


HALIFAX

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Item No. 11.1.2
Halifax Regional Council
October 20, 2015

TO: Mayor Savage and Members of Halifax Regional Council

SUBMITTED BY: Original signed by 
Richard Butts, Chief Administrative Officer

Original Signed by
Mike Labrecque, Deputy Chief Administrative Officer

DATE: September 25, 2015

SUBJECT: Rainnie Drive Bicycle Lane

ORIGIN

2014 Active Transportation Priorities Plan Recommendation #17: The municipality should consider protected bicycle lanes where ever there are candidate bicycle routes on Maps 2A, B, & C, and aim to implement at least one protected bicycle lane pilot project in the next five years.

2014 Active Transportation Priorities Plan Recommendation #23: Maps 2B & C identify streets that Council has confirmed as candidate routes for bicycle lanes in the Regional Centre. Prior to establishing these painted (or protected) bicycle lanes there should be:

1. More detailed review of each corridor under criteria listed in Appendix E;
2. Public engagement; and
3. Regional Council approval.

LEGISLATIVE AUTHORITY

Section 322(1) of the Halifax Regional Municipality Charter states that "Council may design, lay out, open, expand, construct maintain, improve, alter, repair, light, water, clean and clear streets in the Municipality."

Section 90 of the Motor Vehicle Act authorizes the Traffic Authority to mark lanes on a street and control their use.

Policy 72 of the Downtown Halifax Secondary Planning Strategy states that "HRM shall consider opportunities to install active transportation infrastructure in downtown Halifax to encourage the use of all modes of active transportation. HRM shall consider the Active Transportation Plan in determining appropriate locations for such infrastructure."

RECOMMENDATION ON PAGE 2

RECOMMENDATION

It is recommended that Halifax Regional Council approve the installation of a protected two-way bicycle lane on Rainnie Drive from the Citadel Hill Driveway to Gottingen Street.

BACKGROUND

Rainnie Drive is identified as a candidate bicycle route (“type to be determined”) on Map 2C of the *2014-19 Active Transportation Priorities Plan* (AT Plan).

In 2015, the intersection at North Park, Cogswell, Trollope and Ahern was replaced with a new roundabout which no longer includes a connection to Rainnie Drive. Traffic modelling for this project determined that Rainnie between North Park and Gottingen would be surplus to the needs of the road network for motor vehicle traffic once the roundabout was in place. However, access to Citadel Hill was still needed and public engagement for the roundabouts revealed the community’s wish to maintain the street for an active transportation route.

Prior to construction of the roundabout, the 12m wide Rainnie Drive was used for one eastbound travel lane, one eastbound parking lane, and two westbound travel lanes. Now that the roundabout is complete, Rainnie Drive begins on Cogswell Street east of the roundabout, and functions as a one-way street eastbound with parking on both sides for 300m before it ends at the intersection with Gottingen Street where temporary concrete barriers are currently in place defining the new roadway alignment.

There is an approved budget of \$100,000 in CTU01086 (Traffic – Intersection Improvement Program) for the 2015/16 construction season to complete the conversion of Rainnie Drive to one-way. The work involves reconfiguring the intersection with Gottingen by replacing the temporary concrete barriers with poured curbs. Design of the intersection reconfiguration (Attachment #1) was completed in-house this summer and the tender awarded on September 11, 2015. The Rainnie project was tendered as soon as the design was completed so that work to reconfigure curbs at Rainnie/Gottingen could be finished before winter.

DISCUSSION

With 12m of road width available and only one travel and two parking lanes in use, Rainnie Drive is nearly 4m wider than other nearby one-way streets with two-sided parking such as Trollope and Ahern.

Given that this street is part of the AT Priorities Plan and there was public support for bicycling facilities, the remaining space provides an opportunity to pilot a new type of bicycle facility in Halifax. **Protected bicycle lanes** use physical barriers such as parked cars and posts to separate bicycle lanes from vehicle travel lanes. In this case, cars will park beside a proposed 0.8m wide painted buffer area with space for passenger doors to open without infringing on the bikeway, and contains a row of posts to vertically define the edge of the roadway. Between the buffer and the curb, a 3m wide, two-way bicycle lane is proposed.

An important component of the North Park Intersection Redesign project was to improve bicycling and walking routes in conjunction with the vehicular traffic improvements. Bicycle lanes were added to North Park Street and a narrow asphalt sidewalk was upgraded to a 3.5m wide Active Transportation Greenway on the North Common paralleling North Park Street. The protected bicycle lanes on Rainnie Dr. will nearly close the gap between this Greenway Trail and the bike lanes on Brunswick St. (Attachment #2).

Should it be approved by Council, this 300m bikeway can be considered a ‘pilot’ project as it represents the trial of a new bicycle facility type and its installation allows the opportunity to assess its functionality as well as its maintenance needs. Whether or not it should remain in place in the long term will depend on the outcome of this assessment, as well as the feasibility of making the final 200m connection to Brunswick Street. Consultants are currently engaged by HRM to examine the feasibility of:

1. Making this connection to Brunswick Street;
2. Extending the Brunswick Street bicycle lanes to Spring Garden Road, and;
3. Assessing the potential to convert the Brunswick Street bicycle lanes into a protected facility.

The proposed bike lane uses space surplus to the road network in a cost-effective manner and is incidental to the larger project in terms of scope and cost. There are no design or construction conflicts associated with the addition of the proposed bike lane (Attachment #3).

FINANCIAL IMPLICATIONS

The cost of the paint, posts, and sign bases related to the bikeway is approximately \$8,550.00.

Tender 15-265 Intersection Modifications – Rainnie Dr. at Gottingen Street was awarded to Dexter Construction for a total cost of \$103,086.71 net HST, and includes a provisional sum and specifications to implement the bikeway should Council approve it.

COMMUNITY ENGAGEMENT

The North Park Roundabouts projects included significant community engagement during which the importance of being able to comfortably walk and bicycle through this area was repeatedly raised by the public. In addition to online engagement via Shape Your City (including a survey from January 20 to February 14, 2014), public meetings were held on February 27, 2013 (pre-design stage), February 6, 2014 (design 50% complete) and March 20, 2014 (design 90% complete).

At the February 6, 2014 meeting residents were made aware of plans to disconnect Rainnie Drive from the roundabout and specifically asked for their thoughts on the future of the remaining corridor. A summary of comments from that session identified the top five considerations for changes to Rainnie Drive, as suggested by the public in attendance to be:

- Multi-use trail connecting to the Common
- Connection to other active transportation trails
- Pleasant and interesting route
- No parking / cars
- Connect to landmarks (Citadel Hill and views to Halifax Harbour and Dartmouth)

The Shape Your City portal for the North Park Intersections Re-design has been active since July 1, 2013 and has received over 57,000 unique views. 1,290 participants visited the Frequently Asked Questions (FAQ) section, which has contained the following information about Rainnie Drive for over a year:

What are the design plans for the new Rainnie Drive corridor?

At this stage of the design, access to Rainnie Drive will be provided directly off of Cogswell Street. It is expected to be a one-way street between North Park Street and Gottingen Street with parallel parking on the north side. The existing sidewalks will remain on both the south and north side and a width of asphalt will be dedicated to an active transportation trail. Details of the access at Gottingen Street are still being worked out. Overall, this plan provides opportunities for future redesign, while improving current use of the space with relatively minimal reinstatement costs.

Why is Rainnie Drive being reconfigured?

Changes to Rainnie Drive will ensure the roundabout operates safer and more smoothly by reducing the complexity and size requirements of the intersection at North Park and Cogswell streets. Closing off access to Rainnie Drive from this intersection will simplify the intersection from a five-leg roundabout to a four-leg roundabout. This will make negotiating the roundabout easier for pedestrians because there will be fewer crossings and it will also improve overall safety because of the reduced number of driver decision points and intersection complexity. Such changes also provide an opportunity to increase active transportation systems and green space, while still providing parking in the area.

ENVIRONMENTAL IMPLICATIONS

Improving access to downtown Halifax for people on bicycles has the potential to increase the number of people who ride a bicycle for the purposes of transportation. The provision of a bicycle network will provide residents with mobility options which their minimize impact on the environment.

ALTERNATIVES

Council could recommend to not approve the bicycle lane. In this case, the roadway would not be narrowed and no posts, paint, or signs would be installed to demarcate a bicycle lane. This is not recommended for the reasons contained in this report.

ATTACHMENTS

Attachment #1: Design of Rainnie Drive at Gottingen Street

Attachment #2: Proposal Context

Attachment #3: Evaluation of Rainnie Drive Protected Bicycle Lane

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.php> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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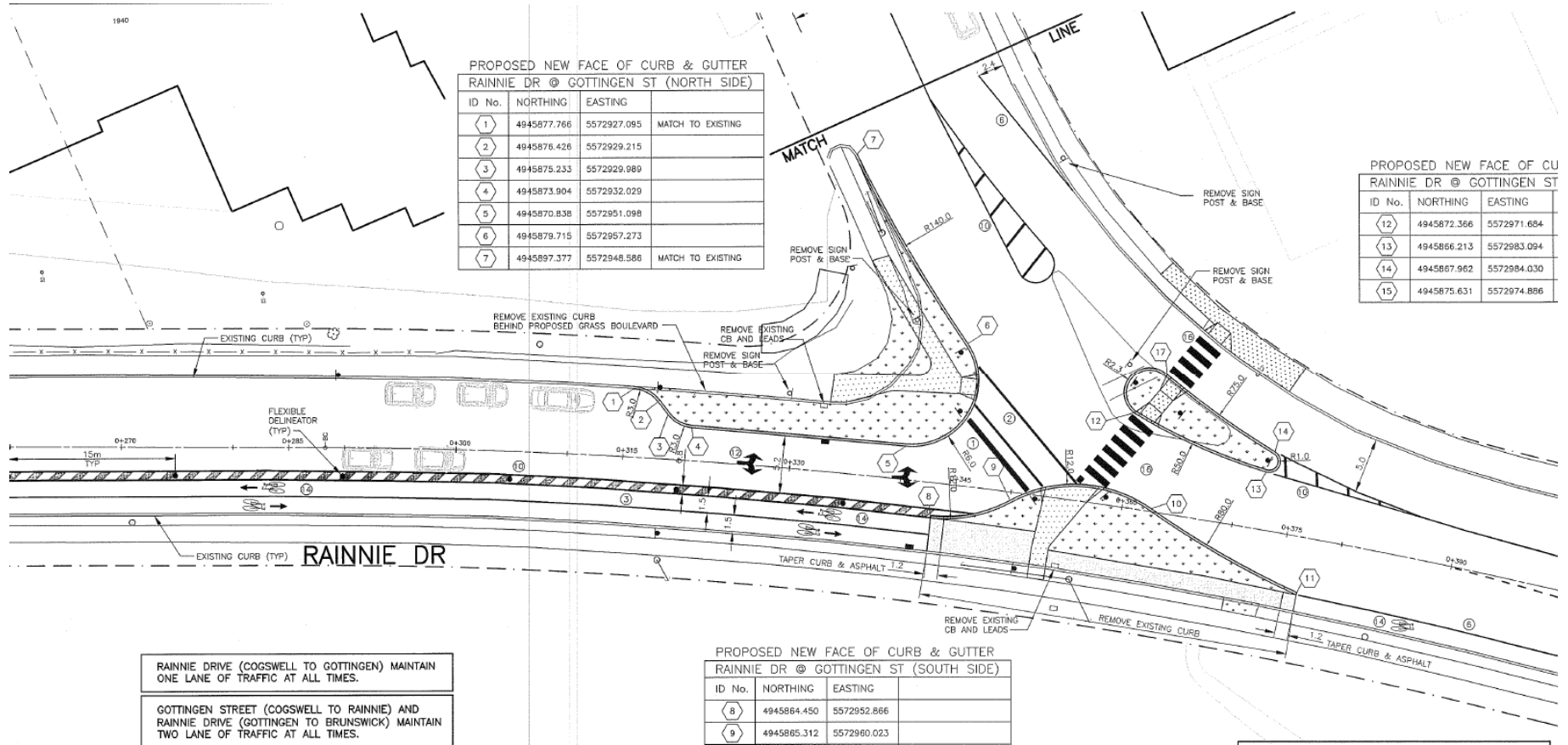
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Attachment #1: Design of Rainnie Drive at Gottingen Street



**PROPOSED NEW FACE OF CURB & GUTTER
RAINNIE DR @ GOTTINGEN ST (NORTH SIDE)**

ID No.	NORTHING	EASTING	
1	4945877.766	5572927.095	MATCH TO EXISTING
2	4945876.426	5572929.215	
3	4945875.233	5572929.989	
4	4945873.904	5572932.029	
5	4945870.838	5572951.098	
6	4945879.715	5572957.273	
7	4945897.377	5572948.586	MATCH TO EXISTING

**PROPOSED NEW FACE OF CU
RAINNIE DR @ GOTTINGEN ST**

ID No.	NORTHING	EASTING	
12	4945872.366	5572971.684	
13	4945866.213	5572983.094	
14	4945867.962	5572984.030	
15	4945875.631	5572974.886	

**PROPOSED NEW FACE OF CURB & GUTTER
RAINNIE DR @ GOTTINGEN ST (SOUTH SIDE)**

ID No.	NORTHING	EASTING	
8	4945884.450	5572952.866	
9	4945865.312	5572960.023	

RAINNIE DRIVE (COGSWELL TO GOTTINGEN) MAINTAIN ONE LANE OF TRAFFIC AT ALL TIMES.

GOTTINGEN STREET (COGSWELL TO RAINNIE) AND RAINNIE DRIVE (GOTTINGEN TO BRUNSWICK) MAINTAIN TWO LANE OF TRAFFIC AT ALL TIMES.

Attachment #2: Proposal Context

AT Greenways on Halifax Common and painted bike lanes on North Park Street

300m proposed Protected Bicycle Lanes on Rainnie Drive

Remaining 200m Bicycle Facility Gap

Brunswick Street Bicycle Lanes



Attachment #3: Evaluation of Rainnie Drive Protected Bicycle Lane

Appendix E of the Active Transportation Priorities Plan establishes evaluation criteria that staff should use when planning new bicycle facilities. The criteria and staff evaluation for the Rainnie Drive Protected Bicycle Lane follow below.

Evaluation Criteria	Staff Comments
Potential for Use/ Connectivity (High density of existing/ planned origins and destinations)	
Residences, Workplaces, Shops, Community Facilities, Schools, Other destinations	Rainnie Drive connects the Halifax Common to the Downtown and Spring Garden Business Districts. The paths on the Halifax Common are heavily used by a dense community of residents in the north and west ends of the city to ride to key destinations such as the business districts, Citadel High School, Central Library, Dalhousie, the Waterfront, etc.
Other AT infrastructure (bicycle lanes, local street bikeways, AT greenways)	This lane would provide a partial connection between the paths on the Halifax Common and Halifax's first bicycle lane on Brunswick Street. Filling the remaining gap is the subject of an ongoing consultant's study.
Street Characteristics	
Favourable grades	Average slopes of ~ 3%, well under the 8% suggested maximum
Low volume of motor vehicle traffic	The roundabout has diverted traffic from Rainnie to Cogswell. A row of parked cars will separate the bicycle lane from motor traffic.
Low volume of large vehicles	The roundabout has diverted traffic from Rainnie to Cogswell. A row of parked cars will separate the bicycle lane from motor traffic.
High volume of existing cyclists	Existing bicycle traffic can be described as moderate for Halifax according to recent bicycle screenline counts at this location.
Speed of traffic	The roundabout has diverted traffic from Rainnie to Cogswell. A row of parked cars will separate the bicycle lane from motor traffic.
Few complex intersections	Complex intersections have recently been upgraded to modern roundabouts.
Safety issues	The project is not addressing any specific safety issue. Rather it is creating dedicated space for bicycling.
Impact on traffic (i.e. of reducing vehicle travel lanes to add bike lane).	None. The project uses left over road space.
Impact on green space	None.
Impact on commercial or residential parking	None. There is still about 4m of extra road width even with two sided parking.
Ability to mitigate losses to on-street parking	Not needed. Parking is not being removed for the bike lane.

Alternative Route Analysis:

The AT plan includes three candidate routes for connecting the paths on the Commons to the Brunswick Street Bicycle lane. A functional network will result from the implementation of at least one of them (i.e. all of them may not be needed)

Cogswell Street	<p>Pros:</p> <ul style="list-style-type: none">- Very wide right of way- Potential to integrate a bicycle facility with the future project to demolish/ reconfigure the Cogswell Interchange <p>Cons:</p> <ul style="list-style-type: none">- The roundabout at North Park has directed the bulk of motor vehicle traffic to Cogswell street, so a bicycle facility here would be on a busier street- The Cogswell project may be several years away.
Cornwallis Street	<p>Pros:</p> <ul style="list-style-type: none">- Good connection via a crosswalk on North Park Street to the paths on the Commons <p>Cons:</p> <ul style="list-style-type: none">- Very steep grade between Brunswick and Gottingen- Parking may need to be removed on one side to allow for a bike lane on both sides.
Public and Stakeholder Feedback	
Public support for the facility	Comments and concerns received from the public and stakeholders are summarized in the Community Engagement section of this report.
Stakeholder support for the facility	Comments and concerns received from the public and stakeholders are summarized in the Community Engagement section of this report.
Internal (HRM) review of the facility	The project has received input of relevant HRM departments, including Road Operations And Construction (respecting winter maintenance).