

**THE TOWN OF GRANDE CACHE
BYLAW NO. 754**

**BEING A BYLAW OF THE TOWN OF GRANDE CACHE IN THE PROVINCE OF ALBERTA,
TO ADOPT THE RIVERVIEW AREA STRUCTURE PLAN**

WHEREAS *the Alberta Municipal Government Act, RSA 2000, Chapter M-26 as amended*, provides as follows:

Section 633(1) For the purpose of providing a framework for subsequent subdivision and development of an area of land, a council may by bylaw adopt an area structure plan.

AND WHEREAS the Council of the Town of Grande Cache deems it to be in the public interest to adopt the Riverview Area Structure Plan.

NOW THEREFORE the Council of the Town of Grande Cache, duly assembled in Council Chambers at Grande Cache, Alberta, hereby enacts as follows:

1. That the Riverview Area Structure Plan, being Schedule 'A' attached to and forming part of this bylaw, be adopted.
2. Should any provision of this bylaw be determined to be invalid, then such provisions shall be severed and the remaining bylaw shall be maintained.
3. This bylaw shall come into force and effect upon receiving third and final reading, and having been signed by the Mayor and Chief Administrative Officer.

Read a first time this twenty-third day of January, 2013 AD

Louise Krewusik
Mayor

Alan Parkin
Chief Administrative Officer

AND NOTICE OF THE PUBLIC HEARING ADVERTISED the twenty-ninth day of January, 2014 AND the fifth day of February, 2014 in the Grande Cache Mountaineer.

PUBLIC HEARING held the twelfth day of February, 2014

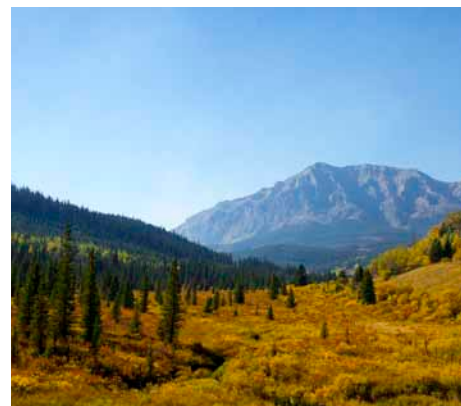
Read a second time this twelfth day of February, 2014

Read a third and final time this twenty sixth day of February, 2014

Shawn Moulun
Deputy Mayor

Loretta Thompson
Chief Administrative Officer

Town of Grande Cache Riverview Area Structure Plan



November 28, 2013

CONTENTS

1.0 Introduction.....	1
1.1 Plan Purpose	1
1.2 Vision	1
1.3 Statutory Plan and Policy Context.....	2
1.4 Summary of Notable Plan Features	3
2.0 Plan Area & Development Considerations.....	4
2.1 Location	4
2.2 Defining the Boundary	4
2.3 Existing Conditions.....	5
2.4 Opportunities and Constraints.....	5
2.5 Land Ownership	6
3.0 ASP Process	7
3.1 Client Stakeholder Consultation.....	7
3.2 Public Involvement.....	8
4.0 Proposed Development Concept.....	9
4.1 Key Planning Principles	9
4.2 Overview	9
4.3 Public Open Space	11
4.4 Road Right-of-Way	13
4.5 Phasing Strategy.....	15
5.0 Servicing and Utilities	16
5.1 General	16
5.2 Water Servicing.....	16
5.3 Sanitary Sewer Servicing.....	16
5.4 Stormwater Management.....	16
5.5 Vehicular Transportation Network.....	16
5.6 Pedestrian Connectivity	17
6.0 Force and Effect	17

7.0 Appendix A: Figures 20

Figure 1	Location
Figure 2	ASP boundary
Figure 2b	Existing Conditions
Figure 3	Development Typologies
Figure 4	Roadway Designations
Figure 5	Phasing Plan
Figure 6.1	Ultimate Servicing Plan
Figure 6.1	Future Water Distribution System
Figure 6.2	Future Water Distribution System - Pressure Zones
Figure 6.3	Peak Hour Demand Analysis for Future System
Figure 6.4	Future Fire Flow Analysis for Future System

1.0 INTRODUCTION

1.1 Plan Purpose

Over the past decade, The Town of Grande Cache has experienced relatively steady population growth. With concurrent growth of local and regional industries, residential populations are expected to continually increase. The Riverview Area Structure Plan (ASP) forms the provision of a new plan area within the Town boundaries, intended to provide a mix of residential typologies, commercial development potential and an array of public open spaces.

This document is intended to establish a general land use framework for the development and servicing of the lands identified within the plan boundary. Since adopting the 2012 MDP, the Riverview ASP area has been prioritized by Council and Administration as the next logical area of raw land that the Town will develop for residential zoning. The land use framework is demonstrated in this plan by identifying:

- development typologies, including a range of residential densities, possible commercial development and public open space;
- a transportation network that creates a well-connected pedestrian system along with an efficient vehicular roadway system;
- high level servicing strategies that demonstrate how basic services will be best implemented to achieve the proposed plan;
- the retention of natural areas for both the preservation of ecological habitat and for strategic buffers between developments; and
- a phased approach to development that suggests how the ASP area will be developed over time.

This ASP has been completed in accordance with the Town of Grande Cache guidelines for the preparation of Area Structure Plans. It also generally follows the land uses included in the current Town of Grande Cache Land Use Bylaw.

1.2 Vision

The 2012 Municipal Development Plan (MDP) charts the course for important themes that inform the development of this ASP. The most relevant overarching themes from the recently endorsed MDP that influenced this ASP included:

- Culture: supporting the development of a culture of positivity, involving youth, encouraging and promoting diversity of people and cultures, and celebrate our special places; Ensuring our residents have great places to celebrate culture and heritage within the community; Preserving our unique character through the way in which we develop the built environment and how we demonstrate respect for the surrounding natural environment;

- Environment: promoting an ethic to preserve and protect our natural environment; ensuring that our community is clean and well maintained; encouraging a culture of environmental responsibility through education and opportunities for local stewardship;
- Governance: promoting transparency in governance, effective community engagement, and fiscal responsibility in community decision-making; and
- Programs and Events: encouraging celebration in the community; Enhancing opportunities to experience our natural context through our existing trail system, and ensuring a balance of outdoor experiences is available.

In October 2012, the Town of Grande Cache Municipal Council established a new Corporate Vision, and has been endorsed as follows:

“Grande Cache will be a progressive mountain community that achieves excellence by embracing cultural diversity, encouraging safe and healthy lifestyles and while fostering environmental stewardship within a thriving and diversified economy.”

This ASP seeks to bring the visions set forth by the MDP and the Corporate Vision through the following project attributes:

- raise the rigor and integrity of planning instruments available to Council and Administration in order to allow the Town and its representatives to make more meaningful and strategic land planning decisions;
- continuing to plan our community through highly engaging, inclusive and transparent planning processes that are facilitated by expert planning professionals, while driven by local values and community involvement;
- exploring strategies to make housing more attainable to existing and future residents through planning, such as densification of development and exploring mixed use development;
- providing a mixture of housing types to provide opportunity for a variety of incomes and lifestyles, designed to create animated streetscapes and comfortable transitions of mass and scale;
- providing people with a well-planned network of public open space that is pedestrian dominated, by providing ample areas for passive and active recreation and by minimizing vehicular / pedestrian conflicts where possible; and
- as a Municipality, demonstrating a strong environmental ethic that encourages a healthier community for both humans and ecological systems.

1.3 Statutory Plan and Policy Context

Several pertinent statutory and non-statutory documents were influential to this ASP and the planning process that was undertaken. The following summaries describe the salient policies and design principles that influence the development of this plan area. Any applicants that wish to develop within this ASP boundary must consult with the actual documents for direct reference to specific guidance on proposed developments.

- *Municipal Development Plan* – the above stated principles from the MDP are directly related to the actions set forth in this ASP. An important output of the MDP process was recognition of a growing local appetite for more sustainable approaches to development, whereby stronger

values for the natural environment are emerging amongst residents in Grande Cache such as access to nature and protecting view sheds. This ASP proposes a new approach to urban growth by drastically increasing municipal reserve dedication and providing a greater area of naturally occurring lands with future growth. Building on another recommendation of the MDP, this ASP also focusses on providing a range of development types early on, including affordable / attainable development options.

- *Land Use Bylaw* – The land use bylaw currently designates the entirety of developable land within this plan area as R-1C (Residential Single Household) and UR-1 (Urban Reserve). Rezoning within this ASP boundary will not take place until which time development applications are received and compared against the more generalized zoning descriptions for this parcel. Should appropriate land use zones not exist, new ones may need to be created for the purpose of suiting this plan, or a Land Use Bylaw update will be required. DC (Direct Control) zoning is not contemplated for and parcels within the proposed plan area at this time.
- *20/20 Vision Document* – this municipal sustainability plan charts the course for the overall principles and objectives of community development in Grande Cache.
- *Open Space Master Plan* – the Town completed an OSMP in 2009, which is a guideline for future development of various open spaces within the community. This plan compiles various passive and active recreational uses of public open space, and made specific recommendations for future open space development within the Riverview ASP boundaries.

1.4 Summary of Notable Plan Features

Notable features of this plan include:

- a minimum 30m buffer of existing vegetation to be retained between existing residential development and proposed growth areas for nearly all interface areas to promote privacy to those residents who have had the luxury of a treed rear property line for decades;
- very strong pedestrian connections throughout the development, accommodating minimal street crossings for pedestrians to travel from their homes to the surrounding natural areas;
- a potential phasing strategy that allows for a range of housing typologies to be available in initial stages of development, which accommodates ever-changing market conditions that dictate appropriate development densities and price points;
- conformance with principles outlined in the Town of Grande Cache Strategic Plan (20/20 Vision), the Municipal Development Plan and the Open Space Master Plan;
- retaining current roadway standards for development areas rather than creating new proposed widths and cross sections –opposed to being overly prescriptive, this ASP provides options for road ROW cross sections as it relates to sidewalk locations, widths, boulevards and medians; and
- flexibility of the plan to make future changes, if required, to amend proposed development densities.

2.0 PLAN AREA & DEVELOPMENT CONSIDERATIONS

2.1 Location

Figure 1 – Location Plan, demonstrates the location of the Riverview ASP boundaries within the Town of Grande Cache. Overall, the ASP land is located at the far north-west side of the Town, and builds the community out to its full settlement boundary in this area.

The plan area is bound to the north and west by steep terrain, and is defined by the settlement boundary of the Town. The 2012 MDP notes the lands to the north of this boundary to be too steep for development, and this is validated by topographical information. The south boundary of the Riverview ASP plan area is defined by existing residential land, including currently treed areas, single family residential, and a school site. Figure 2 – ASP Boundary, demonstrates the existing nearby development located to the south of the ASP area.

The proposed plan area would be accessed by road at two locations, including 110 St. at the east end of the development and at Moberly Road at the west end of the development.

2.2 Defining the Boundary

The original plan boundary included only a 13.0 ha parcel of land located at the far south-west end of the current ASP boundary, previously known as “Phase 6 Extension”. The boundary was subsequently increased to over 57ha due to:

- the need to provide a greater volume of potential development sites, with uncertainty in potential growth demands in the near future;
- the need to accommodate affordable / attainable housing alternatives in the near future, which currently do not exist within readily serviced lands;
- the economic efficiency of completing this study for a larger area of land;
- the ability to understand the entire vehicular transportation network to ensure acceptable volumes of vehicular traffic along roadways and at intersections;
- the need to fully understand pedestrian linkages for the entire area, including roadside sidewalks and other walkways within designated areas of public open space; and
- the need to demonstrate an essential second roadway access to the Stage 6 and Riverview ASP areas to reduce safety risks and potential traffic congestion of the single roadway access at Hoppe Ave. / Moberly Road.

The name “Riverview” was inspired by the pronounced view of the surrounding river system that can be seen to the northwest from the highest plateau within the plan area. While views of the surrounding mountain ranges dominate throughout the community, future resident of the Riverview plan area will also enjoy a strategic overlook north toward the Smoky River.

2.3 Existing Conditions

The Town of Grande Cache is located atop a mountain plateau in and amongst the Rocky Mountains. While flat relief is often limited within mountainous regions, the settlement boundary of the Town was defined by a fairly large plateau of gently sloping land that is generally less than 10% in grade. The ASP site has a consistent and steady slope leading general from south to north. Beyond the settlement boundaries and past the northern extents of the ASP boundaries exists fairly steep terrain that has variable slopes.

Figure 2B depicts the plan area overlaid upon an aerial photo of the ASP boundaries. Portions of the plan area have been previously cleared, due to the following infrastructure developments:

- a sewage lagoon which had been decommissioned upon the completion of a more current sewage treatment plant located to the east of the Town;
- east-west fire breaks completed in previous years as a fire prevention measure; and
- both north-south and west-west utility ROWs for overhead power lines and stormwater utility lines.

A historical resources assessment has not been completed for the ASP area. It is important to note that pursuant to Section 31 of the Historical Resources Act, development proponents and their representative are required to report the discovery of any archaeological, historical period or paleontological resources which may be encountered during construction.

2.4 Opportunities and Constraints

The plan area has the following characteristics that present opportunities for unique development alternatives:

- sizeable areas of natural vegetated areas that can be included within the open space network, in a relatively intact and natural state;
- potential retained natural areas that are sizeable enough to also include nature trails or other recreational purpose without adversely affecting ecological integrity;
- past planning efforts including the 2012 MDP and the 2009 Open Space Master Plan that both resulted from significant local input, and provide direction for this ASP;
- existing utility connections for urban servicing at either end of the plan area, with verification of capacity (as included in past engineering servicing studies);
- undulating and gently sloping terrain that allows for strategic views from nearly all development sites within the plan boundaries, to ensure all occupants can enjoy views of the surrounding mountainous region; and
- great access to adjacent natural areas and the regional trail system, and the ability to retain many of the existing connections that residents currently utilize.

Some of the development constraints that will influence the final plan for this ASP include:

- an area of land known as the reclaimed sewage lagoon which has restrictions for future development options;

- utility right of ways, such as a north-south stormwater utility easement that bisects the site;
- steep terrain just beyond the developable land boundary, as delineated in the MDP; and
- existing development that has not seen nearby development for many years, and associated resistance from residents to endorse new development immediately adjacent to their property.

2.5 Land Ownership

The entire plan area is currently owned by the Town of Grande Cache, and is within the current surveyed Town boundaries. This area is titled as “Remainder of Lot A”. Lot A was the original plan area designated when the original Town limits were first established.



3.0 ASP PROCESS

3.1 Client Stakeholder Consultation

The Consulting team has had three live meetings with the Client to overview the scope of work for this assignment, better understand potential growth trends of the community, gather background data and past studies, craft an outline of the final document, and determine the most suitable public consultation process. A project Advisory Committee was established, with approximately 15 local individuals participating in the first meeting. Local stakeholders represent the following groups, amongst others:

- local business community, including land development;
- Town administration;
- local residents that live adjacent to the proposed plan area (Phase 4 residents);
- MPC members;
- seniors; and
- stay-at-home parents.

This distribution was pre-determined based on a direct selection process, to flush out anticipated concerns with this development. These potential concerns included:

- existing residents who have benefited from “bush-side” living that would have future growth adjacent to their rear property lines;
- walkability of the public realm and the need to ensure optimal accessibility of streets and open space for all abilities; and
- past knowledge of Town growth habits, and current growth demands such as diversity of product types and the provision of affordable / attainable / appropriate housing.

An initial meeting was held with Advisory Committee members. After team introductions, the participants were given an overview of the purpose of Area Structure Plans, and how this document fits within the context of other planning instruments found in this community. A presentation was then given to inspire thinking toward what “home” means, followed by group discussion on the key attributes of what makes Grande Cache a great community to live in. Live polling of the audience was used as a technique to share group perspectives and to track results of numerous questions. When asked what best defines “home” in Grande Cache, the most prominent response was the scenic views prevalent in this community. This was consistent with result to this question in past consultations conducted by the consulting team, which reinforces the importance of protecting view sheds in municipal planning.

A second follow up meeting with the Advisory Committee was held approximately one month after the initial session. At this meeting, the Consulting team provided a draft outline plan of the proposed distribution of land uses within the plan area. Using results from polling and group discussion from the initial Advisory Committee meeting, the team demonstrated how this feedback was used to develop the draft plan.

3.2 Public Involvement

(to be completed upon completion of the upcoming public open house, and subsequent public hearing, summarizing any feedback received and overall impressions of the plan)



4.0 PROPOSED DEVELOPMENT CONCEPT

4.1 Key Planning Principles

The following key principles were established during the preparation of this ASP, in consultation with the steering committee and also reference to past planning instruments within the Town.

- **Principle 1:** Designing a Walkable Community – the provision of public open space, including streets, alleys, park spaces and natural areas that are pedestrian dominated and minimize the impacts that vehicles have on pedestrian experience.
- **Principle 2:** Creating Home – a conscious effort to understand the key elements that make Grande Cache such a great place to live, play and grow old. Two of the key elements that define “home” in Grande Cache were identified as the well preserved views to surrounding natural areas, and the social fabric within the community.
- **Principle 3:** Providing Affordable / Attainable Housing – while providing a mix of housing types, this plan needs to identify development strategies that provide more appropriate housing types with reduced price points. This can be achieved through increased densities and reduced lot sizes, while still not compromising the quality of housing units and aesthetic appearance of development. This plan attempts to accommodate the efficient and cost effective use of land, infrastructure and services by promoting more compact and contiguous development.

4.2 Overview

The proposed layout accommodates six development typologies and areas, best demonstrated on Figure 3. The following describe the various typologies, and also provide a summary of how each help address the three principles identified in Section 4.1:

1. **Mixed Use Development** – (approx. 50 units / ha, assumed 2.6 people / unit) a parcel of land surrounded on all sides by roadway, which can accommodate a mix of small commercial / retail or recreational amenity uses on a building’s main floor, with options for additional residential development on above floors (approximately a 3 to 4 storey building). Mixed-use is intentionally left open ended, as to allow developers to bring their perspective on local market opportunities for small commercial development mixed with residential units.
 - **Principle 1** – Walkable Community: providing some commercial services to residents nearby to their homes and within walking distance, as the current downtown is beyond a ten minute walk and disconnected by inconsistent walkways.
 - **Principle 2** – Home: Providing more than just housing as built form within a residential area allows for potential public service amenities to encourage at-home socialization, public gathering, and spending more time within your neighbourhood.
 - **Principle 3** – Affordable / Attainable: dense apartment-style or rental units are common within mixed use developments. This would provide a higher density housing option, either

by rental or fee simple ownership, with close proximity to basic services such as small convenience store or retail operations.

2. **High Density Residential** – (approx. 60 units / ha, assumed 2.0 people / unit) provision of development densities that are no greater than existing high density developments in Grande Cache. Ample surface parking areas would need to be accommodated on-site for these areas, as underground parking may be cost prohibitive due to soil conditions. These parcels would potentially be zoned as per the current LUB designation of R-3 for Residential High Density Multiple Household, and should not host any high density than currently found in Town and permitted by the current LUB.

- **Principle 1** – Walkable Community: providing some services to residents nearby to their homes, as the current downtown is beyond a ten minute walk and disconnected by inconsistent walkways.
- **Principle 2** – Home: Higher density developments often contain internal social gathering spaces which can enhance sense of home and belonging for building residents and their visitors.
- **Principle 3** – Affordable / Attainable: higher density developments reduce site servicing and land costs per unit due to limited distribution of utilities on site and more compact and vertical development.

3. **Medium Density / Attached Residential** – (approx. 40 units / ha, assumed 2.8 people / unit) row housing / multi-family residential development, which is most commonly suited to affordable / attainable / appropriate housing that still provides residents with a front and rear yard. This typology includes homes that are attached to one another with two or more units within a single structure.

- **Principle 1** – Walkable Community: ensuring that these developments are well connected to the trail and open space network that is spread throughout the ASP boundary.
- **Principle 2** – Home: while looking for more attainable housing options, market demand shows trends of home buyers preferring to have their own yard. For many people, home extends to their own back or front yard, and this housing type still provides outdoor semi-private space.
- **Principle 3** – Affordable / Attainable: More compact development allows new housing product to come with a lower price point. While high density developments will likely bring a lower price point than attached residential, this housing type comes with the pride of fee simple ownership and a semi-private outdoor yard. Cost savings are achieved through less land use and partially shared utilities.

4. **Low Density Residential** – (approx. 20 units / ha, assumed 3.4 people/ unit) traditional single family attached or detached garage product.

- **Principle 1** – Walkable Community: ensuring that these developments are well connected to the trail and open space network that is spread throughout the ASP boundary. Some caution needs to be raised with low density residential as lower population densities can result in amenities becoming further apart and less walkable.
- **Principle 2** – Home: in the absence of concern for more affordable housing options, market

demand shows trends of home buyers preferring to have their own yard and single family home with large private property. This density more suitable allows for outbuildings such as garden sheds and detached garages.

- **Principle 3** – Affordable / Attainable: Low density, single family housing developments are of the least affordable options available in Town.

5. **Municipal Reserve** – otherwise known as park space, this designation describes future public land that will be either traditional parks or areas of retained natural areas. While the Town has the ability to delineate portions of land as Environmental Reserve, none is contemplated in this plan. This ASP proposes an over-dedication of MR above the typical 10% allocation of MR, due to significant MR deferral from past phases of development that requires consumption;
6. **Public ROWs** - including road ROWs and other required easements for the purpose of accommodating utilities; and
7. **Abandoned Sewage Lagoon** – this area includes a reclaimed sewage lagoon (reclaimed as per Albert Environment standards and regulations). Development is not permitted on this site. While this parcel of land will remain as Public Utility Lot (PUL), it will become part of the overall open space network.

The following table identifies the overall statistics for the various plan area typologies:

Proposed General Land Use	Gross Area (ha)	Percentage of ASP area	Approx. units / ha	Approx. population
Mixed Use Development	1.2	2.1%	50	160
High Density Residential	1.9	3.3%	60	230
Med. Density / Attached Residential	4.1	7.1%	40	460
Low Density Residential	23.1	40.2%	20	1570
Municipal Reserve	10.9	19.0%		
Public ROWs	12.5	21.8%		
Abandoned Sewage Lagoon	3.7	6.4%		
Total	57.4	100%		2420

4.3 Public Open Space

Crime Prevention Through Environmental Design (CPTED) involves the appropriate design, organization of the physical environment and involvement of the community. This initiative can help reduce crime and improve the quality of life for people. In the development of the Riverview ASP area, decisions relating to transportation design, street pattern, access, public open spaces, parks, utility corridors, multi-use trails and walkways, and the built environment shall use CPTED principles to create a safe and secure neighbourhood. Natural surveillance will be one strategy used to increase visibility and awareness of public and private space, natural access control techniques to guide and direct people within natural and built environments, and promote territorial reinforcement by increasing the definition of space and local stewardship within the neighbourhood.

Firesmart principles will be important to consider in developing strategies for retaining natural areas within the network of public open space. The current firesmart approaches are unfortunately not sincere to ecological preservation, as its best management practices lead to significant disturbance to the ground floor of natural areas which commonly support small animals, insects and reptiles that depend on understory vegetation. Also, understory vegetation such as dogwood, willow and grassy groundcovers provide protection from erosion and help sustain firm ground around larger tree roots. As understory vegetation is altered, concerns with windblown trees nearby housing developments become more common. A balanced approach will be required that explores how to minimize the spread of wildfire in residential areas, while preserving ecological systems, biodiversity and forest health.

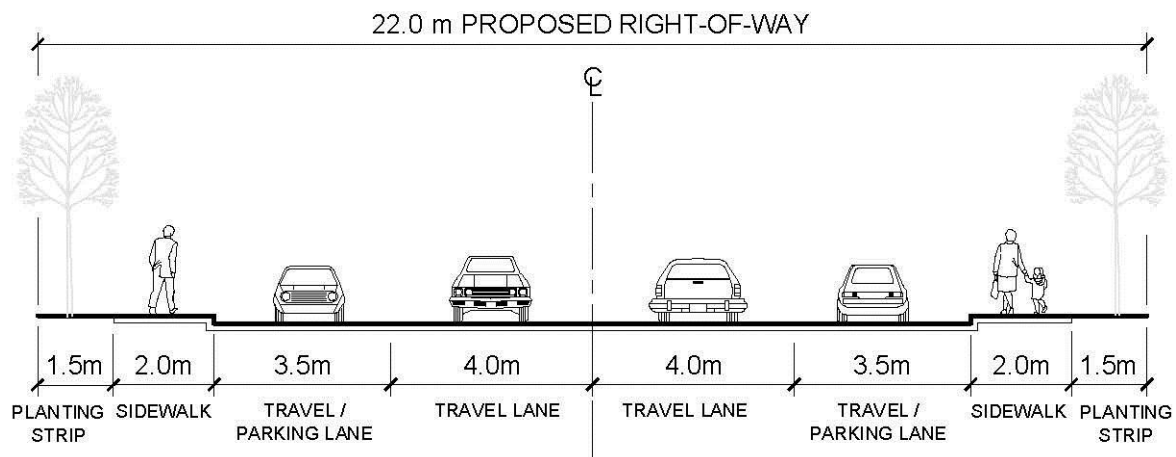
Figure 3 identifies the network of public open spaces that will form part of the passive and active recreational network of this neighbourhood. In creating the 2009 Open Space Master Plan (OSMP), this network was not yet contemplated. As a result, recommendations made in the previous OSMP will require updating to reflect the anticipated resident population, current trends in recreation, the inclusion of significantly more natural areas and the newly designated MR areas.

A significant benefit of the proposed Riverview ASP is the potential trails network that is a result of the MR and utility ROW configuration. A conscious effort was made to minimize pedestrian and vehicular conflicts by implementing numerous mid-block pedestrian walkways and open spaces. All development applications must address this neighbourhood trails network and respect the connections demonstrated in this proposed plan.

4.4 Road Right-of-Way

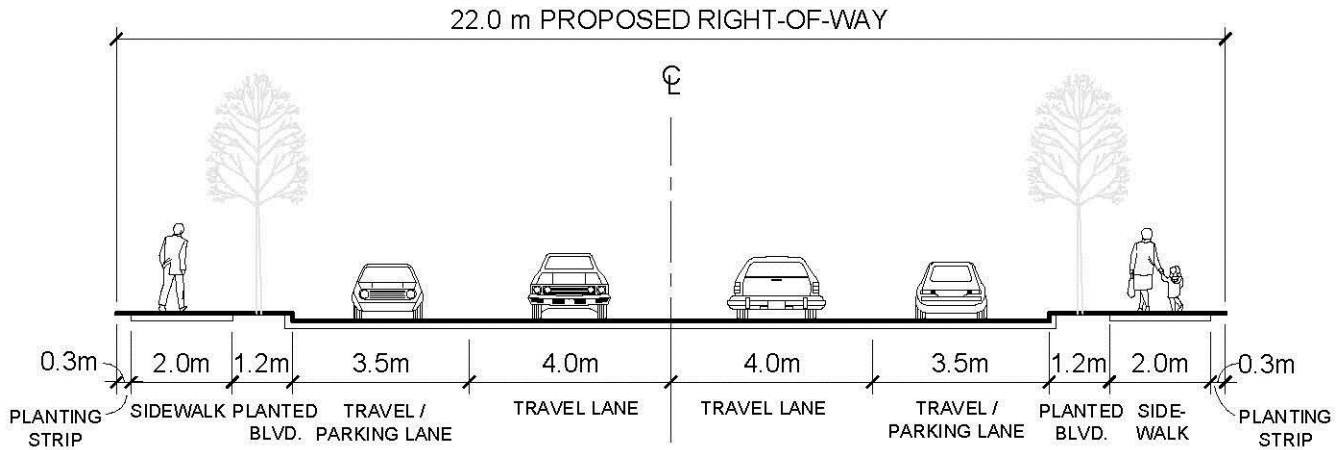
This plan introduces two road typologies, including collector (27.0m ROW) and local (22.0m ROW) roads. All roads in the plan are proposed to be two-way travel. Figure 4 demonstrates two options for each of these typologies, and can be described as follows:

22.0m Local Road ROW "Option A"



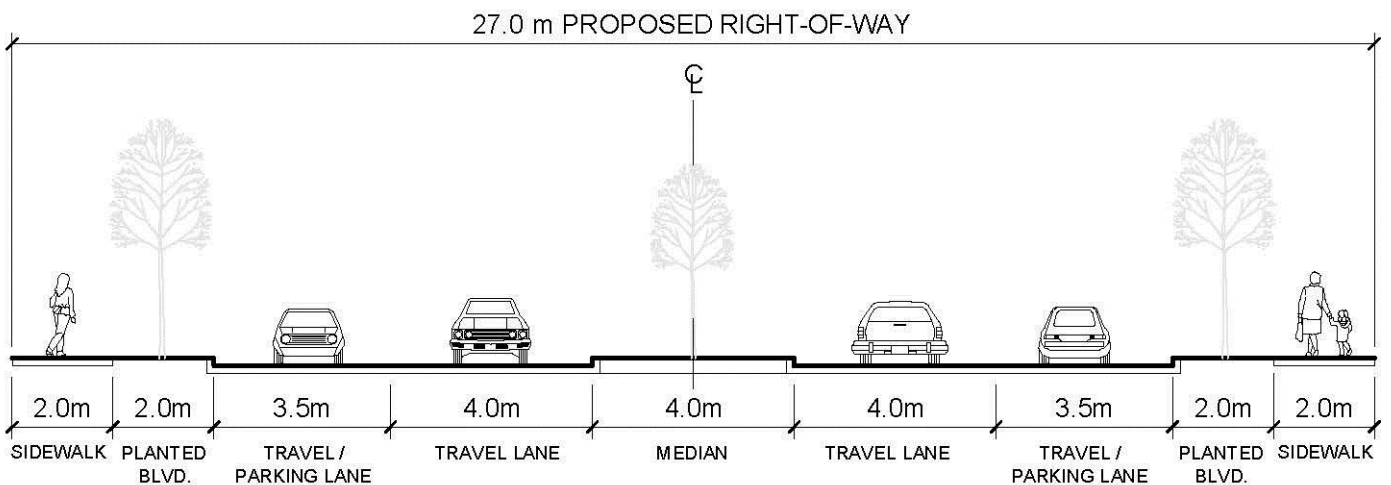
This option includes two-way traffic along local roads, with 4.0m wide travel lanes and 3.5m travel / parking lanes. A separate sidewalk has been shown here, providing a tree-lined boulevard between the curb and sidewalk. This setback allows for minor amounts of snow storage during snow clearing, however the integrity of the planted boulevard could be jeopardized by road salts, sand and snow clearing equipment. The value of a separated walk is an enhanced pedestrian experience by providing a walking surface on both sides of the road that is set back from parked or moving vehicles.

22.0m Local Road ROW “Option B”



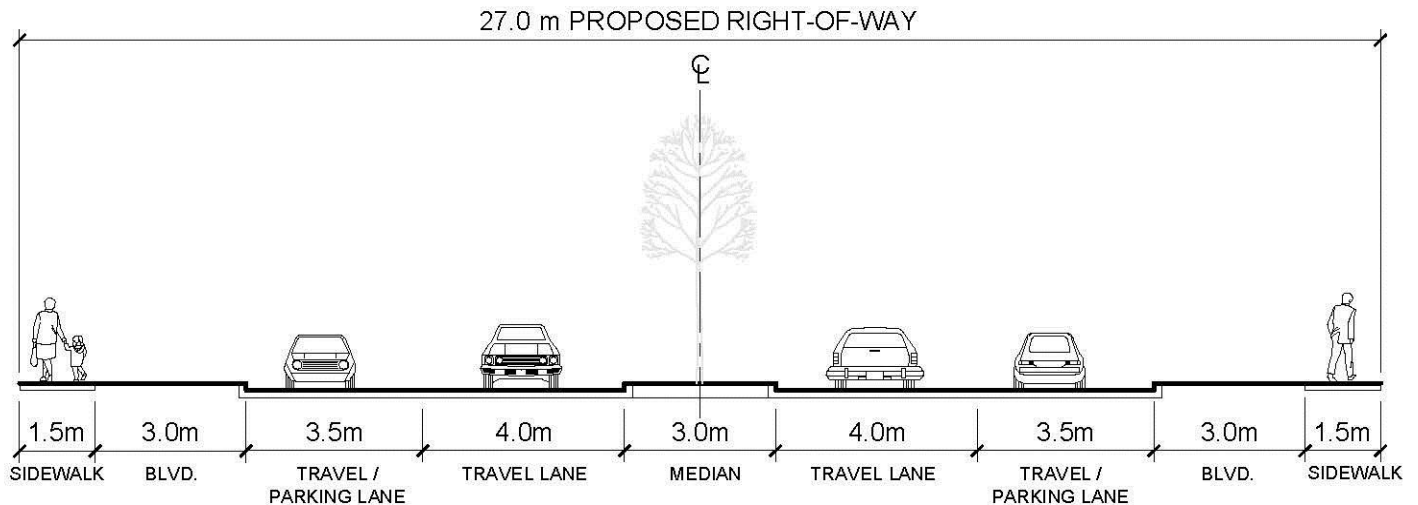
This option is similar to the previous version, however demonstrates a monolithic sidewalk. The benefit of this iteration is the protection of the planting strip from wintertime conditions. Drawbacks include a less desirable pedestrian experience, even more limited areas for snow storage along the curb. This option would either require snow storage on the road carriageway, or complete removal of cleared snow using an auger and truck.

27.0m Collector Road ROW “Option A”



This option includes two-way traffic along local roads, with 4.0m wide travel lanes and 3.5m travel / parking lanes. The cross section also includes a 4.0m wide centre median that provides enhanced plantings (trees, groundcovers) as well as snow storage potential in winter months. A separate sidewalk has been shown here, providing a tree-lined boulevard between the curb and sidewalk. This setback allows for minor amounts of snow storage during snow clearing, however the integrity of the planted boulevard could be jeopardized by road salts, sand and snow clearing equipment. The value of a separated walk is an enhanced pedestrian experience by providing a walking surface on both sides of the road that is set back from parked or moving vehicles.

27.0m Collector Road ROW "Option B"



The centre median provides sufficient width to support a continuous row of street trees to enhance the appearance of the streetscape, while reduced in size from the previous option to 3.0m width. A narrower median is not recommended should trees be planned for this alignment. In this option, the sidewalk widths are minimized to 1.5m and are separated from the road carriageway. This allows for a 3.0m wide boulevard for maximum snow storage, on either side of the street. Not having trees along the boulevards reduce the aesthetic quality of the street, and inhibits ecological connectivity of some species that take advantage of tree lined boulevards. On the other hand it reduces obstacles for snow removal when piles snow is loaded and hauled from temporary stockpile locations along the boulevard.

4.5 Phasing Strategy

Figure 5 demonstrates a proposed phasing strategy, assuming four phases of development. This strategy can be further refined into more, or less phases, predicated by market demands and development proposals made. This phasing strategy was formulated based on the following considerations:

- initial phases of development providing a mix of housing types at inception, so that immediate market demands can be addressed early on;
- providing medium to high density residential up front in initial stages to help resolve current market demands;
- beginning with initial stages that are adjacent to current services, so that utilities are merely extended as to minimize development costs; and
- deferring the development of the major collector road that crosses the core of the proposed ASP area to latter stages to reduce initial costs.

5.0 SERVICING AND UTILITIES

5.1 General

A geotechnical investigation will be required to address global stability (current and post-development), on site soil condition and typical geotechnical development constraints.

The current Riverview ASP plan will require revisions to accommodate the existing topography. Some proposed roadways will require realignment in order to provide grades that are within the current Town of Grande Cache engineering standards.

5.2 Water Servicing

As outlined in the report entitled Water Distribution System Master Plan – Draft Report, prepared by ISL Engineering, dated November 2007, new 200mm and 250mm diameter watermains are required to service this area. The preliminary alignment of these mains is shown on figure 6.1 of this report.

5.3 Sanitary Sewer Servicing

As indicated in the report entitled Wastewater Collection System Master Plan – Draft Report, prepared by ISL Engineering, dated October 2007, new sanitary sewer infrastructure is required to service this area. The preliminary location of these facilities is shown on figure 6.1 of this report. Preliminary cost estimates provided in this report are shown below.

This report recommends two options to provide sanitary sewer service for this area. Option A includes a new 375mm trunk sewer while option B includes a sewage lift station. In addition, a new 300mm sanitary trunk sewer along the west edge of the development is required.

5.4 Stormwater Management

A stormwater management plan will be required for this development. The ultimate stormwater management plan will identify allowable discharge rates, required storage volumes, outfall locations and water quality improvement measures.

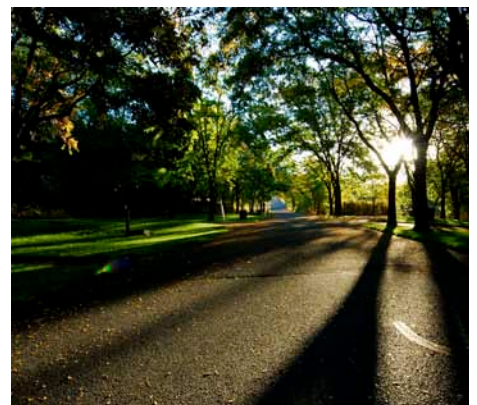
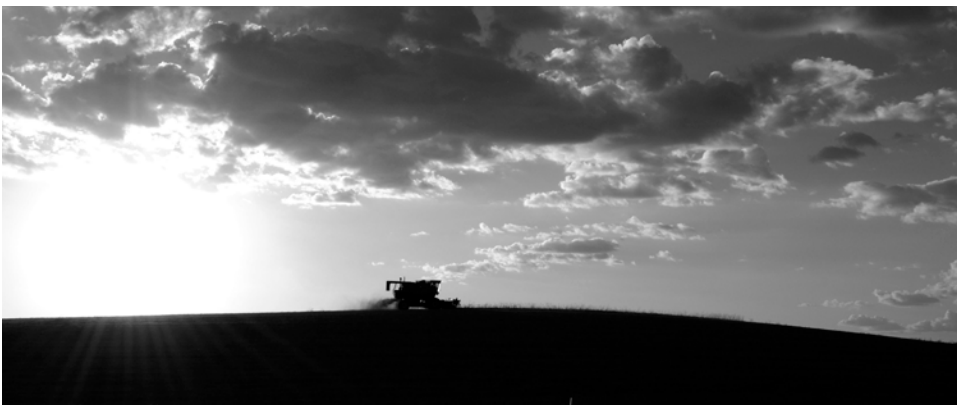
The current Riverview ASP will require revisions to accommodate stormwater management facilities.

5.5 Vehicular Transportation Network

A transportation impact assessment will be required for this development. This assessment will address on-site and off-site traffic impacts.

5.6 Pedestrian Connectivity

Pedestrian connectivity can be accommodated with a combination of sidewalks adjacent to roadways, walkways within public utility lots and trails within natural areas. Detailed planning will be required to provide a plan to integrate the above noted features.



6.0 FORCE AND EFFECT

The Riverview ASP is intended to refine existing general policy direction and land use designations assigned to these lands within the 2012 MDP, guide the subsequent assignment and implementation of land use districts to the lands within the LUB as well as establish a sound framework for future decisions on land use, subdivision, servicing and development permits. It must be noted that in making future decisions concerning the use, subdivision and development of the lands within this ASP, the Town will need to remain mindful of and monitor the capacities of both on and off-site services and make any necessary adjustments to uses, densities and lots sizes within this ASP accordingly.

Policy 6.1 Decisions Consistent with Riverview Area Structure Plan

The Town shall ensure that all future land use, subdivision, development and servicing decisions made regarding lands within the Riverview ASP shall comply with the provisions, policies, maps, figures and drawings contained within the Riverview ASP.

Policy 6.2 Amendments

- a) If any decision referred to in Policy 6.1 would constitute a major change of the provisions of this ASP, an amendment to this ASP shall be required in consideration of Policy 6.4. Decisions that would constitute a minor change to the provisions of the ASP may be considered without an amendment, in accordance with Policy 6.4, where the owner/developer can demonstrate to the satisfaction of the Town that the change does not substantively alter the intent, force or effect of the provisions of this ASP.
- b) Amendments that may be required to this ASP shall be completed in accordance with the Municipal Government Act and all other applicable bylaws, policies and procedures.

Policy 6.3 Effect on Decision Making

- a) This ASP, its concepts and provisions shall be used in conjunction with the relevant provision of the 2012 MDP and the LUB, particularly in guiding the exercise of discretion in making decisions on subdivision and development permit applications. This ASP will be used to guide any required amendments to the provisions or land use designations in the 2012 MDP to ensure consistency with Section 638 of the Municipal Government Act.
- b) Specifically tailored land use districts may be prepared and inserted in the LUB to support and facilitate the implementation of this ASP including provisions related to lot size, density, form and character, landscaping, public amenity space, and access and circulation. A

specifically tailored direct control land use district may be prepared and adopted to address any unique area or development situation.

Policy 6.4 Principles for Decision Making

- a) The exercise of discretion or variance in deciding an application or an amendment to this ASP must be both reasonable and defensible within the letter and spirit of this ASP as well as widely accepted planning principles.
- b) If a requirement or provision of this ASP is to be deviated from or if an amendment is to be made, it is essential that those making the decision clearly understand the rationale for the requirement or provision they are being asked to vary or amend.
- c) Discretion, variance and amendment shall only be considered if it can be demonstrated that the discretion, variance or amendment being considered will, at a minimum, not jeopardize the policies of this ASP and, at best, better serve them.
- d) Any variance or discretion exercised or any amendment made shall be fully documented so that the reasons and rationale for the variance or discretion exercised or the amendment are accurately recorded and clearly understood.

Policy 6.5 Repeated Amendment Applications

Should an owner/developer make repeated applications to amend this ASP once it is in effect, the Town may undertake or require that the owner/developer undertake an overall review of this ASP instead of continuing to make individual, isolated amendment applications so that the implications of the revision to this ASP can be considered and evaluated, at a minimum, in the context of the entire ASP area and, if warranted, beyond this ASP area.

Policy 6.6 Development Phasing

The staging or phasing of development will be determined by market forces and the cost-effective provision of infrastructure. An illustrative Phasing Sequence is shown on Figure 5. This phasing sequence is illustrative only and may be altered to fit changing circumstances.

Policy 6.7 Compliance With The ASP

The Town shall pursue whatever actions are deemed appropriate or necessary to secure compliance with the provision of this ASP.

Policy 6.9 Development Agreement

The Town may require owners/developers to enter into an agreement with the Town as a condition of any subdivision or development permit application pursuant to the Municipal Development Act.

Policy 6.8 Technical Information

Detailed engineering analysis and other technical information shall be required with respect to geotechnical conditions, roads and servicing (both on- and offsite) in support of decisions at the subdivision and development level. All site preparation, public utilities, public roads, pedestrian walkways and any other public facilities and improvements shall be professionally designed and constructed to the satisfaction of the Town in accordance with the Town's standards.

Policy 6.10 Traffic Impact Assessment

The Town may require applicant(s)/owner(s)/developer(s)/proponent(s), at their sole expense, to prepare a Traffic Impact Assessment (TIA). The timing and scope of a TIA shall be as determined by the Town and, if required, in consultation with Alberta Transportation.

Policy 6.11 Stormwater Management

- a) Subdivision and development permit applications shall comply with the Stormwater Management Guidelines for the Province of Alberta 1999, prepared by Alberta Environment. There shall be no change between preand post-development off-site flows except where the application conforms to an approved stormwater management plan approved in conjunction with the Town.
- b) With all costs passed on to the developer, the Town shall take responsibility for making all necessary arrangements and securing all required approvals regarding the disposal and management of stormwater off-site and all required documentation, permission, approvals and/or other forms of authorization from all relevant agencies having jurisdiction in relation to the application.
- c) If an owner/applicant/proponent is prepared to undertake the required engineering, the Town may consider interim and/or on-site stormwater management until the overall stormwater management system or required components of it are in place and approved.

Policy 6.12 Power Lines

Proposed power lines to service the ASP area and other shallow utilities such as gas and telephone shall be installed underground.

Policy 6.13 Reserve Lands

- a) Environmental reserves may be taken according to Section 664 of the Municipal Government Act either in the form of a lot (ownership transferred to the municipality) or as an environmental reserve easement (private ownership is retained). The Town may require any owner/developer to provide hazard land as environmental reserve as part of a subdivision application. All environmental reserve is to remain in its natural state except as permitted in accordance with Part 17, Division 9 of the Municipal Government Act. In some instances, conservation easements may be considered in place of environmental reserves as provided for in the Section 22 of the Environmental Enhancement and Protection Act.
- b) Municipal Reserve will be dedicated at the time of subdivision in accordance with this ASP as per the relevant provisions of the Municipal Government Act. The Town will ensure that the Deferred Reserve Caveat registered against the title for the remainder of Lot A will be reduced by the whatever amount of MR land is dedicated.

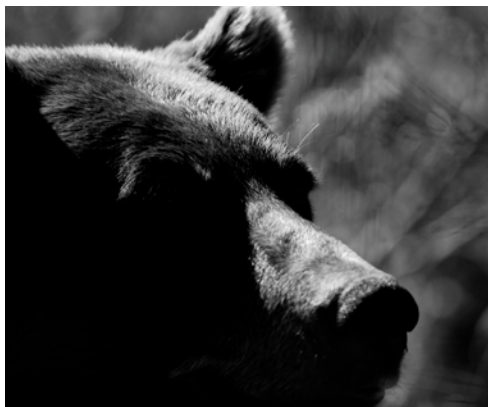
Policy 6.14 FireSmart Principles

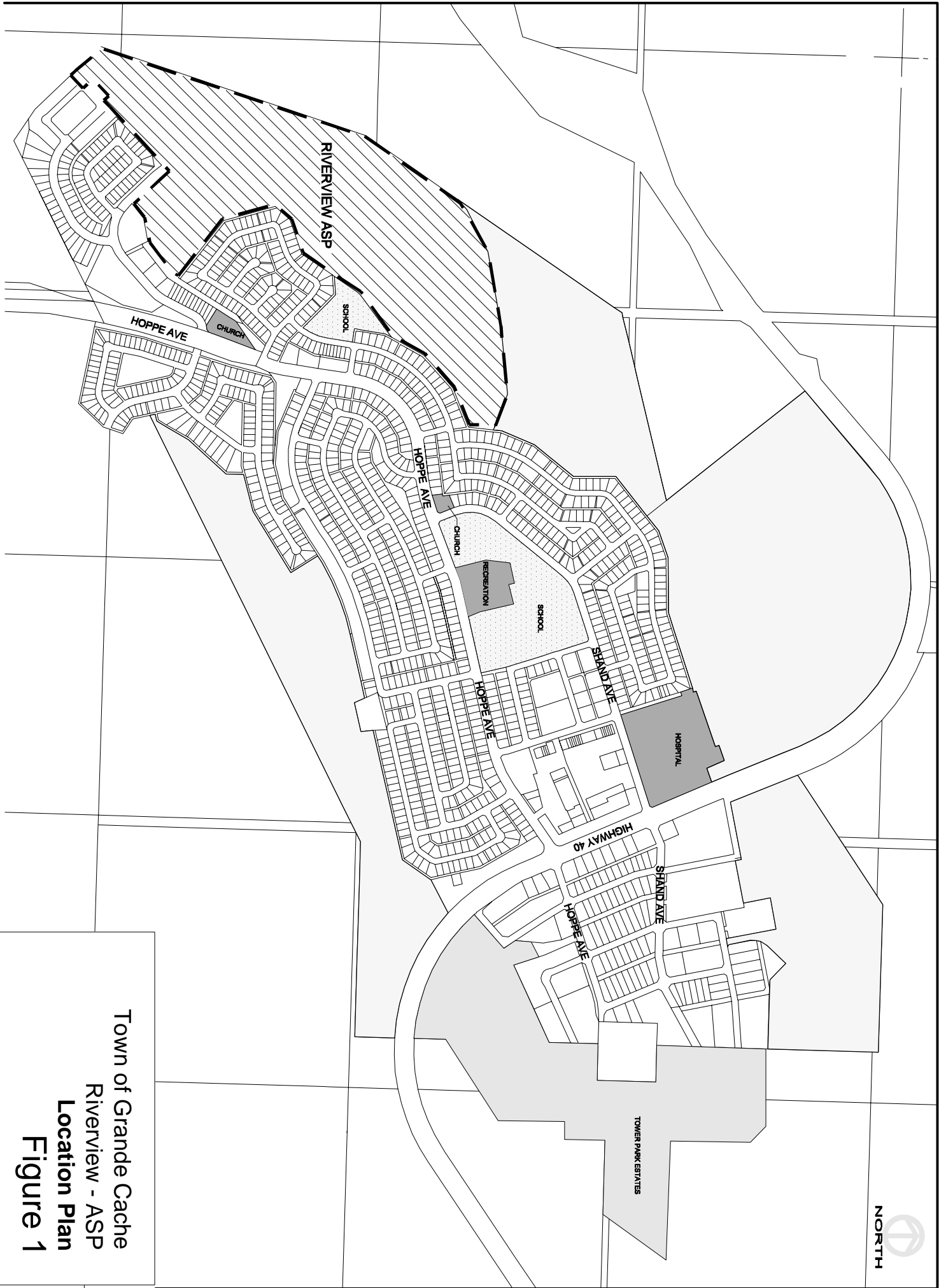
The Town shall consider the principles presented in “FireSmart: Protecting Your Community from Wildfire” in an effort to minimize the risk of wildfire within this ASP area.

Policy 6.15 Historical Resources

In any area identified by Alberta Culture and Community Spirit (ACCS), the Town shall refer any land use, subdivision or development application to ACCS and impose any conditions necessary, should the application be approved, to ensure that the owner/developer complies with any requirements ACCS identifies pursuant to historical resources legislation and regulations.

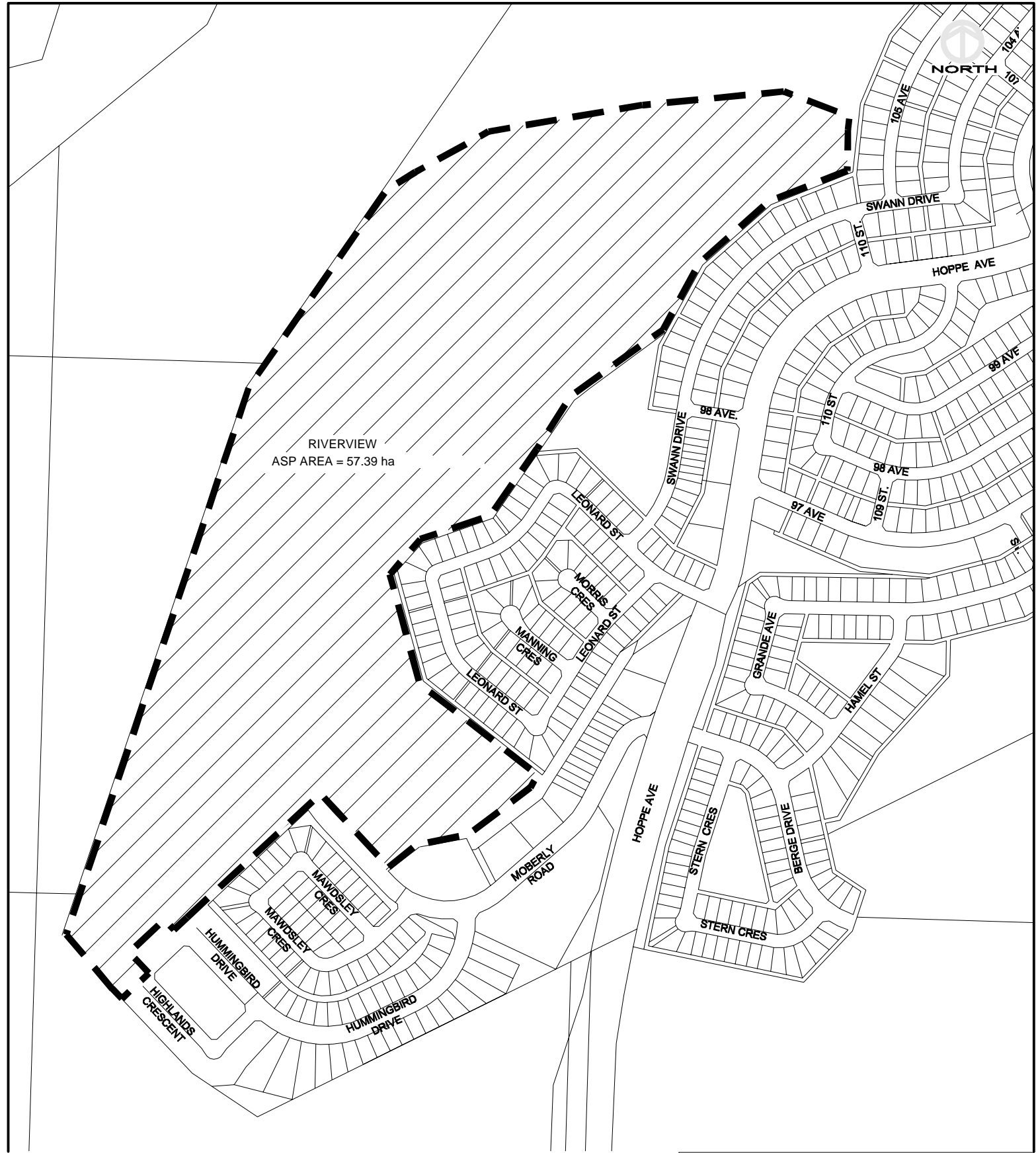
7.0 APPENDIX A: FIGURES





Town of Grande Cache
Riverview - ASP
Location Plan
Figure 1

100m 300m 500m Scale 1:15,000



LEGEND
 - - - Area Structure Plan Boundary

Scale 1:7500
 50m 150m 300m

Town of Grande Cache
 Riverview - ASP
 ASP Boundary
 Figure 2










LEGEND
 ——— Area Structure Plan Boundary

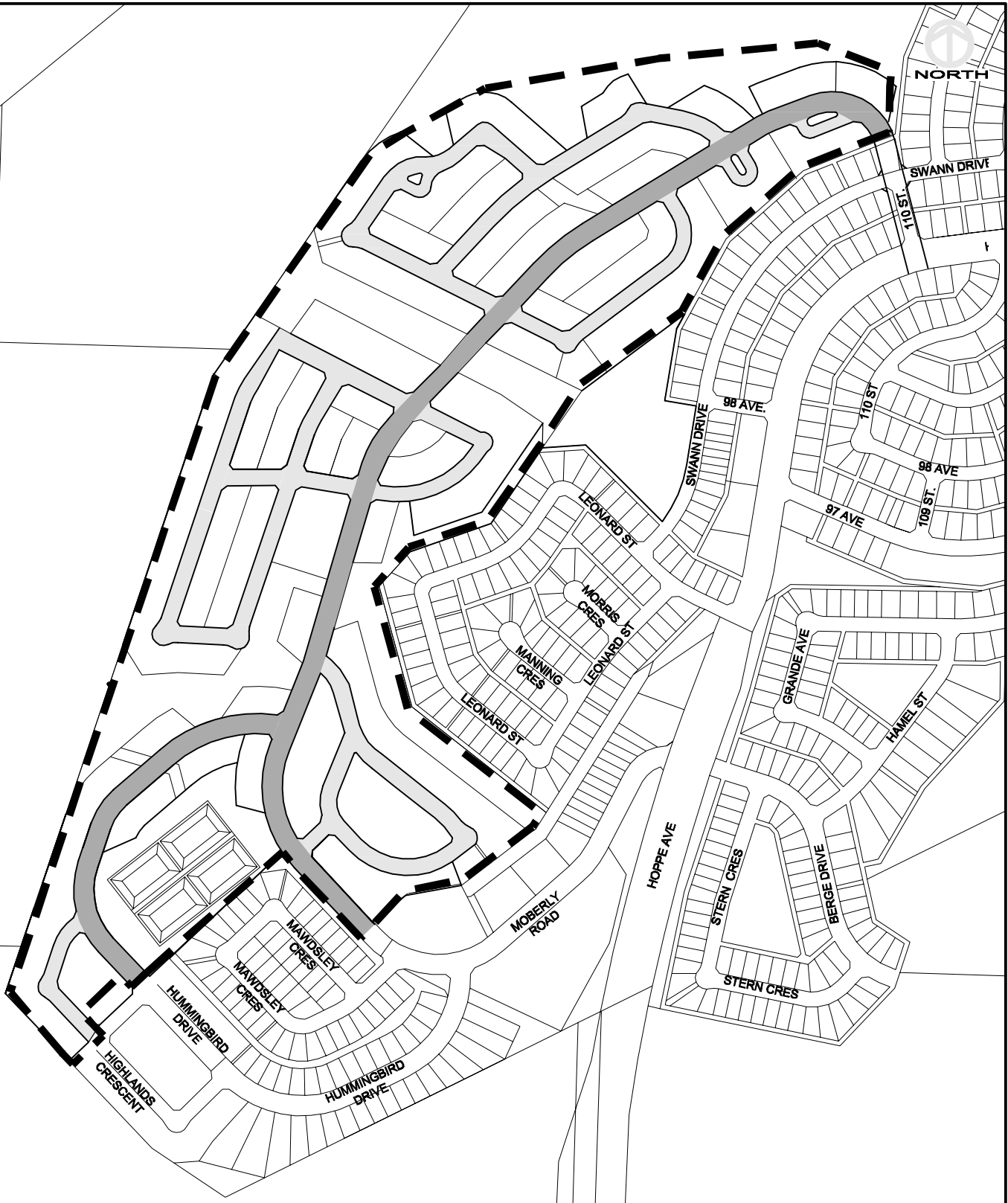
Scale 1:7500
 50m 150m 300m




Town of Grande Cache
 Riverview - ASP
Existing Conditions
Figure 2b



- LEGEND**
-  AREA STRUCTURE PLAN BOUNDARY
 -  HIGH DENSITY RESIDENTIAL
 -  MIXED USE DEVELOPMENT
 -  MULTI-FAMILY RESIDENTIAL
 -  MUNICIPAL RESERVE
 -  ROAD RIGHT-OF-WAY
 -  SINGLE FAMILY RESIDENTIAL

Town of Grande Cache
Riverview - ASP
Development Typologies
Figure 3



- LEGEND**
-  AREA STRUCTURE PLAN BOUNDARY
 -  COLLECTOR ROAD
 -  LOCAL ROAD

Town of Grande Cache
 Riverview - ASP
 Roadway Designations
 Figure 4



- LEGEND**
- AREA STRUCTURE PLAN BOUNDARY
 - HIGH DENSITY RESIDENTIAL
 - MIXED USE DEVELOPMENT
 - MULTI-FAMILY RESIDENTIAL
 - MUNICIPAL RESERVE
 - ROAD RIGHT-OF-WAY
 - SINGLE FAMILY RESIDENTIAL

Town of Grande Cache
 Riverview - ASP
Phasing Plan
Figure 5



Scale 1:7500
 50m 150m 300m

Figure 5 – Phasing Plan

Figure 6.1

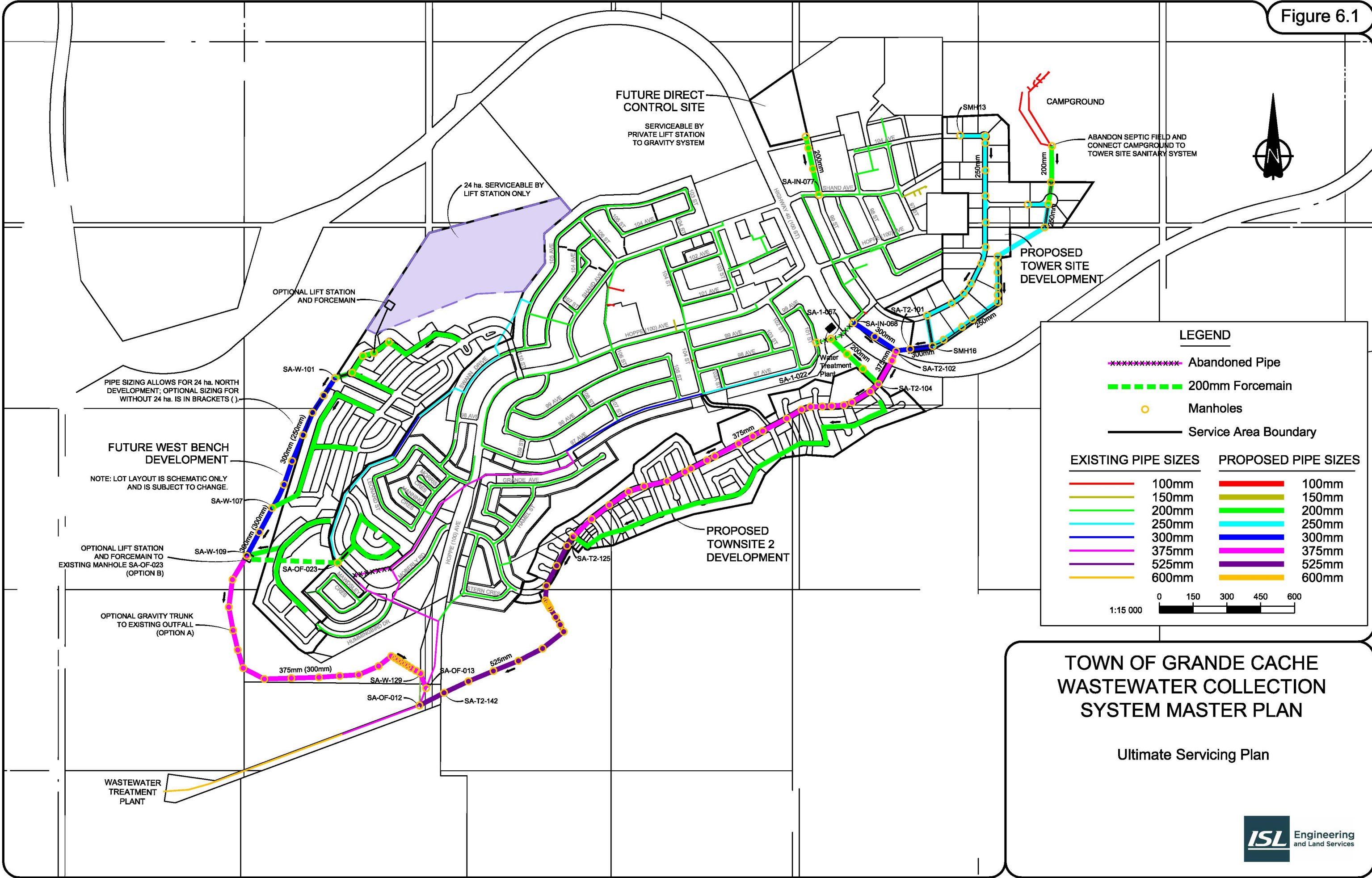
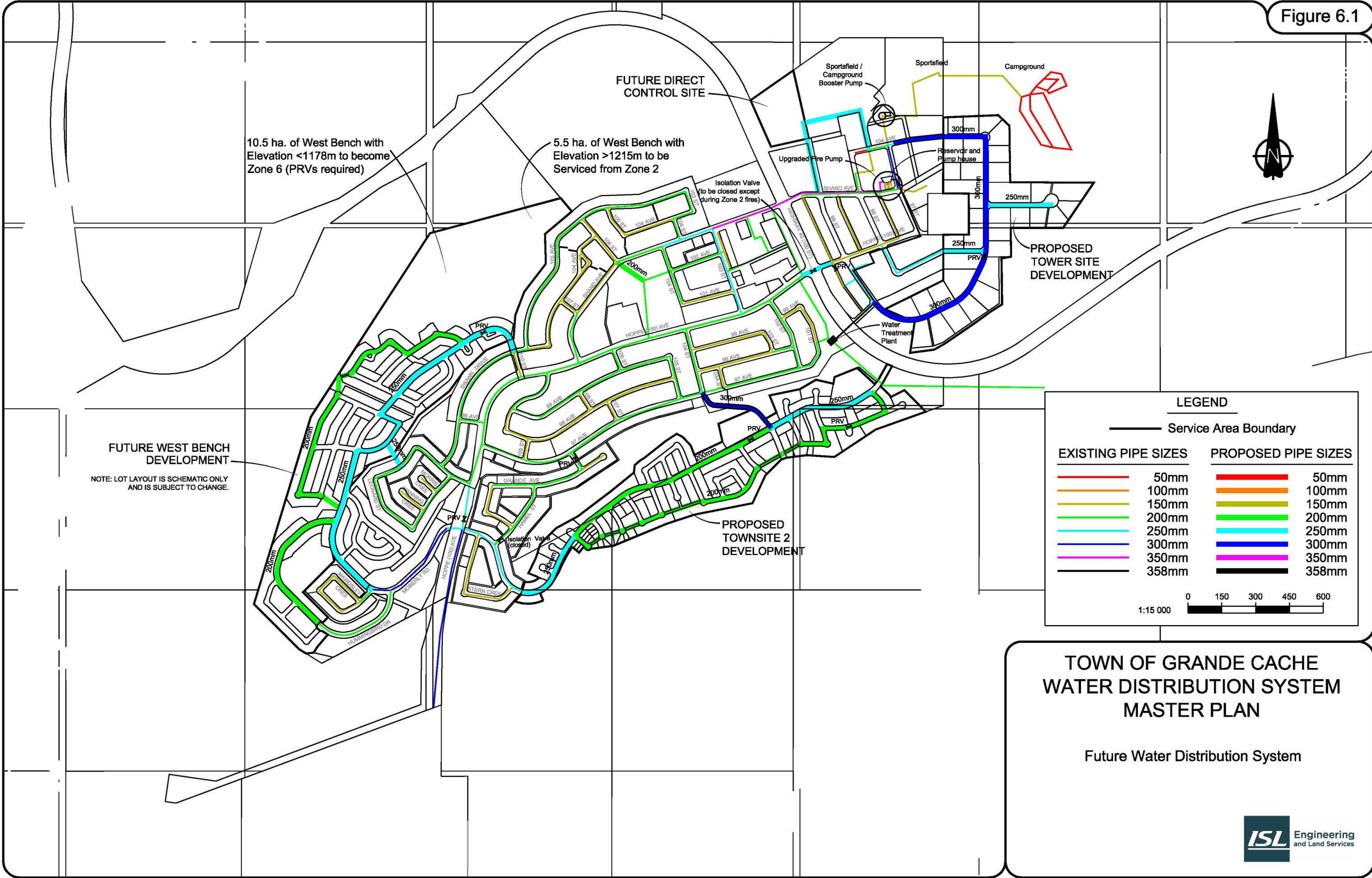


Figure 6.1



10.5 ha. of West Bench with Elevation <1178m to become Zone 6 (PRVs required)

5.5 ha. of West Bench with Elevation >1215m to be Serviced from Zone 2

Isolation Valve (to be closed except during Zone 2 fires)

PROPOSED TOWER SITE DEVELOPMENT

FUTURE WEST BENCH DEVELOPMENT

NOTE: LOT LAYOUT IS SCHEMATIC ONLY AND IS SUBJECT TO CHANGE.

PROPOSED TOWNSITE 2 DEVELOPMENT

LEGEND

EXISTING PIPE SIZES		PROPOSED PIPE SIZES	
	Service Area Boundary		50mm
			100mm
			150mm
			200mm
			250mm
			300mm
			350mm
			358mm

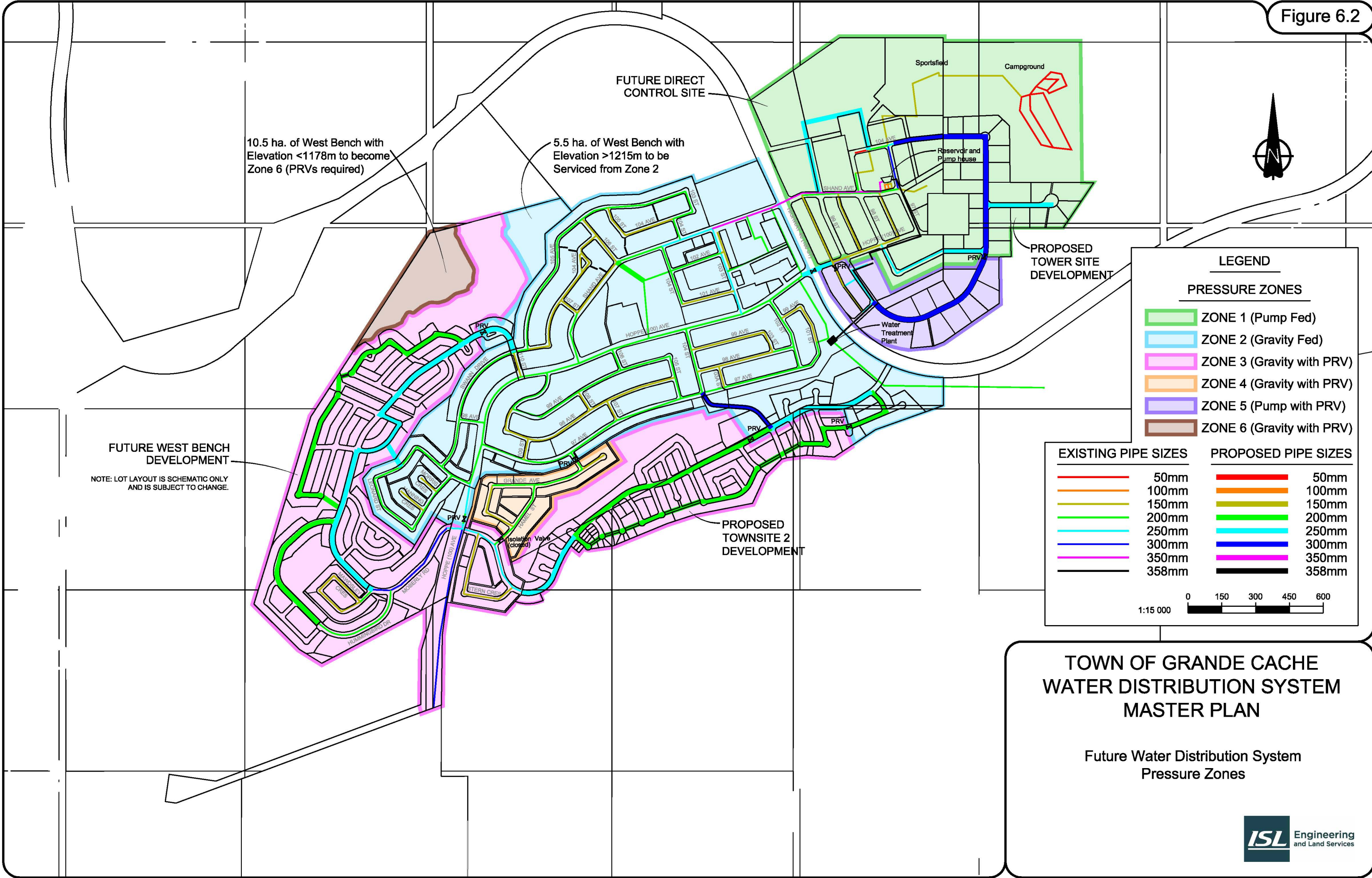
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TOWN OF GRANDE CACHE WATER DISTRIBUTION SYSTEM MASTER PLAN

Future Water Distribution System



Figure 6.2



10.5 ha. of West Bench with Elevation <1178m to become Zone 6 (PRVs required)

5.5 ha. of West Bench with Elevation >1215m to be Serviced from Zone 2

LEGEND

PRESSURE ZONES

- ZONE 1 (Pump Fed)
- ZONE 2 (Gravity Fed)
- ZONE 3 (Gravity with PRV)
- ZONE 4 (Gravity with PRV)
- ZONE 5 (Pump with PRV)
- ZONE 6 (Gravity with PRV)

EXISTING PIPE SIZES		PROPOSED PIPE SIZES	
	50mm		50mm
	100mm		100mm
	150mm		150mm
	200mm		200mm
	250mm		250mm
	300mm		300mm
	350mm		350mm
	358mm		358mm

1:15 000
0 150 300 450 600

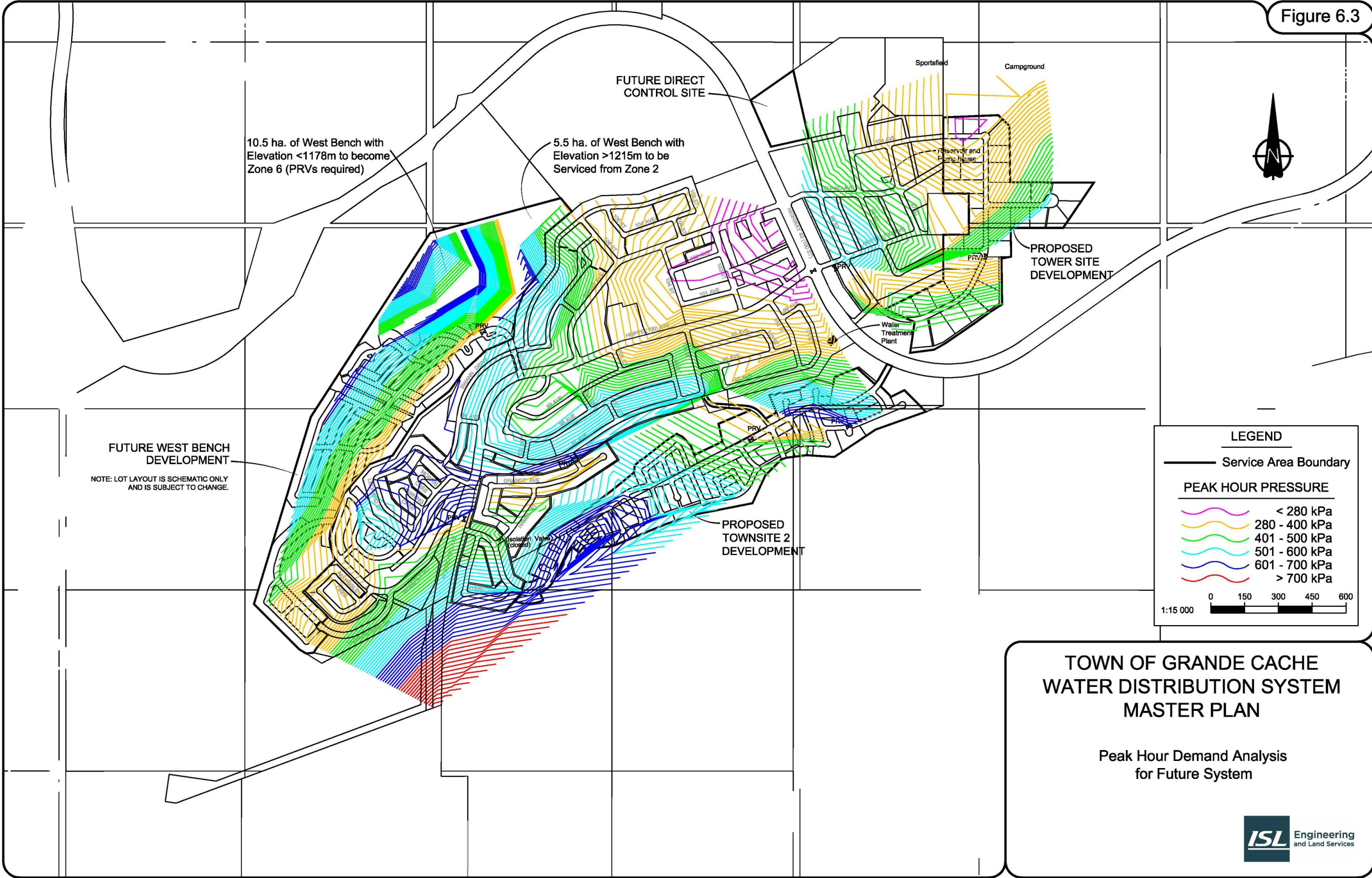
FUTURE WEST BENCH DEVELOPMENT
NOTE: LOT LAYOUT IS SCHEMATIC ONLY AND IS SUBJECT TO CHANGE.

**TOWN OF GRANDE CACHE
WATER DISTRIBUTION SYSTEM
MASTER PLAN**

Future Water Distribution System
Pressure Zones



Figure 6.3

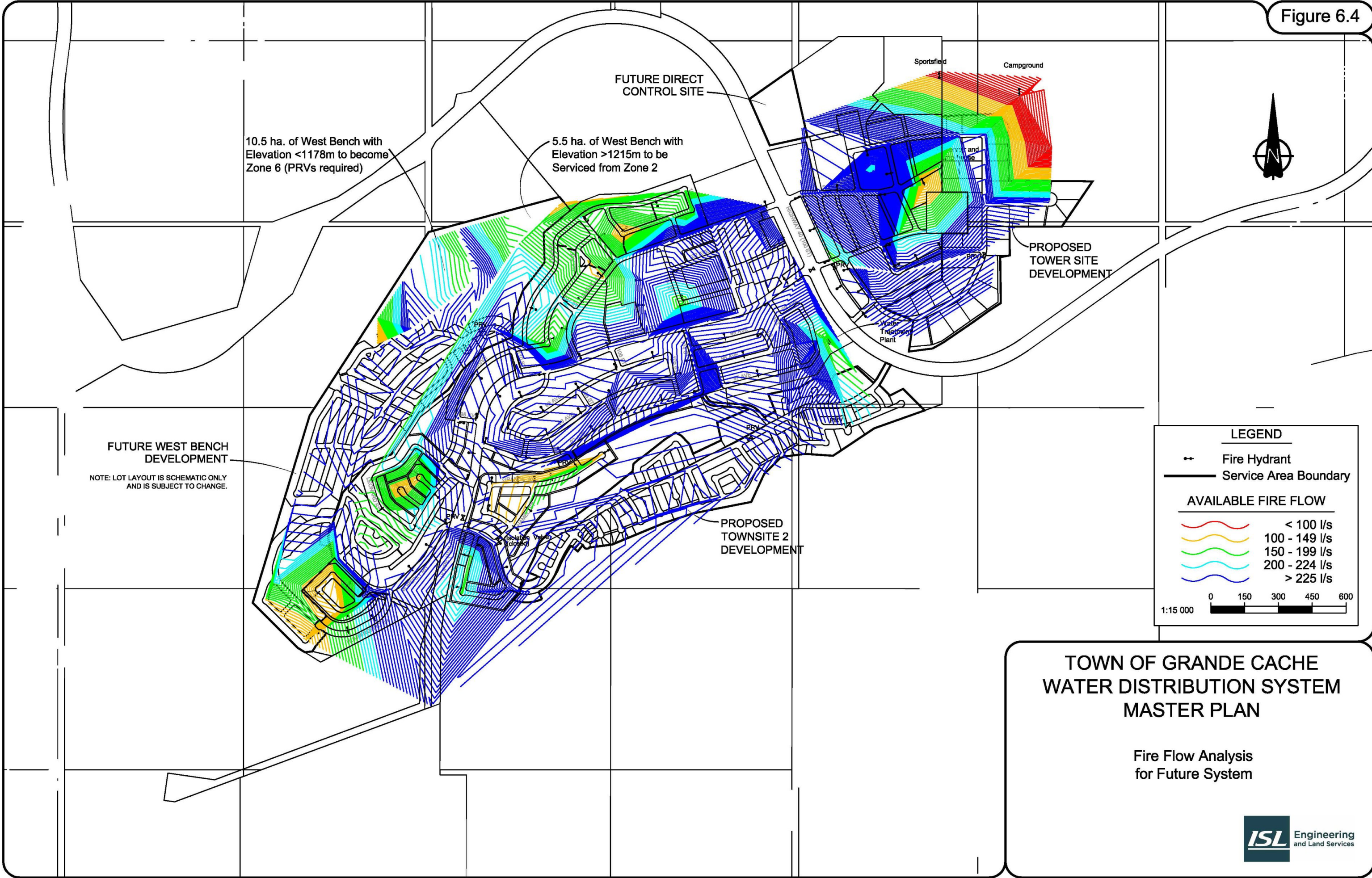


**TOWN OF GRANDE CACHE
WATER DISTRIBUTION SYSTEM
MASTER PLAN**

Peak Hour Demand Analysis
for Future System



Figure 6.4



10.5 ha. of West Bench with Elevation <1178m to become Zone 6 (PRVs required)

5.5 ha. of West Bench with Elevation >1215m to be Serviced from Zone 2

FUTURE DIRECT CONTROL SITE

Sportsfield
Campground

PROPOSED TOWER SITE DEVELOPMENT

Water Treatment Plant

FUTURE WEST BENCH DEVELOPMENT

NOTE: LOT LAYOUT IS SCHEMATIC ONLY AND IS SUBJECT TO CHANGE.

PROPOSED TOWNSITE 2 DEVELOPMENT