

ATTACHMENT 1



Longboat Landing

Fort McMurray, Alberta

Outline Plan

Revised September 2010

Prepared for:
Clearwater Village Properties Inc.

Prepared by:
NORR Architects Planners

Submitted to:
Regional Municipality of Wood Buffalo





LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
VOLUME I: LAND USE PLANNING BRIEF

Table of Contents

1.0	Introduction	4
1.1	Longboat Landing - Vision Statement	4
1.2	Goals and Objectives	5
1.3	Longboat Landing – Development Process & Approvals	6
2.0	Background Information	7
2.1	Regional Context	7
2.2	Local Context	8
2.3	Commercial Context	9
2.4	Longboat Landing Site	10
3.0	Agreement and Policies Affecting Land Development	12
3.1	Municipal Development Plan	12
3.2	RMWB Lower Townsite Area Redevelopment Plan	13
3.3	Land Use Bylaw 99/059.....	17
3.3.1	Proposed Uses	18
3.3.2	Proposed Site Provisions	19
3.3.3	Flood Abatement	21
3.3.4	Landscaping/Parkland.....	22
4.0	Physical and Natural Environment	22
4.1	General Site Conditions	22
4.2	Geotechnical Investigation	22
4.3	Phase I and II ESA	22
4.4	Summary of Biophysical Issues	22
5.0	Land Use Redesignation	22
5.1	The Process	23
5.2	Land Use Program Summary	24
5.2.1	Product Mix	24
5.2.2	Market and Financial Analysis	24
5.3	Architectural Prototypes	25
5.4	Summary of Development Plan	26
5.4.1	Overall Land Use Concept	26
5.4.2	Land Use Statistical Summary	27
5.4.3	Transportation and Parking	28
5.4.4	Open Space and Trails	32
5.4.5	Sanitary and Water Service	32
5.4.6	Shallow Utilities	33
5.4.7	Stormwater Management	33
5.4.8	Development Phasing	34



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

List of Figures

Figure 1: RMWB Regional Setting	4
Figure 2: Lower Townsite Area Redevelopment Plan Boundary Showing Longboat Landing	8
Figure 3: Aerial Photo Showing Longboat Landing Site	10
Figure 4: Map of Site Access and Right-of-Ways	11
Figure 5: RMWB Future Land Use Concept - LTARP.....	14
Figure 6: Current Land Use Map - Longboat Landing Area	18
Figure 7: Parkland	21
Figure 8: Road Cross-Sections 1	30
Figure 9: Road Cross-Sections 2	31

List of Tables

Table 1: Proposed List of Discretionary Uses	19
Table 2: Proposed Site Provisions	20
Table 3: Usable Site Area	28



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

1.0 Introduction

Fort McMurray is located within the Regional Municipality of Wood Buffalo (RMWB) in the northeastern portion of Alberta. Since its incorporation over 40 years ago, the town of Fort McMurray has seen unprecedented economic growth fuelled by the explosive expansion of the Oil Sands industry. As a result, demand for housing has been at an all-time high particularly in the Fort McMurray area. Although growth is anticipated over the long term, volatility of the Energy sector will continue to have an impact on housing demand and the supply of appropriate housing types over the long term. This Outline Plan updates the Land Use Planning Brief that formed the basis of the Longboat Landing Master Plan as presented to Council in May 2005. It restates the comprehensive land use strategy which the Longboat Landing project intends to implement towards fulfilling these critical local community housing needs and redefines the process by which this will be achieved.

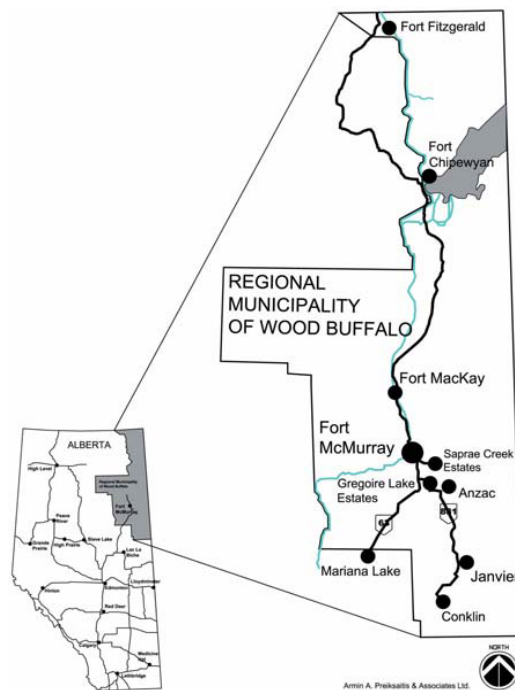


Figure 1: RMWB Regional Setting

1.1 Long Boat Landing – Vision Statement

The 2009 RMWB *Lower Townsite Area Redevelopment Plan* (LTARP) redefines a vision for the historic centre of Fort McMurray recognizing this area as the commercial, government and entertainment focus of Fort McMurray while promoting the



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

importance of an expanded residential population in the downtown core. In keeping with the municipality's goal of doubling the projected population in the Lower Townsite, the Longboat Landing development seeks to fulfill the role of a catalyst in stimulating the desired changes for long range land use policy as stated in the LTARP. While providing a diverse range of housing stock, Longboat Landing will become a unique, urban neighborhood which reinforces the lifestyle the area has to offer.

The community is thoughtfully designed and crafted for families and good neighbours. Longboat Landing will build on the concept of proven authentic communities, presenting a balance between home life and work, green space and natural enclaves, pedestrians and vehicles. This is the vision for Longboat Landing as it seeks to establish its place both within the overall community as well as being a critical element towards realization of the revised LTARP strategy.

1.2 Goals and Objectives

Realization of the project vision relies on establishment of a number of related goals and objectives. These will serve as the measure of project success in fulfilling both the LTARP vision as well as ensuring that Longboat Landing becomes an important and vital part of the overall community.

Project Goals

- Develop a comprehensively designed urban community that creates and enhances an urban lifestyle,
- Create a new community that will attract and retain residents through a diverse hierarchy of open space, housing types and access to adjacent urban amenities,
- Establish a land use strategy which is capable of being implemented in phases,
- Create a land use plan which optimizes build-out of the permitted site density with the flexibility to increase that number to meet growth expectations within the LTARP area,
- Create a residential product mix which addresses market diversity,
- Provide a range of amenities and services internally to reduce demands on the regional transportation network,
- Work in partnership with the municipality to build a community that responds to changing market conditions while achieving the agreed upon vision of the community and larger Lower Townsite Area.

Project Objectives

The above project goals will be achieved by satisfying a series of corresponding planning considerations and development objectives:

- Ensure the land use allows flexibility
- Develop land use programming and corresponding land use plan which fits within existing zoning regulations while providing a



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

- wide range of housing opportunities;
- Provide physical linkages within the site between neighbourhoods, to the riverfront, and to adjacent off site neighbourhoods including Keyano College;
- Provide adequate and strategically located open space, both natural and formal in order to enhance interface between residential buildings and exterior living areas;
- Incorporate adequate provision for site drainage and flood management infrastructure;
- Design solutions for roads, parking areas and residential habitable areas must respond to minimum flood elevation design criteria;
- Organize building massing to create an appealing streetscape, maximize view capture and establish a sensitive interface with retained natural open space along riverfront;
- Design a road system, with RMWB Engineering department input, which is efficient, functional and designed to express the unique nature of the community.

1.3 Longboat Landing – Development and Approvals Process

The overall land use strategy for the Longboat Landing project is based on phased project implementation in accordance with a site specific R4 zoning designation. Based on meetings and discussions with RMWB staff, a comprehensive land use strategy was developed for the entire site at the project outset in order to obtain endorsement of the overall project in principal and to facilitate a phase by phase implementation of the governing zoning regulations. The original May 2005 Planning Brief provided the context for development and this Outline Plan (and accompanying modified R4 land use district) will provide the technical framework for Administration and the Developer in each subsequent application.

This Outline Plan is an intermediate planning document which bridges the gap between the large scale 2009 LTARP, the 2005 Longboat Landing Planning Brief and individual plans for development/subdivision in the Longboat Landing area. It is a comprehensive guiding document that summarizes the proposed land use program, planning rationale and overall land use plan for the entire site. A series of individual project phases, of one or more buildings, will contain Development Permit level planning and design detail associated with the specific phase. Each application will include technical background studies and reports in an appendices format as support for the individual Development Permit submission. These reports have been completed with respect of the requirements of the overall site but may be updated or revised if required by increases in density arising from the R4 rezoning.

Land Use Planning Brief

Within the Land Use Planning Brief (2005), an informed development program was assembled for Longboat Landing that



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

serves as the basis for preparation of a Comprehensive Land Use Plan. The Comprehensive Land Use Plan integrates the existing DCR4 land uses, building types, roadway profiles, streetscape and facilities with phased, Master Plan development. The Land Use Planning Brief presents an overall summary of technical analyses contained within the Comprehensive Land Use Strategy as well as a detailed outline of the overall land use program and related physical planning. It will form the context within which the R4 medium and high density applications are assessed by Administration. It contains information about the ultimate density, location, conceptual configuration, form, character and servicing strategy associated with the Comprehensive Land Use Plan.

Technical Appendices

The Technical Appendices that have been prepared contain reports upon which development planning and regulatory policy is based. These reports address recommendations for transportation, development servicing, environmental analysis and geotechnical analysis. In keeping with the 2009 LTARP, increases in the local and overall site density arising from applications under a site specific R4 Bylaw will require additional supporting technical documentation.

2.0 Background Information

This section of the Outline Brief provides a brief summary of contextual and other relevant information necessary to convey an understanding about the influences which have contributed to formulation of the comprehensive land use strategy for Longboat Landing.

2.1 Regional Context

Fort McMurray is located in the northeastern portion of Alberta within the Regional Municipality of Wood Buffalo. It functions as the Urban Services Area for the municipality with a population of more than 65,400 in 2007. The Longboat Landing site is located within the Lower Townsite Area of Fort McMurray and borders both the Clearwater River and Hangingstone Creek. It falls within an area covered by the local Area Redevelopment Plan (ARP) which establishes a vision and direction for development of the Lower Townsite Area over the next 20 years, see Figure 3: Lower Townsite Redevelopment Plan Boundary.

The Lower Townsite Area contains the historic town centre of Fort McMurray and boasts a wide range of existing land uses including residential, commercial, industrial, institutional and recreational. The Lower Townsite Area is bordered by the Athabasca River to the north-east and the Clearwater River to the east. Hangingstone Creek functions as the south border of the Lower Townsite, The Snye River forms the northern boundary and Highway 63 serves as the western



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

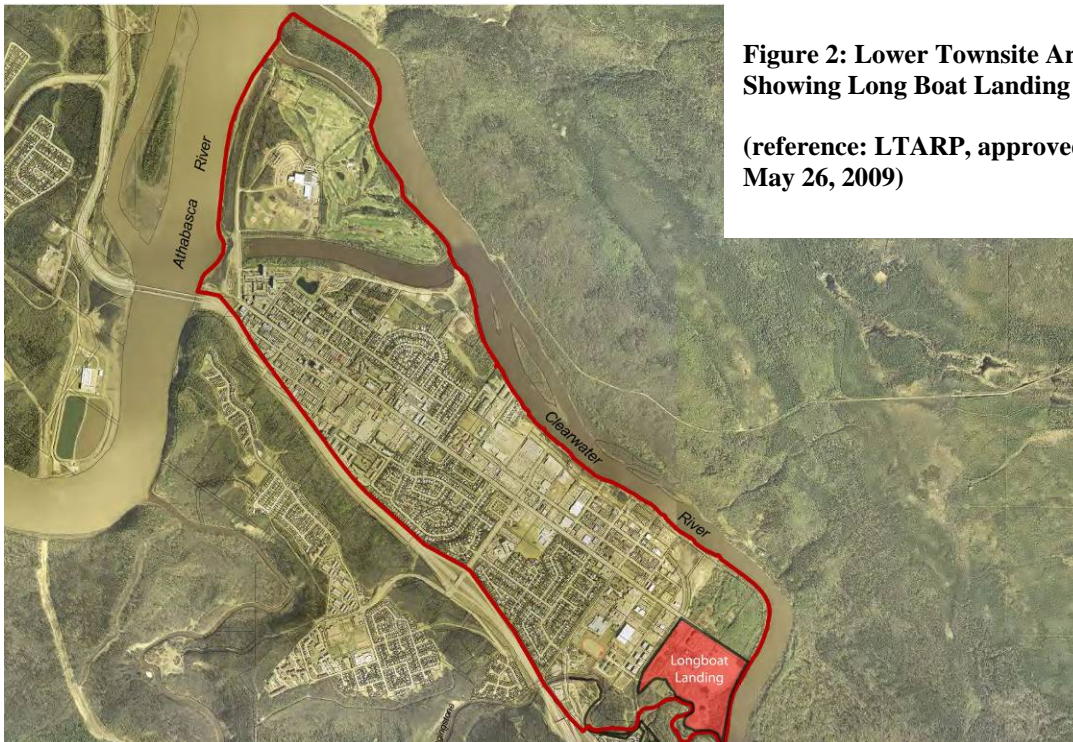
boundary.

Demographic Characteristics

The RMWB consists of a number of villages, hamlets and the Urban Services Area of Fort McMurray. Based on 2007 data, approximately 18% of Fort McMurray's population resides in the Lower Townsite, representing approximately 11,721 people. As a result, the Lower Townsite ranks high as an employment location.

2.2 Local Context

The Longboat Landing site is nestled at the confluence of Hangingstone Creek and the Clearwater River within the southeast corner of the ARP plan area boundary. The entire ARP area benefits from an abundance of parks and open space located along the Clearwater River and in nearby adjacent neighbourhoods. The project site will benefit from access to community facilities as well as proximity to major commercial, government, professional, business and entertainment activities. In turn, this relationship supports the higher density residential projected in the Lower Townsite area. In addition, the site is in close proximity to Keyano College and the newly constructed Health and Wellness Centre.



**Figure 2: Lower Townsite Area
Showing Long Boat Landing**

(reference: LTARP, approved
May 26, 2009)



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

2.3 Commercial Context

The Lower Townsite is the historical hub of the *Urban Services Area* and as such provides the major commercial services for the town of Fort McMurray. The Lower Townsite serves the retail needs of the entire region.

Recently, the advent of 'Big Box' stores has changed the land use pattern within the Lower Townsite. This type of retailing has had a large impact on local traffic circulation and related consumer habits. Ease of access and convenient parking reinforce a pattern of vehicle dependent retail development resulting in deterioration of pedestrian friendly streets and associated developments.

The ARP indicates that as of early 2000, 60 businesses were intending to expand operations within the near future. Up to 140,000 square feet of additional commercial space was planned. Much of this potential expansion could be accommodated in the Lower Townsite. This is a goal of the ARP, as represented in current land use districts designations, and combined with availability of sizable land parcels within the Lower Townsite area, additional commercial expansion could easily be accommodated. In addition, projected future expansions in the oil sands industry has also resulted in increases in industrial service businesses which provide support services to the oil industry.

Additional housing development within the Lower Townsite as proposed in the Longboat Landing project, will help support and sustain a strong commercial base for this area.

2.4 Longboat Landing Site

The Longboat Landing site is legally described as Lot 1, Block 1, Plan 0824071. The site comprises an area of approximately 27.5 ha. (65.7 acres). Its boundaries are generally defined as follows:

- North Boundary: existing undeveloped road ROW
- East Boundary: the Clearwater River
- West Boundary: Prairie Loop Boulevard
- South Boundary: Hangingstone Creek



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN



Figure 3: Aerial Photo Showing Longboat Landing Site

The land is generally flat within the development area of the site with lower areas in the undisturbed margins of the site and generally drains to Hangingstone Creek and Clearwater River. Except for the Hangingstone Creek, which crosses into and out of the southeast portion of the site, no well-defined drainage courses were observed on the site.

Site Access

Site access will be facilitated off of Franklin Avenue and eventually an additional access will be developed at Mills Avenue off Prairie Loop Boulevard. Approximately 65% of the site has been disturbed or is clear of vegetation. The balance of the site, extending to the edge of the two water courses, contains existing vegetation consisting of riparian species of primarily deciduous tree and shrubs. The primary views are to the south and east towards Hangingstone Creek and the Clearwater River respectively.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

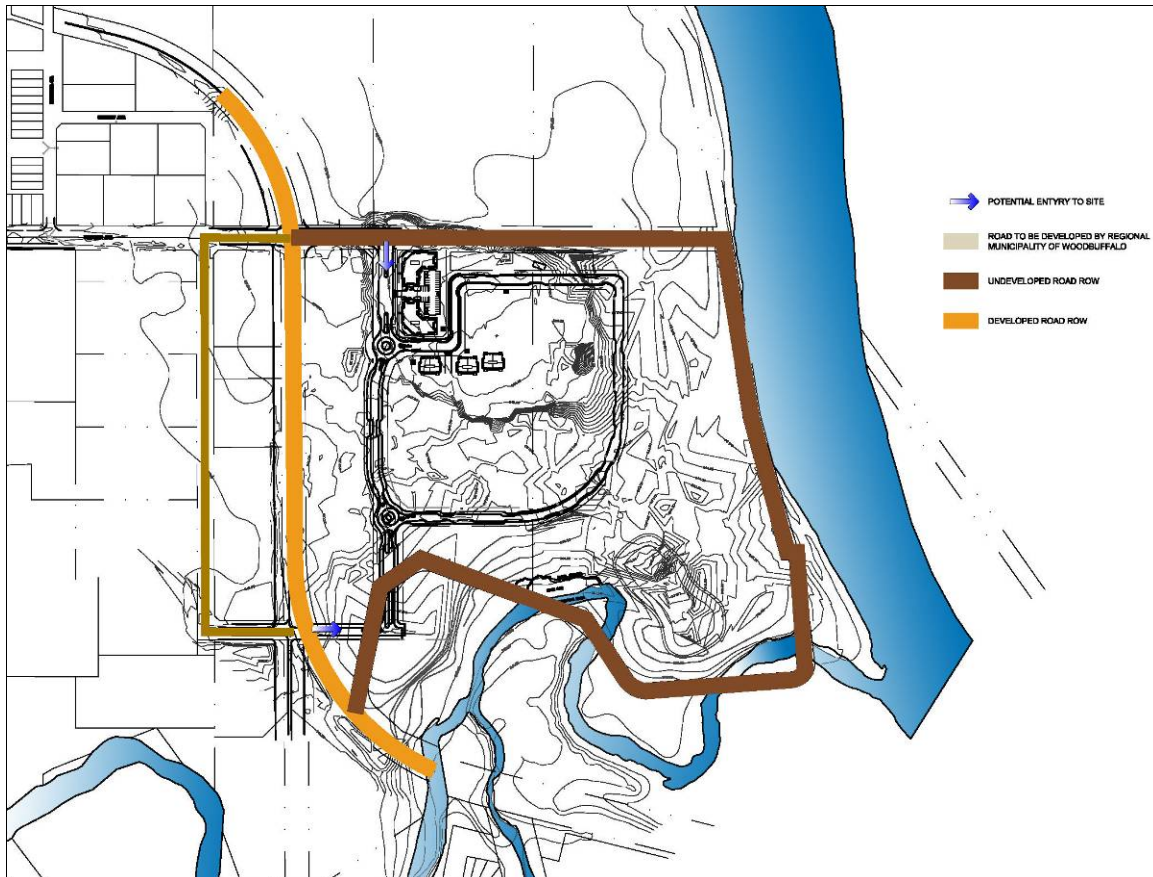


Figure 4: Map of Site Access and Right-of-Ways

Existing use

The entire development site is currently designated DCR4. The original 66 acre site has been stripped to the full extent of the 44 acre development area leaving approximately 22 acres in it's original state. Within the 44 acre development area, extensive filling, grading and compacting has taken place produce 30 acres of property that is ready to develop. The three large stockpiles of structural fill and topsoil exist ready for placement.

Approximately 5 acres of the site has infrastructure, roadways and the first phase of development consisting of two 38 unit apartments and three 6 unit stacked townhomes has been built. In the southeast corner of the site, at the confluence of the Hangingstone Creek and Clearwater River, is a partially completed storm water pond sized for the initial phases of development.

The connection to the site is through the extension of Franklin Avenue whose ROW to the Clearwater River has seen the



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

construction of a major stormwater channel and outfall. The north property line has seen the construction of sanitary lift station 1b and the first phase of the Prairie Loop Boulevard arterial roadway that will connect Hwy 63 to the downtown core.



Airphoto – June 2009

3.0 Agreement and Policies Affecting Land Development

3.1 Municipal Development Plan

The Municipal Development Plan provides a large-scale general framework for managing all Municipal functions, the development of residential, commercial and industrial lands, parks and open space, community services and infrastructure. The policies adopted in the Municipal Development Plan set the stage for more detailed and specific planning and land use control documents described in the Lower Townsite Area Redevelopment Plan (LTARP) and Land Use Bylaw.

The Municipal Development Plan states that ***depending on servicing capacity, multifamily residential development may be considered in the (Keyano College District) area if flood hazards can be identified and are fully addressed and if residential development is not isolated from amenity areas and Keyano College.***

To minimize flood damage, the Municipal Development Plan regulates development below the 250 metre contour elevation (the established 1:100 year flood elevation), in order to reduce flooding



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

risk and the damage it causes, especially given the overall context of the Lower Townsite of Fort McMurray (see Figure 8 : Flood Plain Urban Service Area Map). The Municipality's directions for addressing this issue includes implementing the recommendations of the **1999/2000 Trillium Engineering Flood Abatement Report** as approved. In addition, the Municipality intends to undertake incremental flood abatement projects, where possible, that fit aesthetically with surrounding development and undertake annual spring break-up river monitoring and ensure emergency preparedness. These are necessary considerations in designing a storm water management plan. Further details in the Land Use Bylaw section.

3.2 RMWB Lower Townsite Area Redevelopment Plan Bylaw 09/016

The Municipal Government Act of Alberta enables local Councils to adopt Area Redevelopment Plans to guide decisions which affect the physical development of a specific area. The RMWB Lower Townsite Area Redevelopment Plan (LTARP) was recently revised and adopted by Council on May 26, 2009. This Plan provides a comprehensive land use and development strategy for the future redevelopment of the Lower Townsite Area until 2030. It addresses specific issues related to sustainability, intensification, land use integration and compatibility, transportation and connectivity, infrastructure and servicing, flood abatement as well as the form, function and aesthetics of the area.

Lower Townsite Vision Statement – 2030

"The Lower Townsite will be the focal point for a prosperous Northern Region. As the central downtown core for Fort McMurray, the Lower Townsite will be a quality urban environment offering opportunities to work, live, and play in the same area. It will include a diversity of commercial, residential and recreational uses centered on the natural beauty of the Athabasca and Clearwater Rivers. The Lower Townsite will be inclusive and accessible to all and will celebrate the area's history and community spirit." (LTARP, p. 1)



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

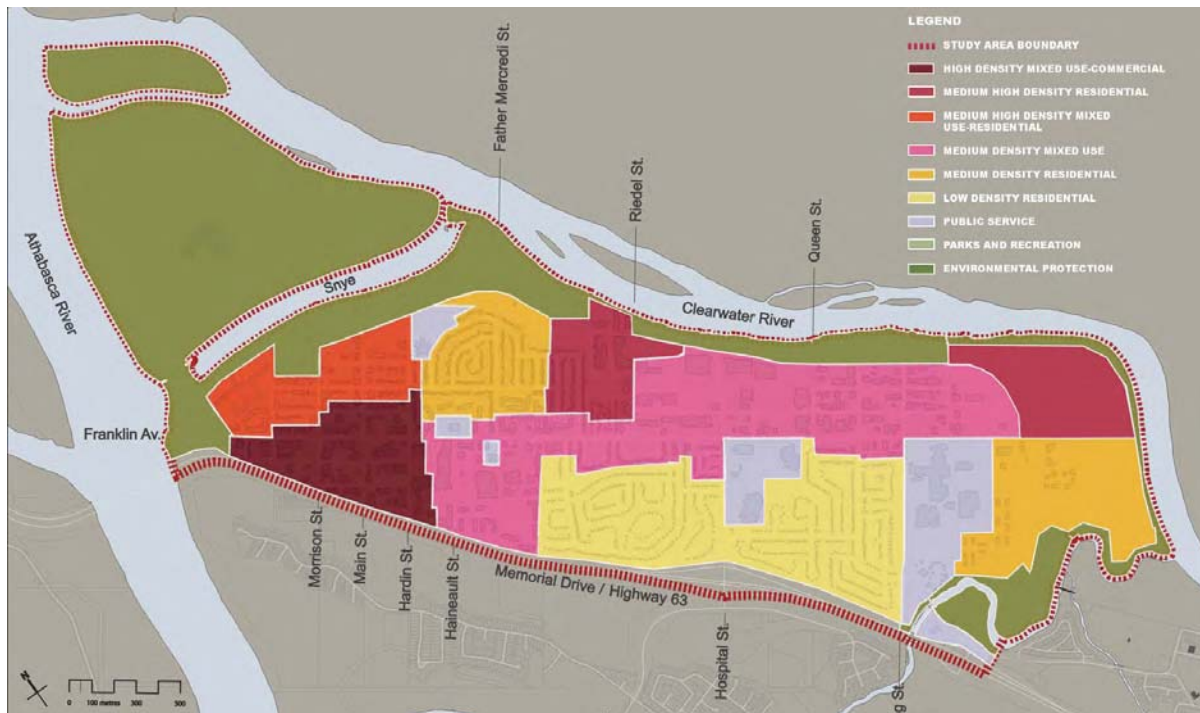


Figure 5: RMWB Future Land Use Concept – Lower Townsite Area Redevelopment Plan

The proposed modified R4 High Density Residential District is generally consistent with the overall direction and intent of the vision of the new LTARP. The following demonstrates the development's adherence to key goals outlined in the LTARP.

Land Use ***Goal #1:** As part of the Region's sustainable approach for population and business growth in the Urban Service Area, allow for intensification of the LTS that will improve community activity, economic development and safety.*

***Goal #2:** Redevelop the LTS to retain and enhance its mixed-use character, providing improved opportunities to live, work, shop, play and learn.*

***Goal #3:** Allow for a range of housing types and densities that will meet the needs of a diverse population in a supportive and sustainable community environment.*

Findings

The proposed development addresses the land use goals in the following ways:

- Encourages intensification at the East end of Franklin Avenue



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

which will improve community activity, economic development and safety

- Enables a range of housing types to attract a broad demographic and diverse community
- Facilitates compatible high-density housing in the Keyano College District,
- Increases the amount and variety of housing available downtown to meet the growing demand,
- Cleans up the incompatible noxious industrial uses,
- Organizes compatible land uses to enforce desirable land use patterns and create locational synergies between the site and neighbouring parkland.
- Can create a minimum of 400 additional units within the area identified in the Planning Brief as the development footprint.

Municipal Services

Goal #7: Ensure that infrastructure expansion projects are implemented at appropriate population growth thresholds in order to meet future servicing needs.

Goal #8: Reduce the flood risk in the LTS.

Goal #9: Ensure that municipal services are provided in a manner that minimizes impacts on the community environment, maximizes efficiency and use of existing systems, and minimizes life cycle costs.

Findings

The proposed development addresses the goals to strategically plan for appropriate infrastructure in the following ways:

- It is expected that the water supply facilities and sanitary trunk will require upgrading. Developers are responsible for on-site servicing costs and off-site development charges to cover a proportionate share of those costs resulting from their development. On-site stormwater management techniques are being implemented to avoid costly upgrades.
- Site access is a key factor in shaping the overall urban form of the land use plan. A significant effort has been made to minimize the need for excessive roadway infrastructure while ensuring that functional vehicular circulation movements are maintained. The land use plan contains one main vehicular loop road with two main access points off Mills Avenue and Franklin Avenue. Access to all internal development nodes is conveniently provided off this loop road. This permits the majority of internal access and parking to be internalized within motor courts and green spaces
- An environmental protection zone is provided in the plan to mitigate flood risks and protect the riparian areas.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

Riverfront, Parks, and Cultural Heritage

Goal #10: *Develop the riverfront areas of the Snyc, the Clearwater River, and MacDonald Island as attractive recreation areas and exciting focal points for the community and in a way that recognizes the historical significance of the area.*

Goal #11: *Ensure population and economic expansion in the LTS is accompanied by appropriate expansion of parks and recreation facilities and programs in the area.*

Findings

The proposed development addresses the riverfront, parks and cultural heritage of the Lower Townsite area in the following ways:

- Provides for a “Destination Node” near the riverfront at the terminus of Franklin Avenue.
- Incorporates regional pathways to link pedestrians to the Clearwater shoreline. This contributes to creating a continuous, interlinked parks and trail development along the Clearwater and Hangingstone Rivers
- Respects natural areas along the riverfront and takes necessary steps to protect these natural features as part of the overall Riverfront Master Plan,
- Maintains public access to the river’s edge and reinforces linkages with this system and the neighborhood
- Creates an attractive public realm – including attractive streetscapes, pedestrian walkways, recreational pathways, and urban park spaces
- The riverfront and parks will contribute to the liveability of the Lower Townsite area which is important in encouraging the development of more housing
- Utilizes general urban design principles through an open pedestrian-focused environment
- Respects the key landscape features: rivers (Clearwater and Hangingstone), flood plains and wooded areas. These natural amenities are preserved by maintaining and enhancing the urban edge conditions that emphasize the river valley setting and its natural backdrop.
- Visual gateways and portals to the water are reinforced to provide a sense of entry and orient the visitors by ensuring that buildings and new development are sensitively designed and sited so as to create view corridors and gateways
- Recognizes the area’s historical significance while providing a unifying theme for the proposed riverfront development, streetscape improvements, facade improvements, street furniture, signage and lighting. The story of the historic rivers provides an opportunity to highlight elements of the natural and human history in facades and streetscape through the use of lighting and street furniture and other elements.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

- The 22 acres of undeveloped green space would provide the RMWB River Park with a spectacular district park facility at the confluence of the Hangingstone and Clearwater River.

Transportation Systems

Goal #12: *Improve the transportation network in the LTS to accommodate the planned growth, considering all modes of transportation, that addresses issues of sustainability and provides safe, efficient and comfortable solutions to the community's needs.*

Findings

The proposed development encourages multi-modal forms of transportation. Proximity to the river pathways and key public service facilities such as Keyano College will encourage walking and cycling.

3.3 Land Use Bylaw 99/059

The Land Use Bylaw determines, in specific terms, the permitted and discretionary uses in all land use districts within the Municipality. The project lands are currently governed by a Direct Control District - DC-R4 (Bylaw 02/002), which has special land use and development regulations to accommodate medium/high density residential development and to ensure a high and comprehensive standard of form and appearance appropriate to the site in conformance with the Lower Townsite Area Redevelopment Plan.

This district is also intended to provide the Municipality with the necessary control over development to address the issues of flooding, flood protection and the necessity for filling land within the Clearwater River Valley Flood Plain Area, as well as the environmental circumstances, unique character and recreational opportunities of the Clearwater River Valley and the servicing and transportation challenges in this area.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

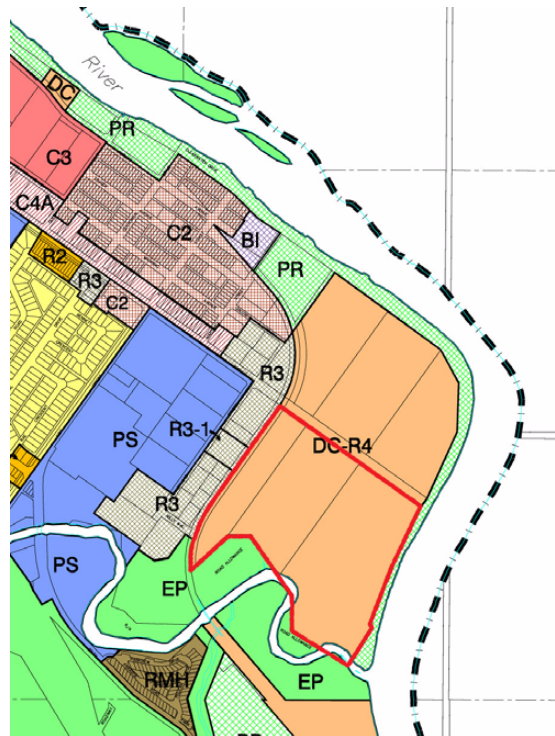


Figure: 6: Current Land Use Map – Long Boat Landing Area

3.3.1 Proposed Uses

The proposed land use is more consistent with the goals and objectives of the revised LTARP (May 2009) than the existing DCR4 land use district as it encourages intensification in the Lower Townsite Area and higher density development towards the east end of Franklin Avenue. In addition, the proposed uses will facilitate in creating a comprehensively designed community responding to the needs of the future population growth in the Lower Townsite area.

The following is a list of uses outlined in the proposed modified R4 land use district followed by the proposed site provisions applicable to the Longboat Landing site.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

Table 1: Proposed List of Uses

Permitted Uses*	Discretionary Uses - Planning Commission
<ul style="list-style-type: none"> • Accessory Building • Home Occupation • Park • Parking Lot or Structure 	<ul style="list-style-type: none"> • Apartment Hotel • Community Service Facility • Cluster Housing
Discretionary Uses – Development Officer*	
<ul style="list-style-type: none"> • Apartment Building • Home Business • Food Service Minor Restaurant • Public Use • Public Utility • Child Care Facility • Educational Facility (accessory to religious assembly only) • Retail, Convenience • Religious Assembly • Residential Sales Centre • Senior Citizen Housing • Townhouse 	

3.3.2 Proposed Site Provisions

The development of Longboat Landing, in the form presented herein, will require some modifications to the base R4 district. These changes are necessary and desirable in order to maintain the consistent streetscape with the existing built form throughout the balance of the project.

In an effort to create a true urban community which directly addresses the street, a reduction in the typical minimum yard setbacks is required. The following table summarizes the site provisions contained in the proposed land use district, which will achieve the master planned community envisioned for this site:



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

Table 2: Proposed Site Provisions

Requirements	
(a) FRONT YARD	3.0 m
(b) SIDE YARD (min.)	3.0 m
(c) REAR YARD (min.)	3.0 m
(d) BUILDING HEIGHT (max.)	
i) Apartment	54.0 m
ii) Townhousing, Cluster Housing, Religious Assembly	10.0 m
(e) LOT WIDTH (min.)	
i) Apartment	30.0 m
ii) Cluster Housing	7.5 m
iii) Street Oriented Townhousing,	4.5 m (interior lot)
iv) Street Oriented Townhousing,	9.0 m (exterior lot)
(f) DENSITY (min/max.)	1100 units total/647 units/ha
(g) PRIVATE AMENITY AREA (min.)	4.0 m ² per unit
(h) CONVENIENCE RETAIL STORES	
i) shall be limited to the main floor of an apartment building containing at least 50 dwelling units;	
ii) shall be limited to the ground floor area of a residential building along Prairie Loop Boulevard;	
iii) shall provide a separate, outside principal entrance;	
iv) may reduce the required front yard to zero.	
(i) * LANDSCAPING	
i) A minimum of 30 percent of the entire Longboat Landing site area, rather than 30 percent of each development parcel, plus all adjoining Municipal boulevards shall be landscaped in accordance with Section 72 of Part 5 (General Regulations).	
ii) One tree for each 35 m ² and one shrub for each 25 m ² of any required yard;	
iii) One tree shall be sited for every five (5) stalls in a parking lot with 25 stalls or greater as per section 72.7 of this Bylaw.	
(j) Parking	
Parking shall be provided in accordance with Part 7	
(k) Building Separation as per Section 88.	
(l) Garbage Disposal:	
Garbage and waste materials shall be stored in weatherproof and animal proof containers and shall be visually screened from all adjacent sites and public thoroughfares to the satisfaction of the Development Authority.	
(m) In addition to the private amenity area identified in subsection (g) above any residential development in this district shall provide playground area with play structure(s) to the satisfaction of the Development Authority. The playground area shall be considered part of the landscaped area.	

** Note: The Longboat landing site includes a significant parkland dedication of approximately 8.7 hectares (21.6 acres) or 33% of the total site area. This area will be open green space for passive recreation, and a large wetland which will also act as stormwater management pond. Due to the expansive parkland adjacent to the site, certain parcels within the developable area may not achieve the minimum 30% landscape area required under the land use bylaw.*



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

3.3.3 Flood Abatement

Due to the periodic occurrence of flood events in most of the Lower Townsite area, key design elevations have been established by the RMWB. These key minimum elevations are 250 for minimum main floor (habitable) elevation of buildings and 249.0 minimum for roadways and 248.0 was set for the parking areas. All key electrical installations such as power transformers or electrical panels for pumping systems should also be located above the 250.00 elevation. According to the Land Use Bylaw, development requires compliance with Chapter 5 General Regulations: 60. Development in the Flood Plain (Clearwater River/Athabasca River Flood Plain Area). In addition, Section 22.2 of the Development Permit Application Requirements specifies that the Development Authority may require: (d) detailed plans or studies showing engineered flood protection measures.

3.3.4 Landscaping/Parkland

The Longboat Landing site includes a significant parkland dedication of approximately 8.7 hectares (21.6 acres) or 33% of total site area. Figure 7 indicates area outside of Development Site (outlined in red) that will be parkland



Figure 7: Parkland – Long Boat Landing Area



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

4.0 Physical and Natural Environment

4.1 General Site Conditions

The site forms part of the Clearwater River and Hangingstone Creek flood plain near the confluence of the two waterways. It is predominantly cleared of trees with mature forest along the south and east perimeter. Originally, the topography was relatively flat with an approximate average elevation of 245m. However, more recently the site has been altered by deposition of fill materials in the north corner of the property; upwards of 5.0 metres of fill have been placed in the central and northwest sections of the site.

4.2 Geotechnical Investigation

Results of the geotechnical investigation indicates that the site is suitable for the proposed residential development. Geotechnical recommendations for the site development and general recommended construction procedures can be found in the November 24, 2004 Thurber Engineering *Geotechnical Investigation*.

4.3 Phase I and II ESA

Bel MK Engineering Ltd. completed a *Phase I and Phase II Environmental Site Assessment (ESA)* for the proposed site in May of 2004. Minor environmental issues were identified in the ESA were the presence of residual hydrocarbons inside, and south of, the fenced construction yard and intermittent elevated soil salinity levels in the northeast portion of the site. The hydrocarbons were addressed through a mitigation program initiated by ATCO and the balance of these environmental concerns will be addressed in a staged manner during development of the site as required.

4.4 Summary of Biophysical Issues

The analysis conducted to date has revealed some constraints. Minor issues encountered will be resolved through planning and design. These issues listed below:

- soil stability requires piling,
- flood abatement requires filling,
- salt impacted soils require excavation and grading if they are to support plant material or landscaping,
- remaining hydrocarbon contamination south of the yard have been addressed.

5.0 Land Use Re-designation



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

Through the Land Use Planning Brief (in response the 2005 LTARP), an understanding of the various physical conditions, regulatory policies and market forces formed the basis of the Master Plan to respond to these influences in the land use planning process. The Land Use Planning Brief is the vision document that the Outline Plan refers to for context.

In order to ensure a successful outcome, the land use response must satisfy the project goals and objectives stated earlier in Section 1.0 of both the Land Use Planning Brief and this Outline Plan. The underlying organization, character and outcome of the Master Plan, as approved by Council, will be achieved through a more conventional process of application, review and decision by administration under a modified R4 land use district which conforms to the goals and objectives of the newly approved LTARP. The proposed land use change and associated Outline Plan provides Council with the assurance that the intent of the LTARP will be implemented and its approval of the land use for the undeveloped lands of the Longboat Landing site is respected while providing flexibility in how it is accomplished.

5.1 The Process

The process of developing the Longboat Landing comprehensive land use strategy was initiated by an inventory and analysis phase which produced a synthesis of opportunities and constraints revealing the development potential of the site. The synthesis considered the physical site conditions, land use regulatory policy and market research findings discussed in previous sections. Based on this analysis, potential project issues and opportunities are recorded for further consideration and resolution during subsequent stages of the planning process. The basic project issues and opportunities which evolved from this analysis are summarized below:

Project Requirements

- Major offsite roads and servicing upgrades were required and upgrades are in process;
- Onsite soil stability conditions require piling of area proposed for development;
- Site drainage design requires area for detention of runoff;
- Relatively high construction costs which may potentially be compounded by a lack of available workforce.
- A process of application review and decision within the context of the Land Use Planning Brief and respecting development character of the Master Plan.

Project Opportunities

- Very strong market demand for housing;
- Existing relatively flat site topography;
- Great location next to river, downtown core and Keyano College;
- Waterfront orientation provides strong opportunities for view



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

orientation and open space development next to lands dedicated to parks and open space;

- Good views of surrounding natural landscape;
- R4 zoning should permit delivery of housing product responsive to the market place combined with the flexibility to accommodate influences on the market.

5.2 Land Use Program Summary

The evolution of a preferred land use program involved the initial definition of residential product types which fit within permitted zoning regulations and respond to both market demand and economic feasibility requirements. The land use program adheres to specific regulatory requirements and the LTARP vision, while responding to market conditions. The program then incorporates the preferred product mix and architectural unit prototypes. The site responds to the urban and natural environment through a division into high and medium density. The portion of the property parallel to the west property line adjacent to Prairie Loop Boulevard is conducive to multi story mid and high rise apartments (high density) and the balance of the site medium density.

5.2.1 Product Mix

Market research findings were utilized in developing initial product mix scenarios. Basic unit types, sizes and configurations were defined based on analysis of competitive projects and absorption statistics. Various combinations were then developed to establish an overall site product mix and inherent economic and absorption model. From these basic unit type definitions, preliminary architectural prototypes were developed in order to initiate corresponding site feasibility analysis. These early yield studies resulted in a residential land use program consisting of the following product types:

- High Rise Apartments
- Low Rise Apartments
- Stacked Townhomes
- Row Townhomes

5.2.2 Market and Financial Analysis

Development Consulting Group was retained by Clearwater Village Properties to prepare a market and financial analysis for the proposed development in Fort McMurray. The principal findings and recommendations of this report are summarized below and inform the land use program.

Commercial Development

Given its proximity to all of the shopping centres in the downtown core and the lack of pedestrian traffic along Franklin Avenue east of



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

Keyano College, the subject site is not a good location for any kind of retail or service commercial development. Accordingly, it is recommended that this land use not be included in any master plan for the subject site.

Housing Demand

The population of Fort McMurray is projected to increase from 56,111 in 2004 to 62,000 by 2006, 85,000 by 2011 and 86,000 by 2016. These population projections reflect the 'bunching' of major oil sands projects during the 2006-2011 period and the precipitous decline in oil sands development currently anticipated after 2011. The cyclical nature of the economy locally and globally is especially significant and argues for the flexibility of a conventional R4 land use as opposed to the Direct Control.

In order to maximize the absorption rate of multi-family units on the subject site, there must be as wide a range of unit types as possible. With this objective in mind, the land use concept utilizes various housing types including: high rise apartments, low rise apartments, stacked townhouses and row houses.

5.3 Architectural Prototypes

In order to physically test the site's capability to accommodate various product mix scenarios, preliminary architectural prototypes were developed and utilized in the early yield studies. Upon determination of a preferred yield scenario, both architectural prototypes and site planning were refined in tandem in order to generate the comprehensive land use plan. The following architectural prototypes were employed in developing the comprehensive land use plan, and provide a general indication of the mass and form of possible building types on site.

Architectural Imagery



Row Townhousing



Stacked Townhousing



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN



Low-Rise Apartment



High-Rise Apartment

5.4 Summary of Development Plan

The comprehensive land use plan represents the overall physical configuration of the land use program and forms the basis for proceeding with phased project implementation. The plan incorporates the resolution and response to various project issues and opportunities previously identified. This section provides a summary of the key components or *layers* which make up the comprehensive land use plan.

5.4.1 Overall Land Use Concept

The Longboat Landing comprehensive land use plan is founded on an underlying concept which involves physical application of the land use program to best respond to the site's physical attributes and constraints. The land use program represents a response to market and regulatory demands while the physical land use plan represents its three dimensional expression. The intent is to establish positive interfaces not only between the overall development and adjacent neighbourhoods but also between internal neighbourhoods and individual building masses.

To this end, site access and circulation are key factors in shaping the overall urban form of the land use plan. A significant effort has been made to minimize the need for excessive roadway infrastructure while ensuring that functional vehicular circulation movements are maintained. The land use plan contains one main vehicular loop road with two main access points off Mills Avenue and Franklin Avenue. Access to all internal development nodes is conveniently provided off this loop road. This permits the majority of internal access and parking to be internalized within motor courts and green spaces.

This approach has lead to a number of favourable outcomes. It has



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

resulted in the creation of internal neighbourhoods which not only accommodate internal green spaces but are also separated from each other by green space corridors. The introduction of these open space corridors in return provide excellent opportunities for development of a comprehensive pedestrian trail system linking both internal neighbourhoods and connecting with external open space and surrounding neighbourhoods. In this way, less emphasis is placed on vehicular circulation while a safe and convenient pedestrian environment is created.

A town grid is created, however, rather than the grid being composed only of hard paved surfaces, the linear open space corridors replace would be rear lanes. This provides opportunities for significant landscape treatments which soften the visual impact of development by creating internal buffers between building masses. At the same time this improves indoor / outdoor living relationships by creating internal aesthetic viewsapes which in turn account for increased privacy between individual residential units as well as between building nodes.

The land use concept described creates an overall plan with a 'front door' environment due to the effort placed on internalization of motor courts and parking areas. The majority of frontyards face predominantly onto either formal or natural green spaces. The overall result is the creation of an appealing streetscape as perceived both internally as well as from surrounding adjacent neighbourhoods and open space corridors.

5.4.2 Land Use Statistical Summary

Developable Area and Proposed Land Exchange

The Longboat Landing site currently includes approximately 65.6 acres (26.5 ha) of land. A portion of this land is located within an area to be designated as parkland while other portions of the land are required by the RMWB for road widening.

The negotiation and closing on the sale of the Land to expand Prairie Loop Boulevard is complete resulting in a remaining gross site area of 56.069 ha.

The development site is also limited due to its proximity to the Clearwater River and Hangingstone Creek. A parkland dedication in excess of 10% is required between the rivers and the developable area of the site. The proposed parkland dedication (and stormwater pond) will be approximately 21.6 acres (8.7 ha). This accounts for approximately 33% of the site area after land exchange and



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

dedication of required Clearwater Drive road widening.

Table 3: Useable Site Area

Site Area	Acres	Hectares
Total Development Site Area	65.5	26.5
Less: 10.0 m Road Widening Allowance	3.01	1.22
Less: Phase 1 Development	10.09	4.08
Subtotal Site Area	52.4	21.2
Less: Parkland Reserve & Stormwater Ponds	21.6	8.7
TOTAL DEVELOPABLE SITE AREA	30.8	12.5

5.4.3 Transportation and Parking

The Engineering Design Brief identifies two access locations to the local transportation network;

1. Franklin Avenue access to connect the site to the rest of the Lower Townsite and downtown area. This requires upgrading Franklin Avenue to a divided arterial roadway from the site boundary to the King Street intersection,
2. Proposed extension of Mills Avenue to Prairie Loop Boulevard to connect the site to the Highway 63 corridor. These direct access locations will integrate the development well with the existing and future roadway system. This requires a new arterial roadway (Prairie Loop Boulevard) along the railway R.O.W. alignment from the King Street roundabout to the Fraser Avenue extension.

For the initial stages of development, Franklin Avenue will be the singular access to the site. Based the design criteria of 3000 vpd, the second access is required to site at a population horizon of 1800 or 660 units to ensure an acceptable level of service from the site. The internal roadways will be constructed with input from RMWB Engineering department input, to create local and minor collector residential roadways that are efficient and functional. In addition, the furthest distance to a municipal bus stop would be 300m walking distance, which is within the RMWB guidelines of a maximum of 400m.

Parking

Parking within the Longboat Landing development has been provided in accordance with the requirements of the RMWB Land Use Bylaw. The amount of parking varies for each product type however; all products achieve the minimum required parking, with many providing more parking than is required under the bylaw.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

In addition to the required on-site parking, Longboat Landing has been designed to include significant on-street parking. Pods of parallel parking stalls are located on all streets throughout the development. Parking has been designed to blend into the overall landscape and urban fabric in a manner that seeks to calm traffic within the project and to provide a safe and efficient pedestrian experience.



LONGBOAT LANDING FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO VOLUME I: LAND USE PLANNING BRIEF



Figure 8: Road Cross Sections 1



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN



Figure 9: Road Cross Sections 2



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
VOLUME I: LAND USE PLANNING BRIEF

5.4.4 Open Space and Trails

A key factor in determining the organization of built form within the site is the amount, location and configuration of open space, both structured and natural open space. Approximately 44 acres of the total 66 acre site will be developed, a significant amount of open space is inherent in the overall land use plan. Therefore, it is important to consider how approximately 22 acres of open space is incorporated into the site planning. In response to both the ARP and the developer's project goals and objectives, it is logical to consolidate this area as a major open space preservation zone which contains the site's only natural vegetation complexes adjacent to the two major riparian corridors. This serves not only to preserve important environmental values but also to create a major open space anchor and visual amenity which reinforces the overall lifestyle qualities which the Longboat Landing project seeks to achieve. In this way, public access to the waterfront corridors can be accommodated without creating conflicts between the public and private realms. In preserving this natural area as a major open space amenity, it is also conducive to the integration of public trail access through the area.

This natural open space zone occupies the southeastern, southern and southwestern perimeters of the site thereby confining development to an internalized 17.7 ha (44 ac) area. While residential zones flanking this preserved natural perimeter buffer benefit from this interface, internal residential enclaves risk potentially more compromised urban interface conditions. In response to this concern, site planning has incorporated a series of linear open space corridors between building masses, defining internal neighbourhoods and facilitating a pleasant pedestrian movement network. This has the added benefit of providing visual relief between building masses and improved indoor / outdoor relationships. In total the comprehensive land use plan provides 8.7 ha (21.6 ac) of natural and structured open space.

5.4.5 Sanitary and Water Service

The water system for the proposed residential development will be an extension of the City of Fort McMurray's existing pressurized system from two connection locations. The proposed system will be extended from the current water main within Franklin Avenue and the Mills Avenue water main and will be looped. This proposed looping would provide a minimum 400mm diameter continuous water main and is consistent with the 'Lower Townsite East End Servicing Study', March 2002 by Associated Engineering. Upgrading of the existing 200mm water main on Franklin Avenue from Penhornwood to King Street will be required to meet ultimate flow requirements to the site.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

The proposed sanitary system will be serviced by an on-site gravity sewer system to a lift station and, ultimately, an off-site forcemain connecting to an existing manhole on Riedel Street. The lift station would be located immediately adjacent to the site in the Franklin Avenue R.O.W. The proposed lift station location is situated such that if/ when future off-site development occurs to the east, it can be upgraded to accommodate additional flows. The forcemain would measure approximately 2.4 km in length connecting to the existing sanitary sewer network. On an interim basis, the RMWB has agreed to allow the flow from 500 units to be discharged to the sanitary system at the intersection of Franklin Avenue and Penhorwood Street. Both the water and sanitary systems will be designed in accordance with the Regional Municipality of Wood Buffalo's Engineering Servicing Standards.

5.4.6 Shallow Utilities

The specific franchise utility operators such as natural gas, power, phone, and cable television were contacted for general comment regarding servicing the proposed development. It is envisioned that the area will be serviced from existing infrastructure located along Franklin Avenue. ATCO Gas and ATCO Electric have responded with written comments regarding the proposed utility locations and alignments. As development occurs, the utility companies will confirm exact locations of equipment, utility alignments, and etc. providing a design to adequately service each stage.

5.4.7 Stormwater Management

The Stormwater Management system will be designed and constructed in general accordance with the Regional Municipality of Wood Buffalo Engineering Standards. Urban development flow yields higher pollutant concentrations than predevelopment conditions. The proposed stormwater management facility for Longboat Landing will be designed to ensure post-development release rates are based on water quality parameters since an increase in discharge rate will not cause flooding.

The Stormwater Management Facility will collect runoff from approximately 18 hectare development area. Proposed Best Management Practices such as ditch checks and low slope wide-bottom grassed sales will also be employed in the post development basin. The facility will discharge via outfall structure directly into the Hangingstone Creek. The proposed outfall will be designed to address any erosion issues.



LONGBOAT LANDING

FORT McMURRAY, THE REGIONAL MUNICIPALITY OF WOOD BUFFALO
OUTLINE PLAN

Longboat Landing's general servicing concept involves developing the area with an urban roadway cross-section that will include a piped stormwater system. The minor system is designed for 1 in 5 year flows and the major system, conveyed within road right-of-ways or PULs, will accommodate flows in excess of 1 in 5 years.

The post-development drainage basin will predominately drain to one constructed inlet in the wetland detention facility located approximately in the southern half of the owned lands (approximately 27.5 hectares). This wetland will discharge at a controlled release rate via a ditch to the Hangingstone River, complete with an outfall structure to dissipate energy.

An open space system comprised of a stormwater management facility combined with park areas and pedestrian walkways is proposed for the development.

5.4.8 Development Phasing

The original Land Use Brief identified 6 proposed phases of development in accordance with a desired housing mix and related market absorption projections on a per phase basis. Generally, the comprehensive land use plan will be implemented from the Franklin Ave. entrance south along the Prairie Loop Boulevard arterial corridor frontage, then gradually southeast towards the Clearwater River development limit.

While development phasing is not set in stone, orderly development is necessary and will correspond with the systematic or contiguous expansion of servicing and roadways.