

# brookview (bulyea heights) community enhancement report

march 2015





## Table of Contents

---

Section 1, Introduction & Methodology .....	1
Section 2, Site Inventory & Analysis .....	4
Section 3, Urban Park Concept .....	29
Section 4, Preliminary Cost & Implementation Strategy .....	49
Appendices .....	54

---

# Introduction & Methodology

## 1

The Brookview neighbourhood is located in southwest Edmonton and is bordered by the Whitemud Creek Ravine to the east, Terwillegar Drive to the west, Rabbit Hill Road to the south and Whitemud Drive to the north. Bulyea Road is the main collector road that provides access to the community from Rabbit Hill Road and Terwillegar Drive. Pedestrian access to the Whitemud Ravine trails is possible from various points within the neighbourhood.

IBI Group was tasked by the Brookview Community Association Ltd (BCAL) to conduct a review of the Brookview neighbourhood, also known as Bulyea Heights, with the aim of providing recommendations for the enhancement of neighbourhood public areas.

Some of the public areas, such as certain walkways, are owned and maintained by BCAL while others are owned and maintained by the City of Edmonton. The latter consists of streets, walkways and parks.

Our investigation for the Brookview (Bulyea Heights) Community Enhancement consisted of a number of steps, including an assessment of the existing conditions and analysis of opportunities for enhancements before preparing design concepts and recommendations. The following is a summary of these steps.

## Information Gathering

The first step was to gather base information from various sources. This information consisted of digital drawings of the Brookview community obtained from the City of Edmonton as well as documentation and drawings provided by BCAL. A number of site visits and meetings were also conducted.

## Site Inventory and Analysis

A site inventory is necessary to ascertain the physical characteristics of a site, or neighbourhood, as well as to assess various landscape related components such as the type and state of the existing vegetation as well as the style and condition of the walkways, lighting and site furniture.

In addition, the site analysis reveals the character of the neighbourhood, its opportunities and constraints, unique qualities and issues.

A site inventory of the entire neighbourhood is documented in a photographic record as well as a matrix with descriptive annotations. It is included in Appendix C of this report.

# Presentation of Site Analysis Results to BCAL Executive Committee

During our first meetings and discussions with BCAL, the executive committee presented their vision and ideas for the neighbourhood enhancements.

The next step was to present the site analysis findings to the executive committee. On this occasion, IBI Group listed the major assets and potential opportunities of the neighbourhood as well as the constraints and issues observed during the analysis. At the same time, two general design concepts for the areas that we identified would benefit from enhancements were also presented in order to inform the committee of our approach and to obtain a first round of feedback. These first discussions, as well as observations gathered during the site analysis, were used to devise the first concepts.

## Conceptual Design

The general concepts were based on two primary landscape characters found throughout the neighbourhood.

The first concept was based on the influence of the Whitemud Creek ravine as an integral part of the neighbourhood. This concept reflected a naturalized landscape approach in which native plant species, similar to what is found in the Whitemud Ravine, would figure prominently in the proposed enhancements to the community trails and walkways as well as park spaces. Native trees and shrubs would be located at trail intersections (nodes), open spaces such as parks as well as certain open areas within the walkway system.



The second concept was based on the landscape character of the existing neighbourhood streets, parks and walkways. In this scenario, the proposed enhancements reflect an “urban park” setting, which aims to accentuate the existing landscape elements mentioned above with additional planting, sitting plazas and nodes. Masonry elements such as pillars and planters were also proposed for plazas, nodes and other specific areas.

A themed walkway scenario was also proposed for the existing walkways linking the various points throughout the community. A more detailed description of the proposed walkway enhancements is presented in the concept section of this report.

Based on the feedback received from the BCAL executive committee, the urban park concept was chosen for further development.



# Executive Summary

This Community Enhancement Report is divided into three sections and three appendices.

The Introduction is a description of our findings during the site analysis stage of the project. It contains a base map of the Brookview community and depicts the areas of the neighborhood investigated during the site analysis phase. For ease of understanding, the neighbourhood was divided into the following:

- Areas 1, 2 and 3
- Neighbourhood entries 1 and 2
- The school site
- Frank Burton Field
- The Top of bank/ravine area.

These area identifications are referred to throughout the report. A site analysis of the entire neighbourhood is documented in a photographic inventory as well as a matrix with descriptive annotations. It is included in Appendix C of this report.

The second section explains the preferred Urban Park concept. It illustrates the general enhancement concept for the neighbourhood and also focuses on key areas suitable for enhancements. Enhancements are divided into three types – Plazas, Nodes and Trail Heads. This section also illustrates a themed walkway concept as well as directional and interpretive signage and a proposed updated community sign.

The third and final section is a compilation of site amenities that we recommend as part of the community enhancements. These include outdoor exercise equipment and suggested upgrades to both the pedestrian (walkway) and collector road lighting with examples of proposed light standards.

Appendices include an illustrated list of suggested plants for each enhancement location, a cost estimate and breakdown for each type of enhancements and finally, the site analysis matrix and associated photographic inventory.



# Site Inventory & Analysis

## 2

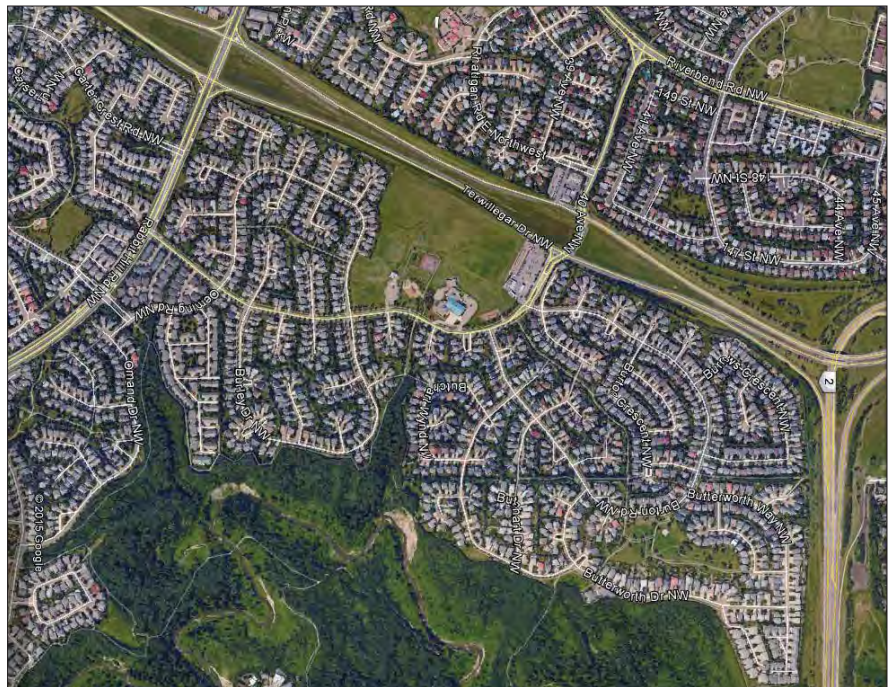
The first step in preparing this Community Enhancement report was the site analysis.

The base maps contained in this report were obtained from the city of Edmonton in a digital drawing format and show the streets, walkways and adjacent arterial roads.

The neighborhood was divided into various areas (figure 1). The boundaries of these areas were determined by physical separation between each, such as collector and local roads and natural boundaries such as the top of bank of the Whitemud Ravine. The walkways owned and maintained by BCAL are also illustrated.

The define areas contain all of the facilities owned or managed by the BCAL.

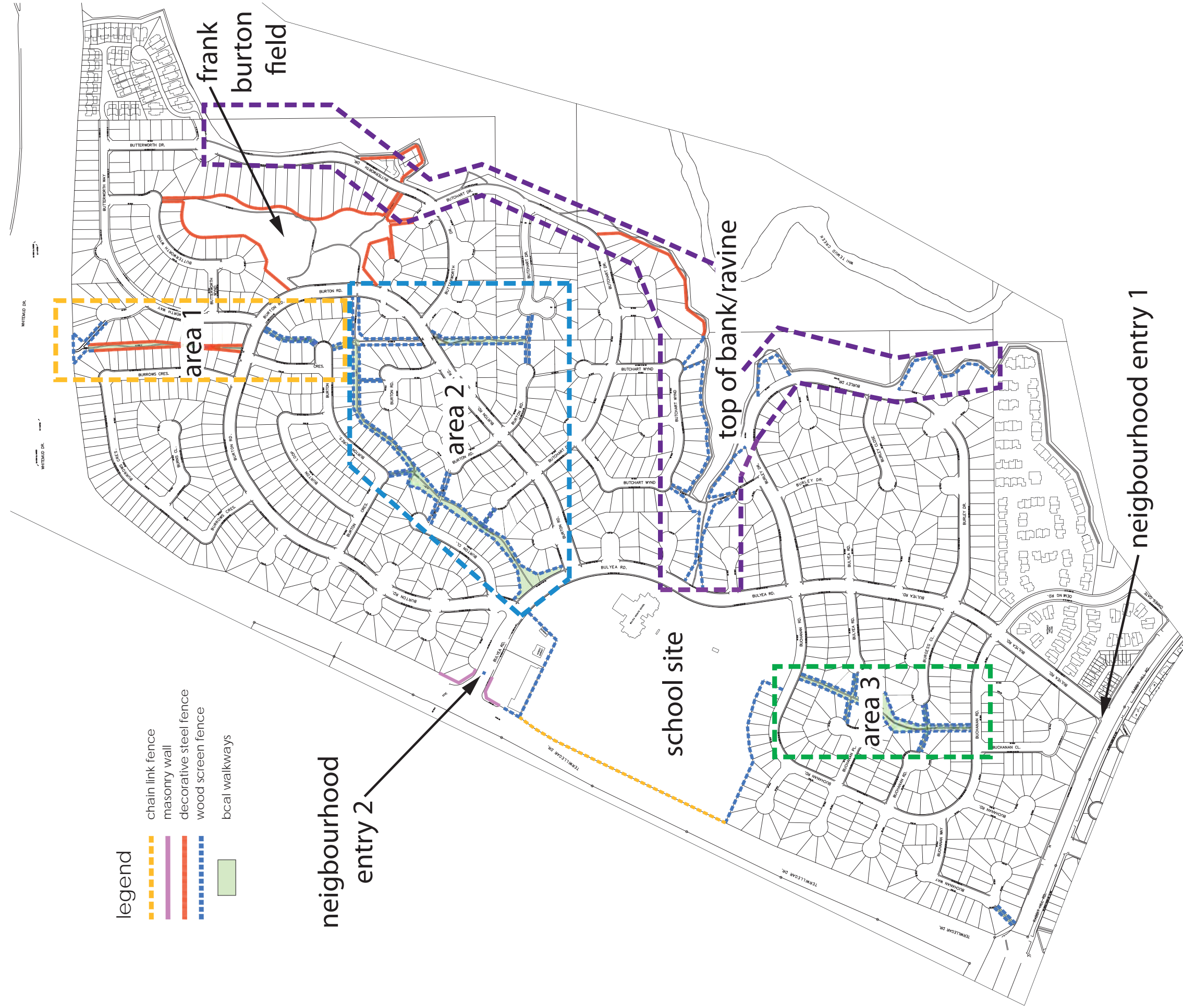
For ease of identification, a walkway lighting inventory map is included separately (figure 2). This map illustrates the location and number of walkway lighting standards in each area within the BCAL owned and maintained walkway.





The table below summarizes the scope of investigation conducted during the site inventory and analysis.

SCOPE OF INVENTORY AND SITE ANALYSIS		
ITEM	AREA COVERED	DESCRIPTION OF INVENTORY AND ANALYSIS ITEMS
Area 1	North of Burton Road Between Burros Cres. and Butterworth Way	Condition of: <ul style="list-style-type: none"> <li>Lighting, benches, signage, waste receptacles, walkway surfaces, softscape. Type and health of vegetation. Overall character(s) of the area.</li> </ul>
Area 2	Bounded by Bulyea Road, Butchart Drive, and Burton Crescent	Condition of: <ul style="list-style-type: none"> <li>Lighting, benches, signage, waste receptacles, walkway surfaces, softscape, type and health of vegetation, potential additional use for open spaces. Potential safety issues with sight lines obstructed by dense vegetation. Overall character(s) of the area.</li> </ul>
Area 3	Bounded by the North and South portions of Buchanan Road	Condition of: <ul style="list-style-type: none"> <li>Lighting, benches, signage, waste receptacles, walkway surfaces, softscape. Type and health of vegetation. Potential additional use for open spaces, overall character(s) of the area.</li> </ul>
School Site	Play and Sports Fields, Bulyea Road Frontage, areas adjacent to commercial site and Terwillegar Drive	Condition of: <ul style="list-style-type: none"> <li>Benches, waste receptacles, walkway surfaces. Interface of Terwillegar Drive and open spaces/sports fields.</li> </ul>
Frank Burton Field	Dry pond and adjacent walkways	Condition of: <ul style="list-style-type: none"> <li>Benches, waste receptacles, signage, walkway surfaces, vegetation.</li> <li>Potential additional use for open spaces, overall character of the area.</li> </ul>
Whitemud Creek Ravine Top of Bank	Area adjacent to Burley Drive, Butchart Drive, Butterworth Drive and Whitemud Creek Ravine	Condition of: <ul style="list-style-type: none"> <li>Lighting, benches, waste receptacles, walkway surfaces, softscape (trees and shrubs) lighting. Potential safety issues with sight lines obstructed by dense vegetation.</li> <li>Overall landscape characters.</li> </ul>
Neighbourhood Entries	Intersection of Terwillegar Drive and Bulyea Road Intersection of Rabbit Hill Road and Bulyea Road	Condition of: <ul style="list-style-type: none"> <li>Masonry, signage, type and health of vegetation.</li> <li>Overall character.</li> </ul>



**[ IBI ]** figure 1  
area delineation and walkway inventory





**IBI** figure 2  
BCAL walkway lighting (by area)

Since each area contains its own character but also shares some common amenities, the community can opt to proceed with enhancements for an entire area at once, easily identifiable in this report, or with individual components within the same area and others.

The following is a summary of the site analysis of each area. A comprehensive Site Inventory and Analysis table covering site amenities, softscape, hardscape, fencing and lighting is enclosed in Appendix C. Recommendations for improvements and remediation of the individual items listed are also enclosed in Appendix C.

## Area 1

Located in the north part of the community, the majority of the walkways in this area are owned and maintained by BCAL with the exception of a small portion off Butterworth Way, which is maintained by the City of Edmonton (photo 1). The character of this area reflects a naturalized landscape with native trees and understory, particularly in the north part above Burton Road (photo 2). The south part of the area is of a similar park like character as seen throughout the rest of the community (photo 3). Fencing consists of decorative steel for the lots backing onto the naturalized area and lighting is provided by pedestrian scale light posts. The character is reminiscent of the Whitemud Ravine located east of the area. Sight lines are relatively good with the exception of a few areas in the naturalized portion where dense vegetation obstructs views from the walkway.



Photo 1: Area 1 Walkway, North of Butterworth Way





Photo 2: Area 1 Walkway, North of Burton Road - Naturalized character



Photo 3: Area 1 Walkway, South of Burton Road - Urban Park Character



## Area 2

Area 2 is defined by Bulyea Road to Butchart Drive to the east and south, and Burton Crescent to the north. The area includes wide green linear spaces and site amenities such as benches, trash receptacles and directional signs (photo 4). This area also includes the Brookview Community sign on Bulyea Road. The landscape in and around the walkway system comprises two separate styles. The first style is best characterized as “Urban Park” with a number of large mature deciduous and coniferous trees, groomed turf areas, as well as some flowering trees (photos 5 and 6). The walkway area south of Burton Road is defined by a more naturalized type of landscape, similar to that which can be found in Area 1 with large native trees and native shrub understory (photo 7). Lighting is provided by pedestrian scale light posts.



Photo 4: Area 2 Walkway, North of Burton Road - Urban Park Character





Photo 5: Area 2 Walkway, North of Burton Road



Photo 6: Area 2 Walkway, Park like character with flowering trees.



Photo 7: Area 2 Walkway, South of Burton Road. Note the dense vegetation and naturalized character.

## Area 3

Area 3 includes the walkways located between south and north Buchanan Road. The area contains wide green linear spaces similar to what is found in Area 2 in addition to fairly large grassed expanses that could accommodate further site amenities (photo 8). The landscape character is "Urban Park" with well groomed turf areas, mature specimen coniferous and flowering deciduous trees (photos 9 and 10). The area includes site amenities such as mail boxes, directional signage, trash receptacles and pet refuse bag dispensers (photo 11). Fencing consists of wood screen fence on lots backing onto the walkways. Lighting is provided by pedestrian scale light posts.



Photo 8: Area 3 Walkway, South of Bulyea Road. Note the Urban Park character and large open space.





Photo 9: Area 3 Walkways, Large mature coniferous trees.



Photo 10: Area 3 Walkways, Typical park like character with flowering trees and groomed turf.



Photo 11: Area 3, Typical walkway signage with pet refuse dispensers.

## School Site

The school site is located in the central part of the community and is adjacent to Terwillegar Drive to the west and Bulyea Road to the east. In addition to the school buildings, the site includes the Community League building, a large playground area and large sports fields to the south and east. In addition to the playground, other site amenities include benches and trash receptacles (photo 12). An asphalt walkway connects the schools, playground and Community League building to Bulyea Road. The walkway lighting is similar to the one encountered throughout the neighbourhood walkways. Fencing is a combination of wood screen fence adjacent to the houses and commercial area adjoining the site and chain link at the western boundary to Terwillegar Drive. There are some trees on the site most notably at the east side next to the school and playground.

Traffic noise from nearby Terwillegar Drive is quite noticeable due to the absence of any buffer such as sound attenuation fencing or mounding. In addition, there is the absence of any type of shade trees along the western edge of the site next to Terwillegar Drive. This results in a lack of shaded areas and exposure to prevailing winds from the northwest and southwest (photo 13).



Photo 12: School site walkway, looking North





Photo 13: School ground adjacent to Terwillegar drive

## Frank Burton Field

Frank Burton Field can perhaps be considered the community's most significant park asset after the Whitemud Creek Ravine. It is a large 'dry' storm pond with an "Urban Park" character and consists of large mature specimen coniferous and flowering deciduous trees, shrubs and well groomed turf areas (photo 14). Other landscape features include pedestrian bridges and dry rocky creeks (photo 15). Site amenities consist of a small basketball court, benches, picnic tables and trash receptacles. With the exception of the basketball court, the space is designed for non-programmed activities and passive recreation (photo 16). A number of concrete walkways cross the park from the 4 major access points to the north, south and east. Maintenance of Frank Burton Field is provided by the City of Edmonton. Houses on large lots backing onto the dry pond make Frank Burton Field a relatively quiet, pleasant enclosed space (photo 17).

Despite the presence of a substantial amount of large trees, many of them coniferous, sight lines are good throughout the park. This, combined with transparent fencing (decorative steel) on the back of lots around Frank Burton Field, should provide users with a sense of security when walking through the park (photo 18).



Photo 14: Frank Burton Field Access East of Burton Road



Photo 15: Frank Burton Field Walkway with bridge and dry creek, looking West. Open spaces for passive recreation.





Photo 16: Frank Burton Field with Basketball court



Photo 17: Frank Burton Field, looking West



Photo 18: Frank Burton Field, looking North

## Top of Bank/Whitemud Creek Ravine

The top of bank covers the area from Burley Drive to the northern-most part of the community at Butterworth Drive. Access to the Whitemud Creek ravine is made possible through gravel pathways and informal paths throughout the area with the main access point being between Butchart Drive and Butterworth Drive.

The area contains two distinct landscape characters. The first, Urban Park, is found mainly on the street boulevards and walkways and is similar to the type of landscape found in areas described previously (photos 19 and 20). The east side of the area consists of the top of bank of the Whitemud Ravine Creek and reflects the native vegetation and character found in the ravine (photo 21). The dense vegetation in this area restricts views of the ravine but certain areas offer the potential for small lookouts, particularly to the north adjacent to Butterworth Drive. The walkways contain a variety of large specimen coniferous, deciduous and flowering trees. The mature trees present in the backyards of houses adjacent to the walkways offer an additional feature creating a dense and varied canopy (photo 22). Although there is a dense vegetative screen next to the walkway, the sight lines are good within the internal walkway and top of bank walkway visible from roadway, and seem to provide a safe environment (photo 23).

The area includes some site amenities such as benches, directional signage and trash receptacles although these, with the exception of one bench, are mostly located within the internal walkway system, away from the top of bank walkway. The walkway adjacent to Butchart Drive contains numerous areas where benches could be installed to enhance the park like setting. Lighting in the internal walkways is similar to other areas in the neighbourhood.





Photo 19: Walkway on Butchart Drive, looking South



Photo 20: Whitemud Creek Ravine top of bank walkway. Note Urban Park and Naturalized landscape characters.





Photo 21: Whitemud Creek Ravine top of bank walkway, looking North



Photo 22: Whitemud Creek Ravine top of bank walkway. Note Urban Park and Naturalized landscape characters.





Photo 23: Whitemud Creek Ravine top of bank walkway adjacent to Butchart Drive, looking North

## Neighbourhood Entries

There are two neighbourhood entries into the community. The first is located at the South end of the neighbourhood at the intersection of Rabbit Hill Road and Bulyea Road. The other is at the intersection of Bulyea Road and Terwillegar Drive on the West side of the neighbourhood. The Rabbit Hill Road entry has been recently updated with the addition of a masonry and brick wall and signage. The location, scale and style of this entry feature make it easily visible to traffic travelling west on Rabbit Hill Road (photo 24).



Photo 24: Entry at Rabbit Hill Road and Bulyea Road

The Terwillegar Drive entry consists of masonry and brick pillars with low walls and signage. The masonry extends North and South for some distance along Terwillegar Drive making this area the major entrance to the neighbourhood (photo 25). Trees and low shrub planting are located in the Bulyea Road median and boulevards (photo 26). The visual impact of this neighbourhood entry is somewhat lost due to its scale, its location at a major intersection, an adjacent commercial plaza and the presence of considerable fast moving vehicular traffic (photo 27).



Photo 25: Entry feature at Terwillegar Drive and Bulyea Road



Photo 26: Entry feature at Terwillegar Drive and Bulyea Road, showing median planting and masonry.





Photo 27: Entry feature at Terwillegar Drive and Bulyea Road, with commercial buildings in the background.

## Landscape Character Analysis

The areas described generally reflect an Urban Park landscape character throughout, with the exception of the naturalized sections in Areas 1 and 2, which reflect a more native style of landscape character. Both characters are well suited to the neighbourhood and, with the proximity of the Whitemud Ravine, complement each other.

The grounds owned by the Community League are generally well maintained when compared with sections owned and maintained by the City of Edmonton. Trees are in good conditions although some are damaged or show signs of disease, probably due to their advanced age. Further investigation into tree health should be undertaken by a qualified arborist. Turf areas are well maintained and are in good condition with the exception of a few areas damaged by winter walkway maintenance or heavy pedestrian traffic (photos 28 and 29).



Photo 28: Typical turf damage caused by winter maintenance.



Photo 29: Healthy turf area in walkway and mature deciduous tree.



Site amenities (benches, trash receptacles, signage, etc.) are minimal and show signs of deterioration and most are made of exposed aggregate which gives them a dated look (photo 30). The existing site amenities should be replaced or updated, and the number of benches in the walkways should be increased. Some walkway sections consisting of large turf expanses could accommodate additional benches, signage and small plazas (photo 31).



Photo 30: Typical signage and trash receptacle found throughout the community. Note the signs of corrosion on signage.



Photo 31: Walkway at southwest centre of Area 2. Large open space could accommodate a plaza and other amenities.

The concrete walkways are in fairly good condition. However some damaged areas, mostly cracked or missing concrete, should be repaired before they become tripping hazards for pedestrians (photo 32). Numerous areas where multiple walkways intersect present an ideal opportunity to install additional benches or create small nodes and plazas. Interpretive or directional signage could also be installed at these intersections (photo 33).



Photo 32: Concrete walkway showing signs of deterioration (cracking).



Photo 33: Walkway intersection. Note the open space that could accommodate a node or plaza.



The state of the pathway lighting and wood screen fencing are two elements that stand out in our site analysis as requiring the most immediate attention. The wood fencing is exhibiting signs of advanced deterioration such as fading and rotting posts, boards and stringers (photo 34). It is our understanding that this issue and a replacement strategy are presently the subject of discussions between the executive committee and the residents of Brookview.



Photo 34: Wood fencing showing signs of advanced deterioration.

The pathway lighting also seems to have reached its normal use cycle. Most of the light post's powder coated paint is faded (photo 35). A considerable number of posts show signs of metal corrosion and damage. In some cases, wires were observed protruding from the base of the light poles (photo 36). In addition, the style and type of lighting is dated and inefficient. More efficient lighting, such as Light-Emitting Diode (LED), should be considered when replacing the walkway lighting. This will not only lead to better lighting patterns but will also help reduce operating costs by using less power.



Photo 35: Walkway lighting. Note corrosion at base of pole.



Photo 36: Walkway lighting with corrosion and exposed wires.



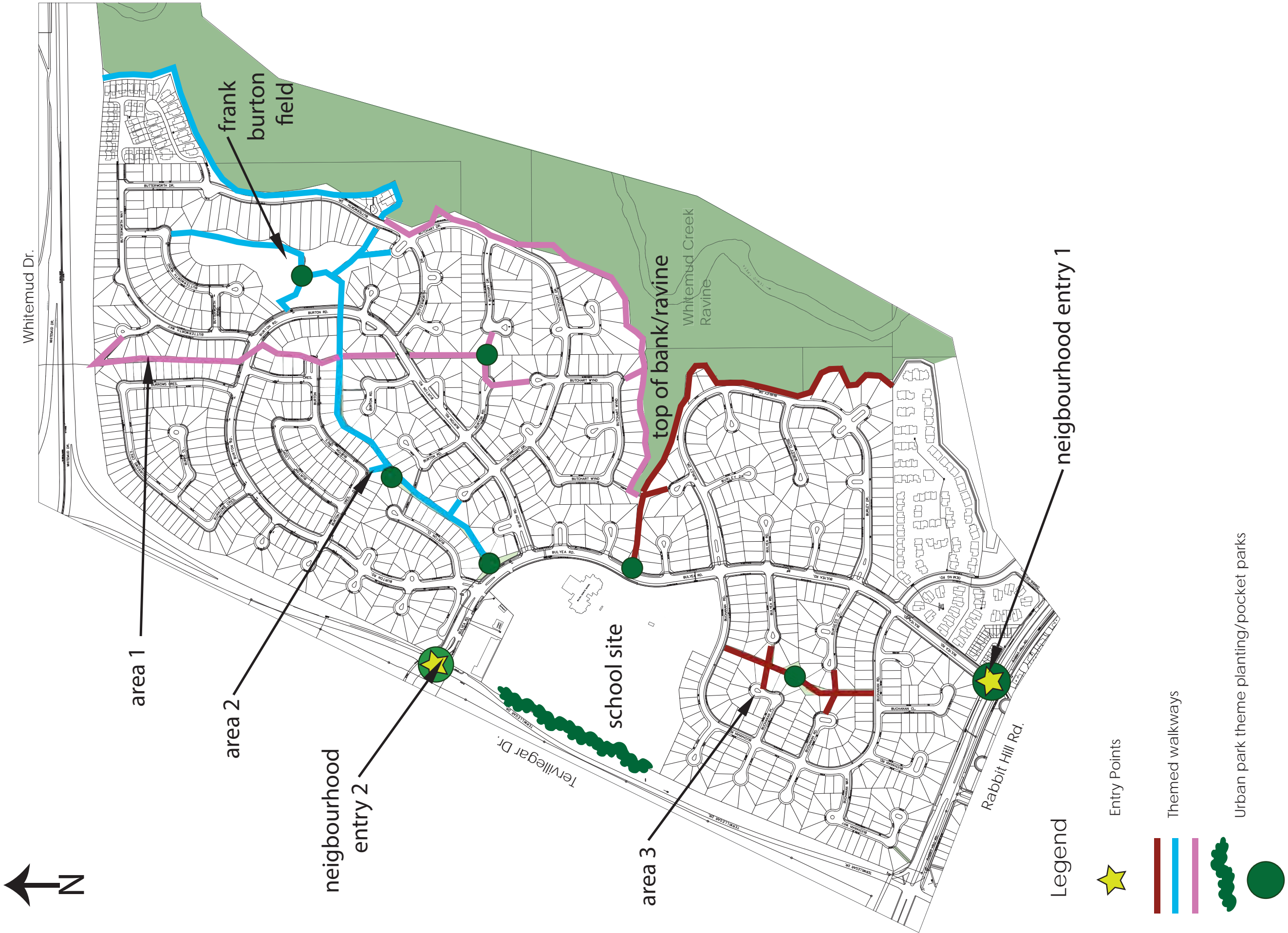
---

# Urban Park Concept

## 3

The general design theme of “urban park”, is a starting point from which the type and style of the various enhancements are developed. The theme was chosen based on the existing conditions such as the type of existing plant material, overall neighbourhood and walkway character, adjacent amenities and feedback from the BCAL executive committee.

The concept identifies areas and walkways that are ideally suited for various enhancements such as trail head identification markers, nodes and plazas. The concept was chosen based on each site’s location and intrinsic attributes such as the quantity of available open space; its visibility; its location near high traffic pedestrian areas, and its use as a major pedestrian thoroughfare. For an example please see figure 3 on the following page.



IBI figure 3 urban park option



## Walkways

A themed walkway concept is proposed to enhance the connection between the various neighbourhood points of interest as well as add an additional element of interest (figure 3).

In addition to providing variety and interest, the themed walkways should be named, have directional signage and should be colour coded. This would help with wayfinding, particularly for visitors not familiar with the neighbourhood.

Specific loops have also been identified within the proposed walkway system. These jogging or walking loops of 1.0 Km, 1.5 Km and 2.5 Km lengths can be used by persons wishing to set up a specific distance as part of their exercise regime. A number of simple outdoor fitness equipment for those wishing to engage in circuit training is also proposed. The location of the fitness equipment, in Frank Burton Field, was chosen for its ample open spaces. It is also proposed for the junction of two loop trails (figure 4).



**IBI** figure 4  
trail loop and amenities key plan



## Plazas

Plazas, nodes and trail heads are proposed throughout the neighbourhood (figure 5).

The plazas are located in high visibility areas, high pedestrian traffic areas and walkway intersection or walkway and street intersections. The plazas would consist of a hard surface area, benches, trash receptacles, bollards and masonry pillars and planters as well as enhanced planting of trees and flowering shrubs (figure 6-10).



**IBI** figure 5  
amenities (plazas, nodes, trail heads) key plan





Figure 6: Proposed plaza at the intersection of Butchart Drive and Butterworth Drive.

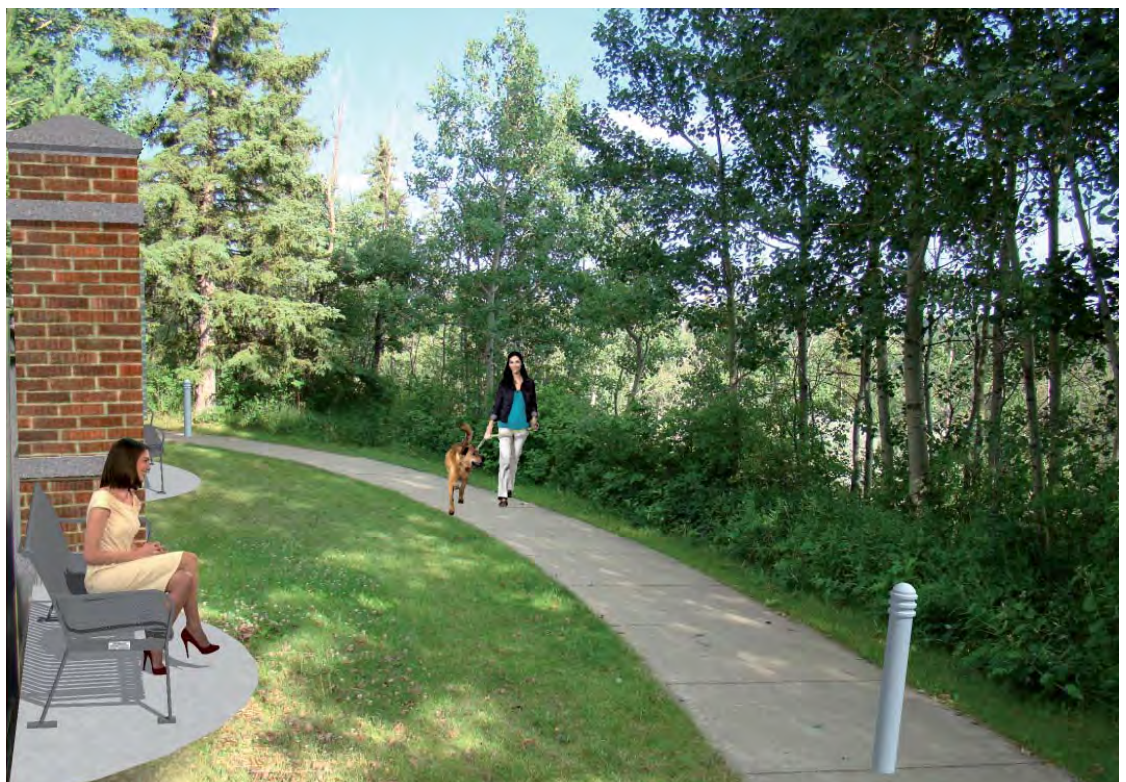


Figure 7: Proposed small plaza on the Whitemud Creek Ravine top of bank walkway, with views of the Ravine.



The plazas also serve an additional function as trail heads and walkway identifiers.



Figure 8: Proposed plaza with additional amenities, such as a gazebo, in open spaces.



Figure 9: Proposed plaza adjacent to Bulyea Road, which also serves as a trail head.





**IB** figure 10  
typical plaza layout and planting concept

eo-36557



A variation to the main plaza design is proposed for an interpretive and thematic area located on Burton Road looking out to the recently dedicated Frank Burton Field. In addition to the standard plaza masonry treatment and amenities, it would also acknowledge the aviation background of Frank Burton. Interpretive panels and a seating area in the form of a stylized airplane with a wing shaped trellis add to the theme (figure 11).



Figure 11: Plaza for Frank Burton field, adjacent to Burton Road (option 1).



Figure 11 B: Plaza for Frank Burton field, adjacent to Burton Road (Option 2).



## Nodes

Nodes are located in areas where high traffic pedestrian walkways intersect. Like plazas, these consist of one or more benches, trash receptacle, additional planting and one or more masonry pillars serving as either directional or interpretive signage or both (figure 12 - 16).



Figure 12: Node at the intersection of the thematic trail and other walkways, South of Burton Crescent.



In addition to being a place to stop and rest, nodes serve to encourage interaction and conversation amongst residents and visitors to Brookview.

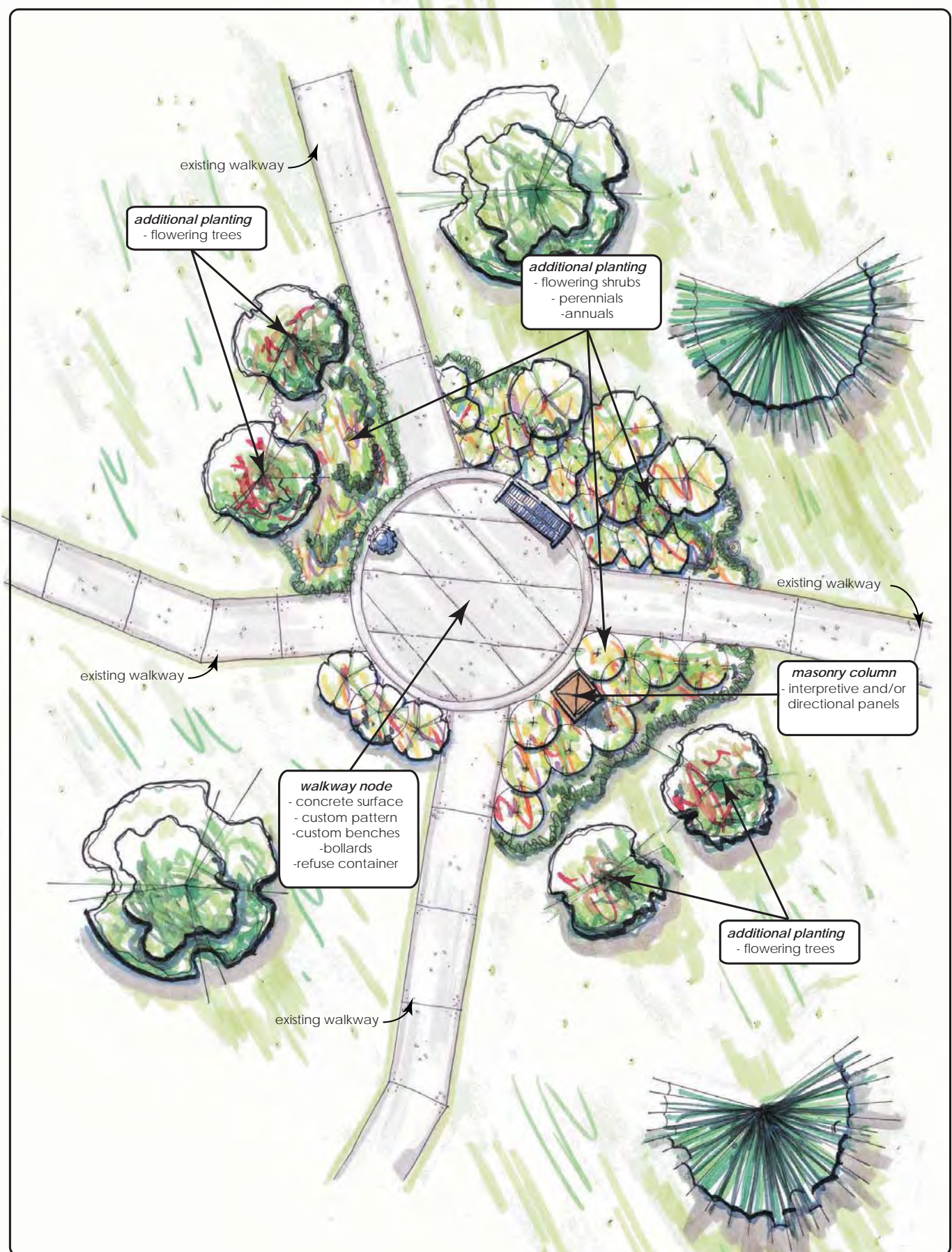


Figure 13: Small node at the intersection of thematic trail and secondary walkway, South of Burton Crescent.



Figure 14: Small node at the intersection of thematic trail and secondary walkway, Frank Burton Field.





**IBI** figure 15  
typical node layout and planting concept

eo-36557

The open space around certain plazas and nodes is such that other amenities or structures could be added. For example, the plaza located at P.5.1 on the amenities key plan (figure 5), can easily accommodate an additional structure such as a small gazebo and benches.



Figure 16: Example of plaza functioning as interpretive trail head.

## Trail Heads

Trail head elements serve as markers identifying a certain themed trails as well as being used for interpretive and/or directional signage purposes. Trail head markers are colour coded, as mentioned earlier, to reflect the theme of a particular trail (Figure 17).



## Signage

We propose a mix of interpretive (based on a certain theme) and directional signage or to the walkways. Although directional signage already exists in certain walkways, these are few in numbers, damaged and not very visible. An example of different directional and interpretive signage is illustrated in figure 17. Interpretive and/or directional signage can be incorporated with the masonry pillars.

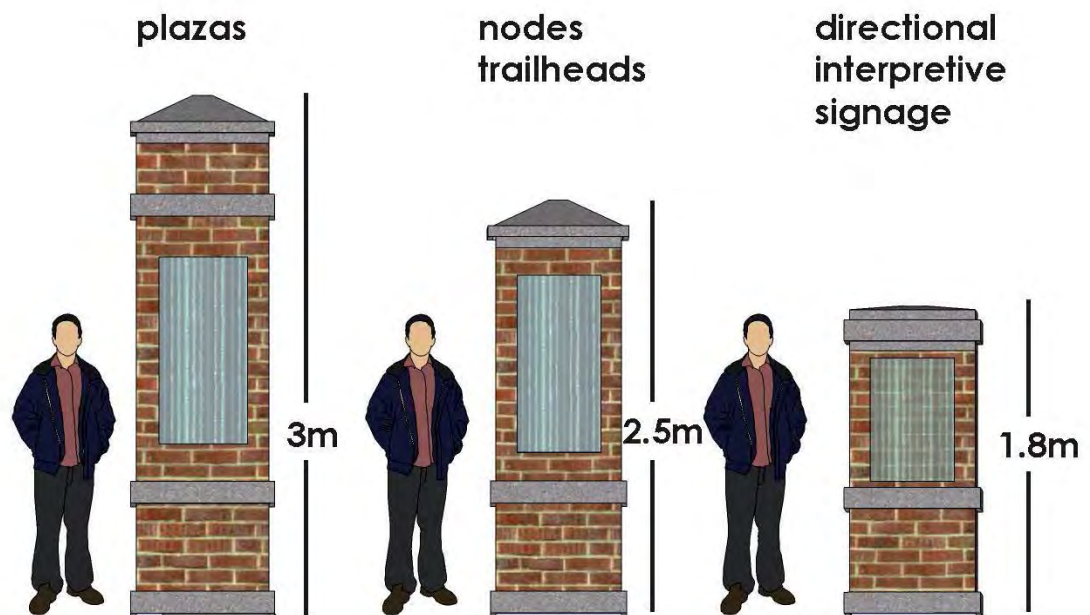


Figure 17: Masonry pillars (from left to right) for plazas and nodes, trail heads, interpretive signage.

## Neighbourhood Entries

Additional enhancements to the neighbourhood entry at Terwillegar Drive are also proposed. These could consist of replacing some of the existing plant material as well as increasing the variety and amount of planting in that area. The existing masonry pillars could also be updated with new pre-cast concrete caps, similar to the ones proposed for the plazas and other amenities. The neighbourhood entry at Rabbit Hill road has recently seen a new entry feature wall installed and we do not propose any enhancement in that area with the exception of some additional planting perhaps.

## School Park Site

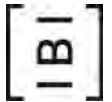
The eastern edge of the school adjacent to Terwillegar Drive is also included as proposed enhancements. Presently, it contains 3 baseball diamonds and 2 small soccer pitches as well as general open space with a standard chain link fence delineating the school grounds and the road right-of-way. The proposed enhancements in that area consist of a “green” screen with of a mix of coniferous and deciduous trees, with an emphasis on coniferous trees for year round screening. Planting in that area could be a simple park like theme with trees only or could be made to mimic a somewhat modified shelter belt, similar to those found throughout the region, with the addition of shrubs and denser planting for additional wind breaks (figure 18). The final option would be determined at the time of detail planting plans.





figure 18

school grounds planting concept



eo-36557

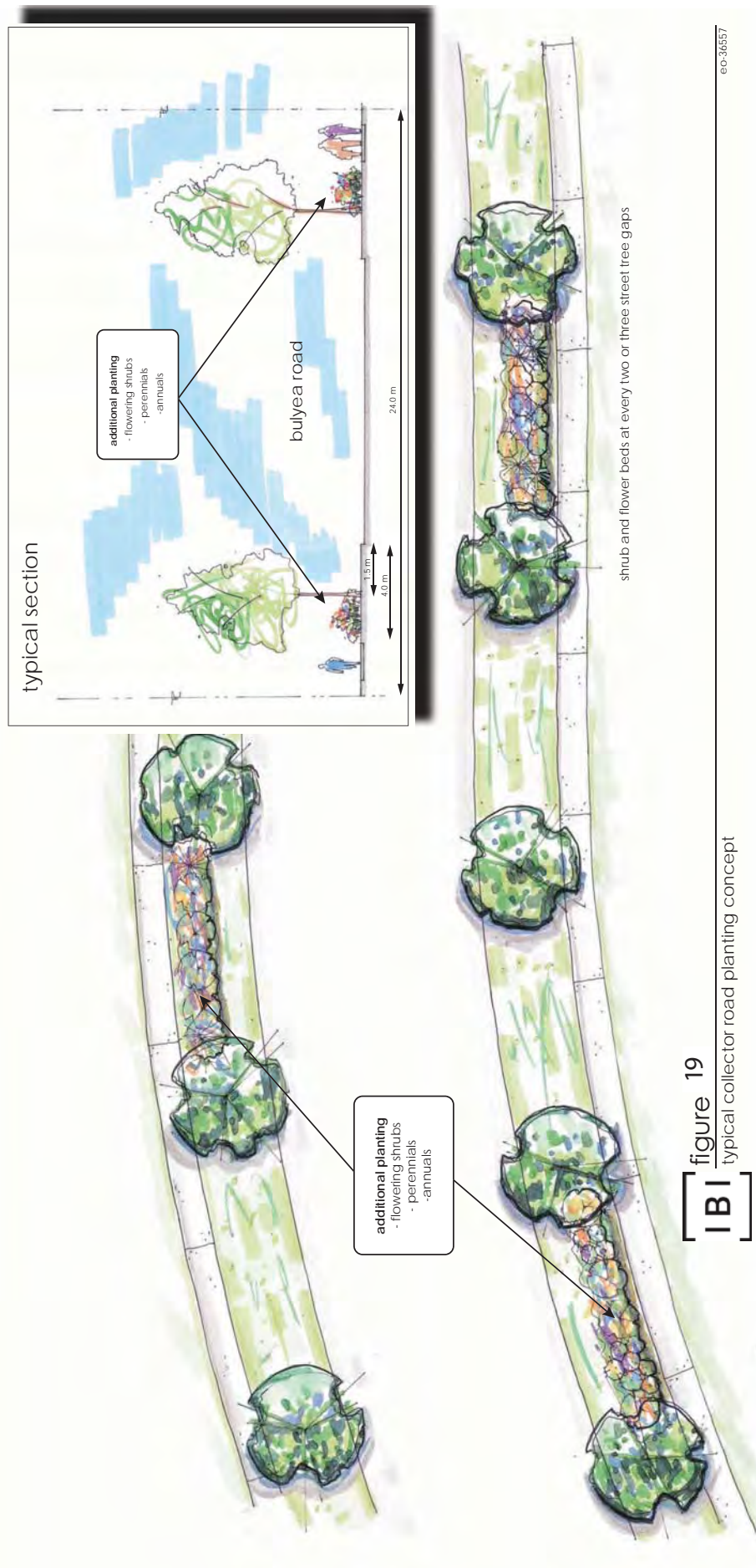
## Collector Road Landscape

The main neighbourhood collector roadway, Bulyea Road, was designed with wide boulevards able to accommodate a considerable amount of planting. Presently, the landscaping is composed of street trees and sod with approximately 10 to 15 meters of separation between trees (photo 37). In order to create a more pedestrian friendly environment with an additional buffer between pedestrian and vehicular traffic, it is proposed that beds of flowering shrub be added in the boulevards, at regular intervals (figure 19). In addition to the above, these shrub beds would add colour and variety to the neighbourhood landscape.



Photo 37: Typical boulevard planting on Bulyea Road





**IBI** figure 19  
typical collector road planting concept

eo-36557

## Neighbourhood Information Sign

We also propose to upgrade the Brookview Community sign. The existing wood posts would be replaced with the masonry pillars of the same type mentioned for other enhanced amenities thus maintaining the theme throughout the neighbourhood (figure 20). BCAL has immediate plans to upgrade the existing sign with the addition of lighting and this could be easily incorporated within the scope of work. Consideration should be given in the future to upgrade the present sign to an electronic one with remote programming capabilities.

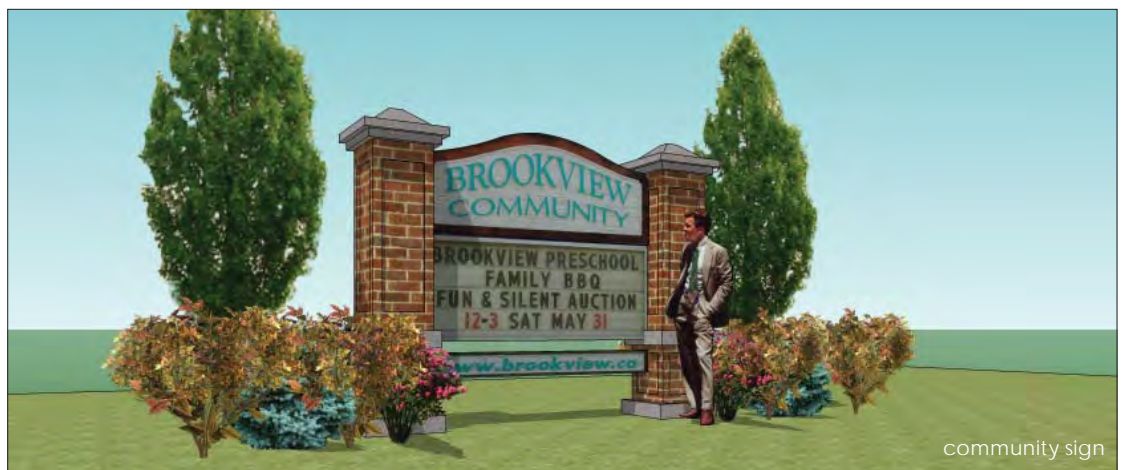


Figure 20: Enhanced neighbourhood information sign.



---

# Preliminary Cost & Implementation Strategy

# 4

This section includes a preliminary cost estimate for the proposed enhancements as well as a proposed implementation strategy that we recommend, based on our observations and discussions with BCAL.

## Costs Estimates

The cost estimate shows the preliminary cost for each individual component, such as plazas, nodes, etc. and the total for all proposed enhancements of that type, by category.

Presenting the cost estimate in this fashion will permit BCAL to budget the costs of the proposed enhancements either by type of enhancement (nodes, plazas, etc.) or by individual component of each enhancement. For example, BCAL may proceed with building all plazas at once in all areas in which case the preliminary total for all plazas can be referred to in establishing a budget. Conversely, should BCAL move to build only a few plazas, a few nodes and trail heads in certain areas, the cost of each individual element can then be used to establish a construction budget.

It should be noted that these are preliminary cost estimates based on the concepts presented in this report. Cost estimates will be updated once detail design is completed.

## Implementation Strategy

The proposed implementation strategy is based on our observations during the site analysis as well as discussions with BCAL during the concept presentations. While the implantation strategy can be viewed as a general guideline with the final decision resting with BCAL, some items, such as the replacement of the existing walkway lighting should be considered a priority.



ITEM	DESCRIPTION	COMMENTS
1	Walkway Lighting - All Areas	<ul style="list-style-type: none"> <li>Light poles show advance stage of deterioration and should be replace as soon as possible</li> </ul>
2	Community Sign Illumination	<ul style="list-style-type: none"> <li>Steps already taken to have sign illuminated in 2015. Electrical contractor hired.</li> </ul>
3	Plazas	<ul style="list-style-type: none"> <li>Build one plaza (e.g. across from school) as a "pilot" project and to allow feed back from community. First plaza should be built in high visibility area.</li> <li>Subsequent plazas could be built one area at a time, as opposed to a few plazas in various areas.</li> </ul>
4	Nodes	<ul style="list-style-type: none"> <li>Nodes could be built after or simultaneously with the plazas. As with the plazas, it is recommended that all nodes in one area be built before moving on to nodes in other areas.</li> </ul>
5	Trail heads, interpretive signage and themed walkways	<ul style="list-style-type: none"> <li>As these components are linked together, it is recommended that these be built in one area, and after the nodes and plazas. One exception could be the installation of interpretive signage at the "pilot" plaza mentioned above.</li> </ul>
6	Collector Road Landscaping	<ul style="list-style-type: none"> <li>Collector Road landscaping could be done anytime as it is a separate item from the walkways and plazas. Entire planting can and should be done the same year for aesthetic reasons and also to maintain supply and installation prices locked in.</li> </ul>

**brookview****site amenities estimate**

Dec 5/2014

EO: 36557

Description	Qty.	Unit	Unit Price	Amount
<b>Plaza</b>				
<b>1.0 Hardscape</b>				
1.1 Bench	2	each	\$2,300.00	\$4,600.00
1.2 Trash Receptacle	1	each	\$1,600.00	\$1,600.00
1.3 Bollard	4	each	\$2,500.00	\$10,000.00
1.4 3m Ht. Masonry Column	2	each	\$7,500.00	\$15,000.00
1.5 Interpretive/Directional Signage	2	each	\$2,500.00	\$5,000.00
1.6 Small Concrete Planter	5	lm	\$700.00	\$3,500.00
1.7 Concrete	25	m2	\$200.00	\$5,000.00
<b>2.0 Softscape</b>				
2.1 Tree	2	each	\$550.00	\$1,100.00
2.2 Shrub	15	each	\$50.00	\$750.00
2.3 Shrub Bed Excavation	40	m2	\$15.00	\$600.00
2.4 450mm Depth Topsoil with Grading & Levelling	40	m2	\$15.00	\$600.00
2.5 100mm Depth Wood Chip Mulch	40	m2	\$15.00	\$600.00
Contingency (10%)				\$4,835.00
<b>TOTAL</b>				<b>\$53,185.00</b>
<b>Total Plazas</b>				
	8	each	\$53,185.00	\$425,480.00

Description	Qty.	Unit	Unit Price	Amount
<b>Frank Burton Field Plaza</b>				
<b>1.0 Hardscape</b>				
1.1 Bench	2	each	\$2,300.00	\$4,600.00
1.2 Trash Receptacle	1	each	\$1,600.00	\$1,600.00
1.3 1.8m Ht. Masonry Column	2	each	\$7,500.00	\$15,000.00
1.4 Interpretive/Directional Signage	1	each	\$2,500.00	\$2,500.00
1.5 Concrete Sitting Wall	5	lm	\$700.00	\$3,500.00
1.6 Concrete	30	m2	\$200.00	\$6,000.00
1.7 Coloured Concrete	8	m2	\$325.00	\$2,600.00
1.8 Structure	1	sum	\$20,000.00	\$20,000.00
<b>2.0 Softscape</b>				
2.1 Tree	8	each	\$550.00	\$4,400.00
Contingency (10%)				\$6,020.00
<b>TOTAL</b>				<b>\$66,220.00</b>

Description	Qty.	Unit	Unit Price	Amount
<b>Node</b>				
<b>1.0 Hardscape</b>				
1.1 Bench	1	each	\$2,300.00	\$2,300.00
1.2 Trash Receptacle	1	each	\$1,600.00	\$1,600.00
1.3 2.5m Ht. Masonry Column	1	each	\$6,000.00	\$6,000.00
1.4 Interpretive/Directional Signage	1	each	\$2,500.00	\$2,500.00
1.5 Concrete	20	m2	\$200.00	\$4,000.00
<b>2.1 Softscape</b>				
2.1 Tree	1	each	\$550.00	\$550.00
2.2 Shrub	12	each	\$50.00	\$600.00
2.3 Shrub Bed Excavation	30	m2	\$15.00	\$450.00
2.4 450mm Depth Topsoil with Grading & Levelling	30	m2	\$15.00	\$450.00
2.5 100mm Depth Wood Chip Mulch	30	m2	\$15.00	\$450.00
Contingency (10%)				\$1,890.00
<b>TOTAL</b>				<b>\$20,790.00</b>
<b>Total Nodes</b>				
	4	each	\$20,790.00	\$83,160.00



Description	Qty.	Unit	Unit Price	Amount
<b>Trailhead</b>				
<b>1.0 Hardscape</b>				
1.1 2.5m Ht. Masonry Column	2	each	\$6,000.00	\$12,000.00
1.2 Interpretive/Directional Signage	2	each	\$2,500.00	\$5,000.00
1.3 Trash Receptacle	1	each	\$1,600.00	\$1,600.00
Contingency (10%)				\$1,860.00
<b>TOTAL</b>				<b>\$20,460.00</b>

<b>Total Trailheads</b>	<b>9 each</b>	<b>\$20,460.00</b>	<b>\$184,140.00</b>
-------------------------	---------------	--------------------	---------------------

Description	Qty.	Unit	Unit Price	Amount
<b>Interpretive/Directional Signage</b>				
<b>1.0 Hardscape</b>				
1.1 1.8m HT. Masonry Column	1	each	\$5,000.00	\$5,000.00
1.2 Interpretive/Directional Signage	1	each	\$2,500.00	\$2,500.00
Contingency (10%)				\$750.00
<b>TOTAL</b>				<b>\$8,250.00</b>

<b>Total Signage</b>	<b>14 each</b>	<b>\$8,250.00</b>	<b>\$115,500.00</b>
----------------------	----------------	-------------------	---------------------

Description	Qty.	Unit	Unit Price	Amount
<b>Additional</b>				
<b>1.0 Additional</b>				
1.1 Schoolyard Treeline - 60mm Cal. Deciduous Tree	30	each	\$500.00	\$15,000.00
1.2 Schoolyard Treeline - 2.5m Ht. Coniferous Tree	50	each	\$550.00	\$27,500.00
1.3 Gazebo in P5	1	each	\$8,000.00	\$8,000.00
1.4 Exercise Equipment	5	each	\$3,000.00	\$15,000.00
1.5 Community Masonry Pillar	2	each	\$6,000.00	\$12,000.00
<b>2.0 Lighting</b>				
2.1 Area 1	9	each	\$6,635.00	\$59,715.00
2.2 Area 2	17	each	\$6,635.00	\$112,795.00
2.3 Area 3	8	each	\$6,635.00	\$53,080.00
2.4 Frank Burton Field	11	each	\$6,635.00	\$72,985.00
2.5 School Site	7	each	\$6,635.00	\$46,445.00
2.6 Ravine	4	each	\$6,635.00	\$26,540.00
2.7 Existing Sign Lighting	1	each	\$9,109.50	\$9,109.50
2.8 Replace and Update Bulyea Road Lights*	25	each	\$9,233.00	\$230,825.00
Contingency (10%)				\$68,899.45
<b>TOTAL</b>				<b>\$757,893.95</b>

\*Does not include 8 light standards with Shaw, Telus, and Epcor boxes.  
Price to be determined with above utilities since prices vary with location and type of service. See enclosed picture on next page.

<b>GRAND TOTAL:</b>	<b>\$1,632,393.95</b>
---------------------	-----------------------

---

# Appendices

## Table of Contents

Appendix A - Proposed Plant Species ..... 55

Appendix B - Proposed Site Furniture and Lighting .....61

Appendix C - Site Analysis Matrix & Photographic Inventory ..... 65



---

Appendix

A

# Proposed Plant Species



thunderchild crabapple



siberian crabapple



tanner crabapple



rose glow barberry



royal burgundy barberry



winged burning bush



purpleleaf sandcherry



kelsey dwarf dogwood



goldfinger potentilla



brookview

main boulevards and nodes- suggested plant selection 1

eo-36557





flaming mound spirea



orange whisper  
potentilla



snowmound spirea



bridalwreath spirea



cuthbert grant rose



hope for humanity rose



morden belle rose



blue fescue grass



blue oat grass



karl foerster  
reed grass



brookview

main boulevards and nodes - suggested plant selection 2

eo-36557





dwarf burning bush



hope for humanity rose



gold star potentilla



kelsey dwarf dogwood



sunset potentilla



morden blush rose



anthony waterer spirea



dwarf mugo pine





morden sunrise rose



yellowbird potentilla



morden blush sunrise



goldmound spirea



ribbon oat grass



blue oat grass



karl foerster  
reed grass





arnold hawthorn



sweetberry honeysuckle



minuet lilac



douglas fir



balsam fir



norway spruce



swiss stone pine



white spruce



trembling aspen



swedish  
columnar aspen



lodgepole pine





---

Appendix

# B

## Proposed Site Furniture and Lighting



bench



refuse/waste receptacle



bollard





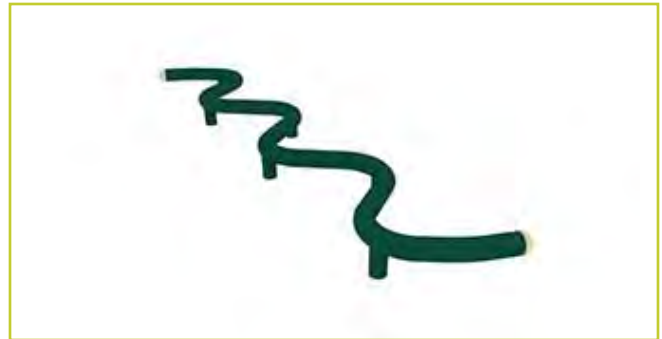
2-person full bar exercise



combo bars



3-beam jump bar



s-shaped jump bar



2-level horizontal bars

Exercise equipment is proposed only. Variations in type and quantity of equipment is possible. We propose to have the equipment in one central location only (Frank Burton Field) for ease of maintenance. The location is also part of 2 loop trails for circuit training.



urbanscape series - walkway



metroscape series - walkway



domus series - walkway



heritage pole with domus head - roadway



lumark crosstour series - signage lighting

- > "theme/style neutral" - easily integrated in present Brookview neighborhood character.
- > suggested colours - black
- > available with LED optics - energy conservation and low maintenance
- > "off-the-shelf" product - easily replaced
- > price range \$5,000 to \$7,000 per unit





---

Appendix

C

# Site Analysis Matrix & Photographic Inventory

## Brookview - Site Inventory and Analysis

### Area 1

Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<u>Landscape</u>	•Shrubs	Damaged/dead	3015	Arborist to check health
	•Trees	Old, some missing	3016,3034,3010	Arborist to check health/replace missing
	•Sod	Well maintained	3000	Maintain
	•Slide	Extends from yard into walkway	3003	Remove
	•Cement Disposal	Cement pile in walkway	3031	Remove
	•Pipes	Broken, exposed	3042	Remove
<u>Fencing</u>	•Decorative Steel	Paint chipping, rusting, poorly maintained	3008	Clean, touch up paint
	•Wood Screen	Broken, chipped paint	3035	Replace
	•Masonry Pillars	Worn	3024	Clean or replace - New caps
<u>Hard Scape</u>	•Concrete Walk	Cracks throughout	2994, 3038	Repair
<u>Amenities</u>	•Trash Receptacle	Old, standard design	3019	Replace - newer, modern design
	•CoE Steel Bollards	City property, old, rusting	2994	Maintain
	•Timber Bollards	Damaged, chipped paint, slanted	3025	Re-Paint and straighten
	•Pet Waste Disposal Bags	Worn	3020	Re-Paint and re-sticker
<u>Lighting</u>	•Pedestrian Lighting	Rusting bases	3046	Replace - Update light standard
<u>Signage</u>	•Homeowners Association	Paint and weather damaged	3049	Replace - More resistant materials
	•Community Walkways	Clean, good shape. Sharpie markings	3020	Clean
				No seating - add benches

### Area 2

Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<u>Landscape</u>	•Trees	Healthy, minimal. Little shade/privacy	3067, 3083	Add - shade in open areas. Block views into houses
	•Shrubs	Almost non-existent	3083, 3112	Add - Lower ground cover, soften fencelines
	•Sod	Well maintained	3083	Maintain
<u>Fencing</u>	•Wood Screen	Broken, pieces missing, chipped paint Line of sight blocked in SE walkway	3059, 3077, 3115, 3127 3269	Replace Replace with decorative steel for safety
<u>Hard Scape</u>	•Concrete Walk	Cracks throughout	3066	Repair
	•Concrete Pad	Good shape, some missing	3267	Add where missing
<u>Amenities</u>	•Trash Receptacle	Old, standard design. Open and closed top	3051, 3267	Replace - Newer, modern design
	•CoE Steel Bollards	City property, old, rusting	3094	Maintain
	•Timber Bollards	Damaged, chipped paint	3066	Re-Paint
	•Cement Post Bollards	Useless - Room for vehicles to bypass	3274, 3277	Add extra to prevent traffic
	•Pet Waste Disposal Bags	Worn	3120	Re-paint and re-sticker
<u>Lighting</u>	•Pedestrian Lighting	Rusting bases, exposed wiring	3116	Replace - Update light standard
<u>Signage</u>	•Homeowners Association	Paint and weather damaged	3048, 3049	Replace - More resistant materials
	•Community Walkways	Good shape, dirty. Broken post	3050, 3120	Clean and replace post
	•Community Board	Old, weathered. Posts cracking	3122	Replace with modern signage
	•Burton Road Entry	Difficult to see, small	3127	Upgrade, light, stronger surrounding planting.
				No seating - add benches, picnic tables

### Area 3

Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<u>Landscape</u>	•Trees	Minimal	3182	Add trees for shade in open areas
	•Shrubs	Almost non-existent	3160	Add shrubs for more naturalized feel
	•Sod	Torn up in areas	3189	Seed damaged areas
<u>Fencing</u>	•Wood Screen	Better shape than rest of site. Minor wear	3160	Basic maintenance, paint
<u>Hard Scape</u>	•Concrete Walk	Minor cracking	3184	Repair
	•Concrete Pads	Good shape, dirty	3164	Keep clean
<u>Amenities</u>	•Trash Receptacle	Old, standard design	3164	Replace - Newer, modern design
	•CoE Steel Bollards	City property, good shape	3160	Maintain
	•Timber Bollards	Chipped paint, some wear	3164	Re-paint
	•Pet Waste Disposal Bags	Worn, covered in blank sticker	3162	Re-paint and re-sticker
<u>Lighting</u>	•Pedestrian Lighting	Rusting bases	3194	Replace - update light standard
<u>Signage</u>	•Homeowners Association	Paint and weather damaged	3161	Replace - more resistant materials
	•Community Walkways	Clean, good shape.	3162	Maintain

### School Site

Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<u>Landscape</u>	•Shrubs	Minimal	3150	Add more to site
	•Trees	Minimal	3143, 3147	Add along chain link fence - block views of road
	•Sod	Problems near entrances	3125, 3143	Maintain fields. Consider trails for entrances
<u>Fencing</u>	•Chain Link	Some wear/broken	3141, 3142	Repair
	•Wood Screen	Reasonable shape, minor deficiencies	3124	Re-paint
	•Wood Rail	Worn	3124, 3125	Touch up paint, minor repairs
<u>Hard Scape</u>	•Asphalt Trail	Cracks throughout	3150	Repair
	•Concrete Pad	Clean, good shape	3150	Maintain
<u>Amenities</u>	•Trash Receptacle	Steel barrel, rusting	3150	Replace - newer, modern design
	•Bench	Exposed aggregate	3150, 3154	Maintain
	•Guard Rail?	Worn, questionable usefulness	3152	Re-paint or remove
<u>Lighting</u>	•Pedestrian Lighting	Good shape	3154	Update light standard



**Frank Burton Field**

Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<b><u>Landscape</u></b>	•Shrubs	Minimal	3295	Add shrub beds, increase around stream beds
	•Trees	Variety, good health	3280	Maintain
	•Sod	Well Maintained	3290	Maintain
	•Bridge	Minor wear	3285	Touch up paint
	•Resident's path	Resident's personal path into park	3294	Remove
<b><u>Fencing</u></b>	•Decorative Steel	Good shape	3294	Maintain
	•Masonry Pillars	Good shape	3294	Maintain
<b><u>Hard Scape</u></b>	•Concrete Walk	Minor cracks	3285	Minor repairs
	•Concrete Pad	Good shape	3299	Maintain
	•Basketball Court	Minor cracks	3290	Paint lines, repair cracks
<b><u>Ammenities</u></b>	•Trash Receptacle	Open, closed, and drum - minor wear	3280, 3295	Replace - Newer, modern design. 1 style
	•CoE Steel Bollards	Good shape	3299	Maintain
	•Timber Bollards	Good shape, some wear	3299	Clean, maintain
	•Bus Shelter	Good shape	3280	Maintain
	•Benches	Good shape	3289	Maintain
	•Picnic Tables	Good shape	3284	Maintain
<b><u>Lighting</u></b>	•Pedestrian Lighting	Good shape	3299	Replace if planning to change style in rest of site
<b><u>Signage</u></b>	•CoE Warning/Hours	Good shape, slight wear	3281, 3299	Maintain

**Ravine/TOB**

Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<b><u>Landscape</u></b>	•Shrubs	Minimal outside of ravine	3219	More shrub beds, lots of space
	•Trees	Bare along roads	3219	More boulevard planting, lots of space
	•Sod	Few dead patches - driven on	3239, 3247	Reseed damaged areas
<b><u>Fencing</u></b>	•Decorative Steel	Paint chipping, rusting	3251	Clean, touch up paint
	•Wood Screen	Broken, chipped paint, old	3214	Replace with decorative steel - views of TOB
	•Guard Rail	Old, worn	3252	Replace - possible ravine viewing area
<b><u>Hard Scape</u></b>	•Concrete Walk	Minor cracking	3225	Repair
	•Concrete Pad	Dirty, good shape	3223	Clean
<b><u>Ammenities</u></b>	•Trash Receptacle	Old, standard design	3225, 3216	Replace - newer, modern design
	•Bench	Good shape, chipped paint	3223	Touch up
	•Pet Waste Disposal Bags	Good shape, some wear	3216	Maintain
	•Timber Bollards	Minor damage	3247	Repair/paint
<b><u>Lighting</u></b>	•Pedestrian Lighting	Bases not buried	3234	Replace - Update light standard, bury deeper
<b><u>Signage</u></b>	•Homeowners Association	Best shape on site, slight weather damage	3247	Replace - more resistant materials
	•Community Walkways	Clean, Good Shape. Sharpie Markings	3244	Clean

**Neighbourhood Entry 1**

Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<b><u>Landscape</u></b>	•Shrubs	Non-existent	3209	Plant around entry feature if possible
	•Trees	Non-existent	3208	Boulevard planting if possible
	•Sod	Damaged	3208	Seed damaged areas
<b><u>Fencing</u></b>	•Wood Screen	Paint Chipping, old, worn	3203	Repair and paint
<b><u>Hard Scape</u></b>	•Concrete Walk	Good shape	3208	Maintain
<b><u>Lighting</u></b>	•CoE Street Lighting	Good shape	3208	Maintain
<b><u>Signage</u></b>	•Brookview Entry feat.	Good shape, minimalistic	3209, 3213	Add planting, maintain

**Neighbourhood Entry 2**

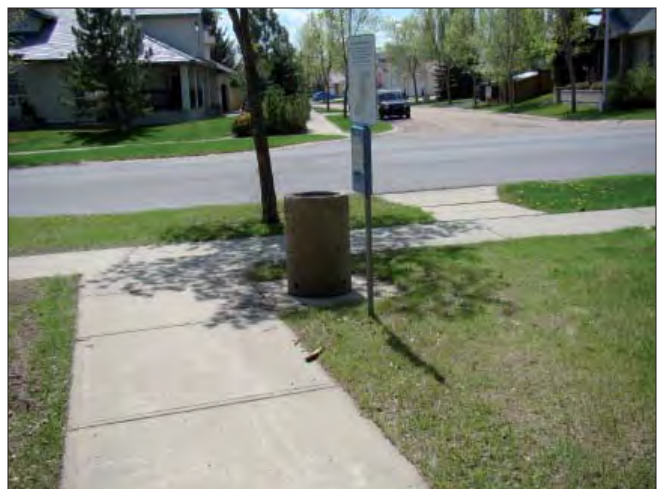
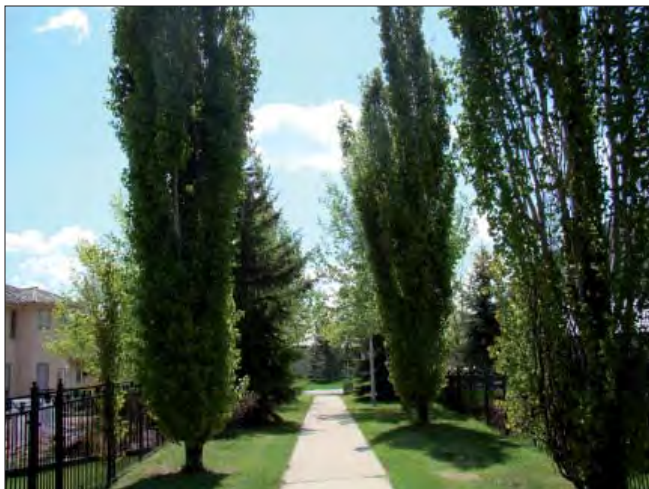
Category	Type	Present State	Photo Reference (DSC0-)	Recommendations
<b><u>Landscape</u></b>	•Shrubs	Minimal in areas	3130, 3136, 3140	Add in meridian and alongside masonry wall
	•Trees	Minimal planting	3140, 3132	Add along street, soften masonry and fencing
	•Sod	Varies, some damage	3135, 3137	Reseed damaged, maintain
	•Stone Beds	Missing stones	3136	Replace missing stones/change to wood mulch
<b><u>Fencing</u></b>	•Masonry Pillars (meridian)	Minimal, old	3130	Replace - larger, modernize
	•Masonry (feat.)	-	-	Clean, basic maintenance
<b><u>Hard Scape</u></b>	•Concrete Walk	Good shape	3129	Maintain
	•Concrete Meridian	Some cracking. Large, bare concrete patch	3138	Possible planting location, soften hardscape
<b><u>Ammenities</u></b>	•Bus Shelter	New, good shape	3140	Maintain
<b><u>Lighting</u></b>	•CoE Street Lighting	Minor rust	3138	Maintain
	•Meridian Pillar Light	Old, visible wiring, small	3130	Replace with more modern concept
<b><u>Signage</u></b>	•Brookview Entry feat.	Good shape, possible visibility issues	3133, 3137	Light to make more noticeable
	•Business Owner Signage	Broken	3140	Remove

# Photographic Inventory

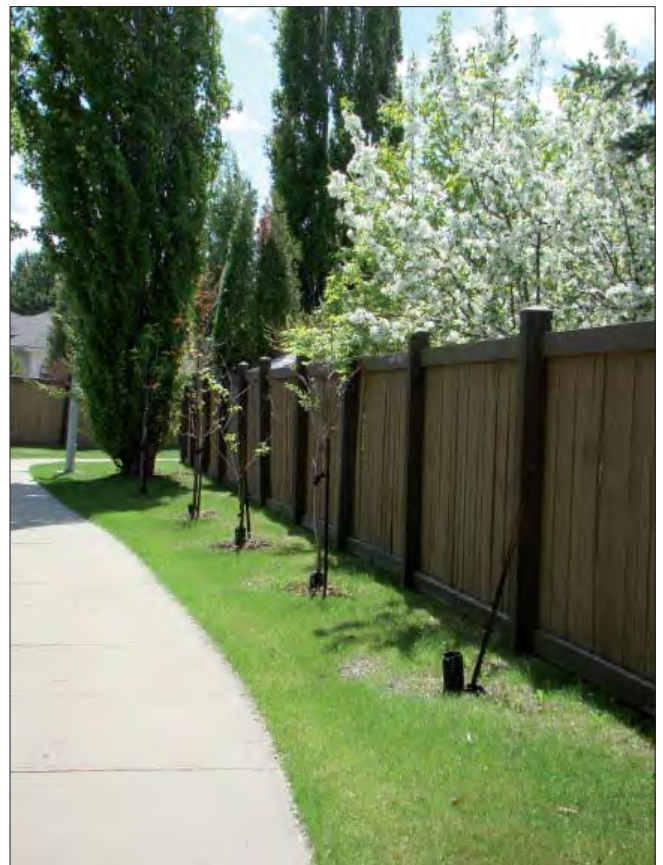
## Area 1





















# Photographic Inventory

## Area 2



















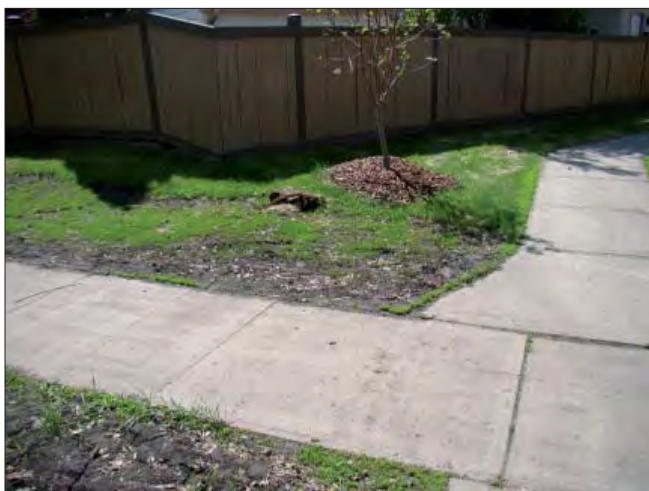




# Photographic Inventory

## Area 3









# Photographic Inventory School Site









# Photographic Inventory

## Frank Burton Field









# Photographic Inventory Ravine/TOB









# Photographic Inventory

## Neighbourhood Entry 1





# Photographic Inventory

## Neighbourhood Entry 2









---

IBI Group is a globally integrated architecture, planning, engineering, and technology firm.



**Defining the cities of tomorrow**  
[www.ibigroup.com](http://www.ibigroup.com)