



THE ELBOW VALLEY AREA STRUCTURE PLAN
SPECIAL DEVELOPMENT AREA CELL #10

A MASTER SITE DEVELOPMENT PLAN FOR A RESIDENTIAL VILLA NEIGHBOURHOOD

**MAY 2016
APPROVED**



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**A MASTER SITE
DEVELOPMENT PLAN
FOR A RESIDENTIAL
VILLA NEIGHBOURHOOD**

APRIL 2016

SUBMITTED TO:
ROCKY VIEW COUNTY

PREPARED FOR:
**HOMES BY AVI
(AVI LAND CORPORATION)**

PREPARED BY:
B&A PLANNING GROUP

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1.0 INTRODUCTION

In accordance with the Elbow Valley Area Structure Plan (Bylaw C-4762-97) and Direct Control District (Bylaw C-4763-97), this Master Site Development Plan (MSDP) contemplates the development of 50 residential semi-detached villa condominium units.

This MSDP is designed to support the subdivision and development permit process for the Elbow Valley Special Development Area Cell # 10.

The MSDP includes specific expectations to establish how the project will be implemented within the context of the existing Elbow Valley community and current municipal policies and development regulations. It considers the proposed placement of buildings, landscaping, lighting, and establishes expectations for the architectural treatment and landscape design. It also describes a strategy to implement required transportation and utility servicing infrastructure necessary to support the project.





THE PROJECT VISION

The various neighbourhoods that make up the Elbow Valley Area Structure Plan policy area comprise a blend of high-quality single-detached, semi-detached villas and acreage homes that have been integrated into the natural environment.

The Elbow Valley community was purposefully designed to bring people together who are passionate about nature and recreation in order to reside in a high quality community laid out within a series of unique neighbourhoods situated within a connected open space system that offers a variety of passive and active recreation amenities.

As permitted by existing municipal planning policy and land use designation, this Master Site Development Plan contemplates the creation of a new Elbow Valley neighbourhood containing 50 residential semi-detached villa condominium units that include high-quality architectural design elements complemented by landscaping and vegetative plantings. The new Elbow Valley 'Cell 10' neighbourhood will be a residential enclave that honours and respects the tradition of natural beauty and enhanced architectural sensibility that is ever present throughout the existing Elbow Valley community.

3.0 AREA CONTEXT

As illustrated by Figure 1: Regional Context, the subject land is located in the southwest corner of the intersection of Highway 8 and Range Road 25. The site is accessed from Lott Creek Drive via an existing driveway that provides access to a community mailbox and an accessory building owned by the Elbow Valley Residents Club (EVRC). This driveway also provides access to Fisherman's Lake and a temporary storage facility situated in the Highway 8 ROW.

The plan area is located east of Elbow Springs Golf Course and north and west of existing Elbow Valley residential neighbourhoods. To the south, across Lott Creek Drive, are existing single-family homes within the Elbow Valley community.

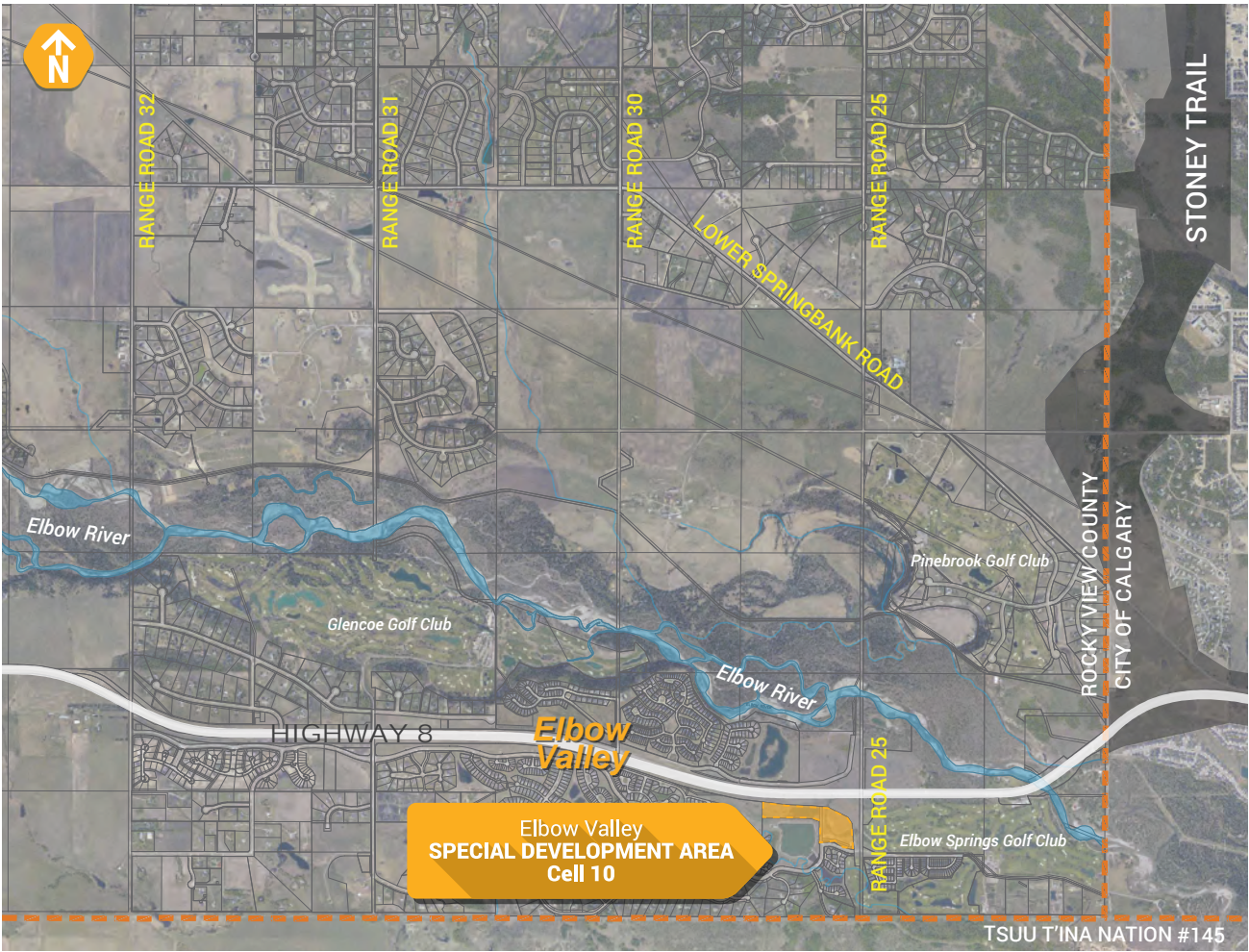
The subject lands generally form the eastern extent of the existing 'built-up' area of the Elbow Valley Community situated south of Highway 8. Lands further west include the balance of Elbow Valley neighbourhoods, the Elbow Valley West community and a variety of country residential communities and agricultural parcels.

The Elbow River is situated about ½ mile to the north, the Tsuu T'ina First Nation No. 145 is located about ¼ mile to the south and the City of Calgary is located 1 mile to the east.

**This MSDP
is designed to
support the subdivision
and development
permit process for the
Elbow Valley Special
Development Area
Cell # 10.**



FIGURE 1 | REGIONAL CONTEXT



MUNICIPAL POLICY FRAMEWORK

County Plan (Municipal Development Plan, 2013)

Policies within Section 10 of the County Plan support new residential developments within existing Area Structure Plans when the proposed development conforms to adopted ASP policies.

The County Plan provides a framework to direct the preparation of a Master Site Development Plan to include the following:

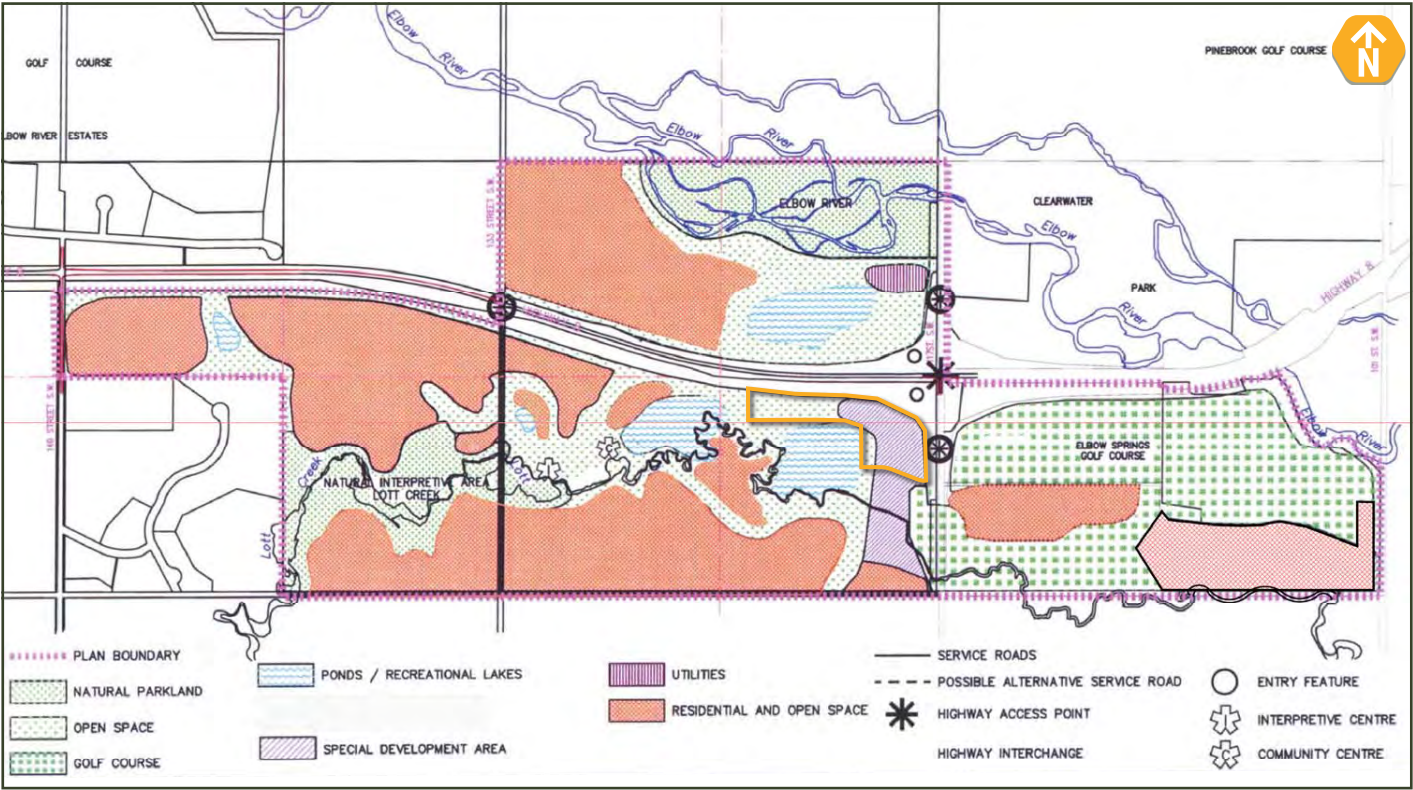
1. *A general introduction to the proposed development: a discussion of the vision and purpose of the proposal*
2. *A master site plan addressing:*
 - a) *building placement and setbacks;*
 - b) *building height and general architectural appearance;*
 - c) *parking and public lighting;*
 - d) *landscaping for visual appearance and/or mitigating measures;*
 - e) *agriculture boundary design guidelines; and*
 - f) *anticipated phasing.*
3. *A summary of the Applicant's community consultation and results.*
4. *Technical issues identified by the County that are necessary to determine the project's viability and offsite impacts. These may include any item identified in Appendix C.*

This Master Site Development Plan has been prepared in accordance with the County Plan's general direction in this regard and the specific development policies established by the Elbow Valley Area Structure Plan and attendant Direct Control District.

Elbow Valley Area Structure Plan, 1997

As illustrated by Figure 2: Elbow Valley Area Structure Plan, the subject land is identified as 'Special Development Area Cell #10. The ASP establishes a future land use concept for this parcel which provides for a broad range of land uses that may include the opportunity for commercial, institutional and residential land uses supported by recreational open space and associated transportation and utility servicing infrastructure.

FIGURE 2 | ELBOW VALLEY AREA STRUCTURE PLAN



Subject Lands

Section 4.3 of the ASP establishes a general principle for the special development area to accommodate 'gateway opportunities' with potential for commercial land uses that primarily service the Elbow Valley community. In 1997 the Special Development Area was created in order to provide the opportunity for a mixed use development cell that could accommodate a variety of residential uses to be developed in concert with "community service" oriented uses, and where appropriate, provide for commercial opportunity. It is acknowledged that the development contemplated by this MSDP does not contemplate service oriented institutional and commercial land uses. Notwithstanding, the ASP's Section 4.3 allows for a broad range of potential uses within this area and specifically provides opportunity for comprehensively planned residential development. Specifically, Section 4.3 (g) allows Council to include residential uses instead of the anticipated commercial uses.

The ASP directs that a detailed site plan must be prepared and submitted for Council approval prior to any development proceeding within the special development area. This MSDP has been prepared in accordance within this ASP requirement.

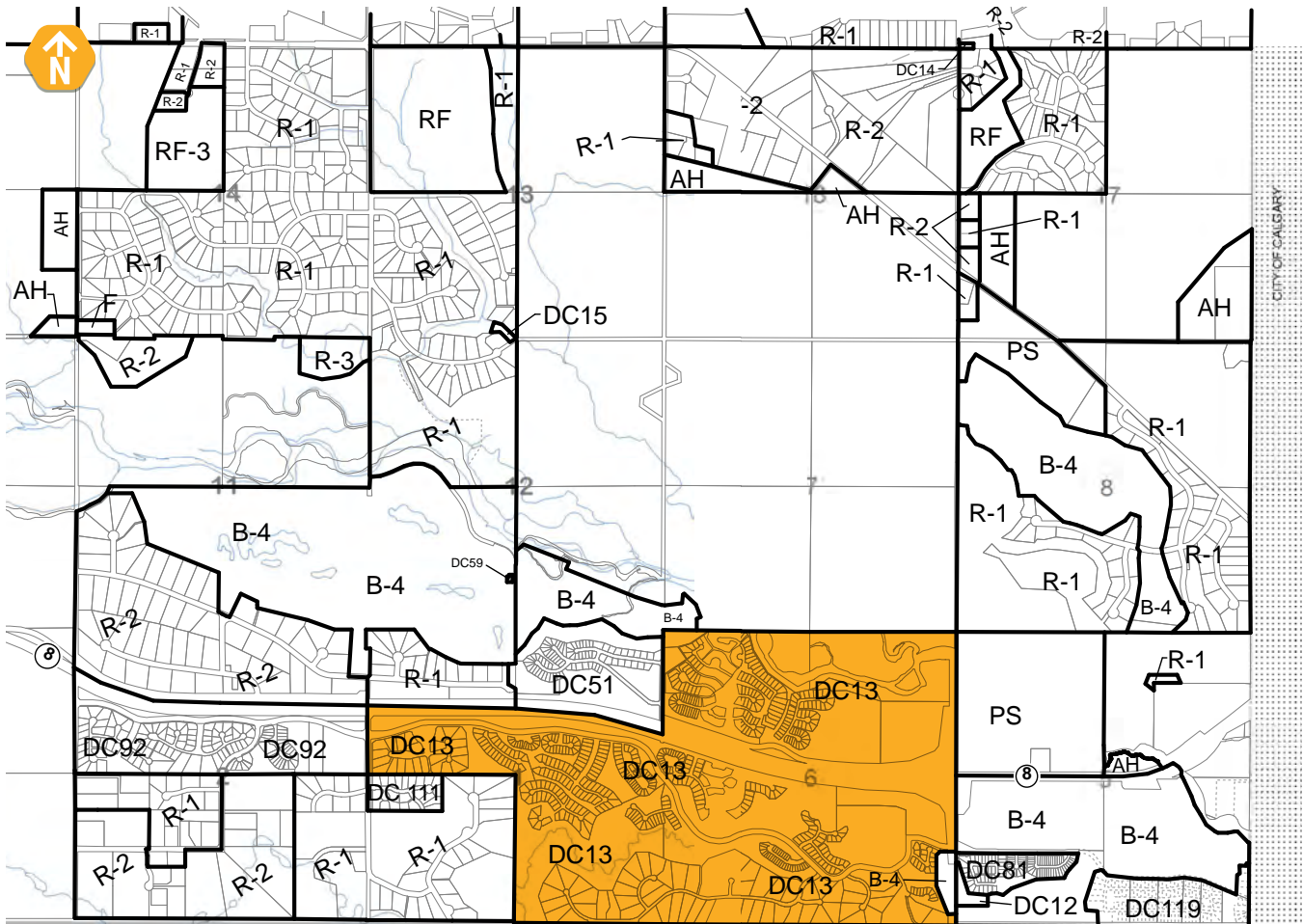
Section 4.5 of the Elbow Valley Area Structure Plan establishes the opportunity for residential properties to be maintained through condominium ownership to provide for the operation and maintenance of community infrastructure and recreation amenities with minimal cost and obligations to the municipality. The residential development contemplated by this MSDP proposes a condominium form of ownership. Likewise, a Resident's Association will be created by the developer at the subdivision stage to establish expectation for maintenance of neighbourhood-specific infrastructure and amenities in addition to a proportional contribution to the continued operation and maintenance of the existing Elbow Valley amenities. The Special Development Area Cell #10 Residents Association will fall under the management oversight of the Elbow Valley Resident's Club (EVRC) – which presently provides such oversight to the five (5) existing neighbourhoods already developed within the Elbow Valley ASP community.

Direct Control Bylaw C-4763-97

As illustrated by Figure 3: Existing Land Use, the subject lands are presently designated Direct Control District (Bylaw C-47630-97), a bylaw adopted specifically to implement the general policy intentions of the Elbow Valley Area Structure Plan.

Section 7.0 of the DC Bylaw specifically prescribes development opportunities within the Special Development Area/Settlement Centre Development Cell #10. Cell #10 has a range of discretionary uses including conference/recreation settlement centre, commercial and retail uses, community uses as well as single-family and semi-detached dwellings. The Direct Control District includes provision for a maximum of 50 residential units and the Bylaw prescribes specific lot size, building size and height and minimum yard setbacks. The bylaw further prescribes that a comprehensive site plan is required to be submitted for Council approval prior to development on the site. This MSDP has been prepared to address the Direct Control District requirements.

FIGURE 3 | EXISTING LAND USE



ALL LANDS ARE DESIGNATED RF UNLESS NOTED OTHERWISE

RANCH AND FARM DISTRICT	RF
SEE EXCEPTIONS LISTED WITH THIS DISTRICT	RF *
RANCH AND FARM TWO DISTRICT	RF-2
RANCH AND FARM THREE DISTRICT	RF-3
AGRICULTURAL HOLDING DISTRICT	AH
FARMSTEAD DISTRICT	F
RESIDENTIAL ONE DISTRICT	R-1
RESIDENTIAL TWO DISTRICT	R-2
RESIDENTIAL THREE DISTRICT	R-3
HIGHWAY BUSINESS DISTRICT	B-1
GENERAL BUSINESS DISTRICT	B-2
LIMITED BUSINESS DISTRICT	B-3
RECREATION BUSINESS DISTRICT	B-4
AGRICULTURAL BUSINESS DISTRICT	B-5
LOCAL BUSINESS DISTRICT	B-6
HIGHWAY FRONTAGE BUSINESS DISTRICT	B-6F
BUSINESS CAMPUS BUSINESS DISTRICT	B-6C
INDUSTRIAL CAMPUS BUSINESS DISTRICT	B-6C

VISUAL REFERENCE
ONLY
CONTACT THE
COUNTY PLANNING
DEPARTMENT FOR
OFFICIAL
CONFIRMATION

RECREATION DESTINATION BUSINESS DISTRICT	B-6D
LEISURE AND RECREATION BUSINESS DISTRICT	B-6R
AGRICULTURAL SERVICES BUSINESS DISTRICT	B-6S
POINT COMMERCIAL DISTRICT	C-PT
VILLAGE CENTRE COMMERCIAL DISTRICT	C-VG
LOCAL COMMERCIAL DISTRICT	C-LC
REGIONAL COMMERCIAL DISTRICT	C-RC
INDUSTRIAL ACTIVITY DISTRICT	I-A
STORAGE AND SALES INDUSTRIAL DISTRICT	I-S
NATURAL RESOURCE INDUSTRIAL DISTRICT	NRI
HAMLET RESIDENTIAL SINGLE FAMILY DISTRICT	HR-1
HAMLET RESIDENTIAL (2) DISTRICT	HR-2
HAMLET COMMERCIAL DISTRICT	HC
HAMLET INDUSTRIAL DISTRICT	HI
PUBLIC SERVICES DISTRICT	PS
AIRPORT DISTRICT	AP
DIRECT CONTROL DISTRICT	DC



ROCKY VIEW COUNTY

TWP. 24-3-W5M

Part FIVE of the BYLAW No. C-4841-97

LAND USE MAP NO. 47-SE

Date: Sep 13, 2011



EXISTING CONDITIONS

As illustrated by Figure 4: Site Conditions, the subject lands include \pm 20.8 ac legally described as Lot 4, Plan 971 1980 situated within the SE $\frac{1}{4}$ of Section 6-24-2-W5M.

The lands are located within the Elbow Valley subdivision directly southwest of the intersection of Highway 8 and Range Road 25.

The subject quarter section includes the following existing developments:

- Comprehensively planned residential development;
- Fisherman's Lake and associated parking/access infrastructure;
- Regional pathway;
- Utility and Access Easements; and
- Regional stormwater facilities.

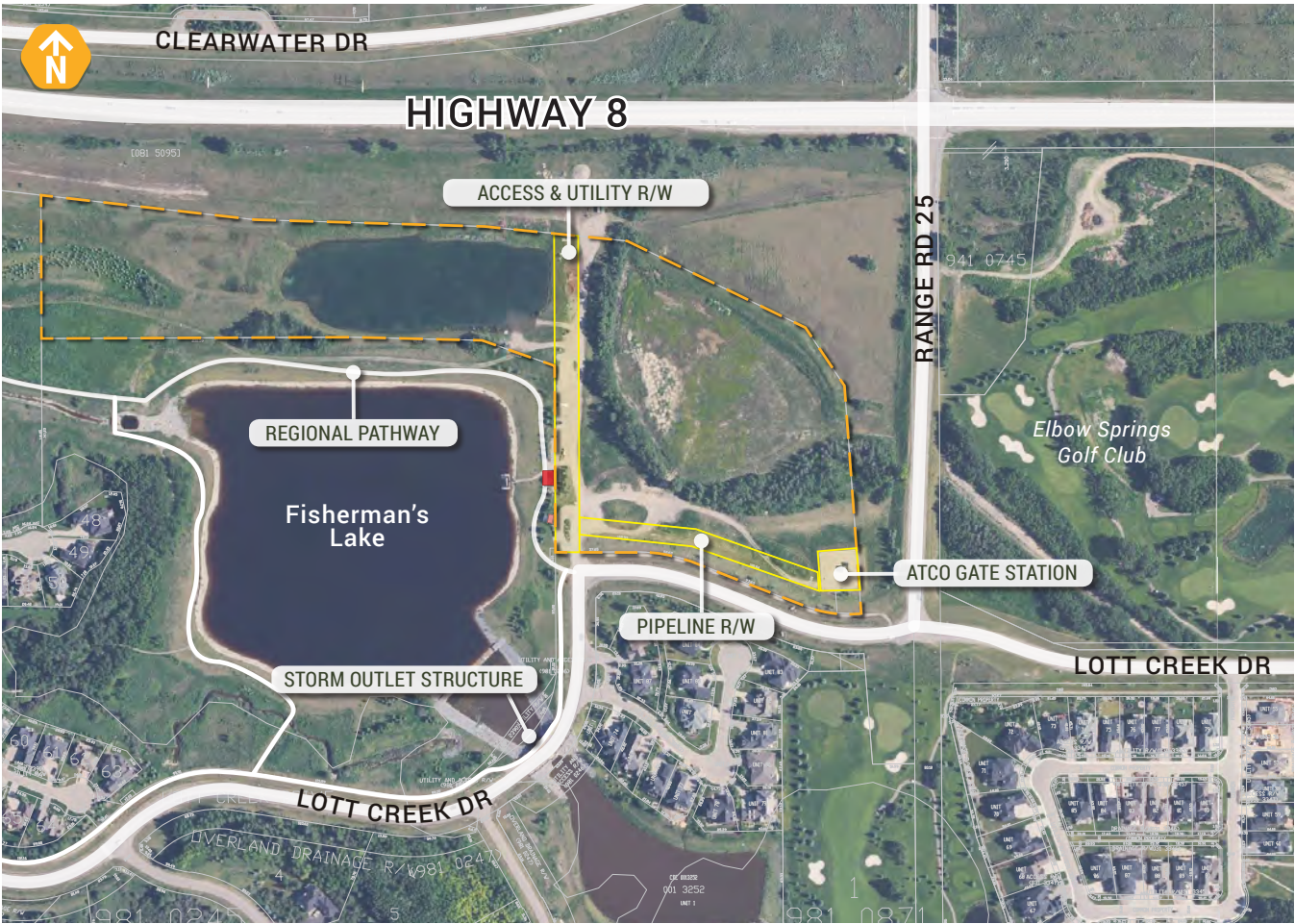
To support the preparation of the Elbow Valley Area Structure Plan, a Historical Resource Overview was prepared in July 1989 which identified four (4) areas of prehistoric significance. None of these identified sites are located within the subject lands, and as such, lands to which this MSDP apply are not considered to contain significance from an historical and/or archaeological perspective. To confirm this, an application for clearance under the Historical Resources Act was submitted to Alberta Culture and Tourism. This application is expected to be approved by the Province prior to Council's consideration of this MSDP.

A Biophysical Impact Assessment (BIA) was prepared to consider the environmental significance and ecological sensitivity of existing habitat conditions within the site. The majority of the subject land consists of non-native grassland that has established over areas previously stripped and graded in association with prior construction activities. The subject lands include a residual area of near-native aspen forest that remains notwithstanding the extensive disturbances that occurred to support the development of the existing Elbow Valley communities. No rare plants or rare ecological communities were observed within the subject lands.

The BIA concluded the site is not considered to be environmentally significant and that all sensitivities can be mitigated as part of the development's proposed construction plan.

A Geotechnical Evaluation was completed within the subject lands. The report's conclusions indicate that the soils are generally expected to meet 'engineered fill' standards and should not constrain development within the eastern portion of the property. Groundwater was shallow and located at about 1 m below the existing grade surface which may impact utility and foundation design. The report recommends a number of building techniques to overcome the shallow groundwater conditions.

FIGURE 4 | SITE CONDITIONS



THE DEVELOPMENT CONCEPT

As illustrated by Figure 5: Development Concept, the proposed development will consist of 50 semi-detached villa condominium units, most with walk-out basements, developed with a high-quality architectural design and complimentary landscaping amenities that is consistent with the existing Elbow Valley community. The clustered residential node will function as a planned neighbourhood cell within the greater residential community which is consistent with the development style seen in Elbow Valley.

Access will be provided by a private road designed and constructed in accordance with the County's engineering standards. A portion of this private road will follow the alignment of the existing utility and access easement ROW 981 0246.

Potable water will be provided from Westridge Utilities Inc. Based on preliminary discussions with the water provider, the utility has available capacity and intention to provide water service. Wastewater will be provided via connection into the Elbow Valley sanitary trunk line. The City of Calgary has confirmed intention to permit this service connection subject to formal request from Rocky View County. Stormwater will be managed on-site via a comprehensive system of overland conveyance and infiltration areas.

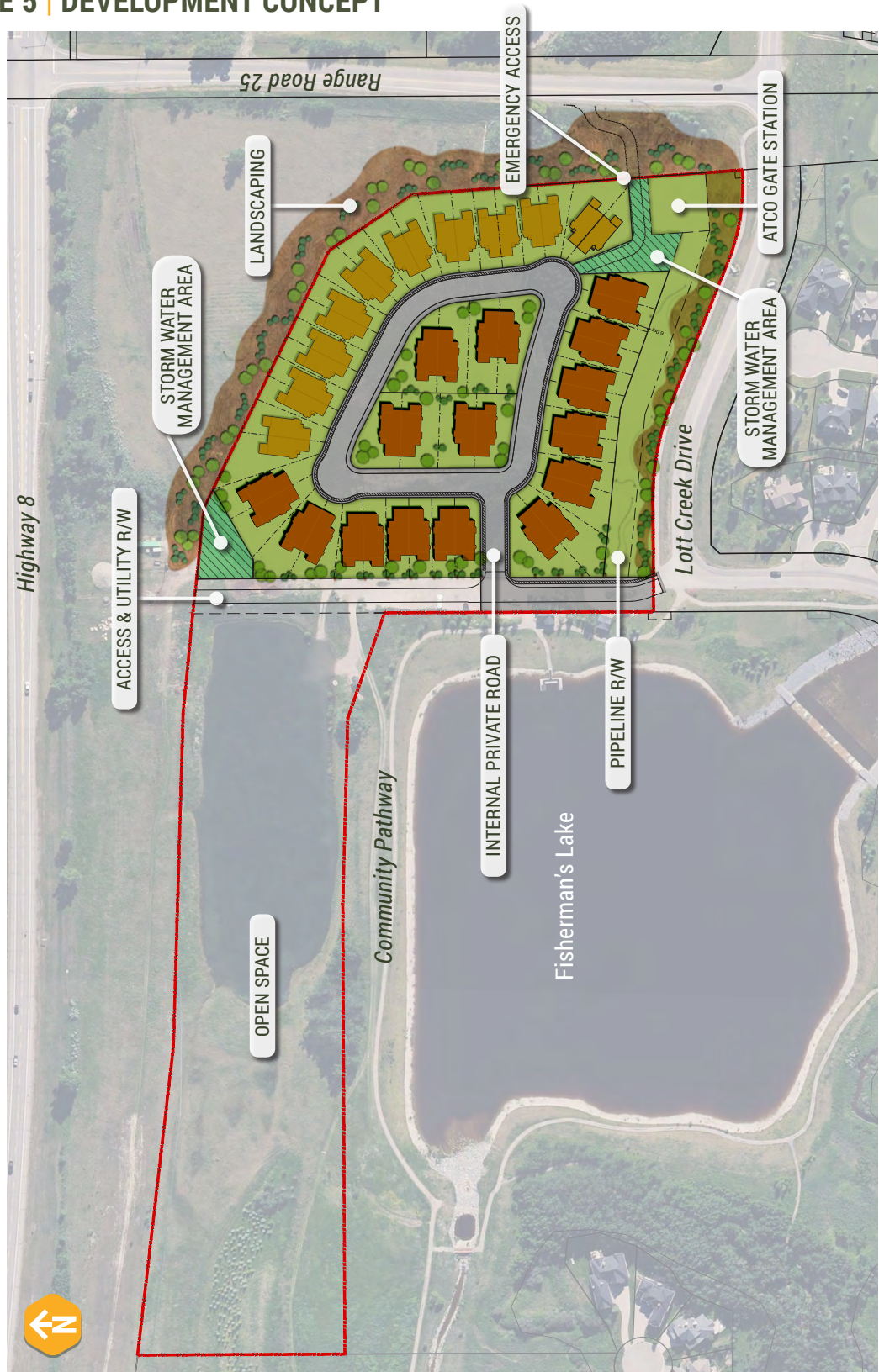
The site will be professionally landscaped. An earth berm will be installed along the Highway 8 / Range Road 25 frontage to include native and drought-resistant plantings similar in character to the existing Elbow Valley berm situated on the south side of Hwy 8. Comprehensive landscaping elements will be installed along the Lott Creek Drive frontage to match existing plantings along the south side of this road. Each villa condominium unit will include coordinated landscaped elements in accordance with the Elbow Valley Design Guidelines.

The residential development area will be serviced in a single phase and all 50 units will be constructed in accordance with a single development permit.

The Developer will establish a Residents Association for the 50 condominium units at the subdivision stage. Once legally established, the 'Cell#10' Residents Association will operate under the management oversight of the Elbow Valley Residents Club (EVRC). Homeowner fees will be established for each residential parcel within Site 10 by the EVRC to address ongoing maintenance of private roads, common area landscaping and waste management (specific to Cell #10) in addition to the maintenance of the existing community amenities already servicing the Elbow Valley community (e.g. pathways, community centre, private lakes, etc.).

The majority of the subject lands situated west of the utility and access easement appears to be located in the floodway of the Elbow River. As such, these lands are expected to be maintained as private open space. However, a portion of this area appears to be located outside the floodway, and as such, presumably hold future development potential. As such, any future development within the MSDP area west of the utility and access easement may only be advanced in accordance with an application to amend this MSDP and the merits of same will be evaluated in accordance with the provisions of the Elbow Valley Area Structure Plan and Direct Control Bylaw C-4763-97.

FIGURE 5 | DEVELOPMENT CONCEPT



ARCHITECTURAL DESIGN & LANDSCAPING

The residential development proposed within this MSDP is intended to integrate with the existing development context of Elbow Valley community. The architectural elements for each lot and residential building will reflect a high-quality and design standard consistent with the Elbow Valley Community Design Guidelines.

As illustrated on Figure 6: Architectural Considerations the proposed semi-detached villas will include a 'foothills inspired' design sensibility that showcases traditional architectural features and natural materials. A variety of unit widths with front and/or side entry configurations will be provided.

Site and Building Design

All aspects of site and building design are expected to be compliant with the development prescriptions contained within the Elbow Valley Direct Control Bylaw C-4763-97 and the RVC Land Use Bylaw C-4841-97.

Architectural Design Considerations

The residential buildings proposed within this MSDP will respect and honour the tradition of quality in the Elbow Valley community by generally complying with the Elbow Valley Design Guidelines which were created by the original developer of the Elbow Valley community and maintained by the Elbow Valley Residents Club.

- Detailed site plans for each residential unit are expected to address the following considerations:
- Building placement to respect municipal zoning requirements and logically orient building elevations to the internal private road.
- Material finishing and colour with preference for native materials (stone, brick, wood) to compliment ambient background colours of natural vegetation.
- Lineal roof lines are encourage with visual variety provided by exterior elements such as dormers, overhangs, chimneys and skylights.

Garages

Garages should be designed to integrate with the character of the home. Garage doors may be one-piece or sectional, and should have details compatible with those of the house (frame-and-panel or other construction, with windows as appropriate) and should be clad and finished to match the house.

Windows in the garage doors should be of a traditional appearance to match the character of the home.

FIGURE 6 | ARCHITECTURAL CONSIDERATIONS



Landscaping Objectives and Criteria

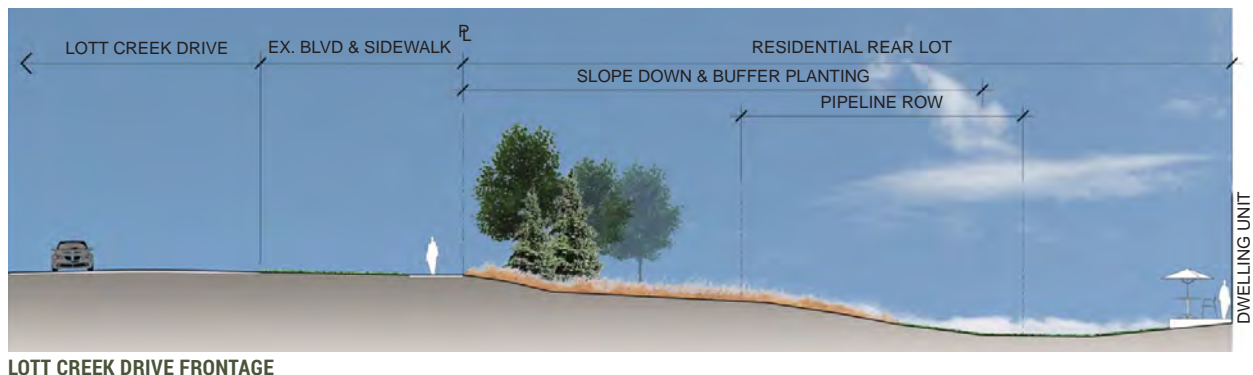
Landscaping should be used to enhance the building architecture, define outdoor spaces, frame views and coordinate structures within each residential site in accordance with the following objectives:

- Functional use of native plant materials is encouraged.
- Generally, manicured lawns should be minimized.
- Plantings should be organized in groups rather than located individually or in straight rows.
- Plants that contrast with the ambient colour and character of existing vegetation should be avoided.
- Site grading should divert runoff water to benefit existing and proposed new plants.
- Where considered appropriate, artificial hard landscaping materials such as concrete or asphalt paving should be minimized.

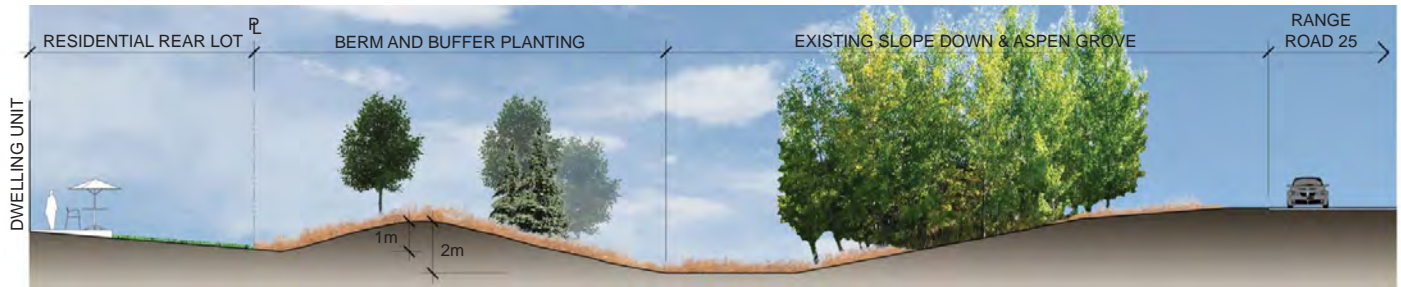
Visual Screening and Buffering from Perimeter Roads

As illustrated on Figure 5: Development Concept, the residential area proposed by this MSDP shall be appropriately screened and buffered along the Highway 8 / Range Road 25 frontage and along the Lott Creek Drive frontage.

The landscaped area along the southern boundary of the site facing Lott Creek Drive will be implemented by the developer within a separate lot to be owned in common by the Cell #10 Residents Association. This separate titled area will maintain the existing pipeline R/W 991 1509 and ATCO Gate Station and all existing caveats/encumbrances will run extend with this title. It is acknowledged that all landscaping within this lot shall be maintained by the Cell#10 Residents Association (under the management of the Elbow Valley Residents Club).

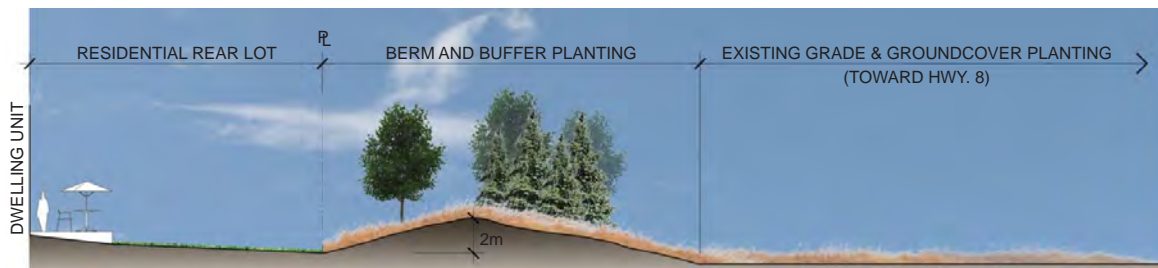


The earth berm and associated plantings along the eastern and northern boundary of the site will be implemented by the developer along an alignment that partially straddles the rear property line of each residential lot and Alberta Transportation's Highway ROW. Approval from Alberta Transportation will be required at the subdivision stage for any portion of the berm that occupies the highway ROW. Likewise, a private landscaping easement will be established to provide right of access for maintenance purposes. It is acknowledged that all landscaping within this area shall be maintained by the Cell #10 Residents Association (under the management of the Elbow Valley Residents Club).



RANGE ROAD 25 FRONTAGE

The landscaping proposed along the western boundary of the site will occupy rear yards of the associated residential lots. A private landscaping easement will be established to provide right of access for maintenance purposes. It is acknowledged that all landscaping within this area shall be maintained by the Cell #10 Residents Association (under the management of the Elbow Valley Residents Club).



HIGHWAY 8 FRONTAGE

The specific nature of these landscaping elements illustrated on Figure 5 shall be determined at the subdivision stage. A Landscaping Plan shall be prepared by a qualified professional to determine the specific type, extent and location of all plantings. The developer will install all landscaping in accordance with the specific provisions of the County's Development Agreement process and Servicing Standards.

Lighting

All development within the MSDP will establish and maintain an outdoor lighting system that respects an overall expectation to maintain 'Dark Skies' in accordance with the County's policies governing same and with consideration of International Dark Sky Association guidelines. The overall design imperative is to reduce the effects of lighting within the development area.



TRANSPORTATION

Traffic Impact Assessment

To support the residential development proposed by this MSDP, a Transportation Impact Assessment (TIA) was prepared to ascertain the adequacy of the study area intersections and road links to accommodate the opening day and long-term (20 year) traffic horizons. The TIA also was prepared to determine the necessary roadway improvements required to incorporate the proposed development.

Regional Roadway Improvements

OPENING DAY SCENARIO

The TIA concluded that all regional road intersections within the vicinity of the site are expected to operate within acceptable parameters with background traffic in the opening day horizon.

The road link analysis confirmed that Highway 8 is presently carrying traffic volumes above its environmental capacity, and as such, Alberta Transportation has confirmed that a twinning design is currently under preparation and the Province recently announced plans to implement the anticipated highway twinning in conjunction with the SW Calgary Ring Road construction project.

All other regional roads within the study area will operate within their respective environmental capacity limits, and as such, no road improvements are required within the opening day scenario.

LONG TERM SCENARIO (20 YRS)

The intersection capacity analysis confirmed that all regional road intersections within the vicinity of the site are expected to operate within acceptable parameters with background traffic in the long-term horizon.

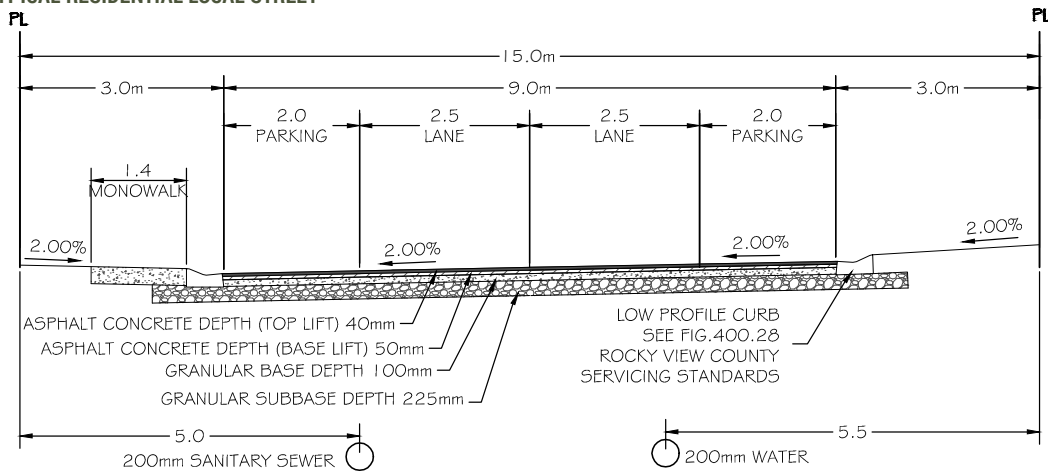
Assuming Highway 8 is twinned in the long-term horizon, all regional roads within the study area will operate within their respective environmental capacity limits. As such, no regional road improvements are required in the long term horizon.

Local Roadway Improvements

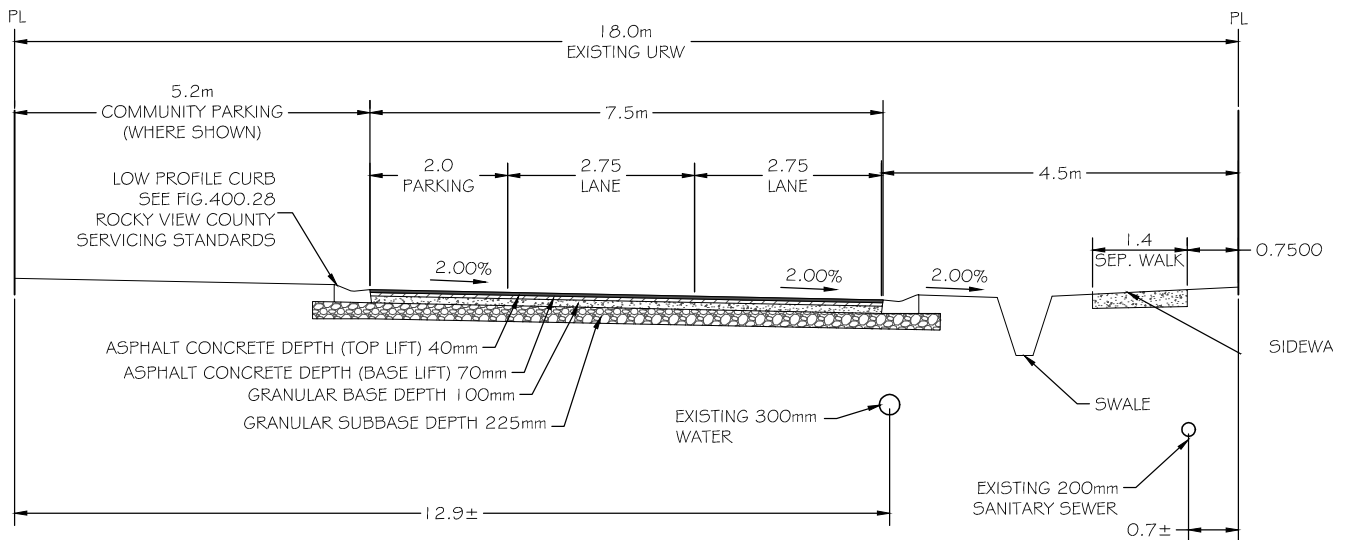
As illustrated by Figure 7: Transportation, the new residential neighbourhood will be accessed from Lott Creek Drive via an internal private road which will include a paved surface treatment with an urban cross section designed and constructed by the developer in accordance with the County's Servicing Standards.

Access to the remainder of the subject lands west of the existing Utility and Access ROW shall be provided by a gravel driveway.

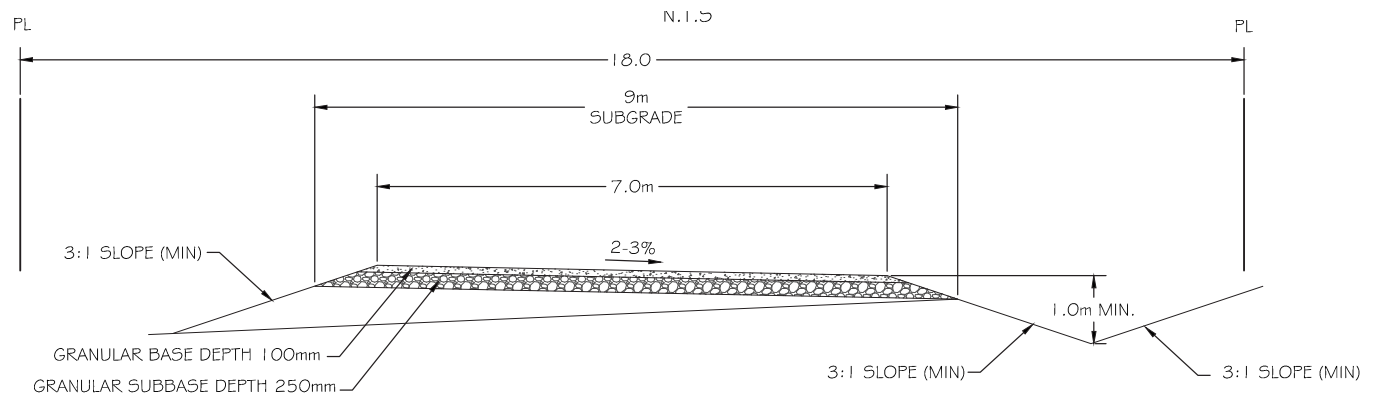
TYPICAL RESIDENTIAL LOCAL STREET



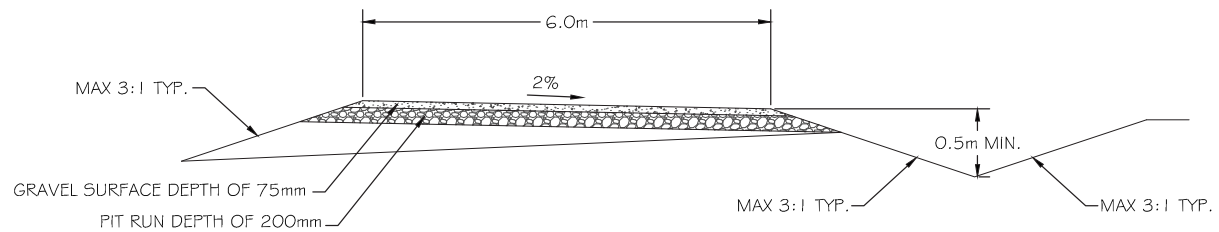
RESIDENTIAL LOCAL TWO-WAY



GRAVEL ROAD CROSS SECTION



EMERGENCY ACCESS ROAD CROSS SECTION











All transportation infrastructure shall be provided by the developer at the subdivision stage in accordance with the County's Development Agreement process.

It is noted that the internal private road and driveway access will be maintained by the Cell #10 Residents Association (under the management of the Elbow Valley Residents Club).

The County's Transportation Levy shall apply at the subdivision stage.



-  URBAN RESIDENTIAL ASPHALT (4,500 m²)
 RURAL RESIDENTIAL ASPHALT (640 m²)
 EXISTING ROAD TO BE MODIFIED (230 m²)
 GRAVEL ROAD (990 m²)
 LANDSCAPE/OPEN SPACE (±2.6 Ha)
 CONCRETE SIDEWALK (760 m²)
 PROPOSED EMERGENCY ACCESS GRAVEL ROAD (720 m²)
 SUBJECT LANDS

Noise Study

The proposed development will have walkout residential units with rear yard exposure to Highway 8, which is considered to be a major roadway. Highway 8 is classified as a highway with a speed limit of 80 km/hr. In consultation with Alberta Transportation (AT), a Noise Study was prepared to assess the potential noise impacts on the proposed residential development due to its proximity to Highway 8. Based on the analysis undertaken as part of this study, it is determined that sound attenuation is not required.

Secondary Access

Section 411 of the County's Servicing Standards 2013 indicates that any rural development that will result in ten lots or greater must have two access points.

Primary access will be provided via the internal road connection that will intersect with Lott Creek Drive. A secondary access alignment is contemplated within the southeast corner of the MSDP area as illustrated on Figure 7: Transportation. This access will extend from the internal private road and cross into the ditch and connect with an approach off Range Rd 25. This access will be maintained by the Cell #10 Residents Association, gated and used only if interruption occurs at the subdivision's main access/egress.



It is noted that the alignment of the secondary access's linkage onto Range Rd 25 may be revised at pending confirmation of the design of the ultimate interchange at Hwy 8 and Range Rd 25. Ongoing consultation with Alberta Transportation will be required at such time the interchange is constructed.

The ATCO Gate Station will be accessed from the internal private road along the alignment of the secondary access.

Pedestrian Connectivity

Pedestrian movement within the MSDP area will be facilitated primarily through provision of sidewalks as illustrated on Figure 7: Transportation and detailed in the proposed road cross section above illustrated. The sidewalk will be tied into the existing regional pathway situated within the southwest portion of the MSDP area.

All pedestrian infrastructure within the MSDP area will be maintained by the Cell #10 Residents Association.



9.0 UTILITY SERVICING

Potable Water

Potable water is provided to Elbow Valley by Westridge Utilities Inc. Based on preliminary discussions with Westridge representatives, it is understood that ample capacity exists in their system to supply servicing to the proposed 50 lot villa condominium development. In accordance with the County's Servicing Standards, as this land already has appropriate zoning for the proposed 50 residential units, the next step will be to provide confirmation from Westridge that capacity has been purchased at the subdivision endorsement stage.



There is an existing 300 PVC mm water main running in a Utility Right of Way to the west of the proposed residential area. As per the Servicing Strategy Report prepared in support of this MSDP, the subject lands will be serviced by a connection with this existing water main.

As illustrated on Figure 8: Potable Water Service, a 200 mm PVC local water distribution main with a dual connection to the existing 300 mm main will be installed by the developer to service the residential area.

FIGURE 8 | POTABLE WATER SERVICE



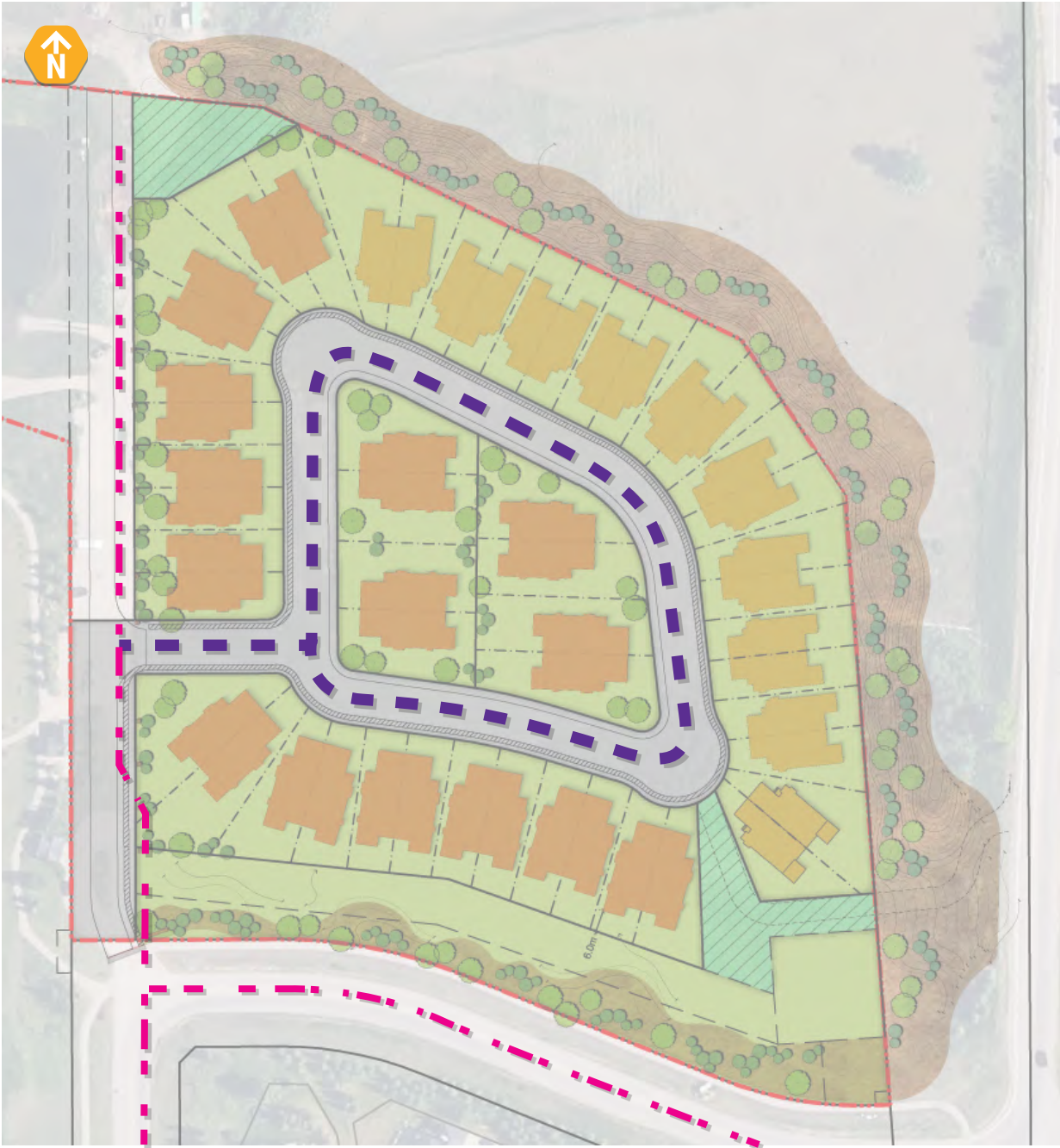
Wastewater Treatment, Storage and Disposal

The Site 10 development is located within the approved servicing area as defined in a servicing agreement between the City of Calgary and Rocky View County. In accordance with the terms of that Agreement, sanitary sewage from the site will ultimately flow into the City of Calgary sanitary treatment system. Based on preliminary discussion with the City of Calgary and Rocky View County administration, it is understood that the connection of the 50 residential units for the Cell #10 area is consistent with the servicing agreement.

There is an existing 200 mm PVC gravity sanitary main running in a Utility Right of Way to the west of the proposed residential area. As per the Servicing Strategy Report, the subject lands will be serviced by a connection with this existing sanitary main.

As illustrated on Figure 9: Wastewater Service, a new 200 mm PVC gravity pipe network will be installed by the developer to service the residential area.

FIGURE 9 | WASTEWATER SERVICING



- Proposed Wastewater Servicing Line
- - Existing Wastewater Servicing Line

Stormwater Management

A Staged Master Drainage Plan (SMDP) was prepared in support of this MSDP to establish expectation for managing stormwater in association with planned residential development. The SMDP identifies a strategy to accommodate the collection, safe conveyance, storage and ultimate discharge of surface drainage.

As illustrated on Figure 10: Stormwater Management, surface runoff is to be managed by an overland drainage system that directs it to a series of gutters and swales. In addition, swales will be installed within each residential lot rear yard setback that will direct surface flows to two (2) infiltration areas situated in the northwest and southeast areas of the site – each sized in accordance with the recommendations of the Staged Master Drainage Plan.

The infiltration areas and drainage swales will be constructed by the developer and maintained by the Cell #10 Residents Association. An overland drainage plan and associated easement agreement will be registered against all affected privately-owned lands and shall specify a right for County access the lands if emergency circumstances warrant. The infiltration areas shall be established within separate titled lots to be owned in common by the Cell #10 Residents Association.

Flood Analysis

As part of the Staged Master Drainage Plan prepared in support of this MSDP, a Flood Analysis was undertaken to assess the potential for this proposed residential area to experience flooding from the Elbow River related to significant precipitation events. Given data that was cited from flood events in 2005 and 2013, there is no evidence to suggest the portion of the subject lands proposed for residential development would experience inundation. This Flood Analysis has been forwarded to Alberta Environment and Sustainable Resource Development with comments expected to be received as part of the MSDP application circulation process.

To further mitigate flood risk within the MSDP area, the developer will establish grades within the residential area that will be set to a minimum of 0.6 m above the 1:100 flood elevation (i.e. 1108.9 m). Therefore, the minimum elevation for each residential unit's floor slabs will be 1109.40 m, which will be at least 0.30 m above the spill over elevation of any adjacent trap low.

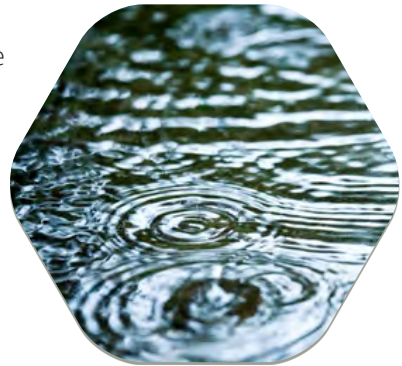


FIGURE 10 | STORMWATER MANAGEMENT





IMPLEMENTATION

This Master Site Development Plan will be implemented primarily via the County's subdivision and development permit process. It is noted that an Area Structure Plan and Direct Control Bylaw have already been approved for the surrounding community. As such, this MSDP is intended to provide more detailed guidance to support the implementation process respecting matters such as building placement, architecture and landscaping. Accordingly, the following section establishes key expectations regarding how this proposed residential development is expected to be implemented.

Subdivision

As illustrated by Figure 11: Proposed Subdivision, the developer proposes to subdivide the parent parcel as follows:

- 50 condominium lots – each to contain a residential villa unit;
- 1 lot to contain the existing pipeline R/W 991 1509, a portion of Utility and Access R/W 981 0246 and the ATCO Gate Station – to be owned by the Cell #10 Residents Association;
- 1 lot to contain the northwest drainage infiltration area – to be owned by the Cell #10 Residents Association; and
- The remainder of Block 4, Plan 971 1980.

An application for subdivision will be submitted to the County concurrent with this Master Site Development Plan. However, it is acknowledged that the subdivision application cannot be considered by Council until after the MSDP is adopted.

FIGURE 11 | SUBDIVISION CONDOMINIUM PLAN



LOT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
ACRES	0.24	0.21	0.16	0.13	0.12	0.12	0.12	0.12	0.13	0.12	0.12	0.15	0.14	0.17	0.13

LOT	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
ACRES	0.11	0.12	0.12	0.12	0.14	0.14	0.13	0.13	0.14	0.12	0.11	0.11	0.11	0.11	0.12

LOT	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
ACRES	0.13	0.20	0.17	0.17	0.19	0.16	0.13	0.12	0.12	0.12	0.12	0.14	0.19	0.19	0.18

LOT	46	47	48	49	50	51 Road	52	53	Overall Site Area	East Development Area	Remainder
ACRES	0.18	0.19	0.18	0.19	0.20	2.01	1.73	0.21	20.58 acres	11.23 acres	9.35 acres

Development Agreement Process

All infrastructure required in support of this project is expected to be installed by the developer in accordance with the terms of the County's Development Agreement process. This Agreement will be prepared as a condition of subdivision and/or development permit and will address matters such as:

- Detailed engineering drawings
- Confirmation of water supply
- Confirmation of wastewater supply
- Erosion and Sediment Control Plan
- Construction Management Plan
- Weed Management Plan
- Securities
- Other matters as required.

Landscape Plan

A landscaping plan shall be prepared by a qualified professional at the subdivision and/or development permit stage to detail the specific type and extent of plantings as described in Section 7 of this MSDP. The developer shall establish a separate titled lot and easements affecting private lands in order to implement the comprehensive planting program. All landscaping will be maintained by the Cell#10 Residents Association. All landscaping proposed in the Highway ROW will require approval from Alberta Transportation.

Municipal Reserve (MR)

Municipal Reserves are outstanding in the amount of 10% of the area described in certificate of title to the subject lands.

The developer requests that the required MR dedication be deferred by caveat to be registered against title for the remainder parcel.

Subdivision Phasing

It is expected that the subdivision of the 50 residential villa condominium units and implementation of the associated transportation and utility servicing infrastructure will proceed in a single phase. However, the developer may implement the subdivision in multiple phases, subject to Council approval, and provided that appropriate infrastructure is put in place to support the development.

Community and Road Naming

The developer will submit application for community and road naming at the subdivision stage.

The Cell #10 Residents Association

A Residents Association will be created by the developer at the subdivision and/or development permit stage to establish expectation for maintenance of neighbourhood-specific infrastructure and amenities in addition to a proportional contribution to the continued operation and maintenance of the existing Elbow Valley amenities.

Once legally established and operational, the Cell #10 Residents Association will be managed by the Elbow Valley Resident's Club (EVRC) – which presently provides oversight to five (5) neighbourhoods already developed within the Elbow Valley ASP.

An encumbrance will be registered against title to each residential lot to outline responsibilities of each future owner as a member of the Residents Association.

Architectural Controls

The developer shall prepare architectural controls to ensure all residential development within the MSDP area respects a unified design aesthetic. The architectural controls will respect the intent of the Elbow Valley Design Guidelines. It is expected that the developer will liaise with the Elbow Valley Residents Club to ensure the architectural design and material finishing is generally consistent with the existing surrounding development. The developer shall register an encumbrance against title to all new lots to ensure the architectural controls are adhered to.

Development Permit Process

The development permit process will proceed following adoption of the MSDP and the subdivision application has been conditionally approved.

It is expected that the developer will apply for approval to develop all 50 residential villa condominium units in accordance with the terms of a single development permit application.

Remainder Parcel (West Parcel)

It is noted that this Master Site Development only contemplates comprehensive residential development within the eastern portion of the subject lands. At such time additional development may be proposed within the western portion of the site, an amendment to this MSDP will be required and any future development therein will be expected to be consistent with the adopted Elbow Valley ASP and Direct Control Land Use District.



COMMUNITY CONSULTATION

Prior to preparation of this Master Site Development Plan, the developer engaged the Elbow Valley Residents Club to present the preliminary development concept for the subject lands and discuss considerations of mutual interest. Subsequently, the developer convened several additional meetings with EVRC representatives to discuss specific project-related considerations and review more detailed development concepts as contained within this draft MSDP.

The developer also met with Alberta Transportation to discuss traffic-related development considerations and discuss potential for placing landscaping elements within the highway right-of-way.

The developer expects to continue meeting with the EVRC as the proposal is evaluated by administration. At least one community meeting is expected to be held in the near term to provide opportunity for all Elbow Valley residents in addition to other local community stakeholders to review and comment on the draft MSDP and supporting information prior to the proposal being finalized and presented to RVC Council.

SUPPORTING TECHNICAL STUDIES (UNDER SEPARATE COVER)

1. Geotechnical Evaluation, McIntosh Lalani, October 2014
2. Biophysical Impact Assessment, Westhoff Engineering Resources, Inc, December 2014
3. Staged Master Drainage Plan, Westhoff Engineering Resources, Inc, December 2014
4. Traffic Impact Assessment, Bunt & Associates Engineering, December 2014
5. Noise Study, Bunt & Associates Engineering, December 2014
6. Servicing Strategy Report, Sedulous Engineering, January 2015