

Planning & Development Report to  
Calgary Planning Commission  
2020 June 04

ISC: UNRESTRICTED  
CPC2020-0571

**Land Use Amendment in Lewisburg (Ward 3) at 14900 – 6 Street NE and 800 – 144 Avenue NE, LOC2019-0135**

---

**EXECUTIVE SUMMARY**

This land use amendment application was submitted by B&A Planning Group on 2019 August 28 on behalf of the landowner, Genesis Keystone Ltd. The application proposes to redesignate approximately 10.54 hectares (26.04 acres) of greenfield land in the northeast Community of Lewisburg from Special Purpose – Future Urban Development (S-FUD) District to Special Purpose – Urban Nature (S-UN) District and Special Purpose – City and Regional Infrastructure (S-CRI) District.

The intent of this application is to enable a constructed wetland and storm pond facility by providing for:

- approximately 7.06 hectares (17.43 acres) of Environmental Reserve for constructed wetlands and granular trail that would be designated Special Purpose – Urban Nature (S-UN); and
- approximately 3.48 hectares (8.61 acres) of land for a stormwater pond that would be designated Special Purpose – City and Regional Infrastructure (S-CRI).

This is a non-standard application which is out of our general sequence of reviewing storm ponds and environmental reserves with the rest of the neighborhood. An approval for this application is needed in advance as the contributing stormwater catchment area for this storm pond facility extends over multiple communities including the Livingston Community, which contains approved outline plan areas, in addition to the Lewisburg Community which is generally ready to proceed to development stages.

The proposed land use amendment aligns with the applicable policies of the *Municipal Development Plan* and *Keystone Hills Area Structure Plan*.

This application is accompanied by an outline plan application (CPC2020-0572) to provide the future subdivision layout for the site's development. Conditions have been incorporated in the outline plan to effectively address the site's development.

The quarter section containing the storm pond and environment reserve (subject lands) is within a Growth Management Overlay area. It is noteworthy that, an approval of this application does not pre-suppose an acceptable design or approval decision on the remaining area. The area is still subject to the Growth Management Overlay.

Planning & Development Report to  
Calgary Planning Commission  
2020 June 04

ISC: UNRESTRICTED  
CPC2020-0571

**Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135**

---

**ADMINISTRATION RECOMMENDATION:**

That Calgary Planning Commission recommend that Council hold a Public Hearing; and

1. **ADOPT**, by bylaw, the proposed land use redesignation of 10.54 hectares  $\pm$  (26.04 acres  $\pm$ ) located at 14900 – 6 Street NE and 800 – 144 Avenue NE (Portion of N1/2 of the SW1/4 Section 2-26-1-5; Portion of Section 2-26-1-5, Legal Subdivisions 3 and 4) from Special Purpose – Future Urban Development (S-FUD) District to Special Purpose – Urban Nature (S-UN) District and Special Purpose – City and Regional Infrastructure (S-CRI) District; and
2. Give three readings to the proposed bylaw.

**PREVIOUS COUNCIL DIRECTION / POLICY**

None.

**BACKGROUND**

This application was submitted by B&A Planning Group on 2019 August 28 on behalf of the landowner, Genesis Keystone Ltd. B&A Planning Group have provided a summary of their proposal in the Applicant Submission (Attachment 1).

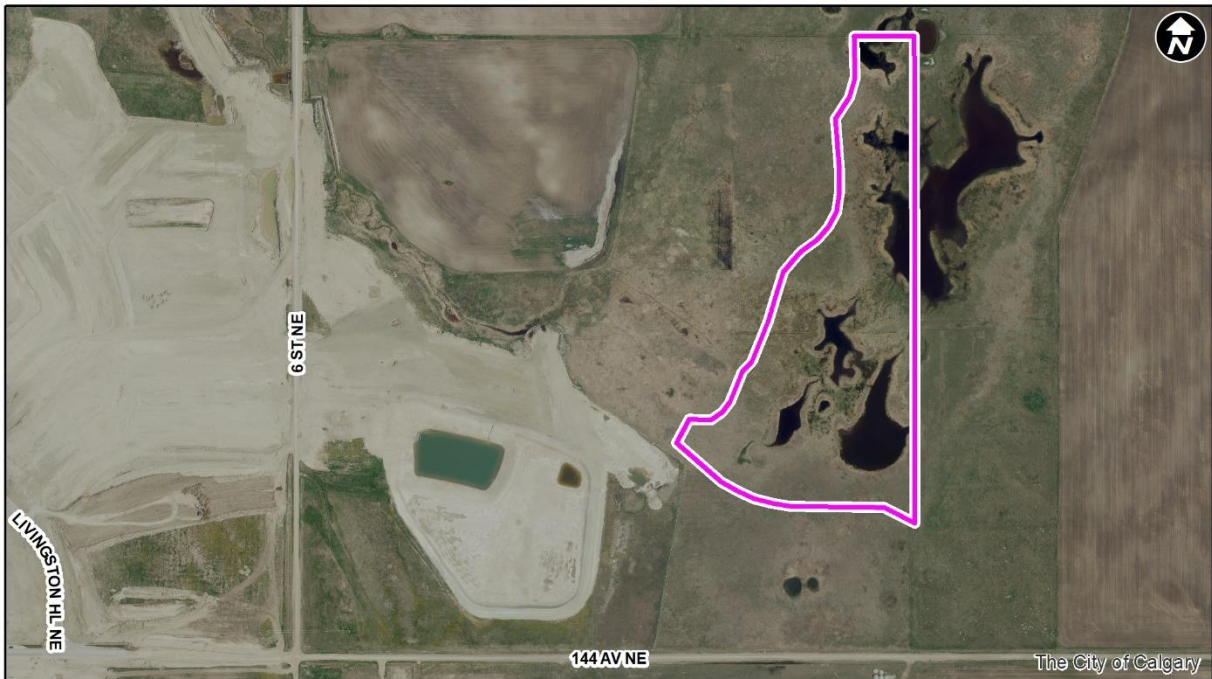
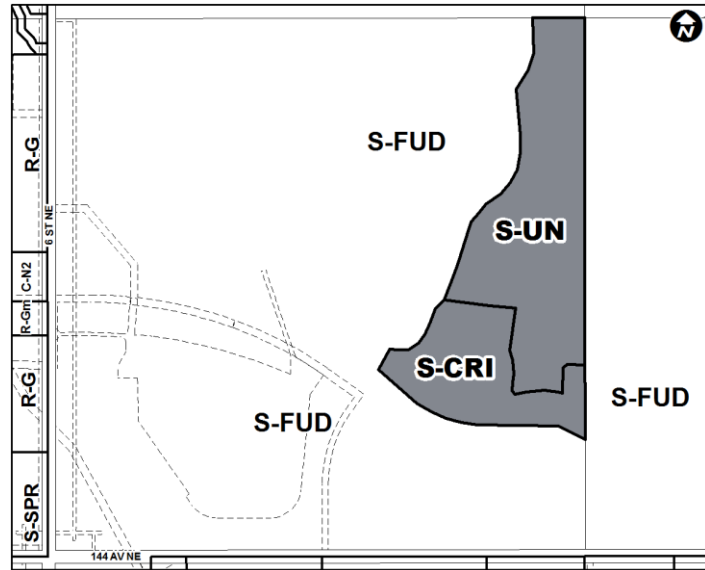
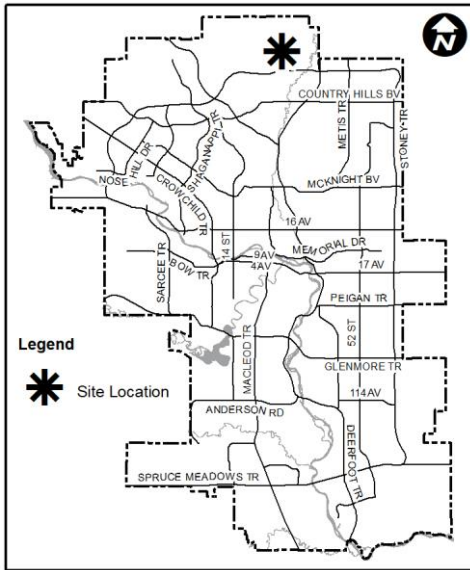
The application proposes to redesignate approximately 10.54 hectares (26.04 acres) of greenfield land in the northeast community of Lewisburg to allow for a constructed wetland and storm pond facility (Attachment 2).

The quarter section containing the future wetland and storm pond facility (subject lands) is within a Growth Management Overlay (GMO) area. A land use and outline plan application for this constructed wetland and storm pond facility was submitted ahead of the required planning work for the remainder of the quarter section. The contributing stormwater catchment for this storm pond facility extends into the Livingston Community, which contains previously approved outline plan areas, in addition to the Lewisburg Community (Attachment 3). However, since this storm pond facility is the downstream infrastructure for those approved outline plan areas, further development within the community of Livingston could not proceed without this storm pond facility being constructed. This proposed storm pond does not serve the portions of the Lewisburg Community that already have GMO removal (Attachment 3).

The design of the proposed storm pond includes provision of approximately 7.06 hectares of Environmental Reserves (ER) because the existing wetlands in the location of the storm pond are intended to be removed. The ER dedication is congruent with the wetland and not able to be separated. The constructed wetland and storm pond facility would allow the applicant to confirm an appropriate design that facilitates the needs of all stakeholders including the City. The remainder of the quarter section is subject of another application (LOC2020-0057) which was submitted on 2020 May 5 and is currently under review.

**Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135**

**Location Maps**

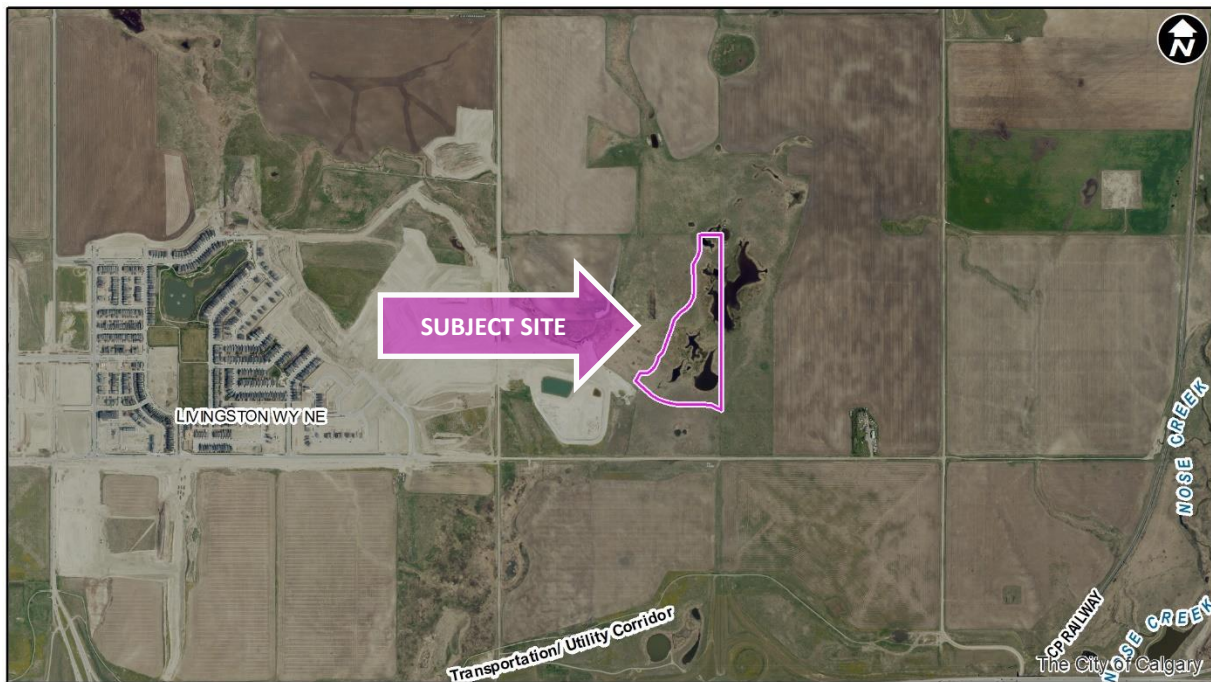


Planning & Development Report to  
Calgary Planning Commission  
2020 June 04

ISC: UNRESTRICTED  
CPC2020-0571

**Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135**

---



### Site Context

This subject site is part of the quarter section located east of 6 Street NE and north of 144 Avenue NE within the Community of Lewisburg. The subject site contains Class III Seasonal March wetlands. The site is predominantly flat and is currently undeveloped under the S-FUD District. The adjacent lands on all sides are also undeveloped under the S-FUD District. This quarter section located east of 6 Street NE and north of 144 Avenue NE, including the subject site, is currently within a Growth Management Overlay.

A land use amendment and outline plan application (LOC2016-0181) was approved in 2017 for the lands located west of 6 Street NE. A land use amendment and outline plan application (LOC2016-0311) was approved in 2019 for the lands located south of 144 Avenue NE.

A temporary stormwater pond currently exists west of the subject site and has interim access from 6 Street NE. This existing access for the temporary pond is proposed to be extended to the subject site for providing interim access until such time when the remainder of the quarter section is developed with roads.

The existing wetlands on the subject site are intended to be removed and replaced with a constructed wetland and storm pond facility. This application provides for approximately 7.06 hectares (17.43 acres) of Environmental Reserve (ER) for constructed wetlands.

Planning & Development Report to  
Calgary Planning Commission  
2020 June 04

ISC: UNRESTRICTED  
CPC2020-0571

## Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135

---

### INVESTIGATION: ALTERNATIVES AND ANALYSIS

This application is to allow for a constructed wetland and storm pond facility which would serve portions of the approved Livingston Community in addition to the Lewisburg Community. Further information on how this proposal aligns with applicable policies is found in the Strategic Alignment section of this report.

#### Subdivision Design

The intent of this application is to enable a constructed wetland and storm pond facility with interim access (see outline plan in Attachment 2). The outline plan proposed with this land use amendment application shows a shadow plan for the rest of the quarter section. This shadow plan was provided to demonstrate a conceptual build out of those lands only and has not been reviewed or accepted as part of this application. An approval for the subject application will not constitute approval for the shadow plan shown for the rest of the quarter section.

The developer proposes a 'Stormwater Kidney' that combines traditional storm pond elements and natural wetland features. It consists of a sediment clarifier, main pond body, biofilter, treatment wetland, and ER wetland, where elements are seamlessly integrated to function as both a storm pond and wetland (see concept plan in Attachment 4).

Municipal Reserve (MR) is owing on the site but have not been provided within the proposed outline plan boundary. Further subdivision of the residual quarter section lands would provide for the required MR.

Environmental Reserve (ER) lands are proposed for constructed wetlands.

#### Land Use

The subject site is currently designated Special Purpose – Future Urban Development (S-FUD) District which is intended to be applied to lands that are awaiting urban development and utility servicing to protect lands from premature subdivision and development.

The two proposed land use districts are Special Purpose – City and Regional Infrastructure (S-CRI) District and Special Purpose – Urban Nature (S-UN) District.

The S-CRI District is intended to provide for infrastructure and utility facilities. The district also allows uses operated by Federal, Provincial and Municipal levels of government. For this application, the S-CRI District provides for a Public Utility Lot (PUL).

The S-UN District is intended to be applied to lands that have either been set aside for the purpose of preserving existing characteristics of a natural plant or animal community or which are undergoing naturalization by providing for natural landforms, vegetation, and wetlands and limit development to improvements that facilitate passive recreational use. For this application, the S-UN District provides for Environmental Reserve (ER).

## Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135

---

The two land uses will function in an integrated manner with the S-CRI District including stormwater treatment infrastructure, while the S-UN District including the reconstructed wetland. The reconstructed wetland will adhere to the *Alberta Guide to Wetland Construction in Stormwater Management Facilities* (2018).

### Density

The *Keystone Hills Area Structure Plan* stipulates that neighbourhoods are required to meet a minimum average density of 20 units per hectare. The application does not propose any residential density on the subject site. The constructed wetland and storm pond facility will support development in Livingston and Lewisburg Communities.

### Transportation

This existing maintenance access for the temporary pond is proposed to be extended to the subject site to provide interim access until the remainder of the quarter section is developed with roads. An access right-of-way will be registered to accommodate the interim maintenance access on the remaining parcels when the stormwater pond is subdivided. The ultimate access will be provided via an internal collector roadway, which will be planned as part of the broader community.

### Environmental Site Considerations

An Environmental Site Assessment was not required as part of this application. A Biophysical Impact Assessment (BIA) has been approved by The City for the subject lands.

One Class III Seasonal Marsh wetland is to be reconstructed and protected as Environmental Reserve (ER). The area of the current wetland is approximately 7.01 hectares (17.32 acres), while the ER provided through this outline plan is approximately 7.06 hectares (17.43 acres). The ER includes the reconstructed wetland as well as a setback area from the wetland footprint. The proposed setback is approximately 35-46 metres from the normal water line and 25-29 metres from the high water line.

Water Act approval for the disturbance and alteration of the existing Class III wetland has not yet been obtained from the Province. No disturbance to the wetland will be permitted until Water Act approval is received.

Reconstructed wetlands are new or modified wetland systems constructed to replace an existing natural wetland that provides similar natural ecological functions with appropriate hydroperiod, water levels, native vegetation, soils, and habitat zones, while meeting water quantity and quality wetland standards.

The reconstructed wetland will be connected to the stormwater treatment facility. Stormwater will filter through the various treatment systems in the Public Utility Lot (PUL) before entering the reconstructed wetland. By the time water enters the reconstructed wetland, sediment and



**Planning & Development Report to  
Calgary Planning Commission  
2020 June 04**

**ISC: UNRESTRICTED  
CPC2020-0571**

**Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135**

---

pollutants will be filtered out, allowing the wetland to function as a natural riparian zone that provides important habitat and ecological services. The wetland has been designed to continuously circulate water, which will mitigate odours and excessive algae formation while mimicking the functionality of a natural wetland.

The reconstructed wetland is also designed to provide water to the existing wetland complex to the east of the subject site, maintaining the ecological function of the undisturbed wetland.

A granular trail will be located along the western edge of the reconstructed wetland and will provide access for walking and passive recreation while respecting the naturalized/environmental components of the reconstructed wetland. The trail will tie to pathways along the future green corridor to the west of the subject site.

### **Utilities and Servicing**

The proposed storm pond facility will service the communities of Livingston and Lewisburg. An existing storm line, originating in Livingston and ending at a temporary storm pond within Lewisburg, will be extended to the proposed storm pond facility (the temporary storm pond will then be decommissioned). An existing sanitary line currently runs through the Lewisburg area, however sanitary and water connections to the subject outline plan will not be required. Further utility and servicing details, including the registration of any required utility right-of-ways, will be resolved at the tentative plan stage.

### **Climate Resilience**

The proposed development will use 'Stormwater Kidney' technology which utilizes biofilters, clarifiers and treatment wetlands to clean water of sediments and contaminants and manage stormwater. Native planting for riparian areas will be used to mimic and recreate the function of the existing wetland. This constructed wetland and storm pond facility is more effective at removing contaminants from stormwater and managing nuisances as compared to conventional pond and wetland designs, and supports the supports the Climate Adaptation objectives associated with natural assets management.

### **Stakeholder Engagement, Research and Communication**

In keeping with Administration's standard practices, this application was circulated to relevant stakeholders and noticed posted on-site. Notification letters were sent to adjacent landowners and the application was advertised online.

No citizen comments were received by the Calgary Planning Commission (CPC) report submission date. No public meetings were held by the applicant or Administration for this application.

Currently, there is no community association for the area.

Planning & Development Report to  
Calgary Planning Commission  
2020 June 04

ISC: UNRESTRICTED  
CPC2020-0571

## **Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135**

---

The application was circulated to Rocky View County and they had no comments.

Following CPC, notifications for a Public Hearing of Council will be posted on-site and mailed out to adjacent landowners. In addition, CPC's recommendation and the date of the public hearing will be advertised.

### **Strategic Alignment**

#### ***South Saskatchewan Regional Plan (2014)***

The recommendation by Administration in this report has considered and is aligned with the policy directions of the [South Saskatchewan Regional Plan](#) which directs population growth in the region to Cities and Towns and promotes the efficient use of land.

#### ***Interim Growth Plan (2019)***

The recommendation aligns with the policy direction of the [Interim Growth Plan](#). The proposed land use amendment builds on the principles of the *Interim Growth Plan* by means of promoting efficient use of land, regional infrastructure, and establishing strong, sustainable communities.

#### ***Rocky View County/City of Calgary Intermunicipal Development Plan (Statutory – 2012)***

The site is within the Policy Area on Map 1: Plan Area of the [Rocky View County/City of Calgary Intermunicipal Development Plan](#). The proposal is consistent with the policies of the *Rocky View County/City of Calgary Intermunicipal Development Plan*.

#### ***Municipal Development Plan (Statutory – 2009)***

[Map 1: Urban Structure](#) of [Municipal Development Plan](#) (MDP) includes the subject parcel within the Planned Greenfield with Area Structure Plan (ASP) typology. The MDP recognizes that ASPs are appropriate policies to provide specific direction for development of local communities in these areas. The *Keystone Hills Area Structure Plan* is the relevant ASP for the subject site.

#### ***Climate Resiliency Strategy (2018)***

The [Climate Resilience Strategy](#) contains the Climate Mitigation Action Plan (CMAP) and the Climate Adaptation Action Plan (CAAP). This application includes 7.06 hectares of environmental reserve land and enables a constructed wetland and storm pond facility that meets the intent of CAAP Program 6: Natural Assets Management.

#### ***Keystone Hills Area Structure Plan (Statutory – 2012)***

The subject site is located within the area covered by the [Keystone Hills Area Structure Plan](#) (ASP).



Planning & Development Report to  
Calgary Planning Commission  
2020 June 04

ISC: UNRESTRICTED  
CPC2020-0571

## **Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135**

---

Map 4: Growth Management Overlay of the ASP shows the subject site within the Growth Management Overlay. The removal of Growth Management Overlay (GMO) was not required for this application as it only proposes the constructed wetland and storm pond facility, which is required infrastructure for the adjacent lands which have previously received GMO removal. The subject application does not presuppose a decision on the future GMO removal for the remaining lands within this service area. In order to approve land use and an outline plan for the remainder of the lands to the west and south of the subject site, the ASP requires removal of the Growth Management Overlay. This GMO removal is not part of the subject application.

Map 5: Land Use Concept of the ASP shows the subject lands within the Environmental Open Space Study Area. Environmental Open Space is composed of environmentally sensitive lands that are protected through land use designations, conservation easements, or other mechanisms. Section 10.4.1 Environmental Open Space policies within the ASP provides guidance for the composition and protection of lands within Environmental Open Space Study Area.

The proposal is consistent with the policies of the ASP.

### **Social, Environmental, Economic (External)**

The proposal provides for approximately 7.06 hectares (17.43 acres) of Environmental Reserve (ER) for constructed wetlands. For the constructed wetland and storm pond facility, the developer proposes a Stormwater Kidney design that combines traditional storm pond elements and natural wetland features (see concept plan in Attachment 4). The Stormwater Kidney is considered a less expensive alternative to conventional storm ponds, with less costly infrastructure and maintenance requirements which results in increased economic longevity, resilience, and sustainability.

This application would allow for a constructed and integrated wetland and storm pond facility that is a necessary infrastructure component to enable existing approved and future development in the area. This integrated facility will provide recreational open space within this community while serving an important ecological and infrastructure function. The ongoing and future development activity supported by this proposal will help sustain economic opportunities in this area.

### **Financial Capacity**

#### ***Current and Future Operating Budget***

There are no known impacts to the current operating budget as the existing temporary storm pond is operated and maintained wholly by the developer; and decommissioned in the future at the developer's expense. In the future, the City will operate and maintain the permanent storm pond facility. Expenses related to the City's operating budget were factored in at the time of GMO removal for the Livingston Community.

Planning & Development Report to  
Calgary Planning Commission  
2020 June 04

ISC: UNRESTRICTED  
CPC2020-0571

**Land Use Amendment in Lewisburg (Ward 3) at 14900 - 6 Street NE and 800 - 144 Avenue NE, LOC2019-0135**

---

***Current and Future Capital Budget***

The proposed amendment does not trigger Growth Management Overlay removal or capital infrastructure investment and therefore there are no growth management concerns at this time. It is noteworthy that, an approval of this application does not pre-suppose an acceptable design or approval decision on adjacent unapproved lands in either Growth Management Overlay removal or in community design.

**Risk Assessment**

If this application is not approved, and thus this essential servicing infrastructure does not advance to development stages, further development within the community of Livingston, which has Growth Management Overlay removal, would not be able to proceed at this time.

In addition to The City's approval, Water Act Approval from the Province is required prior to the proposed servicing infrastructure construction, which could also have an impact on timelines.

**REASON(S) FOR RECOMMENDATION(S):**

The proposed land use amendment will facilitate development in keeping with the direction provided by the *Municipal Development Plan* and the *Keystone Hills Area Structure Plan*. This land use amendment is necessary to allow for a constructed wetland and storm pond facility which is critical to service the previously approved urban development in the Livingston and future Lewisburg Communities.

The constructed wetland and storm pond facility is a cost-effective alternative to conventional storm ponds and will enhance the aesthetical and recreational opportunities in the area resulting in economic longevity, resilience, and sustainability.

**ATTACHMENT(S)**

1. Applicant Submission
2. Proposed Outline Plan
3. Catchment Area for Proposed Pond
4. Concept Plan