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# BINGHAM CROSSING

## MASTER SITE DEVELOPMENT PLAN

Rocky View County

July 23, 2013



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## Appendix A

Potential Road Cross Sections

# Introduction



As instructed in the Direct Control District (DC148) approved by Rocky View County Council on November 1, 2012, this Master Site Development Plan (MSDP) is intended to further guide the development of Bingham Crossing.

This MSDP should be interpreted in conjunction with the Bingham Crossing Conceptual Scheme (Bylaw C-7185-2012) as well as the approved land use (Bylaw C-7186-2012). Together, these documents outline the type, form, uses, and style of Bingham Crossing. This MSDP is in full compliance with all previously approved policies related to the development.

This MSDP relates strictly to what is referred to as Bingham Crossing's 'Phase 1', a  $\pm 32.15$  ha ( $\pm 79.44$  ac) portion of NW-34-24-3-W5M. DC148 has established a breakdown of three sub-areas, or zones, for development and has determined a list of appropriate uses within each of these three zones.

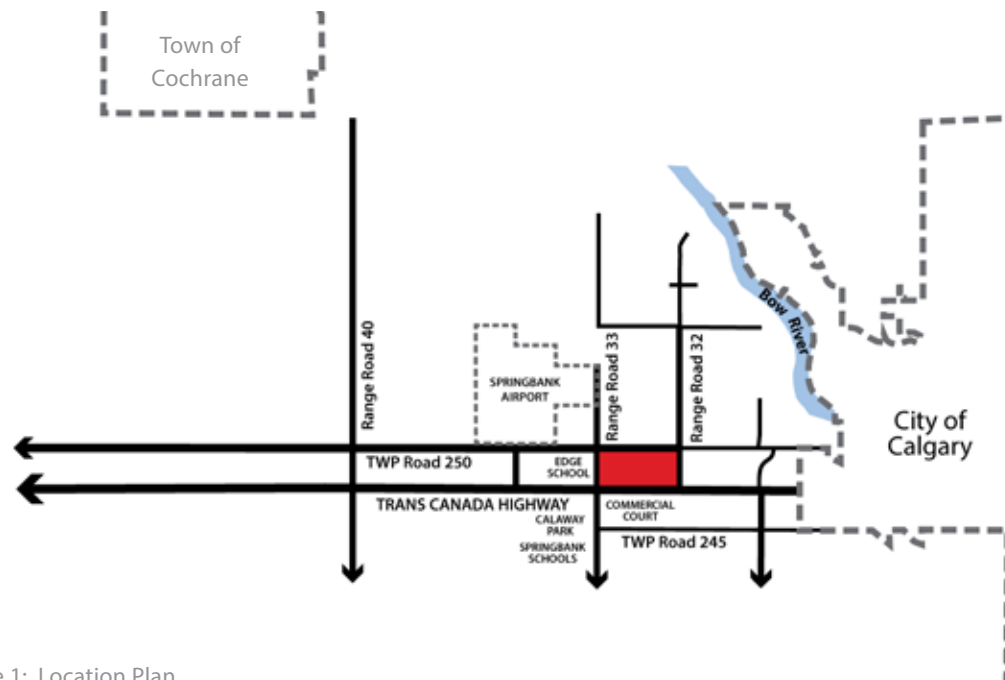


Figure 1: Location Plan





Figure 2: Aerial Photograph



## 2

# Vision of Development



Bingham Crossing will be a unique shopping destination and lifestyle centre for the Rocky View community. It will provide meeting places for both residents and visitors to gather in a comfortable village atmosphere. Reflecting the Springbank lifestyle, Bingham Crossing will provide a rural alternative for commercial development with a variety of high quality shops, services and amenities.

Bingham Crossing will offer desirable office, retail and commercial services to the residents and businesses in Rocky View County, and it will increase local employment opportunities for those looking to work closer to home.

At the heart of the development lies a unique village centre that has been developed based on a comprehensive set of architectural controls which has resulted in each building including a series of highly developed architectural elements. High quality shops and services will locate here to provide a range of products and services that have not previously been available in Springbank. The core will promote walkability with wide, animated sidewalks linking stores, services and amenities that will include gathering places such as plazas, restaurants and cafes. The thoroughfares will be attractively landscaped and enhanced with design elements, such as banners, ornamental lighting, and street furniture that create a small intimate village atmosphere.

In addition, Bingham Crossing will satisfy a long standing need for seniors housing in the community by providing an active living community for seniors in Springbank. The seniors' community will include:

- villas
- apartments
- assisted living
- dementia support units

In addition it will include the following facilities:

- wellness center
- spa
- theatre
- salt water pool
- exercise room
- games room





Figure 3: Site Plan







## 3

# Explanation of Three Zones



Bingham Crossing will consist of a retail/lifestyle zone, a highway edge zone, and a neighbourhood buffer zone. Each of the three components will include a different range of uses that smoothly transition and complement one another.

All three components will include a comprehensively designed open space network and will be pedestrian oriented. Bingham Crossing will provide local employment opportunities within Springbank (full time and part time) and social gathering places for the community.

## Neighbourhood Buffer Zone

Located along the entire length of the north edge of the project, the Neighbourhood Buffer Zone will provide a transition area that will consist of ample open space, including a regional trail, a seniors housing facility, as well as other forms of low intensity, low impact uses (offices, small scale commercial) that will be integrated into the overall open space system. Planning of the site has sensitively considered the transition of uses and development densities so they are compatible with the country residential uses to the north.

In addition, access points to the project have been located and designed so that traffic is directed away from the existing residential areas toward Range Road 33 and the Trans Canada Highway.

## Lifestyle Zone

The Lifestyle Zone, located within the central portion of the plan area, will be the pedestrian focal point of Bingham Crossing. It is an area for shopping and socializing, and will have buildings with varying heights and storefronts with the potential for offices above the main floors. The buildings will be articulated on all sides of the façades and will have street edges with small plazas to enhance the pedestrian experience. Buildings will incorporate trellises, canopies, arcades, and awnings to soften building edges. Building materials will include organic and rustic materials. Shopping streets will have restaurants, cafés and bistros to activate the walking corridors. This area will be designed to accommodate community events such as a farmer's market or other outdoor gatherings. Opportunities in the forms of rent reduction, subsidies, services-in-kind (e.g. providing free or reduced support services), and partnerships with local community groups will be available to prospective organizations.





Figure 4: Location of 3 Zones

### Highway Edge

Located along Highway 1/Range Road 33, furthest from the existing residential and closest to existing industrial and commercial developments, the Highway Edge Zone will accommodate comparatively more significant scale retail uses than the other two zones. Uses locating here will benefit from the large volume of traffic traveling the Trans Canada Highway and the high visibility of this portion of the plan area. View corridors will be preserved.

This portion of Bingham Crossing will be designed with coordinated parking, landscaping, lighting and thematic elements. Shops and services, as well as offices, could be interspersed within the shopping area with landscaped parking lots, articulated buildings, pedestrian connections, and low intensity lighting



#### Legend

- Highway Edge Zone
- Lifestyle Zone
- Neighbourhood Buffer Zone
- Municipal Reserve/Open Space
- Proposed Storm Pond
- Roads/Road Widening



## 4

# Public Consultation



In a continuing effort to collaborate with, and engage all neighbours, the community and stakeholders, a series of both formal and informal initiatives have taken place throughout the MSDP process.

Dialogue has continued to take place in the format that people are most comfortable: one on one coffee chats, in-home visits, group meetings, open houses, e-mail, phone, and letter. In addition, after the Land Use approval, a community working group was formed and continues to meet regularly to ensure that input into the process and design is ongoing and collaborative. The project also has an up to date website that remains current and interactive.

Collaboration with all stakeholders has always been viewed as fundamental to the success of Bingham Crossing and will continue to be so moving forward.





# 5 Description of Phase 1 Development



## Seniors'

The Bingham Crossing Conceptual Scheme and DC 148 encourage further review and refinement of development details through the completion of the MSDP. Through this process it has become clear that the supportive services and amenities associated with the seniors' community need to be expanded to provide a viable and suitable seniors' community that meets the needs of future residents. The number of units and the unit sizes originally contemplated have not changed, however, through further enhancement, the common and amenity areas, along with public areas have been enlarged. The increase of these areas will have no effect on the servicing availability and requirements for the development.

All seniors' development within Phase 1 will be located in the Neighbourhood Buffer zone and will ultimately be constructed in 2 Stages.

Stage 1 will include the following:

- a care building with  $\pm 90$  units which include ground floor common facilities and shared community facilities;
- an independent living building attached to the care building which contains  $\pm 53$  units;
- a community centre including a dining room, bistro, games room, art studios, exercise room, spa, theatre and workshop space;
- a central courtyard;

- an internal private roadway; and
- eight (8) – one storey villas (semi-detached)

Stage 2 will include the following:

- a second independent living/care building which will contain  $\pm 53$  to  $\pm 90$  units;
- $\pm$  thirty (30) - one storey villas (semi-detached) and
- an internal park adjacent to the private roadway

The first stage of construction will coincide with the commercial, retail, office development presented in this MSDP. Timing of the second stage of construction is based on market demand, occupancy levels and availability of servicing. This MSDP accounts only for the first stage of the seniors' community. At the time when the second stage of the seniors' community is being contemplated, an amendment to this MSDP will be required.

All buildings are set back from the Bingham Crossing internal roadways along the south and east edges to the site to create a landscaped boulevard along these frontages. The streetscape along these frontages will include street trees and separate sidewalks. Additionally, there will be raised and clearly demarcated pedestrian crosswalks at the western and eastern boundaries of the traffic circle to the south of the site – connecting the seniors project to the proposed retail to the south and potential future Bingham Crossing development to the east.



Within the site, the care building and independent living building and a Stage 2 building will form the boundaries to a  $\pm 2.0$  acre internal landscaped courtyard which will contain a number of uses such as a croquet pitch, horseshoe toss, bocce ball, fire-pit, a gazebo, a lawn bowling green and a number of gardens including an English Garden and a herb and vegetable garden.

To the West and North of the Independent Living Building - a private roadway will be constructed with Villas located along the North and West edges. These buildings will typically be one storey or 1 and  $\frac{1}{2}$  stories – a very low scale adjacent to the natural areas and paths to the north and the pond and path system to the West. Also, adjacent to this roadway will be constructed a park system as part of the Seniors Project.



Typical Villa Elevation



### Retail/Office/Commercial Design

Bingham Crossing is the place for people who look for exciting shopping, living, and entertainment in a pedestrian oriented environment. It is special and an inviting place. Main Street has an ambiance that recalls a classic “village core.” It has wide sidewalks, outdoor dining, shops with awnings, and shade trees.

The retail/office/commercial component of the development will be made up of several buildings of varying sizes and shapes. Some buildings will be occupied by single tenants while others will have multiple tenants with a variation of uses. Shops, offices, galleries and boutiques will be interspersed with dining, cafes, and local service uses. The largest single tenant space will be occupied by a food store.

Building heights and facades will vary in order to animate the streetscape while patios and outdoor activities bring life to the pedestrian spaces.





Typical Commercial/Office/Retail Elevations



Typical Commercial/Office/Retail Elevations



## 6

# Architecture



Bingham Crossing is a unique village style development set in a pedestrian oriented environment. Development within Bingham Crossing will be dictated by design guidelines located within this MSDP in order to ensure buildings are high quality, sustainable, consistent, and pedestrian scaled.

These guidelines will be enforced with easements, covenants and restrictions that will be included in tenant lease agreements, or with any subdivided land. Emphasis is placed upon the building quality, uniqueness, and variety. Buildings, parking lots, social spaces, and open spaces will be designed to encourage ease of pedestrian movement at a comfortable scale.

## LEED

The project will be designed to meet or exceed the requirements for Certification under the LEED Core and Shell rating system as developed by the Canada Green Building Council.



## Material Palette

The color palette utilized for Bingham Crossing will draw on the surrounding nature and townscapes of Western Alberta; integrating the classic base colors of the region, including but not limited to natural 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. Accents will be of high quality materials and used to promote a vibrant street life.

The material palette includes: stone, masonry, metal panels, metal siding, wood trim, wood siding, EIFS (in limited quantity), metal roofing, shingles (asphalt or wood).

Large expanses of flat walls along district streets are not desirable. Where large amounts of mass are required, the façade will be broken down by changes in plane, reveals or decorative details.

High quality materials such as stones and brick will be used for architectural details and accents whenever appropriate. A more generous use of details and materials will be used at entries and the ground floor along district streets.



High quality durable base material, such as brick or stone, will be used for building facades abutting the sidewalk along district streets. The base should be a minimum of 24" (610mm) in height and proportioned and detailed for the facade of the building.

Roof shingles will be of high quality. Different materials and colors of roof materials that promote variety and individuality to buildings within an overall compatible palette of materials are incorporated.

### Seniors'

The Architectural Character of the Bingham Crossing Seniors Community is purposely very residential (not institutional), in terms of building forms, details and materials. Buildings will be articulated with bays,

balconies and sunrooms with a one storey stone base and wall materials of EIFS and clapboard style siding.

The buildings abutting internal roadways will be set back substantially from the sidewalk with landscaping to create a "park-like" appearance to these building elevations.

### Retail/Office/Commercial

Retail, office and commercial building design will focus on enhancing the pedestrian environment through creating visual interest at a pedestrian scale. Buildings will be articulated through changes in wall plane, material, and texture along with clearly demarcated entrances and human-scaled design elements such as canopies and awnings where appropriate. Additionally, transparency of façade

elements such as windows and doors will enhance visual interest for pedestrians and contribute to the public realm.

### Utility Buildings

Utility buildings such as the wastewater treatment plant and the pump station will be designed to reflect the building typology found in rural Western Alberta. Building materials will include reclaimed barn wood and corrugated metal.



Typical Commercial/Office/Retail Elevations



## Building Height

DC148 describes a maximum building height of 12.00 m (39.37ft.) for all buildings on site; this includes any retail, commercial, office and seniors' housing buildings.

## Building Sizes and Dimensions

Bingham Crossing Stage 1 is projected to develop approximately  $\pm 25,083\text{m}^2$  ( $\pm 270,000\text{ft}^2$ ) of retail, office and commercial uses and approximately  $\pm 17,187\text{m}^2$  ( $\pm 185,000\text{ft}^2$ ) of the Stage 1 seniors' community. As discussed previously, there has been an increase in area to the seniors' complex to allow for more community amenities. Servicing requirements, unit numbers and unit sizes are not affected by this area increase.

Final building placement and sizes will be determined at the Development Permit stage; however, as seen in Figure 6, building envelopes with maximum building floor areas have been established. The floor area of individual buildings may grow/shrink within their respective building envelope; however, the total floor area for Stage 1 of the seniors' community may not exceed the projected area of approximately  $\pm 17,187\text{m}^2$  ( $\pm 185,000\text{ft}^2$ ), while all retail, office and commercial buildings may not exceed the projected area of approximately  $\pm 25,083\text{m}^2$  ( $\pm 270,000\text{ft}^2$ ).

No single commercial tenant space within a building shall exceed  $5,109\text{m}^2$  ( $55,000\text{ft}^2$ ).



Figure 5: Maximum Extent of Building Outline for Seniors Residence





Figure 6: Maximum Extent of Building Outline for Commercial Sites





# 7 Signage



Clear, consistent and multi-modal signage is important to establish a sense of place in Bingham Crossing. Pedestrians, cyclists and vehicles alike will enjoy high quality, architectural signage to announce the development and facilitate efficient on-site movements.

The final sign locations are subject to refinement. Types of signs that may be installed include:

- Bingham Crossing identification signage
- site signs
- directional signs
- tenant and seniors' community identification signage
- tenant identification signs located on building facades

Figure 7 provides general locations.



Typical Directional Signage





Figure 7: Signage Location Plan





Typical Directional Signage





Typical Bingham Crossing Identification Signage



# 8 Lighting



The entire outdoor lighting system at Bingham Crossing has been designed to be as unobtrusive as possible while still maintaining a high quality, attractive and pedestrian oriented aesthetic.

## Dark Sky Policy

Bingham crossing will establish and maintain an outdoor lighting system that complies with the County's Dark Sky Policy as well as the International Dark Sky Association guidelines. The intent is to reduce the effects of unnatural lighting on the environment and surrounding community and to cut down on energy usage.

## Hierarchy of Lighting

A hierarchy of lighting will be established and scaled to the particular needs of the varied zones within the Bingham Crossing, including both the public lighting and project site lighting.

## Public Lighting

Public lighting refers primarily to street lights along internal streets. This street lighting shall conform to the County's and Alberta Transportation's design standards at the time of installation. Lighting along the project corridors is designed to provide a cohesive project identity.

## Project Site Lighting

Site lighting refers to the illumination of on-site areas for the purpose of safety, security, and night time ambiance, and includes parking areas, pedestrian movement corridors and plaza areas, and lighting around buildings. Within these illumination areas, 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.

General parking areas throughout Bingham Crossing will consist of pole mounted fixtures located within the parking areas. The height and intensity of these fixtures are designed to provide consistent illumination while reducing the actual quantity of freestanding fixtures needed. The light source is typically designed to provide a natural colour while reducing glare.



Along pedestrian movement corridors and plaza areas, low mounted lighting will be utilized to reinforce the pedestrian scale.

Service area lighting is to be provided within 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.

In general, the following minimum light levels will be achieved:

- parking lot – 2 foot candles
- entrances – 5 foot candles

A detailed lighting plan will be submitted with the Development Permit for each parcel and/or building.



Example of Dark Sky Lighting Fixtures



Typical Lighting Standard with Banners



## 9

# Landscaping



## Context

Bingham Crossing is located at a crossroads of the urban / rural interface. The area is rich with beautiful scenery and rolling topography.

Just west of Bingham Crossing, hints of the mountain landscape begin to emerge. Angular rock outcrops provide a preview of the mountain terrain visible to the west. Further west, large earth and rock formations occupy the landscape and further amplify the undulating terrain of the region.

The native vegetation of the area exists in large groups in an opportunistic fashion. Often the trees and shrubs will be located on the north side of a hill or in small depressions in the topography. Existing groups of native vegetation have diverse colour and texture in all seasons.

## Landscape Design Intention

Landscape can assist in providing a distinctive identity to Bingham Crossing by referencing the unique geological features and the native vegetation of the region. The perimeter landscape will be articulated with undulating topography, groves of native trees and shrubs and interesting rock outcrops. This treatment will give Bingham Crossing an individuality that will be attractive, and most importantly, fit the immediate context.

## Landscape Description

The use of undulating berms, native vegetation and rock outcrops will provide an attractive border to the site and buffer the development from adjacent properties and roads. The berms will vary from  $\pm 1.0$  metre to  $\pm 3.5$  metres in height and define view corridors to and from the development. 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.

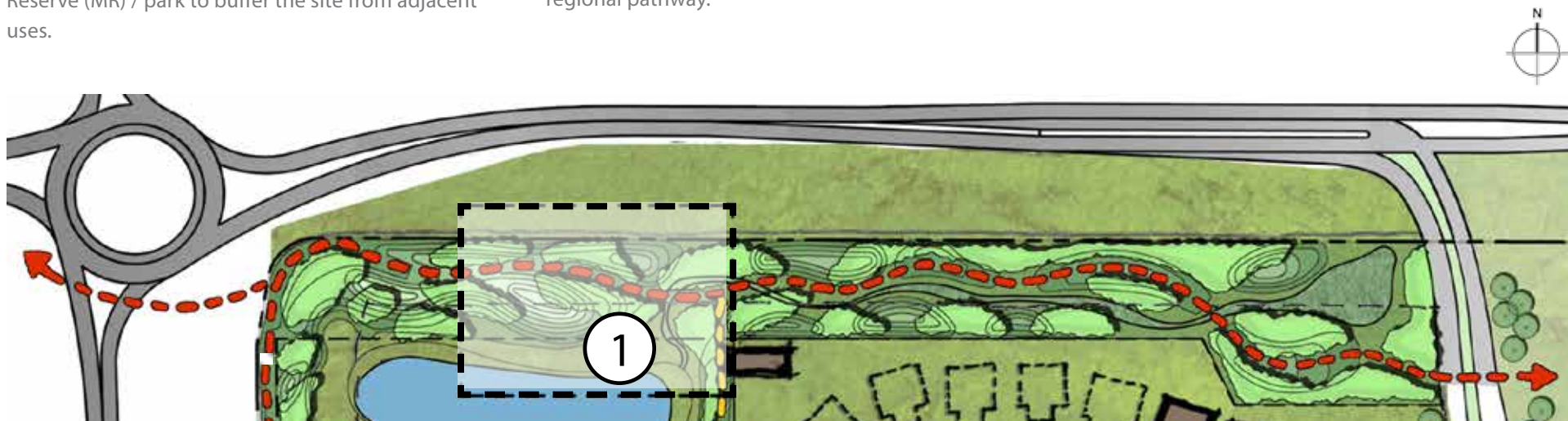
Bingham Crossing will be connected to the adjacent areas by a network of regional pathways and local trails. These pathways will be established in the greenbelt that forms the perimeter of the project. Navigating through the development as a cyclist or pedestrian will be a pleasurable experience. Pathways within the greenbelt will be articulated with undulating berms, prairie grasses, substantial groves of native trees and rest nodes for pathway users.



## Northern Edge


The northern interface along Township Road 250 will feature a  $\pm 30$  to  $\pm 50$  metre wide linear Municipal Reserve (MR) / park to buffer the site from adjacent uses.

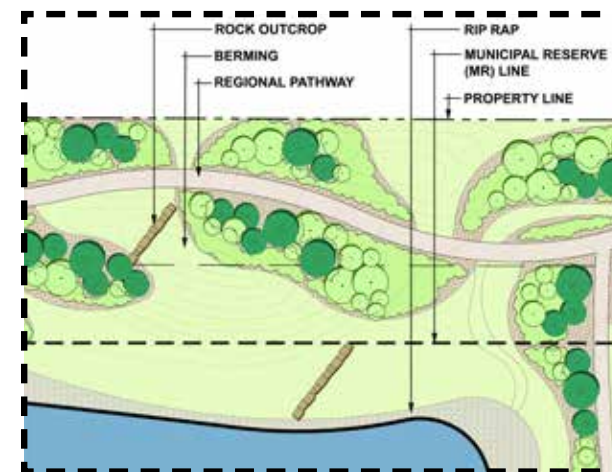
This MR / Park will also feature berming, native vegetation, rock outcrops and will incorporate a regional pathway.



Northern Landscape Interface

### Legend

-  Regional Pathway
-  Internal Trails

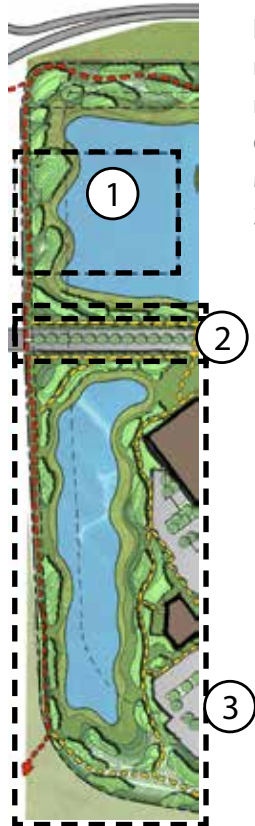


Detail 1: Northern Interface Detail

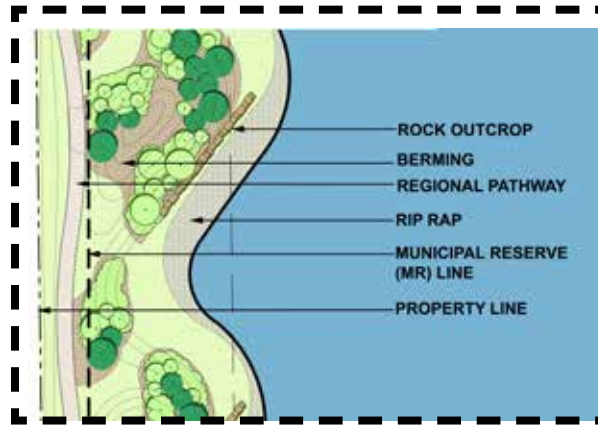


## Western Edge

A naturally planted storm pond is located along the western edge of the development. Pond landscape will consist of riparian edge plantings, undulating topography and rock outcrops that will frame views to the mountains. It is anticipated that the storm pond will be dedicated PUL, as per current County Policy, while adjacent landscaping will be owned and maintained by Bingham Crossing. The regional pathway will also run along the western edge of the pond in a dedicated MR adjacent Range Road 33.

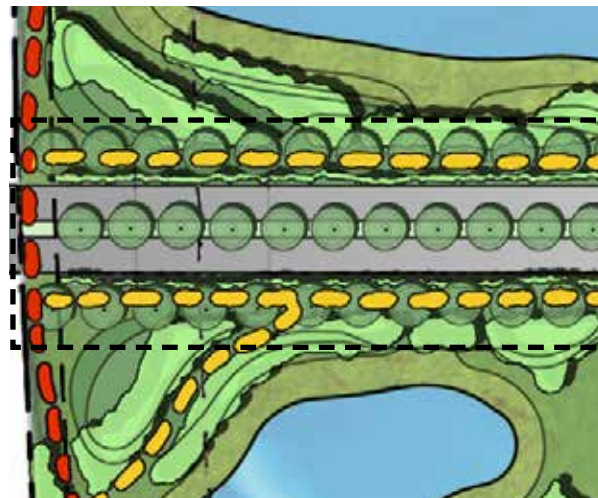


Western Landscape Interface



Detail 1: Western Interface Detail

①



Detail 2: Western Interface Detail

②



Detail 3: Western Interface Detail

③



## Southern Edge

The southern edge of the property, adjacent to the Trans-Canada Highway, contains a  $\pm 30$  metre wide landscape buffer and features a local granular surfaced trail. This area will be articulated with a mix of undulating berms, native vegetation and rock walls similar to the rest of the development.



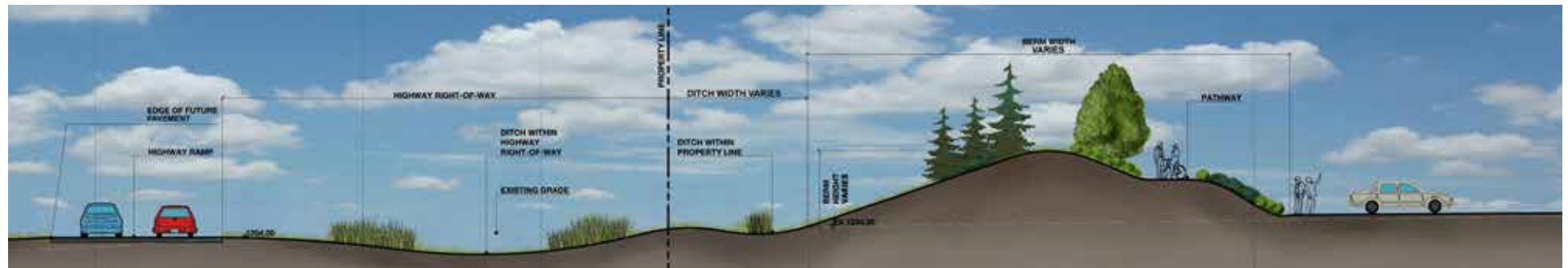
Southern Landscape Interface including Berm

Legend

- Regional Pathway
- Internal Trails



Detail 1: Southern Interface Detail



Typical Berm Cross Section



## Village Centre

The village centre is at the heart of Bingham Crossing. It is Bingham's meeting place, 'main street' and town square. Small shops, boutiques, coffee houses and cafes with sidewalk patios are set in a 'landscape dominant' space. Opportunities prevail in the 'multi use' central space for special events, programmed uses, community functions and variable seasonal activities.

Warm inviting spaces greet you in the central streetscape space. Close attention will be paid to the comfort level in all areas of the project, but especially the main street area.

Annual and perennial planters will animate café spaces, building entrances and street corners. Boulder formations using the same material as the rock outcrops will be located at feature nodes. Street furniture will complement the architecture and maximize pedestrian opportunities.

The community main street feel will be reinforced with linear street tree planting and perennial or shrub understory in appropriate locations.

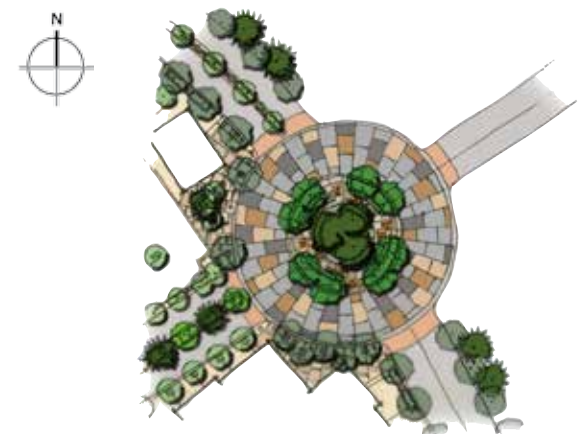
Coniferous trees will be grouped in select areas for winter interest or to provide shelter from the wind.

- the lot owners' association, merchants' association or such other agency or association will maintain the landscape installations at bingham crossing, including m'r's, setbacks and public utility lots
- all areas of the site will be landscaped in accordance with the rocky view county land use bylaw
- planting islands will be provided in all parking areas in accordance with the rocky view land use bylaw

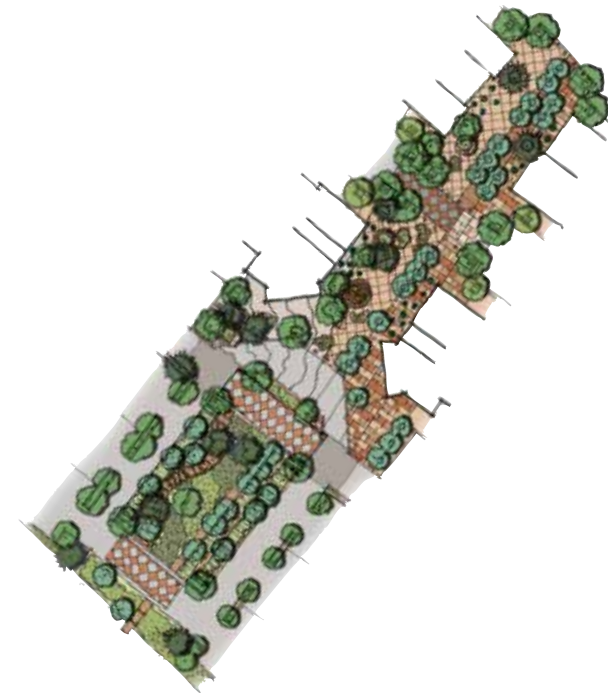




Site Plan



Detail 1: Typical Roundabouts Landscaping



Detail 2: Typical Plaza Landscaping

## 10

## Development Principles



General principles have been established in order to ensure consistent, contextually appropriate and visually attractive development throughout Bingham Crossing. The implementation of these principles will be realised through the Subdivision and Development Permit process. These principles establish tangible performance standards for the development.

### Seniors' Community

- offer a range of housing options from villas (independent living) to assisted living units to permit aging in place
- functions as a transition area between the retail/business uses to the south and existing country residential to the north
- incorporate open space that integrates seamlessly into the overall open space system
- building design is compatible in form and character with existing adjacent residential uses
- access points, adjacent to existing residential uses, do not interfere with existing access points and direct traffic away from residential areas to the east of Bingham Crossing

### Main Street

- main street is designed to be an active and vibrant retail experience where the pedestrian and automobile safely and seamlessly co-exist
- wide sidewalks (minimum of 2.4m) adjacent to retail uses

- on-street parking is provided to accommodate short term visits
- landscaping is incorporated to reinforce the pedestrian linkages and provide visual interest
- streetscape amenities along these streets, especially pedestrian scaled amenities such as light fixtures and amenities such as benches, waste receptacles, planters and decorative planting
- raised and well defined pedestrian crossing areas are introduced at frequent intervals throughout

### Goals and Objectives of the Retail Areas

A series of retail districts each with distinct individual character will be established through a variety of high quality retail storefronts, signage, open space, and movement patterns.

#### Retail Storefronts

- express individuality while maintaining quality through the use of superior materials and finishes
- create one-of-a-kind storefronts with ample transparency for easy merchandise viewing





### Signage

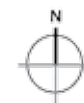
- utilize simple, yet eye-catching signage to attract street traffic, and add character and identity to the district
- incorporate innovative expressive signage that is compatible in scale and character with the building or storefront design

### Outdoor Dining

- provide well established and comfortable areas for outdoor dining with protection from the elements

### Plazas

- incorporate plazas, green spaces, and "outdoor rooms" to create a sense of place
- establish immediate physical & visual connections between sidewalks and outdoor plazas



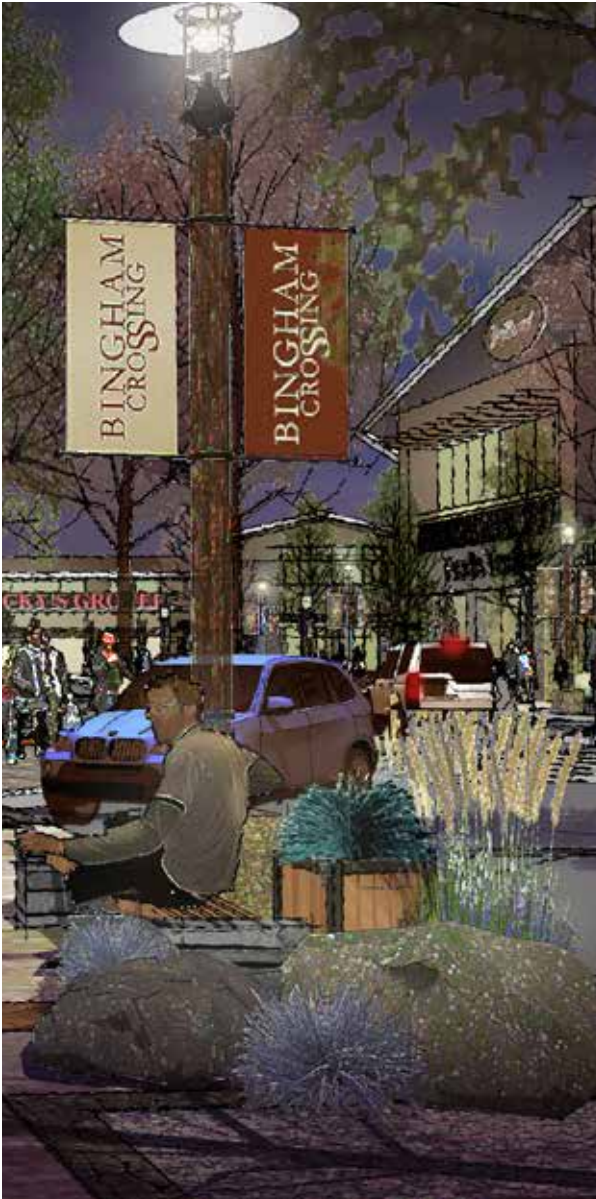
### Legend

- Property Line
- ..... Extent of Development
- Extent of Municipal Reserve
- > Pedestrian Connections

\* for peripheral pathway system please refer to landscape plan

Figure 8: Internal Pedestrian Connectivity Plan





### Pedestrian Connections

- utilize pedestrian passages, midblock crossings, and paths for easy pedestrian access throughout
- provide clear and strong linkages between buildings
- connect to the surrounding regional pathway network
- provide safe and easy pedestrian connection to adjacent seniors community

### Building Design Principles

Depending on the individual building's size, scale, and function, certain design principles are appropriate. These principles give direction for entryways, building orientation, building massing and general aesthetics.

#### Anchor Buildings

Anchor Buildings refer to buildings that draw a considerable number of people as result of their function allowing other facilities within the area to benefit from the increased exposure. Grocery stores are typical uses located within Anchor Buildings.

#### Orientation & Massing

- orient main entrances towards a parking field. Secondary entrances may be oriented towards pedestrian spaces, including sidewalks and pedestrian walkways
- use simple, yet varied massing; in particular, introduce strong forms to accentuate primary

store entrances for maximum impact from near or far distances. Entrances that afford a "sense of entry" are encouraged

#### Architectural Guidelines

- articulate all building elevations visible from publicly accessible areas. Expansive blank and unadorned wall surfaces will be minimized
- 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
- entrances should be clearly demarcated with recesses, overhangs, and other architectural details

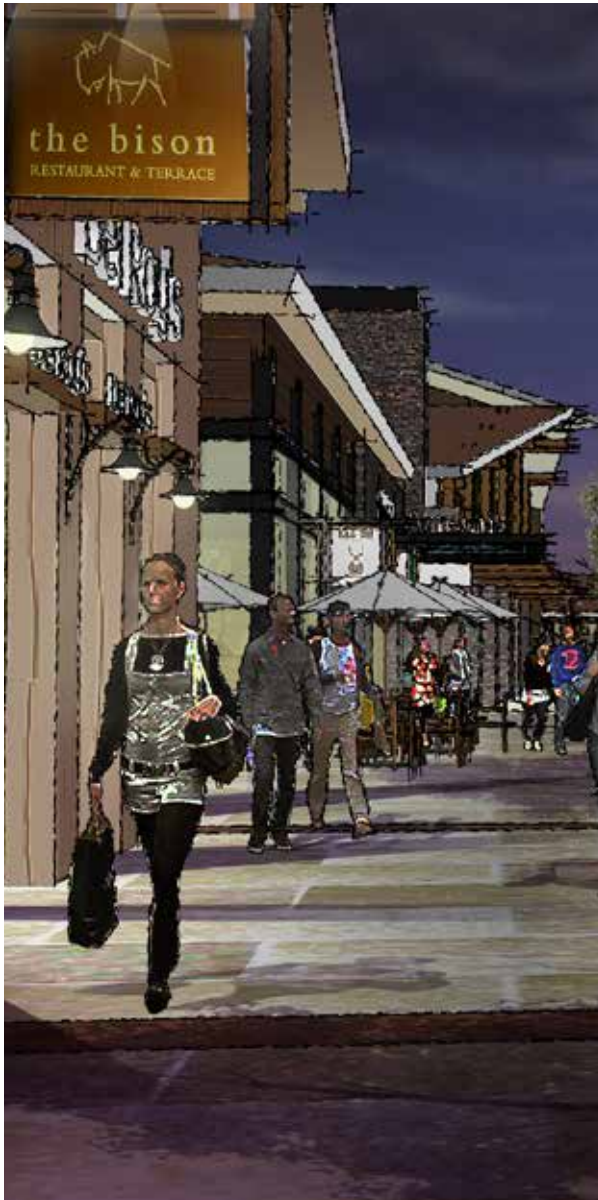
#### Entrances

- generous storefront window and expansive displays are located at main entries
- clear plate glass or functional glazing is recommended; the use of reflective, opaque and darkly tinted glass is strongly discouraged

Use architectural details to enhance the building's appearance.

Careful detailing, including human-scaled elements is especially appropriate at street level.





### Inline Retail

Inline Retail refers to multiple commercial storefront spaces abutting one another and arranged in a single building.

#### Orientation & Massing Guidelines

- orient primary shop entrances towards key pedestrian space, including sidewalks and pedestrian walkways. Secondary entrances may be oriented to pedestrian passages and parking areas
- incorporate compatible changes in architectural form and roofline to emphasize a building corner and/or primary shop entrances
- configure buildings to maintain a continuous edge along the sidewalk and define public space
- provide a frequent cadence of shop entrances along the street; encouraging walk-in traffic at the street level
- express roofs in a visually interesting fashion. Flat roof forms incorporate an attractive cornice or parapet

#### Architectural Design Guidelines

- all visible sides of the retail building are articulated and provide visual interest. Blank, unadorned walls are strongly discouraged
- use fenestration (i.e., windows and doors), as well as changes in wall plane, material, texture, color, etc., to create shadow lines and articulate building walls
- provide visible entrances. Entrances should be clearly expressed with recesses, overhangs (including canopies or awnings), special materials, and/or detailing
- incorporate human-scaled details and elements such as canopies and awnings, display windows, architectural lighting, etc., especially where pedestrian activity is expected
- a high degree of transparency along sidewalks and heavily trafficked areas. The use of reflective, opaque, and darkly tinted glass is discouraged
- continue details, materials, and colors around the entire building
- ensure that a compatible combination of attractive architectural lighting and appropriate security lighting on all elevations enhances on-site safety





### Freestanding Pads

Freestanding Pads are standalone buildings free of attachment and tend to be located in close proximity to Anchor Buildings.

#### Orientation & Massing Guidelines

- Locate pad building to define project entrances and gateways
- Explore opportunities to group pad retail buildings to frame and share outdoor space such as small plazas and pedestrian Passages
- Orient main entrances towards pedestrian spaces, including sidewalks and important pedestrian walkways. Consider compatible changes in architectural form and roofline to emphasize gateways and / or a primary shop entrance

Express the roof in a visually interesting fashion. Flat roof forms should incorporate an attractive cornice or parapet.

- Locate service, loading, and storage areas away from public places

#### Architectural Design Guidelines

- All facades of a pad retail building are articulated and provide visual interest. Blank, unadorned walls are strongly discouraged
- Use fenestration (i.e., windows and doors), as well as changes in wall plane, material, texture, color, etc., to create shadow lines and articulate building walls

- Provide visible entrances. Entrances should be clearly expressed with recesses, overhangs (including canopies or awnings), special materials, and/or detailing
- Incorporate human-scaled details and elements such as canopies and awnings, display windows, architectural lighting, etc., especially where pedestrian activity is expected
- Require a high degree of transparency along sidewalks and heavily trafficked areas. The use of reflective, opaque, and darkly tinted glass is discouraged
- Continue details, materials, and colors around the entire building
- Ensure that a compatible combination of attractive architectural lighting and appropriate security lighting on all elevations enhances on-site safety

### Outdoor Display and Sales

Exterior display areas, where permitted will be properly sited and landscaped.

### Loading / Garbage Areas

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



### Screening of Mechanical Units and 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.

### Pedestrian Passage

Pedestrian Passages are designed to enhance the pedestrian environment through the use of light, shade, color, texture, special building materials and are typically framed by buildings that create an intimate scale.

These passages are characterized with details that enhance a pedestrian environment such as special materials, and intimate scale.

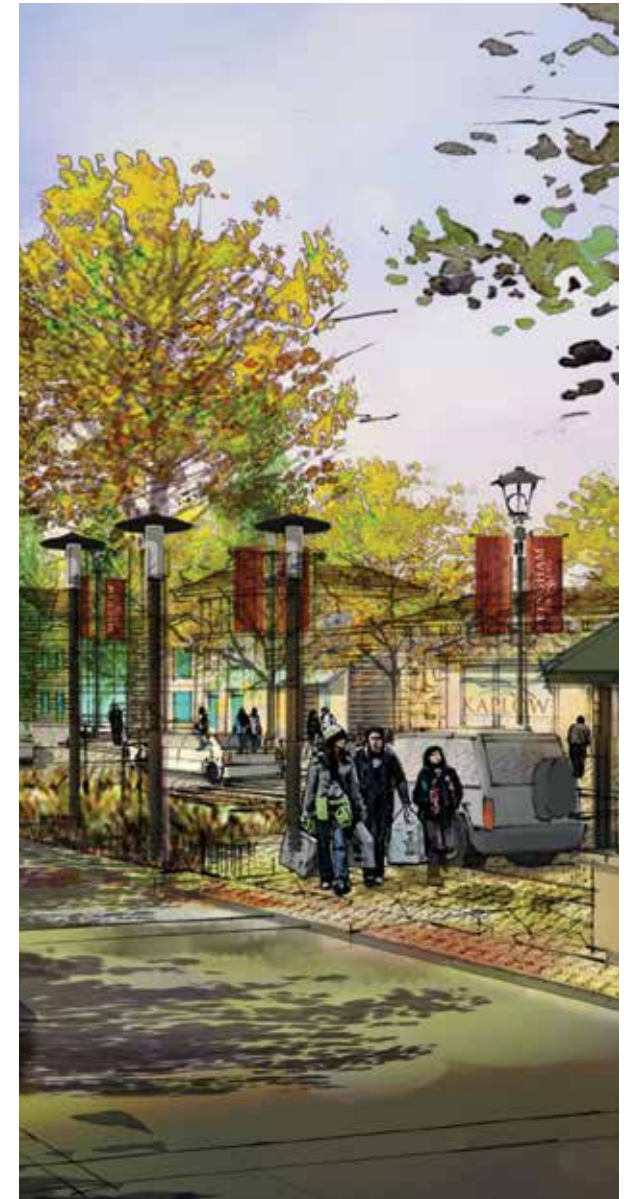
Shops that front the passages should provide special design elements that address this condition.

- Blade signage is the preferred signage in these areas
- Other design elements to break down scale and provide a high quality pedestrian environment are encouraged, including canopies, building mounted lights, planters, trellises, draping fabric banners that span the public right of way, special tile work, niches with fountains, etc

The goal is to create an interesting environment of light, shade, color, and texture.



Typical Plaza Cross Section



# 11 Transportation



Mobility is encouraged throughout Bingham Crossing through a variety of transportation methods.

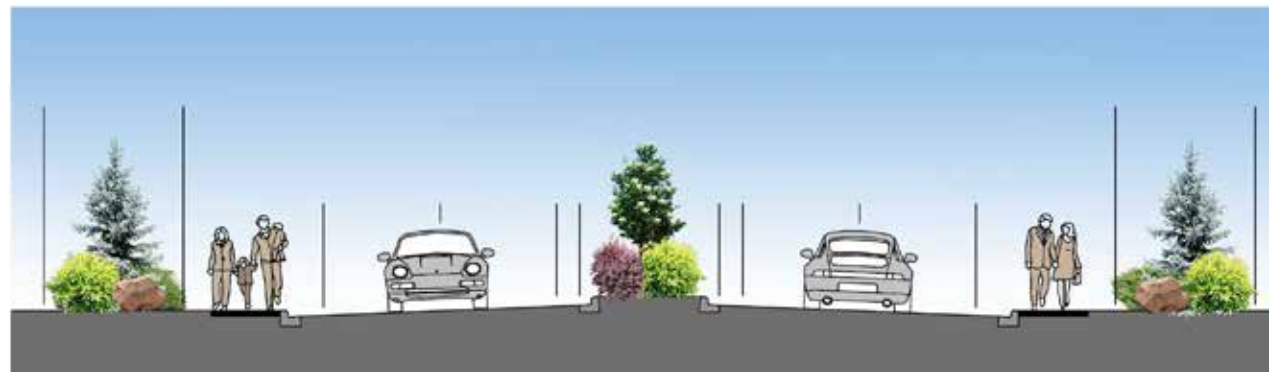
## Transit

Subject to completion and occupancy targets being met, fee for service private transit will be provided within Bingham Crossing and extended to regional areas that wish to participate. Transit stops will be strategically placed within 400m of all shops and services within Bingham Crossing to ensure transit is accessible and convenient.

## Internal road network

Within the development there will be two main spine roads: an east-to-west road through the central area of the site and a gateway entrance running north-south also through the central area of the site. Smaller commercial access roads will run through the site from these main spine roads to individual buildings and parking lots.

Potential cross sections for the internal road network is provided in Appendix A.



Typical Road Cross Section





Figure 9: Proposed Bus Stop Plan





Figure 10: Internal Road Network



### External road network improvements

Bingham Crossing is located at the intersection of three major roadways: the TransCanada Highway, Range Road 33 and Township Road 250. As such, appropriate upgrades are required in order to maintain the safe and efficient functionality of these thoroughfares.

Subject to further Rocky View County and Alberta Transportation approvals, the following upgrades are being proposed in conjunction with this phase of development.

- 1 New westbound off-ramp from the TransCanada Highway onto Range Road 33
- 2 New single-lane roundabouts at Range Road 33 and the new ramp, Range Road 33 and Township Road 250, and at the south end of the overpass (including dedicated northbound to eastbound turn-lane)
- 3 Right in / right out access on Range Road 33 at the west site access
- 4 Forced left hand turn slot from the exit onto Township Road 250



Figure 11: Detail of Off-site Road Improvements



## 12

# Water, Wastewater Collection, Treatment and Disposal



For this phase of development, 47 acre feet of potable water will be provided which meets the demand requirements. This volume will be delivered through Calalta Waterworks Ltd. which operates a water supply and treatment facility, located across the TransCanada Highway, at the Calaway Park site. This volume has been purchased from Calalta and will be delivered through the existing water main that runs from Calalta, across the TransCanada Highway and north along Range Road 33.

All potable water, fire protection water and delivery components will be paid for by the developer. Rocky View County will not be requested to finance or incur debt for these components.

All discussions and policies within the Bingham Crossing Conceptual Scheme are still applicable and continue to be observed.

Sanitary sewer servicing will be accommodated through on-site collection, treatment, and disposal. Treated wastewater will be dispersed through a spray irrigation system onto land located within the eastern part of the plan area.

This wastewater treatment plant will be constructed as part of Phase 1 and sized to be able to be expanded as the project proceeds. The facility will be an advanced wastewater treatment plant that will incorporate flow equalization, biological treatment, and membrane filtration. Wastewater from the development will meet or exceed the standards dictated by Alberta Environment and Sustainable Resources Development.

The treated wastewater will be spray irrigated onto land east of Bingham Crossing owned by the developer. Forage crops will be planted, as specified by a professional agrologist, and used as a method of evapotranspiration in the disposal of the treated wastewater. Equalization storage will reduce and moderate peak inflows and will optimize the size of the treatment works, providing a more consistent flow rate and improved performance. Treated wastewater will be retained in a storage pond that will be used to provide a consistent flow to the spray irrigation system and to store the treated wastewater over the winter months. The treatment and disposal facilities will be componentized, thereby allowing parallel expansions with future phases.

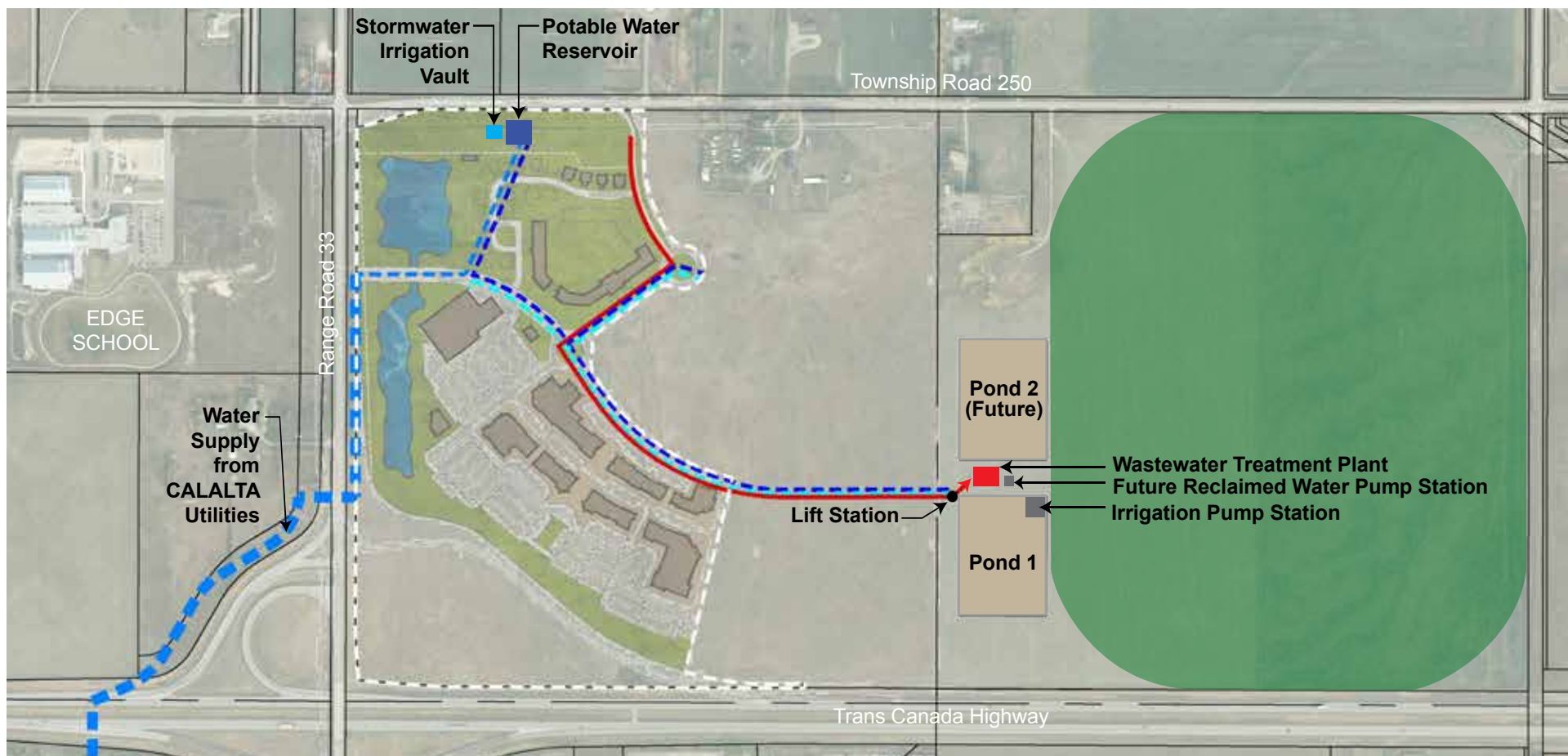
Hydrogeological and agricultural assessments have been completed that assess the hydrologic and soil conditions of the site and the appropriate application rate that will be used in spraying the treated wastewater onto the land. These reports have been prepared consistent with Alberta Environment and Sustainable Resources Development and County standards and will be used as the basis in the issuance of the required permits.

The spray irrigation system will be oversized (i.e. approximately 25% additional capacity in the storage ponds and increased land area for irrigation to accommodate for years where higher than normal precipitation rates occur).



All wastewater collection, treatment and disposal components will be paid for by the developer. Rocky View County will not be requested to finance or incur debt for these components.

All discussions and policies within the Bingham Crossing Conceptual Scheme are still applicable and continue to be observed.



Legend

Lands available and reachable for irrigation

Figure 12 : Water and Wastewater Servicing Plan



# Stormwater Management



An integrated Stormwater Management approach has been undertaken to accommodate the stormwater runoff in the Bingham Crossing project. The stormwater ponds and the entire underground piping network associated with on-site stormwater will be designed, constructed, maintained and financed by the developer.

The Stormwater Master Drainage Plan considers on-site flow conveyance and storage facilities that allow for the runoff leaving the site to be consistent with the pre-development runoff rate as well as volume.

Low Impact Development (LID) principles will be the foundation of the storm water utility systems within the project. This will include the reuse of storm water for irrigation of the landscaping and source control practices such as absorbent landscaping and bioswales.

Stormwater collected on the site will be stored in a pond to be slowly released at the pre-development rate. In order to further mimic the pre-development water balance, water will be drawn from the pond to irrigate the landscaping. This will support the establishment of landscaping and trees as well as efficiently using rainwater on-site and allowing it to evaporate and evapotranspire rather than becoming runoff.

Before reaching the pond, some areas of Bingham Crossing will first be drained to bio-retention areas that are designed to promote infiltration, treat the runoff water, and evapotranspire via the plants.

Realizing this approach for managing stormwater ensures that Bingham Crossing will maintain a pre-development water balance, establishes a lush landscaped environment and will not impose any downstream stormwater effects.

All stormwater infrastructure will be paid for by the developer. Rocky View County will not be requested to finance or incur debt for these components.





Examples of Bio-Retention Areas



## 14

## Implementation



This MSDP is not the last application that will be in front of the County. Both subdivisions and development permits will need to be considered by the County prior to on-site development. This MSDP is written to establish consistency and continuity between the approved policy (Bingham Crossing Conceptual Scheme) and the more technical applications to follow (subdivision and development permits).

### Subdivision

Individual parcels within Land Use Boundary may be subdivided into separate parcels (lots). The attached drawing indicates in general, the potential subdivisions for Bingham Crossing. The individual subdivisions are representative and will require a separate subdivision application.



Figure 13: Subdivision Phasing



### Public Utility Lot (PUL) Dedication

Public Utility Lot (PUL) dedications will ultimately be at the discretion of the County at the subdivision stage; however, the wastewater treatment plant, storage ponds, and any other required infrastructure are anticipated to be dedicated.

### Municipal Reserve (MR) Dedication

Municipal Reserve (MR) requirements will be managed through the dedication of lands as well as deferral of MR owing to the remainder of the lands.

As requested by the Rocky View West Recreation Board, a  $\pm 30$  metre linear MR is to be dedicated along the northern portion of the subject lands. This MR is to accommodate a meandering regional pathway.

This MR flares to  $\pm 50$  metres at the northern entrance of the development to accommodate appropriate road crossings.

Along the western edge of the development, a  $\pm 6$  metre linear MR will be dedicated in order to accommodate a regional path. This MR will connect with the MR dedicated along the north edge.

The total MR land to be dedicated with Phase 1 development is  $\pm 1.5$  ha ( $\pm 3.8$  ac). Any remaining MR owing will be deferred to the remainder of the lands.

All MR will follow policies contained within the Bingham Crossing Conceptual Scheme with regards to construction and maintenance.

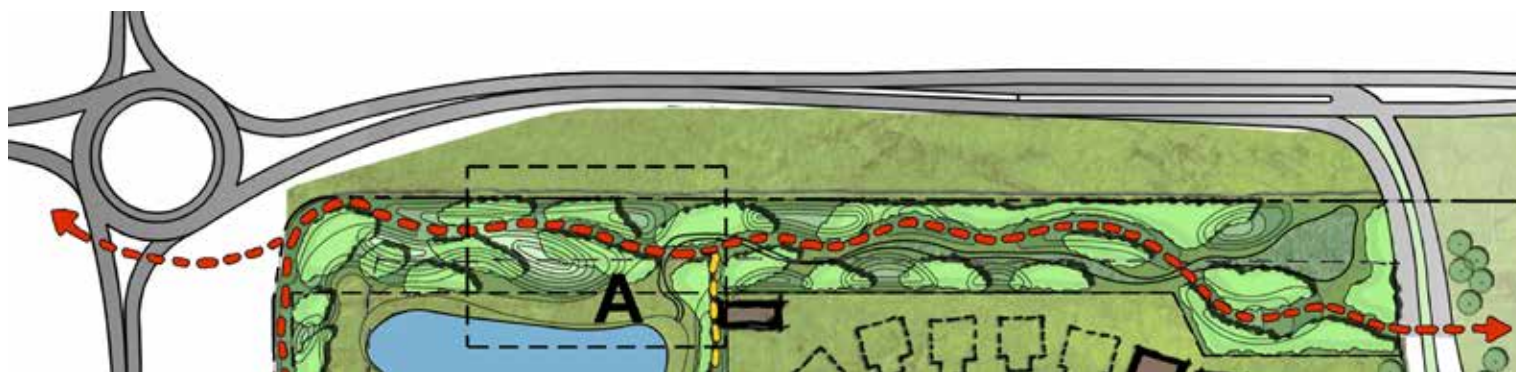
### Environmental Reserve (ER)

There are no lands within the Phase 1 area that are considered for Environmental Reserve (ER) dedication.

### Development Permits (DP)

This MSDP sets the stage for Subdivision and Development Permits (DP) to follow. DC148 establishes appropriate uses to be located within each of the three zones (Neighbourhood Buffer, Lifestyle, and Highway Edge).

Upon application of Subdivision and DP, this MSDP will be used as a guide for building size and placement, building design, landscaping and berming, lighting, signage and infrastructure requirements.



#### Legend

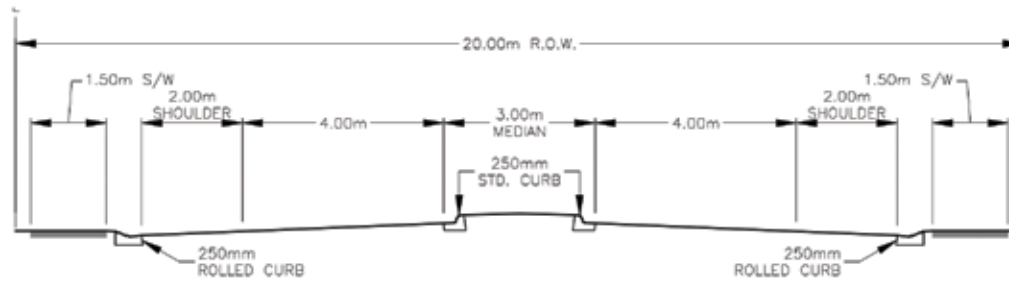
- Regional Pathway
- Internal Trails

Municipal Reserve (MR) Dedication Detail

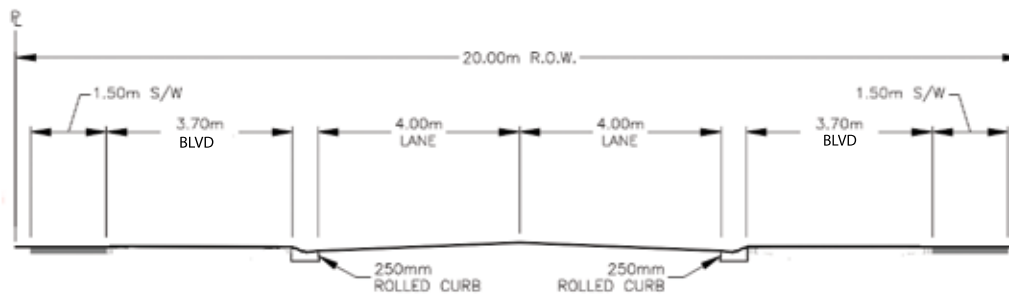


# Appendix A

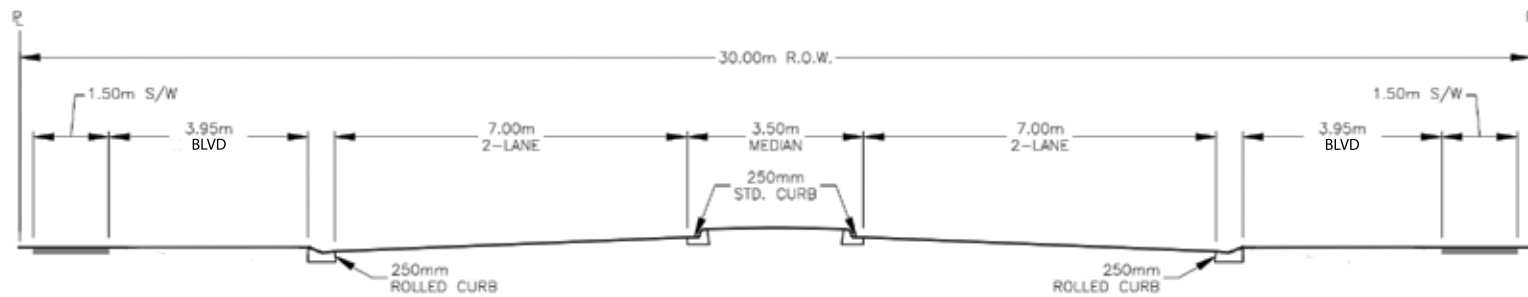




Potential Cross Section - East To West Entrance



Potential Cross Section - Internal Roads



Potential Cross Section - Gateway Entrance



