



**AREA B**

# **Development Scheme 2015**





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## 1.0 INTRODUCTION

This Development Scheme is a Neighbourhood Plan which was approved by the City of Iqaluit Council. Through this plan, the City of Iqaluit will increase the supply of serviceable land and opportunities for growth. The Development Scheme is rooted in a community vision based on the long-term directions established in the City of Iqaluit General Plan, the Iqaluit Sustainable Community Plan and the direction provided to the City by Iqalummiut throughout the consultation process. The purpose of a Development Scheme is to guide land uses for the neighbourhood and establish policies to ensure appropriate development. Anticipated build-out of this neighbourhood spans over a 10-year horizon once Phase 1 lots are disposed.

### **Vision Statement**

*Iqaluit's next neighbourhood has a positive neighbourhood identity and is an integral part of our community. The neighbourhood design is inclusive - it supports a range of land uses and housing options. The neighbourhood supports the health and well-being of residents by providing spaces for traditional, cultural and recreational activities and by maintaining access to the land.*

The requirements for Development Schemes are outlined in the *Nunavut Planning Act* and in Policy 1 of Section 8.4 of the 2010 General Plan. The subject lands are identified as “Future Development Area B” in the 2010 Iqaluit General Plan (By-law 703).

### **Planning Context**

Iqaluit is experiencing rapid demographic growth and an acute housing shortage. There is a high demand for public housing, a low vacancy rate for apartments and a strong demand for vacant low density lots, as demonstrated at the time of lot disposal. Iqalummiut households are diverse in size, income and demographic composition.

Construction costs are high and servicing new neighbourhoods is becoming increasingly costly. Access to the private housing market is increasingly becoming out of reach for many Iqalummiut.

Land development is constrained by a challenging terrain. There is limited land suitable for development in Iqaluit. The land selected for Iqaluit's next neighbourhood is located along Road To Nowhere, directly east of the Lake Subdivision, north of Niaqunngusiariaq Road, Toonik Pond and AWG Arena, and west of the Niaqunnguk River. The greater area provides recreational opportunities to Iqalummiut, including snowmobiling, skiing and skating in the winter and spring months and swimming in Niaqunnguk River in the summer.

The neighbourhood is designed to respond to the natural landscape. The area selected for the neighbourhood is shaped like a bowl, and features significant drainage and snowdrifting. The

neighbourhood's design retains the majority of existing drainage corridors and ensures that development is not proposed in areas where snowdrifting cannot be mitigated. Roads are designed in response to the design of piped services, which require positive drainage to function. The main north-south road is proposed at an angle to ensure that roads are not too steep.

### **The Development Scheme Highlights**

The Development Scheme represents an important part of Iqaluit's growth for the next ten years. With the ten-year housing need for Iqaluit recently estimated at 1,050 to 1,270 units, the 490 units estimated for this new neighbourhood represent approximately 42% of the required supply. The new neighbourhood also reserves land for commercial and institutional uses, exceeding the estimated ten-year requirement of 1.8 hectares.

The new neighbourhood is proposed to contain a mix of uses and residential densities. Housing types will range from low-density to high-density, in a variety of forms and lot sizes. This range of housing options is offered to reflect Iqaluit's diversity, allowing opportunities for different types of households to establish in the new neighbourhood. Approximately 12 waterfront lots are proposed, which will contain single-detached dwellings on large lots. Approximately 71 additional low-density units will be located throughout the neighbourhood. Medium-density housing units such as townhouses and triplexes will also be dispersed throughout the area, totalling approximately 259 units. A portion of the lands north of Road To Nowhere will be reserved for high-density housing types such as apartments and stacked row dwellings, with approximately 148 units.

Additionally, a new school site is proposed at the north of the new neighbourhood, on the south side of Road To Nowhere. Two areas will also be reserved for commercial development to the east of the school and near Toonik Pond. These will provide business and shopping opportunities for residents.

The current uses of the land were considered through the preparation of the neighbourhood design. Through its Land Use Concept Plan, the Development Scheme provides new gathering places and walking trails for the community and supports the enjoyment of existing green spaces, outdoor activities, and snowmobile trails. The new neighbourhood will include two municipal playgrounds, along with recreational spaces at the school site.

The Land Use Concept Plan is attached as **Schedule A** and describes land uses, environmental protection areas, open space areas, watercourse setbacks, road and trail networks, and phasing of development. The Servicing Concept Plan (**Schedule B**) illustrates the location of the water and sewer servicing infrastructure and distribution network. A Phasing Plan is included as **Schedule C**, which illustrates the general timeline for development. A Transportation Plan, including roads, Walking Trails, and Snowmobile Trails, is included as **Schedule D**.



## 2.0 OVERVIEW OF PLANNING PROCESS

The key steps undertaken in the planning process are outlined below:

Community Engagement #1 – Selecting a New Development Area	June 18-19, 2013
Development Area Selection Report	August, 2013
Council motion to select Development Area	September 10, 2013
Community Engagement #2 – Issues, Concerns, Needs, Past Practices, & Design Principles	October 8-11, 2013
Community Engagement #3 – Alternative Concept Plans	November 25-27, 2013
Community Engagement #4 – Draft Development Scheme (Council Workshop, Open House and consultation at Northmart)	June 2014
Development Scheme to City of Iqaluit Council	April 2015

Community members participated in a consultation session to share ideas about the features and design of the new neighbourhood. Many of the suggestions were drawn from the successes and challenges experienced in Iqaluit's most recently developed neighbourhood, the Plateau Subdivision.

There have been four Community Engagement events, with approximately 20-40 members of the community in attendance at each session. The October and November 2013 sessions included Roundtable sessions with community stakeholders, each with approximately 10-15 invitees. Additionally, in June 2014, City Staff consulted with approximately 200 Iqalumiut at Northmart and held an Open House the same month. Council workshops were held throughout the process. The design of the neighbourhood incorporates many of the suggestions heard at these public events, which highlighted a desire for sustainable growth that expands housing options and retains existing qualities of the land. In addition, the City consulted with agencies on an as-needed basis.

The new neighbourhood incorporates several lessons learned and suggestions, including:

- The existing **Snowmobile Trail network**, connecting Iqaluit to Pangnirtung and Tarr Inlet shall be retained;
- Some **large lots** will be included along the waterfront to increase the diversity of housing options and preserve visual sightlines to the waterbody;
- **Commercial / mixed-use** development will be included in the neighbourhood design;
- Land will be reserved for a new **school**;
- **Larger playground spaces** will be provided to allow for a wider range of recreational activities and increase the amount of open space in the neighbourhood;

- An **0.8-metre gap** will be required beneath houses to prevent snow drifting (exceptions may be granted in certain cases);
- **Solar orientation** will be encouraged to promote passive heating and light from the sun, where feasible;
- Separated **pedestrian walkways** will be included on some streets to improve connections and encourage walking;
- **Roads will be paved** to improve travel conditions and reduce damage to vehicles; and
- Some streets will accommodate **on-street parking** to provide visitor parking in the neighbourhood.

This Development Scheme is the first step in the development process for the new neighbourhood. After receiving Council approval, detailed engineering designs can begin, with lot disposal anticipated for 2016 or 2017. The City will also carry out consultations with community members to name the new neighbourhood and its streets in the future. Once the new neighbourhood name is found, this Plan shall be updated through a resolution from Council.

### **3.0 SUSTAINABLE COMMUNITY PLAN (2014)**

In January 2014, Iqaluit City Council adopted the Iqaluit Sustainable Community Plan. The plan is an umbrella document for the City of Iqaluit, and is intended to guide City activities and plans. The Sustainable Community Plan contains many actions to move the community towards a better long-term future by reinforcing the three central relationships: relationship to the environment, relationship to social and family wellbeing, and relationship to a productive society. The Action Plan (Part 2) specifies that the City of Iqaluit will use the Plan to “guide decision-making and to incorporate sustainability in the work of the municipality.”

There are links to **7 Municipal Goals** in the Sustainable Community Plan that are addressed by implementing Municipal Actions in this Development Scheme.

The Development Scheme actively responds to these Municipal Goals:

- Enhance energy guidelines for future development
- Increase available housing
- Promote affordable home ownership

The Development Scheme addresses aspects of these Municipal Goals:

- A beautiful community

- Improve outdoor safety
- Ensure the community is physically accessible to everyone
- Positive neighbourhood identity

The Development Scheme is a Neighbourhood Plan. The design aspires to support both the community's traditional, cultural and recreational requirements and its needs for more serviced land to support demographic growth. The Scheme intentionally contributes to the community's long-term vision to create a new neighbourhood in Iqaluit that is safe, caring, connected, and respectful of our land, each other and ourselves.

## 4.0 LAND USE POLICIES AND DESIGN PRINCIPLES

The following policies will apply to the lands identified on the Land Use Concept Plan in **Schedule A**. Land uses identified on the Land Use Concept Plan are conceptual and may be changed without an amendment to this Plan, provided the proposed use is consistent with the land use designation on Figure B of the General Plan. Changes in land use may require an amendment to the Zoning By-law.

**Table 1: Distribution of Land Uses**

መልክ ልማት <b>LAND USE</b>	ጠፍ (ha) (ፋንታሚያ ጠፍ) <b>AREA (ha)</b> (leasable land)	ከጠፍ ጠፍ ፊርማ <b>% OF TOTAL AREA</b>	ፊርማ (ፊርማ / ha) (ፊርማ ፊርማ ፊርማ) <b>DENSITY</b> (units/ha) (from Plateau Subdivision)	ፊርማ ፊርማ <b>UNITS</b>
ፊርማ Low Density	3.67	28%	22 units / HA	83
ፊርማ / ፊርማ ፊርማ Waterfront Low Density	0.82	7%	15 units / HA	12
ፊርማ General Low Density	2.85	21%	25 units / HA	71
ፊርማ Medium Density	5.19	40%	50 units / HA	259
ፊርማ High Density	1.69	13%	90 units / HA	148
ፊርማ Potential Expansion	1.30		90 units / HA	119
ፊርማ Institutional	1.87	14%		
ፊርማ Commercial	0.69	5%		
ፊርማ ፊርማ ፊርማ ALL RESIDENTIAL LAND USES	10.55	80%	46 units / HA	490
ፊርማ ፊርማ ALL LAND USES	13.11	100%	37 units / HA	490



The distribution of land uses is summarized in Table 1. Table 1 illustrates that a total of 80% of the land is dedicated for residential development and 20% is for non-residential or mixed-use development. Table 1 does not include playgrounds, and additionally excludes water pumping and sewage lift stations.

## 4.1 Land Use Policies

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### 4.1.1 Open Space, Parks & Picnic Area



The *Open Space* designation protects land from development and forms a greenspace network that connects to adjacent neighbourhoods. These spaces create environmental value by including setbacks from waterbodies, and by accommodating drainage courses and snowdrift zones. These spaces also provide recreational opportunities, including space for formal Snowmobile Trails and Walking Trails. These trails are shown conceptually on Schedule A, including protection of major Snowmobile Trails leading to Pangnirtung and Tarr Inlet.

The Land Use Concept Plan includes two municipal playgrounds and a recreational play area on the proposed school site:

- A large playground approximately 1,300 m<sup>2</sup> in size will be centrally located in the middle of the neighbourhood. This space could include play structures and a hard surface for either basketball and/or ball hockey. Cultural representations in playground design will be considered.
- A second playground at the south end will be located next to Toonik Pond and connected to Walking Trails.
- A recreational area, located at the school site, will complement the two municipal playgrounds. Similar to other school sites in Iqaluit, it is anticipated that the school site will include play structures.

A picnic area with associated parking is proposed on the east side of Toonik Pond at the south end of the new neighbourhood. The picnic area is located near existing development and facilities to ensure accessibility for Elders and people with disabilities. The parking could be used for those wanting to picnic or swim, or to use the playground proposed beside the pond. An additional parking lot is proposed along Road to Nowhere, providing access to the Walking Trail along Niaqunnguk River. The Open Area Zone (OR) is proposed for these lands.

#### 4.1.2 Institutional

The *Institutional* designation is reserved for buildings that provide a community service. The range of uses will include educational, recreational, servicing infrastructure, government services, daycare, place of worship, arts studio and greenhouses. *Institutional* lots are located on relatively large and flat sites, close to primary roads or intersections, and with good visibility from the surrounding neighbourhood pursuant to Section 8.6 of the General Plan.

A school is anticipated for the large lot along the Road To Nowhere with additional land for another use. A second lot is located at the south end of the neighbourhood, which will enjoy a prime location next to Toonik Pond and a playground. Two small lots are dedicated for a new water booster and reheat station and sewage lift station which are needed to provide piped services to the new neighbourhood. The *Public / Institutional Zone (P)* is proposed for lands under this designation. An exception will be placed on this zone to prohibit uses that do not meet the intent of the designation (e.g. government offices).



The City will explore the potential for the provision of a ski chalet or cabin in the neighbourhood to support this recreational activity. The location of this facility will be determined through additional consultation. An amendment to this Plan will not be required to allow this facility.

#### 4.1.3 Commercial



The *Commercial* designation is intended for commercial activities. Residential uses that are located above the ground floor of a building may also be permitted in this designation. There are two areas identified for commercial development, one area along the Road To Nowhere and the other east of Toonik Pond. A *Neighbourhood Business Exception Zone (B3[x])* is proposed for lands under this designation. The Exception Zone would provide for additional permitted uses that are considered compatible with the neighbourhood such as a retail store, educational facility, and business services and conditional uses such as a greenhouse. The Exception Zone may restrict the floor area of certain uses.

#### 4.1.4 Residential – Low Density

The *Residential – Low Density* designation permits low-density residential uses such as single-detached, semi-detached, and duplex dwellings. These lands are distributed throughout the development area to allow a small supply in each phase of development. The *Low Density Residential Zone – Full Services (R1)* is proposed for lands under this designation.



#### 4.1.5 Residential – Waterfront



The *Residential – Waterfront* designation is intended for single-detached dwellings on relatively large lots that are strategically located to allow more visibility from the surrounding area to the waterbody. Buildings will be restricted to two storeys in height. A *Low Density Residential Zone – Full Services, Special Exception Zone 2 (R1[x])* is proposed for lands under this designation. The Special Exception Zone will restrict uses to single-detached dwellings and regulate minimum lot areas, lot frontages, and side yard setbacks to ensure that the intent of the designation is achieved.

#### 4.1.6 Residential – Medium Density

The *Residential – Medium Density* designation permits ground-oriented multi-family housing forms such as fourplexes, sixplexes, row dwellings, and stacked row dwellings, but does not include apartment type units. The *Medium Density Residential Zone (R2)* is proposed for lands under this designation. The easternmost block of the land within this designation is associated with a “Potential Expansion” area. These lands are considered marginal for development due to rock outcrops which may create cost, road slope and servicing constraints. As part of the criteria for lot disposal, applicants will be required to assess the feasibility of expanding the lot into the “Potential Expansion” area. In this case, the land may also be considered a *Medium Density Cluster*.



#### 4.1.7 Residential – Medium Density Cluster



The *Residential – Medium Density Cluster* designation is intended for clustered development of medium-density ground-oriented building forms such as fourplexes, sixplexes, row dwellings, and stacked row dwellings. These Clusters are located in areas where the depth of the lot and access to the lot make this the most efficient form of development. The *Residential Cluster Zone (RC)* is proposed for lands under this designation.



#### 4.1.8 Residential – High Density

The *Residential – High Density* designation permits apartment dwellings, but may also include medium density forms of development such as sixplexes, eightplexes, row dwellings and stacked row dwellings. The *High Density Residential Zone (R3)* is proposed for lands under this designation. The block of land within this designation at the northwest of the development area is associated with a “Potential Expansion” area. These lands are considered marginal for development due to rock outcrops which may create cost, road slope and servicing constraints. As part of the criteria for lot disposal, applicants will be required to assess the feasibility of expanding the lot into the “Potential Expansion” area.



#### 4.2 Land Use Design Principles

The Design Principles used to guide the preparation of Land Use Concept Plan were drawn from previous planning initiatives (primarily the Sustainable Community Plan and General Plan), lessons learned from development of the Plateau Subdivision, an analysis of development constraints and environmental risks, and through the ideas, concerns and aspirations expressed by Iqalummiut, City Council, City Staff, organizations and businesses.

Table 2 evaluates the performance of the Land Use Concept Plan against each Design Principle.

**Table 2: Performance of Land Use Concept Plan with Design Principles**

Design Principle		Land Use Concept Plan
<b>Safety</b>		
<b>1</b>	Ensure appropriate setbacks from environmental risks: a. Snowdrift areas where snowfencing would not be effective. b. Major drainage courses.	<ul style="list-style-type: none"> <li>› Development was not proposed in areas where the snowdrifting risk could not be mitigated by a future snowfence.</li> <li>› A 20-metre easement is provided for the major east-west drainage course through the central part of the development area.</li> </ul>
<b>2</b>	Provide a minimum of two access roads to new neighbourhood to ensure access for emergency services	<ul style="list-style-type: none"> <li>› Two access points to the development area are provided, linking Niaqunngusiariaq Road and Road To Nowhere.</li> </ul>
<b>Environment</b>		
<b>3</b>	Protect waterbodies with a 30-metre open space setback to maintain community access, maintain setbacks from homes, and protect water quality.	<ul style="list-style-type: none"> <li>› A 30-metre setback is provided from water bodies.</li> </ul>
<b>4</b>	Design to respond to wind and snow conditions.	<ul style="list-style-type: none"> <li>› A Wind and Snow Assessment identified areas of</li> </ul>

	Design Principle	Land Use Concept Plan
		anticipated heavy snowdrifting that cannot be mitigated by snowfencing – these areas are excluded from the development area.
5	Create lots that help achieve orientation to the sun.	<ul style="list-style-type: none"> <li>› Due to the terrain, the design of the road network was driven primarily by the slope of the land and servicing constraints, not the solar orientation. Some lots are oriented to the south, although others are not.</li> <li>› The use of Clusters will provide more flexibility to achieve solar orientation where appropriate and feasible.</li> </ul>
6	Design to respond to natural drainage.	› The neighbourhood design responds to the topography of the area's overall "bowl" shape. Drainage easements are included to accommodate the natural drainage from north of the Lake Subdivision. A 20-metre easement is provided for the major east-west drainage course, with at least 6 other breaks in the design to allow for proper drainage.
7	Protect the quality of water running into Niaqunnguk River.	› The setbacks from waterbodies will help protect water quality in Niaqunnguk River.
<b>Community Design</b>		
8	Target the accommodation of approximately <b>420 new homes</b> which represents the projected 10-year need for new residential development in the City after accounting for vacant lots, Core Area redevelopment, and Inuit-Owned Lands development.	› Development potential is estimated at <b>approximately 490 units</b> .
9	Target a minimum average residential density of <b>40 units/ha</b> .	› The average residential density is estimated at <b>46 units/ha</b> .
10	Provide a choice of dwelling types to reflect diversity of needs and affordability.	› The neighbourhood will have a mix of housing types, including single-detached, row dwellings, and apartment units.
11	Provide land for community uses, commercial uses, and open spaces that are well-connected to the residential uses.	› <b>20%</b> of developable lot area is reserved for non-residential uses, commercial, an area for a new school, and an <i>Institutional</i> area in the southern part of the neighbourhood.
12	Reserve the following development sites (ie. school site and recreation site) for community uses: <ul style="list-style-type: none"> <li>a. Large and relatively flat sites</li> <li>b. Central locations</li> <li>c. Good views.</li> </ul>	<ul style="list-style-type: none"> <li>› An appropriate site (large, flat, central, elevated) is reserved for a school.</li> <li>› An additional <i>Institutional</i> area is located at the south end of the development area, adjacent to an open space and nearby the existing institutional node Niaqunngusariaq Road.</li> </ul>
13	Target a range of housing densities in each Phase of development.	› Phasing allows flexibility and includes low- and medium-density development lots in each phase. High-density development is planned in Phase 1 and "Future Phasing." The lands designated high-density in "Future Phasing" along Road To Nowhere can be brought online at any time to respond to demand.
14	Achieve a good transition between low, medium and high density residential uses.	› High-density housing is located along the Road To Nowhere, while low-density housing is generally located at the southern portion of the development area. In all cases, high-density housing backs onto <i>Open Space</i> .

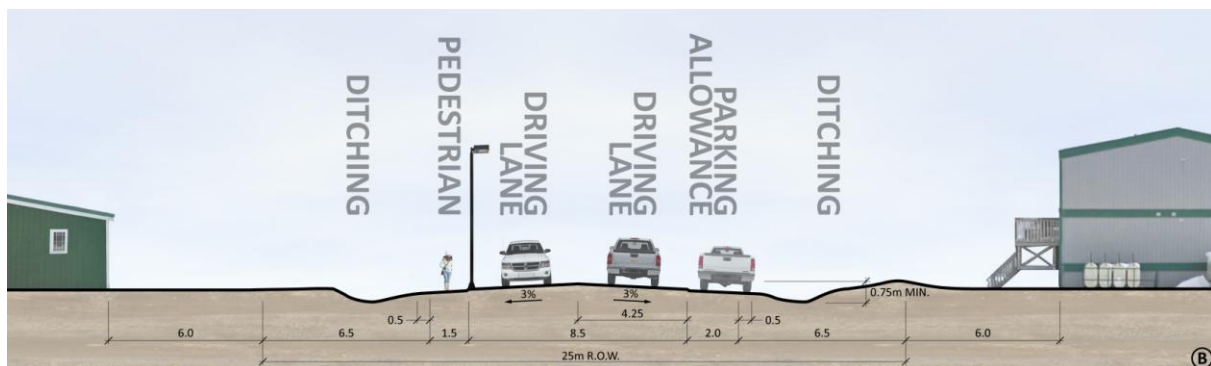
	Design Principle	Land Use Concept Plan
		› Medium-density housing is distributed consistently throughout the development area.
15	Consider the snowdrifting impacts of high-density lots on downwind lots.	› High-density lots are located north of Road To Nowhere and at a high elevation which will serve to mitigate snowdrifting impacts.
16	Lots closest to the waterbody should be reserved for residential and recreational uses.	› Lots near the waterbody are reserved for large-lot residential uses and community uses. › The large central playground, Walking Trails and picnic area are located around the waterbody.
17	Front 30% of lots should not have a slope exceeding 10%.	› Lots are configured to meet this principle.
<b>Neighbourhood Identity</b>		
18	Create focal points (eg. gathering place, community use, landmark) for the new neighbourhood.	› The prominent school site, commercial uses, playgrounds, and community use next to Toonik Pond will create focal points in the neighbourhood. Cultural representations in playground design will be considered.
19	Provide recreational opportunities for residents, such as a playground, outdoor rink, or court.	› 2 playgrounds (centrally located playground and Toonik Pond playground), Walking Trails, picnic area around Toonik Pond, and a recreational area associated with the school site are proposed to provide recreational opportunities.

## 5.0 DEVELOPMENT POLICIES

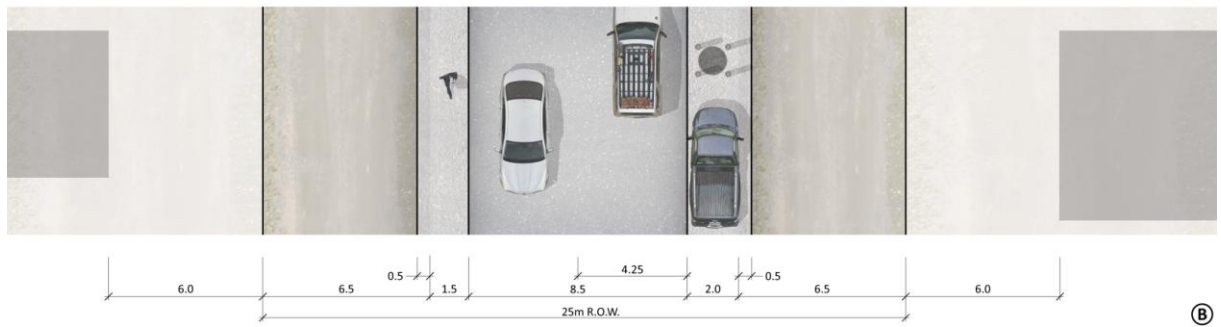
### 5.1 Transportation Policies

#### 5.1.1 Roads

Roads will be classified in accordance with the road classification policies in the General Plan. The Road To Nowhere is currently designated as a Collector Road on Figure D of the General Plan and terminates at the approximate location where the north-south road intersects with the Road To Nowhere. This Development Scheme extends the Collector Road designation for Road To Nowhere to the eastern edge of the community. The Collector Road cross-sections are illustrated in Figures 1 and 2.

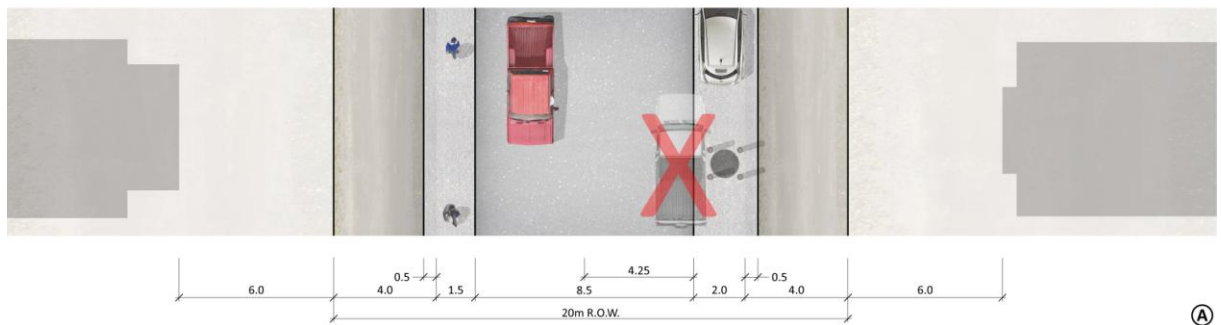
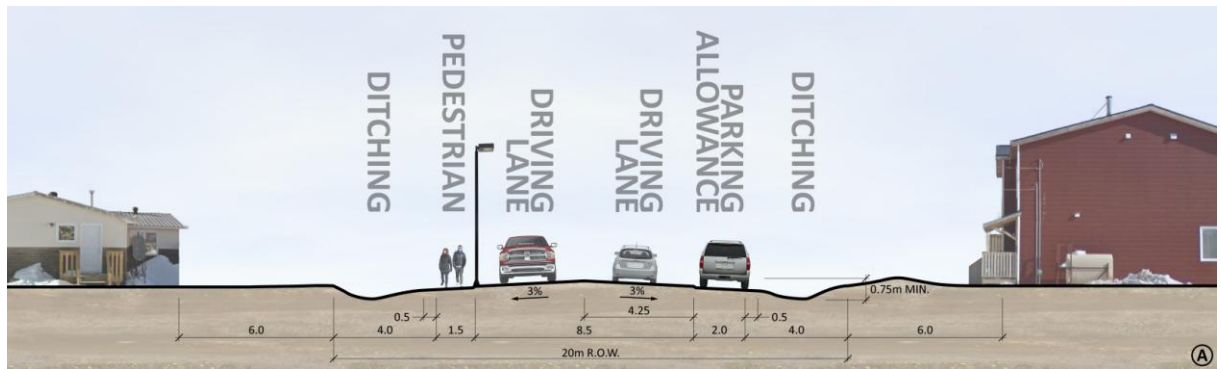






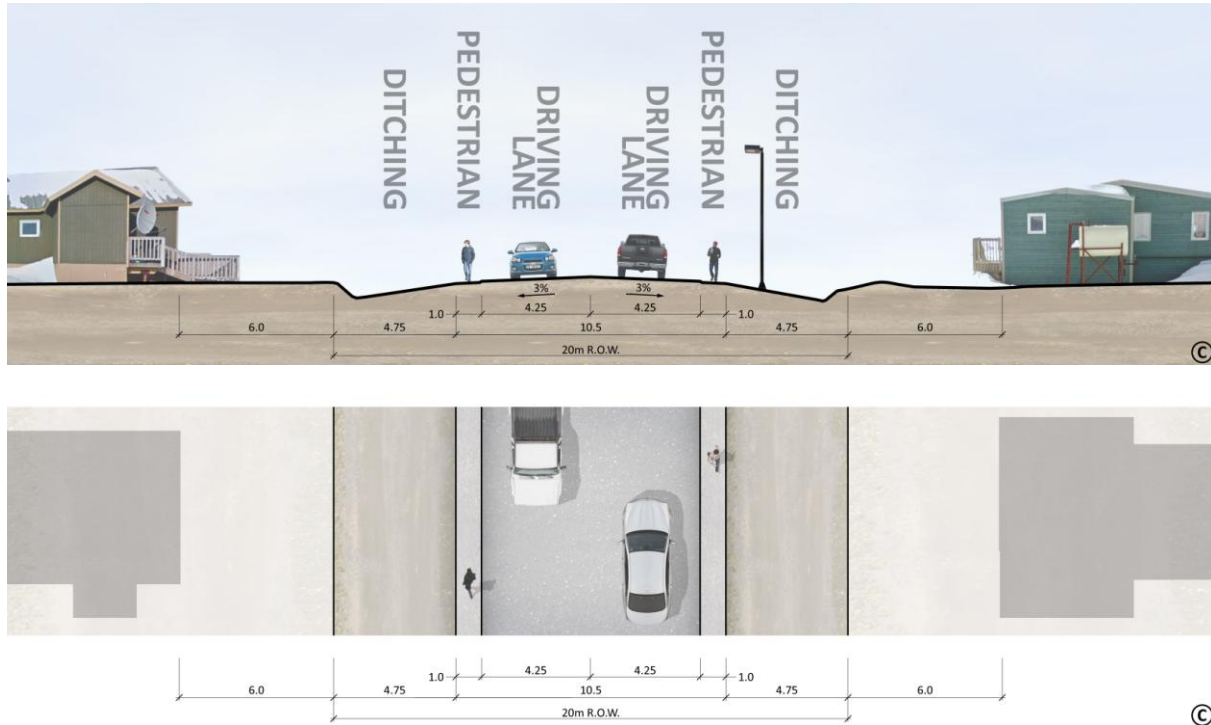
**Figures 1 & 2: Cross-sections for Road To Nowhere (Collector Road)**

For the main north-south connector road through the neighbourhood, the proposed road cross-section is illustrated below. The road includes a 20-metre-wide cross-section and accommodates parallel on-street parking on the side of the road with the utilidor, and a pedestrian walkway on the other side. Parking is permitted behind or in front of the utilidor, but not beside (represented with an “X” in the cross-sections). The cross-section allows sufficient space for travelling vehicles, parked vehicles, pedestrians, drainage, and utilities to coexist safely. The pedestrian walkways will be reserved for the exclusive use of pedestrians, as established in Policy 3(c) in Section 6.2 of the General Plan. These walkways will link the institutional node along Niaqunngusariaq Road to the south with the school and high-density residential uses along the Road To Nowhere in the north. Cross-sections for the north-south road are illustrated in Figures 3 and 4.



**Figures 3 & 4: Cross-sections for north-south road**

Remaining Local Roads will be designed to a minimum 20-metre road allowance and will not accommodate an increased gravel bed width for on-street parking or a separated pedestrian walkway. Minimum 1-metre-wide shoulders will be provided on each side of the vehicle lanes.



**Figures 5 & 6: Cross-sections for Local Roads**

Roads will be paved in order to eliminate the raising of dust and reduce road maintenance costs for the City. The detailed design process for roads will include consultation with the Nunavut Disabilities Society and the City of Iqaluit Accessibility Committee. Road paving will be included in the development costs.

### 5.1.2 Walking Trails



Proposed Walking Trails are shown on the Land Use Concept Plan. These trails are distinct from Snowmobile Trails, and measures will be introduced to discourage snowmobile use and minimize conflicts (eg. posts, trail markers, boulders).

A Walking Trail is proposed to link the school site with the main north-south road. This Trail will be developed in consultation with the Iqaluit District Education Authority regarding the location and design of the Trail. A recreational Walking Trail is also proposed around the waterbody and to link Road To Nowhere to Niaqunnguk River. A

crossing bridge may be considered to complete the loop at the eastern end of the waterbody, which must be designed to avoid conflict with the Snowmobile Trail. The Trail is also proposed to extend to the popular swimming spot on the Niaqunnguk River.

A Walking Trail is also proposed around Toonik Pond, connecting to the proposed Picnic Area and providing off-road access to the proposed playground and the existing residential area to the west. This Trail will also function as a pedestrian short-cut between the neighbourhood and the Core Area.

### 5.1.3 Snowmobile Trails

The Snowmobile Trail links are shown on the Land Use Concept Plan in **Schedule D**. It is intended that an east-west route traverse through the neighbourhood along its existing path, which facilitates access to the land. Conflicts between snowmobiles and pedestrians will be minimized. The two snowmobile crossings across roads will be properly marked with signage to improve their safety and to signal to municipal workers to avoid piling snow in these areas. Appropriate grading to access the road bed at crossing points will be implemented to ensure good visibility and reduce snowmobile speeds. As the snowmobile road crossings are located in the same easement as the major east-west drainage course, the grading must be designed in a way that does not impede drainage.

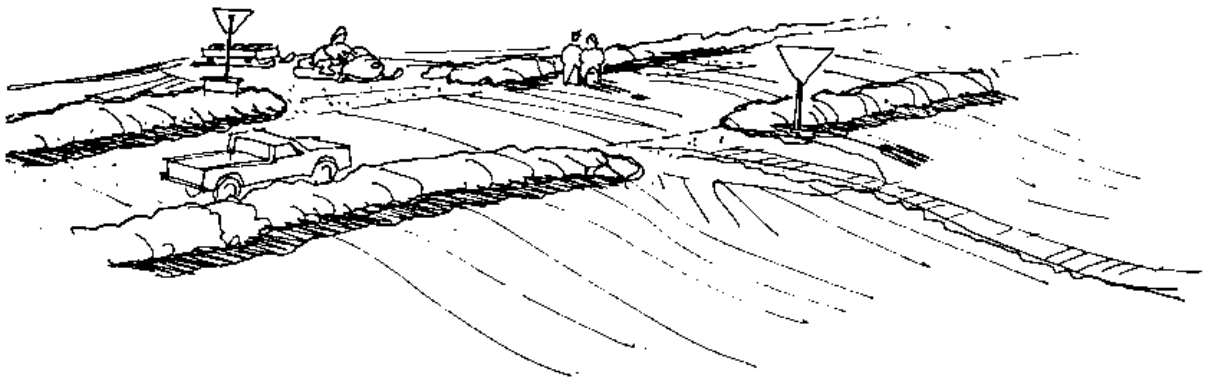


Table 3 shows the performance of the Transportation Concept Plan with regards to key design principles.



**Table 3: Performance of Transportation Concept Plan with Design Principles**

	Design Principle	Transportation Concept Plan
<b>1</b>	Provide safe movement for snowmobiles and consider primary snowmobile routes (ie. Tarr Inlet & Pangnirtung Trails) that traverse the development area.	<ul style="list-style-type: none"> <li>› Two snowmobile routes are being retained through the development area.</li> <li>› Ramps for road crossings and signage will be implemented to ensure safe travel.</li> </ul>
<b>2</b>	Provide safe movement for pedestrians.	<ul style="list-style-type: none"> <li>› Pedestrian walkways are to be included along the development area's two primary roadways: Road To Nowhere and the main north-south access road. These walkways provide safe routes for all users, including community members with disabilities.</li> </ul>
<b>3</b>	Integrate neighbourhood movement networks (road, Snowmobile Trail, Walking Trail) with community-wide networks.	<ul style="list-style-type: none"> <li>› The road network connects to Road To Nowhere in the north and Niaqunngusiariaq Road in the south.</li> <li>› The Snowmobile Trails link to existing trails to the east and west.</li> <li>› Walking Trails link to roads that are intended to have defined pedestrian walkways.</li> </ul>
<b>4</b>	Ensure road slopes generally do not exceed 8%, to a maximum of 10%. Roads with slopes of 10% should be no longer than 200 m in length.	<ul style="list-style-type: none"> <li>› The design meets the maximum road slope design principle.</li> </ul>
<b>5</b>	Align main roads in the direction of the prevailing winds, where possible, to reduce snowdrifting.	<ul style="list-style-type: none"> <li>› The design of the road network was driven primarily by the slope of the land and servicing constraints, not to achieve alignment with prevailing wind direction. Some sections of road are aligned but the majority are not. Proposed snow fencing will help to mitigate snow drifting.</li> </ul>
<b>6</b>	Align roads to follow natural drainage patterns, where possible.	<ul style="list-style-type: none"> <li>› Roads follow natural drainage patterns, where feasible. Drainage from the north can be ditched into the north-south connector to the small waterbody. East-west drainage runs within a 20-metre easement, as road connections are not practical in this location.</li> </ul>

## 5.2 Servicing & Drainage Policies

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### 5.2.1 Servicing

The development will be serviced with a piped water and sewer utilidor system, similar to other parts of the City. A new water pressure regulation and reheat station will be required to service the development, in addition to a new sewage lift station. The anticipated location of this infrastructure and the piped system with anticipated access vault locations is identified on the Servicing Concept Plan in **Schedule B**. The water station and sewage lift station are identified on the Land Use Concept Plan in the *Institutional* land use designation. To improve fire safety for the development area, each utilidor access vault will be equipped with a fire hydrant.

### 5.2.2 Drainage

Existing spring run-off drainage courses have been integrated into road design and alignment where possible to avoid areas to be developed. The main east-west drainage course has been retained in its original alignment and will be accommodated within a 20-metre drainage easement that can also accommodate a Snowmobile Trail during the winter months. There are 6 other drainage easements identified on the Land Use Concept Plan to facilitate drainage. These easements will be designed with a minimum width of 8 metres to allow proper drainage during the Spring and Summer months. Detailed drainage plans will be prepared during detailed engineering design for each Phase of development.

## 5.3 Phasing of Development

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The Phasing of Development is shown in **Schedule C**. A phased approach is proposed for the development area to ensure manageable costs to the City and to deliver land in accordance with demand. There are three phases of development proposed: Phase 1, Phase 2, and Future Phases. Since the water station and sewage lift station must be installed in Phase 1, the location of Phase 1 recognizes and takes advantage of the location of this major infrastructure.

**Phase 1** provides a mix of all land uses including different densities of residential development, the school site, and commercial areas. Depending on the size of the school, a portion of the *Institutional* land in Phase 1 may also accommodate a second institutional use. If demand for residential land is high, the “Future Phasing” lands further along the Road To Nowhere could be included in Phase 1. This opportunity should be explored during the Phase 1 Proposal Call, since a greater disposal of lots in Phase 1 will reduce interest costs on the major infrastructure needed to service the entire development area.

**Phase 2** represents the addition of a new servicing loop that avoids constructing any interim infrastructure that would be redundant at the time of build-out. If demand is high for low-density residential land, the cul-de-sac road identified as “Future Phases” could be constructed during Phase 2.

**Future Phasing** represents the remaining lands that may be added to either Phase 1 or Phase 2 development depending on the demand for land, or as a stand-alone phase (i.e. Phase 3). Included in Future Phasing is the southern portion of the neighbourhood.

Two areas are reserved for **“Potential Expansion.”** These are lands that are marginal for development due to rock outcrops which may create cost and servicing constraints.

Table 4 summarizes the extent of development by land use for each phase.

**Table 4: Development of Land Uses by Phase**

<b>PHASE</b>		<b>AREA (ha)</b> (leasable land)	<b>DENSITY</b> (units/ha) <small>(from Plateau Subdivision)</small>	<b>UNITS</b>
<b>01   PHASE 01</b>		<b>4.65</b>	<b>29</b>	<b>137</b>
	General Low Density	0.64	25	16
	Medium Density	1.90	50	95
	High Density	0.29	90	26
	Commercial	0.51		
	Institutional	1.31		
<b>02   PHASE 02</b>		<b>3.19</b>	<b>41</b>	<b>131</b>
	Waterfront Low Density	0.32	15	5
	General Low Density	0.66	25	16
	Medium Density	2.21	50	110
<b>FUTURE PHASING</b>		<b>5.26</b>	<b>42</b>	<b>224</b>
	Waterfront Low Density	0.50	15	7
	General Low Density	1.55	25	38
	Medium Density	1.08	50	54
	High Density	1.39	90	125
	Commercial	0.18		
	Institutional	0.56		

## 5.4 Lot Development Standards

The table below outlines lot development standards that will apply to all development in the Development Area. This includes site layout considerations, building design, and building systems. A discussion of the proposed building system standards is described below.

Lot Development Standards	
<b>Site Layout</b>	
<b>1</b>	Building entrances should avoid facing the northwest prevailing winds since these will have the highest potential for cold air infiltration into the building. Where an entrance must face northwest, a wind screen will be constructed.
<b>Building Design</b>	
<b>2</b>	As part of this Development Scheme, the City will adopt Energy Standard Requirements. The Energy Standard Requirements will be adopted at a later date through an amendment to this Plan.
<b>3</b>	A wind study shall be required for all buildings three or more storeys in height, or with a length greater than 25m, or with a gross floor area greater than 500m <sup>2</sup> .
<b>4</b>	Building design shall provide 0.8 metres of clearance beneath the building to prevent snow drifting against building faces (i.e. no solid skirting or enclosed storage below buildings). The Development Officer may grant exceptions if the applicant can demonstrate that downwind effects are minimized by site layout and building design, where slab-on-grade construction is used, or where site topography creates hardship in achieving this standard.
<b>5</b>	Buildings shall be designed to respect and respond to the topography of the site. Stepping of the building to reduce massing and excessive pile height will be required.
<b>6</b>	Residential units shall be encouraged to maximize solar exposure in active areas (such as the living room and kitchen). Passive areas in which light, views and heat are less important (such as storage areas, utility rooms, and bedrooms) should be located towards the building's northern facades. Avoid placement of accessory buildings in front of south-facing windows, where possible.
<b>7</b>	All ground-oriented residential development shall incorporate wind lock entries (vestibules) into dwelling unit design to help prevent energy loss and to provide storage space, particularly to support land-based economy activities.
<b>Building Systems</b>	
<b>8</b>	All windows installed must be ENERGY STAR® qualified windows under the Natural Resources Canada (NRCAN) EnerGuide Program.
<b>9</b>	All buildings will use oil-fired water heaters instead of electric water heaters.
<b>10</b>	All buildings will use Heat Recovery Ventilators (HRV) as a ventilation standard.
<b>11</b>	No buildings shall be permitted to have electric baseboard heating as the primary heating system.

## 5.5 Affordable Housing

The City would like to improve access to housing for lower-income groups in the City. In keeping with General Plan policy, a target minimum of 7% of the leasable lot area will be affordable, according to the income percentile established by Council. At this time, affordable housing is housing that is affordable to the 50<sup>th</sup> income percentile.

As part of this Development Scheme, the City will adopt an Affordable Housing policy. The Affordable Housing policy will be adopted at a later date through an amendment to this Plan.



## 5.6 Radar Site Influence Areas

The 150-metre and 300-metre Radar Site Influence Areas are indicated on the Concept Plan in Schedule A. The buffers respond to Policy 8 of Section 5.11 of the General Plan, which ensures non-interference with the air navigation communications system (NAV Can VOR/DME site) located at the top of Niaqunngusiariaq Road through:

- a) Prohibition of any development, obstructions, buildings, or equipment within a 150-metre radius of the antenna array; and
- b) Restrictions on development (ie. materials and height) within a 300-metre radius of the antenna array in accordance with provisions set out in the Zoning By-law.
- c) Notwithstanding the above, development applications that do not comply with NAV Canada standards may be considered subject to NAV Canada's review and acceptance.

As part of its Zoning By-law amendment process, the City will engage in additional consultation with NAV Canada.

## 6.0 DEMONSTRATION PLAN



**Looking west**



**Looking southeast**



**Looking north**

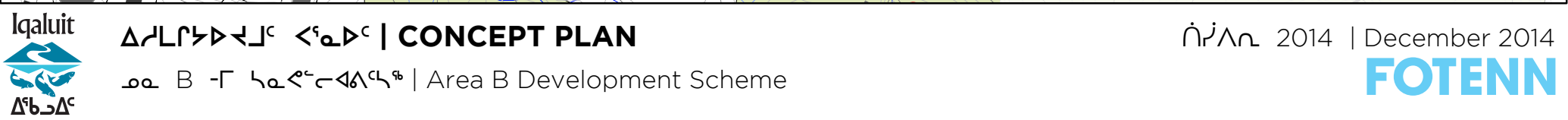
## **7.0 MONITORING**

In implementing the policies of this Development Scheme the following should be monitored and reviewed at the beginning of each phase of development:

- The effectiveness of lot development standards in each phase of development, and make modifications where required;
- Housing demand and needs;
- Demand for non-residential development lots;
- The success of call for proposals;
- The success implementing the affordable housing policy;
- Impact of development on snow, wind and drainage patterns; and
- Recurrent issues/challenges in the development review process that may need to be addressed with Zoning By-law amendments or other corrective measures.

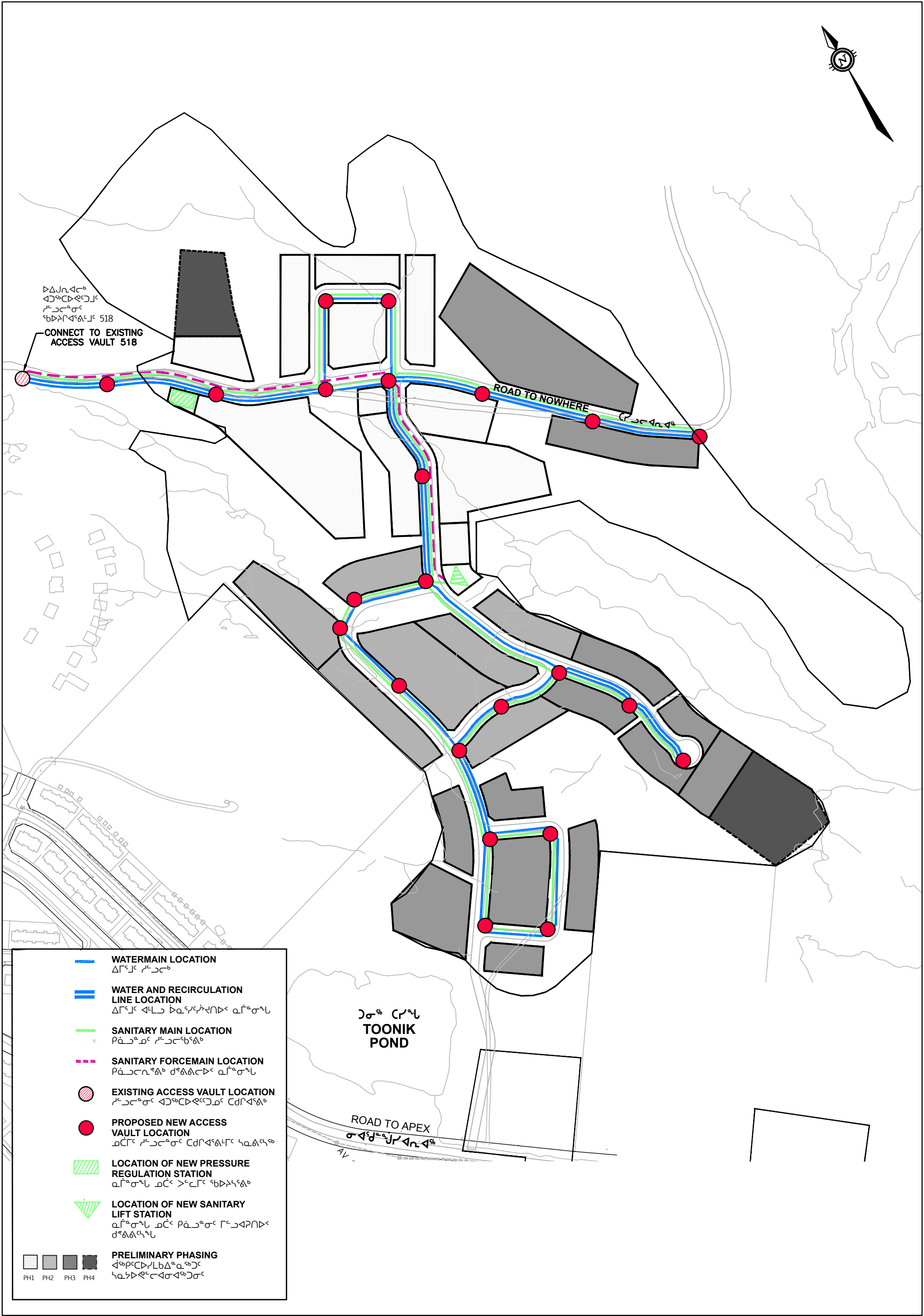
## **Schedule A – Land Use Concept Plan**





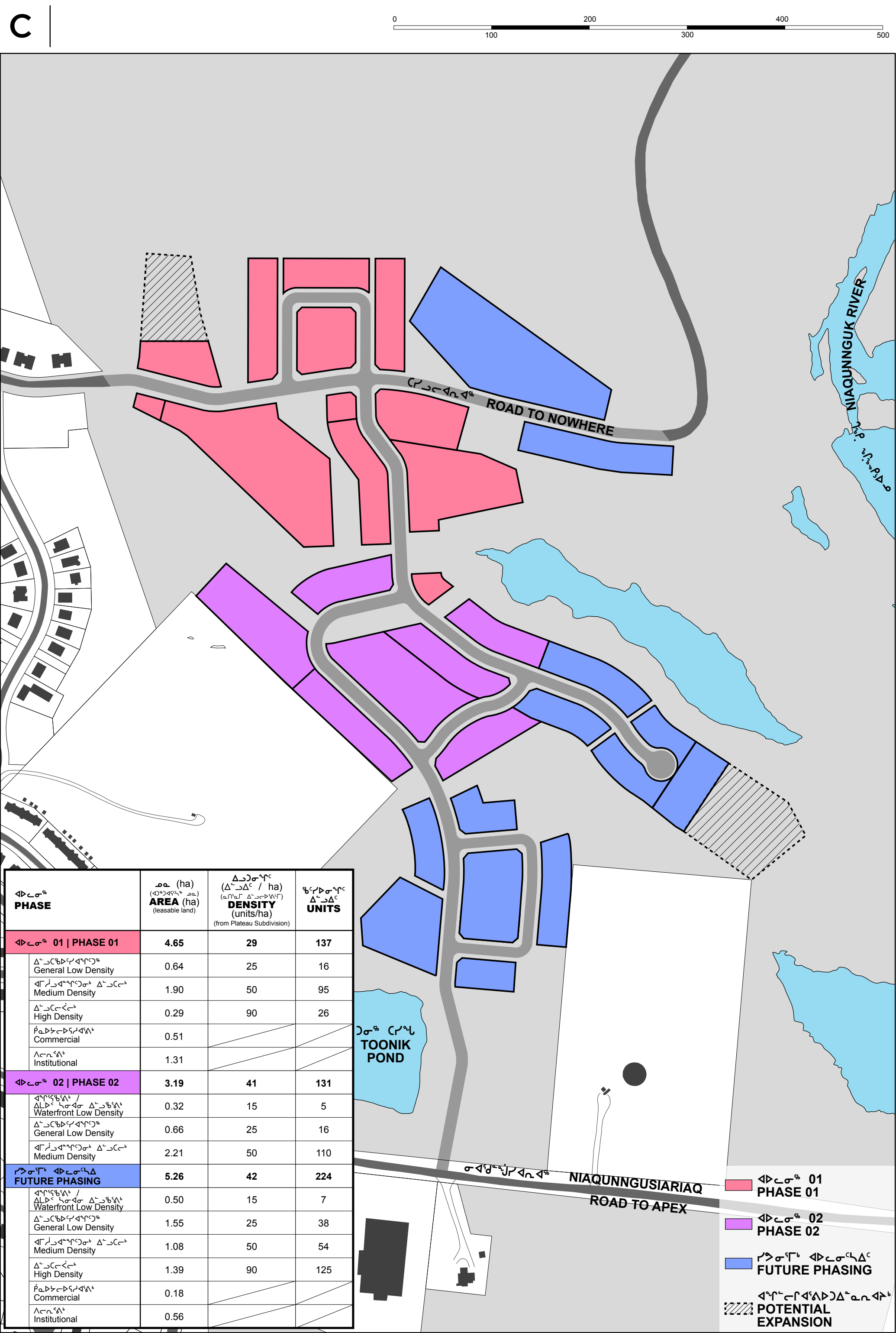


## **Schedule B – Servicing Concept Plan**



## **Schedule C – Phasing of Development**





## **Schedule D – Transportation Plan**



