

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 15.1.2 Halifax Regional Council August 6, 2024

SUBJECT:	PLPROJ-2024-00370: Downtown Gateway Comprehensive Plan
DATE:	July 5, 2024
FROM:	Brad Anguish, Acting Chief Administrative Officer
TO:	Mayor Savage and Members of Halifax Regional Council

<u>ORIGIN</u>

• February 26, 2019, Regional Council motion (Item 15.1.6)

MOVED by Councillor Mason, seconded by Councillor Deputy Mayor Mancini

THAT Halifax Regional Council:

4. Request a staff report regarding the timeline and the phasing of construction to align with other street recapitalization projects, and options to fund the Cogswell Greenway including potential use of Development Charges on adjacent development sites.

AMENDED MOTION PUT AND PASSED UNANIMOUSLY

• March 7, 2023, Halifax Regional Council (Item No. 12.1):

MOVED by Councillor Mason, seconded by Councillor Stoddard

THAT Halifax Regional Council approve the sale of PID 00002063 located at civic 1940 Gottingen Street, Halifax and authorize the Mayor and Municipal Clerk to enter into an Agreement of Purchase and Sale and Buy-Back Agreement with the Mi'kmaw Native Friendship Society as per the terms and conditions outlined in Table 1 of the staff report dated January 18, 2023.

MOTION PUT AND PASSED UNANIMOUSLY.

- Staff initiated proposal to initiate a comprehensive planning process for the Downtown Gateway lands bounded by Cogswell Street, Rainnie Drive, and Gottingen Street and including the Halifax Regional Police Headquarters property.
- 2024/25 Business Plan: Downtown Gateway Strategic Land Management

EXECUTIVE SUMMARY

The Downtown Gateway area is approximately 5.87 hectares of underutilized municipally owned lands located within the Halifax's North End, and generally bounded by Cogswell Street, Rainnie Drive, and Gottingen Street (including the Halifax Regional Police HQ property). With a limited supply of publicly owned lands in the downtown core, the Downtown Gateway lands present a significant city building opportunity for new or expanded Municipal facilities, housing, parks, and improved streetscapes and public spaces.

There are a number of municipal initiatives underway related to the Downtown Gateway lands, including the sale of municipal lands at below market value for the new Mi'kmaw Native Friendship Centre (MNFC). As part of the land disposal review process, an initial conceptual master plan was prepared to explore the area's long-term potential. The study identified opportunities to establish destination streetscapes and public plazas and confirmed that the disposal of lands for the MNFC would not compromise potential transportation connections,

The purpose of this report is to advance the city building opportunities for the Downtown Gateway lands identified in the conceptual plan by coordinating existing municipal initiatives and establishing a multi-phase comprehensive planning project. The recommended Phase 1 next steps of the comprehensive planning work include:

- creating the Downtown Gateway Functional Plan;
- determining municipal needs and public benefits;
- establishing a shared access easement between the MNFC and Centennial Pool lands; and
- engaging with other levels of government and key groups.

Once the Phase 1 steps detailed in this report are completed, which is estimated to take approximately two to three years, staff will return to Council with more information and advice for advancing the comprehensive planning process. Depending on the information and opportunities identified, staff anticipate providing recommendations on municipal needs and facilities, cost recovery strategies, proposed public plazas, potential amendments to applicable planning documents, and community engagement initiatives. Cost associated with advancing the Downtown Gateway Functional Plan will be considered through the 2025/26 business planning process. The remaining Phase 1 next steps can be carried out with existing resources and the need and costs for any further studies or capital investments will be outlined in the business planning process and future Council reports.

RECOMMENDATION

It is recommended that Halifax Regional Council direct the Chief Administrative Officer to:

- 1. Advance the Downtown Gateway comprehensive planning project and the Phase 1 Next Steps outlined in the Discussion Section of this report and include the proposed Downtown Gateway Functional Plan within the 2025/26 business planning process; and
- 2. Return to Council, as may be required, with additional information and recommendations upon the completion of the Phase 1 Next steps.

BACKGROUND

The Municipality owns a significant area of land bounded by Cogswell Street, Rainnie Drive, and Gottingen Street (including the Halifax Regional Police HQ property). The area is strategically located and identified as the Downtown Gateway Study Area (Map 1). The lands are currently underutilized and provide various opportunities for new or expanded municipal facilities, public spaces, housing, and other purposes. With the Municipality experiencing unprecedented growth, there is an opportunity to support long-term civic needs in coordination with transportation network improvements and potential cost recovery strategies. The following sections outline the site context and related Municipal initiatives.

Site Context

The subject site is comprised of six (6) properties within the Regional Centre Plan boundary. The subject lands are described in greater detail below:

Subject Area 000020	89, 40724304, 40724312	, 0002063, 00002071, and 00002055
---------------------	------------------------	-----------------------------------

Location	The site is bounded by Rainnie Drive and Cogswell Street, extending from the roundabout near the Halifax Common to southern extents of the current Halifax Regional Police Headquarters on Gottingen Street.
Regional Plan	Urban Settlement
Designation	
Community Plan	Downtown (D)
Designation (Map 1)	
Zoning (Map 2)	Downtown Halifax (DH)
Precincts and Special	The North End Gateway and Scotia Square Complex (NSS), and Halifax
Areas (Map 2)	Citadel Ramparts
Maximum Height	18.5 metres
Size of Site	3.64 hectares (8.8 Acres) and 5.87 hectares (14.5 Acres) with streets
Current Land Use(s)	The Halifax Regional Police Headquarters, the Centennial Pool, the former
	Canadian Red Cross site, municipally owned land that is currently used for
	modular homes, and a privately owned site. (Map 1)
Surrounding Use(s)	North: residential and neighbourhood commercial uses;
	• South: Citadel Hill National Historic Site, a number of high-rise mix-use developments in the core of Downtown Halifax;
	 East: Cogswell District, high-rise residential and commercial uses, including office spaces, restaurants, and Scotia Bank Theatre; West: Halifax Commons, Citadel High School, QEII Halifax Infirmary Hospital and Sciences Centre.

Planning Context

Regional Plan Context

The Regional Plan designates this area as Urban Settlement in Chapter 6 of the Plan providing vision, guiding principles, and core concepts that are to be used to guide development of planning policies for the area. The Plan highlights the consideration of a number of functional plans in the development of planning policies, and the consideration of affordable housing and diverse housing options when developing and amending municipal planning strategies.

Centre Plan Context

The Centre Plan implements policies of the Regional Plan and Priority Plans, including policies concerning strategic growth, heritage resources and protected views, inclusive of housing and mobility options, food and energy security, parks, and open spaces among others.

Centre Plan identifies the Downtown Gateway area as the North End Gateway and Scotia Square Complex (NSS) Precinct. The Plan speaks to the transformation of Cogswell Street into an active boulevard and the treatment of Rainnie Drive that will serve to provide this Precinct's residents, businesses, and visitors with a wide range of services and amenities, while enhancing these important pedestrian connections into the downtown from the surrounding areas.

Related Municipal Initiatives

The following outlines several Municipal initiatives related to the Downtown Gateway lands, as detailed in Attachment A.

- <u>The Cogswell Greenway</u>: The Greenway is a proposed landscaped bidirectional bikeway that is intended to support pedestrian and active transportation connections through the community.
- <u>The New Mi'kmaw Native Friendship Centre (MNFC)</u>: Regional Council approved the sale of the former Canadian Red Cross site, located at 1940 Gottingen Street, Halifax, to MNFC with the intent of supporting the construction of a new, high-profile Friendship Centre.

• <u>Training and Competition Aquatic Facility Study</u>: Regional Council directed staff to advance an Aquatic Facility Study, and report back to Regional Council with its findings and recommendations for the development of such a facility. This project is currently underway and could have implications for the future of the Centennial Pool site.

- 4 -

- <u>Modular Housing:</u> The Halifax modular housing development is located on a portion of the parking area of the Centennial Pool accessed from Cogswell Street. Construction was completed in mid-2022.
- <u>Halifax Regional Police (HRP) Facility Review:</u> A review of HRP facilities was completed in 2018 and is currently in the process of being updated to guide decisions on the location, design, and timing of new HRP facilities across HRM, including decisions related to the HRP headquarters.

DISCUSSION

The Municipality is experiencing significant growth, resulting in increased demand for a variety of municipal facilities and services. With a limited supply of publicly owned lands in the downtown core, the Downtown Gateway lands present a unique city building opportunity to support several long-term municipal needs in coordination with improved streetscapes and new public spaces. Given this context, staff recommend initiating a comprehensive planning project to guide the use and development of these strategically located lands. The following sections discuss an initial conceptual master plan for the subject site, potential municipal needs, and the proposed next steps for advancing the comprehensive planning process.

Downtown Gateway Study and Conceptual Master Plan

In March 2023, Fathom Studio completed a study to review the Downtown Gateway transportation network and explore the site's long-term development potential to inform decisions about the sale of 1940 Gottingen Street to the MNFC. The study was informed by discussions with various business units and the MNFC, and produced a conceptual master plan that builds on existing municipal strategies. The study confirmed that the entirety of 1940 Gottingen Street could be conveyed to the MNFC without compromising future potential road connections or public plazas. This conclusion informed the staff recommendations for the property disposal, which has since been approved by Council.

The conceptual plan (Figure 1) identifies the potential layout of future development sites, the active transportation (AT) network, and public spaces as a starting point for future comprehensive planning.

The main components of the Downtown Gateway conceptual master plan are as follows:

• <u>The Cogswell Corridor</u>

A 4-metre wide bidirectional bike lane and a separated 2-metre sidewalk are proposed for the north side of Cogswell Street, which is consistent with the All Ages and Abilities (AAA) Bikeway Network that was identified in the Integrated Mobility Plan. This will extend from the North Park Roundabout to Brunswick Street, generally following the WSP Plan prepared for the Cogswell development project.

• <u>The Gottingen Street Corridor</u>

The current street width of 15 metres on Gottingen Street, between Cogswell Street and Rainnie Drive, is proposed to be reduced to 8-9 metres in width. This maintains the existing east side curb and reclaims some additional space on the west side of the street for a separated bikeway. Existing on-street parking spaces would be removed.



Figure 1: Downtown Gateway Conceptual Master Plan

(Note: the above image illustrates the potential development of the study area and is not intended to imply any decisions about the future use of individual sites. The buildings illustrated are intended to show potential floor area yields and are generally based on mixed residential and commercial floorplates, which may not represent the building forms needed for public facilities.)

Rainnie Drive Plaza

The conceptual plan highlights the unique potential of converting Rainnie Drive from a street that accommodates through traffic and on-street parking into a destination as a pedestrian urban plaza and/or cultural corridor given its prominent location. Its south-facing view of Citadel Hill makes it ideally suited for retail frontages along its length to activate and entice people along the corridor. The dedicated bidirectional bikeway may be maintained on the south side of the proposed linear plaza, if feasible. The remainder of the plaza could be accessible to emergency vehicles and potentially early morning deliveries but is otherwise proposed to be closed to regular traffic. The plaza could include destination facilities like fountains, playgrounds, interpretive nodes, sidewalk cafes, gardens, and public art.

Gateway Central Plaza

The conceptual plan includes a central plaza to split up the larger block and serve as the site's main pedestrian route between Cogswell Street and Rainnie Drive, and a central gathering area for future visitors and residents. The area acts as a central focal point for the site, preserving views from the Creighton corridor up to Citadel Hill, which are currently blocked by the Centennial Pool.

Potential Development Sites

The master plan identified 6 potential development parcels to help inform municipal decisions about the future use of the lands. Based on the consultant's recommendations to increase allowable building heights, the plan models potential buildings to illustrate the potential to develop a total gross floor area of approximately 94,509 square metres, which represents space for approximately 1,200 dwelling units. The model shows that the lands could accommodate an additional 50,746 square metres for parking located underground, within buildings podiums or on the surface, which is sufficient space to accommodate up to 1,900 parking spaces. The buildings illustrated by the

- 5 -

consultant are intended to show potential floor area yields and are generally based on mixed residential and commercial floorplates, which may not represent the building forms needed for public facilities.

The Downtown Gateway study is contained in Attachment B. The study recommends 15 actions to advance the conceptual master plan as outlined in Attachment C. The following summarizes the study recommendations into its three main components.

- <u>Proceed with the land sale for the MNFC</u> As already outlined, the study confirmed that the entirety of 1940 Gottingen Street could be conveyed without compromising the future opportunities identified in the conceptual master plan. This process is largely complete and a recommendation to approve a related access easement on the adjacent Centennial Pool lands is discussed below (Phase 1 Next Steps).
- <u>Determine Municipal Need for HRM Owned Parcels</u> The study recommended that HRM determine the best course of action for all the HRM owned parcels (rights-of-way inclusive), including maintaining existing facilities, assessing additional Municipal needs, or making properties available for sale or long-term lease. Related to determining Municipal needs, the study also recommends considering opportunities to adjust property boundaries as part of the proposed realignment and narrowing of the Rainnie Drive / Gottingen Street intersection and the Cogswell Street right-of-way.
- Master Planning Process

The study identified several specific steps needed to make decisions about the use and development of the Downtown Gateway study area lands, including the consideration of the costs and benefits of closing Rainnie Drive to vehicle traffic; planning for destination streetscapes and public spaces; easements between development sites; changes to planning documents; and public consultations. While each item is an important decision point, in general, these recommendations identify a need to proceed with a comprehensive planning process under Council direction.

Phase 1 Next Steps

To advance the city building opportunities for the Downtown Gateway lands, staff recommend establishing a comprehensive planning project to be completed in phases and incorporated into the business planning processes. The following outlines the recommended next steps to complete as the first phase of the comprehensive planning work.

1. Downtown Gateway Functional Plan

With the Cogswell interchange redevelopment now well underway and the Downtown Gateway study providing further direction on the transportation network, staff advise that there is sufficient direction to proceed with confirming the transportation network design for the area through the development of a functional plan. This includes advancing designs for Cogswell Street and Gottingen Street (between Cogswell Street and Rainnie Drive), a traffic assessment that further considers the network impacts of restricting vehicle traffic on Rainnie Drive, and consideration of transit needs. This component of the comprehensive planning work can proceed before decisions are made about the use and development of the HRM-owned lands. This will help identify the lands needed for the transportation right-of-way versus lands that should be added or removed from development parcels. Moving forward with more detailed designs will also help ensure that adjacent development, including impacts on streetscapes within the study area, are coordinated with the future improvements to the transportation network.

The 2019 Council motion concerning the Cogswell Greenway requested advice on options for the funding the Greenway, including the potential use of development charges on adjacent development sites. Staff do not recommend the use of local improvement or other forms of development charges in this case given that the Greenway provides broad regional and community benefits associated with the AAA bike network. Staff also note that no completed components of the AAA bike network are funded by development charges. The functional plan will provide cost estimates and an implementation strategy to inform the capital planning

process and there may be opportunities to access federal or provincial funding programs. Longer term, there may also be opportunities to offset capital costs through the potential sale or lease of surplus municipal lands.

2. Municipal Needs and Public Benefits

Preliminary discussions with various business units were held to identify potential needs for the Downtown Gateway lands. Based on these discussions, staff advise that there is significant interest in developing some or all the Downtown Gateway lands for municipal purposes, coordinating land use decisions, and exploring innovative city building opportunities. The following summarizes the potential municipal needs identified through preliminary discussions:

- public parkland;
- recreation and community facilities;
- new fire station to replace or enhance existing service;
- affordable housing;
- community service hub guided by the Safe Cities approach;
- potential new or updated Halifax Regional Police facility; and
- community services, including partnerships with local community organizations.

Building on existing HRM facility reviews, staff will further explore and clarify the specific municipal needs for the lands. This may include opportunities for multi-purpose facilities, partnerships with non-profits or other levels of government, and the identification of any surplus lands.

3. Approval of Shared Access Easement

The Downtown Gateway study recommended that the Municipality consider establishing a shared access easement between the MNFC and Centennial Pool lands to provide efficient vehicle access to the MNFC and future municipal and /or development sites. The shared access would avoid driveway access off Rainnie Drive to support its potential conversion into a pedestrian focused plaza and would also minimize the number of driveways needed from Cogswell and Gottingen Streets to support a pedestrian focused streetscape. Given this context, the MNFC requested the Municipality finalize the intended access easement on the Centennial Pool lands to enable vehicles to access underground loading and parking facilities, and potentially underground service connections subject to development and engineering reviews. The MNFC advise that this would support more efficient building design and operations and support the urban design recommendations contained in the Downtown Gateway Study, which they support. Staff also support establishing the access easement and recommend that Council direct the CAO to proceed with defining and registering the easement.

4. Engagement with Potential Partners

There are a number of areas for potential cooperation with other levels of government and key groups and staff recommend engaging with the below potential project partners to help inform decisions on the long-term use and development of the subject site.

- Parks Canada to explore the Cultural Corridor concept along the shared boundary of Rainnie Drive and Citadel Hill;
- Provincial Government to explore potential provincial government interest in the lands for provincial government services, including multi-purpose facilities, public housing, land exchanges, or funding opportunities;
- Halifax Water to understand any servicing constraints and opportunities to connect to the Cogswell district energy system;
- MNFC to further coordinate and support the development of the MNFC
- Common Hill Developments Ltd., property owner of 5621 Rainnie Drive to learn more about development intentions and opportunities to coordinate with the development of the broader study area; and
- local community organizations to explore opportunities for supporting community services.

Additional groups may be identified and engaged through the review process.

Future Phases

Once the above steps are completed, which is estimated to take approximately 2-3 years, staff will return to Council with more information and advice for advancing the comprehensive planning process. Depending on the information and opportunities identified, staff anticipate providing recommendations on the following matters.

Municipal Facilities

Staff will provide recommendations on municipal needs, including opportunities for shared facilities and partnerships. This may include seeking Council direction to advance the design of one or more new Municipal buildings.

Cost Recovery Strategy

There may be opportunities to sell or lease surplus lands, or partner with the private sector to fund some or all of the public infrastructure improvements identified in the Downtown Gateway study, such as the proposed central and Rainnie Drive plazas. This may also include providing 'air rights' above municipal facilities or ensuring public access to privately owned plazas located above underground parking structures. Further study and engagement with the private sector may be required.

Proposed Central and Rainnie Drive Plazas

The proposed central and Rainne Drive plazas are a defining feature of the initial Downtown Gateway Conceptual plan, which will warrant further analysis of the costs and benefits.

Changes to land use planning documents

The Downtown Gateway Study recommends that planning documents be amended to allow taller buildings and other adjustments to built form controls. These and other changes may be needed to support the areas development and staff may seek Council direction to initiate the MPS amendment process.

Public Engagement

While the initial phase of work includes targeted stakeholder consultations, future phases are expected to include broader public engagement, including public meetings and on-line engagement tools.

Conclusion

The proposed Downtown Gateway comprehensive planning initiative provides a unique opportunity to carefully coordinate the use and development of the strategically located municipal land holdings located within the Downtown Core. There is significant interest in using the lands for municipal purposes and advancing the master planning process will support informed decisions in coordination with opportunities to enhance transportation infrastructure and public spaces. While there could be significant costs, there are also significant opportunities for cost recovery through the sale or lease of surplus lands. Therefore, staff recommend that Regional Council direct the CAO to advance the next steps outlined in this report and return to Council for further direction.

FINANCIAL IMPLICATIONS

The HRM costs associated with advancing the proposed Downtown Gateway Functional Plan will be included in the 2025/26 business planning process. All other phase one next steps recommended in this report can be accommodated within the approved 2024-2025 operating budget for Planning and Development and other business units involved in determining the municipal needs for the subject site. If needed, additional costs may be identified through the 2025-2026 business planning process or separate requests to the Audit and Finance Standing Committee. The need and costs for any further studies or capital investments will be outlined in future Council reports.

RISK CONSIDERATION

There are no significant risks associated with the recommendations contained within this report. The recommended next steps are intended to reduce risks posed by potential uncoordinated decisions on the use and development of Municipal lands that may undermine future development and cost recovery opportunities.

COMMUNITY ENGAGEMENT

As outlined in the Discussion section of this report, staff recommend proceeding with targeted stakeholder engagement to gather more information and explore potential partnership opportunities. Future phases of the master planning process are expected to include broad based public engagement and future Council reports will outline the recommended engagement program.

ENVIRONMENTAL IMPLICATIONS

The recommendation to proceed with the functional design for the Cogswell Greenway will support the development of AAA bikeway network and help reduce greenhouse gas emissions associated with automobiles. Future phases of work may identify opportunities to support sustainable building design and connect the area to the Cogswell district energy system.

ALTERNATIVES

Regional Council could choose to:

- 1. Direct the CAO to advance Downtown Gateway comprehensive planning initiative through next steps that differ from those outlined in this report. This may require a supplementary report from staff.
- 2. Not to advance the Downtown Gateway comprehensive planning initiative. This would result in reviews and decisions on the use and development of the Municipal lands continuing to be considered in an uncoordinated manner. Staff do not recommend this alternative as it would increase risks of short-term decisions creating unintentional constraints on long-term opportunities.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter (HRM Charter), Part VIII, Planning & Development

Halifax Regional Municipality Charter, subsections as outlined below:

- (3) The property vested in the Municipality, absolutely or in trust, is under the exclusive management and control of the Council, unless an Act of the Legislature provides otherwise.
 (5) The Municipality may... (b) sell property at market value when the property is no longer required for the purposes of the Municipality;
- 233 (1) The Municipality may

(a) acquire and assemble land for the purpose of carrying out a development consistent with the municipal planning strategy, whether the development is to be undertaken by the Municipality or not; or

(b) by agreement with the owners of the land, acquire the right to impose easements or other development restrictions on the lands as if it had acquired the title.

(2) The Municipality may subdivide, rearrange and deal with lands described in clause (1)(a) as if it were a private owner and may sell the lands subject to any building restrictions or easements that the Council requires to ensure the development is consistent with the municipal planning strategy.

- 322 (1) The Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light, water, clean, and clear streets in the Municipality.
- 325 (1) The Council may, by policy, permanently close any street or part of a street and the Council shall hold a public hearing before passing the policy.

ATTACHMENTS

- Map 1: Downtown Gateway Study Area
- Map 2: GFLUM
- Map 3: Zoning and Land Uses
- Attachment A: Downtown Gateway Related Municipal Initiatives
- Attachment B: Fathom Downtown Gateway Study
- Attachment C: Summary of Downtown Gateway Study Recommendations

Report Prepared by:	Dali Salih, Planner III, Planning and Development, 902.220.9631
	Ben Sivak, Manager of Planned Growth, Planning and Development, 902.292.4563

	A Stass Pontand P
Amerin Ave N	
Map 1 - Location of Subject S PIDS 00002089, 40724304, 4072437 00002063, 00002701, 00002055 Halifax Private Property Modular Housing and Centennial Pool Parking Former Blood Services Site Regional Centre Plan Area	 A HRP Headquarters Centennial Pool Cogswell Road Network Dog Park HRM Properties MNFC Easement





Attachment A: Downtown Gateway Related Municipal Initiatives

The following outlines a number of Municipal initiatives related to the Downtown Gateway lands.

Cogswell Greenway

The Cogswell Greenway is a proposed landscaped bidirectional bikeway. It is intended to support pedestrian and active transportation connections through the community.

In 2017, WSP prepared a road and Active Transportation (AT) Plan for Cogswell Street between the North Park Roundabout and the new Cogswell District, as part of the Cogswell District Functional Plan. The plan shows the bidirectional bikeway or "greenway" located on the north side of Cogswell Street and the removal of on-street parking and lane consolidations as part of the road narrowing for Cogswell Street. The lack of a bidirectional bikeway connection between Maynard Street and the North Park roundabout was noted as an issue needing resolving in coordination with the Cogswell redevelopment.

In February 2019, Regional Council requested a staff report regarding the timeline and the phasing of construction of the proposed Cogswell Greenway that considers aligning with other street recapitalization projects and funding options, including potential use of development charges. This report responds to this motion and is reviewed in the Discussion section of this report.

Mi'kmaw Native Friendship Centre

In March 2023, <u>Regional Council approved the sale of the former Canadian Red Cross site</u>, located at 1940 Gottingen Street, at below-market value to the Mi'kmaw Native Friendship Centre (MNFC), under the Community Interest category process, pursuant to Administrative Order 50, Respecting the Disposal of Surplus Real Property. The intent is to support construction of a new, high-profile, Mi'kmaw Native Friendship Centre. The new Centre will benefit both Indigenous and non-Indigenous residents in providing a place to gather, learn and collaborate in a wide variety of programs, services, and events, while advancing self-representation, cultural presentation, commemoration, and financial independence. It is anticipated that an architecturally iconic cultural centre will be an attraction for visitors and tourists while advancing opportunities to meet the needs of the Indigenous community.

The sale of the site is subject to a number of terms and conditions, including the demolition of the building by the Municipality prior to disposal and buy-back agreement provisions. At the time of preparing this report, demolition was completed.

In December 2023, the MNFC requested that staff finalize an access and service easement over HRMowned lands (Centennial Pool at 1970 Gottingen Street) to access their proposed parking, underground services, and to provide a space for bus lay-by on Gottingen Street for direct access to the MNFC's main entrance for charter or bus services used by visitors, program participants, or clients. The site's initial valuation assumed access off the shared driveway and was intended to be finalized once the balance of the block planning was more advanced. The establishment of the shared easement is a recommendation of this report.

Training and Competition Aquatic Facility Study

Training and competition centres are specialized facilities that are designed to international standards for a variety of aquatic sports. In almost all cases, they are part of a larger pool complex that is also used for recreation and leisure activities that might include elements such as slides and play amenities. One of the primary municipal interests in a training and competition facility would be as one component of an overall aquatic centre that serves the public's broad needs.

In March 2024, Regional Council directed staff to advance a Training and Competition Aquatic Facility Study as outlined in the <u>January 18, 2023 Council Report</u>, and report back to Regional Council with its findings and recommendations for the development of such a facility. This project is currently underway and the review process will assess numerous scenarios, as outlined in the 2024 staff report, and provide recommendations relating to;

- renovations to the existing aquatic centre;
- design and construction of a new aquatic centre; and
- consideration of an institutional partner.

On June 28, 2022, Regional Council moved a motion to advance aquatic facility planning. The motion noted that a replacement of the Centennial Pool may result in the potential disposal of the Centennial Pool property and that this process in-turn could offset new facility project costs. However, the January 2023 Regional Council report proposed that any potential disposal be considered as a separate future consideration that will include an assessment of the site for other municipal uses.

Modular Housing

In August 2021, Regional Council passed a motion to implement a range of emergency supportive housing and emergency shelter accommodations for those who are unhoused in collaboration with and based on feedback from community-based social services providers and the Province of Nova Scotia. Halifax Regional Council also identified \$500,000 for use in addressing urgent and emergency needs related to homelessness and directed the Chief Administrative Officer to work with the Province of Nova Scotia and community partners to explore use of this funding. In November 2021, Regional Council directed that the Chief Administrative Officer be authorized to spend up to an additional \$3.2 million for this purpose and in January 2022, Regional Council approved another \$1.2 million. In March 2022, Regional Council voted to reallocate a \$205,601 surplus in 2021/22 supplementary education funding to the emergency housing fund. The majority of the additional \$4.6 million approved by Council is to support installation of modular units on sites in Dartmouth and Halifax.

The Halifax modular housing development is located on a portion of the parking area of the Centennial Pool accessed from Cogswell Street. Construction was completed in mid 2022. The development includes the following:

- six (6) modular sleeping units (total capacity 36 persons);
- one (1) barrier free modular sleeping unit including single washroom (total capacity 2 persons);
- commercial kitchen modular unit including small common area; and
- an office trailer with a small program space to accommodate Out of the Cold staff, who have been confirmed by the province as the service provider for the Halifax site.

While HRM purchased and owns the modular housing, the province is responsible for operations through a License Agreement with the Municipality. The current term for this License Agreement expires on March 31, 2025, and may be extended past this date.

Halifax Regional Police Facilities Review

The Halifax Regional Police (HRP) headquarters located on Gottingen Street was constructed in the 1970's and requires replacement or significant upgrades to meet modern standards and the growing facility needs of HRP. A review of HRP facilities was completed in 2018 and is currently in the process of being updated to guide decisions on the location, design, and timing of new HRP facilities across HRM, including decisions related to the HRP headquarters. This review is targeted for completion in late 2024 and more detailed analysis concerning specific sites and facilities will be required.



HALIFAX DOWNTOWN GATEWAY PLAN

Prepared by



Feb 7, 2023

for the Halifax Regional Municipality



TABLE OF CONTENTS

INTRODUCTION & BACKGROUND

1

Purpose of the Study	1
Current Site Uses	2
The Site	3
Analysis	5

PRELIMINARY DEVELOPMENT CONCEPTS 15

Stakeholder Interviews	.15
Development Concepts	.17
Options 1a and 1B: Internal Road Concepts	.17

TRANSPORTATION IMPACT ANALYSIS 25

Existing Conditions Review	25
Future roadway conditions	31

MASTER PLAN CONCEPT

37

The 6 Development Parcels	49
Site Pro Forma's	51
Recommendations & Next Steps	53
Class D Cost Estimates	54

CHAPTER

INTRODUCTION & BACKGROUND

PURPOSE OF THE STUDY

The North End Gateway and Scotia Square Complex (NSS) Precinct has been identified in the Regional Centre Secondary Municipal Planning Strategy (RCSMPS) as a special district due to its strategic interface between the Citadel to the south, the downtown, and the existing historic neighbourhoods of the north end (proposed as a heritage conservation district).

The project area includes lands located between Rainnie Drive and Cogswell Street, extending from the roundabout near the Halifax Common to southern extents of the current Halifax Regional Police Headquarters on Gottingen Street (See Figure 1) except for a small private parcel to the west (PID 00002071 - 0.27 acres (See Figure 2). This area is referred to in this report as the "Downtown Gateway". With the impending removal of the Canadian Blood Services Building (CSB) and the aging Centennial Pool Facility, this part of the district is ripe for redevelopment starting with the Mi'kmaw Native Friendship Centre (MNFC) planned for the eastern portion of the CSB property along Gottingen Street.

The NSS precinct is the key linking corridor between the Halifax Commons and the Halifax Waterfront and downtown. The Secondary Municipal Plan identifies the area's special role:

- As a major gateway into the downtown, signified with open space and public art installations.
- Signature architecture will be located at the prominent corner framed by Cogswell Street, Rainnie Drive, and Gottingen Street (the study area).
- Cogswell Street will be transformed into an active boulevard and the treatment of Rainnie Drive will serve to provide this Precinct's residents, businesses, and visitors with a wide range of services and amenities, while enhancing these important pedestrian connections into the downtown from the surrounding areas.
- The Downtown Gateway is adjacent to the Halifax Citadel Hill which is identified as Landscape of Cultural Significance under Policy CHR-3.
- Heights in this district are controlled by (a) Map 4 of the SMPS and Schedule 15 of the LUB, (b) Viewplane #1 (Schedule 26 of the LUB) and the (c) Halifax Citadel Ramparts Sight Lines.





FIGURE 2. CANADIAN BLOOD SERVICES BUILDING Scheduled for 2022 Demolition

- Existing civic and recreational facilities are encouraged to be integrated into mixed-use developments that frame the streets while providing architectural features to enhance important north-south view corridors from the areas to the north.
- Building massing and material quality will provide for a complementary transition to the distinct character of the neighbourhood to the north.
- Gottingen Street's intersection with Cogswell Street, and its link to Rainnie Drive, will become an important civic focus for the area that will extend the 'main street' character to the Citadel area.

The key urban design takeaways from the MPS policies as it relates to this plan include:

- 1. The need to ensure for signature architecture, signature open spaces, and public art in the block.
- 2. Preserving the view corridors to the Citadel Hill from Creighton Street.
- 3. Encouraging walking and cycling around and through the site and resolving the active transportation linkages in and around the site
- 4. Confirming the best future use for Rainnie Drive
- Master planning the entire block to ensure that urban design objectives are achieved instead of developing via uncoordinated piecemeal development

RFP Study Objectives

The Objectives of this study from the HRM's original Request for Proposals (RFP) include:

- Delineate the preferred road/active transportation alignment for the potential extension of Creighton Street to Rainnie Drive including Cost D estimates;
- Develop potential initial concepts for future land use within the study area to illustrate the site's potential;

- Identify long-term transportation needs and opportunities within the study area;
- Complete Phase 1 Archaeological Assessment;
- Clarify which portion of 1940 Gottingen can be conveyed to support the MNFC;
- Consider / address potential impacts to conceptual design of MNFC on the site;
- Select best option to serve both HRM & MNFC goals;
- Inform future plans / decisions about use of Municipal lands in the study area

CURRENT SITE USES

- Centennial Pool (PIDS 00002089 [3 acres] and PID 40724312 [0.36 acres]) - Built in 1967, the 55-year old Centennial Pool does not meet the current Canada Games standards and is subject to a recent Council Motion. No decisions have been made yet on its future use for either relocation or redevelopment. The land was recently identified for temporary modular housing units to serve as heated shelter space for up to 38 people.
- 2. Citadel Off-leash Dog Park (PID 40724304 [0.26 acres]). This fenced area has been identified as an off-leash area close to the Halifax Commons for dog owners. There may be an opportunity to evaluate the use of the site as a dogpark or consider alternative location in the area.
- 3. The Canadian Blood Services Site (PID 00002063-1.3 acres) has reverted back over to HRM ownership and HRM has recently issued a Request for Proposal (RFP) for the demolition of the building. Council is currently in the process of exercising a first option agreement for 60% of the CBS site with the Mi'kmaw Native Friendship Centre (MNFC); providing a 'construction ready' pad site for the construction of a new Native Friendship Centre sometime in 2024. Fathom has worked together with the MNFC to develop a preliminary concept for the new facilities.

THE SITE

The North End Gateway and Scotia Square Complex (NSS) Precinct is bordered by Cogswell Street in the North, Rainnie Drive in the South and Halifax Regional Police Headquarters in the east. The property is located less than 700 m from Downtown Halifax. The site's location is in close proximity to several of Halifax's community and economic centres: Halifax Commons, Scotia Bank Theatre, Citadel High School, Halifax Regional Police Headquarters, and the Nova Scotia Regional Hospital. The National Historic Site, Citadel Hill, is the site's closest neighbour and is located to the property's south.

PID 40724304

11.204 st

PID 0000207

1.846 st

The site has a +30' grade change making for a challenging building, but the site also allows for 3 level of underground parking tucked into the sloping sides of the Citadel and providing about 94 parking spaces. Seven storeys have been planned (7 on the low side and 4-storeys on the high side of the site). The remaining 40% of the CBS site are envisioned to be part of a future development.

4. The remaining parcel (PID 00002071 - [0.27

acres]) is privately owned and was purchased as a 7-storey development about a decade ago. There is currently no active application on file but the property is strategic in its overlook of the Halifax Common. The "Drum" development was part of a Site Plan Approval pre-application for Case 16880 in 2011 under the former Downtown Halifax Secondary Municipal Planning Strategy. The application was deemed incomplete and the file was closed in April of

THON STRE

PID 407243

Cogswell Street

Rainnie Drive Com



2011.

5. The Police Station (PID 00002055) site.

The entire block offers about 8.6 acres of redevelopment potential.

ANALYSIS

This section outlines the various factors that will influence the future design of the Gateway block including a range of studies and policies already completed by HRM to guide growth and development in the regional centre (transportation, transit, active transportation, infrastructure investment). On top of these existing policies, the site conditions also present opportunities and constraints for development as noted in this section.

Integrated Mobility Plan

The Integrated Mobility Plan (IMP) sets out the strategic plan for realizing the mobility targets of the 2014 Regional Plan by 2031. In 2014, the Regional Plan set the target that by 2031, at least 30% of trips will be made by walking, bicycling or transit, while no more than 70% will be made by private vehicle. Within the Regional Centre, 50% of all trips are already made by transit or active transportation.

The protected bike lanes are planned for Cogswell Street and Rainnie Drive, and the local street bikeways are planned for Maynard Street (northbound) and Creighton Street (southbound and are not shown on the AAA Map below (Fig 4).

Though not shown on the map below, a protected bikeway connection between Cogswell Street and Rainnie Drive through or around this site was determined to be desirable as part of the

Regional Centre AAA Bikeway Network (Fig 5). To achieve this plan, the Gateway Area should:

- Retain the existing bidirectional bikeway on Rainnie Drive.
- Accommodate the future proposed bidirectional bikeway on the north side of Cogswell Street, and the proposed local street bikeways on Maynard (northbound) and Creighton (southbound) streets,
- Address the bidirectional bikeway gap on Cogswell Street between North Park Street and Maynard Street with limited row width, and
- Provide safe crossing treatment(s) on Cogswell Street for bidirectional bikeway transition through or around this block (See Figure 5).



FIGURE 4. INTEGRATED MOBILITY PLAN - PROPOSED ALL AGES & ABILITIES BICYCLE NETWORK (2022)

FIGURE 5. REGIONAL CENTRE AAA BIKE-WAY NETWORK PLAN



FIGURE 6. WSP COGSWELL STREET CONCEPT PLAN



WSP Cogswell Street and Active Transportation (AT) Plan

In 2017, as part of the Cogswell District Functional Plan, WSP prepared a road and AT Plan for Cogswell Street between the North Park Roundabout and the new Cogswell District. The plan shows the bidirectional bikeway or "greenway" located on the north side of Cogswell Street and the removal of on-street parking and lane

consolidations as part of the road dieting for Cogswell Street. The lack of a bidirectional bikeway connection between Maynard Street and the North Park roundabout was noted as an issue needing resolving as part of this plan and in coordination with the Cogswell redevelopment..



Moving Forward Together Transit Plan

The Moving Forward Together Plan was intended to initiate the restructuring of the HRM transit network, and guide the implementation of service improvements. As part of this plan, Gottingen Street and part of Cogswell Street were identified as major transit-oriented streets with 6 bus routes planned along these corridors. The corner of Gottingen Street and Cogswell Street is a transit-oriented corner which acts as a major hinge to the transit plan. The redevelopment of this important corner (the current Centennial Pool site) should respond to the Transit Oriented Development (TOD) guidelines in the Integrated Mobility Plan. These TOD characteristics include:

- A mix of uses
- Moderate to high density
- Pedestrian connectivity
- Transportation choices
 - Reduced parking

•

Pedestrian supportive design





Active Transportation (AT) Plan

The 2014 AT Priorities Plan provided a review and update to HRM's 2006 Active Transportation Functional Plan and proposes priority initiatives for the next five years to 2019. The study has not been updated past 2019. The purpose of this plan is to identify the means by which the municipality will work to double the number of residents who choose to walk or bicycle for trips to work, school, shopping, and services. This objective is tied to overarching objectives in the Regional Municipal Planning Strategy to increase the number of walking and cycling trips and to develop complete communities.

The major (25 year) goals of the plan, are to:

1. Establish a complete, integrated and readily accessible regionwide AT network serving urban, suburban and rural areas;

2. Double the number of person-trips using AT modes by 2026; and,

3. Make conditions for AT modes safer through the development of appropriate facilities in combination with promotion and safety education.

FIGURE 7. SOLAR DIAGRAM



Solar Gain

The highest daily hours of sunshine is measured at the summer solstice (June 21) at about 15.4 hours of sunshine per day. Conversely, the lowest daily hours of sunshine is at the winter solstice (Dec 21) with about 8.4 hours of sunshine per day.

As seen in Figure 7, the sun's movement tracks along the site's southern perimeter, moving from east to west. The lack of buildings south of Rainnie Drive (Citadel Hill) means that any future buildings facing onto Rainnie Drive will receive maximum sunlight through most of the day, all year round. The solar gain along this corridor

is relatively uncommon in downtown conditions which are usually impacted by building shadows. The Rainnie Drive portion of the gateway block faces southward onto Citadel Hill receiving full sun throughout the day. This exposure and orientation makes Rainnie Drive ideal as a pedestrian space bordering Citadel Hill.

Microclimatic mitigation strategies should be employed by future buildings bordering Rainnie Drive to improve the thermal comfort during the hot summer. In winter though, this area could be ideal as a warm outdoor space.

FIGURE 8. WIND ROSE



Wind

The prevailing winter winds on the site come from the northwest at an average speed of 10.1mph (See Figure 8). The winter wind direction has implications on human thermal comfort in open areas. It is possible cold gusty winds from the northwest and west will make the Cogswell Street frontages colder and windier than the Rainnie Drive side. Building location and preserving existing trees and vegetation throughout the site's north edge will help improve the overall thermal comfort. In this regard, denser tree planting should be prioritized for Cogswell Street to reduce winds on the block. Building heights, orientation, and proximity should ensure the future development does not create wind tunnels throughout the proposed development or in the nearby residential neighbourhoods.

The prevailing summer winds come from the southwest and the south, but wind speeds are much lower and average 7.9mph (See Figure 8). These summer winds will help create a better thermal environment for the sunny Rainnie Drive Plaza in the summer.

FIGURE 9. ELEVATION MAP





Elevation

The Downtown Gateway study area ranges in elevation from 38m at its lowest point in the northeast (Cogswell Street - Gottingen Street) to 51m at its highest point along Rainnie Drive. The elevation range is 13m (4-storeys) at its most extreme across the site.

Drastic changes in elevation are indicated by shorter bands of colour and contours in close proximity. As the Figure 9 indicates, the majority of the site is gradually sloped; however, there is a distinct change in grade along the site's southern edge along Rainnie Drive at the edges of Citadel Hill. This section of the site experiences a rapid change in grade with about 7m of grade change from Creighton Street at Cogswell Street to Rainnie Drive to the south. The grade change across the site will present challenges in the final design of buildings and public spaces. The idea of slightly lowering Rainnie Drive to reduce the grade changes across the site should be explored.

We assume much of the site will be excavated to provide underground parking within the block. If parking was established under the entire block instead of just under each building pad, the 5 acre site could accommodate around 500 parking spaces per level. The high archaeological potential of this site (see appendix A) will require monitoring during construction as part of any excavation.

FIGURE 10. SLOPE MAP





Slope

Slope conditions have a significant effect on the design of an eventual neighbourhood. Among many factors, slopes can influence the amount of required cut and fill, the site's accessibility, and its overall suitability for development.

The dark grey area indicates slopes less than 2% (See Figure 10). These can present drainage challenges due to the flat conditions. The future grading plan will have to address these areas to prevent water from pooling and potentially freezing.

Much of the site falls within the 2-8% range, which is generally favourable for future development. Slopes within this range allow water to move across the site and also fall within - or are close to meeting - accessibility standards.

Slopes between 8-15% will require significant cut and fill, retaining walls, stairs, ramps, or a full storey of grade change between the front and back of the unit to become usable. Additionally, slopes above 15% experience extreme grade change and are challenging unless addressed.

The sloping remnants of Citadel Hill will need to be carefully addressed in this plan to ensure universal accessibility for public spaces around the future building sites and plazas.

FIGURE 11. SOLAR ASPECT





Aspect

The solar aspect map represents the amount of solar exposure specific portions of the site receives. Aspect is informed by the site's topography. Aspect also informs the ultimate selection and location of vegetation for the site.

North-facing slopes receive less sunlight; these areas are colder, and soil will retain moisture for longer periods. Vegetation in these areas should be shade tolerant and prefer damp soils. Southern areas receive the most amount of sunlight throughout the day, creating dry soil conditions. Within these areas, sun-loving species are preferred. Plant selection should also consider drought-tolerant perennial and tree species.

Solar aspect should also inform the location of buildings, especially when trying to achieve a net-zero development. Generally, north facing slopes receive less sunlight but are also sheltered from the southern prevailing winds. Conversely, buildings on the south facing slopes receive more sunlight but receive higher wind speeds. Buildings should be oriented to ensure wind tunnels are prevented. Secondly, the final design should implement microclimatic design measures (shade sail, vegetation buffers, fountains), to ensure user comfort during the summer and winter months.

The site generally slopes downward to the north away from Citadel Hill (See Figure 11), potentially creating more shade from future buildings that will need to be ameliorated through microclimatic design.

FIGURE 12. SURFICIAL GEOLOGY





Surficial & Bedrock Geology

Surficial geology maps provide information on surface sediments, their morphology, and properties. The soils of the Downtown Gateway study area are predominantly till veneer (See Figure 12).

Glacial sediment or till (T) is formed from erosion of bedrock by glacial ice. The result is a mixture of boulders, sand, silt, and clay. This sediment may be deposited as blankets or veneers over bedrock. Till which is less than 1.5 m thick is referred to as a veneer. Till veneer (TV) are almost always associated with bedrock outcrops.

In areas south of the site at Citadel Hill are Drumlins (See Figure 12). Drumlins are smooth, oval hills with a steeper, blunt end facing the oncoming glacier, and a gentle slope pointing in the direction of ice movement. They were formed when a large accumulation of eroded material was deposited underneath the ice. The glacier then continued to move up and over this material, moulding it into the streamlined drumlin shape.

A geotechnical investigation should confirm bedrock depths prior to taking any of these parcels to market so developers have a good understanding of the cost implications for underground parking. Ideally this investigation should happen once the Blood Service Building is removed. Shallow bedrock conditions can significantly influence higher site development costs.

The bedrock under the site is part of the CUNARD FORMATION (L'Hc), consisting of black to rust-brown slate with thin beds and lenses of minor black meta siltstone; medium-bedded, fine-grained, cross-laminated meta-sandstone; sulphide minerals common and prone to acid rock drainage (ARD). Pyritic slates must be disposed of following provincial disposal guidelines adding cost when they must be excavated.

CHAPTER



PRELIMINARY DEVELOPMENT CONCEPTS

To assess the various opportunities for block redevelopment, several preliminary design concepts were prepared for consideration prior to two design workshops; one with senior HRM staff, and one with the Mi'kmaw Native Friendship Centre team. The workshops were designed to assess the pros and cons of 4 options, including impact on the proposed MNFC site, and to help coordinate and communicate the timelines for the master plan.

STAKEHOLDER INTERVIEWS

From early June to the end of June, Fathom hosted several internal HRM interviews with relevant departments including planning, real property, transportation planning, and engineering. The interviews were critical in assessing the needs from the various stakeholders that need to be represented on the plans. During these meetings, the WSP road and AT options, and the various Rainnie Drive scenarios were discussed to provide some context for the design work. Fathom had already worked with MNFC staff on the Friendship Centre plan so the team had a good understanding of the needs for that facility.

Workshop participants were provided with a context presentation to acclimatize participants to the project. Following the presentations,

participants were asked to provide feedback on the 4 options while considering other options for development.

No formal public involvement was part of this plan at this stage of the planning process given the technical nature of the discussions.



6

RENOLID

111



DOWNLOWN GAILOWAY 1940

Rig

Post.

2



DEVELOPMENT CONCEPTS

Prior to the design workshops with the stakeholders, Fathom prepared 4 high level development concepts for consideration and comment.

1. Internal Road Concepts (Options 1 and 1B)

The first two concepts considered a new internal road network within the block to break up the block scale and provide new road frontage for new buildings.

2. Internal Park Concepts (Options 2 and 2B)

The final two options considered AT connections around the periphery of the site with a reserved central open space within the block.

These concepts are described in detail on the following pages.

OPTIONS 1A AND 1B: INTERNAL ROAD CONCEPTS

With the potential eventual closure of Rainnie Drive, Fathom explored two concepts that looked at the impact of an internal road network being added. These concepts imagined a central road to break down the block scale (roughly 3 city-scale blocks long). Both options had to deal with the significant grade change which exists today between Cogswell Street (at Creighton Street) and Rainnie Drive at the base of Citadel Hill.



FIGURE 14. OPTION 1A

Option 1A

Option 1A extends Creighton Street from Cogswell Street through to Rainnie Drive. The grade change for this length of road is almost 8m to the existing grade at Rainnie Drive. If the Rainnie Drive elevation was maintained, the road would have to be almost 12% (7-8m high). This grade is too steep to meet HRM design standards. To reduce the road grade to 8-10%, significant retaining walls would be needed along the southern portion of Rainnie Drive along Citadel Hill. The next chapter provides an overview of the traffic impacts of adding this new road but suffice to say, there are no traffic throughput benefits to adding this new road, but there are significant safety concerns that would result from this option (more in Chapter 3).

As part of this plan, the proposed road would extend Creighton as one-way traffic through to Gottingen Street. The AT network would be built alongside this new road providing a more direct route for walkers and cyclists. At least one crosswalk would be needed at the Creighton and Cogswell intersection. Another crosswalk may be needed at Maynard to connect the Maynard Shared Street to this new AT network.

The benefits of this layout include (a) the block scale gets broken down to a more Halifax sized block, (b) the landlocked parcel behind MNFC would have direct street frontage should Rainnie Drive be closed as a street, and (c) the substantial regrading of Rainnie Drive would create flatter development sites for future development. The negatives of this plan outweigh the positive benefits including

(a) The Rainnie Drive regrading would have to happen before the remaining blocks could be sold since the grade changes would be substantial,

(b) The regrading of Rainnie Drive would require a substantial cut to make the road grades work, and this would require a substantial retaining wall along Citadel Hill (2-3m high),

(c) The new road corridor would consume over 1 acre of the 5.22 acres of the site adding more impermeable asphalt and more roads for HRM to maintain,

(d) Traffic safety would be reduced due to the new intersection at Cogswell, and

(e) The underground parking potential would be minimized due to the new road.

In the end, this plan would require a lot of regrading and retaining walls, and would create a new road that provides little to no benefits to HRM or the adjacent development sites.

None of the 4 tables at the 2 workshops chose option 1A or 1B and no one thought the benefit of a new road outweighed the negatives created by the road.


FIGURE 15. OPTION 1B

Option 1B

Option 1B is a slightly different road alignment from Option 1A designed to reduce the amount of cut required along Rainnie Drive. Like Option 1A, this option extends Creighton Street from Cogswell Street through to Rainnie Drive using a 1-way southbound road corridor. The grade change for this length of the road is almost 8m from the existing grade at Rainnie Drive. If the Rainnie Drive elevation was maintained, the road would have to be almost 12%. This alignment reduces the amount of cut where it meets Rainnie Drive because the existing road is naturally lower in grade at this location. This alignment allows the road to be around 5.5%, but it would still require some retaining walls along Citadel Hill. Like Option 1A, there are no positive transportation benefits associated with this new road option and in fact, the new road would reduce traffic safety (more in Chapter 3).

As part of this plan, the proposed road would extend Creighton as one-way traffic through to Gottingen Street. The AT network would be built alongside this new road providing through traffic for walkers and cyclists. At least one crosswalk would be needed at the Creighton and Cogswell intersection. Another crosswalk may be needed at Maynard to connect the Maynard Shared Street to this new AT network.

The benefits of this layout include (a) the block scale gets broken down to a more Halifax-sized block, (b) the landlocked parcel behind MNFC would have direct street frontage, but its configuration would be severely hampered due to the remaining triangular parcel and (c) the substantial regrading of a portion of Rainnie Drive would create flatter development sites for future development on the Blood Services sites.

The negatives of this plan far outweigh the positive benefits including

(a) the Rainnie Drive re-grading would have to happen before the remaining blocks could be sold since the grade changes would be substantial,

(b) the regrading of Rainnie Drive would require a notable cut to make the road grades work, and this would require a substantially tall retaining wall along Citadel Hill (about 2m high),

(c) the new road corridor would consume over 1 acre of the 5.22 acres of the site adding more impermeable asphalt and more roads for HRM to maintain and reducing the underground parking potential, and

(d) traffic safety would be reduced due to the new intersection at Cogswell.

In the end, Option 1B would require a lot of re-grading and retaining walls similar to Option 1A, and, as well, the new road provides little to no benefits to HRM or the adjacent development sites. None of the 4 tables at the workshops chose option 1A or 1B and no attendees advocated for additional roads.



FIGURE 16. ROAD ALIGNMENTS A, B AND C









FIGURE 20. OPTION 2A

PUBLIC PLAZA CONCEPTS

The remaining 2 options traded the internal road for a public open space corridor and advocated the removal of Rainnie Drive as a public street to be replaced by a public plaza. The bidirectional bike lanes would be routed around the block.

Option 2A

Option 2A replaced the new road shown in Options 1A and 1B with a public open space corridor at the terminus to Creighton Street. This option allows for the removal of Rainnie Drive as a street replacing it with a linear plaza instead. The linear plaza at the end of Creighton maintains the view corridor to Citadel Hill from the north-end neighbourhood at both Creighton and Maynard. HRM staff noted that the former "Drum" site should be pushed back to its existing property boundary to keep the view corridor from Maynard open.

The linear plaza would still require a series of stairs to provide access to the existing grades of Rainnie Drive. Workshop respondents noted that the stairs in this linear park would still require an accessible ramp for cyclists and pedestrians. In grading this space, the building frontages along this space would benefit from being flat.

The Rainnie Drive Linear Plaza would include south-facing space for shops to spill out onto the base of Citadel Hill. This linear corridor/ plaza for walking, biking and rolling should allow for future service deliveries to the storefronts that face onto it. In this respect, it would be accessible for limited traffic deliveries but not for public traffic. Workshop participants noted that the ground floor of the buildings along this corridor should be reserved for commercially active ground floor uses. Public art, sports courts, water features and interpretive features could all be part of this linear corridor. Participants discussed the idea of public parking below the plaza.

The benefits of this layout include (a) 1 acre of road proposed in Option 1A would be replaced with over 1 acre of public space, (b) the public spaces proposed in this plan would active ground floor commercial uses, (c) changing Rainnie Drive from a street to a linear plaza would activate storefronts along the base of Citadel Hill on this block, (d) each building site would front onto substantial park space, (e) the linear plaza could be used for various public events by the surrounding buildings and provide an extension of the public realm/cultural space of the citadel, (f) the AT network would encircle the block providing triple A level of service, (g) a new consolidated Citadel Hill entrance would provide a single point of entry rather than multiple uncoordinated entries to the Hill, and (f) adding a public realm space at the foot of the Hill. The negatives of this plan are minor and include the need to service the remaining 40% CBS parcel via a shared flaglot. Participants commented about moving all the AT lanes to the north side of Cogswell.

In the end, Option 2A was the preferred option by 3 of the 4 workshop tables, though participants noted that bidirectional bike lanes on both sides of Cogswell Street should be consolidated to the north side of the street and extended to the North Park Roundabout.



FIGURE 21. OPTION 2B

Option 2B

Option 2B is very similar to Option 2A except that the dedicated bidirectional bike lane is brought through the middle of the site rather than encircling the block as shown in Option 2A. One of the drawbacks of bringing the trail through the linear park is that the adjacent store frontages would require stepped slabs and complex grading to make a 6% maximum bike lane slope work. In the end, participants felt that AT encircling the block would be best for the site and would not encumber the future development sites. Even though a dedicated AAA lane would be moved to the block periphery, participants felt that an accessible route was needed through this park space using a series of tiered plazas which combined steps with ramps to ensure accessibility for cyclists and pedestrians.



FIGURE 22. PREFERRED OPTION

The Preferred Option

Workshop participants and HRM staff preferred to use Option 2A as a basis for the preferred plan, though they did suggest some additional changes:

- 1. Ensure that development on the private "Drum" site does not extend across HRM property lines, maintaining the view corridor to Citadel Hill from Maynard Street.
- 2. The Cogswell Street AT lanes should extend all the way on the north side of Cogswell to the North Park roundabout.
- 3. Remove the AT lanes on the south side of Cogswell Street and incorporate the remnant land into the development block.
- 4. Preserve the view terminus sites indicated on Schedule 9 of the Regional Centre Land Use By-law.
- Explore a shared laneway with a common easement to the site behind the proposed MNFC building. This laneway gives the rear site frontage on Gottingen Street and provides a shared point of entry for all 3 buildings into an underground parking lot.
- 6. Explore parking underneath the linear plaza of Rainnie Drive to reduce any lost on-street public parking.
- 7. Reconfigure the buildings along Rainnie Drive to maximize the frontage and provide for active storefronts along the new Rainnie

Drive urban plaza.

- 8. Conduct further analysis to determine the feasibility and timing of potential closure and regrading to determine the timing of the Rainnie Drive re-grading to see if its re-grading schedule benefits the re-design of the proposed MNFC building.
- 9. Maintain a dedicated bidirectional cycle lane on the south side of Rainnie Drive.

For the MNFC site, the Friendship group requested consideration of an easement for underground parking access to the north of the proposed MNFC lot. This access would be shared between the MNFC and the development sites to the west (Building B) and north (Building A) of the MNFC. The shared easement provides controlled access to all underground parking on these 3 sites rather than requiring street-facing parking garages for these 3 buildings. Ideally, this arrangement would create more active street frontages for these 3 sites. An easement will be necessary for Building B if Rainnie Drive is converted to a public plaza from a public street. As well, frontage requirements for this building will have to be met to ensure the site is not land-locked and bylaw requirements can be met.

CHAPTER

TRANSPORTATION IMPACT ANALYSIS

In order to better understand what is happening in the surrounding transportation network, it is important to understand the pieces that make up the puzzle. Work under this project included a full review of existing and future anticipated transportation conditions at, and in the areas surrounding the development in order to identify conditions that are good, those that are less than desirable, and problems that clearly need resolution.

EXISTING CONDITIONS REVIEW

To start, the project area is located in an incredibly diverse transportation environment including direct influences from:

- Historic Citadel Hill
- Activity centres throughout the Halifax Common
- Student activity from Citadel High
- Gateway to Downtown Halifax (vehicular and active transportation)
- Hospitals and healthcare facilities
- Scotia Bank Center, and
- The proposed Mi'kmaw Native Friendship Center

From a transportation perspective, the area has seen a significant number of projects implemented to better support the diverse set of activities in the area. Such improvements include:

 Removal and redevelopment of the underutilized and complex Cogswell Street Interchange (ongoing)

- North Park roundabout corridor (2014)
- Gottingen Street transit corridor (2019)
- Gottingen Street / Rainnie Drive intersection upgrades (2015)
- Rainnie Drive active transportation trail (2015)
- Proposed QE II Hospital
- Other supporting roadway and AT improvements in the impacted area.

The following sections of this chapter summarize the critical considerations when evaluating proposed changes to the local transportation network.

Existing road network

The study area forms a triangle in the middle of major connections to the north, south, east and west with the North Park Roundabout at Cogswell Street serving as a distributor of traffic to these different directions. For the most part, roads in this area consist of collector and arterial roadways, with

FIGURE 23. PEAK HOUR VOLUMES AND GENERAL TRAFFIC DISTRIBUTION



limited access to local roads.

The exception to this is the local street connections to Creighton (one-way southbound), Maynard (one-way northbound), and Bauer Street along the north side of Cogswell Street. The other notable exception, is Rainnie Drive, which is designated as a roadway, though functionally serves as a double loaded parking street with significant traffic volumes using the main circulation aisle.

The figure above shows this general roadway layout, the one-way streets, and AM and PM peak hour volumes on each roadway by direction.

From a road hierarchy perspective, it appears quite clear that the major roadways (Cogswell Street, North Park, Trollope / Ahern, Brunswick and Gottingen Street (north of Cogswell Street) should be considered the major road corridors and should carry the majority of commuter based traffic. It also appear clear that Creighton, Maynard and Bauer should be restricted to local residential traffic with commuter traffic being minimized.

Rainnie Drive runs parallel to Cogswell Street (the main arterial roadway) connecting the same points (North Park Roundabout and the south end of Gottingen Street) as the parallel and preferable Cogswell Street / Gottingen Street route. In these regards, there is a compelling transportation argument and should be evaluated as part of future comprehensive redevelopment of this strategic site. Rainnie Drive should not serve as a traffic thoroughfare.

Finally, there is a less clear argument for the preferred functionality of the section of Gottingen Street between Cogswell Street and Brunswick Street given that the same connection can be made using Cogswell Street directly to Brunswick. In this regard, it appears that identifying this section of Gottingen Street as a minor collector roadway best serves the combination of distributing through traffic across the road network and providing access to local commercial / residential / institutional land uses.

There are numerous unique transportation needs associated with each of these roads including:

- On street and off street parking requirements, including long and short term parking, commuter and residential parking permits, etc.
- Commercial loading requirements
- Special events including parades, parking and staging for Citadel Hill and the surrounding area, and
- Active transportation integration including off-road, on-road



FIGURE 24. APPROVED COGSWELL STREET PLAN (HRM WEBSITE)

Ongoing and Upcoming work

The **Cogswell Street Interchange Redevelopment Project** is significant in scope and impacts a large corridor parallel to the Halifax Harbour. The most significant impact on transportation patterns occurs along this corridor and it is not anticipated that there will be any significant diversion of traffic entering and exiting the Halifax downtown core. Similarly, the Cogswell Street corridor continues to provide a similar set of travel options approaching and exiting the downtown.

Operationally, past studies showed that the Cogswell Street interchange was significantly underutilized therefore the proposed road network changes are expected to simply better utilize the available capacity within the road network. With respect to the sections of Cogswell Street addressed in this current study, care must be taken to coordinate horizontal alignments and lane continuity on Cogswell Street in the section between Gottingen Street and Brunswick Street. Additional details on operational capacity and alignments are provided in the analysis discussions later in this section.

The **Intersection of Cogswell Street and Brunswick Street** includes the connection of bi-directional bikeways/greenway as shown in the figure below, through bike lane accommodation has been extended along Brunswick Street to Duke Street. Also identified is the section of Cogswell Street between the North Park Roundabout and Brunswick Street that indicates functional planning not yet started. Arguably, this project starts that functional planning process by establishing a preferred AT corridor along the north side of Cogswell Street in this area.

Finally, the **intersection of Gottingen Street and Rainnie Drive** is undergoing a variety of review and design processes, though it is understood that final decisions on the viability and changes to Rainnie Drive are contingent on the findings of this plan. Realignment and narrowing of the Rainnie Drive / Gottingen Street intersection is currently being proposed.





Collisions

Collision statistics in the vicinity of the development shows about 90 collisions over a 4-year period from 2018 and 2021 distributed as shown in the figure below. There appears to be an opportunity to positively impact about a third of these collisions through improved geometric design and safety risk considerations. The opportunities to reduce collisions appear to be present along Cogswell Street, at the Citadel Hill entrance, at the Gottingen Street / Rainnie Drive intersection and potentially at the Cogswell Street / Gottingen Street intersection.

FIGURE 26. NUMBER OF COLLISIONS



Traffic Volumes

Traffic data was obtained from HRM for the areas surrounding the proposed development lands and is summarized in the figure to the right. This information was used as a basis for evaluating the traffic capacity and operational characteristics of various intersections around the project area under existing conditions as well as future conditions with additional growth and development traffic added to the network.

The figure to the right shows the location and the years of the most recent traffic counts on the network. The larger traffic diagrams show 2016 data that was used as part of the HRM Rainnie Drive evaluation.



FIGURE 27. TRAFFIC VOLUME SUMMARY (WITH COUNTS FROM HRM REPORT)

Rainnie Drive / Brunswick Street Functional Plan (HRM)

As part of the ongoing Rainnie Drive / Brunswick Street Functional Plan, HRM completed a traffic impact analysis in October 2021 that investigated the implications of closing Rainnie Drive to vehicular traffic as recommended in WSP's pre-design report for the Cogwell Roundabout. While the closure was not officially adopted by HRM, the associated Transportation Impact Study provided information of the impacts of closure and specific intersection analysis to provide clues to the future use of the intersections surrounding the study area. Specifically, the HRM study cited 4 recommendations from the WSP report, which recommended the following changes:

- Widening Cogswell Street to a 4-lane cross-section between North Park Street and Gottingen Street.
- Modifying the existing Cogswell Street eastbound and westbound approaches to include a left turn storage lane and two through lanes.
- Adding a left turn storage lane and protected left turn phase for the Gottingen Street northbound left turn movement.
- Installing actuated traffic signals and revised phasing.

The traffic conditions in the report were reviewed as part of this study to determine the opportunities and constraints that impact this study. The WSP report used 2016 traffic counts in their analysis, though the review of the more recent 2021 counts at the same intersections show that traffic volumes are presently lower than during the 2016 count periods. There are a number possible reasons for this including COVID19 related impacts, continuing increases to transit and active transportation or construction related impacts, though these nuances do not impact the fundamental findings in this report.

The results of the analysis present in the HRM report suggest that the Cogswell/Gottingen intersection operates well below capacity (maximum V/C ratio of 0.42, or 42% of theoretical capacity) for all movements at the intersection. The only movement that experiences a significant increase is the eastbound right turn from Cogswell Street to Gottingen Street which goes from V/C = 0.10 to 0.52 based on a total volumes increase from 50 to 355 vehicles on the movement.

The October 14, 2021 Rainnie Drive / Brunswick Street Functional Plan report ultimately concludes that...

"The closure of this section of roadway [Rainnie Drive] would be expected to divert traffic to nearby streets and intersections; however, intersection performance analysis indicates that the impacts during peak periods are expected to be minimal and will not necessitate any intersection upgrades."

FIGURE 28. IMAGE FROM RAINNIE DRIVE / BRUNSWICK FUNCTIONAL PLAN



More on Rainnie Drive

Rainnie Drive, in its existing condition, is a challenging corridor as it is a street trying to serve more purposes than necessary including:

- 1. A 'linear parking lot' accommodating parking spaces along both sides of the roadway
- 2. A one-way roadway thoroughfare used by regular commuter traffic resulting in about 300 through vehicles during the AM peak and 185 vehicles during the PM peak hours
- 3. A primary AT corridor connecting the North Park Roundabout and Gottingen Street
- 4. A cultural corridor adjacent to Citadel Hill

The result is a mixing of a diverse set of traffic needs that compromises safety and operations along the corridor. For example:

- Best practices suggest that a commuter traffic thoroughfare should not be routed through a street dominated by parking.
 Essentially this is the situation today on Rainnie Drive
- Intermixing high turn over parking and frequently used active transportation routes without physical separation is undesirable
- The historic and recreational environment characterized by Citadel Hill is in stark contrast to the adjacent urban parking lot, wide asphalt pavements, deteriorated chain link fences and older urban structures
- While opportunities to cross between the north and south sides of Rainnie Drive are limited today, a more open and free flowing environment make todays form of operation highly undesirable

Throughout the project discussions, workshops, planning considerations and transportation analysis, there appears to be a long list of benefits to closing Rainnie Drive including, but not limited to:

- It is not required from a vehicle capacity perspective
- Eliminates the challenging intersection (safety, geometric and operational issues) at Rainnie Drive and Gottingen Street
- Simplifies the functional area entering and exiting the North Park Roundabout, reducing the number of potential conflict points
- Provides clearer access guidance to Citadel Hill and provides greater opportunity for directional and promotional signage
- Permits more fluid flow between Citadel and properties to the north
- Supports a more integrated urban environment with a much clearer hierarchy of roadway and active transportation routes
- Extends the logical historic and recreational environment
 surrounding Citadel Hill
- Reduces safety and liability risks along Rainnie Drive especially for pedestrians and cyclists

Conversely, the work leading up to this report suggests that there are really only three arguably negative impacts that may warrant further



FIGURE 29. RAINNIE DRIVE FACING EAST TOWARD DOWNTOWN

consideration:

- 1. Loss of Parking the removal of Rainnie Drive would eliminate about 80 on-street parking spaces. Past correspondence and recent discussions suggest that this loss should not have a significant impact to downtown parking operations and could be regained through parking initiatives within the new development north of Rainnie Drive
- 2. Loss of Roadway Frontage from a commercial perspective, this may be considered an issue due to a reduced number of vehicles passing properties fronting Rainnie Drive, though there is already limited traffic due to the one-way nature of the street, and there appear to be ample opportunities for commercial frontage on Gottingen Street and Cogswell Street. Further removal of the roadway would presumably provide for a more appealing residential and small commercial environment, therefore strategic land use planning appears to mitigate this issue. A middle ground on this issue could be the elimination of regular vehicular traffic from the public area, but still allow limited access to vehicles such buses, emergency vehicles or service vehicles.
- 3. Halifax Transit is currently using Rainnie Drive as a layover area for buses due to Cogswell construction. They have been unable to identify another suitable location and may need to continue to use Rainnie after Cogswell construction is complete unless another layover area is found.

While additional analysis may be beneficial, there appears to be a very strong transportation and land use planning argument for the closure of Rainnie Drive and the associated elimination of through traffic between Citadel Hill and the properties to the north.

FUTURE ROADWAY CONDITIONS

Road Cross Sections and Intersections

Cogswell Street

West of Gottingen Street, Cogswell Street currently operates with a single through lane in each direction and has an expended cross section at the North Park Roundabout and at Gottingen Street. It also includes parking on the north side of the roadway. This is in distinct contrast to Cogswell Street east of Gottingen Street which functions with 3 full lanes in each direction separated by a grassed median. Such drastic changes compromise driver expectations on roadways and force an increased workload on drivers, cyclists and pedestrians. Research suggests that such conditions contribute to increased risks of conflict for all users of the road space.

The more recent WSP design shows the roadway as a simple 4-lane roadway along most of the length of Cogswell Street, including through each of the intersections. While certainly more consistent in nature, there are some other factors that warrant consideration when defining the proposed cross-section along Cogswell Street adjacent to the proposed development area. These include:

- The eastbound exit from the North Park Roundabout onto Cogswell Street is a single-lane exit, and is not envisioned to expand in the foreseeable future. Therefore, maintaining a single lane eastbound on Cogswell Street is practical.
- The active transportation environment envisioned for the project area suggests that more people can be expected to cross Cogswell Street at the roundabout, at Gottingen Street and at a mid-block crossing near Creighton Street. Therefore, a reduced cross-sectional width on Cogswell Street is beneficial.
- 3. Similarly, the expansion of Cogswell Street to include bike lanes along the north side of the roadway requires space, therefore reducing road widths, where practical, in factor of AT and greenspace elements is prudent.
- 4. The westbound approach to the roundabout includes two lanes today and collects a significant amount of traffic from Gottingen Street, Brunswick Street and east Cogswell Street. This two-lane cross-section appears reasonable to maintain capacity and lane selection approaching the roundabout.

Critical to AT accommodation on Cogswell Street is the section of roadway between Bauer Street and the North Park Roundabout. As per past plans, the available right of way is restricted and approach/ departure geometry of the roundabout restricts the ability to make any significant changes to the cross-section. It was determined that the continuation of a two-way bike lane through this section of the roadway is not possible without major reconstruction of portions of the roundabout, or acquisition of additional ROW and likely modifications to existing buildings. To resolve this space challenge with the desire to continue the AAA facility to the roundabout, a solution was found using a full-width multi-use path, as opposed to bike lanes, and is shown in in Figure 34 on the following page.

Creighton and Maynard Street

Creighton and Maynard form a one-way couplet with Creighton approaching Cogswell Street in the southbound direction and Maynard conveying traffic north from Cogswell Street. Both streets, though particularly Creighton Street in the AM peak period, are well-known shortcut routes used to bypass Gottingen Street and Barrington Street coming off the Macdonald Bridge. While a larger shortcutting strategy is warranted for these streets, part of the solution should include limiting access to Cogswell Street in order to minimize traffic on the local road network. It is our understanding that HRM will be carrying out further planning work on the bikeway elements for these streets in the near future.

Such an approach would also support the functional classification of Cogswell Street as a major arterial roadway serving as one of the most significant entry and exit routes into downtown Halifax.

As shown in the plans developed under this project, extending the median from the North Park Roundabout past these two streets provides an effective barrier to non-local traffic using these local streets and travel thoroughfares.

FIGURE 30. COGSWELL AND GOTTINGEN STREET (EXISTING)



FIGURE 31. COGSWELL AND GOTTINGEN STREET (WSP PLAN)

Gottingen Street

North of Cogswell, Gottingen Street has a 3-lane cross-section defined by the requirements of the Gottingen Street Transit Priority Corridor. As such, it is not expected to change. South of Cogswell Street as shown in the image to the right, Gottingen Street has a wide pavement section of about 15 meters. This space includes a single through lane in each direction plus parking in select areas between Cogswell Street and Rainnie Drive. Between Rainnie Drive and Brunswick, the cross-section remains wide though parking is not permitted.

General safety guidance suggests that lanes wider than about 4.5 meters cause confusion regarding the number of lanes present with some drivers assuming 2 lanes of travel are available. Given that there are frequently no cars parked on sections of Gottingen Street, the wide cross-section may be challenging for some drivers to interpret and therefore increases the risk of collisions. Improved definition of travel lanes and parking areas could be partially achieved by reducing the overall lane width of the corridor.

North Park Roundabout

The North Park Roundabout was constructed in 2015 to serve the longer term transportation needs of the North Park Street corridor, including connections to Cogswell Street, Trollope Street and Ahern Avenue. It also provides nearby access to Citadel Hill from both Ahern and Cogswell Street (using Rainnie Drive) in a somewhat complex interconnection of roadways and driveways. No near term improvements are currently planned for the roundabout, though HRM has indicated that there are ongoing discussions evaluating the performance of existing roundabouts with respect to pedestrian and cycling traffic. For the purposes of this study, it is assumed that no significant geometric modifications to the roundabout itself will be entertained.

Given the complexities of roundabout operation, it is prudent to minimize features or activities that may create confusion or conflict at, or within the functional area of a roundabout (i.e. locations where decisions related to the roundabout are being made). While there are limited operational challenges near the roundabout, there are many visual distractions that can divert driver attention including activities in the Common area, Citadel Hill, views of the harbour or activities associated with frequent special events.

One opportunity to improve operations near the roundabout is through simplifying the intermix of roadways and pathways that intersect near the roundabout, and particularly in the southeast quadrant nearest Citadel Hill and the existing Rainnie Drive entrance help eliminate some of the existing challenges and minimize collision risks surrounding the roundabout. Figure 33 illustrates the mix of movement that can, and have been observed to result in many potential conflict points.

The proposed plan for this area recommends two key features to improve operations in addition to the closure to cars on Rainnie Drive:

- 1. Extend the roundabout median past Bauer (as a minimum) Street to eliminate movements across Cogswell Street
- 2. Make Cogswell Street the main entry point to Citadel Hill, eliminating the Ahern entry point and provide an Ahern exit for convenience. The Cogswell access could by configured as a right-in, right-out access, or potentially as a right-in only access.



FIGURE 32. GOTTINGEN STREET FACING SOUTH



FIGURE 33. CONFLICT POINTS NEAR ROUNDABOUT



FIGURE 34. PROPOSED PLAN EAST OF ROUNDABOUT

Cogswell Street / Gottingen Street Intersection

A variety of past recommendations have been made at this intersection and it has been modelled a number of different times under different traffic loading scenarios and lane configurations. The following four recommendations were made in the WSP report for the Northpark Roundabout and text has been added indicating the current status of those recommendations along with additional commentary where appropriate:

- Adding a protected left turn for northbound Gottingen Street. This has been completed and includes a protected left turn phase and current intersection modelling in this report to 2032 suggests that this is an appropriate and required improvement.
- Installation of actuated traffic signals. It is our opinion that the installation of actuated signals should be viewed from a Cogswell Street corridor perspective recognizing that it is being upgraded to become a prominent corridor to and from Downtown Halifax. In this regard, actuated signals will provide a higher level of performance and flexibility than pre-timed signals and could be implemented in conjunction with upgrades required to accommodate bicycle lane signalization and control at the intersection. Further, the signal installation at this location should be considered in coordination with signals at Brunswick Street and future signals at Barrington Street and Upper Water Street in order to build consistency, predictability and efficiency into the corridor operations.
- Widening Cogswell Street to a 4-lane cross-section between North Park Street and Gottingen Street. This has been partially discussed above with respect to the Cogswell Street cross-section. The specific requirements at Gottingen Street are discussed in greater detail in the next section of the report and yield a couple of options for future consideration. In particular, the available property in the southwest corner of the intersection restricts the options for AT accommodation depending on the width of the roadway cross-section. If providing off-street AT accommodation along Gottingen Street is pursued, then the 4-lane Cogswell cross-section will be required along with narrowing lanes on Gottingen Street to accommodate the trail as show in Figure 37 to the right.
- Modify Cogswell Street east-bound and west-bound approaches to include a left turn storage lane and two through lanes. This is discussed in greater detail in the following sections, but does not appear to be an appropriate configuration at the intersection for a variety of reasons including: low left turn volumes (there is little to no convenience added to travel routes by using these left turn movements); relatively low opposing left turn volumes; and,

limited cross-sectional width after the addition of dedicated bike lanes along the north side of Cogswell Street.



FIGURE 35. COGSWELL AND GOTTINGEN STREET (EXISTING)



FIGURE 36. COGSWELL AND GOTTINGEN STREET (WSP PLAN)



FIGURE 37. COGSWELL AND GOTTINGEN STREET (PROPOSED)

Traffic Conditions

To further evaluate the impacts of a Rainnie Drive closure, as well as the revised roadway conditions recommended in this report, a SYNCHRO / SimTraffic model was prepared, extending from the North Park Roundabout to Brunswick Street, including the intersections of Brunswick Street with Cogswell and Gottingen Street / Duke.

The model used the most recent counts at each intersection, generally between 2019 and 2021, and was adjusted conservatively to represent a 2022 baseline traffic volume. Background traffic growth was considered to be a 2032 future conditions background traffic scenario using a 1% annual growth rate. In addition, the Institute of Transportation Engineers (ITE) Trip Generation Guide (10th Edition) was used to estimate future traffic volumes from the proposed development area between Rainnie Drive and Cogswell Street. The trip generation estimates were based on general planning guidance for the anticipated intent of the development area and assumes a reasonable mix of residential, commercial and office space.

To better understand how the road network is expected to operate under the proposed future conditions, Rainnie Drive was removed from the road network and traffic was reassigned to Gottingen Street and Brunswick Street in a similar manner to the previous HRM Functional Plan for the Rainnie Drive closure. The road network was also modified to represent the intersection configurations proposed in this study. As such, intersections along Brunswick Street remained similar to today's conditions and no changes were made to operations at the North Park Roundabout.

As Rainnie Drive operated as a one-way eastbound street, the most significant volume changes occurred during the AM peaks where inbound volumes are the highest. The outbound peak volumes operated in a manner very similar to today's conditions as Rainnie Drive was already not an option during that period.

The information on the following pages summarized the key findings and the critical intersections in the study area in terms of:

- Average Delay (sec/veh)
- Volume to Capacity (V/C) ratio
- Queue lengths (veh)
- Level of Service (a through F)



FIGURE 39. SYNCHRO TRAFFIC MODEL

Land Use	Trip	#	Variable		AM Pea	ak	PM Peak			
	Code	Units		Enter	Exit	TOTAL	Enter	Exit	TOTAL	
Residential - Mid-Rise, Ground Floor Commercial	231	560	Units	21	54	75	63	27	90	
Office Space	710	10	/1000 ft ²	31	5	36	2	11	13	
Commercial Space	820	10	/1000 ft ²	6	3	9	18	20	38	
Internal Capture	-	-	-	-4	-4	-8	-9	-9	-18	
Pass-By	-	-	-	0	0	0	-5	-5	-10	
Total New Trips to Network				54	58	112	69	44	113	

FIGURE 38. TRIP GENERATION FOR NEW DEVELOPMENT

Traffic Modelling Findings

The following tables show the future conditions modeling results for the Gottingen Street / Cogswell Street intersection and the North Park Roundabout. The scenario presented is for a future 2032 time horizon, with full development traffic added to the networks as well as 1% average annual growth over the 10-year period. The road network models represent the proposed roadway layout presented in this report.

Gottingen Street and Cogswell Street

The intersection operates at relatively good levels of service through the AM and PM peak periods. During the AM peak, the eastbound (inbound toward downtown Halifax) movements see the highest volumes through the intersection and subsequently experience the highest capacity utilization. As noted in the table below, the eastbound through movement indicates a V/C ratio of 0.60 (60% use of theoretical capacity on that movement) and the right turn indicates a V/C ratio of 0.96. Note that all traffic removed from Rainnie Drive was reassigned to this movement. Realistically, we would anticipate some redistribution of this traffic between Gottingen Street and Brunswick Street. This may occur through driver choice during uncongested conditions, or drivers may elect to proceed to Brunswick if some queueing is experienced on the right turn to Gottingen Street.

A variety of strategies could be used to improve operations for this movement during the AM peak period including:

1. Provide a dedicated right turn signal during the northbound Gottingen Street protected left turn movement. This would suggest that the eastbound approach should be configured with a dedicated right turn lane and would require the expansion of the eastbound approach to 3 lanes. Operationally, either of the following configurations function at reasonable levels of service:

- Dedicated right, dedicated through, and dedicated left, or
- Dedicated right, dedicated through and shared through/ left.
- 2. Implement actuated traffic signals to better manage right turn queueing. Actuated signals would be expected to have a significant impact on this intersection as there is available capacity on all other movements at the intersection.
- 3. Consider narrowing Cogswell St. between Gottingen St. and Brunswick St., and increase developable land area

During the PM peak hour, the Gottingen Street northbound left turn movement experiences the highest V/C ratio at 0.73, though there is flexibility in the signal timing at the intersection as other movements generally operate well below capacity. The intersection performs well in the PM peak, but similar to the AM peak, would benefit from actuated traffic signalization to better manage left turn delay and queueing. While the intersections are somewhat different from the previous HRM analysis, the fundamental findings of the analysis are quite similar.

	Cogswell Street EB			Cogswell Street WB			Gott	ingen S NB	Street	Gottingen Street SB			
				ĺ									
t	Vol veh/hr	25	290	355	30	150	80	150	100	10	170	270	60
nen ak	V/C Ratio	0.08	0.60	0.96	0.17	0.30	0.19	0.40	0.00	0.25	0.30	0.00	0.70
2032 Jevelopr AM Pe	Delay sec/veh	15.7	18.7	48.0	25.6	18.5	17.3	12.4	0.0	13.6	10.1	0.0	21.7
	LOS	В	В	D	С	В	В	В	A	В	В	А	С
	50% Q veh	0.3	3.0	7.7	0.6	1.6	0.8	1.1	0.0	1.0	1.0	0.0	3.8
t.	Vol veh/hr	65	160	220	20	270	120	400	240	40	60	150	50
nen ak	V/C Ratio	0.24	0.30	0.54	0.09	0.49	0.26	0.73	0.00	0.54	0.12	0.00	0.39
2032 Developr PM Pe	Delay <i>sec/veh</i>	20.4	14.0	18.3	19.7	21.4	18.1	20.2	0.0	17.5	9.1	0.0	15.2
	LOS	С	В	В	В	С	В	С	A	В	А	A	В
	50% Q veh	0.7	1.2	2.3	0.3	3.0	1.2	3.4	0.0	2.6	0.3	0.0	1.6

FIGURE 40. SYNCHRO TRAFFIC RESULTS - COGSWELL AND GOTTINGEN STREET INTERSECTION

North Park Roundabout

Fundamentally, operations at the roundabout are not changing as a result of the proposed roadway layout. The majority of the changes proposed such as the closure of Rainnie Drive and extension of the roundabout median along Cogswell Street serve to improve efficiency and reduce potential conflict. Note that these potential benefits are not reflected in the results of the modelling exercise presented below. The table below shows the AM and PM peak results for the 2032 scenario with development in place and 1% growth over the 10-year horizon. The results suggest that the roundabout will continue to operate at very good levels of service for the foreseeable future.

	Cogswell Street			Cogswell Street			Ahern Avenue			North Park Street			
		EB			WB			NB			SB		
L.	Vol veh/hr	96	208	10	77	105	155	16	150	51	402	394	26
nen: ak	V/C Ratio	0.24	0.	0.77		0.23		0.40		0.49	0.45		
2032 elopi	Delay sec/veh	11.1	29	29.2		5.9		11.4		9.1	8.0		
Deve AN	LOS	В		D		А		В		A	А		
	95% Q veh	1	7		1		1	2		3	:	2	
	Vol veh/hr	152	134	14	100	268	342	33	431	49	260	290	33
nen: ak	V/C Ratio	0.25	0.	0.23		0.59		0.71		0.35	0.37		
2032 elopi	Delay sec/veh	8.4	7	7.5		15.1		17.9			8.1	7.9	
Deve	LOS	A		A	(С	В	С		A		Ą	
	95% Q veh	1		1		4		6		2	2		

The Figure 42, shows the one modification proposed to the North Park Roundabout in order to accommodate the extension of a 4 meters wide multi-use path on the north side of Cogswell Street between the roundabout and Bauer Street. As shown in the figure, the entry and departure lanes remain the same at the roundabout, through the centerline alignment of Cogswell Street shifts about 5 degrees. This can be seen when comparing the existing solid blue centerline pavement parking on the Cogswell Street approach, to the new centerline represented by the dashed grey line and highlighted within the pink circle.

While this is a relatively minor change, roundabout entry and departure geometry are critical elements in ensuring safety and operational risks are minimized at the roundabout. The impact of this change should be further analyzed during the detailed design process of the implementation stage.



FIGURE 42. ALIGNMENT MODIFICATIONS AT ROUNDABOUT

CHAPTER

MASTER PLAN CONCEPT

The preferred development plan for the Gateway Block was developed through a collaborative process that included various HRM staff in several departments as well as The Mi'kmaw Native Friendship Society. The objective of this plan is to confirm the rough grades and layout of the eventual development sites, AT Network and public spaces surrounding and within the Gateway Block to clarify any impacts on the proposed MNFC site, and as a starting point for future comprehensive planning.

Working from the preferred option in Chapter 2 which was developed through several internal engagement sessions and workshops, the design team prepared a conceptual master plan, a conceptual grading plan, and massing models for the proposed buildings in the development. While the proposed concept will require additional analysis, it is intended to provide a starting point for future master planning, public consultation and Council consideration. To support this process, a pro-forma was developed to estimate the potential development yield from the development. This plan should provide HRM and any future developers with the information they need to make an informed decision on the potential value of the lots.

Part of this exercise may require changes to the existing zoning regulations as it relates to height and built form standards for this special area. The next steps are outlined in the recommendations section at the end of this chapter and are illustrated in Figure 40.

PUBLIC SPACE DESIGN REQUIREMENTS

The master plan (next page) outlines key considerations for various HRM-owned (public space) components of this plan. These include the Cogswell Street Corridor, The Gottingen Street Corridor, The Rainnie Drive Plaza, The Citadel Hill Entry/Exit, and The Central Gateway Plaza. These components are described below in more detail.

The Cogswell Corridor

Following the Integrated Mobility Plan and the AAA Bikeway Network Plan, the north side of Cogswell Street has been reserved for a separated 4m wide bidirectional bike lane and a separated 2m sidewalk. This will extend from the North Park Roundabout all the way to Barrington Street generally following the WSP Plan. The lane configuration will follow the recommendations of the traffic study chapter of this report including 3.5m wide travel lanes which extend from 3 lanes at the roundabout to 4 lanes (2 in each direction) at Gottingen Street. A central crosswalk is proposed for the west side of Creighton Street crossing 3 lanes of traffic and including a protected central boulevard as a crossing refuge. A 2.5m separated sidewalk is proposed for the south side of Cogswell. The entire corridor should be planted with caliper-sized street trees following the Urban Forest Master Plan guidelines. The central boulevard could include trees and shrubs to reduce the potential for pedestrian shortcutting, avoiding the crosswalk. The proposed boulevard between the roundabout and Creighton Street will eliminate dangerous left turns and will better control access into Citadel Hill.

The Gottingen Street Corridor

Rather than a formal route through the gateway block for the bidirectional bikeway, the bike trail routing has been routed along the west side of Gottingen Street between Cogswell Street and Rainnie Drive. The current street width of 15m through this stretch can be reduced down to 8-9m of width (no onstreet parking), maintaining the existing east side curb and reclaiming space on the west side of the street for the separated bikeway. The current right-of-way may be slightly challenging to add a dedicated 2m sidewalk on the west side of the bikeway. HRM has the option of building a shared walking and cycling bikeway, or they may need an extra metre or two along the Pool property that abut Gottingen Street in this block. The width is tightest at the Cogswell Street end but it gets wider in front of the proposed MNFC site so no additional land should be needed to accommodate the bike lanes and sidewalk. Alternatively, HRM could relocate the curb on the east side of Gottingen Street over an extra 1-2m to make room on the west side for a separated sidewalk and bikeway on the west side of the street.

The MNFS has requested space for a bus lay-by in front of the proposed MNFC building on Gottingen Street for the many seniors that will come to visit the building. The Friendship Centre believes there should be close access between the bus layby and the front doors of the facility for seniors. While HRM cannot dedicate parking spaces for individual businesses or occupants, it can dedicate a loading zone or taxi stand in front of the building for bus access. The MNFS expects there to be regular use by shuttles and small buses for visitors to the Friendship Centre.

Like The Cogswell Street Corridor, urban tree planting on the Gottingen Street corridor will be important for the character of the district. HRM should coordinate the plantings with Mi'kmaw relevant tree species that would act as culturally sensitive urban tree species around the block.

Rainnie Drive Plaza Conversion

The master plan highlights the extraordinary potential of converting Rainnie Drive from a parking street to a dedicated pedestrian urban plaza. Its south-facing overlook of Citadel Hill makes it ideally suited for retail frontages along its length to activate and entice people along the corridor. HRM has suggested that the dedicated bidirectional bikeway be maintained on the south side of the proposed linear plaza if feasible.

The remainder of the plaza should be accessible to emergency vehicles and potentially early morning deliveries but it will be closed to regular traffic. Instead, an Argyle Street-like paved plaza could connect the Commons to Gottingen Street. The plaza could include destination facilities like fountains, playgrounds, interpretive nodes, sidewalk cafes, gardens, and public art as described later in this chapter.

The Cultural Corridor Concept

The Rainnie Drive corridor sits at the historic edge of original town palisade protecting the early British garrison from the untamed nature of the Province (See Appendix A). This was the figurative and literal divide between the Colonial British fortifications and Mi'kma'ki, the land of the Mi'kmaw people. The corridor offers the opportunity to explore the many cultures that once divided Halifax, but have now created a rich tapestry of experiences that makes Halifax so unique. The idea of a cultural corridor could explore a timeline of the city from the new MNFC site all the way up to the present, expanding on the African Nova Scotia communities, the French, the Lebanese, and even the modern Ukrainian cultures of recent times. This idea could be a partnership between the MNFC, Parks Canada and HRM. Obviously this idea needs much more exploration as part of a thematic design exercise.

Citadel Hill Entry/Exit Consolidation

The existing main entrance to Citadel Hill remains somewhat confusing and hidden along Rainnie Drive and Ahern Avenue. This plan offers an opportunity to consolidate the entry/exit working with Parks Canada to create a clearer gateway into the Hill. This could include better wayfinding signage, better lighting, and more clearly articulated roads and sidewalks. The new Cogswell Street Boulevard will eliminate left turns into the hill from Cogswell Street and will direct traffic around the roundabout to access the new entry.



FIGURE 43. DOWNTOWN GATEWAY MASTER PLAN

LEGEND

PROPOSED BUILDINGS
 PATIO
 GREEN ROOF

4	SHARED EASEMENT - PARKING
5	DRIVEWAY/SHARED EASEMENT

- ⁶ PING PONG TABLES & PASSIVE PLAY ZONE
- 7 GATHERING & PERFORMANCE AREA
- 8 BLEACHER SEATING / RETAINING WALL
- 9 WATER FEATURE / CULTURAL ART ELEMENTS



- 10 PEDESTRIAN PROMENADE
- 11 BI-DIRECTIONAL BIKE LANE
- 12 PEDESTRIAN WALKWAY

13 BUS LAY-BY

- 14 MI'KMAW NATIVE FRIENDSHIP CENTRE
- 15 MULTI USE PATHWAY

16	PLANTING BED	 STUDY LIMIT
17	STONE RETAINING WALL	 PROPERTY LINE



FIGURE 44. CENTRAL PLAZA PRECEDENTS

Gateway Central Plaza

The site's central plaza serves as the site's main pedestrian entrance point from Cogswell Street, and a central gathering area for the future development's visitors and residents. Overall, the area acts as a central focal point for the site, preserving views from the Creighton corridor up to Citadel Hill. These views are currently blocked by the Centennial Pool. The adjacent buildings' podiums inform the area's boundaries, creating a destination point and unique identity from the surrounding neighbourhood.

The plaza rises about 7m from Cogswell Street to Rainnie Drive Plaza necessitating 2 sets of stairs and ramps. The first set occurs at Cogswell Street and rises a full storey (3.5m), and the second



set happens closer to Rainnie Drive rising another 3m. Below the plaza there could be 2-3 storeys of underground parking. Buildings A and B on the periphery would be active groundfloor retail uses. Building B will have active uses on the Rainnie Drive elevation but not on the central plaza due to the 1 storey grade change along the frontage at this location. The central axis envisions low podium vegetation, passive seating areas, and a water feature at the site's entry - drawing people in from neighbouring streets, offering the user the opportunity to move through the site at their leisure. The area could be used for a variety of events and would contain thematic public art.



FIGURE 45. CENTRAL PLAZA PAVING AND FURNISHINGS

Central Plaza - paving and furniture

The central area's paving replicates frequent pathways of pedestrian travel, represented by pavers with different colours or sizes. Building entrances and heavily trafficked areas will feature paving that honours the site's diverse cultural history.

Planted areas in the area's centre will be delineated by wooden benches. Possible choices include furniture incorporating parametric design, wooden inserts atop concrete planting edges, or benches that create the planting buffer's edge.





FIGURE 46. RAINNIE DRVIE PLAZA

Passive areas

Due to the development's proposed density, the future design aims to provide passive spaces alongside Rainnie Drive's sidewalks and bike lanes. Due to the lack of traffic on Rainnie Drive, this area will be considerably calmer and quieter than the site's northern edge; ideally suited for walking, sitting, biking, and recreation. The nearby pedestrian street and bike lanes envision large planting areas and tree-lined streets, which will further reduce noise levels and enhance privacy for people using this section of the site.

Here, residents can connect with their families, friends, and the surrounding parkland by taking advantage of passive rest and seating areas, recreational courts, and game tables. Businesses in





FIGURE 47. RAINNIE DRIVE PLAZA

Sidewalks, Multi-use path, and bike lanes

The development envisions connecting to the surrounding area using a mixture of pedestrian-only streets, bike lanes, and multi-use paths. To connect to the nearby federal and municipal parkland, the proposed design envisions the streets and cycle lanes bordered by vegetation and tree-lined streets. Rainnie Drive will be solely dedicated to cyclists and pedestrians. Where streets are bordered by roads accommodating cars, adequate paving and planter buffers should be implemented to provide a buffer while ensuring the comfort and safety of pedestrians and cyclists.



THE 6 DEVELOPMENT PARCELS

The master plan has identified 6 development parcels including Buildings A-F and the proposed MNFC Site which is part of the Blood Services site. It is important to note that the maximum development potential is not intended to presume any potential sale or lease of lands within the Downtown Gateway. Rather, it is provided to help inform future municipal land requirements, and first what services could be accommodated near one of the fastest growing downtowns in the country; and secondly, what other complementary land use could be accommodated.

Re-examining Building Height

Maximum building heights in the downtown are controlled by 4 factors: (1) the Rampart Heights, (2) Viewplane Heights and (3) Heights shown on the zoning maps, and (4) Shadow protocols (Schedule 51). The rampart heights and viewplanes above the gateway block are substantially higher than 23m in most places. The allowable heights to the east and north of the gateway block are also substantially higher. The Gateway block wraps around Citadel Hill as the western-most boundary of the Downtown Halifax (DH) zone. This 'peninsula' bridges the new Cogswell District and the Quinpool Corridor, bridged by the Halifax Commons. The Cogswell District is governed by the Rampart Heights and Viewplanes affording heights of between 50m and 90m. The Hampton Inn, the Homewood Suites and the Pearl buildings are all about 50m in height along Brunswick Street. The Quinpool Corridor to the west with a FAR of 8, allows buildings of similar heights (Willlowtree tower is planned as a 75m tower). The Staples site to the north will allow a 17 storey tower. At the western tip of the Gateway Block, the district rests between the cultural landscape of Citadel Hill and the established residential neighbourhood North End proposed as a heritage conservation district. Here, the heights should be a little more sensitive to the surrounding neighbourhoods but still slightly higher than 23m.

The consultants believe the 23m height cap may be slightly low for the western side of the site, and excessively low for the eastern side of the Gateway District. The Rampart and Viewplane restrictions seem to range from 12 storeys (36m) at Building C to 20-storeys (60m) at Building E (to be confirmed by a surveyor). The large scale of the developable parcels, the opportunity to hide significant underground parking in the foot of the hill, the proximity to transit, the

FIGURE 48. SCHEDULE 15 - MAXIMUM HEIGHT (M)



FIGURE 49. SCHEDULE 17 - MAXIMUM FLOOR AREA RATIONS



proximity of parks access in the Commons, and the bridging potential between two height districts (Cogswell and Quinpool) all provide ample reasons for increased height and density.

Based on the surrounding heights, the consultants believe the western portion of the district (Building E) could explore heights in the range of 36m without unduly impacting the surrounding heritage resources. We have reviewed the shade impacts of the proposed taller buildings on the shadow protocols in the Common and none of the proposed height changes will be governed by the shade impacts (Appendix 2 LUB). The Drum site sits within the 100m buffer of the shadow protocol area however, even increasing height to 27m (8 storeys) does not impact the shadows on the Commons. The Drum site is too constrained for a tower form so a Tall-Midrise (8 storeys) is all that is feasible on this site. The western half of the district (to the east side of the proposed Central Plaza) should explore heights in the range of 36-45m depending on Viewplane and Rampart restrictions. This height change would be in keeping with the surrounding building heights.



Built Form Standard Changes

The built form standards (Part V, Chapter 3 of the LUB) do not require substantial changes however we would recommend exploring the following changes:

- 1. Schedule 7, (Pedestrian Oriented Street) should add Commercial Streets designations for Cogswell, Rainnie and Gottingen to ensure groundfloor commercial activation.
- 2. A new view corridor Schedule should be added for the proposed Creighton view corridor shown in the plan.
- 3. Schedule 15 Max Building Height Precincts should be explored to the greater heights proposed in this plan.
- 4. MAP 4-MaximumBuildingHeightPrecincts in the SMPS should be updated according to the new proposed heights.
- 5. Schedule 19, Maximum Front Yard Setbacks should add 3.5m for Cogswell, Gottingen and Rainnie.

Easements

The proposed subdivision plan is presented in figure 50. This map shows 2 proposed easements. One is an access easement servicing Sites A, B and MNFC. A second easement is for the shared easement between Buildings D and C. Controlling the access to the block with shared easements reduces the amount of underground parking entries emptying onto Cogswell and Gottingen. This means safer exit/entry points and a reduction on vehicles travelling over sidewalks and/or bike lanes. Two easements are much better than 5 parking garage entries for 5 buildings. Also, in the case of Building B which will not have access from Rainnie Drive, an easement will be required to develop this parcel in the future.

The Central Plaza easement may or may not be required. HRM may want to retain this space as a public park, or they may want to ensure it is built and controlled by a private developer. The advantage of having it built by a developer is that the developer can build parking underneath it and it would be the developers expense instead of HRM's. In this case, HRM may want to retain a public easement over the Plaza to control what happens in the space. Or, it could be left as a fully private space with design guidelines developed by HRM as part of the purchase and sale agreement. HRM will have to decide the best way forward for ownership or the level of control desired over on this important open space. Develop NS has been dealing with these type of arrangements for 20 years so they may be able to provide some guidance on a strategy that works best for the municipality. We assume the Rainnie Drive public road right of way will remain public if converted to a linear plaza.

FIGURE 51. DEVELOPMENT PRO FORMA.

BUILDING			BUILDING B	;		BUILDING	;		BUILDING)		BUILDING			BUILDING F		
(m²)	Area	Parking	(m²)	Area	Parking	(m²)	Area	Parking	(m²)	Area	Parking	(m²)	Area	Parking	(m²)	Area	Parking
P. Level 2	-	4000	P. Level 2			P. Level 2		3500	P. Level 2		810	P. Level 2		5000	P. Level 2		5000
P. Level 1	-	4000	P. Level 1			P. Level 1		3500	P. Level 1		810	P. Level 1		5000	P. Level 1		5000
Floor 1	650	650	Floor 1	645	645	Floor 1	1180	1800	Floor 1	810		Floor 1	1765		Floor 1	1288	
Floor 2	450	650	Floor 2	645	645	Floor 2	3120		Floor 2	810		Floor 2	1700		Floor 2	1230	
Floor 3	2560		Floor 3	645	645	Floor 3	3200		Floor 3	810		Floor 3	1700		Floor 3	1230	
Floor 4	2560		Floor 4	1290		Floor 4	1975		Floor 4	340		Floor 4	1464		Floor 4	1230	
Floor 5	2560		Floor 5	990		Floor 5	1975		Floor 5	340		Floor 5	700		Floor 5	700	
Floor 6	2040		Floor 6	990		Floor 6	1975		Floor 6	340		Floor 6	700		Floor 6	700	
Floor 7	2040		Floor 7	990		Floor 7	1975		Floor 7	340		Floor 7	700		Floor 7	700	
Floor 8	2040		Floor 8	990		Floor 8	1975		Floor 8	340		Floor 8	700		Floor 8	700	
Floor 9	1660		Floor 9	990		Floor 9	670					Floor 9	700		Floor 9	700	
Floor 10	1280		Floor 10	990		Floor 10	670					Floor 10	700		Floor 10	700	
Floor 11	1280		Floor 11	990		Floor 11	670					Floor 11	700		Floor 11	700	
Floor 12	1280		Floor 12	990		Floor 12	670					Floor 12	700		Floor 12	700	
Floor 13	1280		Floor 13	990								Floor 13	700				
Floor 14	1280											Floor 14	700				
												Floor 15	700				
												Floor 16	700				
												Floor 17	700				
												Floor 18	700				
												Floor 19	700				
												Floor 20	700				
Total GFA	22,470	9,300	Total GFA	12,135	4,515	Total GFA	20,055	8,800	Total GFA	4,130	1,620	Total GFA	17,829	10,000	Total GFA	10,578	10,000

MNFC-SEP	2022*		MNFC - SEP	2022*-0	Cont.	SUMMARY OF TOTAL DEVELOPMENT						
(m²)	Area	Parking	(m²)	Area	Parking	(m²)	Area	Parking				
P. Level 3	-	3066	Floor 2	1276		Total GFA	94,509	50,746				
P. Level 2	1272	1800	Floor 3	864		Note Allowers in the o						
P. Level 1	1420	1645	Floor 4	530		Note: All areas in the proforma speak to the suggested development only. This proform						
Floor 1	1951		Total GFA	7,312	6,511	is what might be able to achieve if the height						
* All areas are	oubicato	, d to obonco k	Actual areas may very	based on t	he final							

design for each development

* All areas are subjected to change based on final design

SITE PRO FORMA'S

The Pro forma shown in Figure 51 assumes the height changes proposed in this report which will need further confirmation from HRM planners and a public/council engagement process as part of the Plan amendment and Zoning amendments. These pro forma's represent the maximum potential, and not what is currently permitted under regulations.

Building Site A

This site for Building A occupies the eastern portion of the Centennial Pool Site (PID 00002089) and is about 6589 m² in size. The site has about 100m of frontage along Cogswell Street and would preserve 12m along its western edge to be dedicated for the half the central plaza. The other half of the plaza would be reserved on Building C site to the west. The central plaza is 24m wide. The site is generally long along Cogswell street so the building would benefit from an mid-block underpass at the finished grade elevation to the parking area in the rear. The

massing model shows this underpass. The maximum estimated height on this property is 14 storeys (42m) but this needs to be confirmed by a surveyor.

- The Site A area is 6.589 m²
- The GFA for this site is 22,470 m² assuming 14-storeys. Most of this could be developed as residential with groundfloor commercial. There could be some offices as well.
- 9,300 m² are dedicated to underground parking spaces.
- Underground parking is 2.0 storeys below the building allowing for about 250 parking spaces
- This site has 27 outdoor parking spaces •

Site A underground parking would be accessible via the access easement to the south of the site. Alternately, it may be accessible directly from Gottingen Street.

Building Site B

This site for Building B occupies the western portion of the Blood Services Site (PID 00002063) and is about 2446 m² in size. The site has about 51m of frontage along Rainnie Drive and borders the central plaza. The other half of the plaza would be reserved on Building C site to the west. The central plaza is about 24m wide. The site will need to gain access via a easement to the north out to Gottingen Street since the intent of Rainnie Drive in this plan is that it will not be accessible to vehicles. We have assumed the Rainnie Drive right of way will still provide road frontage to meet the LUB requirements. The massing model shows about 9 storeys along Rainnie Drive and 11-storeys from the central back of house area serviced by the proposed easement.

- The Site B area is 2446 m²
- The GFA for this site is 12,135 m²
- 1,935 m² of the first, second and third floors are dedicated to underground parking spaces.
- In addition to this, 2 storeys of underground parking is below the building allowing about 85 parking spaces

Site B underground parking would be accessible via the easement to the north of this site. It would be beneficial from a development perspective to consider all groundfloor uses along Rainnie Drive for commercial use. The upper floors could be residential or office uses.

Building Site C

This site for Building C occupies the western portion of the Centennial Pool Site (PID 00002089) and is about 4750 m2 in size. The site has about 70m of frontage along Cogswell Street and borders the central plaza leaving 12m along its eastern boundary. The other half of the plaza would be reserved on the Building A site to the east. The central plaza is about 24m wide. The site will gain access via a shared easement with the Drum site to the west out to Cogswell Street. The massing model shows about 12 storeys along Cogswell Street.

- The Site C area is 4750 m²
- The total GFA for this site is 20,055 m²
- 1800 m² of the first floor is dedicated to underground parking spaces.
- In addition to this, 2 storeys of underground parking below the building allowing for about 230 parking spaces
- This site has 5 outdoor parking spaces

Site C underground parking would be accessible via the easement to the west side of this site. It would be beneficial from a development perspective to consider all groundfloor uses along Rainnie Drive for commercial use and at least 2 storeys of the lowrise portion on Rainnie Drive for office spaces.

Building Site D

This site for Building D occupies the Drum site (PID 00002071) and is about 1099 m² in size. The site is privately owned and is somewhat encumbered by its shape limiting underground parking. The site has about 40m of frontage along Cogswell Street and borders the shared easement of Site C along its eastern boundary. The massing model shows 8 storeys. The site is very encumbered for parking due to the narrow dimensions of the lot.

- The site D area is 1099 m²
- The GFA for this site is 4,130 m²
- Underground parking would benefit from a shared easement access with Site C and 2-storey of underground parking could provide about 50 spaces.

Site D underground parking would be accessible via the shared easement to the east side of this site.

Building Site MNFC

This site for Building MNFC occupies the eastern side of the Blood Services site (PID 00002063) and is about 3739 m2 in size. The maximum height on this site under the ramparts is about 45m though current planning for the building is limited by the existing 23m height precinct. The design of the building is ongoing and GFA as of Sep 2022 are shown in the pro forma. This building would benefit significantly from the access easement proposed north of the site. This access easement will be required for site D in any case, but allowing access by the MNFC would mean that the ground floor garage location could be moved to the north freeing up the street for public entry or some form of ground floor commercial use. This would improve the urban design and active streetscape nature of this project tremendously. The building would also benefit greatly from the regrading and 'pedestrianization' of Rainnie Drive. In this plan, the regrading of Rainnie allows for a much better relationship between the street and groundfloor access.

Building Site E

This site for Building E occupies the northern portion of the Halifax Regional Police Station (PID 00002055) site and is about 6,800 m² in size. The site has about 64m of frontage along Gottingen Street and shares a long linear parking lot along its eastern boundary with Building F. The massing model shows about 20 storeys along Gottingen Street. This is the tallest building with this development (to be confirmed by a surveyor).

Buildings E and F would include a shared parking podium of about 12,000 m2 providing about 350 cars per level

- The Site E/F area is ~ 6800 m²
- The total GFA for Building E is 17,829 m² @ 20-storeys

- Underground parking is 2-storeys below the building allowing for about 330 underground parking spaces
- This site has 35 outdoor parking spaces

Site E underground parking would be accessible via the outdoor parking lot from Cogswell street.

Building Site F

The site for Building F occupies the southern portion of the Halifax Regional Police Station (PID 00002055) and is about 6800 m2 in size. The site has about 54m of frontage along Gottingen Street and shares a long linear parking lot along its eastern boundary with Building E. The massing model shows about 12 storeys along Gottingen Street.

- The Site E/F area is ~6800 m²
- The total GFA for Building F is 10,578 m²
- Underground parking is 2-storeys below the building allowing for about 330 underground parking spaces for building E
- This site has 35 outdoor parking spaces

Site F underground parking would be accessible via the outdoor parking lot from Gottingen Street.

RECOMMENDATIONS & NEXT STEPS

There are a number of important next steps that will need to be considered to advance this plan to the next steps. These include:

- Determine the best course of action for all the HRM owned parcels identified in this study including maintaining existing facilities, assessing additional public needs, or making properties available for sale or long-term lease.
- 2. Initiate a more detailed comprehensive planning process for the lands and transportation network.
- 3. Incorporate the Cogswell Greenway as part of the future planning process for the study area.
- 4. Undertake a geotechnical study to better understand the depth of bedrock under the site or potential for Pyritic slates before taking any sites to market.
- Based on additional analysis and consultation, consider changes to the maximum height framework along with any necessary built form changes to support the overall objectives of the study area.
- Confirm the MNFC site area and continue to proceed with the land sale with the MNFS. In particular, confirm the proposed easement which provides shared access to building sites A, B and MNFC.
- 7. Explore the pros and cons of the proposed easements in this report. The access easement is needed to service building D and should be secured before selling Parcel A. The MNFS could own this easement if conditions for use are defined as part of the disposition.
- 8. HRM should discuss the pros and cons of the proposed Central Plaza easement. Either HRM retains ownership, or Sites A and C own it and allow its public use.
- 9. HRM should explore the access easement between site C and Site D. We believe this will significantly benefit Site D while slightly encumbering Site C.
- 10. Consider the potential acquisition of the former "Drum" site by HRM.
- 11. Update the Rainnie Drive Transportation study with the results of this study if needed.

- 12. Further explore the pros and cons of closing Rainnie Drive to vehicular traffic and if warranted undertake a more detailed design study for the Rainnie Drive Linear Plaza including Class C Cost Estimates.
- 13. Establish a municipal budget for the projects outlined in this report.
- 14. Work with Parks Canada to explore the Cultural Corridor concept further along the shared boundary of Rainnie Drive and Citadel Hill.
- 15. As part of the proposed realignment and narrowing of the Rainnie Drive / Gottingen Street intersection consider changes to the Police Station lands property boundary

CLASS D COST ESTIMATES

Class D estimates of probable cost were prepared for each of the projects highlighted in this chapter. The costs in this chapter were developed using 2022 material and construction costs and prices will naturally inflate over time and should be taken into account. We have assumed a 15% contingency, a 15% design and engineering budget for tender documents and CA services, and 15% for HST.

The estimates include all public space components and no site development costs for the individual building sites. We have provided a cost estimate for the Central Plaza space should HRM want to retain that space as a public park, but as we indicated, we believe it is in the HRM's best interest to let the future developers develop this important public space.
Halifax Downtown Gateway Plan Class D cost cstimate for landscape Client: HRM

ect	no	22	-0	6

lient:	HRM				Project no 2 Date: Jan 0	2-069 3, 2023	hom
Item 1	description Stractoona Coggrup list (Brungwick to roundeb	Units	ι	Jnit price	Quantity		Cost
1		out)					
1.1	& any overhead electric poles. (north side)	ea.	\$	5,500	15	\$	82,50
	Removal & reinstatement of affected						
12	underground services including catch basins,	еа	\$	7 000	18	\$	126.00
	manholes, water mains, fire hydrants, etc. (north			.,			
1.3	side) Base & regrading	m²	\$	45	6700	\$	301,5
1.4	Roadway asphalt	m²	\$	130	6200	\$	806,0
1.5	Bicycle lane asphalt (3.5m wide) + basecourse	m²	\$	160	1680	\$	268,8
1.0 1.7	Asphalt paint & crossing indicators Concrete curb (north side & island)	m	₽ \$	20 250	1000	Ф \$	33,0 150.0
1.8	Concrete sidewalk at intersections	m²	\$	180	400	\$	72,0
1.9	Traffic signage	ea.	\$	1,500	30	\$	45,0
1.10	Traffic Control	LS	\$	200,000	1	\$	200,0
1.11	Planting & sod	m²	\$ ¢	150	1400	\$ ¢	210,0
1.12	Trees including soil cells Benches	ea.	Ф \$	8,500 2,500	00 15	Ф \$	002,0 37.5
1.14	Pedestrian lighting (north side)	ea.	\$	8,500	16	\$	136.0
1.15	Tactile indicators	m²	\$	800	30	\$	24,0
	Subtotal					\$	3,044,8
2	Streetscape Gottigen st. (Cogswell to Rainnie)						
2.1	Removal of existing light standards & any	ea.	\$	5,500	8	\$	44,0
	Demoval & reinstatement of offected						
2 2	Removal & reinstatement of all ected	00	¢	7 000	10	¢	010
Z.Z	manholes, water mains, fire hydrants, etc.	ed.	φ	7,000	12	φ	04,0
23	Base & grading	m ²	\$	45	2160	\$	97.2
2.4	Roadway asphalt	m²	\$	130	2160	\$	280.8
2.5	Bicycle lane asphalt (3.5m wide) + basecourse	m²	\$	160	630	\$	100,8
2.6	Asphalt paint & crossing indicators	m	\$	20	380	\$	7,6
2.7	Concrete curb	m	\$	250	360	\$	90,0
2.8	1.5m Concrete sidewalk (west side)	m²	\$ ¢	130	290	\$	37,7
2.9	Traffic Control	ea. LS	ф \$	100 000	20	Ф \$	30,0 100.0
2.11	Planting & sod	m²	\$	150	650	\$	97,5
2.12	Trees including soil cells	ea.	\$	8,500	10	\$	85,0
2.13	Benches	ea.	\$	2,500	3	\$	7,5
2.14	Pedestrian lighting (west side)	ea.	\$	8,500	6	\$	51,0
2.15	Subtotal	m²	\$	800	3	\$ \$	2,4 1,115,5
•	Odered consider Deizette de						
3	Removal of existing light standards & any			50.000		4	50.0
3.1	overhead electric poles.	L.S.	\$	50,000	1	\$	50,0
	Removal & reinstatement of affected						
3.2	underground services including catch basins,	ea.	\$	7,000	18	\$	126,0
	manholes, water mains, fire hydrants, etc.						
3.3	Base & grading	m²	\$	45	6825	\$	307,1
3.4	Patio areas paving	m²	\$	250	720	\$	180,0
3.5	Custom designed paving in plazas & promenade	m²	\$	300	3800	\$	1,140,0
36	Bicycle lane asphalt (3 5m wide) + basecourse	m²	\$	160	1050	\$	168.0
3.7	Asphalt paint	m	\$	20	380	\$	7,6
3.8	Retaining wall	m	\$	5,000	30	\$	150,0
3.9	Outdoor theatre	m²	\$	8,000	95	\$	760,0
3.10	Planting	m²	\$	70	865	\$	60,5
3.11 3.12	Lawn Trees in planted areas	m ⁴	¢ ¢	6U 600	2070 00	⊅ \$	124,2 5/ 0
3.13	Pedestrian lighting	ea.	ф \$	8.500	12	\$	104,0 102 0
3.14	Benches	ea.	\$	2,500	30	\$	75,0
3.15	Waste recepticles	ea.	\$	2,500	8	\$	20,0
3.16	Ping Pong tables	ea.	\$	15,000	3	\$	45,0
3.17	Bike racks	ea.	\$ ¢	2,000	15 1	\$ ¢	30,0
3.10 3.10	Wavfinding	18	Ф \$	200,000 60 000	⊥ 1	ф \$	25U,U 60 ∩
	rear indiag	L.U.	Ψ	00,000	1	٣	00,0

4.1 4.2 4.3	Base & grading	m²	\$	25	1935	¢	40.055
4.2 4.3	Plaza poving				T)00	φ	48,375
4.3	FIdZd Udvillu	m²	\$	250	1075	\$	268.750
	Steps including handrail	m²	\$	150	85	\$	12.750
4.4	Ramps including handrail	m²	\$	150	195	\$	29,250
4.5	Cultural art element	L.S.	\$	50.000	1	\$	50.000
4.6	Planting	m²	\$	70	585	\$	40.950
4.7	Trees in planted areas	ea.	\$	600	25	\$	15.000
48	Light standards	ea	\$	3 000	9	\$	27,000
49	Benches	ea.	\$	2,500	20	\$	50,000
410	Bikeracks	ea.	\$	2,000	10	\$	20,000
4 1 1	Wasterconticles	-00. -02	\$	18,000	1	\$	18,000
1.11	Subtotal	00.	P	10,000	1	\$	580.075
						•	000,070
Б	Block A						
	Demolition & safe disposal of existing site						
5.1	features including buildings, driveways, parking	L.S.	\$1	,000,000	1	\$	1,000,000
	etc.						
5.2	Site Stabilization and Environmental Control	m²	\$	30	3090	\$	92,700
5.3	Easement Paving	m²	\$	180	640	\$	115,200
	Subtotal					\$	1,207,900
6	Block B						
6.1	NA	L.S.	\$		0	\$	-
	Subtotal					\$	-
	DL LO						
7	BIOCK C	2	\$		0	\$	
7.1	NA	m	\$	-	U	\$	-
	Subtotal					Þ	-
8	Block D						
81	NA	m ²	\$		Ω	\$	-
0.1	Subtotal		۴		0	\$	
						F	
9	Block E+F						
9.1	NA	m²	\$	-	0	\$	-
	Subtotal					\$	-
10	Block MNFC						
	_						
10.1	Donate property	L.S.	\$	1	1	\$	1
	0.44-4-1					4	4
	Subtotal					Þ	T
	Construction Total					\$	9,657,751
	Const Contingency (20%)					\$	1 931 550
	Design Engineering & CA Services (15%)					\$	1 448 663
	Gentechnical services					\$	2 000
	Survey (Topographic underground services and ex	isting feet	turee			\$	10,000
	HST (15%)	io ang i ou	cai 03)			\$	1 448 663
	Grand total					\$	14,498,627
10.1	Subtotal Construction Total Const. Contingency (20%) Data Contingency (20%)	L.O.	φ	1	Ţ	φ \$	9,657,751 1,931,550















FIGURE 55. 3D MASSING MODEL LOOKING AT THE CULTURAL CORRIDOR



FIGURE 56. CENTRAL PLAZA MASSING

Attachment C:

Downtown Gateway Study Recommendations

The study recommends a number of important next steps to advance the conceptual master plan. These study recommendations are list below.

- 1. Determine the best course of action for all the HRM owned parcels identified in this study including maintaining existing facilities, assessing additional public needs, or making properties available for sale or long-term lease.
- 2. Initiate a more detailed comprehensive planning process for the lands and transportation network.
- 3. Incorporate the Cogswell Greenway as part of the future planning process for the study area.
- 4. Undertake a geotechnical study to better understand the depth of bedrock under the site or potential for Pyritic slates before taking any sites to market.
- 5. Based on additional analysis and consultation, consider changes to the maximum height framework along with any necessary built form changes to support the overall objectives of the study area.
- 6. Continue to finalize the approved land sale with the MNFS. In particular, the access easement from the originating sale which provides shared access to building Sites A, B and MNFC (see Figure 1 of the staff report).
- 7. Explore the pros and cons of the proposed easements in this report. The access easement is needed to service building D and should be secured before selling Parcel A. The MNFS could own this easement if conditions for use are defined as part of the disposition.
- 8. HRM should discuss the pros and cons of the proposed Central Plaza easement. Either HRM retains ownership, or Sites A and C own it and allow its public use.
- 9. HRM should establish the access easement between Site C and Site D. We believe this will significantly benefit Site D while slightly encumbering Site C.
- 10. Consider the potential acquisition of the former "Drum" site by HRM.
- 11. Update the Rainnie Drive Transportation study with the results of this study if needed.
- 12. Further explore the pros and cons of closing Rainnie Drive to vehicular traffic and if warranted undertake a more detailed design study for the Rainnie Drive Linear Plaza including Class C Cost Estimates.
- 13. Establish a municipal budget for the projects outlined in this report.
- 14. Work with Parks Canada to explore the Cultural Corridor concept further along the shared boundary of Rainnie Drive and Citadel Hill.
- 15. As part of the proposed realignment and narrowing of the Rainnie Drive / Gottingen Street intersection consider changes to the Police Station lands property boundary.