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**Item No. 4**  
**Halifax Regional Council**  
**July 5, 2011**

**TO:** Mayor Kelly and Members of Halifax Regional Council

Original Signed

**SUBMITTED BY:** Councilor Reg Rankin, Chair, Transportation Standing Committee

**DATE:** June 14, 2011

**SUBJECT:** Roundabouts – Aesthetics and Design

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### INFORMATION REPORT

#### ORIGIN

Staff information report presented at the Transportation Standing Committee meeting of May 26, 2011.

#### BACKGROUND

The Transportation Standing Committee received an information report dated March 22, 2011 which was discussed at the May 26, 2011 meeting. The March 22, 2011 information report was prepared in response to Regional Council's request of November 23, 2010 for a staff report on:

1. The status of roundabouts including an update on roundabout policy and design guidelines and in particular an overview of the use of landscaping and public art; and
2. The Armdale Rotary and development of landscaping and/or public art features. The update is to include an overview of the viewplanes, technical consideration of the site, and proposed methods on engaging the public in the project.

Further background on this matter is provided in the attached March 22, 2011 information report.

**DISCUSSION**

Discussion followed the May 26, 2011 presentation of the March 22, 2011 information report to the Transportation Standing Committee. The following comments were captured, which the Chair requested be forwarded to staff for their consideration:

- That staff give consideration to road user distraction in any policy for roundabout aesthetics and design incorporating public art;
- That staff look at the size of smaller roundabout designs, such as the one on Larry Uteck Blvd., which can be difficult to manoeuvre because of the tight turns;
- Whether a roundabout is an appropriate place to be investing in public art, since it is not generally a gathering place for the public.

**BUDGET IMPLICATIONS**

There are no budget implications with this report.

**FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

**COMMUNITY ENGAGEMENT**

The Transportation Standing Committee is comprised of eight duly elected members of Council. Composition is made up of a member from each of HRM's six Community Councils, along with two members at large.

Transportation Standing Committee meetings are held once a month and are open to the public, unless otherwise stated. Agendas, reports, and minutes from these meetings are posted online.

**ATTACHMENTS**

1. Information Report to the Transportation Standing Committee dated March 22, 2011.
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A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by:                      Jennifer Weagle, Legislative Assistant, Office of the Municipal Clerk, 490-6517

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**Transportation Standing Committee**  
**May 26, 2011**

**TO:** Chair and Members of Transportation Standing Committee

**SUBMITTED BY:** Original Signed  
\_\_\_\_\_  
Ken Reashor, P.Eng., Director, Transportation and Public Works

**DATE:** March 22, 2011

**SUBJECT:** Roundabouts – Aesthetics and Design

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**INFORMATION REPORT**

**ORIGIN**

This report was prepared in response to Regional Council's request on November 23<sup>rd</sup>, 2010, item 10.2.2, that staff prepare a report for the following:

1. The status of roundabouts including an update on roundabout policy and design guidelines and in particular an overview of the use of landscaping and public art; and
2. The Armdale Rotary and development of landscaping and/or public art features. The update to include an overview of the viewplanes, technical considerations of the site, and proposed methods on engaging the public in the project.

**BACKGROUND**

On October 1, 2005, the Province of Nova Scotia amended Chapter 293 of the Motor Vehicle Act which decided how a vehicle was to transverse a rotary or roundabout. It stated the following:

- 135 (1) The driver of a vehicle entering a roadway in or around a rotary or roundabout shall yield the right of way to traffic already on the roadway in the circle and approaching so closely to the entering highway as to constitute an immediate hazard; and
- (2) The driver of a vehicle passing around a rotary or roundabout shall drive the vehicle in a counter clockwise direction around the island or the center of the circle.

The amended legislation prompted HRM to install "Yield" signs on both the Herring Cove Road and Chebucto Road approaches to the Rotary (that is, the two approaches that were not signalized) to conform to the new legislation. The yield signs were supplemented with warning "Yield Ahead" signs.

The geometry of the Armdale Rotary was officially converted to a Modern Roundabout in 2007. No allowance was made in the design or construction budgets for additional landscaping or public art features. However, during public consultation and information sessions the idea of public art as a means to celebrate and enhance the sense of place for the Armdale Roundabout was brought up and there was a commitment to further this concept.

## **DISCUSSION**

On May 11, 2010 Halifax Regional Council adopted in principle the use of modern roundabouts on Municipal roads where appropriate design guidelines and standards can be met. Currently in HRM, roundabouts are being considered when an intersection requires upgrading. Each intersection would be evaluated to determine whether a roundabout would be more effective than the existing traffic signals or stop control.

A set of guidelines for the treatment of roundabout center islands was developed in order to provide direction and guidance with respect to a safe, economical, and aesthetically pleasing center island at Municipal roundabouts.

In summary, center island treatments:

- Must consider the safety of all road users including pedestrians, cyclists, motorists, transit, and operators of large vehicles.
- Shall not interfere with critical sight lines, create physical hazards within the roadway zone, or obstruct or detract from roadway signage.
- Which could be construed as pedestrian facilities or pedestrian destinations are not permitted.
- Which are designed as entry features to a community should be considered on an individual basis in the context in which they will be placed.
- Shall have on-going maintenance requirements determined and assigned prior to installation.

When considering a center island treatment a number of elements need to be reviewed:

- Road user distraction is a critical constraint
- Pedestrian safety needs to be reviewed
- Road user safety must be considered
- Ongoing maintenance is important
- Signs
- Street lights
- Underground Infrastructure

All proponents of center island treatments on municipally owned roadways must adhere to these guidelines. The Traffic Authority is to have the final approval of the implementation of any center island treatment.

A copy of the full set of guidelines for center island treatments can be found in Attachment 1 for your information.

Similarly, but not to the same extent, treatments at pedestrian and vehicular entrances to roundabouts must also be reviewed to ensure safe function of the roundabout. Done properly, landscaping and art has been proven to contribute to creating a better functioning roundabout.

### **Public Art and Landscaping in Roundabouts**

Given the amount of open green space that roundabouts create when compared to traditional intersections and the fact that they are often found at important locations in cities and towns, it only stands to reason that there should be places for public art and significant landscaping. The use of art and landscaping at a roundabout is one of the distinguishing features that give roundabouts an aesthetic advantage over traditional intersections. The use of art and landscaping can provide the potential for gateway treatments that promote themes, branding and identification. They are also opportunities for neighbourhoods to create a unique identity for themselves by participating in the art and landscaping component of the roundabout design. Using distinct approaches to landscaping and unique art installations can also act as a means for way finding around a city. In Europe, whole societies are dedicated to the development of art and landscaping of roundabouts.

At the Armdale Roundabout a unique opportunity exists. Located at the intersection of five major roadways, the Armdale Roundabout is also where four distinct communities of HRM meet. It is a gateway and provides picturesque views of the Northwest Arm. A tree planting plan was developed and implemented in 2008, one year after the change from a rotary to a roundabout (see Attachment 2). The aim of that plan was to:

- create a better aesthetic for the Armdale Roundabout
- direct driver focus towards traffic in the roundabout, and
- to frame picturesque views of the Northwest Arm from key locations prior to entering the roundabout.

Currently staff is undertaking a more detailed plan for improving the public spaces at the Armdale Roundabout in conjunction with developing proposed view plane protection regulations for the whole of the Northwest Arm and the placement of public art within the roundabout. This process, including the public involvement component, is scheduled to take place this coming fiscal year.

The process to bring public art to roundabouts will be addressed within the planning for new intersections where the roundabout model is the recommended approach. The inclusion of public art will be assessed in each instance according to the parameters around centre island treatments

discussed previously in this document and to the site in general. These considerations will include pedestrian and vehicular volumes, sightlines and viewplanes, and all other functional parameters that will inform the principles of a roundabout's design. Community ideas around image and identification present opportunities to direct unique public art pieces on a case by case basis. These opportunities and constraints will form the conditions against which the development of a public art project will be assessed.

In assessing the Armdale Roundabout after-the-fact, the restrictions imposed by the site make public art installation in the center island very difficult. Sightlines for vehicles entering and exiting the Roundabout have to be respected and distracting elements must be minimized to ensure the focus of drivers within the Roundabout and to prevent a large number of pedestrians from crossing the center laneways to examine the piece. In addition, there are a variety of challenges posed by the extensive underground infrastructure running within the central island. As such, the best approach to develop public art for this site is to identify the opportunities that exist outside the center island.

Real Property Planning and Cultural Affairs will determine a series of acceptable locations for the prospective artwork as part of the public planning process. Cultural Affairs will also identify the contextual opportunities of the sites and surrounding area including its history, communities and cultures. Collectively the physical and contextual opportunities will be developed into the terms of reference for the creation of public art. The terms of reference will then be developed into a call for artists and sent out to the artistic community.

A significant consideration for the project will be how the artist will engage with the community to reflect the "placeness" of the Armdale Roundabout. A jury consisting of HRM staff and community members of District 17 (Armdale) will select an artist to create the public art. The public art project will be managed by Cultural Affairs, who will provide a timeline and support so the artwork is ready for unveiling in the spring of 2012.

### **BUDGET IMPLICATIONS**

There are no budget implications with this report.

### **FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN**

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

**COMMUNITY ENGAGEMENT**

Roundabouts are located at places that are important to a wide group of users and to adjacent neighbourhoods. They are also a new element in HRM. Therefore, there is the need for a high level of community engagement and consultation. A short list of public groups to involve includes adjacent residents and businesses, pedestrians and drivers and owing to the desire for public art, the arts and cultural community.

**ATTACHMENTS**

1. Roundabout Center Island Treatment Guidelines (dated January 20<sup>th</sup>, 2011)
2. Armdale Roundabout Tree Planting Plan 2008

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A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

Report Prepared by: Tanya Davis, P.Eng., Traffic Services Supervisor, 490-8425  
Peter Bigelow, Manager, Real Property Planning, 490-6047  
Jamie MacLellan, Public Art Facilitator CD, 490-1039

**Original Signed**

Report Approved by: \_\_\_\_\_  
Taso Koutroulakis, P.Eng., Acting Manager, Traffic & Right of Way, 490-4816

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## **Roundabout Center Island Treatment Guidelines**

*Last updated: January 20th, 2011*

These guidelines were developed in order to provide direction and guidance with respect to safe, economical and aesthetic center island treatments at Municipal roundabouts. All proponents of center island treatments on municipally owned roadways must adhere to these guidelines.

**The Traffic Authority is to have the final approval of the implementation of any center island treatment.**

Center island treatments:

- Must consider the safety of all road users including pedestrians, cyclists, motorists, transit, and operators of large vehicles;
- Shall not interfere with critical sight lines, create physical hazards within the roadway zone, or obstruct or detract from roadway signage;
- Which could be construed as pedestrian facilities or pedestrian destinations are not permitted;
- Which are designed as entry features to a community should be considered on an individual basis in the context in which they will be placed; and
- Shall have on-going maintenance requirements determined and assigned prior to installation.

When considering a center island treatment a number of elements need to be reviewed:

- Road user distraction is a critical constraint – if the center island treatment is too distracting, the driver's attention may be focused away from the roadway. Therefore, anything that moves should be avoided, i.e.: windmills, flags, water from a fountain, etc. Static displays would be better suited. Further, the theme, scope and scale of the treatment need to be evaluated. The feature should be seen and appreciated from the approach to the roundabout and not from the yield line. Sight areas are to be based on the intersection sight distance on approaches and stopping sight distance for circulating traffic as set out by the Transportation Association of Canada. No feature within the sight line triangle shall have a height of between 1.05m and 1.8m.
- Pedestrian safety needs to be reviewed – Center island treatment should not entice pedestrians to the center island. If concrete treatments are desired, such as maintenance aprons, or truck aprons, efforts must be made to ensure they do not resemble a sidewalk or pedestrian walkway. The use of tinted, textured concrete is effective for this application. Terra cotta is the colour of choice commonly used in other North American jurisdictions to differentiate center island treatments from pedestrian installations.
- Road user safety must be considered – Large solid objects placed in the center island are considered hazards and objects should be traversable or would require some form of crash protection. Various types of crash protection are available and may be "hidden" by landscaping.



- Ongoing maintenance is important – Levels of maintenance and potential risks involved with these items should be established and documented prior to installation.
- Signs – All signs on the approaches and within the roundabout circle are regulatory and warning signs conforming to the Manual of Uniform Traffic Control Devices. Any signs installed in the center island must be approved by the Traffic Authority.
- Street lights – Are mandatory and are required to be spaced and have illuminating levels according to the Illuminating Engineering Society of North America. This includes lighting at approaches and is particularly important at pedestrian crossing locations.
- Underground Infrastructure – All underground infrastructures must be located and identified before digging/planting within the center island or on any approach can be undertaken.

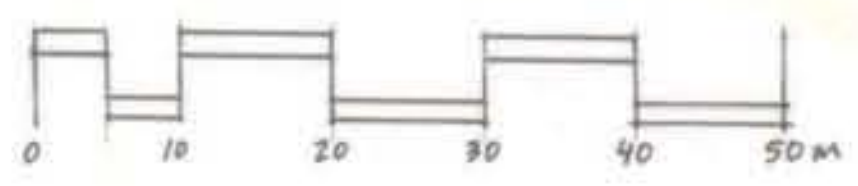
For questions or clarification, please contact HRM Traffic and Right of Way at 490-4000.

# ARMDALE ROUNDABOUT TREE PLANTING PLAN



## LEGEND

-  PROPOSED TREE
-  STREET LIGHT
-  PEDESTRIAN CROSSWALK
-  OVERHEAD ROAD SIGN



NORTHWEST ARM  
Views to Dingle Tower,  
Horseshoe Island, and  
Harbour mouth.