

**Werner Schwar**  
**Landscape Architect**

B.L.A., O.A.L.A., C.S.L.A.



P.O. Box 21048, 640 River St.

Thunder Bay, Ontario P7A 3S0

Phone/Fax: (807) 346-0607

e-mail: [wsla@tbaytel.net](mailto:wsla@tbaytel.net)

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**Implementation Plan for Street  
Beautification in Downtown Atikokan  
Atikokan, Ontario**

Phase One: Draft Summary of Findings,  
Concept Options and Evaluation

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For: Township of Atikokan  
Box 130, 120 Marks Street Atikokan, ON P0T 1C0

Date: February 23, 2004.

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Township of Atikokan  
Box 1330, 120 Marks Street, Atikokan, ON P0T 1C0

Attn.: Warren Paulson, CAO/ Clerk

February 23, 2005.

**Re: Phase One – Implementation Plan for Street Beautification in Downtown Atikokan.**

Dear Warren,

Please find enclosed 5 bound and 1 unbound copies of the draft report, as well as a digital copy on compact disk.

This document is meant to assist the Town and DARC to decide on a preferred design option for Main Street. There are 3 proposed options to evaluate. Option One shows Main Street with a central median, as was recommended by a previous study in 1994. Option Two shows Main Street reduced to two lanes of traffic with parking defined by 'bump-outs' at intersections. Option Three shows Main Street realigned into a serpentine configuration. In as much as possible, the Consultant Team has tried to evaluate the concepts to allow for equal comparison. Thus, for this phase we have just focused on the physical structure of the concept options. Site amenities, and other visual enhancements have not been shown, and only allowed for in the cost estimate. To a large extent these items can take any form and be added or deleted to suit budget. In addition, it is the Consultant Team's opinion that the treatment of O'Brien Street would be relatively similar in each option, and as a result it is listed as a separate cost item.

Given the tight time lines of this project, the Consultant team would appreciate feedback and direction to proceed with a preferred option by Wednesday March 9, 2005.

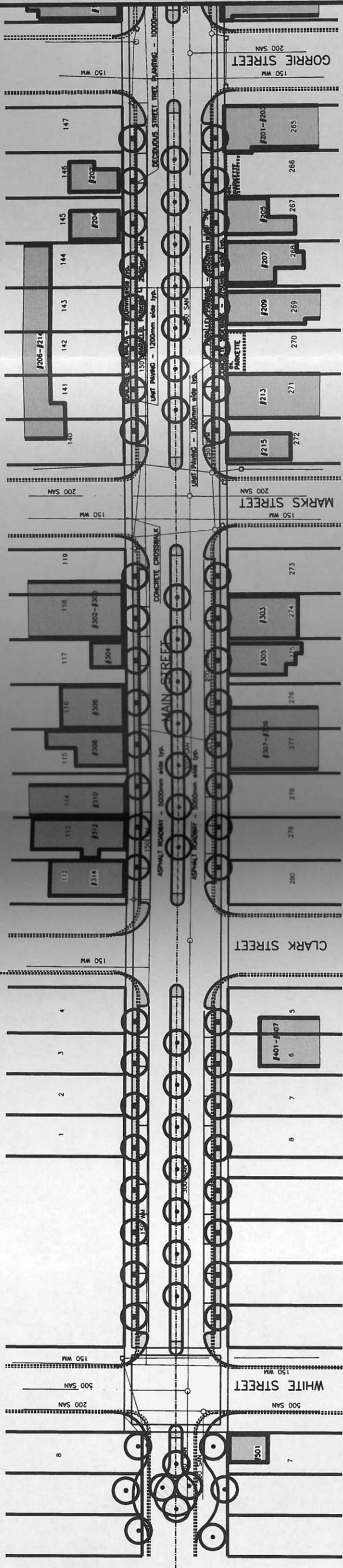
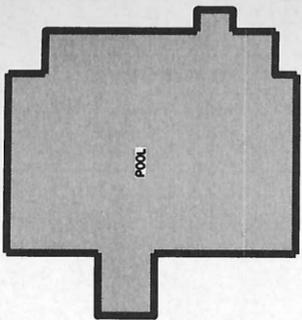
Thank you.

Sincerely,

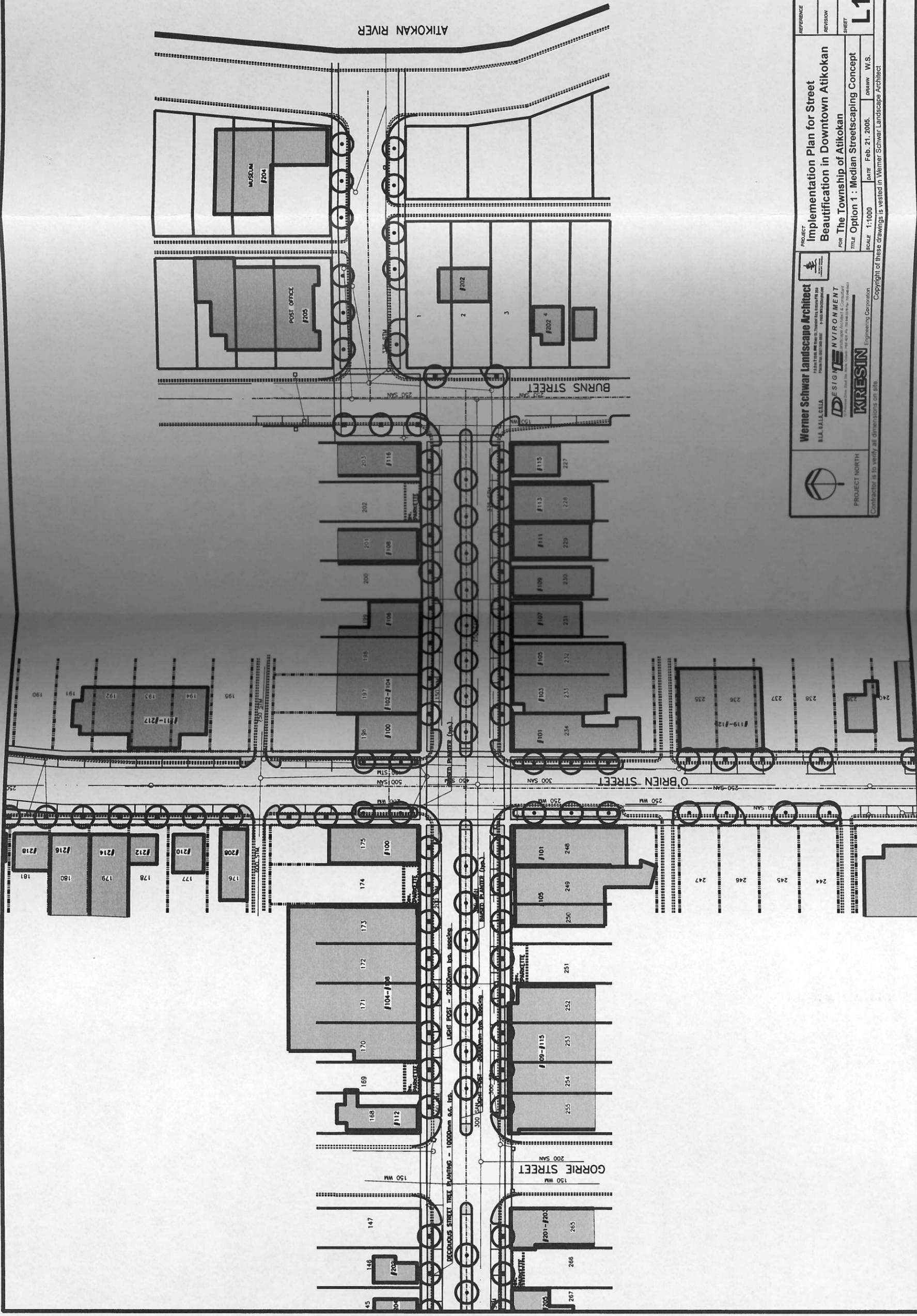
**Werner Schwar B.L.A., O.A.L.A., C.S.L.A.**  
**Werner Schwar Landscape Architect**

## Section One: Option Drawings

The following section contains the graphic representations of the options. Each option is composed of three sheets: a) and b) depicting Main Street, c) depicting O'Brien Street.



<p>Werner Schwar Landscape Architect B.L.A. B.A.L.A. S.E.L.A.</p>	<p>PROJECT <b>Implementation Plan for Street Beautification in Downtown Atikokan</b> for <b>The Township of Atikokan</b></p>	<p>REFERENCE REVISION SHEET</p>
	<p>TITLE <b>Option 1 : Median Streetscaping Concept</b></p>	<p>SCALE 1:1000</p>
<p>DESIGN ENVIRONMENT KRESIN Engineering Corporation</p>	<p>DRAWN W.S.</p>	<p>SHEET <b>L1a</b></p>
<p>PROJECT NORTH</p>		
<p>Contractor is to verify all dimensions on site</p>		
<p>Copyright of these drawings is vested in Werner Schwar Landscape Architect</p>		



<p><b>Werner Schwaer Landscape Architect</b>          B.L.A. BALLARILLA          10000mm hgt. lvs.          20000mm hgt. lvs.</p>	<p>PROJECT  <b>Implementation Plan for Street Beautification in Downtown Atikokan</b>          FOR THE TOWNSHIP OF ATKOKAN</p>	<p>REFERENCE          REVISION          SHEET</p>
	<p>TITLE  <b>Option 1 : Median Streetscaping Concept</b></p>	<p>SCALE          1:1000</p>
<p>PROJECT NORTH          Contractor is to verify all dimensions on site.</p>	<p>ENGINEERING CORPORATION  <b>KRESIN</b></p>	<p>DRAWN          W.S.</p>

**L1b**

ATIKOKAN RIVER

BURNS STREET

O'BRIEN STREET

GORRIE STREET

MUSEUM /204

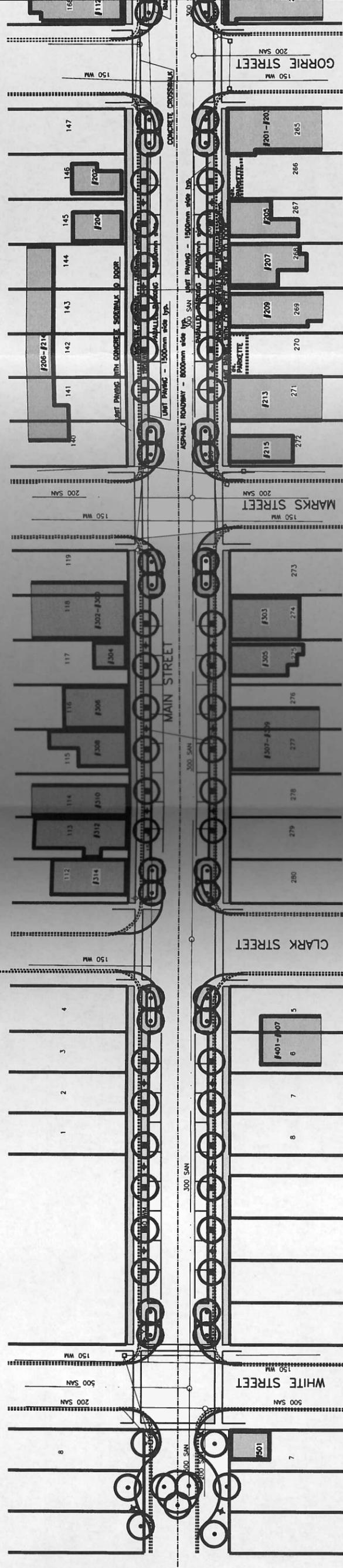
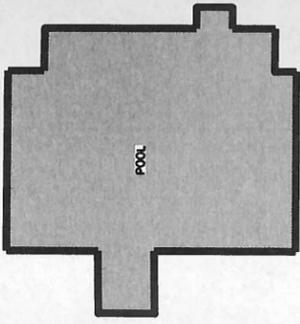
POST OFFICE /205

LIGHT POST - 2000mm hgt. lvs.

DECIDUOUS STREET TREE PLANTING - 10000mm hgt. lvs.

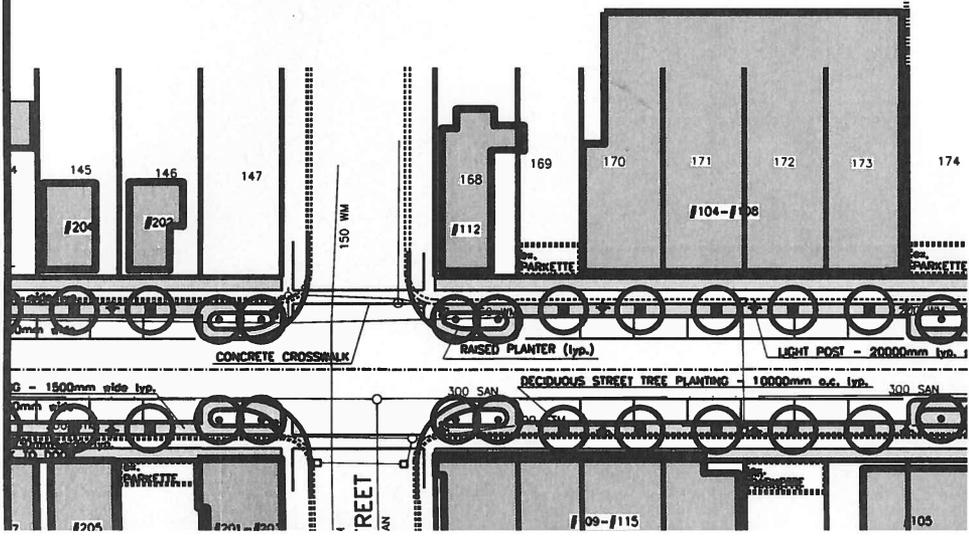
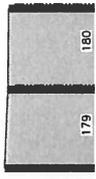
BUSHED PLANTER (typ.)

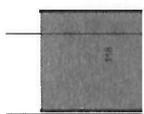




<p><b>Werner Schwar Landscape Architect</b> S.L.L. SALLI S.L.L.A. Piazza S. Maria, 10 - 00187 Roma - Tel. 06/47811111 www.werner-schwarz.it</p>	<p>PROJECT <b>Implementation Plan for Street Beautification in Downtown Atikokan</b></p>	<p>REFERENCE</p>
	<p>FOR <b>The Township of Atikokan</b></p>	<p>REVISION</p>
<p>DESIGN ENVIRONMENT Landscape Architecture &amp; Consulting KRESIN Engineering Corporation</p>	<p>TITLE <b>Option 2 : Bump-out Streetscaping Concept</b></p>	<p>SHEET <b>L2a</b></p>
<p>PROJECT NORTH</p>	<p>SCALE 1:1000</p>	<p>DATE Feb. 21, 2005.</p>
<p>Contractor is to verify all dimensions on site.</p>	<p>Copyright of these drawings is vested in Werner Schwar Landscape Architect</p>	<p>DRAWN W.S.</p>







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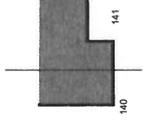
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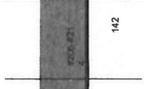
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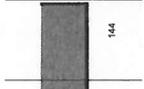
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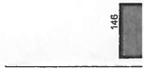
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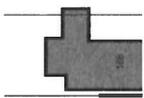
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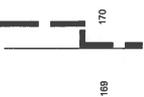
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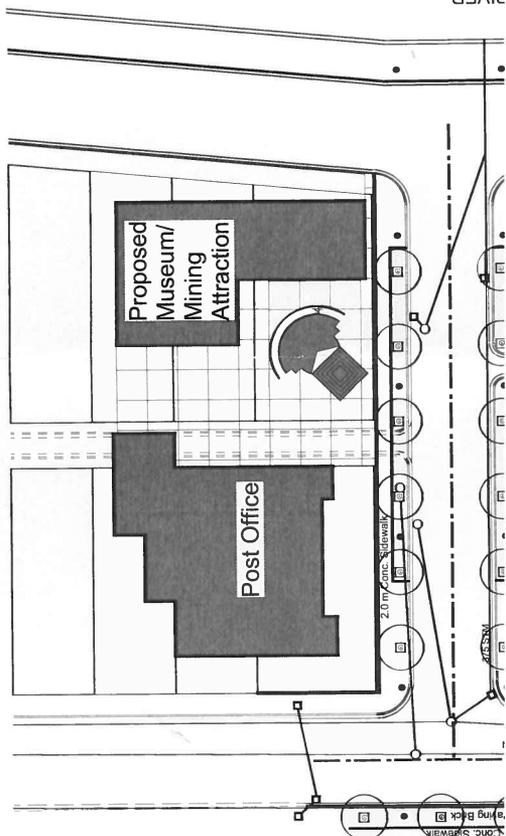


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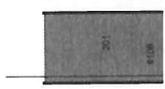
170

171 Parquette: 172  
Possible Skate Park  
Previous site of Burkes



202

200





## Section Two: Evaluation Matrix

The following section depicts the evaluation matrix that was developed to assist the project steering committee in making both a subjective and somewhat quantifiable decision as to the preferred option for the community. The matrix is very much a work in progress, as some of the items were not able to be fully articulated on the drawings given time constraints. In such cases the Consultant Team has done its best to provide an educated opinion.

### **Discussion:**

Based upon the above evaluation matrix, option 2: Bump-outs (Widened Sidewalks with Variable Boulevard Widening) achieved the highest overall score. This option also achieved the highest score in the majority of categories.

While not the most unique design alternative, this option strikes a balance between meeting objectives, improving aesthetics, as well as having the ability to add trees and green space to the downtown with the least disruption to the existing traffic flow and the reality of future infrastructure upgrading. In this option, temporary measures can be located in the location of its permanent home with relatively less existing or future conflicts. In addition, by widening the existing pedestrian zone there is the creation of much more usable continuous pedestrian space adjacent to the sidewalk which can be utilized for store owners to personalize and animate, as well as, for planned civic events. Cost is also a positive factor for this option, as it can be easily standardized and the lack of a median results in construction cost savings. This option is also easily phaseable on a block-by-block basis, not resulting in awkward geometries between completed and non-completed phases.

The Median option, while creating a formality and the impression of grandeur does divide the Main Street into two halves. The median zone would in essence only serve an aesthetic function, and would not be well utilized practically as useable public open space. In addition, it changes the current pattern of vehicular circulation by making directional changes limited to intersections only. While the visual effect of the existing wide roadway would be softened, the physical width would remain the same. It is questionable whether the Town of Atikokan that is marketing itself as the Canoeing Capital of Canada, and at the heart of Northwoods Adventure Country would want to create a very rigidly formal downtown streetscape that contradicts the wilderness imagery of the marketing strategy. In addition, the centre of road location for underground municipal services has the most potential to cause conflict in the future.

The Serpentine Roadway option is unquestionably unique. Main Streets are by convention straight and this option is decidedly curvilinear in keeping with the notion of water flowing, which is an important element in the Canoe Capital and Northwoods Adventure Country initiatives. The ability to create flowing interconnected green and open space is of benefit in this option in creating a 'natural look'. It is the very non-traditional nature of this option, which may make it difficult for a conservative community to accept. While aesthetics of this option are unique, its ability to be phased is difficult due to the change in alignment of roadway. Non-traditional design also tends to end up costing more.

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**Summary of Top Reasons for Wider Sidewalk with Variable Boulevard Widening Option.**

- 1) Creation of useable public open space adjacent to building and sidewalk for pedestrians and displays.
  - 2) Maintains existing traffic flow patterns with the least disruption.
  - 3) Reduces traveled portion of roadway for vehicles, reducing the visual width appearance and encourages vehicles to lessen speeds.
  - 4) Least potential conflict with future underground service upgrading.
  - 5) Opportunity for temporary planting areas with little disruption to the existing conditions and little conflict to future upgrading.
  - 6) Opportunity to be conveniently phased with the best integration into the existing conditions.
  - 7) Utilizes a typical street layout design, but within this framework has the opportunity to create 'flowing' green space.
-

## Draft Implementation Plan for Street Beautification in Downtown Atikokan Concept Evaluation Matrix

Rating System: 1 to 3 (1=good, 2=better, 3=best)

### 1.0 Primary Project Goals

Item	Concept 1: Raised Center Planting Median.		Concept 2: Widen Sidewalks with variable boulevard widening.		Concept 3: Serpentine Main Street Alignment.	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Ability to create an aesthetically pleasing experience on Main Street	2	<ul style="list-style-type: none"> <li>▪ Centre median creates an image of grandeur usually found in larger cities</li> <li>▪ Not common on main streets of northwestern Ontario</li> <li>▪ May divide north and south sides of street visually and physically.</li> </ul>	3	<ul style="list-style-type: none"> <li>▪ Wide pedestrian zone becomes the visual focus, reducing the scale of roadway</li> <li>▪ Creates a flexible base framework for providing a unique experience</li> </ul>	3	<ul style="list-style-type: none"> <li>▪ Curvilinear lines are very pleasing, natural looking and have a calming effect.</li> <li>▪ Serpentine road alignment is unique to a main street in Canada</li> <li>▪ Has the potential to provide the most memorable experience.</li> </ul>
Ability to encourage both local residents and visitors to patronize businesses along Main Street	2	<ul style="list-style-type: none"> <li>▪ Aesthetically pleasing streetscape encourages patrons to linger longer.</li> <li>▪ Median may act as a physical divider creating 2 almost independent sides of the street</li> </ul>	3	<ul style="list-style-type: none"> <li>▪ Aesthetically pleasing streetscape encourages patrons to linger longer.</li> <li>▪ Has the potential to weave north &amp; south sides of Main Street together.</li> </ul>	3	<ul style="list-style-type: none"> <li>▪ Aesthetically pleasing streetscape encourages patrons to linger longer.</li> <li>▪ Has the potential to weave north &amp; south sides of Main Street together.</li> </ul>
<b>Sub-total Sum (max. 6)</b>	<b>4</b>		<b>6</b>		<b>6</b>	

## 2.0 Secondary Project Goals

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Ability to encourage local merchants to improve their properties and displays	3	<ul style="list-style-type: none"> <li>Investment by the Township may encourage merchants to aspire to a similar standard.</li> <li>May encourage merchant rivalry to increase their own aesthetic presentation.</li> </ul>	3	<ul style="list-style-type: none"> <li>Investment by the Township may encourage merchants to aspire to a similar standard.</li> <li>May encourage merchant rivalry to increase their own aesthetic presentation.</li> </ul>	3	<ul style="list-style-type: none"> <li>Investment by the Township may encourage merchants to aspire to a similar standard.</li> <li>May induce merchant rivalry to increase their own aesthetic presentation.</li> </ul>
Ability to provide a more interesting shopping experience	2	<ul style="list-style-type: none"> <li>More interesting than existing condition, however pedestrian shopping zone is not unique.</li> <li>Cross-street pedestrian movement may be restricted by median resulting in a less spontaneous and a more contrived shopping experience.</li> </ul>	3	<ul style="list-style-type: none"> <li>Wide pedestrian zone allows for the shopping experience to 'spill out' from the building with increased outdoor displays etc.</li> <li>Narrower roadway encourages cross-street shopping experience</li> </ul>	3	<ul style="list-style-type: none"> <li>Curvilinear layout is different and unique from most other shopping experiences in northwestern Ontario</li> <li>Wide pedestrian zone allows for the shopping experience to 'spill out' from the building with increased outdoor displays etc.</li> <li>Narrower roadway encourages cross-street shopping experience</li> </ul>
Ability to provide employment and business opportunities related to the construction and provision of infrastructure	3	<ul style="list-style-type: none"> <li>Utilizes local manufactures and construction labour where possible.</li> <li>Varied construction employment opportunities over a period of time as project is phased.</li> </ul>	3	<ul style="list-style-type: none"> <li>Utilizes local manufactures and construction labour where possible.</li> <li>Varied construction employment opportunities over a period of time as project is phased.</li> </ul>	2	<ul style="list-style-type: none"> <li>Utilizes local manufactures and construction labour where possible.</li> <li>As this option has some difficulty being phased into smaller sections, this may reduce the number of people working on the project at regular intervals.</li> </ul>
Ability to create a positive attitude amongst young residents of Atikokan	2	<ul style="list-style-type: none"> <li>Revitalized Main Street Streetscape conveys civic pride and optimism in the</li> </ul>	2	<ul style="list-style-type: none"> <li>Revitalized and personalized Main Street Streetscape conveys civic</li> </ul>	3	<ul style="list-style-type: none"> <li>Revitalized personalized and very unique Main Street Streetscape conveys</li> </ul>

towards their community.		community	pride and optimism in the community	civic pride and optimism in the community
Ability to encourage people and businesses to relocate to Atikokan	1	<ul style="list-style-type: none"> <li>▪ Revitalized Main Street Streetscape conveys civic pride and optimism in the community</li> <li>▪ Median may make cross-street shopping less desirable which may discourage some businesses to relocate.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Revitalized Main Street Streetscape conveys civic pride and optimism in the community.</li> <li>▪ Encourages a cross-street and pedestrian friendly shopping experience.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Revitalized unique Main Street Streetscape conveys pride and optimism in the community</li> <li>▪ Encourages a cross-street and pedestrian friendly shopping experience.</li> <li>▪ Larger public spaces may encourage increased visitation and shopping.</li> </ul>
<b>Sub-total Sum (max. 15)</b>	<b>11</b>	<b>13</b>	<b>3</b>	<b>14</b>

### 3.0 Design Principle Integration

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Ability to support Northwoods Adventure Country and Canoeing Capital of Canada initiatives	2	<ul style="list-style-type: none"> <li>Centre median provides space for thematic displays.</li> <li>Design will provide numerous trees but mainly in a regimented linear form not alluding to 'nature'.</li> </ul>	3	<ul style="list-style-type: none"> <li>Wide boulevards provide space for thematic displays.</li> <li>Design has the flexibility to allow for personalization and the creation of elements that allude to the varied hinterland/river experience.</li> </ul>	3	<ul style="list-style-type: none"> <li>Curvilinear layout alludes to the flow of water such as the Atikokan River and the Canoeing Capital of Canada.</li> <li>Irregular spaces create a 'natural' and 'organic' feel. that may be easily animated.</li> </ul>
Ability of design to resonate with local residents and businesses	2	<ul style="list-style-type: none"> <li>Alludes to grandeur and a larger city.</li> <li>Will force residents to change their customary traffic patterns, which may not be popular.</li> <li>Strong linear design may not be popular with all residents.</li> </ul>	3	<ul style="list-style-type: none"> <li>Least changes to existing use patterns, while at the same time improving appearance.</li> <li>Varied vital street-level experiences should be popular with local residents.</li> </ul>	2	<ul style="list-style-type: none"> <li>Curvilinear nature is very different from the norm and may be difficult for local residents to envision and embrace initially even with varied vital street-level experiences.</li> </ul>
Ability of design to resonate with younger and older generations	2	<ul style="list-style-type: none"> <li>Formality may appeal to a wide range of ages.</li> <li>Design is very urban and may reduce some pedestrian spontaneity.</li> </ul>	3	<ul style="list-style-type: none"> <li>Traditional layout may appeal to the widest range of ages.</li> <li>Design has the ability to introduce more massed trees and also encourages pedestrian cross-street spontaneity.</li> </ul>	2	<ul style="list-style-type: none"> <li>Unique layout may appeal more to the younger generation.</li> <li>Design has the ability to introduce 'forest-like' plantings to the downtown core, which may be too 'different' for conservative residents.</li> </ul>
Designs ability to maximize Street Tree planting.	2	<ul style="list-style-type: none"> <li>All street tree planting would be in linear 'allee' rows one tree deep.</li> </ul>	3	<ul style="list-style-type: none"> <li>Wide continuous sidewalk areas allow for non-linear street tree planting and grouping.</li> <li>Mass tree plantings will be able to occur.</li> </ul>	3	<ul style="list-style-type: none"> <li>Variable sizes of continuous space for tree planting allows for the greatest flexibility in locations, species and spacings.</li> <li>Mass tree plantings will be</li> </ul>

<p>Ability of design to accommodate low cost interim street tree planting within non scheduled construction phases.</p>	<p>2</p>	<ul style="list-style-type: none"> <li>▪ In boulevard area only, as it is unlikely median could be planted before construction.</li> <li>▪ Design does not provide the largest sidewalk walk width to experiment with varied tree placement.</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Sections of continuous boulevard area could be used for planting.</li> <li>▪ Widened sidewalks and bump-outs will provide for increased opportunities.</li> </ul>	<p>2</p>	<p>able to occur.</p> <ul style="list-style-type: none"> <li>▪ Curvilinear road layout would make interim planting difficult before road construction</li> </ul>
<p>Ability of design to capture the unique spirit of place – ‘genus loci’</p>	<p>2</p>	<ul style="list-style-type: none"> <li>▪ Centre median is unique for northwestern Ontario, would be memorable and can be personalized.</li> <li>▪ However, it is an urban solution to a rural community.</li> </ul>	<p>2</p>	<ul style="list-style-type: none"> <li>▪ Layout is not unique to a main street.</li> <li>▪ However bump-outs and increased boulevard/ green space can support personalization to express Atikokan’s geographic location.</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Uniqueness and layout alludes to the ‘Northwoods’ and flowing water.</li> <li>▪ Design has the ability to physically and conceptually reinforce the concept of Northwoods Adventure Country and the Canoeing Capital of Canada.</li> </ul>
<p>Ability of the design to create a continuous system of “greenspace”</p>	<p>2</p>	<ul style="list-style-type: none"> <li>▪ Green space is continuous in linear ‘allees’. The centre of the roadway in the median affords the best opportunity.</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Wide boulevards allow green space to flow, but it is of a constant width.</li> <li>▪ Potential for continuous mass planting.</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Variable sizes of green space flow along the length of the street.</li> <li>▪ Most potential for continuous mass planting</li> </ul>
<p>Ability of design to provide variable opportunities for integrated socializing space</p>	<p>1</p>	<ul style="list-style-type: none"> <li>▪ Socializing space is not greatly increased from existing.</li> <li>▪ Design provides the smallest width of sidewalk, thus reducing the options of pedestrian open space gathering.</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Wide boulevards allow for socializing opportunities, however sizes of space are fairly constant.</li> <li>▪ Bump-outs will provide opportunity for larger civic gathering locations</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Variable sizes of pedestrian space allow for greatest opportunity.</li> <li>▪ Curvilinear alignment will provide large civic gathering location from side to side and block to block.</li> </ul>
<p>Ability of the design to support “cluster seating &amp; gathering” at prime location. “Sitters &amp; Watchers”</p>	<p>1</p>	<ul style="list-style-type: none"> <li>▪ Median area is not useful for gathering, boulevards are linear and do not encourage gathering.</li> <li>▪ Narrow sidewalks and boulevards make cluster</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Wide boulevards allow for gathering opportunities.</li> <li>▪ Variable &amp; potentially unique options.</li> </ul>	<p>3</p>	<ul style="list-style-type: none"> <li>▪ Variable boulevard spaces allow for a variety of gathering spaces that are potentially unique.</li> </ul>

			seating difficult but congestion can sometimes foster vitality.			
Percentage of available seating space. (optimum @ 1 lin.m. of seating space/10 m <sup>2</sup> of plaza)	2	REQUIRES PLANS TO EVALUATE.	3		3	
<b>Sub-total (max. 30)</b>	<b>18</b>		<b>29</b>		<b>27</b>	

#### 4.0 Functionality & Technical Issues

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Overall traffic flow and ease of use.	1	<ul style="list-style-type: none"> <li>Median strip changes existing traffic flow.</li> <li>Lane separation may encourage higher speed.</li> </ul>	3	<ul style="list-style-type: none"> <li>Existing traffic flow is retained, with the added benefit of parking and lane definition.</li> <li>Narrowed roadway may reduce vehicular speed.</li> </ul>	2	<ul style="list-style-type: none"> <li>Non-traditional layout may not be intuitive for all users.</li> <li>Narrowed roadway may reduce vehicular speed.</li> </ul>
Perceived Personal Safety	2	<ul style="list-style-type: none"> <li>Unrestricted views along the length of the street..</li> <li>Median may block views cross-street and increase feelings of insecurity.</li> </ul>	3	<ul style="list-style-type: none"> <li>Wider pedestrian zone may feel intimidating to some.</li> <li>Cross-street visual integration of shopping experience provides 'safety-in-numbers'.</li> </ul>	2	<ul style="list-style-type: none"> <li>Variable spaces may be unfamiliar to some.</li> <li>Massing of vegetation may be intimidating to some in a downtown setting</li> <li>Cross-street visual integration of shopping experience provides 'safety-in-numbers'.</li> </ul>
Parking – number of stalls	3	<ul style="list-style-type: none"> <li>Maintains a similar amount to existing.</li> <li>TO BE DETERMINED, REQUIRES PLANS</li> </ul>	3	<ul style="list-style-type: none"> <li>Maintains a similar amount to existing.</li> </ul>	2	<ul style="list-style-type: none"> <li>Curvilinear layout may reduce the number of potential stalls.</li> </ul>
Parking – ease of access & safety.	2	<ul style="list-style-type: none"> <li>Median will make access to stalls on the opposite side of street more difficult to</li> </ul>	3	<ul style="list-style-type: none"> <li>Best access and definition of parallel parking stalls.</li> <li>Design has the ability to</li> </ul>	2	<ul style="list-style-type: none"> <li>Curves may be distracting and not familiar to some with parallel parking stalls.</li> </ul>

		<ul style="list-style-type: none"> <li>access.</li> <li>Drive-in, drive-out parallel parking is the only option available</li> </ul>		<p>provide diagonal parking options – slightly more difficult to negotiate than parallel.</p>	<ul style="list-style-type: none"> <li>Design has the ability to provide diagonal parking options – slightly more difficult to negotiate than parallel.</li> </ul>
<p>Parking – general appearance</p>	<ul style="list-style-type: none"> <li>Median helps soften the view of a row of parked cars from the opposite street side.</li> <li>Linear parallel parking will add to the cross-street visual and physical separation.</li> </ul>	<ul style="list-style-type: none"> <li>Median does not allow for any flexibility.</li> <li>Slight intersection complications, however generally standard design.</li> </ul>	<ul style="list-style-type: none"> <li>Frequent bump-outs soften views of long row of parked cars.</li> <li>Diagonal parking option would free up space for pedestrian and merchant space.</li> </ul>	<ul style="list-style-type: none"> <li>Curvilinear layout prevents views of long rows of parked cars.</li> <li>Diagonal parking option would free up space for trees, pedestrian and merchant space.</li> </ul>	<ul style="list-style-type: none"> <li>Curvilinear layout prevents views of long rows of parked cars.</li> <li>Diagonal parking option would free up space for trees, pedestrian and merchant space.</li> </ul>
<p>Vehicular circulation – ease of use, intuitiveness, flexibility</p>	<ul style="list-style-type: none"> <li>Median does not allow for any flexibility.</li> <li>Slight intersection complications, however generally standard design.</li> </ul>	<ul style="list-style-type: none"> <li>Most flexibility of options.</li> <li>Standard design is very intuitive.</li> </ul>	<ul style="list-style-type: none"> <li>Most flexibility of options.</li> <li>Standard design is very intuitive.</li> </ul>	<ul style="list-style-type: none"> <li>Most flexibility of options.</li> <li>Standard design is very intuitive.</li> </ul>	<ul style="list-style-type: none"> <li>Curvilinear layout is unfamiliar and uncommon to drivers, but offers flexibility.</li> </ul>
<p>Pedestrian Circulation – safety, separation with vehicles, interaction potential</p>	<ul style="list-style-type: none"> <li>Pedestrian is closest to parked vehicles.</li> <li>There are wide road crossing with the possibility of being trapped at the centre median</li> </ul>	<ul style="list-style-type: none"> <li>Good pedestrian separation from vehicles due to wider sidewalks and reduced width road crossings.</li> <li>Less restricted views to opposite of street increases interaction potential.</li> </ul>	<ul style="list-style-type: none"> <li>Good pedestrian separation from vehicles due to wider sidewalks and reduced width road crossings.</li> <li>Less restricted views to opposite of street increases interaction potential.</li> </ul>	<ul style="list-style-type: none"> <li>Good pedestrian separation from vehicles due to wider sidewalks and reduced width road crossings.</li> <li>Less restricted views to opposite of street increases interaction potential.</li> </ul>	<ul style="list-style-type: none"> <li>Good pedestrian separation from vehicles due to wider sidewalks and reduced width road crossings.</li> <li>Less restricted views to opposite of street increases interaction potential.</li> </ul>
<p>Designs ability to support variable modes of transportation. (cycling, skiing – snowmobiling)</p>	<ul style="list-style-type: none"> <li>Median usurps a potential zone for non-vehicular transportation.</li> <li>Lack of open space for varied parking solutions.</li> </ul>	<ul style="list-style-type: none"> <li>Wide boulevard offers some opportunity for non-vehicular transportation and innovative parking solutions, however parked cars are a deterrent to cyclists</li> </ul>	<ul style="list-style-type: none"> <li>Wide boulevard offers some opportunity for non-vehicular transportation and innovative parking solutions, however parked cars are a deterrent to cyclists</li> </ul>	<ul style="list-style-type: none"> <li>Wide boulevard offers some opportunity for non-vehicular transportation and varied parking solutions, however parked cars are a deterrent to cyclists.</li> </ul>	<ul style="list-style-type: none"> <li>Wide boulevard offers some opportunity for non-vehicular transportation and varied parking solutions, however parked cars are a deterrent to cyclists.</li> </ul>
<p>Green space/ Open Space – quality, usability accessibility</p>	<ul style="list-style-type: none"> <li>Limited size and linear in layout.</li> <li>Design provides little possibility for future increased open space.</li> </ul>	<ul style="list-style-type: none"> <li>Somewhat linear in nature, some variability</li> <li>Design provides increased possibility for future development of open space</li> </ul>	<ul style="list-style-type: none"> <li>Somewhat linear in nature, some variability</li> <li>Design provides increased possibility for future development of open space</li> </ul>	<ul style="list-style-type: none"> <li>Opportunity for highly variable and continuous non-linear green space.</li> <li>Design provides increased possibility for future</li> </ul>	<ul style="list-style-type: none"> <li>Opportunity for highly variable and continuous non-linear green space.</li> <li>Design provides increased possibility for future</li> </ul>

Lighting – number of poles, scale, effect	2	Number of poles would be the highest due to vehicular scale poles in centre median and pedestrian scale in boulevard.	3	Narrow roadway allows for vehicle and pedestrian scale lighting to be on same pole. Lighting may alternate sides of street to reduce number of poles.	2	development of open space
<b>Sub-total Sum (max. 30)</b>	<b>19</b>		<b>29</b>		<b>23</b>	

### 5.0 Aesthetics

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Massing potential – designs ability to provide critical massing of trees	2	<ul style="list-style-type: none"> <li>Provides massing opportunities only in long uniform rows (linear allees).</li> </ul>	3	<ul style="list-style-type: none"> <li>Provides massing opportunities in uniform rows and groupings, with varied possibilities.</li> </ul>	3	<ul style="list-style-type: none"> <li>Provides massing opportunities in random groupings, with varied possibilities.</li> </ul>
Unification of street	2	<ul style="list-style-type: none"> <li>Continuous rows of trees and consistent amenities would unify street.</li> <li>However, there is visual and physical separation cross-street because of median.</li> </ul>	3	<ul style="list-style-type: none"> <li>Continuous rows and groupings of trees and consistent amenities would unify street.</li> </ul>	3	<ul style="list-style-type: none"> <li>Curvilinear form would de-emphasize long linear nature of Main Street with a unique design.</li> </ul>
Framing/ Defining/ highlighting/ Screening of view	2	<ul style="list-style-type: none"> <li>View is framed along the length of street, however side view screening is limited due to width available.</li> </ul>	3	<ul style="list-style-type: none"> <li>View is framed along length of street, and increased boulevard width provides opportunity for side view screening as required.</li> </ul>	3	<ul style="list-style-type: none"> <li>Potential for grouping of vegetation frames view in an organic way and opportunity for large grouping of vegetation to screen specific areas.</li> </ul>
Ability of design to transform existing condition to enhance and evoke human scale.	3	<ul style="list-style-type: none"> <li>Increased presence of trees and reduced vehicular lane evokes a desirable human scale by defining and delineating pedestrian</li> </ul>	3	<ul style="list-style-type: none"> <li>Increased presence of trees and reduced vehicular lane evokes a desirable human scale with good pedestrian separation from vehicular</li> </ul>	3	<ul style="list-style-type: none"> <li>Increased presence of trees and reduced vehicular lane evokes a desirable human scale.</li> <li>Curvilinear layout reduces</li> </ul>

	zone.	zone.	zone.	zone.	visual width of road right of way.
Opportunity for personalization and identification within street/block or building	2	<ul style="list-style-type: none"> <li>▪ Linear concept of pedestrian zone lends itself to a homogeneous implementation with little option to deviate and differentiate.</li> <li>▪ Some opportunity visually within the median zone</li> </ul>	3	<ul style="list-style-type: none"> <li>▪ Wide pedestrian zone offers great opportunity for Township and/ or merchant personalization.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Curvilinear alignment will provide varied open space to personalize and provide varied block identification.</li> </ul>
Ability of design to animate adjoining openspace.	2	<ul style="list-style-type: none"> <li>▪ Limited due to narrowest pedestrian zone.</li> <li>▪ Little extra space to work with beyond prescribed pedestrian way.</li> </ul>	3	<ul style="list-style-type: none"> <li>▪ Wide pedestrian zone would allow for merchants to have varied opportunities with sidewalk displays, seating, planting, etc.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Wide pedestrian zone would allow for merchants to have varied opportunities with sidewalk displays, seating, planting, etc.</li> </ul>
<b>Sub-total Sum (max. 18)</b>	<b>13</b>		<b>18</b>		<b>18</b>

## 6.0 Maintenance

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
General Maintenance - amenities	3	<ul style="list-style-type: none"> <li>Easy access from roadway.</li> </ul>	2	<ul style="list-style-type: none"> <li>Amenities may be more difficult to access quickly.</li> </ul>	2	<ul style="list-style-type: none"> <li>Amenities may be integrated into green space reducing ease of access.</li> </ul>
General Maintenance - surfaces (hard & soft)	3	<ul style="list-style-type: none"> <li>Low maintenance requirements due to primarily hard surfaces.</li> </ul>	2	<ul style="list-style-type: none"> <li>More opportunity for green space will require more maintenance.</li> </ul>	1	<ul style="list-style-type: none"> <li>Larger continuous green spaces will require the most maintenance.</li> </ul>
General Maintenance - trees and vegetation	2	<ul style="list-style-type: none"> <li>Low maintenance requirements due to primarily hard surfaces Median trees may be more difficult to maintain due to traffic concerns.</li> </ul>	2	<ul style="list-style-type: none"> <li>More opportunity for green space will require more maintenance.</li> <li>Trees perform better and require less maintenance in mass plantings.</li> </ul>	2	<ul style="list-style-type: none"> <li>Trees perform better and require less maintenance in mass plantings.</li> </ul>
General Maintenance - snow removal	2	<ul style="list-style-type: none"> <li>Defined parking makes snow removal more difficult.</li> <li>Snow storage is possible in median, as exists currently, however this increases cross street visual barriers.</li> </ul>	2	<ul style="list-style-type: none"> <li>Defined parking makes snow removal more difficult.</li> <li>Snow storage is possible in wide boulevard and bump-outs.</li> </ul>	2	<ul style="list-style-type: none"> <li>Defined parking makes snow removal more difficult.</li> <li>Varied snow storage is possible in the wide boulevard and open space, however curvilinear layout makes removal less intuitive.</li> </ul>
Lifecycle Maintenance – designs ability to mitigate accessibility issues for underground service replacement.	1	<ul style="list-style-type: none"> <li>Centre median makes accessing underground services in the centre of the street difficult.</li> <li>Median will be required to be removed when sewer replacement is required.</li> </ul>	3	<ul style="list-style-type: none"> <li>Little service and green space conflict other than laterals to building.</li> <li>Potential for least interaction and conflict with underground servicing.</li> </ul>	2	<ul style="list-style-type: none"> <li>Curvilinear layout above ground does not align with linear nature of services below ground.</li> <li>Dependent on extent of sweep of alignment, some conflict with underground servicing may occur.</li> </ul>
<b>Sub-total Sum (max. 15)</b>	<b>11</b>		<b>11</b>		<b>9</b>	

## 7.0 Green/ Open Space

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Number of trees and arrangement variability (benchmark : 1 tree/ 10m of sidewalk -- 6 trees/500 m2 of plaza)	2	<ul style="list-style-type: none"> <li>Opportunity for linear rows of trees only.</li> <li>approx 152</li> </ul>	2	<ul style="list-style-type: none"> <li>Opportunity for continuous tree planting areas.</li> <li>Approx. 135</li> </ul>	3	<ul style="list-style-type: none"> <li>Opportunity for random and continuous tree planting areas.</li> <li>Approx. 165</li> </ul>
Ability to create space to support different types of vegetation	1	<ul style="list-style-type: none"> <li>Primarily limited to street trees only.</li> <li>Linear layout of design does not lend itself to developing varied open space for mass plantings.</li> </ul>	2	<ul style="list-style-type: none"> <li>Primarily limited to street tree planting but there is opportunity for varied planting options within varied bump-outs and widened pedestrian ways.</li> </ul>	3	<ul style="list-style-type: none"> <li>Curvilinear layout providing large open civic space and widened pedestrian ways provide ample opportunities to support both street tree planting and other varied planting options.</li> </ul>
Percentage of pedestrian open space (Non-sidewalk) available	2	<ul style="list-style-type: none"> <li>Median is not useable pedestrian space, and resulting sidewalks are narrowest.</li> <li>TO BE DETERMINED BY PLAN</li> </ul>	3	<ul style="list-style-type: none"> <li>Reducing traveled portion of road and parking to its narrowest possible creates the greatest amount of open space.</li> </ul>	3	<ul style="list-style-type: none"> <li>Reducing traveled portion of road and parking to its narrowest possible creates the greatest amount of open space.</li> </ul>
Percent of pedestrian thoroughfare sidewalk	2	<ul style="list-style-type: none"> <li>Thoroughfare sidewalk is wider than boulevard.</li> <li>TO BE DETERMINED BY PLAN</li> </ul>	3	<ul style="list-style-type: none"> <li>Boulevard is wider than thoroughfare sidewalk.</li> </ul>	3	<ul style="list-style-type: none"> <li>Boulevard is wider than thoroughfare sidewalk and variable in nature.</li> </ul>
Expandability and changeability of design openspace.	2	<ul style="list-style-type: none"> <li>Boulevard has little opportunity for changeability because of little expanse of excess open space along pedestrian way is available.</li> <li>Median can be varied as required.</li> </ul>	3	<ul style="list-style-type: none"> <li>Area for expansion is limited, however good opportunity for variability within available space.</li> <li>Large percentage of excess pedestrian / civic space lends itself to being adaptable.</li> </ul>	3	<ul style="list-style-type: none"> <li>Variability in size and shape of open space offers the most flexibility.</li> <li>Large percentage of excess pedestrian / civic space lends itself to being adaptable.</li> </ul>
<b>Sub-total Sum (max. 15)</b>	<b>9</b>		<b>13</b>		<b>15</b>	

## 8.0 Utilities

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Ease of repair of existing utilities	1	<ul style="list-style-type: none"> <li>Problematic with sanitary sewer along centerline of road – median would need to be removed for repairs.</li> </ul>	3	<ul style="list-style-type: none"> <li>Potentially the least disruptive dependent of size and location of bump-outs. Potential conflicts primarily in servicing laterals.</li> </ul>	2	<ul style="list-style-type: none"> <li>Curvilinear layout may cause conflicts in some areas. Potential that sweep of alignment may cross over utilities at certain location.</li> </ul>
Ease of new construction	2	<ul style="list-style-type: none"> <li>Centre median would need to be removed to access services.</li> <li>Median at intersection may be slightly problematic.</li> </ul>	3	<ul style="list-style-type: none"> <li>Potential conflicts in servicing laterals.</li> <li>Easily integrated into phased solution</li> </ul>	2	<ul style="list-style-type: none"> <li>Curvilinear layout may cause conflicts in some areas.</li> <li>Sweep of alignment may be problematic during phased construction.</li> </ul>
Ability to fit into available space without conflict	1	<ul style="list-style-type: none"> <li>Median conflicts with sanitary sewer location.</li> <li>Centre median would need to be removed to access services.</li> </ul>	2	<ul style="list-style-type: none"> <li>Little foreseen conflict.</li> <li>Potential conflicts in servicing laterals.</li> </ul>	2	<ul style="list-style-type: none"> <li>Curvilinear layout may cause conflicts in some areas</li> </ul>
Designs ability to integrate existing hydro pole locations	1	<ul style="list-style-type: none"> <li>Design provides the least width in pedestrian zone and the existing location of hydro poles on the south side of the street restricts width in some locations</li> </ul>	3	<ul style="list-style-type: none"> <li>Wider pedestrian zone allows sidewalks to avoid and integrate existing poles.</li> </ul>	3	<ul style="list-style-type: none"> <li>Wider pedestrian zone allows sidewalks to avoid and integrate existing poles.</li> </ul>
<b>Sub-total Sum (max. 12)</b>	<b>5</b>		<b>11</b>		<b>9</b>	

### 9.0 Phaseability

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Ability to be easily phased	2	<ul style="list-style-type: none"> <li>Boulevard can be easily phased, however median should be coordinated with servicing.</li> <li>Median at intersection may be slightly problematic.</li> </ul>	3	<ul style="list-style-type: none"> <li>Best opportunity to be phased independent of other issues.</li> <li>Easily integrated into phase solution</li> </ul>	1	<ul style="list-style-type: none"> <li>Curvilinear nature that is so different from existing configuration makes phasing difficult.</li> <li>Sweep of alignment may be problematic during phased construction.</li> </ul>
Ability to include interim temporary measures -- low cost conceptually supportive implementations.	2	<ul style="list-style-type: none"> <li>Temporary measures can be accommodated in roadway and boulevard.</li> </ul>	3	<ul style="list-style-type: none"> <li>Temporary measures can be accommodated in roadway and boulevard.</li> </ul>	2	<ul style="list-style-type: none"> <li>Temporary measures are made more difficult without the permanent infrastructure to protect them (as layout will be non-traditional).</li> </ul>
Ability to be coordinated with infrastructure reconstruction phasing	2	<ul style="list-style-type: none"> <li>Median is best constructed with infrastructure reconstruction.</li> </ul>	3	<ul style="list-style-type: none"> <li>Best ability to be coordinated with or independently of infrastructure reconstruction.</li> </ul>	1	<ul style="list-style-type: none"> <li>Full effect of design would be very dependent on infrastructure reconstruction.</li> </ul>
<b>Sub-total Sum (max. 9)</b>	<b>6</b>		<b>9</b>		<b>4</b>	

**10.0 Costs**

Item	Concept 1: Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Rating	Comment/Justification	Rating	Comment/Justification	Rating	Comment/Justification
Design – Professional Fees	3	<ul style="list-style-type: none"> <li>▪ Easily standardized.</li> </ul>	2	<ul style="list-style-type: none"> <li>▪ Requires some unique detailed design.</li> </ul>	1	<ul style="list-style-type: none"> <li>▪ Requires extensive non standard design</li> </ul>
Overall Construction Cost – independent of cost for under ground servicing	1	<ul style="list-style-type: none"> <li>▪ Approx. \$,3845,000</li> <li>▪ Highest estimate</li> </ul>	3	<ul style="list-style-type: none"> <li>▪ Approx. \$3,670,000</li> <li>▪ Lowest estimate</li> </ul>	2	<ul style="list-style-type: none"> <li>▪ Approx. \$3,760,000</li> <li>▪ Mid estimate</li> </ul>
<b>Sub-total Sum (max. 6)</b>	<b>4</b>		<b>5</b>		<b>3</b>	

**Rating Synopsis - Concept Recommendation**

Item	Concept 1 : Median		Concept 2: Bump Out Sidewalks		Concept 3: Serpentine Alignment	
	Score	Average score	Score	Average Score	Score	Average Score
1.0 Primary Project Goals (max. 6)	4	2.00	6	3.00	6	3.00
2.0 Secondary Project Goals (max. 15)	11	2.20	13	2.60	14	2.80
3.0 Design Principle Integration (max. 30)	18	1.80	29	2.90	27	2.70
4.0 Functionality & Technical Issues (max. 30)	19	1.90	29	2.90	23	2.30
5.0 Aesthetics (max. 18)	13	2.17	18	3.00	18	3.00
6.0 Maintenance (max. 15)	11	2.20	11	2.20	9	1.80
7.0 Green/ Open Space (max. 15)	9	1.80	13	2.60	15	3.0
8.0 Utilities (max. 12)	5	1.25	11	2.75	9	2.25
9.0 Phaseability (max. 9)	6	2.00	9	3.00	4	1.33
10 Costs (max. 6)	4	2.00	5	2.50	3	1.50
<b>TOTAL SCORE (max. 156)</b>	<b>100</b>	<b>1.93</b>	<b>144</b>	<b>2.75</b>	<b>128</b>	<b>2.46</b>

## Section Three: Cost Estimates

The following section details the anticipated class C costs for each proposed option independent of underground servicing upgrades. It can be summarized as follows:

Option One:	Median	approx. cost \$3,845,000
Option Two:	Bump-out	approx. cost \$3,670,000
Option Three:	Serpentine	approx. cost \$3,760,000
O'Brien Street		approx. cost \$1,425,000

As can be seen in the above numbers, the cost difference between alternatives is relatively little given the overall cost of the project. It is estimated that the median option would cost the most. This is primarily due to the high amount of concrete curbing required for this option. In addition, the concept assumed the majority of the centre median to be soft surface. If this would become hard surface the cost would be even higher.

The Bump-out option is estimated to cost the least of the options. It is the easiest to construct due to it being the most traditional street layout pattern.

It should also be noted that the cost for street amenities and other visual enhancements can be reduced or increased to suit budgetary needs. Consistent quantities were assigned to provide an easier comparison between options. Thus, the above numbers should be utilized for comparative purposes only at this stage. Further concept development and revision for the preferred concept option will determine a more accurate cost estimate.

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**Street Beautification: Option Three – Serpentine Concept**  
**Main Street – White Street to Atikokan River (O'Brien Street N/C)**

Item	Measure	Unit Cost	Qty.	Cost
Removal of existing Asphalt	m <sup>2</sup>	\$15	12500	\$187,500
Removal of ex. concrete curbs	lin.-m	\$15	1200	\$18,000
Removal of ex. unit paving sidewalks	m <sup>2</sup>	\$15	4000	\$60,000
Sub-grade Exc. 800 mm (n/c services replacement)	m <sup>3</sup>	\$12	10000	\$120,000
				0
Granular Road Base – Gran. 'B' @ 600mm	tonne	\$10	14240	\$142,400
Granular Road Base – Gran. 'A' @ 150mm	tonne	\$14	3560	\$49,840
Drainage Fixtures Installed (min. 6 CB per block)	ea.	\$1314	36	\$47,304
Asphalt Area = 8600 m <sup>2</sup> – Base Coat (50 HLA)	tonne	\$110	1011 ton	\$111,210
Asphalt Roadway – Top Coat Paving (40 HL3)	tonne	\$110	843 ton	\$92,730
Concrete Curb/ Depressed Curb	lin.-m	\$150	1700	\$255,000
Concrete Sidewalk	m <sup>2</sup>	\$80	3200	\$256,000
Unit Paving	m <sup>2</sup>	\$150	5500 m <sup>2</sup>	\$825,000
				0
Vehicular Light Poles, Fixtures and Banners	ea.	\$4000	0	\$0
Pedestrian Scale Light Poles, Fixtures, & Footings	ea.	\$4000	65	\$260,000
50 mm dia. PVC duct	lin.-m	\$40	1300	\$52,000
				0
Raised Concrete Planter Seatwall	lin.-m	\$300	300	\$90,000
Tree Grates including concrete curbing	ea.	\$1,000	135	\$135,000
Tree Guards	ea.	\$500	135	\$67,500
Random Boulders (min. 6 per block)	ea.	\$250	36	\$9,000
Northwoods/ Canoe Capital Displays & Sculptures	ea./ allow.	\$2,000	6	\$12,000
Metal Guardrail Fencing	lin.-m	\$300	0	\$0
Bollards (10 per block)	ea.	\$500	60	\$30,000
				0
Benches (min. 6 per block)	ea.	\$1,500	36	\$54,000
Litter Containers (min. 4 per block)	ea.	\$1,000	24	\$24,000
Bicycle Racks (min. 4 per block)	ea.	\$1,000	24	\$24,000
Street Identification Signage (min. 4 per block)	ea.	\$200	24	\$4,800
				0
Deciduous/Coniferous Trees	ea.	\$400	165	\$66,000
Shrubs (80 per block)	ea.	\$40	480	\$19,200
Perennials (150 per block)	ea.	\$5	900	\$4,500
Planting Bed Topsoil and Mulch	m <sup>2</sup>	\$5	2000	\$10,000
Finish grading and sodding	m <sup>2</sup>	\$5	0	\$0
<b>Sub-total</b>				<b>\$3,026,984.00</b>
Contingency of 15%				\$ 454,047.60
<b>Total Construction</b>				<b>\$3,481,031.60</b>
Consultant Fees 8%				\$ 278,482.53
<b>Total in 2005 dollars (not including GST)</b>				<b>\$3,759,514.13</b>

Please note: This cost estimate does not include the site service works such as water, sewer, sanitary, or hydro connections and reconstruction

**Werner Schwar**  
**Landscape Architect**

P.O. Box 21048, 640 River St.  
 Thunder Bay, Ontario P7A 3S0  
 Phone/Fax (807) 346-0607



**Aikokan Street Beautification**  
**Preliminary Cost Estimate**

project No.: 05-183 date: February 2005

**Street Beautification: Option Three – Serpentine Concept**  
**O'Brien Street – MacKenzie Avenue to Niven Street**  
 (Intersection of Main Street & O'Brien Street N/C))

Item	Measure	Unit Cost	Qty.	Cost
Removal of existing Asphalt	m <sup>2</sup>	\$15	12500	\$187,500
Removal of ex. concrete curbs	lin.-m	\$15	1200	\$18,000
Removal of ex. unit paving sidewalks	m <sup>2</sup>	\$15	4000	\$60,000
Sub-grade Exc. 800 mm (n/c services replacement)	m <sup>3</sup>	\$12	10000	\$120,000
				0
Granular Road Base – Gran. 'B' @ 600mm	tonne	\$10	14240	\$142,400
Granular Road Base – Gran. 'A' @ 150mm	tonne	\$14	3560	\$49,840
Drainage Fixtures Installed (min. 6 CB per block)	ea.	\$1314	36	\$47,304
Asphalt Area = 8600 m <sup>2</sup> – Base Coat (50 HL4)	tonne	\$110	1011 ton	\$111,210
Asphalt Roadway – Top Coat Paving (40 HL3)	tonne	\$110	843 ton	\$92,730
Concrete Curb/ Depressed Curb	lin.-m	\$150	1700	\$255,000
Concrete Sidewalk	m <sup>2</sup>	\$80	3200	\$256,000
Unit Paving	m <sup>2</sup>	\$150	5500 m <sup>2</sup>	\$825,000
				0
Vehicular Light Poles, Fixtures and Banners	ea.	\$4000	0	\$0
Pedestrian Scale Light Poles, Fixtures, & Footings	ea.	\$4000	65	\$260,000
50 mm dia. PVC duct	lin.-m	\$40	1300	\$52,000
				0
Raised Concrete Planter Seatwall	lin.-m	\$300	300	\$90,000
Tree Grates including concrete curbing	ea.	\$1,000	135	\$135,000
Tree Guards	ea.	\$500	135	\$67,500
Random Boulders (min. 6 per block)	ea.	\$250	36	\$9,000
Northwoods/ Canoe Capital Displays & Sculptures	ea./ allow.	\$2,000	6	\$12,000
Metal Guardrail Fencing	lin.-m	\$300	0	\$0
Bollards (10 per block)	ea.	\$500	60	\$30,000
				0
Benches (min. 6 per block)	ea.	\$1,500	36	\$54,000
Litter Containers (min. 4 per block)	ea.	\$1,000	24	\$24,000
Bicycle Racks (min. 4 per block)	ea.	\$1,000	24	\$24,000
Street Identification Signage (min. 4 per block)	ea.	\$200	24	\$4,800
				0
Deciduous/Coniferous Trees	ea.	\$400	165	\$66,000
Shrubs (80 per block)	ea.	\$40	480	\$19,200
Perennials (150 per block)	ea.	\$5	900	\$4,500
Planting Bed Topsoil and Mulch	m <sup>2</sup>	\$5	2000	\$10,000
Finish grading and sodding	m <sup>2</sup>	\$5	0	\$0
<b>Sub-total</b>				<b>\$3,026,984.00</b>
Contingency of 15%				\$ 454,047.60
<b>Total Construction</b>				<b>\$3,481,031.60</b>
Consultant Fees 8%				\$ 278,482.53
<b>Total in 2005 dollars (not including GST)</b>				<b>\$3,759,514.13</b>



**Street Beautification: Option One – Median Concept**  
**Main Street – White Street to Atikokan River (O'Brien Street N/C)**

Item	Measure	Unit Cost	Qty.	Cost
Removal of existing Asphalt	m <sup>2</sup>	\$15	12500	\$187,500
Removal of ex. concrete curbs	lin.-m	\$15	1200	\$18,000
Removal of ex. unit paving sidewalks	m <sup>2</sup>	\$15	4000	\$60,000
Sub-grade Exc. 800 mm (n/c services replacement)	m <sup>3</sup>	\$12	10000	\$120,000
				0
Granular Road Base – Gran. 'B' @ 600mm	tonne	\$10	16000	\$160,000
Granular Road Base – Gran. 'A' @ 150mm	tonne	\$14	4200	\$58,800
Drainage Fixtures Installed (min. 6 CB per block)	ea.	\$1314	36	\$47,304
Asphalt Area = 10 100 m <sup>2</sup> – Base Coat (50 HLA)	tonne	\$110	1300	\$143,000
Asphalt Roadway – Top Coat Paving (40 HL3)	tonne	\$110	1100	\$121,000
Concrete Curb/ Depressed Curb	lin.-m	\$150	2800	\$420,000
Concrete Sidewalk	m <sup>2</sup>	\$80	2500	\$200,000
Unit Paving	m <sup>2</sup>	\$150	2500	\$375,000
				0
Vehicular Light Poles, Fixtures and Banners	ea.	\$4000	26	\$104,000
Pedestrian Scale Light Poles, Fixtures, & Footings	ea.	\$4000	70	\$280,000
50 mm dia. PVC duct	lin.-m	\$40	2000	\$80,000
				0
Raised Concrete Planter Seatwall	lin.-m	\$300	975	\$292,500
Tree Grates including concrete curbing	ea.	\$1,000	96	\$96,000
Tree Guards	ea.	\$500	152	\$76,000
Random Boulders (min. 6 per block)	ea.	\$250	36	\$9,000
Northwoods/ Canoe Capital Displays & Sculptures	ea./ allow.	\$2,000	6	\$12,000
Metal Guardrail Fencing	lin.-m	\$300	0	\$0
Bollards (10 per block)	ea.	\$500	60	\$30,000
				0
Benches (min. 6 per block)	ea.	\$1,500	36	\$54,000
Litter Containers (min. 4 per block)	ea.	\$1,000	24	\$24,000
Bicycle Racks (min. 4 per block)	ea.	\$1,000	24	\$24,000
Street Identification Signage (min. 4 per block)	ea.	\$200	24	\$4,800
				0
Deciduous/Coniferous Trees	ea.	\$400	152	\$60,800
Shrubs (80 per block)	ea.	\$40	480	\$19,200
Perennials (150 per block)	ea.	\$5	900	\$4,500
Planting Bed Topsoil and Mulch	m <sup>2</sup>	\$5	2000	\$10,000
Finish grading and sodding	m <sup>2</sup>	\$5	900	\$4,500
<b>Sub-total</b>				<b>\$3,095,904.00</b>
Contingency of 15%				\$ 464,385.60
<b>Total Construction</b>				<b>\$3,560,289.60</b>
Consultant Fees 8%				\$ 284,823.17
<b>Total in 2005 dollars (not including GST)</b>				<b>\$3,845,112.77</b>

Please note: This cost estimate does not include the site service works such as water, sewer, sanitary, or hydro connections and reconstruction



**Street Beautification: Option One – Median Concept**  
**O'Brien Street – MacKenzie Avenue to Niven Street**  
(Intersection of Main Street & O'Brien Street N/C))

Item	Measure	Unit Cost	Qty.	Cost
Removal of existing Asphalt	m <sup>2</sup>	\$15	5500	\$82,500
Removal of ex. concrete curbs	lin.-m	\$15	800	\$12,000
Removal of ex. unit paving sidewalks	m <sup>2</sup>	\$15	0	\$0
Sub-grade Exc. 800 mm (n/c services replacement)	m <sup>3</sup>	\$12	4600	\$55,200
				0
Granular Road Base – Gran. 'B' @ 600mm	tonne	\$10	7500	\$75,000
Granular Road Base – Gran. 'A' @ 150mm	tonne	\$14	2100	\$29,400
Drainage Fixtures Installed (min. 13 CB per side)	ea.	\$1314	26	\$34,164
Asphalt Area = 5000 m <sup>2</sup> – Base Coat (50 HL4)	tonne	\$110	600 ton	\$66,000
Asphalt Roadway – Top Coat Paving (40 HL3)	tonne	\$110	520 ton	\$57,200
Concrete Curb/ Depressed Curb	lin.-m	\$150	820	\$123,000
Concrete Sidewalk	m <sup>2</sup>	\$80	1100	\$88,000
Unit Paving	m <sup>2</sup>	\$150	1200 m <sup>2</sup>	\$180,000
				0
Vehicular Light Poles, Fixtures and Banners	ea.	\$4000	0	\$0
Pedestrian Scale Light Poles, Fixtures, & Footings	ea.	\$4000	35	\$140,000
50 mm dia. PVC duct	lin.-m	\$40	750	\$30,000
				0
Raised Concrete Planter Seatwall	lin.-m	\$300	30	\$9,000
Tree Grates including concrete curbing	ea.	\$1,000	40	\$40,000
Tree Guards	ea.	\$500	61	\$30,500
Random Boulders (min. 12 per side)	ea.	\$250	24	\$6,000
Northwoods/ Canoe Capital Displays & Sculptures	ea./ allow.	\$2,000	2	\$4,000
Metal Guardrail Fencing	lin.-m	\$300	0	\$0
Bollards (13 per side)	ea.	\$500	26	\$13,000
				0
Benches (min. 6 per side)	ea.	\$1,500	12	\$18,000
Litter Containers (min. 4 per side)	ea.	\$1,000	8	\$8,000
Bicycle Racks (min. 4 per side)	ea.	\$1,000	8	\$8,000
Street Identification Signage (min. 4 per side)	ea.	\$200	8	\$1,600
				0
Deciduous/Coniferous Trees	ea.	\$400	61	\$24,400
Shrubs (80 per side)	ea.	\$40	160	\$6,400
Perennials (100 per side)	ea.	\$5	200	\$1,000
Planting Bed Topsoil and Mulch	m <sup>2</sup>	\$5	350	\$1,750
Finish grading and sodding	m <sup>2</sup>	\$5	700	\$3,500
<b>Sub-total</b>				<b>\$1,147,614.00</b>
Contingency of 15%				\$ 172,142.10
<b>Total Construction</b>				<b>\$1,319,756.10</b>
Consultant Fees 8%				\$ 105,580.49
<b>Total in 2005 dollars (not including GST)</b>				<b>\$1,425,336.59</b>



**Street Beautification: Option Two – Bump-out Concept**  
**Main Street – White Street to Atikokan River (O'Brien Street N/C)**

Item	Measure	Unit Cost	Qty.	Cost
Removal of existing Asphalt	m <sup>2</sup>	\$15	12500	\$187,500
Removal of ex. concrete curbs	lin.-m	\$15	1200	\$18,000
Removal of ex. unit paving sidewalks	m <sup>2</sup>	\$15	4000	\$60,000
Sub-grade Exc. 800 mm (n/c services replacement)	m <sup>3</sup>	\$12	10000	\$120,000
				0
Granular Road Base – Gran. 'B' @ 600mm	tonne	\$10	16000	\$160,000
Granular Road Base – Gran. 'A' @ 150mm	tonne	\$14	4200	\$58,800
Drainage Fixtures Installed (min. 6 CB per block)	ea.	\$1314	36	\$47,304
Asphalt Area = 10 100 m <sup>2</sup> – Base Coat (50 HL4)	tonne	\$110	1300 ton	\$143,000
Asphalt Roadway – Top Coat Paving (40 HL3)	tonne	\$110	1100 ton	\$121,000
Concrete Curb/ Depressed Curb	lin.-m	\$150	1800	\$270,000
Concrete Sidewalk	m <sup>2</sup>	\$80	2500	\$200,000
Unit Paving	m <sup>2</sup>	\$150	4500 m <sup>2</sup>	\$675,000
				0
Vehicular Light Poles, Fixtures and Banners	ea.	\$4000	0	\$0
Pedestrian Scale Light Poles, Fixtures, & Footings	ea.	\$4000	70	\$280,000
50 mm dia. PVC duct	lin.-m	\$40	1400	\$56,000
				0
Raised Concrete Planter Seatwall	lin.-m	\$300	600	\$180,000
Tree Grates including concrete curbing	ea.	\$1,000	61	\$61,000
Tree Guards	ea.	\$500	135	\$67,500
Random Boulders (min. 6 per block)	ea.	\$250	36	\$9,000
Northwoods/ Canoe Capital Displays & Sculptures	ea./ allow.	\$2,000	6	\$12,000
Metal Guardrail Fencing	lin.-m	\$300	0	\$0
Bollards (10 per block)	ea.	\$500	60	\$30,000
				0
Benches (min. 6 per block)	ea.	\$1,500	36	\$54,000
Litter Containers (min. 4 per block)	ea.	\$1,000	24	\$24,000
Bicycle Racks (min. 4 per block)	ea.	\$1,000	24	\$24,000
Street Identification Signage (min. 4 per block)	ea.	\$200	24	\$4,800
				0
Deciduous/Coniferous Trees	ea.	\$400	135	\$54,000
Shrubs (80 per block)	ea.	\$40	480	\$19,200
Perennials (150 per block)	ea.	\$5	900	\$4,500
Planting Bed Topsoil and Mulch	m <sup>2</sup>	\$5	2000	\$10,000
Finish grading and sodding	m <sup>2</sup>	\$5	900	\$4,500
<b>Sub-total</b>				<b>\$2,955,104.00</b>
Contingency of 15%				\$ 443,265.60
<b>Total Construction</b>				<b>\$3,398,369.60</b>
Consultant Fees 8%				\$ 271,869.57
<b>Total in 2005 dollars (not including GST)</b>				<b>\$3,670,239.17</b>

Please note: This cost estimate does not include the site service works such as water, sewer, sanitary, or hydro connections and reconstruction



**Street Beautification: Option Two – Bump-out Concept**  
**O'Brien Street – MacKenzie Avenue to Niven Street**  
(Intersection of Main Street & O'Brien Street N/C))

Item	Measure	Unit Cost	Qty.	Cost
Removal of existing Asphalt	m <sup>2</sup>	\$15	5500	\$82,500
Removal of ex. concrete curbs	lin.-m	\$15	800	\$12,000
Removal of ex. unit paving sidewalks	m <sup>2</sup>	\$15	0	\$0
Sub-grade Exc. 800 mm (n/c services replacement)	m <sup>3</sup>	\$12	4600	\$55,200
				0
Granular Road Base – Gran. 'B' @ 600mm	tonne	\$10	7500	\$75,000
Granular Road Base – Gran. 'A' @ 150mm	tonne	\$14	2100	\$29,400
Drainage Fixtures Installed (min. 13 CB per side)	ea.	\$1314	26	\$34,164
Asphalt Area = 5000 m <sup>2</sup> – Base Coat (50 HL4)	tonne	\$110	600 ton	\$66,000
Asphalt Roadway – Top Coat Paving (40 HL3)	tonne	\$110	520 ton	\$57,200
Concrete Curb/ Depressed Curb	lin.-m	\$150	820	\$123,000
Concrete Sidewalk	m <sup>2</sup>	\$80	1100	\$88,000
Unit Paving	m <sup>2</sup>	\$150	1200 m <sup>2</sup>	\$180,000
				0
Vehicular Light Poles, Fixtures and Banners	ea.	\$4000	0	\$0
Pedestrian Scale Light Poles, Fixtures, & Footings	ea.	\$4000	35	\$140,000
50 mm dia. PVC duct	lin.-m	\$40	750	\$30,000
				0
Raised Concrete Planter Seatwall	lin.-m	\$300	30	\$9,000
Tree Grates including concrete curbing	ea.	\$1,000	40	\$40,000
Tree Guards	ea.	\$500	61	\$30,500
Random Boulders (min. 12 per side)	ea.	\$250	24	\$6,000
Northwoods/ Canoe Capital Displays & Sculptures	ea./ allow.	\$2,000	2	\$4,000
Metal Guardrail Fencing	lin.-m	\$300	0	\$0
Bollards (13 per side)	ea.	\$500	26	\$13,000
				0
Benches (min. 6 per side)	ea.	\$1,500	12	\$18,000
Litter Containers (min. 4 per side)	ea.	\$1,000	8	\$8,000
Bicycle Racks (min. 4 per side)	ea.	\$1,000	8	\$8,000
Street Identification Signage (min. 4 per side)	ea.	\$200	8	\$1,600
				0
Deciduous/Coniferous Trees	ea.	\$400	61	\$24,400
Shrubs (80 per side)	ea.	\$40	160	\$6,400
Perennials (100 per side)	ea.	\$5	200	\$1,000
Planting Bed Topsoil and Mulch	m <sup>2</sup>	\$5	350	\$1,750
Finish grading and sodding	m <sup>2</sup>	\$5	700	\$3,500
<b>Sub-total</b>				<b>\$1,147,614.00</b>
Contingency of 15%				\$ 172,142.10
<b>Total Construction</b>				<b>\$1,319,756.10</b>
Consultant Fees 8%				\$ 105,580.49
<b>Total in 2005 dollars (not including GST)</b>				<b>\$1,425,336.59</b>

## **Section Four: Consultant Team's Recommendation**

As part of the Terms of Reference for this project, the Consultant Team is obligated to make a recommendation for a preferred option.

Based on the Evaluation Matrix and cost estimates the Consultant Team recommends proceeding with Option 2: Bump-outs, wider sidewalk area and reduced asphalt roadway, for the reasons summarized in section two. In our opinion, all options could work, however the bump-out option may be the best overall 'fit' into the community. In addition, in this option there is the opportunity to include some median areas at key intersections if desired.

The Consultant Team's recommendations aside, ultimately it is still the community's decision as how they wish to express themselves with their Main Street. Each option is unique in its own way and will create a different atmosphere on Main Street. Local opinion must be balanced with the impression Main Street makes on visitors and potential visitors if Atikokan wishes to market itself as the service centre for the Northwoods Adventure Country and Quetico Provincial Park areas.

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