

TOWN OF CROSSFIELD BYLAW NO. 2016-12

Being a bylaw of the Town of Crossfield to adopt an Area Structure Plan pursuant to Section 633 of the Municipal Government Act.

WHEREAS the Council of the Town of Crossfield wishes to adopt the Area Structure Plan affecting the lands described as:

NW ¼ Section 35-28-01-W5M (158.91 acres (64.31 hectares))

herein referred to as the "Lands" and described in Schedule "A", known also as the Hawks Landing Area Structure Plan, attached hereto and forming part of this bylaw; and

WHEREAS a notice was published October 3th and October 10th, 2016 in the Rocky View Weekly advising of the Public Hearing for October 18, 2016.

WHEREAS Council held a Public Hearing and having given consideration to the representations made to it in accordance with Section 692 of the Municipal Government Act, being Chapter 24 of the Revised Statutes of Alberta, 2000, and all amendments thereto.

NOW THEREFORE the Council enacts as follows:

1. That the Area Structure Plan be adopted to provide a framework for subsequent subdivision and development within:

NW ¼ Section 35-28-01-W5M (158.91 acres (64.31 hectares))

as shown as being within the Area Structure Plan boundary in Figure "4.0" of Schedule "A" of this bylaw.

herein referred to as the "Lands" and described in Schedule "A", known as the Hawks Landing Area Structure Plan, attached hereto and forming part of this bylaw.

2. That this Bylaw shall come into effect upon the third and final reading.

First reading passed in open Council, assembled in the Town of Crossfield, the Province of Alberta, this 6th day of September 2016, on a motion by Councillor Tennant.



Mayor Nathan Anderson

Chief Administrative Officer
Ken Bosman

Second reading passed in open Council, assembled in the Town of Crossfield, the Province of Alberta, this 15th day of August 2017 on a motion by Councillor Tennant.



Mayor Nathan Anderson



Chief Administrative Officer
Ken Bosman

Third reading passed in open Council, assembled in the Town of Crossfield, the Province of Alberta, this 15th Day of August 2017 on a motion by Councillor Feltham.

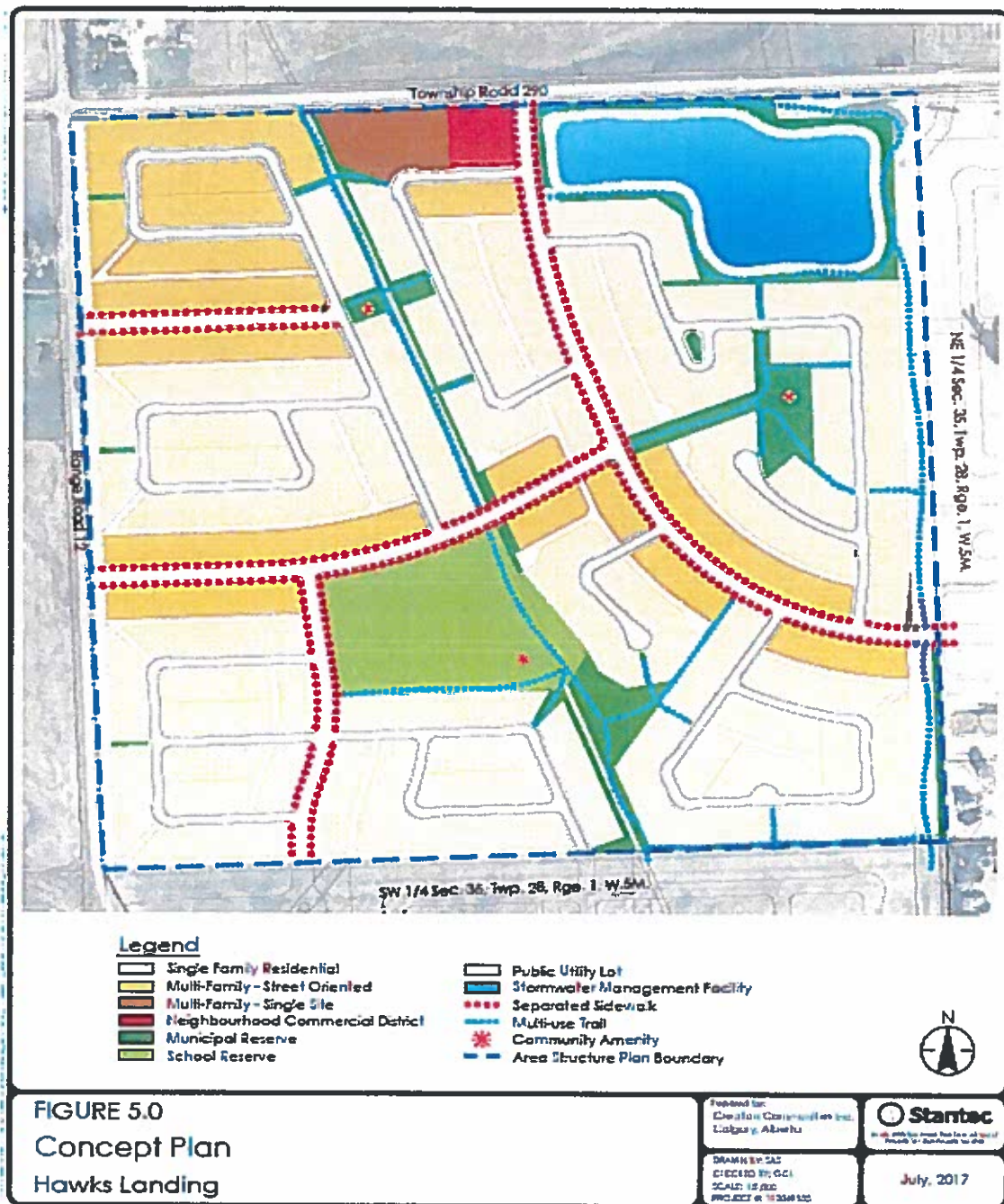


Mayor Nathan Anderson



Chief Administrative Officer
Ken Bosman

Schedule A





Hawks Landing

Area Structure Plan

Creation Communities Inc.

Approved by Crossfield Town Council
Bylaw 2016-12 | August 15, 2017

Table of Contents

1.0	Introduction	1
1.1	Purpose of the Plan.....	1
1.2	Authority of the Plan.....	1
1.3	Interpretation of the Plan	1
1.4	Approval Process.....	2
1.4.1	Municipal Coordination	2
1.4.2	Public Consultation	2
1.4.3	Council Approval	3
1.4.4	Amendments to the Plan	3
1.5	Planning Context.....	3
1.5.1	South Saskatchewan Regional Plan (2014)	3
1.5.2	Rocky View County/Crossfield Intermunicipal Development Plan (2013).....	4
1.5.3	Crossfield Sustainability Plan (2009)	4
1.5.4	Town of Crossfield Municipal Development Plan (2010)	4
1.5.5	Vista Crossing Area Structure Plan (2015)	5
1.5.6	Iron Landing Area Structure Plan (2011).....	5
1.5.7	Town of Crossfield Transportation Master Plan (2007).....	5
1.5.8	Rocky View County Agricultural Boundary Design Guidelines.....	6
1.6	Site Assessments.....	6
1.6.1	Historic Resources.....	7
1.6.2	Environmental Site Assessment.....	7
1.6.3	Geotechnical Investigation (2015)	7
1.6.4	Crossfield Biophysical Overview (2010).....	8
1.6.5	Biophysical Impact Assessment, Wetland Assessment, and Impact Report (2016)	8
1.6.6	Hawks Landing ASP Traffic Impact Assessment (2017).....	8
2.0	Plan Area	10
2.1	Location.....	10
2.1.1	Access	10
2.2	Ownership.....	10
2.2.1	History of the Plan Area	10

2.3	Existing Land Use	10
2.4	Surrounding Development	10
2.4.1	Nearby Amenities.....	11
3.0	Existing Conditions	14
3.1	Environmental Considerations.....	14
3.1.1	Topography & Soils	14
3.1.2	Wildlife	14
3.1.3	Vegetation.....	15
3.1.4	Wetlands	15
3.2	Natural Resource Considerations	16
4.1	Vision.....	20
4.1.1	General Neighbourhood Policies	20
4.2	Land Use Policy Areas	21
4.2.1	Single Detached Residential.....	21
4.2.2	Street-Oriented Attached Residential.....	23
4.2.3	Single Site Attached Residential.....	24
4.2.4	Commercial Use	26
4.3	Land Use Calculations	28
4.4	Population and Density.....	29
4.5	Architectural Design.....	32
4.6	Sustainability	32
5.0	Open Space Network	35
5.1.1	School and Municipal Reserves.....	37
6.0	Transportation Network	39
6.1	External Roadways.....	39
6.1.1	Range Road 12	39
6.1.2	Township Road 290.....	40
6.2	Internal Roadways	40
6.3	Pedestrian Network	41
7.0	Servicing Considerations.....	45
7.1	Sanitary Servicing.....	45
7.2	Stormwater System.....	45

7.3	Water Servicing	46
7.4	Franchise Utilities.....	46
8.0	Implementation	50
8.1	Phasing	50
8.2	Redesignation and Subdivision	50
Appendix A	Public Consultation	52

List of Tables

Table 1- Wetland Description	15
Table 2 - Land Use Calculations	28
Table 3 - MDP Housing Mix Estimation.....	29
Table 4 - Proposed Housing Mix Estimation Maximum	30
Table 5 – Open Space Dedication	36
Table 6 – School and Municipal Reserve Dedication	37

List of Figures

Figure 1 - Location Plan.....	12
Figure 2 - Legal Boundary	13
Figure 3 – Existing Conditions	18
Figure 4 – Utility Rights-of-Way Relocation	19
Figure 5 – Concept Plan	33
Figure 6 - Concept Plan with Aerial.....	34
Figure 7 - Open Space Network	38
Figure 8 - Roadway Network.....	43
Figure 9 – Roadway Cross-Sections	44
Figure 10 - Sanitary Servicing.....	47
Figure 11 - Stormwater Servicing.....	48
Figure 12 - Water Servicing.....	49
Figure 13 - Phasing Plan	51

1.0 Introduction

1.1 Purpose of the Plan

The *Hawks Landing Area Structure Plan (ASP)* describes the proposed residential development for the NW 1/4 of Section 35-28-01-W5M located in north Crossfield.

1.2 Authority of the Plan

The Hawks Landing ASP has been prepared by Stantec Consulting Ltd. on behalf of the Developer, Creation Communities Inc. As required by the Town of Crossfield, this Plan has been prepared in accordance to the *Municipal Government Act* of Alberta (MGA) which identifies the contents of ASPs:

An area structure plan

a. *must describe:*

- i. *the sequence of development proposed for the area,*
- ii. *the land uses proposed for the area, either generally or with respect to specific parts of the area,*
- iii. *the density of population proposed for the area either generally or with respect to specific parts of the area, and*
- iv. *the general location of major transportation routes and public utilities,*

and

b. *may contain any other matters the council considers necessary.*

1.3 Interpretation of the Plan

The Hawks Landing ASP is intended to generally guide development within the Plan Area; all images shown have been included for visioning purposes only and should not be used to identify definitive locations or be considered an indication of exactly what will be constructed.

All land use, dwelling unit, and population calculations are estimates based on preliminary areas and average lot sizes based on a typical development scenario as regulated by the *Town of Crossfield Land Use Bylaw*; exact lot counts will be determined during the time of subdivision, completed on a per-phase basis.

1.4 Approval Process

The following Hawks Landing ASP is the result of months of planning and collaboration between the Developer, Stantec Consulting, and the Town of Crossfield. As per the Town's generally approved planning process, the Hawks Landing ASP has been processed through the following steps.

1.4.1 Municipal Coordination

The Developer attended several meetings with the Town and the Town's consultants to discuss the proposed development as well as the Town's policies and preferences. During these meetings, it was confirmed that the general vision of Hawks Landing is consistent and suitable for residential development in the Town.

As per the Town of Crossfield general ASP approval process, the Draft Hawks Landing ASP was submitted to the Town for their review initial review. During this process, the Town completed an internal circulation of the ASP to gather feedback from a variety of different municipal departments. Following the Draft ASP review, the Developer revised the Plan in accordance to the Town's comments and resubmitted the ASP for a second review. During the second review process, the Town again completed an internal review and circulated the ASP externally to gather feedback from a variety of external stakeholders such as Rocky View County, Alberta Transportation, and Alberta Health Services. The Developer then made final revisions to the ASP based on the second review process.

1.4.2 Public Consultation

To gather input from the adjacent community regarding the Hawks Landing ASP, a public open house was held at the Crossfield & District Community Centre on September 14, 2016. Details regarding this process are further described in Appendix A Public Consultation. All comments received were circulated internally and discussed for their inclusion or impact on the development as proposed.

Topic 1

Residential Uses: Types and sizes of residential lots envisioned and does it meet with the current Town development and vision.

Topic 2

Open Space Network: Path connections and greenspace layout lends to pedestrian circulation centering on the school site.

Topic 3

School Site: A school site is desirable to some residents however others noted it may be more suitable to be placed in the same area as the existing schools. A large open space is acceptable at this location.

1.4.3 Council Approval

Subsequent to the public consultation process, the Hawks Landing ASP was presented to the Town of Crossfield Council for 1st Reading; at this time, a date was set for the Public Hearing. At the public hearing, anyone wishing to speak to the proposed bylaw was given the opportunity to do so. Advertising for the Public Hearing was posted for two weeks prior.

Following the hearing, Council gave second and third reading to the bylaw. The *Hawks Landing Area Structure Plan* bylaw was approved by Crossfield Town Council on (date).

1.4.4 Amendments to the Plan

The Hawks Landing ASP has been created to accommodate flexibility by including generally described land use areas; however, the ASP may require amendment in the future to ensure it remains in line with the Developer's vision for the neighbourhood. Examples of such amendments may include changes to the general intent of each land use district, major revisions to the roadway network, or how open spaces will be distributed. Amendments should only be undertaken should a significant departure from the overall intent of the development take place.

1.5 Planning Context

During the creation process for the Hawks Landing ASP, the following plans were reviewed for their application and impact on the Hawks Landing concept plan. Many of the reviewed documents contain policies which apply to all development in the Town of Crossfield and are reflected in lower level plans; as such, they have not been quoted or carried through into this ASP. In instances where reviewed plans contain policies that apply directly to the development of Hawks Landing, a policy statement has been included in the most relevant section of the ASP for its implementation.

1.5.1 South Saskatchewan Regional Plan (2014)

The *South Saskatchewan Regional Plan* (SSRP) identifies strategic directions for the region over the next 10 years to sets the stage for robust growth, vibrant communities and a healthy environment within the region over the next 50 years.

Policies:

Directions provided within the SSRP are intended to be implemented throughout the region via Municipal Development Plans policies which filter down to more specific planning documents such as the Hawks Landing ASP; as such, no specific policies are required.

1.5.2 Rocky View County/Crossfield Intermunicipal Development Plan (2013)

The *Rocky View County/Crossfield Intermunicipal Development Plan* (IDP) outlines the Framework for Planning to establish “the process”, along with the next steps of implementation, which includes determining future growth areas, appropriate land use and urban/rural interface, and servicing co-ordination.

Policies:

The Hawks Landing ASP land is located within the Intermunicipal Development Plan Area and the Interface Boundary area. Per the policies including in the IDP, the County’s *Agricultural Boundary Design Guidelines* have been referenced to minimize impact on the adjacent agricultural development; these recommendations are further described in Section 1.5.7 Rocky View County Agricultural Boundary Design Guidelines. The Hawks Landing ASP was circulated to Rocky View County for review and comment prior to approval; however, subsequent approvals for land use redesignation and subdivision should also be circulated to Rocky View County prior to approval.

1.5.3 Crossfield Sustainability Plan (2009)

The *Crossfield Sustainability Plan* sets out a sustainability vision, principles, and an action plan to help guide the community towards a more sustainable municipality. Many of the directions provided within the Sustainability Plan are identified for implementation by the municipality through municipal planning documents such as the Municipal Development Plan.

Policies:

Policies reflective of the *Crossfield Sustainability Plan* have been included in Section 4.4 Population and Density and Section 6.2 Internal Roadways.

1.5.4 Town of Crossfield Municipal Development Plan (2010)

The *Town of Crossfield Municipal Development Plan* (MDP) sets forth goals, objectives, and policies to provide long-range planning for the Town of Crossfield. The Hawks Landing development has been designed to support the objectives of the MDP as identified below:

- Environmental Stewardship and Sustainability
 - » Support environmental stewardship by including a natural stormwater pond.
- Land Use and Development & Housing
 - » Provide a range of land uses that provide areas for residents to live, work, learn, and play.
- Transportation Objectives

- » Facilitate the safe and efficient movement of vehicles, pedestrians, and cyclists throughout the neighbourhood.
- Servicing and Utilities Objectives
 - » Utilize efficient and effective servicing systems.

Policies:

Policies reflective of the *Town of Crossfield Municipal Development Plan* have been included in **Section 4.4 Population and Density** and **Section 6.2 Internal Roadways**.

1.5.5 Vista Crossing Area Structure Plan (2015)

The *Vista Crossing Area Structure Plan* (ASP) identifies the future development envisioned for the quarter section immediately south of the Hawks Landing Plan Area. This development is entirely residential in nature with multi-family development in the southwest corner of the Plan Area and open spaces integrated throughout.

Policies:

Policies reflective of the *Vista Crossing Area Structure Plan* have been included in **Section 4.1.1 General Neighbourhood Policies**, **Section 6.2 Internal Roadways**, and **Section 6.3 Pedestrian Network**.

1.5.6 Iron Landing Area Structure Plan (2011)

The *Iron Landing Area Structure Plan* (ASP) identifies the future development envisioned for the quarter section immediately east of the Hawks Landing Plan Area; known as Iron Ridge. This development is primarily residential in nature with higher density residential development in the northeast portion of the Plan Area, neighbourhood mixed-use development along Township Road 290, a stormwater management facility in the northeast portion of the Plan Area, and linear open spaces integrated throughout.

Policies:

Policies reflective of the *Iron Landing Area Structure Plan* have been included in **Section 4.1.1 General Neighbourhood Policies**, **Section 6.2 Internal Roadways**, and **Section 6.3 Pedestrian Network**.

1.5.7 Town of Crossfield Transportation Master Plan (2007)

The *Town of Crossfield Transportation Master Plan* (TMP) was completed for the entire municipal boundary in November of 2007 by DA Watt Consulting. The TMP identifies the existing and future transportation network required to service the Town of Crossfield including upgrades that may be required.

The TMP identified Avenue A, along the south boundary of the Plan Area, and Range Road 12, along the west boundary of the Plan Area, as future primary collector roadways which consist of either two or four lanes and have a minimum right-of-way of 23.5m, 27.0m, or 32.0m.

Although Avenue A was identified along the south boundary of the Plan Area, there is existing development along its potential alignment making its construction impossible. Such existing development includes Harrison Street and Harrison Court, east of the Plan Area. As an alignment for Avenue A has not been protected, its inclusion will not be considered for the Hawks Landing ASP.

The TMP estimates the future population of the Hawks Landing Plan Area at 1,554 persons.

Collector roadways are identified in the TMP as consisting of two lanes and have a minimum right-of-way of 19.0m or 21.0m.

Policies:

Policies reflective of the *Town of Crossfield Transportation Master Plan* have been included in Section 6.1 External Roadways, Section 6.2 Internal Roadways, and Section 6.3 Pedestrian Network.

1.5.8 Rocky View County Agricultural Boundary Design Guidelines

The goal of the *Agricultural Boundary Design Guidelines* is to minimize land use conflicts that can occur when agricultural and nonagricultural uses are located next to one another. The guidelines provide a set of tools to incorporate into the design of an application to ensure consideration of agriculture and to reduce problems for agricultural operators, homeowners, and businesses. These guidelines include buffers, fencing, landscaping, and berms. As Hawks Landing development does not share a property line with adjacent agricultural areas, berms, landscaping, or a continuous boundary fence are not considered necessary; private homeowner fencing and landscaping be function as screening.

Policies:

As per the *Agricultural Boundary Design Guidelines*, a 15m development buffer is required between multi-lot residential development and immediately adjacent agricultural uses to prevent trespassing on agricultural lands and minimize any negative impacts. As shown on Figure 4.0 Concept Plan, a 32m wide buffer has been provided along the west boundary of the Plan Area by way of Range Road 12 (20m wide) and a 12m wide utility right-of-way. A 25m wide buffer has been provided along the north boundary of the Plan Area by way of Township Road 290.

1.6 Site Assessments

The following information has been gathered specifically for the Hawks Landing ASP area and provides additional guidance for the development of this area.

1.6.1 Historic Resources

A Historical Resources Act approval for the development of the Hawks Landing Plan Area was granted on October 16, 2015.

Policies:

- 1.6.1.a In support of the Hawks Landing ASP, the relevant Historical Resources Act clearance letter dated October 16, 2015 shall be submitted to the Town of Crossfield.

1.6.2 Environmental Site Assessment

A Phase One Environmental Site Assessment (ESA) was completed for the Hawks Landing area in September 2015 by Trace Associates to identify and describe actual and potential sources of soil and/or groundwater contamination that may be present. The Phase One ESA was based on a site inspection, personal interviews, reviews of public and land title records as well as aerial photographs, regulatory inquiries, and a personal interview with the landowner.

The assessment did not identify any actual or potential sources of contamination. One high-pressure pipeline, operated by TAQA North Ltd and further described in **Section 3.2 Natural Resource Considerations**, extends from northeast to southwest through the Plan Area. This pipeline has the potential for soil and/or groundwater impacts; however, the pipeline is still active and any contamination or spills are the legal obligation of the pipeline operator.

After reviewing all factors, the ESA noted that no further environmental investigation were warranted.

Policies:

- 1.6.2.a As per the recommendations of the *Hawks Landing Phase One Environmental Site Assessment*, if buried debris or stained soils of unknown quality are encountered during development, a qualified environmental professional shall be contacted. If these materials are encountered near the high-pressure pipeline operated by TAQA North Ltd, they shall be notified as well.

1.6.3 Geotechnical Investigation (2015)

A *Shallow Subsoil and Groundwater Investigation* was completed for the Plan Area in October 2015 by Almor Testing Services Ltd. The investigation provided a description of the Plan Area's existing topography, soil profile, and groundwater table; these topics are discussed in **Section 3.1 – Environmental Considerations**.

The Geotechnical Investigation identified a variety of recommendations for construction in the Plan Area. These recommendations address residential development, service trench installation, roads, and private sewage disposal. The main geotechnical concerns were generally regarding the high water table

and soil drainage; as such, several recommendations were made to address home construction within the Plan Area.

Policies:

- 1.6.3.a In support of the Hawks Landing ASP, all recommendations of the *Shallow Subsoil and Groundwater Investigation* shall be implemented at the time of construction to the satisfaction of the Town of Crossfield and/or their engineering consultants.

1.6.4 Crossfield Biophysical Overview (2010)

The *Crossfield Biophysical Overview* was prepared by Sweetgrass Consultants Ltd in October 2010 for the entire municipal area of Crossfield. Objectives of the study included mapping of habitats and general description of wildlife and vegetation, identification of wetlands and ranking of relative significance, and recommendations for management and mitigation amongst others.

The Biophysical Overview identified the Hawks Landing Plan Area as primarily rural anthropogenic with two small, cultivated wetlands; one in the northeast, and one in the southeast. Each of these wetlands is described as having relatively low significance at the time of survey. The remainder of the site is identified as a rural setting which has been significantly altered by human activities with relatively sparse and non-native vegetation lacking species and structural diversity; potential for wildlife habitat and biodiversity was considered very low.

The Biophysical Overview included a recommendation that biophysical impact assessments should be conducted for proposed developments on individual lands that contain native habitats; this assessment is described below.

1.6.5 Biophysical Impact Assessment, Wetland Assessment, and Impact Report (2016)

A *Biophysical Impact Assessment, Wetland Assessment, and Impact Report* was completed by Trace Associates Inc in December 2016 for the Plan Area. The Biophysical Impact Assessment (BIA) identified site-specific environmental sensitivities and protected features that may be impacted by development activities; whereas, the wetland assessment identified and classified wetlands. The findings of this report, and relevant policies reflective of the report, are further detailed in Section 3.1 Environmental Considerations.

1.6.6 Hawks Landing ASP Traffic Impact Assessment (2017)

The *Hawks Landing ASP Traffic Impact Assessment* (TIA), completed in February 2017 by Stantec Consulting Ltd, examined the traffic impacts of the proposed development. The TIA analyzed the capacity of various intersections at the existing, 10 year (50% build-out), 15 year (100% build-out), and

20 year horizons. Relevant policies reflective of the assessment are further detailed in **Section 6.0 Transportation Network**.

2.0 Plan Area

2.1 Location

The Hawks Landing Plan Area can generally be described as the NW 1/4 of Section 35-28-01-W5M which encompasses 64.31 hectares (158.91 acres) in northwest Crossfield, as shown on Figure 1- Location Plan and Figure 2 – Legal Boundary.

2.1.1 Access

The Plan Area is currently accessible from the north via Township Road 290 and from the west via Range Road 12. Two vehicular access points along the south boundary of the Plan Area were proposed in the Vista Crossing ASP. These roadway connections have been included in the Hawks Landing development. One access will also be provided to the east to connect with future development.

2.2 Ownership

The entire Hawks Landing Plan Area is jointly owned by Ronald Hurt, James Hurt, and Warren Hurt with an interest to purchase caveat registered by the Developer, Creation Communities Inc.

2.2.1 History of the Plan Area

The Hawks Landing Plan Area was part of Osler, Hammond, and Nanton's Canadian West land supply; intended to support the creation of subsidiary railroads for the Canadian Pacific Railway. This land was registered in 1902 with the two current farmsteads dating back to at least 1949.

2.3 Existing Land Use

The Plan Area is currently zoned as UR Urban Reserve to accommodate future urban development. Currently the area is being used for agricultural purposes.

2.4 Surrounding Development

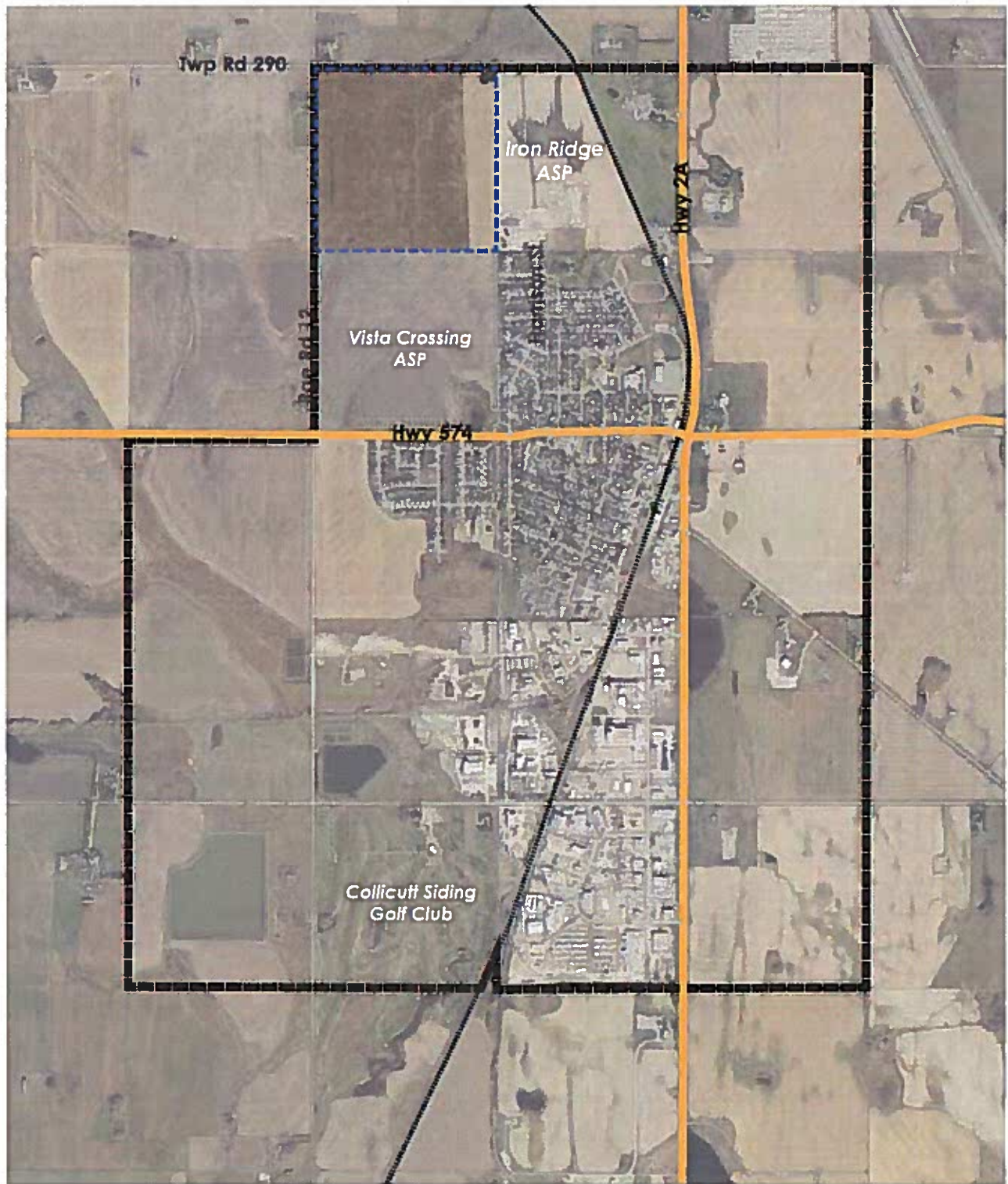
Lands surrounding the Hawks Landing Plan Area are primarily undeveloped agricultural lands; however, lands east and south of the Plan Area have been approved for the Iron Ridge and Vista Crossing residential developments. At the time of the Hawks Landing ASP, the surrounding approved residential developments have not been fully constructed. It is understood that the agricultural lands west and north of the Plan Area have been identified by Rocky View County for their continued agricultural use.

2.4.1 Nearby Amenities

A variety of recreational and educational amenities are located southeast of the Plan Area including Wigle Park and Veteran's Peace Park, which are primarily passive open spaces with walking trails; McCaskill Park, which consists of three baseball diamonds and a running track. The Crossfield & District Community Center, Pete Knight Arena, Crossfield Elementary School, and W.G. Murdoch School are all located along Mountain Avenue, approximately 1.5km southeast of the Plan Area, approximately a 20min walk from Hawks Landing.

Policies:

- 2.4.1.a** To facilitate convenient access to nearby amenities, vehicular and pedestrian connectivity to approved developments adjacent to the Plan Area shall be provided.



Legend

- | | |
|---|---|
|  Town of Crossfield Municipal Boundary |  Highway |
|  Area Structure Plan Boundary |  Railway |



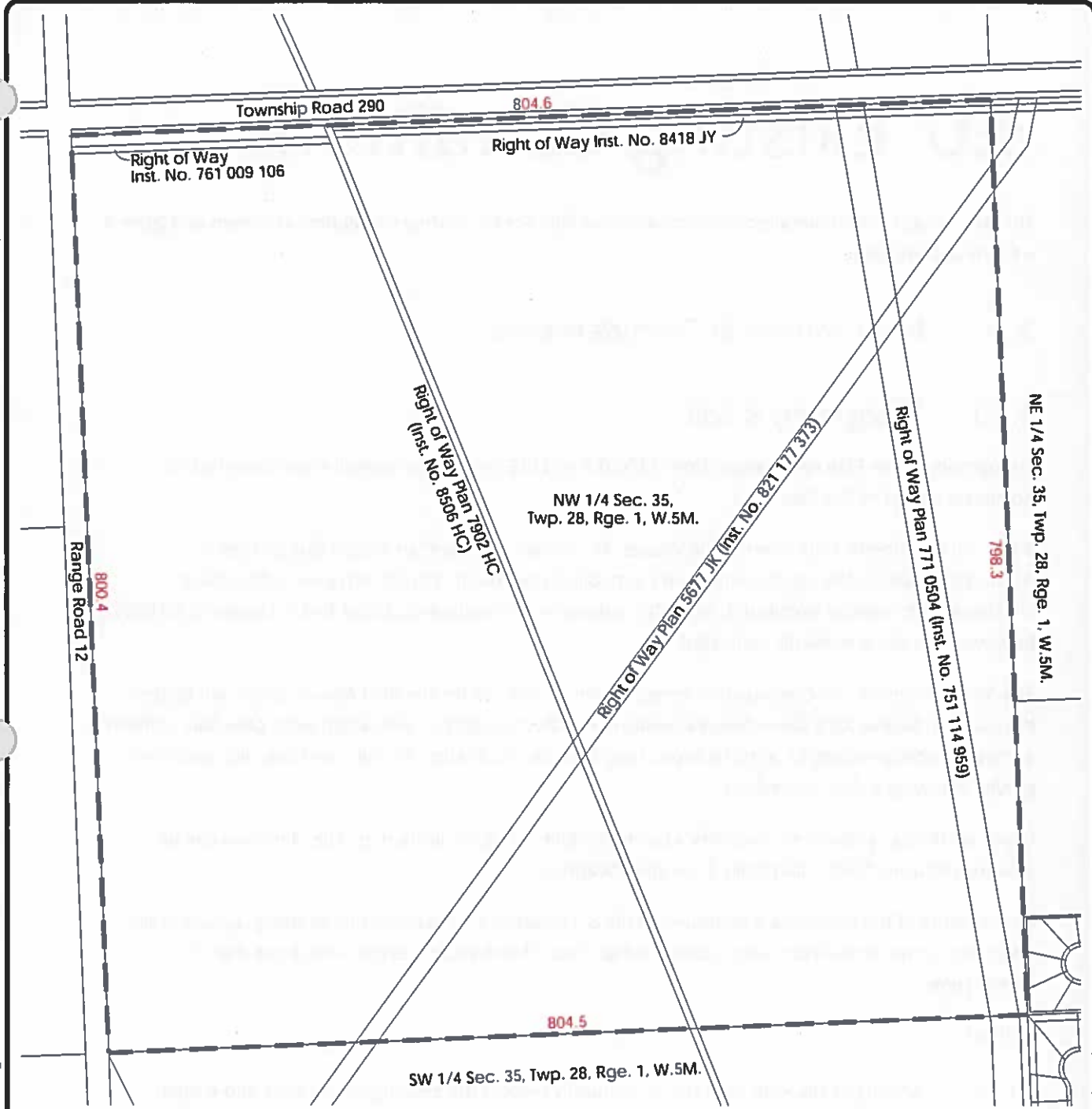
FIGURE 1.0
Location Plan
Hawks Landing

Creation Communities Inc.,
Calgary, Alberta



DRAWN BY: SAS
CHECKED BY: GCL
SCALE: 1:5,000
PROJECT #: 112849555

August 2017



Legend

- 758.5 Boundary Dimension
- Area Structure Plan Boundary



FIGURE 2.0
Legal Boundary
Hawks Landing

Prepared for:
Creation Communities Inc.
Calgary, Alberta



DRAWN BY: SAS
CHECKED BY: GCL
SCALE: 1:5,000
PROJECT #: 112849555

August 2017

3.0 Existing Conditions

The following is a more detailed description of the Plan Area's existing conditions, as shown on **Figure 3 – Existing Conditions**.

3.1 Environmental Considerations

3.1.1 Topography & Soils

Topography in the Plan Area ranges from 1100.0m to 1119.0m with an overall slope towards the northeast corner of the Plan Area.

Based on the Alberta Soils Information Viewer, the Hawks Landing Plan Area is categorized as ADRK1/U1hc soil: orthic black chernozem on medium textured (L, CL) till (ADY) and orthic black chernozem on medium textured (L, SiCL, CL) materials over medium (L, CL) or fine (C) textured till (RKV); however, the site is primarily cultivated.

The *Shallow Subsoil and Groundwater Investigation* completed for the Plan Area in 2015, and further described in **Section 1.6.3 Geotechnical Investigation**, collected soil samples which were generally uniform across the site consisting of, surficial topsoil and browns, sandy silty clay sill, overlying silty sand and gravel, overlying substrate bedrock.

Based on the Canadian Land Inventory's Land Capability for Agriculture map, the Plan Area can be categorized using Class 2 and Class 3 soil classifications.

The majority of the Plan Area is identified as Class 2 Moderate Limitations due to topography and the northeast corner of the Plan Area is identified as Class 3 Moderately Severe Limitations due to topography.

Policies:

- 3.1.1.a Grading of the Plan Area should generally respect the existing topography and natural drainage patterns.

3.1.2 Wildlife

A desktop review of the Plan Area indicated its general use for habitat by song birds and raptors. Bird species previously observed and reported to Fish and Wildlife Management Information System (FWMIS) within 3km of the Plan Area include: black tern (secure), great blue heron (special concern), green-winged teal (secure), northern pintail (secure), Swainson's hawk (sensitive). Although listed, none of these birds were observed within the Plan Area.

During the September 2015 site visit completed for the *Biophysical Impact Assessment, Wetland Assessment, and Impact Report*, the Hawks Landing Plan Area was searched for the presence of wildlife and assessed for wildlife habitat. During this site inspection; sparrows, northern harrier, Canada geese, and an American crow were observed. There were no mammals or fish observed and no permanent wildlife features such as nests, burrows, dens, etc.

Policies:

- 3.1.2.a All construction activities must follow the mitigation procedures as identified in the *Biophysical Impact Assessment, Wetland Assessment, and Impact Report* to mitigate any potential impacts on existing birds located within the Plan Area.

3.1.3 Vegetation

During the September 2015 site inspection, several weeds were observed including: perennial sow-thistle, Canada thistle, chickweed, pineapple weed, foxtail barley, common plantain, cleavers, toadflax, narrowleaf, hawksbeard, buckwheat, wild oats, and Shepard's purse. Cattails were observed in the low area along the west boundary of the Plan Area, and a patch of willow shrubs were also present along the west boundary.

No rare plants were recorded in the vicinity of the Plan Area, as identified in the Alberta Conservation Information Management System (ACIMS), nor were any found incidentally on-site.

3.1.4 Wetlands

As identified in the Wetland Assessment and shown on Figure 3 – Existing Conditions, four ephemeral wetlands were identified within the Plan Area as shown in Table 1- Wetland Description. To accommodate the Hawks Landing development, all wetlands will be removed; as such, compensation to Ducks Unlimited Canada will be required.

Table 1- Wetland Description

Wetland Assessment ID	Location Description	Area		Wetland Type
		(ha)	(ac)	
3	South boundary, east-most	0.24	0.59	Ephemeral
5	South boundary, centre	0.06	0.15	Ephemeral
7	South boundary, west-most	0.10	0.25	Ephemeral
11	Northwest corner	0.47	1.16	Ephemeral

Policies:

- 3.1.4.a All construction activities must follow the mitigation procedures as identified in the *Biophysical Impact Assessment, Wetland Assessment, and Impact Report* to mitigate any potential impacts on existing amphibians located within the Plan Area.
- 3.1.4.b As per the recommendations of the *Biophysical Impact Assessment, Wetland Assessment, and Impact Report*; an application to AEP will be required to remove wetlands under the Water Act.
- 3.1.4.c As per the recommendations of the *Biophysical Impact Assessment, Wetland Assessment, and Impact Report*; compensation for the removal of all wetlands will be confirmed through the Alberta Wetland Rapid Evaluation Tool (ABWRET) application to the Province of Alberta.

3.2 Natural Resource Considerations

As shown on Figure 2 - Legal Boundary, six utility rights-of-way run through the Plan Area.

- 8506HC Canadian Western Natural Gas Company R/W Plan 7902HC
This right-of-way runs from northwest to southeast through the Plan Area
 - » It is understood that this pipeline will remain active subsequent to the development and has been accommodated in the neighbourhood concept using open space dedication.
- 8418JY Canadian Western Natural Gas Company
This right-of-way runs along the north boundary of the Plan Area east of R/W Plan 7902HC.
 - » At the time of subdivision, this right-of-way will be discharged.
- 751 064 830 Rockyview Gas Co-op Ltd
Blanket right-of-way across the entire quarter section
 - » It is understood that this right-of-way will be discharged during subdivision.
- 751 114 959 Mountain View Regional Water Services Commission R/W Plan 771 0504
This right-of-way runs from north to south along the east boundary of the Plan Area
 - » To accommodate the continued use of the pipeline, increase developable area in Hawks Landing, and minimizing crossings along the right-of-way; the Developer will relocate the pipeline to a new right-of-way that will run parallel to the east boundary of the Plan Area as shown on Figure 4 – Utility Rights-of-Way Relocation.
 - » The pipeline registrar must agree to this relocation

» The relocation of this line will be completed during the time of development of the first phase which affects the pipeline.

- 761 009 106 Canadian Western Natural Gas Company

This right-of-way runs along the north boundary of the Plan Area west of R/W 7902HC.

There is no record of the pipelines that may be located within this right-of-way

» At the time of subdivision, this right-of-way will be discharged.

- 821 177 373 Taqa North Ltd. R/W Plan 5677JK

This right-of-way runs from southwest to northeast through the Plan Area.

» To accommodate the continued use of the pipeline, increase developable area in Hawks Landing, minimizing crossings along the right-of-way, and be consistent with Vista Crossing; the pipeline will be relocated to a new right-of-way along that will run parallel to the west boundary of the Plan Area as shown on Figure 4 – Utility Rights-of-Way Relocation.

» The pipeline registrar must agree to this relocation

» The relocation of this line will be completed during the time of development of the first phase which affects the pipeline.

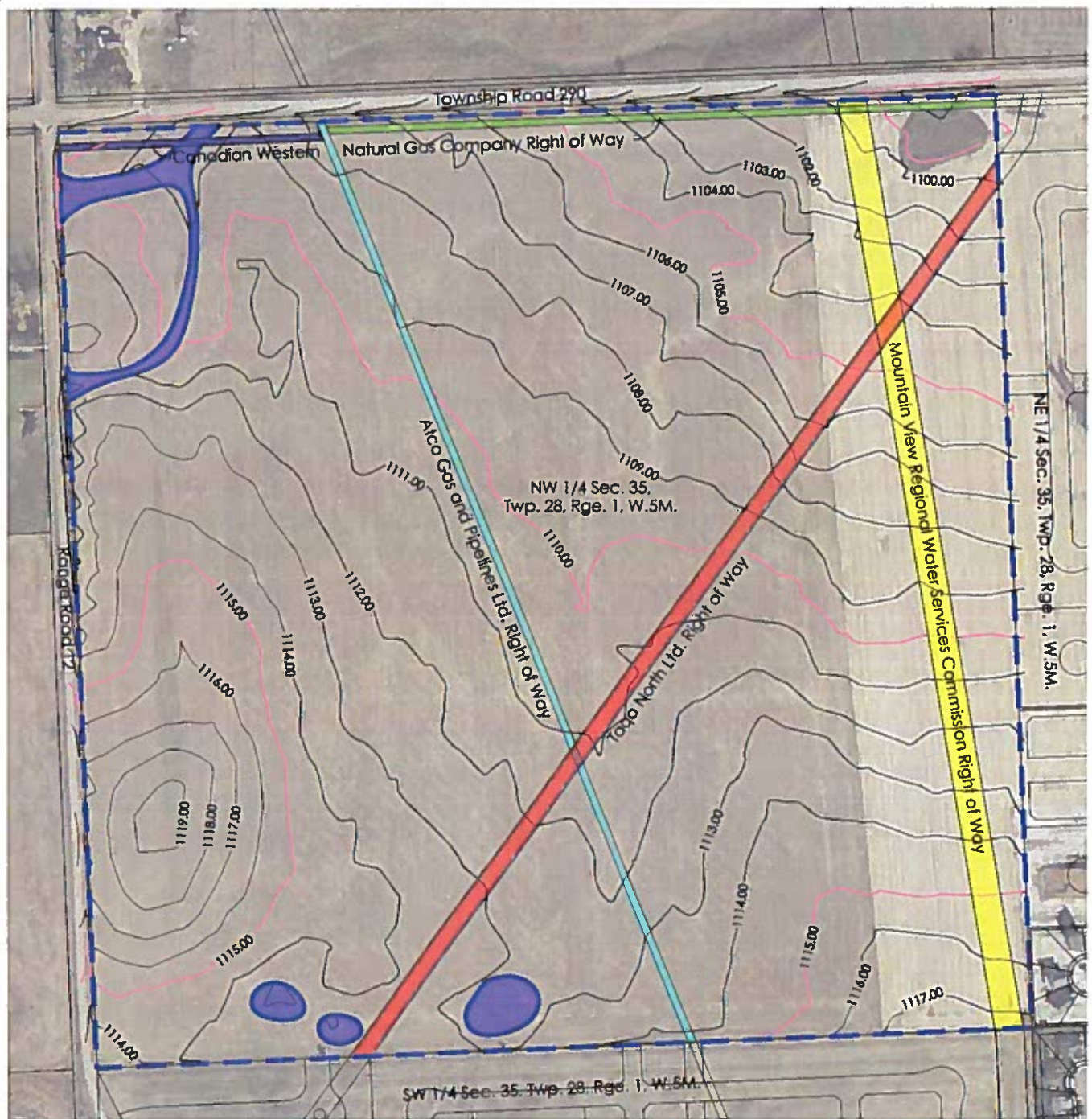
Policies:

3.2.a In accordance with the *Town of Crossfield LUB*, the habitable building setback from all pipelines capable of transporting petroleum products at pressures exceeding 100.0psi shall be setback a distance of 15.24m (50.0ft) measured from the centre line of the pipeline.

3.2.b Building setbacks and work within the rights-of-way shall conform with the AER, NEB, and standards of the utility providers.

3.2.c Building setbacks may be reduced if the Developer confirms such with the pipeline holder and Town of Crossfield.

3.2.d All abandoned rights-of-way that are not in use shall be discharged.



Legend

- Contour Line/Elevation
- Existing Right of Way
- Wetland - Ephemeral
- Area Structure Plan Boundary



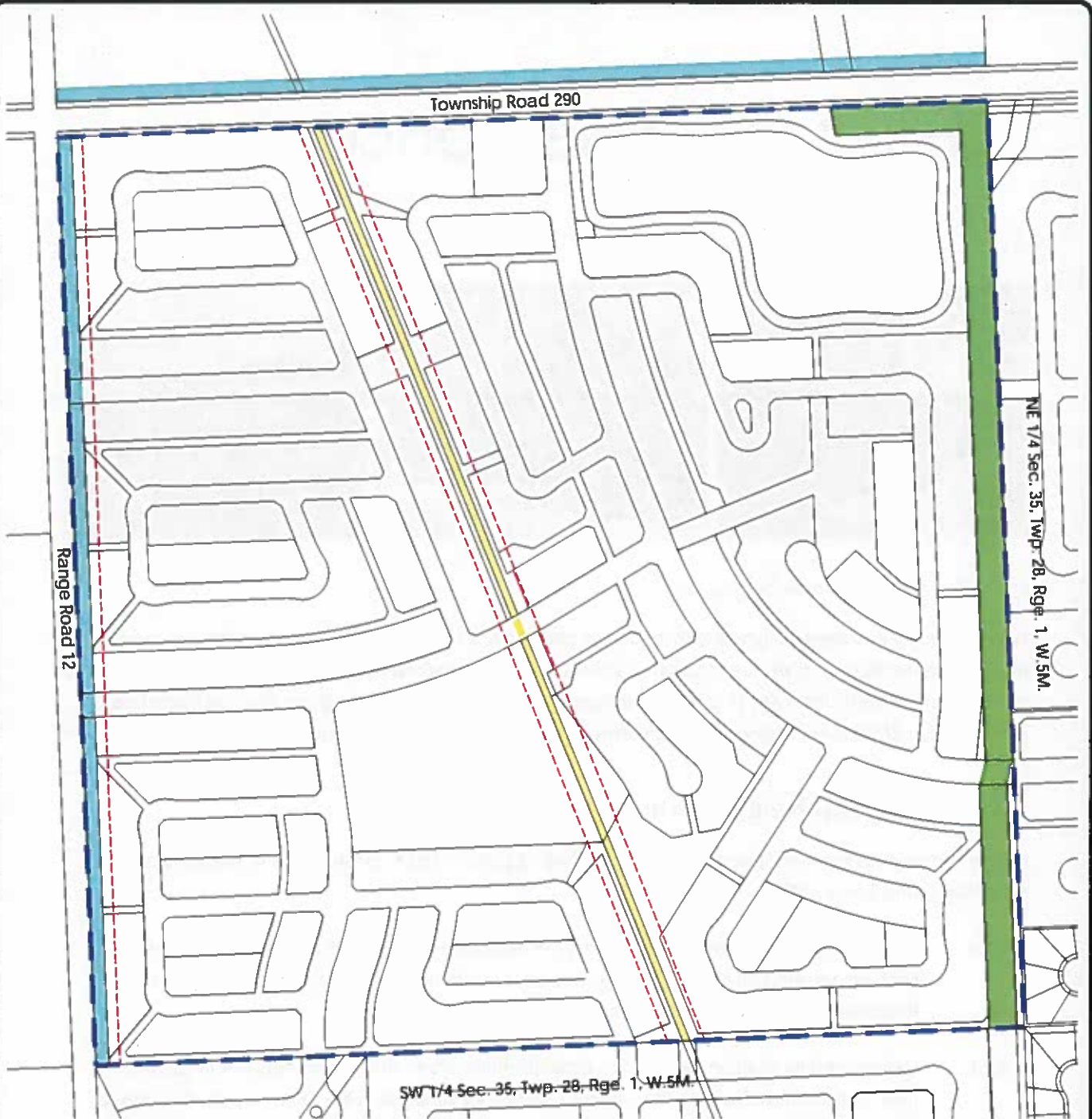
FIGURE 3.0
Existing Conditions
Hawks Landing

Prepared for:
Creation Communities Inc.,
Calgary, Alberta

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DRAWN BY: SAS
CHECKED BY: GCL
SCALE: 1:5,000
PROJECT #: 112849555

August 2017



Legend

- Canadian Western Natural Gas Company Right of Way Plan 7902 HC (To remain in existing location)
- Ta a North Ltd. Right of Way Plan 5677 JK (Re-location)
- Mountain View Regional Water Ser ices Commision Right of Way Plan 771 0504 (Partial Re-location)
- 15.24m Building Setback
- Area Structure Plan Boundary



FIGURE 4.0
Utility Rights-of-Way Relocation
Hawks Landing

Prepared for:
Creation Communities Inc.
Calgary, Alberta



DRAWN BY: SAS
CHECKED BY: GCL
SCALE: 1:5,000
PROJECT #: 112849555

August 2017

4.0 Land Use Concept

4.1 Vision



Character images for visioning purposes only.

Hawks Landing has been designed with land uses that provide residents the opportunity to live, work, play, and learn. Residents of Hawks Landing are encouraged to extend their activities outside and participate in healthy lifestyles through the integration of open spaces throughout the neighbourhood and inclusion of trails and sidewalks which form a high-quality pedestrian network.

4.1.1 General Neighbourhood Policies

Hawks Landing has been designed to using the following policies to be consistent with the policies identified in the Town's MDP.

- 4.1.1.a A variety of housing forms and lot sizes, as described in Section 4.2 Land Use Policy Areas, shall be encouraged at a range of price points to provide housing options for various lifestyles, family sizes, and income levels.
- 4.1.1.b Hawks Landing shall be designed to accommodate areas where residents can live, work, play, and learn as described throughout Section 4.2 Land Use Policy Areas to provide a range of opportunities for residents and reduce the need for residents to travel outside of the community to access services.
- 4.1.1.c The stormwater management facility in Hawks Landing shall be designed as an engineered wetland to create a naturalized area in the neighbourhood where residents can enjoy solitude through the inclusion of a walking trail surrounding the pond; this area is further described in Section 7.2 Stormwater System.

- 4.1.1.d Hawks Landing shall include a variety of open spaces to accommodate different recreation options for residents to enjoy as described in **Section 5.0 Open Space Network**.
- 4.1.1.e Hawks Landing shall be designed to accommodate safe and efficient multi-modal movement as further described in **Section 6.0 Transportation Network**.
- 4.1.1.f To respect the adjacent uses approved in Vista Crossing and Iron Ridge, land uses along the south and east boundaries of the Hawks Landing Plan Area shall be single detached residential.

4.2 Land Use Policy Areas

Land use designation in Hawks Landing should be in accordance to those shown on **Figure 5 – Concept Plan**. Three residential policy areas have been identified in the Hawks Landing neighbourhood to accommodate a variety of housing types and provide options at a range of price points, these densities include: single family residential, street-oriented multi-family, and single site multi-family as described below.

4.2.1 Single Detached Residential

As shown on **Figure 5 – Concept Plan**, the majority of Hawks Landing has been identified for the development of single detached housing. These areas are intended to include bungalow, bi-level, modified bi-level, and two-storey housing; with or without front attached garages, secondary suites, or walkout basements.



Character examples of different Single Detached Residential housing types.

Objectives

- Allow flexibility to provide a range of single detached residential lots that can respond to market conditions and builder preferences.
- Include a range of lot sizes and housing types to provide a variety of single detached homes at different price points.

- Provide detached housing in areas that enhance residents' privacy.
- Offer opportunities for homes to back onto public park spaces.
- Offer opportunities for homes to be constructed with walkout basements.
- Provide convenient connections between single detached housing areas and recreational or educational spaces.

Policies

- 4.2.1.a Residential forms in the Single Detached Residential area shall be primarily single detached housing.
- 4.2.1.b Residential land use districts permitted in the Single Detached Residential areas shall be intended for single detached residential lots with a minimum lot depth of 33.50m (110ft) and minimum lot width of 9.14m (30.0ft).
- 4.2.1.c No single land use district shall comprise more than 80% of the Single Detached Residential area.
- 4.2.1.d In areas where low density housing shares a rear lot line with an open space, walkout basements may be considered.
- 4.2.1.e In areas where Single Detached Residential housing shares a rear lot line with an open space, houses shall include front attached garages.

4.2.2 Street-Oriented Attached Residential

The Street-Oriented Attached Residential areas are intended to include semi-detached, townhouses, and stacked rowhome type developments accessible from a public roadway. As shown on Figure 5 - Land Use Concept Plan, these housing types have been located primarily along collector roadways in order to effectively accommodate higher traffic volumes and provide consistency along primary roadways through massing, scale, and architectural details. The majority of these areas have been designed with rear lanes to allow for the inclusion of rear parking.



Character examples of semi-detached and townhouse housing types.

Objectives

- Provide a range of attached residential options that are accessible directly from the public roadway network.
- Utilize Street-Oriented Attached Residential housing as a transitional use between higher and low density housing types.
- Create consistency along the streetscape.
- Facilitate the inclusion of front or rear parking.
- Provide a variety of more affordable housing options that include outdoor private amenity spaces and personal on-site parking.
- Provide convenient connections between attached residential housing areas and recreational or educational spaces.

Policies

- 4.2.2.a Residential forms in the Street-Oriented Attached Residential area shall include active street fronts by including front porches and/or entrances and windows along the front façade of buildings.
- 4.2.2.b Residential land use districts permitted in the Street-Oriented Attached Residential areas shall be intended for semi-detached, duplex, or townhouse dwellings.

- 4.2.2.c No single land use district shall comprise more than 80% of the Street-Oriented Attached Residential area.
- 4.2.2.d Townhouses in this area shall be generally located along main roadways or near the proposed commercial site.
- 4.2.2.e Housing forms that require front attached garages shall be generally located fronting along the collector roadways.
- 4.2.2.f In areas where rear lanes are not provided, front attached garages shall be provided.

4.2.3 Single Site Attached Residential

The Single Site Attached Residential area is intended to accommodate the highest density housing in Hawks Landing. This area is envisioned for the development of an attached residential development accessed using an internal roadway network. Housing in this area may include townhouses, stacked rowhomes, or an apartment type development offered in either a rental or condominium format.

As shown on Figure 5 - Land Use Concept Plan, the Single Site Attached Residential site has been located along the north boundary of the Plan Area to create a mixed-use node with the adjacent commercial site which will facilitate convenient pedestrian access and minimize the need for personal vehicles to access the site.



Character examples of different single site attached housing types.

Objectives

- Create a multi-use node and provide a buffer between commercial and low density housing types by locating the Single Site Attached Residential area adjacent to the proposed commercial site.
- Enhance vehicle access to the site and minimize through traffic in the community by locating the Single Site Attached Residential site along the exterior of the neighbourhood.

- Facilitate convenient access for residents of the Single Site Attached Residential site to access the commercial area and neighbourhood's open space network by providing open space and trail connections.
- Provide a variety of more affordable housing options for residents by including attached dwelling units.
- Provide opportunities for extended outdoor private amenity spaces by locating higher density housing within close proximity to public open spaces.
- Consider the impact of high traffic volumes, as generated by higher density housing areas, on the surrounding neighbourhood.
- Utilize the higher density housing areas as a buffer between the commercial site and lower density housing.

Policies

- 4.2.3.a The Single Site Attached Residential area shall be designed using a comprehensive site design.
- 4.2.3.b Residential land use districts permitted in the Single Site Attached Residential areas shall be intended for semi-detached, duplex, townhouse, or multi-unit residential development.
- 4.2.3.c All Single Site Attached Residential housing may take the form of rental or condo facilities.

4.2.4 Commercial Use

As shown on Figure 5 - Land Use Concept Plan, one commercial area has been identified along the north boundary of the Plan Area. This area is intended to accommodate businesses that provide small-scale commercial services in a convenient location to residents of Hawks Landing residents and surrounding neighbourhoods.



Character examples of different pedestrian-oriented commercial styles.

Objectives

- Enhance the quality of life for Hawks Landing residents by providing convenient access to neighbourhood-scale commercial services.
- Locate commercial development in a manner that minimizes potentially negative impacts on adjacent residents.
- Allow flexibility for an alternative use for the commercial site, should market conditions not support its development for commercial use.
- Provide opportunities for employment within the neighbourhood.
- Provide pedestrian access to the commercial site via sidewalks and the off-street trail network to reduce the need for personal vehicles.
- Maintain a high level of architectural design through the creation of design guidelines for the commercial site.

Policies

- 4.2.4.a Proposed commercial site design shall consider scale, location, and massing of buildings to minimize impact on adjacent residents.
- 4.2.4.b Commercial site design shall include reasonable pedestrian connections from municipal sidewalks or trails to building entrances.
- 4.2.4.c Commercial site design shall provide screening via fencing or landscaping along its interface with residential areas.

- 4.2.4.d All proposed commercial development shall utilize dark-sky lighting that minimizes impact on adjacent residential areas.
- 4.2.4.e Land use districts permitted in the Commercial area shall be intended for small-scale local commercial development.
- 4.2.4.f The commercial area shall be accessed through the Hawks Landing collector roadway and Twp Rd 290.
- 4.2.4.g All parking for the commercial site shall be accommodated on site.
- 4.2.4.h Pedestrian connectivity should be incorporated through the design of the commercial site.
- 4.2.4.i The commercial site shall be designed using comprehensive planning.

4.3 Land Use Calculations

Table 2 - Land Use Calculations

Land Use Area	Area (ha)	Area (ac)	% of NDA
Gross Plan Area	64.31	158.91	
Environmental Reserve	0.00	0.00	
Net Developable Area (NDA)	64.31	158.91	100.0%
Residential Areas	34.90	86.24	54.3%
Single Detached Residential	25.31	62.54	39.4%
Street-Oriented Attached Residential	8.84	21.83	13.7%
Single Site Attached Residential	0.76	1.87	1.2%
Commercial Area	0.40	1.00	0.6%
School and Municipal Reserve Dedication	9.91	24.49	15.4%
SR School Reserve	4.12	10.18	6.4%
MR Municipal Reserve	3.24	8.00	5.0%
MR Municipal Reserve Corridor (Utility R/W)	2.56	6.32	4.0%
Open Space	5.05	12.49	7.9%
PUL Public Utility Lot	1.84	4.54	2.9%
SWMF Public Utility Lot	3.21	7.94	5.0%
Roadways	14.04	34.68	21.8%
Collector Roadways	3.87	9.56	6.0%
Local Roadways	7.69	18.99	12.0%
Lanes	2.48	6.12	3.9%
Total	64.31	158.91	100.0%

4.4 Population and Density

The *Town of Crossfield Municipal Development Plan* dictates the maximum residential density permitted in the Hawks Landing ASP. As identified in the MDP, all new residential developments are required to achieve a maximum density of 15 dwelling units per gross developable hectare (6 du/ac).

As shown in Table 3 - MDP Housing Mix Estimation, using the MDP allowable density 15.0 dwelling units per gross hectare, Hawks Landing would be developed with approximately 963 dwelling units. Table 3 - MDP Housing Mix Estimation illustrates the estimated number of units for the Hawks Landing development based on the MDP's recommended maximum density of 15.0 du/gross ha.

Table 3 - MDP Housing Mix Estimation

	ASP Gross Area	MDP Allowable Density	MDP Allowable Dwelling Units
Hawks Landing Plan Area	64.31 ha	15 du/gross ha	964 du

Residential Area	% of Housing Stock	Allowable Dwelling Units	Estimated Population
	See Table 4 - Proposed Housing Mix Estimation	MDP Allowable Dwelling Units x % of Housing Stock	
Single Detached Residential	72.10%	695 du	1,876
Street-Oriented Attached Residential	23.11%	222 du	599
Single Site Attached Residential	4.79%	46 du	124
Total Housing Stock	100.00%	963 du	2,599
MDP Recommended Residential Density: 15.0 du/gross ha (6.1 du/gross ac)			

Table Notes:

Potential secondary suites have not been included in the estimated unit counts.

Estimated population is based on the Town's 2016 average household size of 2.7 persons per unit; this information was recorded by Statistics Canada during the 2016 federal census.

Density calculations are determined using the % of Housing Stock shown in Table 4 - Proposed Housing Mix Estimation and the MDP Allowable Dwelling Unit amount of 964 du, as shown in Table 3 - MDP Housing Mix Estimation.

4.4.1 Proposed Residential Density

Although the Town of Crossfield MDP recommends a maximum density of 15 du/ha, it also states that higher residential densities, achieved using different and higher density housing types, shall be considered. It is the intention of the Hawks Landing ASP to achieve a higher residential density than the MDP's recommendation of 15 du/ha to provide a wider range of product types, at various price points, that can appeal to a range of future residents.

As shown in Table 4 - Proposed Housing Mix Estimation, the proposed housing mix estimation for Hawks Landing may be higher than 15.0 du/ha. The variation is due to the inclusion of various housing types including smaller lot homes and attached residential options. The scenario illustrated in Table 4 - Proposed Housing Mix Estimation is a reasonable potential buildout, based on the guidelines identified in the Town of Crossfield LUB. Based on this scenario, the proposed maximum residential density of Hawks Landing is 20.8 dwelling units per gross hectare, approximately 1,337 dwelling units.

Table 4 - Proposed Housing Mix Estimation is intended to be utilized by the Town of Crossfield to guide approvals by identifying a maximum number of dwelling units for each residential area. Actual dwelling unit counts are subject to change and will be based on land use redesignation approval and subdivision, completed on a phased basis.

Table 4 - Proposed Housing Mix Estimation Maximum

Residential Area	Maximum Estimated Dwelling Units (du)	% of Housing Stock	Maximum Estimated Population
Single Detached Residential	964	72.10%	2,602
Street-Oriented Attached Residential	309	23.11%	834
Single Site Attached Residential	64	4.79%	172
Total Housing Stock	1,337	100.00%	3,608
Estimated Residential Density Maximum: 20.8 du/gross ha (8.4 du/gross ac)			

Table Notes:

Potential secondary suites have not been included in the estimated unit counts.

Density calculations are based on the following assumptions; actual densities and unit counts will differ from those shown at the time of subdivision.

- Single Detached Residential Units

Average lot size: 262.39m²

The Single Detached Residential average lot size is an average between that permitted within the medium and small detached housing land use districts, as identified in the Town's LUB.

- **Street-Oriented Attached Residential** Average density: 35 du/ha

This density is standard for rowhome building structures.

- **Single Site Attached Residential** Average density: 85 du/ha

This density is standard for 4-storey apartment buildings, with underground parking is 85 du/ha; as such, it is considered a maximum density for this site.

It is recognized that the actual density of the Single Site Attached Residential area will be lower than 85 du/ha should the site be constructed for lower density attached housing.

Estimated population of Hawks Landing is based on the Town's 2016 average household size of 2.7 persons per unit; this information was recorded by Statistics Canada during the 2016 federal census.

Policies

- 4.4.1.a** In accordance to 2016 amendments to the *Town of Crossfield Municipal Development Plan*, the Hawks Landing development shall achieve a maximum residential density of 15.0 dwelling units per gross hectare, unless otherwise approved by the Town of Crossfield.
- 4.4.1.b** To guide Hawks Landing toward the maximum residential density of 20.8 du/ha, Hawks Landing shall be constructed with at maximum of 1,337 dwelling units.
- i.** As illustrated in **Table 4 - Proposed Housing Mix Estimation Maximum**, the Single Detached Residential area shall include a maximum of 964 dwelling units unless otherwise approved by the Town of Crossfield.
 - ii.** As illustrated in **Table 4 - Proposed Housing Mix Estimation Maximum**, the Street-Oriented Attached Residential area shall include a maximum of 309 dwelling units unless otherwise approved by the Town of Crossfield.
 - iii.** As illustrated in **Table 4 - Proposed Housing Mix Estimation Maximum**, the Single Site Attached Residential shall include a maximum of 64 dwelling units unless otherwise approved by the Town of Crossfield.
- 4.4.1.c** As per the recommendations of the *Town of Crossfield Municipal Development Plan*, no single residential land use district shall comprise more than 50% of the total land use for an ASP.

4.5 Architectural Design

The Developer will create a set of architectural guidelines to provide recommendations and controls surrounding the construction of homes in the neighbourhood. These guidelines are intended to provide consistency throughout the community and may include guidelines regarding construction materials, colours, elevation, windows, garages and driveways, and landscaping.

4.6 Sustainability

- 4.6.a** As per the recommendations of the *Town of Crossfield Sustainability Plan*; commercial, residential, and street lighting shall be designed to reduce light pollution.
- 4.6.b** As per the recommendations of the *Town of Crossfield Sustainability Plan*, builders in Hawks Landing should be encouraged to incorporate the following in the construction of their buildings and houses:
- iv. alternative energy sources such as solar energy or geothermal heating
 - v. energy efficient furnaces, air conditions, windows, and Energy Star appliances
 - vi. electrical efficient lighting
 - vii. water saving toilets and showers
 - viii. green roofs
- 4.6.c** Educational and commercial businesses in Hawks Landing should be encouraged to provide recycling bins for their students' or customers' use.
- 4.6.d** Builders in Hawks Landing should be encouraged to utilize universal design to accommodate residents of all ages and mobility levels.
- 4.6.e** Builders in Hawks Landing should be encouraged to provide rainwater harvesting options for homeowners.



Legend

- | | |
|--------------------------------------|--------------------------------|
| Single Detached Residential | Public Utility Lot |
| Street-Oriented Attached Residential | Stormwater Management Facility |
| Single Site Attached Residential | Separated Sidewalk |
| Commercial Use | Multi-use Trail |
| Municipal Reserve | Community Amenity |
| School Reserve | Area Structure Plan Boundary |



FIGURE 5.0
Concept Plan
Hawks Landing

Prepared for
Creation Communities Inc.
Calgary, Alberta

Stantec
#1102, 4900 40th Street, Red Deer, AB T4E 1T7
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DRAWN BY: SAS
CHECKED BY: GCL
SCALE: 1:5,000
PROJECT #: 112849555

August 2017



Legend

- | | |
|--------------------------------------|--------------------------------|
| Single Detached Residential | Public Utility Lot |
| Street-Oriented Attached Residential | Stormwater Management Facility |
| Single Site Attached Residential | Separated Sidewalk |
| Commercial Use | Multi-use Trail |
| Municipal Reserve | Community Amenity |
| School Reserve | Area Structure Plan Boundary |



FIGURE 6.0

Concept Plan With Aerial
Hawks Landing

Prepared for:
Creation Communities Inc.,
Calgary, Alberta

Stantec
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DRAWN BY: SAS
CHECKED BY: GCL
SCALE: 1:5,000
PROJECT #: 112849555

August 2017

5.0 Open Space Network

Hawks Landing's open space network has been designed around the proposed school site, located in the south central portion of the neighbourhood. To facilitate off-street pedestrian movement and offer diverse opportunities for outdoor recreation, a variety of open spaces and linear park connections have been provided throughout the neighbourhood.

Open spaces in Hawks Landing include linear parks, passive parks, pocket parks, and a stormwater management facility. These areas are intended to provide residents with a range of outdoor recreation opportunities and encourage healthy lifestyles.



Character examples of trails, open spaces, stormwater management facilities, and playgrounds.

Objectives

- Create a comprehensive open space network by identifying a variety of open spaces including linear park connections, passive parks, pocket parks, a school site, and a stormwater management facility.
- Encourage healthy lifestyles by distributing open spaces throughout the neighbourhood to provide convenient access for residents.
- Pedestrian connections throughout the neighbourhood shall be provided using sidewalks and trails to reduce the overall demand to utilize personal vehicles.
- Utilize the stormwater management facility as an opportunity for residents to participate passive methods of recreation.
- Accommodate off-street trails through the use of continuous linear parks and utility rights-of-way.
- Provide opportunities for passive surveillance and increase accessibility to parks by including homes that back onto open spaces.
- Incorporate children's play structures into the open space network.

- Utilize open space trails to provide opportunities for off-street mobility.

Policies

- 5.0.a All open spaces shall be designated using School Reserve, Municipal Reserve, or Public Utility Lot dedication.
- 5.0.b Utility rights-of-way shall be integrated into the overall open space network to provide opportunities for continuous off-street pedestrian movement.
- 5.0.c Recreational programming in utility rights-of-way shall be limited to pedestrian trails and seating nodes that discourage off-trail recreation.
- 5.0.d Programming of open spaces shall be done in consultation with the Town of Crossfield to ensure all municipal regulations and preferences are reflected.
- 5.0.e Open spaces should be designed using the techniques of Crime Prevention through Environmental Design (CPTED).
- 5.0.f The Hawks Landing open space network shall be connected to those surrounding the Plan Area.
- 5.0.g Naturalized landscaping should be incorporated throughout Hawks Landing to reduce water demands and minimize maintenance costs.

Table 5 – Open Space Dedication

Land Use Area	Area (ha)	Area (ac)	% of NDA
Gross Plan Area	64.31	158.91	
Environmental Reserve	0.00	0.00	
Net Developable Area	64.31	158.91	100.0%
SR School Reserve	3.24	8.00	5.0%
MR Municipal Reserve	4.12	10.18	6.4%
MR Municipal Reserve Corridor (Utility R/W)	2.56	6.32	4.0%
PUL Public Utility Lot	1.84	4.54	2.9%
PUL Stormwater Management Facility (SWMF)	3.21	7.94	5.0%
Total Open Space Dedication	14.97	36.98	23.3%

5.1.1 School and Municipal Reserves

As shown in Table 6 – School and Municipal Reserve Dedication, a total of 9.91ha (24.49ac) of combined school and municipal reserves have been dedicated in the Hawks Landing ASP; this amount of land exceeds 10%, the maximum amount which the Town is able to request for such uses under Section 666(1) of the MGA; as such, the Town will be required to pay compensation for this overage.

Policies

- 5.1.1.a The Town may be required to pay compensation to the Hawks Landing Developer for 3.48ha (8.60ac) of land which has been dedicated as an overage to the required 10% land dedication for use as School or Municipal Reserve.

Table 6 – School and Municipal Reserve Dedication

Land Use Area	Area (ha)	Area (ac)	% of NDA
Gross Plan Area	64.31	158.91	
Environmental Reserve	0.00	0.00	
Net Developable Area	64.31	158.91	100.0%
Required School and Municipal Reserve Dedication	6.43	15.89	10.0%
SR School Reserve	3.24	8.00	5.0%
MR Municipal Reserve	4.12	10.18	6.4%
MR Municipal Reserve Corridor (Utility R/W)	2.56	6.32	4.0%
Total School and Municipal Reserve Dedication	9.91	24.49	15.4%
Dedication Overage	3.48	8.60	5.4%



FIGURE 7.0
Open Space Network
Hawks Landing

Prepared for:
 Creation Communities Inc.,
 Calgary, Alberta

Stantec
 #1100, 4900 50th Street, Red Deer, AB T4N 1J7
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DRAWN BY: SAS
 CHECKED BY: GCL
 SCALE: 1:5,000
 PROJECT #: 112849555

August 2017

6.0 Transportation Network

The neighbourhood's roadway network has been designed to provide high quality residential areas that provide residents with a sense of privacy and safety by limiting the amount of through-traffic travelling in residential areas.

Objectives

- Create safe spaces for non-vehicular modes of transportation by providing sidewalks and off-street trail connections.
- Facilitate continuous pedestrian movement by providing off-street pedestrian connections where sidewalks are not available.
- Accommodate different levels of traffic volumes by including a variety of roadway cross-sections.
- Facilitate high traffic volumes at the school site by utilizing collector roadways on at least two sides.

6.1 External Roadways

6.1.1 Range Road 12

Range Road 12 runs along the west boundary of the Plan Area and is identified in the Town of Crossfield MDP as a future primary collector roadway using a 21m wide right-of-way; as such, no additional right-of-way has been required. It is anticipated that the full construction of this road will only be required once the additional lands, currently located in the jurisdiction of Rocky View County, are developed.

Policies

- 6.1.1.a As per the recommendations of the *Town of Crossfield Transportation Master Plan*, the future construction of Range Road 12 should be to a primary collector roadway standard.
- 6.1.1.b As per the recommendations of the *Town of Crossfield Transportation Master Plan*, the future construction of Range Road 12 should include 2.5m pathways along both sides of the roadway.

6.1.2 Township Road 290

Township Road 290 runs along the north boundary of the Plan Area and is identified in the Town of Crossfield MDP as a major road within Rocky View County jurisdiction.

To accommodate the future construction of a major roadway within a 30.48m wide right-of-way, 5.18m has been previously dedicated along the north and south sides of the road allowance; as such, no additional right-of-way has been required.

TIA Results and Recommendations

The 2017 *Hawks Landing ASP Traffic Impact Assessment* provided recommendations for intersections surrounding the Plan Area. These recommendations were categorized using the existing horizon, 10-year horizon (50% build out), 15-year horizon (100% build out), and 20-year horizon.

Policies

- 6.1.2.a All recommendations identified in the *Hawks Landing ASP Traffic Impact Assessment* shall be reviewed for inclusion during the creation of the Hawks Landing Servicing Study.
- 6.1.2.b All recommendations identified in the *Hawks Landing ASP Traffic Impact Assessment* shall be completed by the Developer.
- 6.1.2.c The upgrading of Township Road 290 shall be completed by the Developer when deemed necessary to accommodate the traffic movements associated with Hawks Landing.

6.2 Internal Roadways

A series of roadways have been used to provide vehicular connectivity throughout Hawks Landing. These roadways have been designed to provide convenient vehicular and pedestrian access while preventing short-cutting through the community.

As shown on Figure 8 - Roadway Network, a series of collector roadways have been used to service the Plan Area providing connectivity from north to south and west to east. To supplement the collector roadway network, a system of local roads has been planned to provide access to individual development clusters while discouraging outside traffic from short-cutting.

Any lanes adjacent to Municipal Reserves or public utility lots may have bollards or fencing installed to prevent vehicular access into open spaces.

Policies

- 6.2.a To provide connectivity to Vista Crossing and Iron Ridge, Hawks Landing shall provide two roadway connections along the south boundary of the Plan Area and one along the east boundary that align with those approved in the adjacent neighbourhood ASPs.

- 6.2.b As per the recommendations of the *Town of Crossfield Municipal Development Plan*, sidewalks shall be provided on both sides of all residential streets.
- 6.2.c The Town of Crossfield will set the appropriate roadway cross-section details for each road classification and match those established by Iron Ridge and Vista Crossing.
- 6.2.d As shown on **Figure 9 – Roadway Cross-Sections**, collector roadways in Hawks Landing shall be designed using a 21m wide right-of-way with 1.4m wide separated sidewalks on either side of the roadway.
- 6.2.e Collector roadways should be designed to accommodate the future inclusion of public transit should it become available.
- 6.2.f As shown on **Figure 9 – Roadway Cross-Sections**, local roadways in Hawks Landing shall be designed using a 16m wide right-of-way with 1.5m wide monolithic sidewalks on either side of the roadway.
- 6.2.g As per the recommendations of the *Town of Crossfield Transportation Master Plan*, separate sidewalks should be built where possible at a minimum width of 1.5m.
- 6.2.h Rear lanes may be included as per **Figure 8 - Roadway Network**; however, their removal shall not require an ASP amendment.
- 6.2.i Energy efficient street lighting should be utilized along all public roadways.

6.3 Pedestrian Network

To provide efficient and comfortable pedestrian movement throughout Hawks Landing, a pedestrian network has been created using off-street trails and on-street sidewalks. As per the recommendations of the *Town of Crossfield Transportation Master Plan*, trails in the community will be 2.5m wide asphalt whereas sidewalks will be 1.5m wide.

As shown on **Figure 7 - Open Space Network**, Hawks Landing's linear parks are intended to provide off-street pedestrian connections where continuous roadway connections are not available or to provide more direct and convenient route options.

Policies

- 6.3.a To provide connectivity to Vista Crossing, Hawks Landing shall provide three pedestrian connections along the south boundary of the Plan Area that align with those approved in the Vista Crossing ASP.

- 6.3.b** To provide connectivity to Iron Ridge, Hawks Landing shall provide two pedestrian connections along the east boundary of the Plan Area that align with those approved in the Vista Crossing ASP: one at the north linear open space and one along the collector roadway.
- 6.3.c** Hawks Landing shall provide a system of off-street trail connections throughout the community to reduce vehicle dependency.
- 6.3.d** Where dead-ends in the roadway network are created, pedestrian connections should be provided through the neighbourhood's open space network.
- 6.3.e** Collector roadways in Hawks Landing shall be designed to include separated sidewalks on both sides to optimize trail connectivity and provide a comfortable pedestrian environment.

Township Road 290

Range Road 12

NE 1/4 Sec. 35, Twp. 28, Rge. 1, W. 5M.

SW 1/4 Sec. 35, Twp. 28, Rge. 1, W. 5M.

Legend

- Collector Roadway
- Local Roadway
- Laneway
- Area Structure Plan Boundary



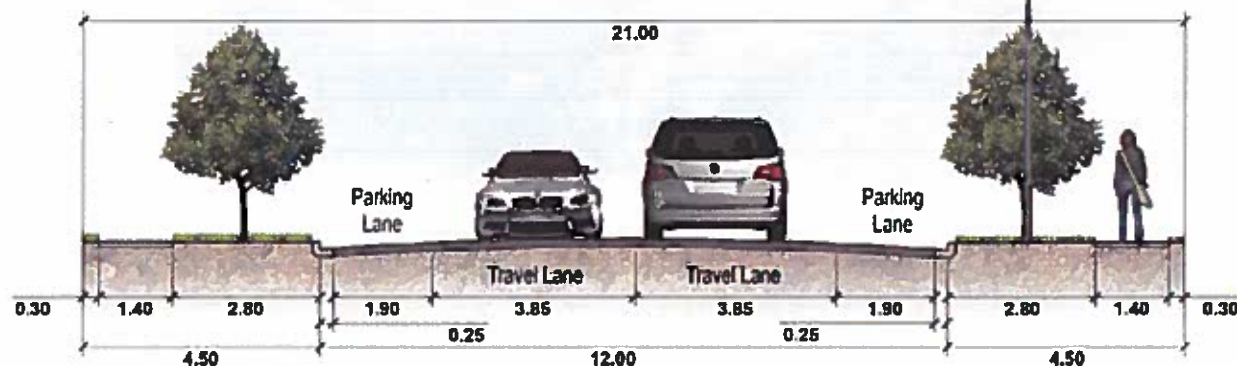
FIGURE 8.0
Roadway Network
Hawks Landing

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Creation Communities Inc.
Calgary, Alberta

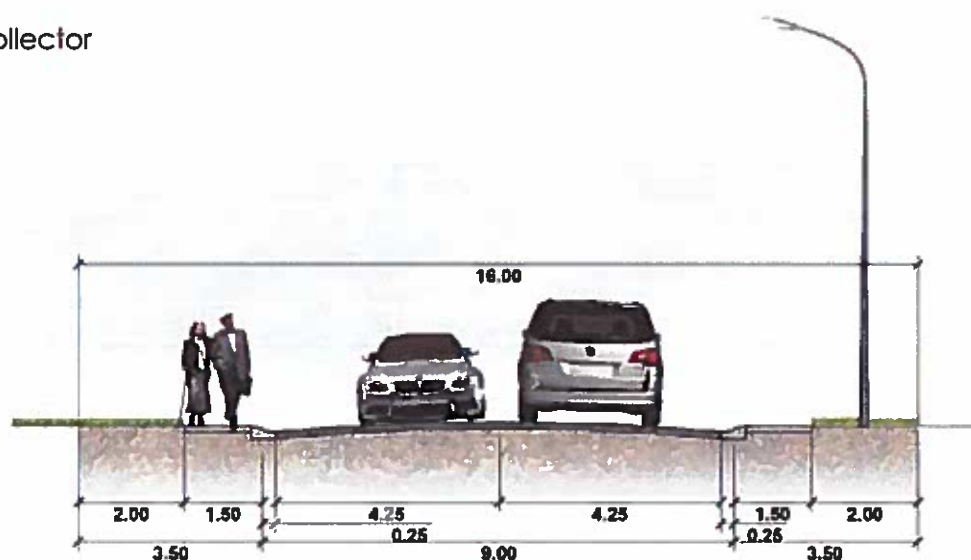


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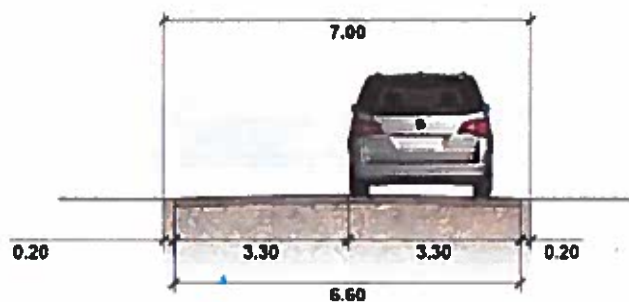
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21.0m Collector



16.0m Local



7.0m Lane

FIGURE 9.0
Roadway Cross-Sections
Hawks Landing

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7.0 Servicing Considerations

7.1 Sanitary Servicing

All wastewater generated from the Hawks Landing neighbourhood will be collected by gravity sewer system as shown on **Figure 10 - Sanitary Servicing**. This system will connect through the existing development east of the Plan Area and Vista Crossing located south of Hawks Landing.

The majority of the Hawks Landing Plan Area has been designed to connect to the proposed sanitary trunk which runs through the adjacent Vista Crossing neighbourhood, along Range Road 12, and to the Laut Avenue Lift Station. The southeast portion of Hawks Landing will connect to the sewer line which is currently stubbed along the east boundary of the Plan Area.

Policies

- 7.1.a All sanitary sewer facilities will be detailed in the Hawks Landing Servicing Study.
- 7.1.b The Hawks Landing overall sanitary servicing system shall be designed in accordance with the Town's MDP.
- 7.1.c The Hawks Landing sanitary servicing system shall be designed in accordance with City of Calgary Guidelines, Town of Crossfield requirements, and Alberta Environmental Guidelines.

7.2 Stormwater System

As shown on **Figure 11 - Stormwater Servicing**, one stormwater management facility (SWMF) has been located in the northeast portion of the Plan Area. This facility will be designed to accommodate 1:100 year storm water flows for the Hawks Landing neighbourhood, and restrict outflows to pre-development rates. This system has been analyzed in a detailed Stormwater Management Plan which has been submitted under separate cover to the Town of Crossfield.

It is anticipated that a portion or all of the Hawks Landing SWMF facility will be constructed as an engineered wet pond, complete with forebay. This facility will not only detain stormwater from major storm events but also enhance water quality to meet Alberta Environment's standards before discharging out of the Hawks Landing development. This facility will also serve a park space that provides residents with opportunities for passive recreation.

An underground storm pipe system will convey minor storm events, less than 1 in 5 year intensity, from the Hawks Landing neighbourhood and direct it into the SWMF.

Policies

- 7.2.a All stormwater management facilities will be detailed in the Hawks Landing Servicing Study.
- 7.2.b The Hawks Landing overall stormwater servicing system shall be designed in accordance with the Town's MDP which illustrates a stormwater management pond along the northeast boundary of the Plan Area.
- 7.2.c The Hawks Landing stormwater servicing system shall be designed in accordance with City of Calgary Guidelines, Town of Crossfield requirements, and Alberta Environmental Guidelines.
- 7.2.d The Hawks Landing SWMF will be designed to accommodate all onsite drainage and any existing upstream pre-development flows. Upstream developments will be responsible to limit their release to pre-development flow.

7.3 Water Servicing

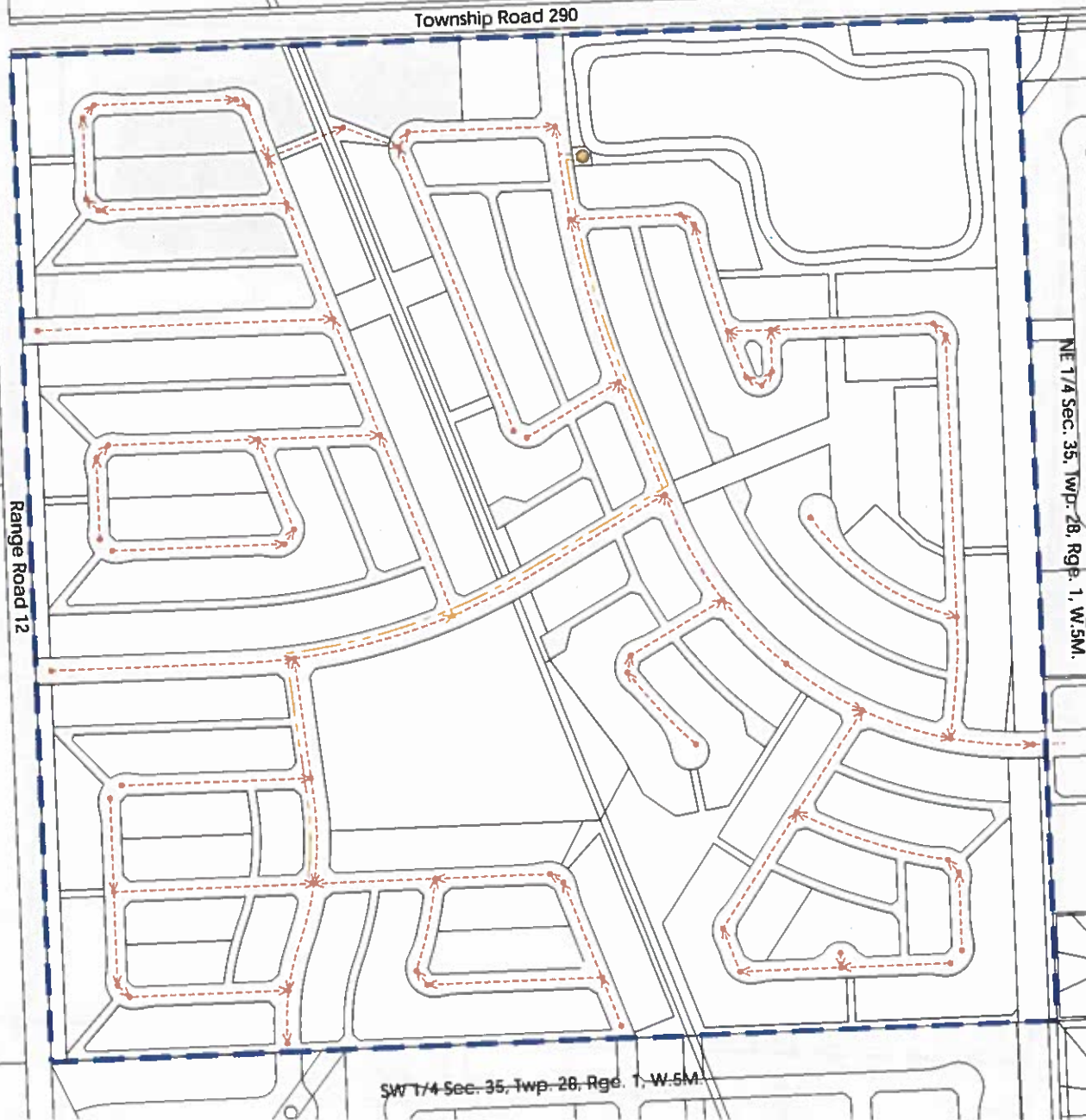
Water servicing will be provided by three connections to the proposed existing systems: two along the south boundary of the Plan Area, and one along the east boundary as shown on Figure 12 - Water Servicing.

Policies

- 7.3.a All water servicing including water main sizing, flows, and pressures shall be detailed in the Hawks Landing Servicing Study.
- 7.3.b The Hawks Landing water servicing system shall be designed in accordance with the Town's MDP which illustrates a 250mm proposed pipe connection extending into the Plan Area from the southeast boundary.
- 7.3.c The Hawks Landing water servicing system shall be designed in accordance with City of Calgary Guidelines, Town of Crossfield requirements, and Alberta Environmental Guidelines.

7.4 Franchise Utilities

Shallow utilities will be required for this development within the Town. These utilities include power, telephone, cable television and internet, and natural gas which will be extended from the existing community to the south, Vista Crossing.



Legend

- Sanitary Sewer
- Force main
- Lift Station
- Sanitary Manhole
- > Sanitary Flow Direction
- - - Area Structure Plan Boundary



FIGURE 10.0
Sanitary Sewer
Hawks Landing

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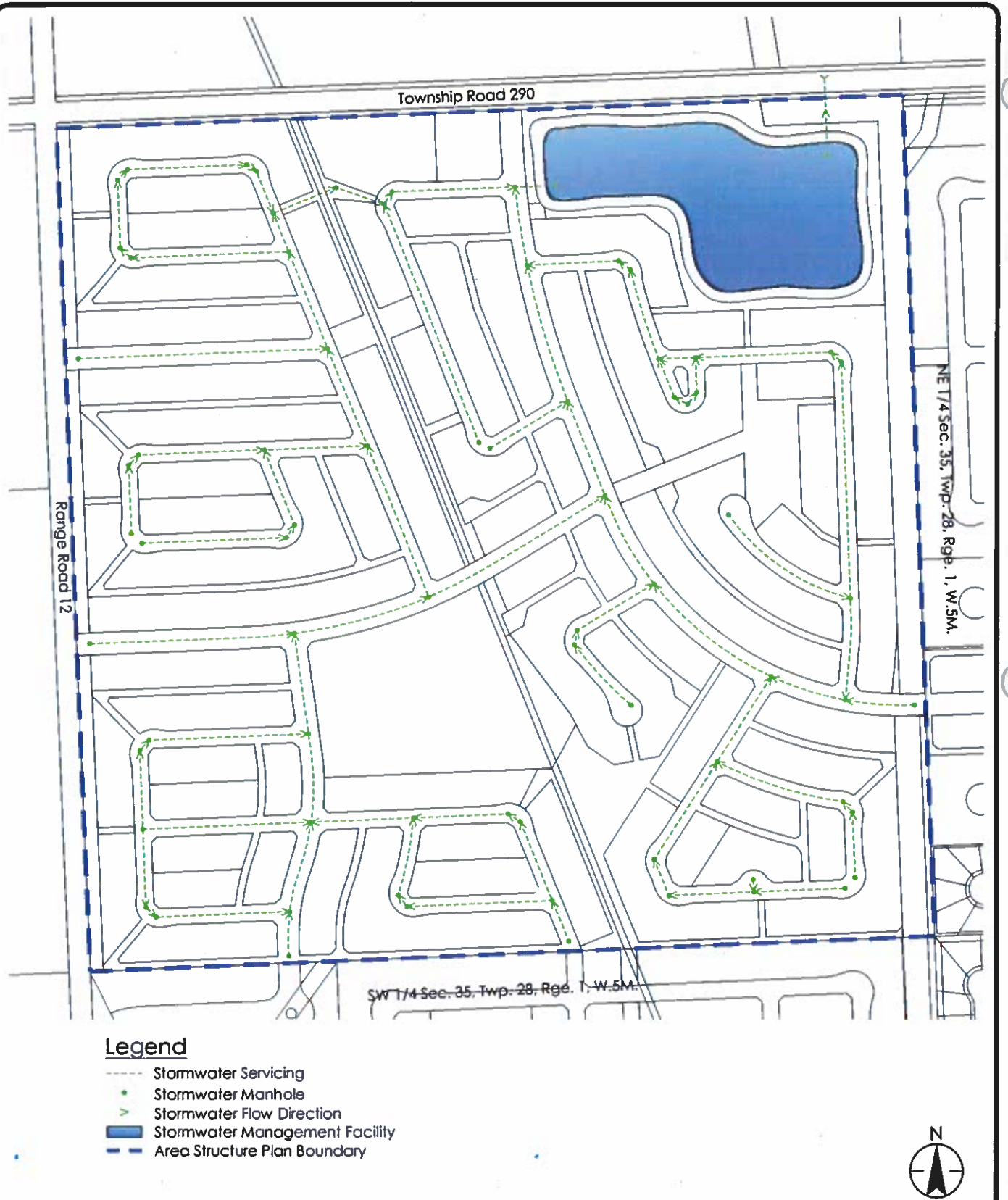


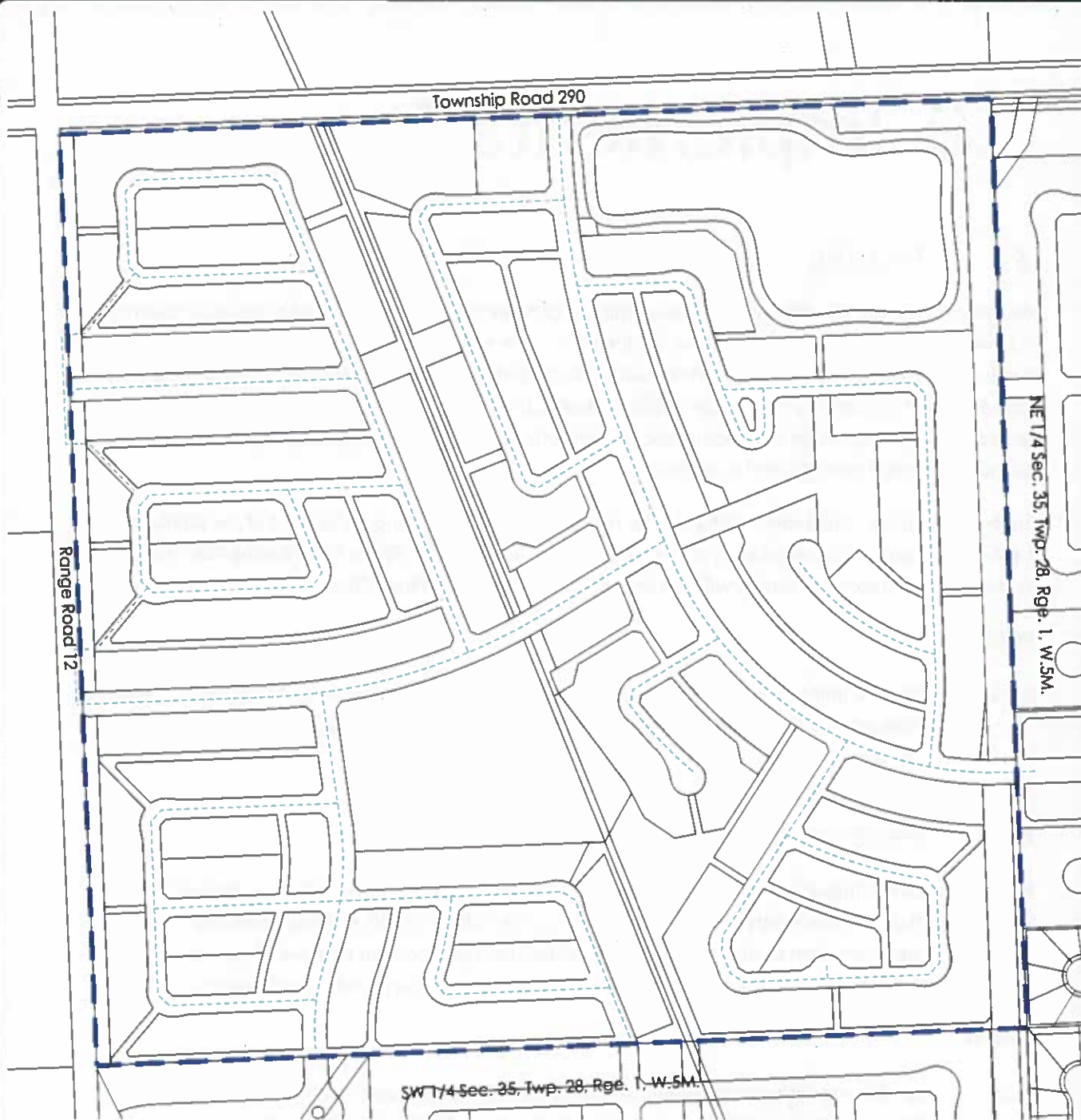
FIGURE 11.0
Stormwater Servicing
Hawks Landing

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Legend

- Water Servicing
- Area Structure Plan Boundary



FIGURE 12.0
Water Servicing
Hawks Landing

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8.0 Implementation

8.1 Phasing

As shown on Figure 13 - Phasing Plan development of Hawks Landing is proposed to be undertaken in several phases. Staging of development is dependent upon many factors, one of which includes servicing. Infrastructure to Hawks Landing will be extended into the Plan Area from the southeast. Each phase will be completed with the logical and economical extension of servicing infrastructure; portions of separate phases may be developed concurrently if there is sufficient demand and/or if municipal servicing is made more efficient as a result.

Subsequent to the completion of Phase One, future phases will continue north, east of the pipeline right-of-way, and then extend west of the right-of-way. As shown on Figure 13 - Phasing Plan the stormwater management facility will be completed as a portion of Phase One.

Policies

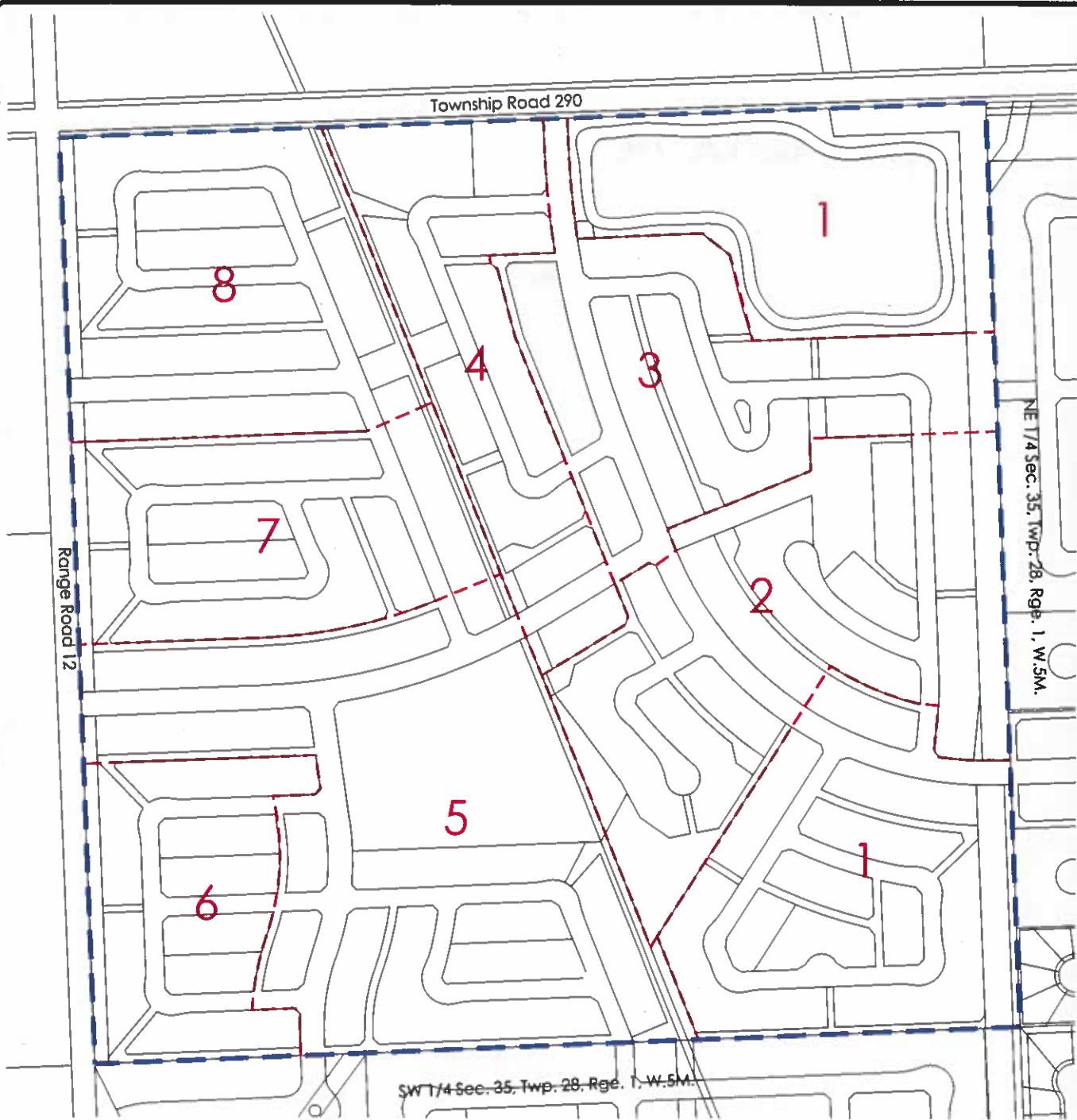
- 8.1.a Development phasing of the Plan Area shall be generally consistent with Figure 13 - Phasing Plan unless efficiencies can be made by developing multiple phases concurrently or out of sequence.

8.2 Redesignation and Subdivision

Redistricting and subdivision applications to conform to the land use designations described in this ASP will be undertaken as necessary. Guided by the Town of Crossfield's MDP, redesignation and subdivisions must conform to the uses identified in The Town of Crossfield LUB and all applicable statutory plans in addition to the informational requirements necessary for each application.

Policies

- 8.2.a Land use redesignation within the Plan Area shall be consistent with those identified on Figure 5 – Concept Plan and described in Section 4.0 – Land Use Concept.



Legend

- Phase Boundary
- Area Structure Plan Boundary



FIGURE 13.0
Phasing Plan
Hawks Landing

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Appendix A Public Consultation