murphy Park Road NW ("the Park"). The Project occurs in a portion of the Park, which consists of the main recreation area ("the Project area"). This SLS, together with the Project's Environmental Impact Assessment (EIA) (report in review), fulfills the City of Edmonton's requirements for environmental reporting and was conducted in accordance with the North Saskatchewan River Valley Area Redevelopment Plan and project-specific Terms of Reference, developed by the City of Edmonton.

The Park is located on the North Saskatchewan River and provides the public with amenities, including 29 picnic sites, playground, hand/carry boat launch, and walking and cycling trails. The purpose of the Project is to renew the existing park roads, parking areas, signage, water line, and two water fountains at the Park. During the planning process, IBI Group and the City of Edmonton identified an opportunity to improve trail connectivity and are considering the construction of two additional walkway connectors in the northwest and southeast portions of the Park. The two additional pedestrian walkways will create new disturbances since they will occur outside of the existing disturbance footprint. Therefore, this change in scope triggered the requirement for the preparation of a SLS and an EIA (report in review).

The objectives of this SLS are to review project alternatives and examine the financial, social, environmental, and institutional opportunities and constraints associated with those alternatives. The SLS is provided to aid the City of Edmonton's determination of which alternative to proceed with, as per the North Saskatchewan River Valley Area Redevelopment Plan requirements.

Three alternatives were considered:

- Option 1: Renewal activities to existing infrastructure only;
- Option 2: Renewal activities to existing infrastructure and new walkway construction (West and East Alignment 1); and
- Option 3: Renewal activities to existing infrastructure and new walkway construction (West and East Alignment 2).

Option 3 was identified as the preferred alternative as it is the highest ranked alternative for social and institutional considerations, and the second highest ranked alternative for financial and environmental. While Option 3 does not have the lowest direct cost; however, moving forward with the new walkway construction now will likely result in reduced costs than pursuing the new walkway construction by itself sometime in the future. From a social standpoint, it ranks highest as it increases connectivity and safety for pedestrians with a clearly visible gravel walkway and the walkway is aligned along the current informal trail, which will encourage pedestrians to use the new formalized walkway. Environmentally, Option 3 is expected to have slightly higher impacts than Option 1 since additional pruning of branches is needed and pruning of roots may be required during construction. However, with the implementation of mitigation measures, including best arborist practices, the trees are not expected to be negatively impacted by the Project. The institutional analysis did not identify any contraventions that would prevent Option 3 from proceeding, whereas Option 1 and 2 do not fully align with several policy intents of providing pedestrian connectivity and reducing environmental impacts.



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## 1.0 INTRODUCTION

Trace Associates Inc. prepared this Site Location Study (SLS), on behalf of IBI Group Inc. (IBI Group), in support of the proposed Emily Murphy Park Renewal Project ("Project"), within Edmonton, Alberta. Emily Murphy Park is located at 11904 Emily Murphy Park Road NW ("the Park"). The Project occurs in a portion of the Park, which consists of the main recreation area ("the Project area"). This SLS, together with the Project's Environmental Impact Assessment (EIA) (report in review), fulfills the City of Edmonton's requirements for environmental reporting and was conducted in accordance with the North Saskatchewan River Valley Area Redevelopment Plan and project-specific Terms of Reference, developed by the City of Edmonton.

The purpose of the Project is to renew the existing park roads, parking areas, signage, water line, and two water fountains at the Park. During the planning process, IBI Group and the City of Edmonton identified an opportunity to improve trail connectivity and are considering the construction of two additional walkway connectors in the west and east portions of the Park. The two additional pedestrian walkways will create new disturbances since they will occur outside of the existing disturbance footprint. Therefore, this change in scope triggered the requirement for the preparation of this SLS and an EIA (report in review). The EIA describes the existing environment of the Project area, identifies potential environmental impacts that may occur as a result of the Project, and identifies mitigation measures to reduce or eliminate the potential impacts.

Trace conducted the work under the Subconsulting Services Agreement between IBI Group and Trace, and in accordance with Trace's Environmental Report – General Conditions (Appendix A).

### 1.1 Objectives

This SLS was prepared to fulfill the City of Edmonton's requirements described within the North Saskatchewan River Valley Area Redevelopment Plan Bylaw 7188 ("Redevelopment Plan") (COE, 2018). The SLS is required as per the Redevelopment Plan to understand the alternatives to the proposed project.

The objectives of this SLS are to identify project alternatives and examine the financial, social, environmental, and institutional opportunities and constraints associated with those alternatives. The SLS is provided to aid the City of Edmonton's determination of which alternative to proceed with, as per the Redevelopment Plan requirements.

### 1.2 Site Description

The Park is bounded by the River to the north, Kinsmen Park West to the east, a residential community to the south, a protected natural area (forested) to the southeast, and Royal Mayfair Golf Club to the west (Figure 1). Groat Road wraps around the west and southwest portions of the Park while Emily Murphy Road runs along the south end and connects to Saskatchewan Drive. The Park is connected to Emily Murphy Road and Groat Road by an interior access road, to the Kinsmen Park by the Forest Capital Trail, and to Saskatchewan Drive by staircases.



Currently, the Park is intensively used for recreation as part of the North Saskatchewan River Valley parks system within the City of Edmonton. Amenities at the Park include (COE, n.d.):

- Building with washrooms;
- Blue emergency telephone;
- Parking;
- Sheltered and non-sheltered picnic sites;
- Playground;
- Small craft boat launch (summer season);
- Toboggan hill; and
- Walking and cycling trails.

### **1.3 Project Description**

Briefly, the proposed Project consists of improvements and upgrades to:

- Granular walkways:
  - Approximately 180 metres (m) of new 1.8 m wide granular walkway construction, in two sections (West and East Walkways).
- Portions of roadways:
  - Approximately 200 m of grading and resurfacing to the 9 m wide access road into the Park from Emily Murphy Road.
  - Approximately 800 m of grading and resurfacing to the 6 m wide roads connecting Parking Lots 1, 2, 3, and 4.
- Parking Lots:
  - Approximately 2,400 square metres of grading and resurfacing to Parking Lots 1, 2, 3, and 4.
- The water fountain:
  - Demolition of the water fountain (including landscape remediation) and future installation of a water bottle fill station at the maintenance building.
- Signage:
  - Replacement of 3 existing park signs, installation of additional 5 new park signs (ID, directional, information) and 1 ped counter. The existing parking signage may require temporary removal due to proximity of construction depending on contractor methodology (approximately 56 posts).



Existing parking lots are expected to be used for laydown and staging, and equipment and construction workers are expected to remain on previously disturbed areas, except for the new walkway construction.

## 1.4 Project Alternatives

The Project team and the City of Edmonton considered the following alternatives, presented in Appendices B to D:

### ▪ Option 1: Renewal activities to existing infrastructure only:

- Renewal activities to existing infrastructure only (construction Spring 2021).

### ▪ Option 2: Renewal activities to existing infrastructure and new walkway construction (West and East Alignment 1 Walkways):

- Renewal activities to existing infrastructure only (construction Spring 2021), includes the addition of West Walkway construction:
  - West Walkway: New walkway construction providing a link for pedestrians with staircase off of Groat Road, through an existing picnic area to an existing gravel trail.
- Construction of new East Alignment 1 Walkway:
  - New walkway construction providing a link for pedestrians from sidewalk associated with Emily Murphy Park Road to the Park. The walkway is aligned to the west side of the current Park access road and down into the Park.

### ▪ Option 3: Renewal activities to existing infrastructure and new walkway construction (West and East Alignment 2):

- Renewal activities to existing infrastructure (construction Spring 2021), includes the addition of West Walkway construction:
  - West Walkway: New walkway construction providing a link for pedestrians with staircase off of Groat Road, through an existing picnic area to an existing gravel trail.
- Construction new East Alignment 2 Walkway:
  - New walkway construction providing a link for pedestrians from sidewalk associated with Emily Murphy Park Road to the Park. The walkway is aligned to the east side of the current Park access road and down into the Park, following existing informal trail.

## 2.0 OPPORTUNITIES AND CONSTRAINTS ANALYSIS

As per the Redevelopment Plan, the Project alternatives need to consider the financial, social, environmental and institutional opportunities, and constraints. The following sections provide a discussion of those opportunities and constraints, and Section 3.0 presents the SLS's recommendation for the preferred alternative.





## 2.1 Financial Opportunities and Constraints

The costs to construct the three options are presented in Table A. As all options being within the approved budget for the budget, this SLS identifies that Project cost is not a financial constraint.

Option 1 is the lowest construction cost of the three options as it does not include any new walkway construction. Option 2 is the most expensive due to the increased length of new walkway, required tree removal, and needed earthworks to allow for the construction of the East Alignment 1 Walkway. Option 3 is more expensive than Option 1 as new walkways are proposed, but it is less expensive than Option 2 as the overall length of new walkway is less.

While Option 1 is the lowest cost, there are likely to be cost efficiencies gained by combining the existing infrastructure upgrades with the new walkway construction and this opportunity for cost efficiencies may be realized with either Options 2 or 3. The detailed design, public engagement, and tendering can be done in one phase, rather than two, should the City of Edmonton proceed with the new walkway construction in the future. Construction costs may be less if the activities are combined, as mobilization and demobilization costs will only occur once, and the contractor is able to find efficiencies with the full scope of work. As well, construction costs are expected to be less if the Project is pursued now, compared to 5 to 10 years in the future.

Table A: Financial Costs			
Approximate Costs	Option 1	Option 2	Option 3
Construction	\$2,120,000	\$2,230,000	\$2,180,000

## 2.2 Social Opportunities and Constraints

The social considerations are presented in Table B, with 'Yes' indicating that there is an opportunity present and with 'No' or 'Limited' indicating that a constraint is identified. Increased accessibility for multiple user groups is a key component of the preferred alternative as the Park currently has limited wheelchair accessibility due to site topography and the existing excessive grades. Currently, none of the alternatives can provide additional wheelchair accessibility. Option 1 does not provide additional pedestrian connectivity, whereas Options 2 and 3 provide users with enhanced park access due to the addition of new walkway connectors, which will make the Park more inviting to users. However, Option 2 interferes with some Park amenities, which will reduce user experience, while Options 1 and 3 do not cause any interference.

Option 1 increases user safety by replacing aging infrastructure, but does not address the issue of users walking down the access road or informal trails. Option 2 provides additional user safety as it provides a formal walkway that is less steep and will direct some users away from walking down the access road. However, users may still choose to continue to walk along the access road or along its east side as this informal trail appears to be the preferred path. Option 3 provides users with a formal walkway along the same alignment as the current the informal trail, although the walkway grades will be steeper than Options 1 or 2.

After weighing the opportunities and constraints associated with each alternative, Option 3 is the preferred alternative from a social perspective.



**Table B: Social Considerations**

Consideration	Option 1	Option 2	Option 3
User Experience	Limited - upgrading existing infrastructure that extends the lifespan of current infrastructure, but no increased connectivity for users.	No - increasing connectivity with gravel walkways will assist users with wayfinding and increased accessibility. However, users may choose to continue to walk along the access road or along its east side as the existing sidewalk ends at this location even after Option 2 is constructed.  As well, this alignment interferes with the current amenities provided by the Park, as this location is the tobogganing hill.	Yes - increased connectivity with gravel walkways will assist users with wayfinding and increased accessibility. Option 3 is the shortest path down the slope. Users tend to choose the shortest path.
User Safety	Limited - upgrading infrastructure that is at its end of life will improve safety and remove hazards created by the existing infrastructure.  The safety improvements do not address user safety along the access road, as users will continue to walk on the access road, or along its east side on the informal trail	Limited – the West Walkway will provide increased user safety as users will be directed to the formalized trail by signage; therefore, reducing the numbers of users that will walk along the access road or through the parking lot where sight lines are limited.  The East Walkway alignment associated with this alternative has a less steep gradient than Option 3; therefore, is the safer alternative for slips/trips and better accommodates those with mobility issues.  Constructing the walkway along the west side of the access road will redirect users to this access rather than the access road itself. However, users are directed to a formal pedestrian access for the Park, but may choose to continue to walk along the access road or along its east side as the existing sidewalk ends at this location.	Limited – the West Walkway will provide increased user safety as users will be directed to the formalized trail by signage; therefore, reducing the numbers of users that will walk along the access road or through the parking lot where sight lines are limited.  Constructing walkways will direct users to a formal pedestrian access for the Park, in the area that they are currently using for access. A formal walkway in this location will encourage users to use the walkway and not the access road, and a formal walkway will be a visible reminder to drivers to expect pedestrians to be present.  Gradient of Option 3 is steeper than Option 2, and does not accommodate universal access requirements. Option 3 is currently being used by some users; therefore, the proposed grades match the existing grades/usability. Signage to be installed for steep slope awareness. The gravel surface will avoid safety issues in winter, compared to a concrete surface.



## 2.3 Environmental Opportunities and Constraints

Table C presents the opportunities and constraints associated with each alternative. The opportunities are identified based on the alternative's avoidance of natural features and the constraints are identified based on the alternative's potential for adversely impacting natural features. This section is supported by the information presented in the Project's EIA (report in progress).

Important natural features within the Park include steep slopes and associated sensitive soils, natural forest (deciduous and coniferous), and associated wildlife habitat. All three alternatives avoid impacts to these features due to their proposed locations within previously disturbed areas, including roads, parking lots and existing maintained grass picnic areas.

Option 1 has the least potential to result in adverse impacts as the proposed activities are limited to previously disturbed areas. The impacts associated with this option are expected to be successfully eliminated through the implementation of mitigation measures.

To construct the new walkways, ground disturbance and excavation is required for both Options 2 and 3. Currently, maintained grass is present in the locations of both the West Walkway, and the two alignments for the East Walkways associated with these alternatives. Option 2 has the greatest potential to cause adverse impacts that cannot be eliminated, as trees will need to be removed to allow for the East Alignment 1 Walkway to be constructed. Option 3 has the potential to create adverse impacts, but these impacts are expected to be successfully eliminated through the implementation of mitigation measures.

Therefore, Option 1 is the preferred alternative as it has the least potential to result in adverse impacts.

Table C: Environmental Considerations			
Positive Effects	Option 1	Option 2	Option 3
Avoidance of Trees	Yes	No	Yes
Avoidance of Native Vegetation	Yes	Yes	Yes
Avoidance of Wildlife Habitat	Yes	Yes	Yes
Adverse Impacts	Option 1	Option 2	Option 3
Impacts to Surface Water	No	No	No
Impacts to Groundwater	No	No	No
Impacts to Fish Habitat	No	No	No
Impacts to Geology/Geomorphology	No	No	No
Impacts to Soils	No	Yes – minimal	Yes - minimal
Impacts to Vegetation (Loss of native vegetation)	No	No	No
Impacts to Vegetation (Potential damage or trampling to retained native vegetation)	Yes – pruning of branches to allow for safe construction access	Yes – pruning of branches and roots, and potential removal of planted trees to allow for construction	Yes – pruning of branches and roots to allow for construction
Impacts to Vegetation (Introduction of non-native species)	Yes – introduction of weeds	Yes – introduction of weeds	Yes – introduction of weeds



Table C: Environmental Considerations			
Adverse Impacts	Option 1	Option 2	Option 3
Impacts to Wildlife (Sensory disturbance)	Yes – Temporary during construction	Yes – Temporary during construction	Yes – Temporary during construction
Impacts to Wildlife (Potential damage or destruction of nests)	Yes – When pruning of trees	Yes – When pruning of trees	Yes – When pruning of trees
Impacts to Wildlife (Loss of wildlife habitat)	No	No	No

## 2.4 Institutional Opportunities and Constraints

The City of Edmonton has policies and bylaws that regulate and guide development and construction within the North Saskatchewan River Valley system, and specifically, the park system. These policies are in place to conserve the natural features within the river valley from increasing development pressures. Where the alternative conforms to the policy or bylaw, this is identified as an opportunity and where the alternative does not conform, this is identified as a constraint. Tables D to I identify whether the proposed Project alternatives conform to these policies and bylaws.

Option 3 is the preferred alternative as it conforms to each applicable policies and bylaws. Neither Options 1 and 2 conform to one or more policies or bylaws.

Table D: Bylaw 7188 - North Saskatchewan River Valley Area Redevelopment Plan Conformance		
Description		
To protect the North Saskatchewan River Valley and Ravine System as part of Edmonton's valuable open space heritage and to establish the principles for future implementation plans and programmes for parks development. To provide open space that consists of variety of uses, a pedestrian movement network, and pedestrian and vehicle access (COE, 2018).		
Option 1	Option 2	Option 3
Yes – enhances the existing vehicle access by extending the lifespan of current road and parking lot infrastructure; however, does not provide additional pedestrian access.	No – enhances the existing vehicle access by extending the lifespan of current road and parking lot infrastructure and provides additional pedestrian access. However, the alignment of the east walkway interferes with some of the Park's current amenities (e.g. tobogganing hill).	Yes – enhances the existing vehicle access by extending the lifespan of current road and parking lot infrastructure and provides additional pedestrian access.



**Table E: Ribbon of Green: North Saskatchewan River Valley and Ravine System Master Plan Conformance**

Description		
To conserve the natural features, wildlife, vegetation, and cultural heritage of Edmonton for present and future generations, with new or expanded development and trails enhancing recreation opportunities and located in areas where environmental impact is low (COE, 1992).		
Option 1	Option 2	Option 3
Yes – enhances the existing infrastructure for the users, and focuses proposed activities on disturbed ground.	Yes – enhances the existing infrastructure for the users and focuses proposed activities on areas where environmental impact is reduced. However, trees are expected to be removed to allow for walkway construction.	Yes – enhances the existing infrastructure for the users and focuses proposed activities on areas where environmental impact is low. No trees are expected to be removed to allow for walkway construction.

**Table F: Bylaw 15100 The Way We Grow: Municipal Development Plan Conformance**

Description		
To utilize parks and open spaces to complement and enhance biodiversity, linkages, habitat and the overall health of Edmonton's ecological network. To restrict the public utility functions in parks and open spaces where they significantly compromise ecological value and integrity. To maintain a healthy urban forest and adopt a "no net loss" approach to the replacement of public trees (COE, 2010).		
Option 1	Option 2	Option 3
Yes – the proposed activities will not compromise ecological value and integrity of the natural areas within the Park, and no public trees will be removed.	Yes – the proposed activities will not compromise ecological value and integrity of the natural areas within the Park. Public trees are expected to be removed as part of the walkway construction, and the "no net loss" policy would be implemented through tree planting.	Yes – the proposed activities will not compromise ecological value and integrity of the natural areas within the Park, and no public trees will be removed.



**Table G: The Way We Green Conformance**

Description		
To conserve the natural features, wildlife, vegetation, and cultural heritage of Edmonton for present and future generations, with new or expanded development and trails enhancing recreation opportunities and located in areas where environmental impact is low (COE, 2011).		
Option 1	Option 2	Option 3
Yes – enhances the existing infrastructure for the users, and focuses proposed activities on disturbed ground.	Yes – enhances the existing infrastructure for the users and focuses proposed activities on areas where environmental impact is reduced. However, trees are expected to be removed to allow for walkway construction.	Yes – enhances the existing infrastructure for the users and focuses proposed activities on areas where environmental impact is low. No trees are expected to be removed to allow for walkway construction.

**Table H: The Way We Move: Transportation Master Plan Conformance**

Description		
To provide well-integrated transitions between sidewalks, the multi-use trail corridor network, other pedestrian networks, transit facilities, parkland, the river valley and ravine system (COE, 2009).		
Option 1	Option 2	Option 3
No – does not provide a well-integrated transition between the sidewalk along Emily Murphy Road NW into the Park and its pathway system.	No – the walkway alignment along the west side of the access road provides pedestrian connection from the sidewalk into the Park, but is not located along the alignment that the public are currently using.	Yes – the walkway alignment along the east side of the access road provides pedestrian connection from the sidewalk into the Park, and is located along the alignment that the public are currently using.

**Table I: Natural Area Systems Conformance**

Description		
To conserve, protect, and restore natural uplands, wetlands, water bodies, and riparian areas, as an integrated and connected system of natural areas throughout the City (COE, 2007).		
Option 1	Option 2	Option 3
Yes – focuses proposed activities on disturbed ground.	Yes – focuses proposed activities on areas where environmental impact is reduced. However, trees are expected to be removed to allow for walkway construction, and the “no net loss” policy would be implemented through tree planting.	Yes – focuses proposed activities on areas where environmental impact is low. No trees are expected to be removed to allow for walkway construction.



### 3.0 CONCLUSIONS

Option 3 is identified as the preferred alternative as it is the higher ranked alternative for social and institutional considerations, and the second highest ranked alternative for financial and environmental (Table E). Therefore, this SLS recommends to pursue Option 3 and that this recommendation is considered during the City of Edmonton's determination if the Project and proposed activities are essential under Bylaw 7188.

While Option 3 does not have the lowest direct cost, moving forward with the new walkway construction now will likely result in reduced costs than pursuing the new walkway construction by itself sometime in the future. From a social standpoint, it ranks highest as it increases connectivity and safety for pedestrians with a clearly visible gravel walkway and the walkway aligned along the current informal trail, which will encourage pedestrians to use the new formalized walkway. Environmentally, Option 3 is expected to have slightly higher impacts as additional pruning of branches will be needed, and pruning of roots may be required during construction. However, with the implementation of mitigation measures, including best arborist practices, the trees are not expected to be negatively impacted by the pruning. The institutional analysis did not identify any contraventions that would prevent Option 3 from proceeding, whereas Options 1 and 2 do not fully align with providing several policy intents of providing pedestrian connectivity and reducing the environmental impact.

Table J: Preferred Alternative by Consideration			
Consideration	Option 1	Option 2	Option 3
Financial	Most Preferred	Least Preferred	Neutral
Social	Least Preferred	Neutral	Most Preferred
Environmental	Most Preferred	Least Preferred	Neutral
Institutional	Neutral	Least Preferred	Most Preferred

### 4.0 LIMITATIONS OF REPORT

This report is based solely on the conditions which existed on site at the time of the assessment. The client, and any other parties using this report with the express written consent of the client and Trace, acknowledges that conditions affecting the environmental assessment of the Site can vary with time and that the conclusions and recommendations set out in this report are time sensitive.

The client, and any other party using this report with the express written consent of the client and Trace, also acknowledges that the conclusions and recommendations set out in this report are based on limited observations and testing on the Site and that conditions may vary across the Site which, in turn, could affect the conclusions and recommendations made.

The client acknowledges that Trace is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment, or development of the Site, the decisions on which are the sole responsibility of the client.



## 5.0 CLOSURE AND QUALITY MANAGEMENT

We trust this meets your requirements. Should you have any questions or comments, please contact the undersigned.

Respectfully submitted,  
Trace Associates Inc.



17-Nov-2020

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17-Nov-2020

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## 6.0 REFERENCES

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## Figures







## **Appendix A**

Trace Associates Inc.  
Environmental Report -  
General Conditions



**1.0 USE OF REPORT**

This report pertains to a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would necessitate a supplementary assessment.

This report and the assessments and recommendations contained in it are intended for the sole use of Trace Associates Inc.'s (Trace's) client. Trace does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than Trace's client (hereunder referred to as the "Client") or an approved agent of the Client. Any unauthorized use of or reliance on the report is at the sole risk of the user.

This report is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of Trace. The Client agrees that it shall use the report for its own internal purposes and it shall not provide the report to another party other than an approved agent.

**2.0 LIMITATION OF REPORT**

This report is based solely on the conditions that existed on site at the time of Trace's investigation. The Client, and any other parties using this report with the express written consent of the Client and Trace, acknowledge that conditions affecting the environmental assessment of the site can vary with time and that the conclusions and recommendations set out in this report are time sensitive.

The Client, and any other party using this report with the express written consent of the Client and Trace, also acknowledge that the conclusions and recommendations set out in this report are based on limited observations and testing on the subject site and that conditions may vary across the site which, in turn, could affect the conclusions and recommendations made.

The Client acknowledges that Trace is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the site, the decisions on which are the sole responsibility of the Client.

**3.0 INFORMATION PROVIDED TO TRACE BY OTHERS**

During the performance of the work and the preparation of this report, Trace may have relied on information provided by persons other than the Client. While Trace endeavours to verify the accuracy of such information when instructed to do so by the Client, Trace accepts no responsibility for the accuracy or the reliability of such information that may affect the report.

**4.0 LIMITATION OF LIABILITY**

The Client recognizes that property containing contaminants and hazardous wastes creates a high risk of claims brought by third parties arising from the presence of those materials. In consideration of these risks, and in consideration of Trace providing the services requested, the Client agrees that Trace's liability shall be limited as follows:

1. With respect to any claims brought against Trace by the Client for damages of any kind whatsoever, including without limitation, incidental, consequential, exemplary or punitive, for any reason whatsoever arising out of the provision or failure to provide services hereunder the amount of such claim and the extent of Trace's liability shall be limited to the amount of fees paid by the Client to Trace under this Agreement.
2. With respect to claims brought by third parties arising out of the presence of contaminants or hazardous wastes on the subject site, the Client agrees to indemnify, defend, and hold harmless Trace from and against any and all claim or claims, action or actions, demands, damages, penalties, fines, losses, costs and expenses of every nature and kind whatsoever, including solicitor-client costs, arising or alleged to arise either in whole or part out of services provided by Trace.

**5.0 JOB SITE SAFETY**

Trace is only responsible for the activities of its employees on the job site and is not responsible for the safety or supervision of any other persons whatsoever. The presence of Trace personnel on the job site shall not be construed in any way to relieve the Client or any other persons on site from their responsibility for job site safety.



## **6.0 DISCLOSURE OF INFORMATION BY CLIENT**

The Client agrees to fully cooperate with Trace with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client acknowledges that in order for Trace to properly provide the service, Trace requires and shall rely upon the full disclosure and accuracy of any and all such information.

## **7.0 STANDARD OF CARE**

Services performed by Trace for this report have been conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Engineering and scientific judgment have been applied in developing the conclusions and/or recommendations provided in this report. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of this report.

## **8.0 EMERGENCY PROCEDURES**

The Client undertakes to inform Trace of all hazardous conditions, or possible hazardous conditions that are known to it. The Client recognizes that the activities of Trace may uncover previously unknown hazardous materials or conditions and that such discovery may result in the necessity to undertake emergency procedures to protect Trace employees, other persons, and the environment. These procedures may involve additional costs outside of any budgets previously agreed upon. The Client agrees to pay Trace for any expenses incurred as a result of such discoveries and to compensate Trace through payment of additional fees and expenses for time spent by Trace to deal with the consequences of such discoveries.

## **9.0 NOTIFICATION OF AUTHORITIES**

The Client acknowledges that in certain instances the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the Client agrees that notification to such bodies or persons, as required, may be done by Trace in its reasonably exercised discretion.

## **10.0 OWNERSHIP OF INSTRUMENTS OF SERVICE**

The Client acknowledges that all reports, plans, and data generated by Trace during the performance of the work and other documents prepared by Trace are considered its professional work product and shall remain the copyright property of Trace.

## **11.0 ALTERNATE REPORT FORMAT**

Where Trace submits both electronic file and hard copy versions of reports, drawings and other documents and deliverables (collectively termed "Trace's instruments of professional service"), the Client agrees that only the signed and stamped versions shall be considered final and legally binding. Trace shall keep the original electronic documents for record and working purposes, and, in the event of a dispute or discrepancies, Trace's electronic copy shall govern.

The Client agrees that both electronic file and hard copy versions of Trace's instruments of professional service shall not, under any circumstances, no matter who owns or uses them, be altered by any party except Trace. The Client warrants that Trace's instruments of professional service will be used only and exactly as submitted by Trace and for the purpose for which such instruments of professional service were intended.

The Client recognizes and agrees that electronic files submitted by Trace have been prepared and submitted using specific software and hardware systems. Trace makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

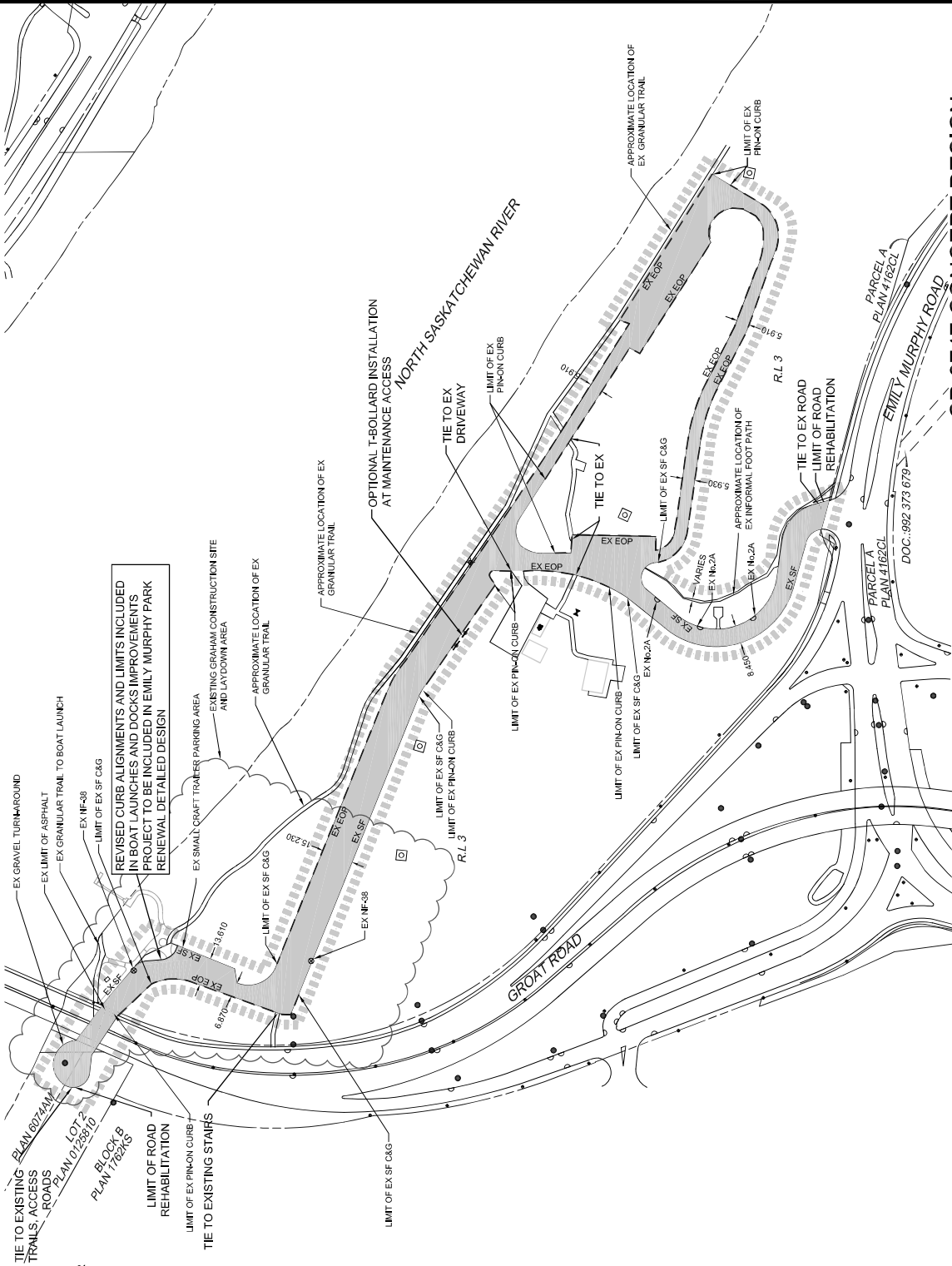
## **12.0 GOVERNING LAW**

The validity, construction and performance of this Agreement shall be governed by the laws in effect in the Province of Alberta.



## Appendix B

Option 1



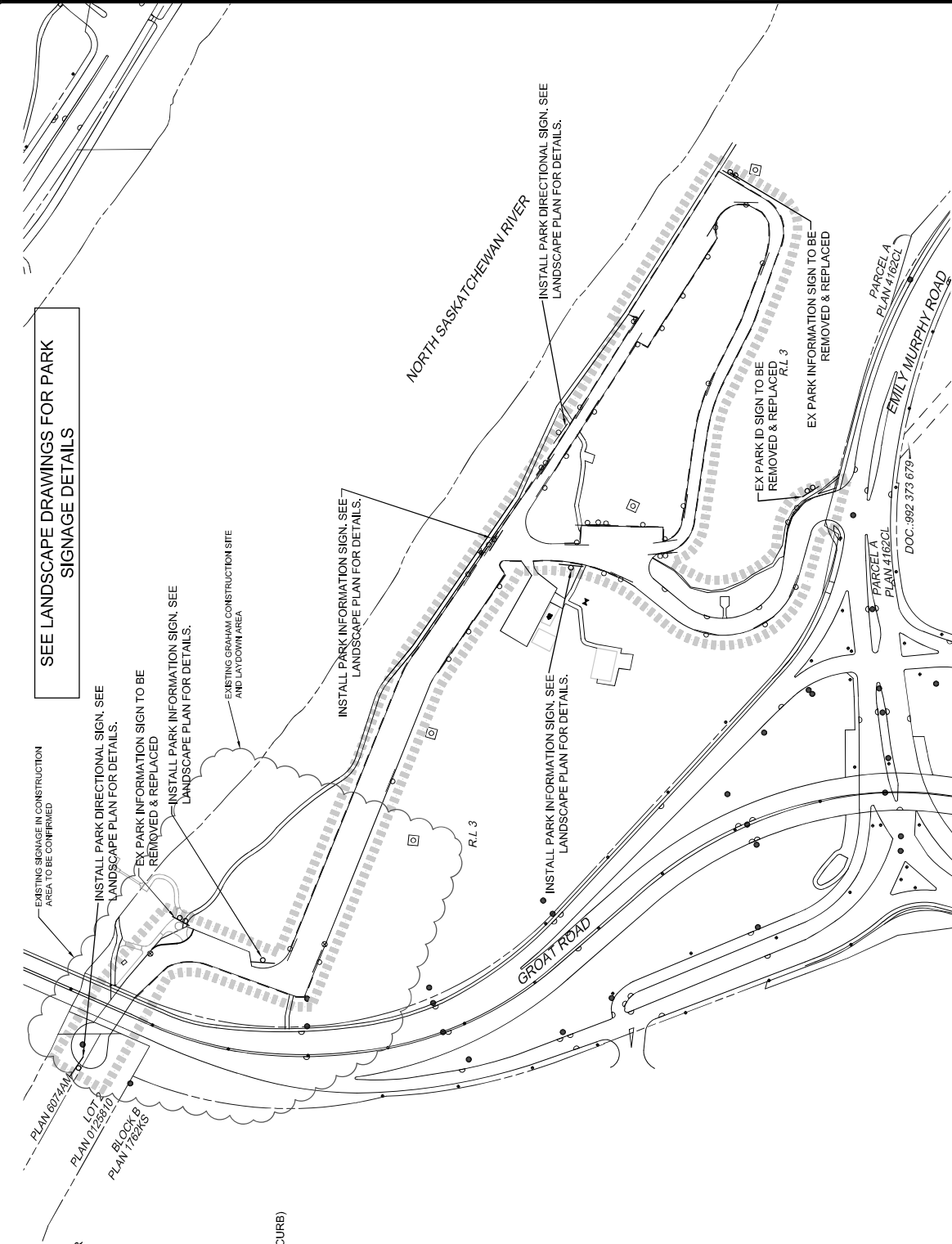
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APRIL 2020



LEGEND

- LIMIT OF CONSTRUCTION
- EXISTING STRAIGHT FACE CURB AND GUTTER
- EXISTING EDGE OF ROAD
- EXISTING WALKWAY
- EXISTING PIN-ON CURB BARRIER
- EXISTING BOLLARDS
- EXISTING REGULATORY SIGNAGE
- MANHOLES, HYDRANTS AND VALVES
- NF-38 CATCH BASIN
- SINGLE No.2A CATCHBASIN (STRAIGHT FACE CURB)
- LIGHT STANDARD, TRANSFORMER
- EXISTING CHAIN LINK FENCE
- EXISTING POST & RAIL FENCE

1. EXISTING PARKING REGULATORY SIGNS TO BE MAINTAINED PENDING ON-SITE AUDIT BY CITY OF EDMONTON.



CP-8747 CONCEPT DESIGN  
EMILY MURPHY PARK REHABILITATION  
STREET FURNITURE PLAN



FIGURE 9  
FILE NO. EC-124948

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## **Appendix C**

Option 2





## Appendix D

Option 3







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