





TO: GENERAL COMMITTEE


SUBJECT: LAKESHORE DRIVE RECONSTRUCTION PROJECT UPDATE –
PROPOSED CENTENNIAL PARK IMPROVEMENTS

WARD: 2

**PREPARED BY AND
KEY CONTACT:** L. BORGDORFF, P. Eng. 
SENIOR PROJECT ENGINEER (Ext. 4493)

SUBMITTED BY:  J. WESTON, M.A.Sc., P. Eng., PMP 
DIRECTOR OF ENGINEERING

**GENERAL MANAGER
APPROVAL:** R. FORWARD, MBA, M.Sc., P. Eng., 
GENERAL MANAGER OF INFRASTRUCTURE & GROWTH MANAGEMENT

**CHIEF ADMINISTRATIVE
OFFICER APPROVAL:** C. LADD 
CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That the Centennial Park Improvements components described within Staff Report ENG006-15 be approved so that the project may be included for consideration in the 2016 Business Plan.
2. That the capital budget for the Dymont's Creek channel improvements between Bradford Street and Lakeshore Drive (14-16-2523-1304) be increased by \$686,949 from the Tax Rate Capital Reserve to address anticipated additional costs associated with environmental restoration and the removal and disposal of sediment within the watercourse.

PURPOSE & BACKGROUND

3. The purpose of this staff report is to request Council approval of the proposed design for Centennial (see Appendix A for the Key Plan and Appendix B a plan of the subject area).
4. Council Motion 13-G-019 associated with the 2013 Business Plan, approved funding for the Lakeshore Drive project and required that staff report back to General Committee for approval prior to tendering any works associated with Centennial Park.
5. Council Motion 14-G-003, "Spending Approval for Specific Parks Elements within Contract 2 of Lakeshore Drive Realignment and Centennial Park Improvements Project", gave spending approval in the amount of \$700,000 for inclusion of specific park elements within the scope of the second construction contract (the current 2015 contract) for the Lakeshore Drive Realignment (Toronto Street to Tiffin Street) and Centennial Park Improvements. These elements were necessary to coordinate with the road and drainage works and maintain access to the park for public enjoyment.
6. Council Motion 14-G-176 "Lakeshore Drive Reconstruction (Toronto Street to Tiffin Street) Project Update" approved the award of Lakeshore Drive Contract 2 and directed staff to reduce the costs of the Centennial Park improvements phase of the project to ensure that the overall project cost does not exceed the previously approved total project budget of \$27,388,400, as adjusted for inflation. This motion was based on recommendations in Staff Report ENG015-14. Contract 2 is anticipated to be complete by the end of 2015 with some final landscaping work to be complete in spring 2016.

7. Council Motion 15-G-129 adopted the Waterfront and Marina Strategic Plan, including the recommendations for Centennial Park. This motion was based on recommendations in Staff Report ENG021-13.

ANALYSIS

8. Centennial Park infrastructure is aging, unreliable, sub-standard and needs to be renewed. The design of the 2016 and 2017 Centennial Park Improvements will include elements to address the condition of the asphalt surface of parking lots and walkways, electrical servicing, pathway lighting and water service line. The design also includes some of the recommendations of the Waterfront and Marina Strategic Plan (Strategic Plan) and the design allows flexibility for future implementation of other Strategic Plan recommendations.
9. The proposed 2016 work would focus on the core of Centennial Park from the south limit of the Marina to Dymont's Creek. The work primarily prepares a park foundation to build upon and includes new underground servicing, resurfaced parking lots, and new pathways. This section of the park would be completed in time for the Canada 150 celebrations. The proposed improvements to be constructed in 2016 as highlighted in Appendix B include:
 - a) Reconstructing the pedestrian pathway, generally along the existing alignment, from the Marina parking lot southerly through the playground area to Dymont's Creek;
 - b) Placing a pedestrian bridge using a simple span with railings across the new Dymont's Creek open channel that is being constructed as part of the current 2015 Lakeshore Drive Realignment contract;
 - c) Constructing a separate bicycle and roller-blade pathway from the Marina parking lot that parallels the pedestrian pathway;
 - d) Replacing pathway lighting with LED fixtures associated with the pedestrian pathway and bicycle and rollerblade pathways noted above;
 - e) Maintaining the open green space for events between the Marina parking lot and the concession booth. The area will be upgraded with electrical pedestals around the perimeter for power sources and a 400 amp electrical service for a stage performance with audio and lights;
 - f) Creating a new open green space for events in an area that is currently an existing roadway between the concession building and Dymont's Creek. The events area will include electrical pedestals around the perimeter for power sources and a 400 amp electrical service for a stage performance with audio and lights;
 - g) Upgrading the electrical feed to the park to provide an opportunity in the future for more electrical pedestals along the pedestrian pathways and/or around the larger green spaces;
 - h) Maintaining existing healthy trees, existing plants and existing landscaping where it could be incorporated with the new infrastructure and blending in the additional parkland and landscaping. The landscaping will include an irrigation system, additional benches along the pathways, and additional drinking fountains;
 - i) The water service lines to the drinking fountains will be upgraded to current standards;

- j) Providing additional parking in the area east of the new Lakeshore Drive at Victoria Street by resurfacing the existing old roadway. There will be a cost savings by utilizing the existing road base over the option of a full reconstruction to create the parking lots. Due to grading constraints, this revised design results in 51 fewer parking spots in Lots B and C; and
 - k) All construction activities will be staged and barricaded such that the pedestrians can still walk through the park in a safe manner. The construction activities will have provisions to limit negative impacts on activities within the park, especially for events that occur on weekends. There will be some impacts on park activities though (i.e. areas where new sod is being placed should not be used until the sod has taken root and is established).
10. The 2017 phase would focus on the park area between Dyment's Creek and Hotchkiss Creek and the final configuration for the parking lot in this area. The proposed improvements to be constructed in 2017 as highlighted in Appendix B include:
- a) Reconstructing the pedestrian pathway, generally along the existing alignment, from Dyment's Creek to Hotchkiss Creek and illuminating with LED fixtures. Note that the bicycle trail will be alongside the new Lakeshore Drive between Dyment's Creek and Hotchkiss Creek, and will be complete as part of the current 2015 contract;
 - b) Reconstructing the large Centennial Park parking lot south of Dyment's Creek and shifting it closer to the new Lakeshore Drive roadway to create a third large green open space for events in the area east of that new Centennial Park parking lot. This third events area will include electrical pedestals around the perimeter for power sources and a 400 amp electrical service for a stage performance with audio and lights;
 - c) Additional upgraded electrical servicing to this park area to provide an opportunity in the future for more electrical pedestals along the pedestrian pathways and/or around the larger green spaces;
 - d) Additional landscaping includes an irrigation system, additional benches along the pathways, and additional drinking fountains; and
 - e) The water service lines to the drinking fountains upgraded to current standards.
11. Through the value engineering exercise the following elements of the original design were identified for removal from the proposed 2016 and 2017 contract (Contract 3). These elements could be considered through future Business Plans:
- a) Enhancements to the pedestrian bridge being proposed to make it an iconic feature in the park. The enhancements could be sponsored by local groups such as the Lion's Club and/or Rotary Club;
 - b) The proposed boardwalk along the length of Centennial Beach;
 - c) Reconstruction of the South Marina parking lots that provide access to the Marina boat launch including improving their surface drainage and upgrading the night time illumination. This parking lot would be intended to accommodate only vehicles with trailers. The parking lot reconstruction can be coordinated with future plans for expanding facilities at the Marina, or proceed as an independent project; and
 - d) Additional improvements to the parking along the frontage of the Marina (Parking Lot A) and the parking lots across from Victoria Street (Parking Lots B and C) to maximize the number of available parking stalls.

12. The parking capacity available for the public utilizing the Centennial Park area will be affected by the works being completed in 2015 as well as the works proposed in 2016 and 2017. While the number of formal paved parking spaces will actually increase from the historic total, there will be a decrease in the total number of parking spots as the informal gravel parking area that previously existed to the west of Lakeshore Drive is no longer available. The number of formal parking spaces for vehicles with trailers will remain the same as currently exists. The total area available for trailer parking is again impacted as the informal gravel parking that previously existed is no longer available. The total parking numbers are summarized in the following table:

Parking Lot/Area	Parking Capacity		
	Existing (Pre-2015 Construction)	At completion of 2015 works	At completion of proposed 2016 and 2017 works
Parking on East of Old Lakeshore Drive			
Parking Lot A (fronting Marina Boardwalk)	80	135	135
Marina Parking Lot			
- vehicles only	34	34	34
- vehicles with trailers	11	11	11
Parking Lot B	0	29	29
Parking Lot C	0	21	21
Parking Lot D	104	151	192
On-Street Parking	53	82	82
Total East Side	282	463	504
Parking On West of Existing Lakeshore Drive	640	0	0
Total Both Sides	922	463	504

13. The current 2015 contract initially included improvements to the watercourse and pond on Dyment's Creek between Bradford Street and Lakeshore Drive (on the Wastewater Treatment Facility property), including environmental restoration (fish and turtle habitat and water quality components), but that work was deleted from the contract to further delineate the potential for sediment with properties that exceed certain Ministry of the Environment and Climate Change (MOECC) regulations and would therefore require special disposal processes. As part of additional geotechnical investigation conducted this year, sediment is being tested, categorized and quantified so that the works could be included in the 2016 and 2017 works and the associated cost could be included in the competitive bidding process.

ENVIRONMENTAL MATTERS

14. The detail design has included the following elements to further enhance the park environment:
- a) Naturalization strategies within the park by maintaining the vegetation and adding more vegetation in new parkland areas; and
 - b) Landscaping design and vegetation for geese management where appropriate such as alongside the shoreline and/or along the perimeter of event areas.

ALTERNATIVES

15. The following Alternatives are available for consideration by General Committee:

Alternative #1 General Committee could choose not to proceed with the improvements to Centennial Park proposed for 2016 or 2017.

This Alternative is not recommended as the park infrastructure is in poor condition and requires replacement/renewal, and this would not allow for the improvements prior to Canada's sesquicentennial celebrations in 2017 at Centennial Park.

Alternative #2 General Committee could choose to modify the proposed improvements within Centennial Park identified in this report.

This Alternative is not recommended as the proposed improvements have been developed to balance the demand to address infrastructure life cycle needs while minimizing costs and ensure that any recommended infrastructure is compatible with proposed elements identified in the Waterfront and Marina Strategic Plan.

Alternative #3 General Committee could choose not to include the additional costs to complete the Dymont's channel improvements as part of the proposed 2016 and 2017 Lakeshore works and defer the works to a future year.

This Alternative is not recommended as the proposed improvements reduce the risk of flooding to the City's Wastewater Treatment Facility by providing the watercourse capacity to convey the regulatory flows.

FINANCIAL

16. The design costs and estimated construction cost including contingency for proposed 2016 and 2017 works (not including the Dymont's Creek channel improvements between Bradford Street and Lakeshore Drive) are provided in the following table.

Year	Description	Estimated Cost including Inflation
2015	Design of Contract 3	\$237,000
2016	Pedestrian Bridge	\$506,597
	Parking Lots	\$594,476
	Parkland	\$1,282,001
	Subtotal	\$2,383,075
	Contingencies, non-recoverable HST, Contract Administration, Inspection, Materials Testing	\$484,045
	Total Proposed 2016 Phase	\$2,867,120
2017	Parking Lots	\$1,692,552
	Parkland	\$875,276
	Subtotal	\$2,567,828
	Contingencies, non-recoverable HST, Contract Administration, Inspection, Materials Testing	\$521,571
	Total Proposed 2017 Phase	\$3,089,399
	Total Value of Work	\$6,193,519

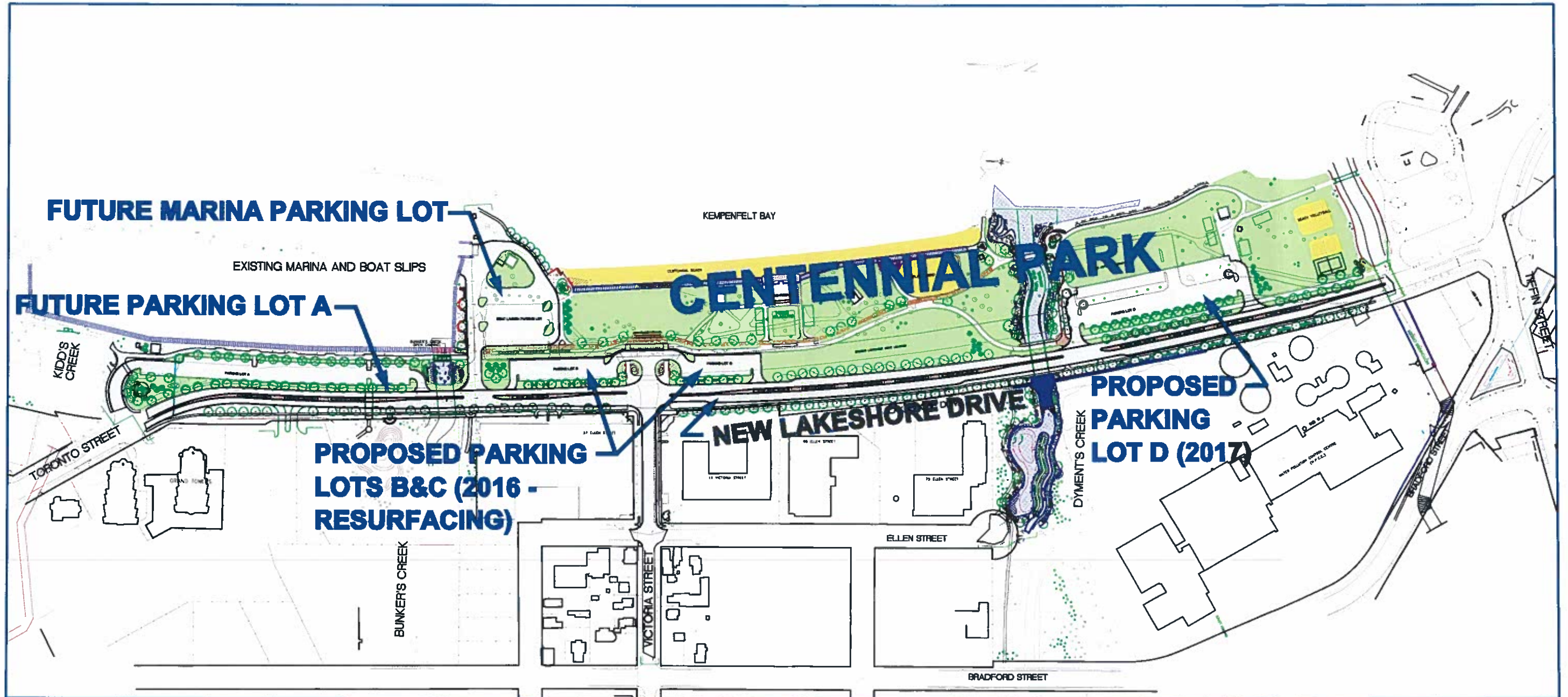
17. Per Staff Report ENG015-14 presented to General Committee in June 2014, the proposed Centennial Park Improvements were limited to \$5,939,778 to maintain the overall project cost identified at \$27,388,400, before adjustment for inflation.
18. The costs associated with the proposed improvements for Centennial Park Improvements that are being considered in the 2016 Business Plan for 2016 and 2017 are \$2,867,120 and \$3,089,399, respectively, for a total of \$5,956,519. With design costs of \$237,000, the total estimated cost for Contract 3 is \$6,193,519. Elements such as a boardwalk along Centennial Beach, enhancements for the pedestrian bridge, Dymment's Creek improvements between Bradford Street and Lakeshore Drive (on the Wastewater Treatment Facility property), and reconstructing the Marina Parking Lots would be considered in future Business Plans and budgeted at the appropriate time.
19. The total estimated cost for Contract 3 (\$6,193,519) is slightly over the upset limit noted in Staff Report ENG015-14 (\$5,939,778). The difference is an adjustment for inflation in construction work from the estimate provided in 2014. The inflation accounts for part of Contract 3 being constructed in 2016 and the balance of the work being constructed in 2017. Inflation for construction work is approximately 1.4% from 2014 to 2015, and estimated at an upper limit of approximately 2.0% for 2015 to 2016 and 2016 to 2017.
20. The total anticipated cost now associated with the Dymment's Creek channel improvements is estimated at \$940,000. The estimated cost associated with the work deleted from the 2015 contract was \$253,051 so the net difference requiring additional funding is \$686,949.
21. The updated total project cost is shown in the table below. Contract 1 has one outstanding claim to be resolved. Construction is still ongoing for the 2015 contract (Contract 2) so the estimated cost at time of tender award has not changed. The total project requires some utility relocation work as part of the Centennial Park Improvements. The costs for the 2015 contract (Contract 2), Contract 1 and the utility relocation work will be reconciled to Final Actual Costs once Contract 2 construction is complete, the Contract 1 claim is resolved and the utility work is complete.
22. The estimated total project cost is higher than the previous upset limit. The estimated cost accounts for:
 - a) An adjustment for inflation in construction costs; and
 - b) Increased costs for Dymment's Creek improvements at the pond between Bradford Street and Lakeshore Drive. Note that while this work is not required to complete the work associated with the Lakeshore Drive reconstruction project, there are cost efficiencies in completing all the surrounding Dymment's channel work at the same time and the channel improvements will convey the regulatory stormwater flows within Dymment's Creek therefore minimizing flooding risks to the City's Wastewater Treatment Facility.

Description	Status	Cost
Design for Contracts 1 and 2	Final Actual Cost	\$1,007,507
Contract 1 – Bridges at Dymont’s Creek and Bunker’s Creek	Estimated Cost	\$6,298,109
Utility Relocates	Estimated Cost	\$90,000
Property	Final Cost	\$47,000
Contract 2 – Improvements to Dymont’s Creek and Bunker’s Creek Drainage and Reconstruction of Lakeshore Drive	Estimate at Tender Award	\$13,990,006
Contract 3 – Centennial Park Improvements	Estimated Cost for Design and Construction	\$6,193,519
Total Project Budget (adjusted for inflation, without additional Dymont’s Creek Work)	Estimated Cost	\$27,626,141
Dymont’s Creek Work	Estimated Additional Cost	\$686,949
Total Project Budget (with additional Dymont’s Creek Work)	Estimated Cost	\$28,313,090

LINKAGE TO 2014 – 2018 COUNCIL STRATEGIC PLAN

23. The recommendation(s) included in this Staff Report support the following goals identified in the 2014-2018 Strategic Plan:
- Responsible Spending
 - Well Planned Transportation
24. The proposed work for Centennial Park Improvements reflects responsible spending by focusing on the critical infrastructure that needs to be replaced and provides an end product that acts as a foundation for future upgrades that could be considered such as an enhanced pedestrian bridge, a beach front boardwalk, additional improvements to parking lots, a splash pad and/or a new pavilion.
25. The proposed pathways for Centennial Park Improvements support active transportation and provide a safer transportation system by providing separate paths for walking and cycling, which are, of course, both separated from vehicular traffic. All pathways/roadways are designed to current geometric standards and include sufficient lighting for night time use.

APPENDIX "A"
KEY PLAN



APPENDIX "B"
LIMITS OF CENTENNIAL PARK IMPROVEMENTS

