BINGHAM CROSSING PHASE 2

MASTER SITE DEVELOPMENT PLAN



Draft for Circulation Purposes

October 2019



BINGHAN CROSSING PHASE 2

++++







Contents

1	INTRODUCTION	1
2	VISION & RATIONALE	3
3	THE BINGHAM CROSSING CONCEPT	5
4	REGIONAL CONTEXT	7
5	SITE CONDITIONS	9
6	PHASE 2 DEVELOPMENT CONCEPT	13
7	ARCHITECTURAL DESIGN	15
8	TRANSPORTATION	23
9	UTILITY SERVICING	27
10	STORMWATER MANAGEMENT	29
11	IMPLEMENTATION	31
12	COMMUNITY CONSULTATION	35

Figures

1	BINGHAM CROSSING CONCEPTUAL SCHEME LAND USE CONCEPT	6
2	AREA CONTEXT	8
3	SITE CONDITIONS	9
4	EXISTING LAND USE	12
5	PHASE TWO DEVELOPMENT CONCEPT	14
6	CONCEPTUAL LANDSCAPING & BOUNDARY INTERFACE TREATMENT	22
7	TRANSPORTATION - ULTIMATE NETWORK	26
8	WATER AND WASTEWATER SERVICING	28
9	STORMWATER MANAGEMENT	30
10	PROPOSED LAND USE	31
11	PROPOSED SUBDIVISION	32



INTRODUCTION

This Master Site Development Plan (MSDP) proposes the development of comprehensively-planned large-format anchor building and related commercial retail units (CRU) in accordance with the approved land use concept established by the adopted Bingham Crossing Conceptual Scheme (Bylaw C-7185-2012).

This MSDP describes a proposed development program which demonstrates how Phase 2 of the Bingham Crossing development can proceed without negatively impacting the approved Phase 1 portion of the project or the surrounding business, institutional, country residential and agricultural parcels.

The MSDP illustrates the potential placement of a new building(s), landscaping treatments, signage & lighting elements and other design features in accordance with the adopted Conceptual Scheme's architectural guidelines Likewise, the MSDP establishes a strategy to logically extend transportation and utility servicing infrastructure from the Phase 1 project into Phase 2 MSDP area.

This Bingham Crossing Phase 2 MSDP applies to the \pm 8.1 ha (\pm 20 ac) portion of lands legally described as NW 34-24-3-W5M.



VISION & RATIONALE

Bingham Crossing will be a master-planned shopping and lifestyle destination that provides the Springbank community, and the entire Calgary Metropolitan Region, with a variety of high-quality shops, services and amenities alongside various office, retail and commercial services. The centre will establish attractive meeting places purposefully designed to facilitate social gathering in a comfortable, village-like atmosphere. Respecting the rural character of the surrounding Springbank community, the design of Bingham Crossing will showcase an architectural aesthetic not typically found in urban settings, and the businesses therein will provide employment opportunities for Rocky View citizens who wish to work closer to home.







VISION & RATIONALE



THE BINGHAM CROSSING CONCEPT

<image>

This Phase 2 MSDP contemplates logical extension of the Highway Edge Zone previously approved within the Phase 1 project area.

Neighbourhood Buffer Zone

The Neighbourhood Buffer Zone will establish a transition area along Township Road 250 including a regional trail, a seniors housing facility, and other forms of low intensity, low impact uses (offices, small scale commercial) integrated into an ample open space system. This commercial zone accommodates a



sensitive transition between the Bingham Crossing project and existing country residential uses to the north. Approved access points onto Township Road 250 will direct traffic to Highway 1 (via Range Road 33) thereby reducing impacts on existing adjacent residential areas.

Lifestyle Zone



The Lifestyle Zone will be the pedestrian focal point of the project featuring an area for shopping and socializing featuring buildings with varying heights and storefronts. The buildings will be articulated on all sides and include street edges with small plazas to enhance the pedestrian experience. Buildings will incorporate trellises, canopies,

arcades, and awnings to soften building edges. External finishing on the buildings will include organic and rustic materials. Shopping streets will have restaurants, cafés and bistros to activate the walking corridors. This commercial zone will accommodate community events such as a farmer's market or other outdoor gatherings.

Highway Edge

The Highway Edge Zone will accommodate comparatively more significant scaled retail uses relative to the other two zones. Business development within this zone will benefit from the enhanced visibility and profile offered to this site by proximity to the TransCanada Highway 1. This portion of Bingham Crossing will be designed with coordinated



parking, landscaping, lighting and architectural treatments. Business services, including offices, may be interspersed within the commercial shopping area alongside landscaped parking lots, articulated buildings, pedestrian connections, and low-intensity lighting.



REGIONAL CONTEXT

As illustrated by *Figure 2: Area Context*, the MSDP area is located directly north of Highway 1 and approximately ½ km east of Range Road 33.

The site is prominently located within the Springbank Highway Business Area, as defined by the County Plan and the North Springbank Area Structure Plan. Existing businesses within the surrounding area include Commercial Court, Calaway Park, Mountain View Business Park and the Springbank Airport. The MSDP area is also situated within vicinity of a variety of institutional developments including the Springbank Middle & Elementary Schools, the Edge School for Athletes, the Springbank United Church and the Springbank Heritage Club.

The subject lands are located about 3 km from the western edge of the City of Calgary and approximately 3 km southeast of the master-planned, full-service community of Harmony.







SITE CONDITIONS

As illustrated by *Figure 3: Site Conditions*, the NW 34-24-3-W5M contains undulating topography with a split drainage catchment that sheds most of the site from northeast to southwest, with a small portion of the site draining towards the northeast.

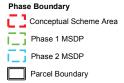
Vegetation within the site includes a mix of pasture, cultivated lands and a substantial area which has been stripped & graded in anticipation of the Phase 1 Bingham Crossing development program. The previous farm building site including a single-family dwelling and related accessory buildings has been demolished and removed from the site.





Site Conditions

Legend



5

5.1 Historical Resource Overview

A Historical Resources Overview (HRO) was previously completed within the NW 34-24-3-W5M in support of the Bingham Crossing Conceptual Scheme. The purpose of the study was to determine the potential for significant historical items, artifacts and/or events to have occurred within site. The HRO concluded that the potential for encountering intact historical resources on-site is low and recommended clearance for the project. **As such, no additional historical resources assessments are required to support development in the Phase 2 MSDP area.**

5.3 Geotechnical Evaluation

A geotechnical evaluation was previously completed within the NW 34-24-3-W5M in support of the Bingham Crossing Conceptual Scheme. The assessment investigated the general subsurface soil conditions underlying the subject lands and established certain construction guidelines for the proposed development. **The report concluded the Phase 2 MSDP area is not constrained by underlying geotechnical conditions and is suitable for development**.

5.2 Phase One Environmental Site Assessment

A Phase One Environmental Site Assessment (ESA) was previously completed within the NW 34-24-3-W5M in support of the Bingham Crossing Conceptual Scheme. The review considered historical uses on the site, the possibility for certain contaminants, known environmental records, and a site visit. **The report concluded that no significant environmental impairment exists within the Phase 2 MSDP area.**

5.4 Biophysical Impact Assessment

A Biophysical Impact Assessment (BIA) was completed within the subject lands in support of this Phase 2 MSDP. The assessment investigated potential for sensitive environmental features and/or species within the project area. **The report concluded the Phase 2 MSDP area does not contain any existing wetlands, rare plants or species at risk that would impair the potential for site development.**

5.5 Existing Land use

As illustrated by *Figure 4: Existing Land Use*, the Phase 2 MSDP area is presently designated Ranch and Farm District (RF) in accordance with the County's Land Use Bylaw (C-4841-97). The approved Phase 1 MSDP area is designated Direct Control District (DC148), which establishes specific development prescriptions to implement planned development within the Neighbourhood Buffer Zone, Lifestyle Zone and Highway Edge Zone as contemplated by the adopted Bingham Crossing Conceptual Scheme and Phase 1 MSDP.

Surrounding parcels contain lands including a mix of Ranch & Farm District (RF), Agricultural Holdings District (AH), country residential districts (R1, R2 & R3), Public Service District (PS) and a variety of business land districts (I-IS, B4, B5, DC20 & DC 27) referred to as Mountain View Business Park (situated adjacent to the Springbank Airport), Calaway Park and Commercial Court.

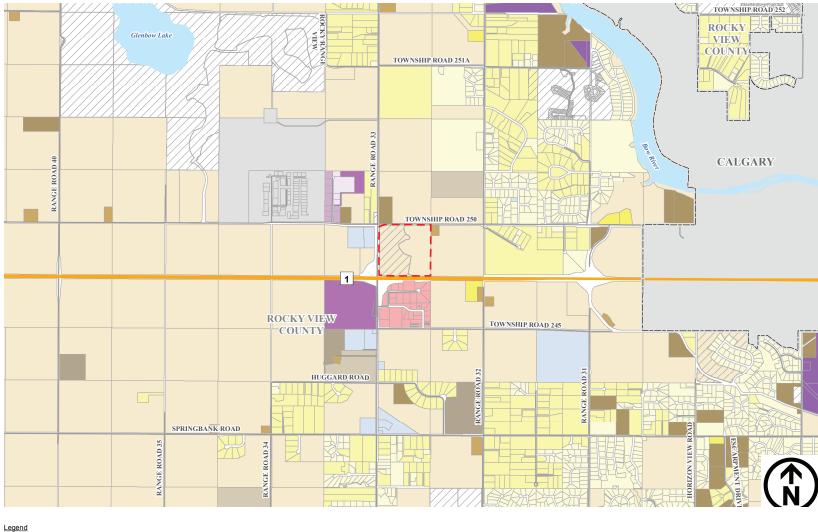


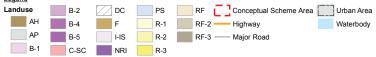


SITE CONDITIONS

9 Figure 4

Existing Land Use





PHASE 2 DEVELOPMENT CONCEPT

As illustrated by **Figure 5: Bingham Crossing Phase 2 Development Concept**, the Phase 2 development concept contemplates extension of the Highway Edge Zone within the southeast corner of NW 34-24-3-W5M to accommodate up to ±175,000 ft2 of commercial development – expected to include a large format anchor building and several stand-alone commercial/retail units (CRU).

The key considerations for the Phase 2 development are as follows:

- » Potable water will be provided from the existing Calalta Waterworks water treatment plant situated immediately south of Calaway Park. The internal potable water distribution network being constructed within Phase 1 will be extended to accommodate the Phase 2 project area, including fire suppression, in accordance with the County's Servicing Standards.
- Wastewater will be provided through an on-site collection, treatment and disposal system with treated wastewater spray-irrigated onto the adjacent quarter section situated directly to the east. The approved wastewater treatment plant being constructed to support Phase 1 of the project area has capacity to service the Phase 2 area.
- Stormwater management will be accommodated by a comprehensively-planned network of overland swales and piped conveyance systems which will direct surface flows to a stormwater management facility (SWMF) to be constructed within the Phase 1 project area.

- Access will be provided by extension of the planned internal roadways servicing the Phase 1 project area, to be constructed by the developer in accordance with the County Servicing Standards.
- » The comprehensively planned open space network to be established in the Phase 1 project area will be logically extended into the Phase 2 area, including the landscaped berm along the southern boundary of the site adjacent to Highway 1. Pathways will be constructed along the collector and internal roads to provide pedestrian mobility throughout the overall project area.
- » **The Highway Edge Zone** design principles established by the Bingham Crossing Conceptual Scheme will be applied within the Phase 2 project area. Architectural controls will be established to integrate treatment of building facades, material finishing & colours, rooflines, lightning, signage and landscaping.



ARCHITECTURAL DESIGN

Bingham Crossing is a unique villagestyle commercial development with design considerations intended to enhance the pedestrian experience.

The form of development within the site will be informed by design guidelines that ensure buildings are constructed with consistent, high quality materials.









7.1.1 Anchor Building

The Phase 2 MSDP area is expected to include a large format anchor building which will be of a more significant size and scale relative to other buildings within the overall Bingham Crossing development footprint. The anchor building will generate a considerable amount of vitality and activity resulting from its increased exposure.

7.1.2 Orientation & Massing

All buildings within the Phase 2 MSDP area will:

- Generally orient main entrances towards central parking fields and/or main thoroughfare. Secondary entrances may be oriented towards pedestrian spaces including sidewalks and pedestrian walkways;
- » Use simple, yet varied massing treatments that accentuate primary store entrances. The exterior treatment of the anchor building will incorporate specific variations in material finishes and colours, roofline articulations, and landscaping to visually break the significant mass of building facades facing Highway 1;
- » Use fenestration (i.e., windows and doors), as well as changes in wall plane, material, texture, color, etc., to create deep shadow lines and articulate building walls;
- » Provide highly visible store entrances that are clearly demarcated with recesses, overhangs, and other architectural details; and
- » Maintain architectural details to enhance the building's appearance with careful detailing, including human-scaled elements at street level.

7.1.3 Exterior Material Finishes & Colour



The color palette utilized within the Phase 2 MSDP area will draw on the ambient cues of the natural landscaping and integrate the classic base colors of the surrounding Region, including earth tones such as tan, beige, and brown (roses, pinks, plums and violets will be avoided).

- Vibrant accents will be used in limited quantities at appropriate locations with high-quality materials used to promote a vibrant street life;
- The exterior material palette is expected to include stone, masonry, metal panels, metal siding, wood trim, wood siding, EIFS (in limited quantity), metal roofing and shingles (asphalt or wood); and
- High quality materials will be used to enhance architectural details and accents featuring a more generous use of details and materials at entries and the ground floor of buildings facing the internal roads.

7.1.4 Outdoor Display Areas

Exterior display areas may be considered, where properly sited and landscaped, in accordance with the requirements of the County's Land Use Bylaw.

7.1.5 Loading Areas & Waste Receptacles

Loading areas will be screened from the surrounding roads with either landscaping or screen walls. The treatment of screen walls will be consistent with the adjacent architectural façade. Waste receptacles will be located in freestanding enclosures or within the buildings.

7.1.6 Screening of Mechanical Units & Service Areas

All mechanical units will be screened from public view, preferably with cohesive design elements such as roof forms that contribute to the overall design intent.

7.1.7 Pedestrian Passage

Pedestrian passages are designed to enhance the pedestrian environment by using light, shade, color, texture, special building materials and are typically framed by buildings that create an intimate scale that enhance a pedestrian environment. Shops that front pedestrian passages should provide special design elements that



enhance the quality of the pedestrian experience such as canopies, building mounted lights, planters, trellises, draping fabric banners, special tile work, niches with fountains, etc. The goal is to create an interesting environment of light, shade, color, and texture.

7.2 Parking & Loading Areas

The large format anchor building anticipated within the Phase 2 MSDP area will, by its nature, require a significant portion of the site be developed with a parking to accommodate passenger vehicles. However, it is important to ensure this parking area does not unnecessarily detract from the overall high-quality architectural aesthetic of the Bingham Crossing project.

The parking area associated with the anchor building will include landscaping treatments designed to break the expanse of pavement, provide shade and accommodate low impact development stormwater management. The main pathway connections from the Phase 1 project area will be prominently extended into the Phase 2 MSDP area to maintain pedestrian passage throughout the site.

A parking plan and schedule will be submitted at the development permit stage to ensure the appropriate parking areas are provided within the Phase 2 MSDP area in accordance with the requirements of the County's Land Use Bylaw.



7.3 Signage

Clear and consistent signage is important to establish a sense of place within the Bingham Crossing development footprint. Pedestrians, cyclists and vehicles alike enjoy high quality, architectural signage to announce the development and facilitate efficient on-site movements. The treatment of signage within the Phase 2 MSDP area will maintain consistency with signage elements constructed within Phase 1 and may include:

- » Project identification signage;
- » Directional signage (way-finding); and
- » Wall-mounted fascia signage.

The specific type, location and treatment of signage will be confirmed by a signage plan to be submitted at the development permit stage.









7.4 Lighting

The outdoor lighting system within the overall Bingham Crossing development footprint will be designed to be as unobtrusive as possible while still maintaining a high quality, attractive and pedestrian oriented aesthetic. Lighting within the Phase 2 MSDP area will extend the hierarchy of lighting established within the Phase 1 MSDP area. **A lighting plan will be submitted at the development permit stage in accordance with the following overall lighting design objectives:**

7.4.1 Dark Sky Lighting

Like the Phase 1 area, an outdoor lighting system that complies with the County's Dark Sky requirements as well as the International Dark Sky Association guidelines will be implemented within the Phase 2 MSDP area. In all cases, exterior illumination will include fixtures with full cut-offs to direct light downward and reduce the effects of unnatural lighting on the environment and surrounding community.

7.4.2 Internal Road Lighting

Illumination along the internal road network will conform to the County's Servicing Standards and Alberta Transportation's design standards at the time of installation.

7.4.3 Project Site Lighting

Project site lighting refers primarily to illumination within each development site in the Phase 2 MSDP area. Project site lighting will provide safety, security, and night-time ambiance, and will be installed within parking areas, pedestrian movement corridors, plaza areas and surrounding buildings. Lighting fixtures are intended to be from the same family of fixtures with respect to design, material, colour and colour of light. All lighting will be designed to minimize light "pollution" and direct the light to the surface.

7.4.4 Parking Area Lighting

Illumination within parking areas will consist of pole mounted fixtures with a height and intensity to provide consistent illumination while reducing the actual quantity of freestanding fixtures needed. Illumination within pedestrian movement corridors and plaza areas will consist of fixtures mounted to reinforce the pedestrian scale.

7.4.5 Service Area Lighting

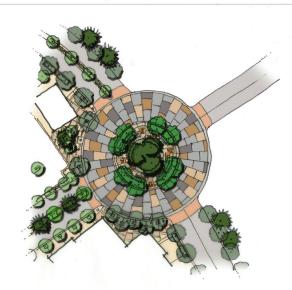
Illumination within service areas will consist of surface mounted wall fixtures with concealed lighting sources. Materials will be metal, with colours selected to meet the design theme, and the pole foundation will be poured in place concrete.

7.5 Landscaping

The Bingham Crossing development footprint is situated at the crossroads of the urban/rural interface, rich with beautiful scenery and rolling topography. Areas located immediately to the west of the project area reveal hints of the mountain landscape with angular rock outcrops providing a preview of the mountain terrain visible to the west.

Areas located further to the west include large earth and rock formations which further amplify the undulating terrain of the Foothills Region. Native vegetation within these areas typically occurs in large groups in opportunistic fashion; is likely situated on the north side of a hill or small depression; and displays a diverse range of colour and texture in all seasons.





Landscaping treatments will provide a distinctive identity within the overall Bingham Crossing development footprint by referencing the unique geological features and native vegetation of the surrounding Region.

Perimeter landscaping will feature undulating topography, groves of native trees and shrubs and interesting rock outcrops, thereby creating a natural design aesthetic that will be attractive, and most importantly, integrate with the immediate context.

7.5.1 Southern Edge Landscaping Treatment

As illustrated on *Figure 6: Conceptual Landscaping & Boundary Interface Treatment*, the southern edge of the Phase 2 MSDP area, adjacent to the Trans-Canada Highway, will contain a ± 30 metre landscape buffer articulated with a mix of undulating berms, native vegetation and rock walls similar to the southern edge treatment within the Phase 1 MSDP area. Native vegetation will be planted in the low areas along the berm. This plant species will be chinook hardy, regionally specific and will be planted in natural groupings. Angular rock outcrops built into the undulating topography in select locations will add interesting features that can be seen from inside and outside the project.

7.5.2 Eastern Edge Landscaping Treatment

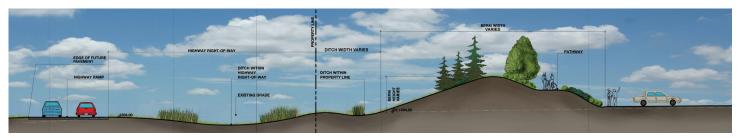
As illustrated on **Figure 6: Conceptual Landscaping & Boundary Interface Treatment**, the eastern edge of the Phase 2 MSDP area, adjacent to the wastewater utility management area, will contain a \pm 6 metre landscape buffer with native vegetation that are chinook hardy, regionally specific and planted in natural groupings. This landscaped buffer treatment will be designed to break the bulk of mass of large format anchor building's eastern elevation in addition to establishing an appropriate transition between the Bingham Crossing business development area and the adjacent utility management area in accordance with the County's Agricultural Boundary Design Guidelines.

7.5.3 Anchor Building Landscaping Treatment

As described in **Section 7.2** of this MSDP and illustrated on *Figure 6: Conceptual Landscaping & Boundary Interface Treatment*, the parking area associated with the anchor building will include landscaping treatments designed to break the expanse of pavement, provide shade and accommodate low impact development stormwater management. The main pathway connections from the Phase 1 project area will be prominently extended into the Phase 2 MSDP area to maintain pedestrian passage throughout the site.

7.5.4 Landscaping Treatment along internal roads and primary drive aisle

As illustrated on *Figure 6: Conceptual Landscaping & Boundary Interface Treatment*, landscaping will be provided along the northern boundary of the Phase 2 MSDP area along the extent of the internal road. Likewise, a landscaped treatment will be provided along the central north-south drive aisle to provide a sense of arrival for the anchor building, delineate it from the adjacent parking area and provide opportunities for pedestrian passage through the site.



The specific type, location and treatment of landscaping will be confirmed by a landscaping plan to be submitted at the development permit stage.

Typical Berm Cross Section



7.6 Architectural Controls

The developer will prepare architectural controls to implement the design considerations presented in this Section. These controls at the development permit stage will be enforced via covenants running with the land and will be included in each tenant lease agreements.

오 Figure 6

Conceptual Landscaping & Boundary Interface Treatment



Eastern Edge Anchor Building Landscaping Treatment Southern Edge

TRANSPORTATION

8.1 Bingham Crossing Traffic Impact Assessment (2012)

A Transportation Impact Assessment (TIA) was prepared in 2012 in support the Bingham Crossing Conceptual Scheme to evaluate the functionality of the local and regional transportation network relative to opening day and long-term (20 year) traffic horizons. The 2012 TIA assumed the following development assumptions within the Conceptual Scheme area:

PHASE	FLOOR SPACE
1	270,000 ft2 business development + 100,000 ft2 seniors housing
2	140,000 ft2 business development
3	500,000 ft2 business development
TOTAL	910,000 ft2 business development + 100,000 ft2 seniors housing

Key to the 2012 TIA's conclusions are the anticipated development thresholds anticipated within the Conceptual Scheme area relative to the timing of implementation for a two (2) staged interchange improvement program.

The 2012 TIA concluded that ultimate build-out of commercial development within the Conceptual Scheme area will require completion of the Stage II interchange upgrade – including twinning of the existing Range Road 33 bridge crossing.

It is acknowledged up to 270,000 ft2 of commercial development can be accommodated with implementation of specific transportation improvements associated with the Stage I interchange upgrade as described in Section 8.3 of this MSDP.



8.2 Phase 2 Traffic Impact Assessment Update

A Transportation Impact Assessment (TIA) update was completed in support the Phase 2 MSDP. This assessment concluded that the analysis and assumptions completed in support of the 2012 Bingham Crossing TIA remain valid.



8.3 Regional Road Network Improvements

As illustrated by *Figure 7: Transportation-Ultimate Network*, the Stage 1 improvement for the Highway 1 / Range Road 33 interchange contemplates specific transportation infrastructure upgrades which can accommodate up to 270,000 ft2 of business development within the Bingham Crossing Conceptual Scheme area described as follows:

- New westbound to north bound ramp from Highway 1 to Range Road 33;
- New roundabouts on Range Road 33 either side of Highway 1;
- Widening and lane improvements along Range Road 33 and Township Road 250;
- Right-in/right out intersection along Range Road 33 directly west of the Phase 1 area;
- New roundabout at the Range Road 33 / Township Road 250 intersection; and
- Forced left turn slot onto Township Road 250 at the mid-point of the Conceptual Scheme's northern boundary.

The Stage 1 interchange upgrade is being constructed by the developer in association with the Phase 1 MSDP development and is expected to be completed prior to consideration of development in the Phase 2 MSDP area.

However, provided that the maximum overall business development threshold of 270,000 ft2 is not exceeded, no additional off-site transportation improvements will be required to support the combined development within the combined Phase 1 and/or Phase 2 MSDP areas. The specific calculation of this development threshold will occur at the development permit stage.

It is acknowledged that payment of the County's Transportation Offsite Levy will be required at the subdivision and/or development permit stage.

8.4 Internal Road Network Improvements

As illustrated by *Figure 7: Transportation-Ultimate Network*, the internal road network will be extended from Phase 1 to the Phase 2 area. The developer will construct all required internal roads within private road ROW's in accordance with the County's Servicing Standards. A roadside development permit from Alberta Transportation will be required.

8.6 Future Transit

In accordance with the Bingham Crossing Conceptual Scheme's Policy 7.1.1, upon completion and occupancy of 80% of the planned retail, commercial and office space contemplated within the overall project area, the developer will implement a private transit service within the site. Since the 80% threshold will not be cumulatively met either the Phase 1 and/or 2 project areas, the requirement for the developer to provide a private transit service is not required at this time. However, it is acknowledged that the design of the internal road network must accommodate implementation of future transit stops within 400 m of all shops and services within the Bingham Crossing development area.

8.5 Secondary/ Emergency Access

As required by the County Servicing Standards, dead-end roadways greater than 90 m must provide a secondary/emergency access to a developed roadway. Pending completion of the Phase 3 project area, emergency access for the Phase 2 project area will be accommodated by conveying traffic through the internal drive aisles and parking areas within the Phase 1 area. The developer will be required to register access easements and rights-of-way at the subdivision and/or development permit stage.

CROSING

9 Figure 7

Transportation-Ultimate Network



UTILITY SERVICING

9.1 Potable Water



In accordance with the requirements of the Bingham Crossing Conceptual Scheme's Policy 8.1.4, a servicing study was completed in support of the Phase 2 MSDP which concludes that **the developer** owns sufficient water licensing and the Calalta Waterworks

water treatment plant has adequate capacity to deliver potable water to the Phase 2 MSDP area. The internal potable water distribution network being constructed within Phase 1 will be extended to accommodate the Phase 2 project area in accordance with the County's Servicing Standards.

The conceptual location of potable water infrastructure is illustrated on *Figure 8: Utility Servicing* and will be confirmed by detailed engineering design and review at the subdivision and/or development permit stage. The developer will implement water conservation measures, through architectural controls, to facilitate low maintenance xeriscape landscaping, water metering and low flow water fixtures. The developer will continue exploring the potential re-use of water for toilet and urinal flushing with the overall project area.

9.2 Fire Suppression

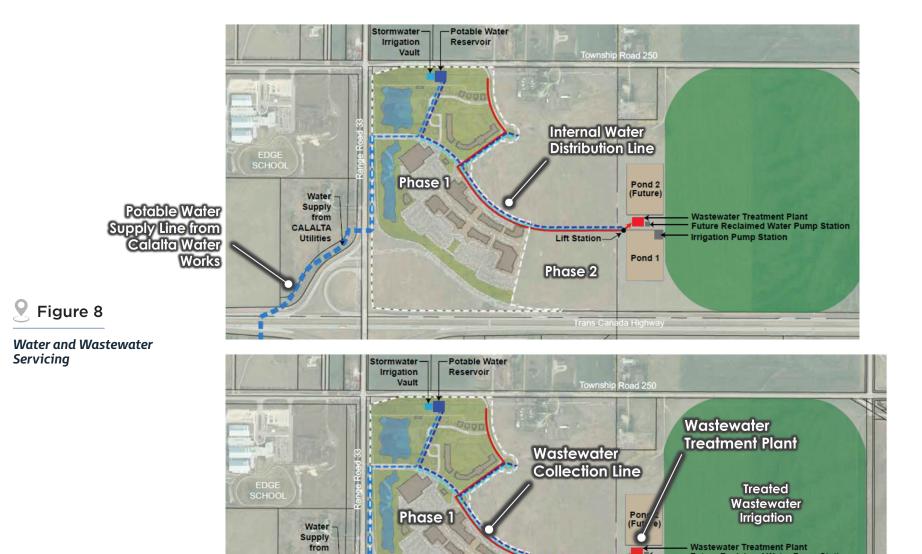
Fire suppression infrastructure will be provided within the Phase 2 project area through a system of charge hydrants in accordance with all relevant regulatory requirements. **If required by the Alberta Building Code, all commercial buildings within the Phase 2 MSDP area will be sprinklered.**

9.3 Wastewater

As detailed in the Phase 2 MSDP Servicing Study, wastewater will be provided through an on-site collection, treatment and disposal system with treated wastewater spray-irrigated onto the quarter section situated directly to the east of the Phase 2 MSDP area. **The wastewater treatment plant being constructed to support Phase 1 of the project has capacity to service the Phase 2 area.** The conceptual location of the wastewater infrastructure is illustrated on *Figure 8: Utility Servicing* and will be confirmed by detailed engineering design and review at the subdivision and/or development permit stage.

9.4 Franchise Utilities

Franchise utilities (i.e. electrical, natural gas, telecommunications) will be provided within the Phase 2 area by the developer. **The specific type, configuration and alignment of these private services will be confirmed by detailed engineering design and review at the subdivision and/or development permit stage.**



CALALTA

Utilities

Wastewater Treatment Plant Future Reclaimed Water Pump Station

Irrigation Pump Station

Lift Station-

Phase 2

Pond 1

la Highway

STORMWATER MANAGEMENT

10.1 Stormwater Management



As described by the Stormwater Master Drainage Plan (SMDP) prepared to support the Bingham Crossing Conceptual Scheme, an integrated approach to managing stormwater runoff has been contemplated within this project's overall development footprint. **Stormwater management facilities (SMF) will be designed, constructed and maintained by the developer to ensure consistency between pre and post development drainage conditions.** Implementation of complimentary Low Impact Development (LID)

infrastructure within each lot will enhance the sustainable function of the constructed SMF's (such as absorbent landscaping and bio-swales) and the use of stormwater (as opposed to potable water) will be considered for irrigation purposes within the overall development footprint.

A Staged Master Drainage Plan and Pond Report was prepared in support of this Phase 2 MSDP which contemplates a comprehensively-planned network of overland swales and piped conveyance systems to direct surface flows from the project area to the stormwater management facility (SWMF) within the Phase 1 MSDP. The report identifies a strategy to accommodate the safe collection, conveyance, storage and ultimate discharge of surface drainage at pre-development volumes and rates. The conceptual location of the stormwater infrastructure is illustrated on *Figure 9: Stormwater Management* and will be confirmed by detailed engineering design and review at the subdivision and/or development permit stage.

10.2 Overland Drainage Plan & Easement Agreement

The developer will prepare an overland drainage plan and associated easement agreement at the subdivision and/or development permit stage to specify a right for the County to access the lands to maintain the stormwater management facilities if emergency circumstances warrant.





* Development Concept is for illustration purposes only. Actual development will be confirmed at the development permit stage.

IMPLEMENTATION

11.1 Proposed Land Use

As illustrated by Figure 10: Proposed Land Use, the MSDP area is expected to be redesignated from Ranch & Farm District (RF) to Direct Control District (DC148), as amended. An amendment to Bylaw C-7186-2012 (DC 148) will be submitted concurrent with this MSDP to revise the Bylaw's schedule and to clarify specific general regulations relative to the total commercial building area that can be permitted within the combined Phase 1 and/or Phase 2 MSDP areas relative to the timing of the anticipated Stage 1 & 2 interchange improvements.



MR

11.2 Subdivision Process

As illustrated by Figure 11: Proposed Subdivision, the developer expects to isolate ownership within the Phase 2 MSDP area, and upon approval of land use, will apply to subdivide the ± 20 ac parcel to remove it from the remainder of NW 34-24-3-W5M. It is expected that the infrastructure required to provide access and servicing to the Phase 2 project area will be implemented in accordance with a Development Agreement process as per the County's Servicing Standards.



MR

D

11.3 Municipal Reserve (MR)

As described in the Bingham Crossing Conceptual Scheme and Phase 1 Master Site Development Plan, dedication of Municipal Reserve (MR) is contemplated along the western (Range Road 33) and northern (Township Road 250) to accommodate a regional pathway and a landscaped buffer between the commercial centre and existing country residential development. **As such, the dedication of MR within the Phase 2 area is expected to be provided by payment of cash-in-lieu of land at the subdivision stage**.

11.5 Community Recreation Fund

The developer appreciates the County's desire to foster the unique recreational and cultural characteristics of Rocky View's diverse communities. As such, the developer acknowledges the County's community recreation funding process and is prepared to consider contributing to the RVC community recreation fund at the development permit stage.

11.4 Development Permit Process

It is anticipated that the majority of infrastructure required to support Phase 2 will be constructed by the developer(s) in accordance with a development agreement process initiated as an approval of subdivision. However, the construction of business development within the Phase 2 project area will be evaluated in accordance with the development permit process to address matters such as:

- Site plan, building sizes & elevations ;
- Detailed engineering drawings for private utility infrastructure;
- Access plan;
- Parking & loading plan;
- Landscaping plan;
- Signage plan;
- Lighting plan;
- Confirmation of potable water supply;
- Confirmation of fire suppression;
- Confirmation of wastewater supply;
- Confirmation of stormwater management (including overland drainage ROW and easements);
- Solid waste management plan;
- Erosion & sediment control plan;
- Construction management plan;
- Weed management plan;
- Securities (if required); and
- Other matters as may be required by the RVC Development Authority.



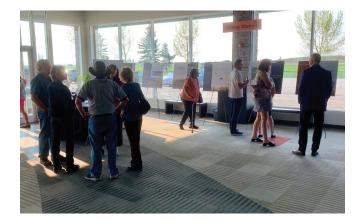
Page left blank intentionally

COMMUNITY CONSULTATION

The developer engaged adjacent landowners and local stakeholders to discuss the proposed Phase 2 development of the Bingham Crossing project as contemplated by this MSDP.

Prior to submitting the MSDP proposal to RVC, the developer and the project consultant team met with the Bingham Crossing Advisory Group to review the overall status of the Bingham Crossing development program in relation to the Phase 1 site improvements scheduled to commence Spring 2019. Likewise, the general nature of the proposed Phase 2 development was also discussed.

On Wednesday, May 29, 2019, the developer hosted an Information Session to present the Phase 2 MSDP proposal to a broad base of local area landowners and key stakeholders. Notice of the Information Session was advertised in the Cochrane Eagle and Rocky View Weekly newspaper starting two weeks before the event. Other promotions included a post card mail drop, a website update, an email blast to subscribed stakeholders and two temporary street signs. The developer had representatives from the project's technical consultants on hand to present information and respond to questions as required.





BINGHAM CROSSING



Approximately 100 people attended the Information Session and were invited to provide input on the Project through face-to-face dialogue with team members, on an interactive display board and through feedback forms. Outlined below is a summary of feedback received:

General Support. Many expressed their support for the Project for a number of reasons including, but not limited to: increased access to services and amenities like medical offices, restaurants and cafés; seniors housing; and a grocery store.

Traffic. Some comments were made either in support of or against roundabouts. Some comments cited concerns about increased traffic at Range Road 32 and Township Road 250.

• **Reponse:** The project team completed a TIA as part of the planning process. Results showed that the proposed roundabouts will meet anticipated traffic today and 20 years into the future. Regional road network improvements are also planned for the project, including widening and lane improvements at Township Road 250.

Character. Some stated that including and maintaining green spaces and a pathway system will be a key aspect of the Project and will help enhance the character of Springbank.

 Response: Design Guidelines will be established that ensure buildings are constructed with consistent, high quality materials. Landscaping will provide a distinctive identity within the overall footprint by referencing the unique geological features and native vegetation of the region. Pathways will be constructed along the collector and internal roads to enhance mobility throughout the site. **Diversity of Amenities.** While many expressed excitement regarding an increase in services and amenities, comments were mixed in terms of the scale of such development. Some looked forward to the prospect of large, chain store retailers while some preferred smaller shops.

 Response: Bingham Crossing will be designed to include a variety of high quality shops, services and amenities in addition to office, retail and commercial services, all of varying scales.

Timeline. Questions regarding timeline were raised throughout the event and some mentioned that they are eagerly anticipating approval/construction due to the long lead time getting to this stage of the Project.

• **Response:** At the time of the information session, the project team communicated its intent to submit the MSDP in the Fall/ Winter of 2019. A timeline for construction is still yet to be determined.

SUPPORTING STUDIES

(SUBMITTED UNDER SEPARATE COVER)

- 1. Biophysical Impact Assessment, Future Development Area, Bingham Crossing, Athena Environmental Consultants Ltd., **August 2017**
- 2. Staged Master Drainage Plan and Pond Report, Aplin Martin, May 2019
- 3. Servicing Study in Support of Land Use, Aplin Martin, October 2019
- 4. Traffic Impact Assessment, Update, Bunt & Associates, April 2019



Page left blank intentionally

