



Regional Plan Land Use Map Amendment

REPORT TITLE: Eagle Heights Country Residential Subdivision - West 1/2 11-37-4-W3
Refine the Green Network Study area (GNSA) and expand Country Residential Land Use Area

P4G MUNICIPALITY: RM of Corman Park

RECOMMENDATIONS

1. That the Regional Oversight Committee endorse in principle the Regional Land Use Map, appended to the Saskatoon North Partnership for Growth Regional Plan as Exhibit 2, by amending the land use designation of the West 1/2 11-37-4-W3 from Green Network Study Area to Country Residential as shown in the attached Eagle Heights Regional Land Use Map Amendment Report based on inclusion of the conditions of approval on the subdivision and rezoning application proposed by the RM of Corman Park and confirmed by the applicant's consultant, in the email to PAC dated April 2, 2020; and,
2. That a copy of this report be forwarded to the Rural Municipality of Corman Park, Cities of Martensville, Warman and Saskatoon and the Town of Osler for endorsement in principle by each partner Council.

REPORT HIGHLIGHTS

- The purpose of this report is to recommend endorsement, in principle, of an amendment to the Regional Land Use Map that forms part of the Saskatoon North Partnership for Growth (P4G) Regional Plan;
- The P4G Regional Plan has received endorsement by the Regional Oversight Committee (ROC) and by its partner Councils but has not received final approval by the Ministry of Government Relations. As such, this request falls under the Interim Regional Plan Changes process, as outlined in the P4G Governance and Implementation Strategy; and
- The applicant has completed a first submission of a Comprehensive Development Review (CDR). If P4G supports the proposed land use map change, subsequent revisions of the CDR will be completed and submitted to Corman Park so subdivision and rezoning can be considered.

DISCUSSION

Amendments are addressed in Section 29 – Governance of the Regional Plan. Accordingly, no amendments to the Regional Land Use Map shall be considered unless a concept plan or other detailed planning for the area has been completed by the municipal council. In this regard, the developer has completed a first submission of a Comprehensive Development Review (CDR).

The subject lands are located within the Country Residential Area as shown on the Regional Land Use Map. The proposed Country Residential Development is consistent with the Land Use intended for the area. However, the lands also include the Green Network Study Area (GNSA). The developer proposes to encroach onto the GNSA designated lands with the development. To support the encroachment and refine the boundaries of the GNSA, a Natural Area Screening study was submitted with the application.

Pursuant to the GNSA policies in the Regional Plan:

13.03 Local Refinement Through Concept Plans.

Prior to the development of a region-wide study, the Green Network Study Area may be refined by a Concept Plan or other detailed assessment. This refinement shall be consistent with the criteria under Policy 13.02.

The criteria under Policy 13.02 includes consideration of wetlands, drainage areas, habitat corridors, and important ecological areas. The developer submitted a Natural Area Screening Study and Drainage Plan to address the criteria in 13.02. The study concluded that “environmental impacts resulting from the planned activities on this Site are expected to be low because of the dominance of non-native and invasive vegetation and the plan to incorporate portions of these natural areas in the development.” Further, “the development plan for the site proposes the retention of approximately 25% of the gross land area to be publicly dedicated and maintained in a naturalized state in conjunction with a stormwater management plan for the site.” The study also recommends mitigation activities such as conducting construction activities outside of avian breeding periods; minimizing disturbance to natural vegetation; providing erosion and sediment control; and restricting removal of trees and vegetation within 20 m of water bodies in accordance with the RM of Corman Park Zoning Bylaw.

The application was circulated to PAC members for review and comment. The only comments received were from the City of Saskatoon. The City had concerns with the quality of the assessment and suggested that further information and a more rigorous field study be undertaken to ensure impacts to natural areas are avoided and/or minimized as required by Regional Plan policies.

In response to the concerns by the City, Corman Park has drafted conditions of approval that include a rare plants survey, a mitigation plan and a comprehensive stormwater management plan. Additional work on the final plan of subdivision may also increase the buffer adjacent to natural areas.

In summary, the proposed development a Country Residential subdivision is consistent with the future land use in the Regional Plan. Further, the refinement of the GNSA, which is contemplated by policy, is supported by a Natural Area Study undertaken by the applicant and will be enhanced through the conditions of approval on the subdivision and rezoning.

In this regard, the P4G Director recommends approval of the Land Use Map amendment by the Regional Oversight Committee.

Attachments

- 1. Eagle Heights Regional Land Use Map Amendment Report**
- 2. City of Saskatoon Comments**
- 3. Corman Park Conditions of Approval**
- 4. Mitigation Plan Requirements**



Land Owner	101120614 Saskatchewan Ltd.
Legal Land Description:	West 1/2 11-37-4-W3
R.M. Council Division:	1
R.M. File Manager:	Tanner Tetreault
Consultant:	Associated Engineering

The R.M. of Corman Park has received an application for subdivision and rezoning of a multi-parcel country residential development on the West ½ of 11-37-4-W3. The desired rezoning on the lands will be from Agricultural District (AG) to Country Residential 1 District (CR1) by means of a holding provision across a multi-phased development process. The applicant is seeking to refine the Green Network Study area (GNSA) within the Saskatoon North Partnership for Growth (P4G) Regional Land Use Map and expand the designation of the bordering Country Residential land use. This would allow the current development concept to be in alignment with the P4G land use map; currently their development concept and phasing plan is not in alignment with the P4G land use map.

Associated Engineering conducted a Natural Area Screening (NAS) on the lands and has provided the R.M. of Corman Park with the results and potential remediation efforts that may be undertaken in order to facilitate the change of land use. PAC should review and confirm the findings of the NAS in order to support the proposed land use map change.

The applicant has also completed a first submission of a Comprehensive Development Review (CDR). If P4G supports the proposed land use map change, subsequent revisions of the CDR will be completed and submitted to Corman Park so we can proceed with consideration of the subdivision and rezoning. If any additional information from the CDR is required to consider the land use map amendment we can provide it, but recognize that components of the CDR may change given potential land use map amendments.

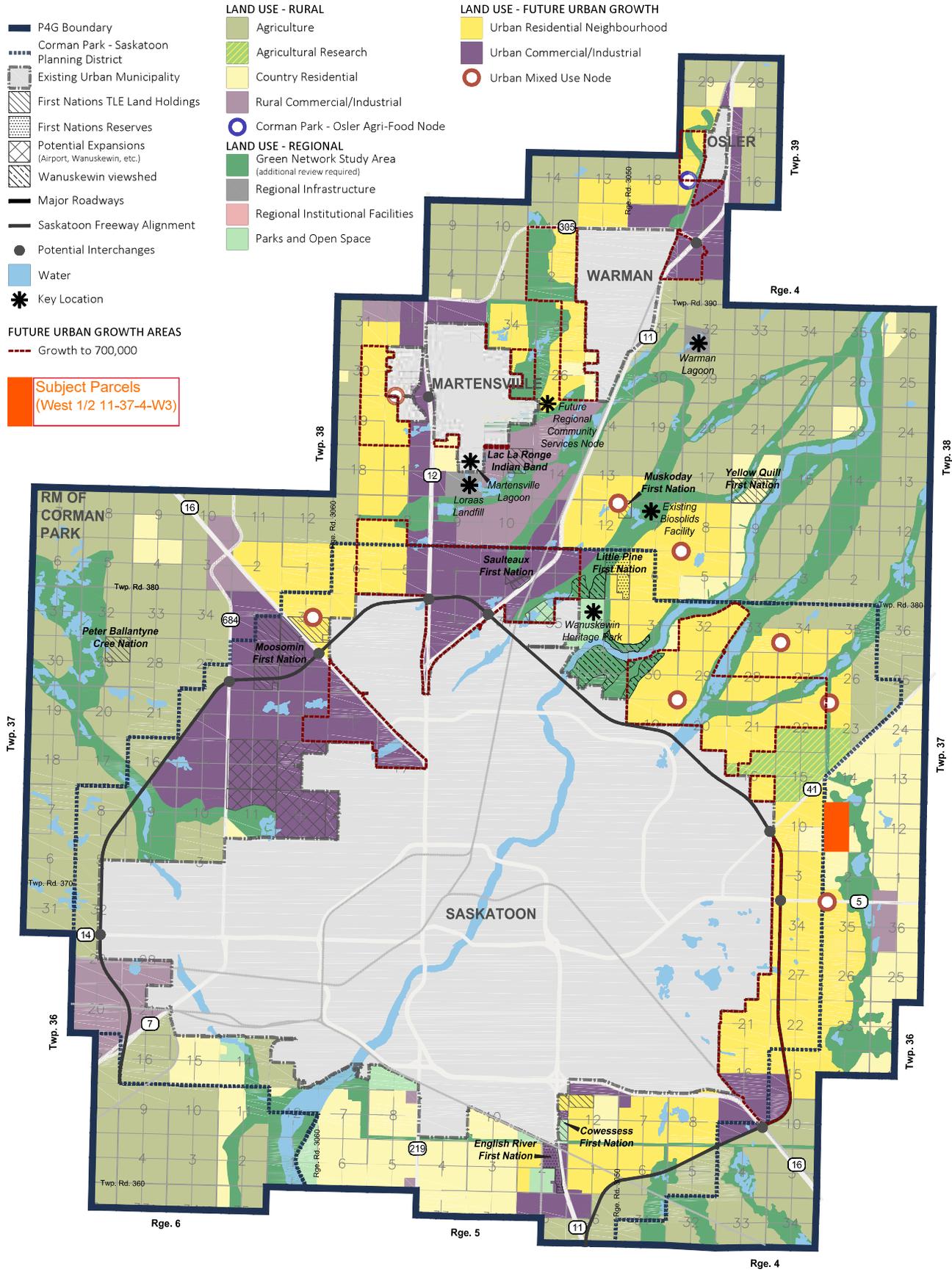
The proposed changes to the land use map will reduce the overall amount of GNSA and increase the level of country residential. The rationale presented within the NAS is that sections of the currently designated GNSA are non-sensitive and the presence of non-native and invasive plant species lowers the quality of the location. If the land use map change is supported it would increase the amount of country residential development shown, and decrease the amount of GNSA. However since the GNSA was always intended to be refined, we do not see a concern with the changes to these land use categories. The potential change to country residential is in conformance with adjacent land designations.

The R.M. circulated the NAS to a third part consultant to confirm the findings presented with the NAS are accurate and that no serious factors that could prohibit development were overlooked. The review confirmed that overall, the high-level results and recommendations of the NAS report appear to be accurately represented and further studies prior to construction, including field surveys, may be required to adequately mitigate potential impacts of construction on the environment. Although some wildlife habitat will be lost, retention and enhancement of natural

vegetation and permanent wetland habitat in the proposed storm water management bodies and the remainder of the GNSA will continue to provide important wildlife habitat. With the proposed loss of several Class II wetlands and one Class V wetland, a much more comprehensive storm water management/drainage plan will be required to mitigate impacts that the proposed development may have on drainage and flooding. Conditions of approval would be added to the subdivision and rezoning approval to consider these requirements; the required servicing agreement may also include references to any requirements such as construction season activity restriction, servicing requirements, etc.

If more information or questions arise please contact the R.M. file manager, Tanner Tetreault. If there are specific conditions of approval on the subdivision and rezoning that would assist in your municipality supporting the P4G land use map change, please provide us with those details for consideration.

SASKATOON NORTH PARTNERSHIP FOR GROWTH (P4G) REGIONAL LAND USE MAP FUTURE URBAN GROWTH AREAS TO 700K





Associated
Engineering

GLOBAL PERSPECTIVE.
LOCAL FOCUS.

Associated Engineering (Sask.) Ltd.

1 - 2225 Northridge Drive
Saskatoon, SK, Canada, S7L 6X6

TEL: 306.653.4969

FAX: 306.242.4904

www.ae.ca

January 7, 2020

File: 2012-4208

Rebecca Row
Director of Planning
RM of Corman Park No. 344
111 Pinehouse Drive
Saskatoon, SK
S7K 5W1

Re: REQUEST FOR AMENDMENT TO THE REGIONAL LAND USE MAP

Dear Rebecca:

Associated Engineering has been contracted to support an application to develop a new multi-parcel country residential subdivision in the W½ 11-37-4-W3M known as Eagle Heights Country Residential Estates. It is our understanding that a portion of this property is designated as a Green Network Study Area by the Regional Land Use Map and that this designation is intended to identify and protect important ecological areas for continued use for stormwater conveyance and habitat protection.

A Natural Area Screening (NAS) was completed for the above noted property to document and inventory the current environmental, natural, cultural and historical assets that are present within the development area as a means of refining the boundaries of the Green Network Study as stated in Section 13.01 of the Saskatoon North Partnership for Growth Regional Plan.

A copy of the above noted NAS report and correspondence from the Ministry of Parks, Culture and Sport is attached to support a request to re-designate all lands outside of the three planned municipal utility parcels to a Country Residential use to enable consideration of an application for rezoning and subdivision. We note that a Comprehensive Development Review (CDR) report was prepared and submitted in support of this application which offers an assessment of drainage in the area. As such, the attached NAS focuses on identification and qualification of wetlands, vegetation and habitat within the subject property. It is anticipated that the information contained within the attached document will be incorporated into the final CDR submission, offering a complete picture of the current and future conditions on the site.

The areas of the site intended to remain undeveloped are intended to be enhanced as naturalized storm retention areas as envisioned by the Green Network Study Area. Enhancement of these existing wetland areas will include some regrading to better delineate the boundaries of the water bodies and to increase the storage capacities of these natural systems to respond to the development of the surrounding properties. The construction of these improvements will seek to minimize the unnecessary disturbance wherever possible. Where disturbance is inevitable, restoration and naturalization will be

A Carbon
Neutral
Company



Platinum
member

completed to reintroduce native plantings which are compatible with the existing plant communities in the surrounding area. Naturalization of the retention areas is consistent with the Regional Plan policies of incorporating natural features and landscapes into new country residential subdivision designs. Naturalization of these areas restores the ecological function of the wetland and riparian areas which in turn offers support for a high rate of biological activity which enables the natural transformation of many of the common pollutants that occur in stormwater runoff into harmless by-products and essential nutrients that can be used to promote and support additional biological productivity in these areas. These transformations are accomplished by virtue of the inherent natural environmental energies of sun, wind, soil, plants and animals within these systems.

Thank you for consideration of this request. We trust that the attached documentation offers sufficient support to consider the refinement of the boundaries of the Green Network Study Area. We anticipate that a detailed development plan for the construction of improvements and subsequent naturalization of these key ecological areas will be prepared and submitted to fulfil the conditions of approval for the proposed subdivision. Please feel free to contact me if you have any questions concerning our intentions or about the information represented in this letter.

Yours truly,



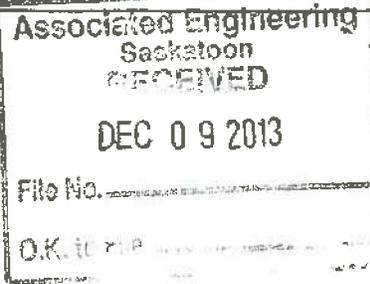
Bill Delainey, RPP
Project Manager

BD/np

Attachments: Natural Area Screening Report
Letter of Approval - Ministry of Parks, Culture and Recreation (December 2013)
Green Network Study Area Figure



Ministry of
Tourism, Parks,
Culture and Sport



Heritage Conservation Branch
2nd Floor 3211 Albert Street
Regina, Saskatchewan
S4S 5W6

(306) 787-5774
nathan.friesen@gov.sk.ca

December 4, 2013

Our File: 13-770

Ms. Kendra Raymond
Associated Engineering
1-225 Northridge Drive
SASKATOON SK S7L 6X6
Phone: (306) 653-2137 ext 484
Email: raymondk@ae.ca

Dear Ms. Raymond:

**RE: 95 Lot Country Residential Subdivision – RM of Corman Park:
W ½ 11-37-4 W3M;
HERITAGE RESOURCE IMPACT ASSESSMENT RESULTS**

Please be advised we received (November 28, 2013) a report from CanNorth Environmental their heritage resource impact assessment (HRIA) of this project completed under Investigation Permit #13-224.

No new or previously recorded heritage sites were observed in the course of pedestrian survey and testing of the development area, despite the high potential of the area. Therefore, this office has no further concerns relating to this project.

On behalf of the Heritage Conservation Branch, please accept our appreciation for having commissioned this investigation, and for your continuing assistance and support in preserving Saskatchewan's archaeological heritage.

Sincerely,

Nathan Friesen
Senior Archaeologist
Archaeological Resource Management



Legend



Current Green Network Study Area



Proposed New Green Network Study Area

Note: The designation of the orange shaded areas outside of the proposed new Green Network Study Areas are intended to be changed to Country Residential.

Project No. 2012-4165

Date: 2019/12/20

Scale: 1:5000



Eagle Heights Country Estates

Figure 1 - Green Network Study Area

REPORT

Chris Cebryk

Eagle Heights Country Residential Estates Natural Area Screening



JANUARY 2020

CONFIDENTIALITY AND © COPYRIGHT

This document is for the sole use of the addressee and Associated Engineering (Sask.) Ltd. The document contains proprietary and confidential information that shall not be reproduced in any manner or disclosed to or discussed with any other parties without the express written permission of Associated Engineering (Sask.) Ltd. Information in this document is to be considered the intellectual property of Associated Engineering (Sask.) Ltd. in accordance with Canadian copyright law.

This report was prepared by Associated Engineering (Sask.) Ltd. for the account of Chris Cebryk. The material in it reflects Associated Engineering (Sask.) Ltd.'s best judgement, in the light of the information available to it, at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Associated Engineering (Sask.) Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

TABLE OF CONTENTS

SECTION	PAGE NO.
Table of Contents	i
1 Introduction	1-1
2 Regulatory Context	2-1
2.1 Federal	2-1
2.2 Provincial	2-1
3 Assessment Methods	3-3
4 Screening Results	4-3
4.1 Land Use Designation	4-3
4.2 Soil and Topography	4-4
4.3 Ecoregion and Terrestrial Vegetation	4-4
4.4 Groundwater Wells and Groundwater	4-5
4.5 Aquatic Resources	4-5
4.6 Wildlife and Wildlife Habitat	4-6
4.7 Protected Species	4-6
4.8 Heritage Resources	4-6
5 Summary and Recommendations	5-7
6 Natural Area Inventory	6-1
7 Site Photos	7-1
Certification Page	7-1

1 INTRODUCTION

A natural area (environmental) screening was requested by the RM of Corman Park Administration in conjunction with the consideration of an application to rezone and subdivide 84 country residential lots situated in the W ½ 11-37-04-03M known as Eagle Heights Country Residential Estates (the Site).

The objective of this screening is to document and inventory the current environmental, natural, cultural and historical assets that are present within the development area as a means of refining the boundaries of the Green Network Study as stated in Section 13.01 of the Saskatoon North Partnership for Growth Regional Plan.

2 REGULATORY CONTEXT

The following federal and provincial acts, regulations and policies influence development within the Site.

2.1 Federal

Species at Risk Act

The purposes of the *Species at Risk Act* are to prevent wildlife species in Canada from disappearing, to provide for the recovery of wildlife species that are extirpated (no longer exist in the wild in Canada), endangered, or threatened as a result of human activity, and to manage species of special concern to prevent them from becoming endangered or threatened. The Act legislates the protection of these species and the designation of critical habitat through agreement, permits, public registry and land dedication.

Migratory Birds Convention Act

This Federal Act provides policies and authorizes the Federal Minister of Environment to control activities that potentially disturbs migratory birds, their eggs and nests. The Act stipulates that no active nesting site or habitat of a migratory bird species shall be disturbed during nesting or rearing periods which generally occurs between April and August.

The Canadian Environmental Protection Act

The Canadian Environmental Protection Act is aimed at preventing pollution and protecting the environment and human health. The goal of the Act is to contribute to sustainable development - development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Discharges of pollution into the environment fall under the jurisdiction of this Act.

The Canada Wildlife Act

The Canada Wildlife Act covers the protection of at-risk plant and animal species. The Act prohibits actions that would impact species at risk and allows for the designation of these species as extirpated, endangered, threatened, or vulnerable.

2.2 Provincial

Saskatchewan Wetland Policy

This policy which was adopted in 1995, encourages sustainable management of wetlands and the restoration and rehabilitation of degraded wetland areas.

The Weed Control Act

The Weed Control Act requires that every owner or occupant of land shall, under the supervision of a designated municipal weed inspector, take measures to control or eradicate any prohibited, noxious and nuisance weeds as designated by the Act.

The Wildlife Act

The Wildlife Act prohibits anyone from killing, injuring, possessing, disturbing, taking, capturing, harvesting, genetically manipulating or interfering with any wild species at risk. Where a breeding site for a species at risk is identified within a study area, the Saskatchewan Ministry of Environment should be consulted to confirm a recommended setback distance at the time of development.

The Planning and Development Act/Dedicated Lands Regulations

The Planning and Development Act establishes the basis for responsible land management in the province. The Act defines what characteristics of land justify its designation as Environmental Reserve and/or a Municipal Utility Parcel. Environmental Reserve is deemed to be an appropriate designation where the land consists of:

- a. a ravine, coulee, swamp, natural drainage course or creek bed;
- b. wildlife habitat or areas that:
 - o are environmentally sensitive;
 - o or contain historical features or significant natural features;
- c. land that is subject to flooding or is, in the opinion of the approving authority, unstable; or
- d. land that abuts the bed and shore of any lake, river, stream or other body of water and that is required for the purpose of:
 - o the prevention of pollution;
 - o the preservation of the bank; or
 - o the protection of the land to be subdivided against flooding.

The Act also recognizes and accounts for the dedication of land for the purposes of locating a public work which includes drainage systems and facilities.

Environmental Assessment Act

The Environmental Assessment Act states that a proponent of a 'development' shall conduct an environmental impact assessment. A 'development' under the Act is defined as any project, operation or activity that is likely to:

- have an affect on any unique, rare or endangered feature of the environment;
- substantially utilize any provincial resource and in so doing pre-empt the use, or potential use, of that resource for any other purpose;
- cause the emission of any pollutants or create by-products, residual or waste products which require handling and disposal in a manner that is not regulated by any other Act or regulation;
- cause widespread public concern because of potential environmental changes;
- involve a new technology that is concerned with resource utilization and that may induce significant environmental change; or
- have a significant impact on the environment or necessitate a further development which is likely to have a significant impact on the environment.

Environmental Management and Protection Act

Pursuant to the above noted Act, no person shall discharge or allow the discharge of a substance into the environment in an amount, concentration or level or at a rate of release that may cause an adverse effect. The Act also regulates shoreline alteration activities and states that a permit is required if any of the following are to occur:

- alter or cause to be altered the configuration of the bed, bank or boundary of any river, stream, lake, creek, marsh or other watercourse or water body;
- remove, displace or add any sand, gravel or other material from, in or to the bed, bank or boundary of any river, stream, lake, creek, marsh or other watercourse or water body; or
- remove vegetation from the bed, bank or boundary of any river, stream, lake, creek, marsh or other watercourse or water body.

3 ASSESSMENT METHODS

The methods used to complete this screening include:

- A desktop study to gather available background data using readily available information about the Project area (i.e. plans, maps, figures, aerial photographs) and existing databases (e.g. the Saskatchewan Conservation Data Center, the Biodiversity Website (HABISask), GeoSask, the Committee on the Status of Endangered Wildlife in Canada status reports, Schedule 1 of Species at Risk (SARA), the Government of Saskatchewan’s Bird’s Atlas, the Water Security Agency’s Water Well Information Database); and
- A preliminary heritage and archaeological screening assessment using the Government of Saskatchewan, Ministry of Parks, Culture and Sports, Developer’s Online Screening Tool.

Designated areas would consist of National or Provincial Park Lands, Historic Parks, Water Security Agency, Game Preserve, National Wildlife Area, Migratory Bird Sanctuary, Conservation Easements, Crown Conservation Easements, Crown Land Subdivisions, Ecological Reserves, Fish and Wildlife Development Fund Lands, Community Pastures – Federal, Ramsar Wetland, Reservoir Development Areas, Representative Areas, Community Pastures – Provincial, Special Management Areas, Wildlife Habitat Protection (WHPA), Wildlife Refuge, Private Stewardship Agreement, Wind turbine Avoidance Zone

The study area for the screening consists of 2 km radius from the approx. center of the Site that is being considered, unless otherwise noted.

In addition to the desktop screening, a visit field was conducted by Wade Sumners, P.Biol. on October 25, 2019 to confirm the land use and dominant plant communities.

4 SCREENING RESULTS

4.1 Land Use Designation

Obtained from HabiSask - <http://biodiversity.sk.ca/HABISask.htm>

Surrounding Land Use: Treed, wetland, cropland, residences

Designated areas: none

The nearest Agricultural Crown Land can be found 8.5 km west of the property, adjacent to the South Saskatchewan River, while the nearest Migratory Bird Sanctuary is located at the Saskatoon Forestry Farm Park and Zoo which is 6.9 km to the west.

Nearest Aboriginal Lands: Asimakaniseekan Askiy I.R. 102 - Urban reserve within the City limits of Saskatoon - 8.4 km southwest of the Site.

4.2 Soil and Topography

Obtained from The Soils of the Saskatoon Map Area (73B) –
<http://sis.agr.gc.ca/cansis/publications/surveys/sk/sks4/index.html>

Chernozemic Dark Brown soils (formed under a grassland vegetation) - developed from a parent material that is medium to moderately fine textured, moderately to strongly calcareous, being comprised of unsorted glacial till and silty glacio-lacustrine deposits.

Map Units (dominant): W4, E3

Texture: loam

Landform: knob and kettle

Slope: 6 - 9 % moderately sloping or gently rolling (class 4)

4.3 Ecoregion and Terrestrial Vegetation

Ecozone: Prairie

Ecoregion: Moist Mixed Grassland

Obtained from <http://biodiversity.sk.ca/HABISask.htm> and Acton, D.F., G.A. Padbury, C.T. Stushnoff. 1998. Ecoregions of Saskatchewan. Canadian Plains Research Center, University of Regina, Regina, SK.

Trees and shrubby vegetation in this region generally occur along stream courses and permanent sloughs. The margins of the wetlands and small lakes are typically dominated by cattails, bulrushes, and sedges. The remaining land base is mostly agricultural crops and grasses with a number of flowering plants and shrubs found in the lower, moister areas (Acton et al. 1998). Native vegetation in this ecoregion is limited to non-arable pasture lands, where spear grasses (*Hesperostipa* spp.) and wheatgrasses (*Agropyron* and *Elymus* spp.), along with deciduous shrubs such as snowberry (*Symphoricarpos albus*), rose (*Rosa* spp.), chokecherry (*Prunus virginiana*), and wolf willow (*Elaeagnus commutate*) are among the more common species. Small aspen groves are typically found around the sloughs and are a characteristic feature of the landscape.

During the field visit it was observed that the vegetation types included modified grassland (dominated by smooth brome grass (*Bromus inermis*), Kentucky bluegrass (*Poa pratensis*), snow berry and wolf willow), treed areas, and wetlands. A couple small hill tops did have elements of native grassland (e.g. speargrass, wheatgrass, and june grass (*Koeleria macrantha*)) but these areas have been invaded by the invasive grasses and shrubs that are dominant at the site. Treed areas were comprised of trembling aspen (*Populus tremuloides*), balsam poplar (*Populus balsamifera*), and the following shrubs: Saskatoon (*Amelanchier alnifolia*), willow (*Salix* spp.), dogwood, chokecherry, rose, wolf willow, and snowberry. Cattails (*Typha latifolia*), trembling aspen, willow (*Salix* spp.), sow thistle (*Sonchus arvensis*), slough grass (*Beckmannia syzigachne*), foxtail barley (*Hordeum jubatum*), reed canary grass (*Phalaris arundinacea*), and rushes (*Juncus* spp.) were found associated with low and seasonally wet areas throughout the Site.

As well, a moderately sized (area of approx. 1,300 m²) stand of European buckthorn (*Rhamnus cathartica*) was observed near a temporary wetland in the northern portion of the Site. This species is invasive often forming dense, even-aged thickets, crowding and shading out native shrubs and herbs. A carpet of buckthorn seedlings often occurs and was present in this stand; preventing native tree and shrub establishment. This species is spread by seed and often acts as a diuretic for birds that eat its berries. Approx. 10,000+ individuals were estimated to occupy this stand.

4.4 Groundwater Wells and Groundwater

Water well drilling records near the Site (Obtained from - <https://gis.wsask.ca/Html5Viewer/index.html?viewer=WaterWells.WellsViewer/>)

10 water wells were identified within 1.6 km of the Parcel, two wells (soil test holes for research purposes) are within the Site.

It is important to note that the database does not contain or identify all the wells completed in the province, only those records that were submitted by drillers.

4.5 Aquatic Resources

Aquatic Resources present:

11 wetlands were observed within and crossing the Site. Wetlands were classified according to Stewart and Kantrud's (1971) wetland classification system (<https://pubs.usgs.gov/rp/092/report.pdf>) which identifies specific vegetation zones surrounding the wetland and assigns a class based on the vegetation present.

Area ID	Area (ha)	Class	Description	Concerns	Potential Mitigation
PW01	0.46	5	Permanent wetland	Affected by farming activities	Stormwater Management Plan
PW02	3.24	5	Permanent wetland	Affected by farming activities	Stormwater Management Plan
TW01	0.44	2	Temporary wetland	none	Lost
TW02	0.13	2	Temporary wetland	Affected by farming activities	Lost
PW03	8.43	5	Permanent wetland	Affected by farming activities	Stormwater Management Plan
TW03	0.25	2	Temporary wetland	None	Lost
TW04	0.21	2	Temporary wetland	None	Lost
TW05	0.13	2	Temporary wetland	None	Lost
TW06	0.01	2	Temporary wetland	None	Lost
PW04	1.47	5	Permanent wetland	Affected by farming activities	Lost
PW05	4.48	5	Permanent wetland	Affected by farming activities	Stormwater Management Plan

Permanent Wetland (PW) - An open-water zone dominates the deepest part of the wetland area while the presence of vascular plants in this zone is rare. Peripheral deep-marsh, shallow-marsh, wet-meadow, and low-prairie zones are often present surround this open water zone. These ponds and lakes maintain fairly stable water levels throughout the year.

Temporary Wetland (TW) – Vegetation occupies the central areas of shallower pond basins and commonly occurs as a peripheral band in most of the deeper ponds and lakes. The wet-meadow zone dominates the deepest part of the wetland area. A peripheral low-prairie zone is usually present. Water loss from bottom seepage is fairly rapid in this wetland and is maintained for only a few weeks after the spring snowmelt and occasionally for several days after heavy rainstorms in late spring, summer, and fall.

There are no watercourses (i.e. creeks) on the Site and there is no evidence that any of the wetland complexes contain fish or provide fish habitat.

4.6 Wildlife and Wildlife Habitat

The east portion of the Site has not been cultivated – likely due to an undulating landform in this area. Wildlife and signs of wildlife (e.g. scat, bark rubbing, twig browsing, numerous burrows) were present throughout this uncultivated area. Six white tail deer were observed during the survey. Although few birds were observed during this visit, it can be expected that this area is heavily used by migratory bird species due to the fruit bearing shrubs and suitable habitat in this portion of the Site. Wildlife trails were well established, in this area, which may also be contributed to by nearby resident usage (i.e. for walking).

4.7 Protected Species

Historic records of occurrence of protected species obtained from <http://biodiversity.sk.ca/HABISask.htm>

Table 4-1
Historic Occurrences of Protected Species within 2 km of the Site

Common Name	Species	Ranking	Preferred Habitat
Plains rough fescue	<i>Festuca hallii</i>	S3 (uncommon)	dry grassland ¹
White-top	<i>Erigeron strigosus</i>	S3 (uncommon)	open, disturbed sites ²
Whooping crane	<i>Grus americana</i>	S1 (very rare)	marshes, bogs, and shallow lakes ³

4.8 Heritage Resources

A Heritage Resources Impact Assessment (HRIA) was completed in the Site, on October 31st, 2013, by CanNorth. Areas were assessed using a combination of pedestrian reconnaissance and the excavation of subsurface shovel probes. No archaeological sites were identified, and it has been recommended that the Project be provided with regulatory approval, according to Section 63 of *The Heritage Property Act*, allowing the residential subdivision development to proceed as planned.

If Project plans are altered, or if heritage resources are discovered during construction, the Heritage Conservation Branch (HCB) must be notified immediately. In the event that human remains are discovered during construction activities, the local RCMP detachment and the HCB (306-787-2817) will need to be contacted.

¹ Moss, 1983. *Flora of Alberta*. 2nd Ed (J.G. Packer Editor) University of Toronto Press, Toronto.

² http://www.efloras.org/flora_page.aspx?flora_id=1

³ https://wildlife-species.canada.ca/species-risk-registry/species/speciesDetails_e.cfm?sid=34

5 SUMMARY AND RECOMMENDATIONS

The environmental impacts resulting from the planned activities on this Site are expected to be low because of the dominance of non-native and invasive vegetation and the plan to incorporate portions of these natural areas in the development. Cultivated land, modified grassland, trees and wetlands form the predominant vegetation types on the Site. Modified grassland is dominated by the aggressive expansion of smooth brome grass, Kentucky bluegrass, and shrubs; which are common and widespread in Saskatchewan. The species present in this modified grassland often change growing conditions (e.g. increasing leaf litter and retaining surface moisture) for native species, limiting their establishment. Areas with elements of native grassland on the Site are being invaded by these species, thereby limiting its designation as native prairie. It is expected that these areas will transition into the surrounding modified grassland vegetation type.

European buckthorn should be removed from the Site, by active management or partnering with a group that is managing this species. Meewasin Valley Authority has conducted an eradication program for this species along the South Saskatchewan River for several years (10+) and an agreement could be made to reduce the stand at the Site. This species is designated as a noxious weed in Saskatchewan and some form of control is required pursuant to *The Weed Control Act*. Leaving this stand idle will allow this species to continue to dominate the understory and spread beyond this Site.

The development plan for the site proposes the retention of approximately 25% of the gross land area to be publicly dedicated and maintained in a naturalized state in conjunction with a stormwater management plan for the site. This plan includes three parcels that have the largest wetlands within the property and are intended to be enhanced to provide greater delineation of the wetland boundaries and to increase their storage capacity in relation to the proposed development of the remaining areas of the Site. Naturalization of these stormwater retention areas will support the preservation of natural habitat and offer continued public access to these areas.

Construction activities should be conducted outside of the avian breeding period (before April 15 to August 30) as per *The Migratory Birds Convention Act*. If land clearing must take place during this period, a qualified person should be present to confirm that there are no active nests in the area within seven days of clearing. Construction activities should also seek to minimize the disturbance to the natural vegetation, provide erosion and sediment control and should be scheduled to avoid sensitive periods such as bird nesting. Where disturbance is inevitable, the site should be restored to a natural state through the reintroduction of compatible and complementary plant species.

The RM of Corman Park Zoning Bylaw encourages the retention of trees and vegetation during lot development and outright restricts the removal of trees or other vegetation within 20 metres of a water body where the removal could have a negative impact on the water body. This undeveloped buffer along the back of lots supports continued wildlife access and movement within the area while also providing substantial benefits for enhancing water quality. For bank stability, temperature control, minimization of direct impacts, and pollutant removal capacities, substantial benefits are achieved within the first 15 metres of vegetated buffer width. Studies indicate that marginal increases in benefits may accrue when buffer widths are increased beyond this distance.⁴ The application of stormwater best management practices (BMPs), when used in conjunction with riparian and wetland buffer strips, can result in a significant increase in water-quality benefits from vegetated buffers.

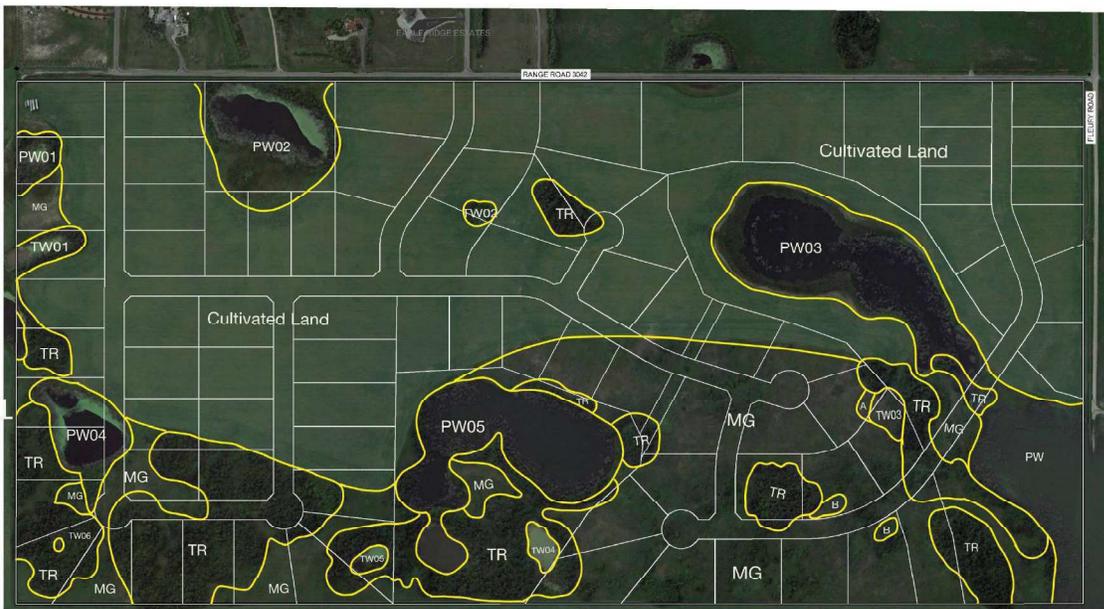
⁴ <https://www.stormh2o.com/home/article/13004950/riparian-and-wetland-buffers-for-waterquality-protection>

Based upon the observed conditions, the vegetative diversity in wetland areas can be considered low due to the existence of reed canary grass and other non-native species and the surrounding agricultural activities. It is common for wetlands that predominantly perform a stormwater management function to have a low ecological value. The Class 5 wetlands within the Site serve an important function in flood attenuation and improving water quality. The wetlands are part of a terminal basin where significant runoff storage occurs (+4 meters deep) before water tips out of the wetlands and into adjacent low-lying areas. As a terminal basin, these wetlands offer semi-permanent storage which supports a high rate of biological activity; enabling the natural transformation of many of the common pollutants that occur in stormwater runoff into harmless by-products and essential nutrients that can be used to promote and support biological productivity.⁵

⁵ City of Moncton, 2015. Naturalized Stormwater Management Guidelines, Public Report. Moncton NB.

6 NATURAL AREA INVENTORY

\\nas001\projects\2012\4165\00_Colony\Site_Dev\Advisory\02_00_Approach\Natural Area Screening\Report\Nat_Cultural Area Screening_20190107.docx



- Legend**
- PW - Permanent Wetland
 - TW - Temporary Wetland
 - MG - Modified Grassland
 - TR - Trees
 - A - European Buckthorn
 - B - Elements of Native Grassland

Project No. 2012-4165
 Date: 2019/12/20
 Scale: 1:5000



Eagle Heights Country Estates
 Natural Area Inventory

7 SITE PHOTOS



Photograph 1: Modified grassland, wetlands and cultivated fields were the dominant vegetation types on the Site



Photograph 2: Modified grassland was comprised of smooth brome grass, Kentucky bluegrass and shrubs



Photograph 3: European buckthorn (a noxious plant) was present in a moderately sized stand near a temporary wetland



Photograph 4: European buckthorn seedlings in the understory of the stand



Photograph 5: Several tree rubbings were observed



Photograph 6: Several burrows were observed on the site



Photograph 7: A temporary wetland observed at the Site

CERTIFICATION PAGE

This report presents our findings regarding the Natural Area Screening for the proposed Eagle Heights Country Residential Estates Development.

Respectfully submitted,

Prepared by:

Handwritten signature of Wade Summers in blue ink.

Wade Summers, P.Biol.
Senior Biologist

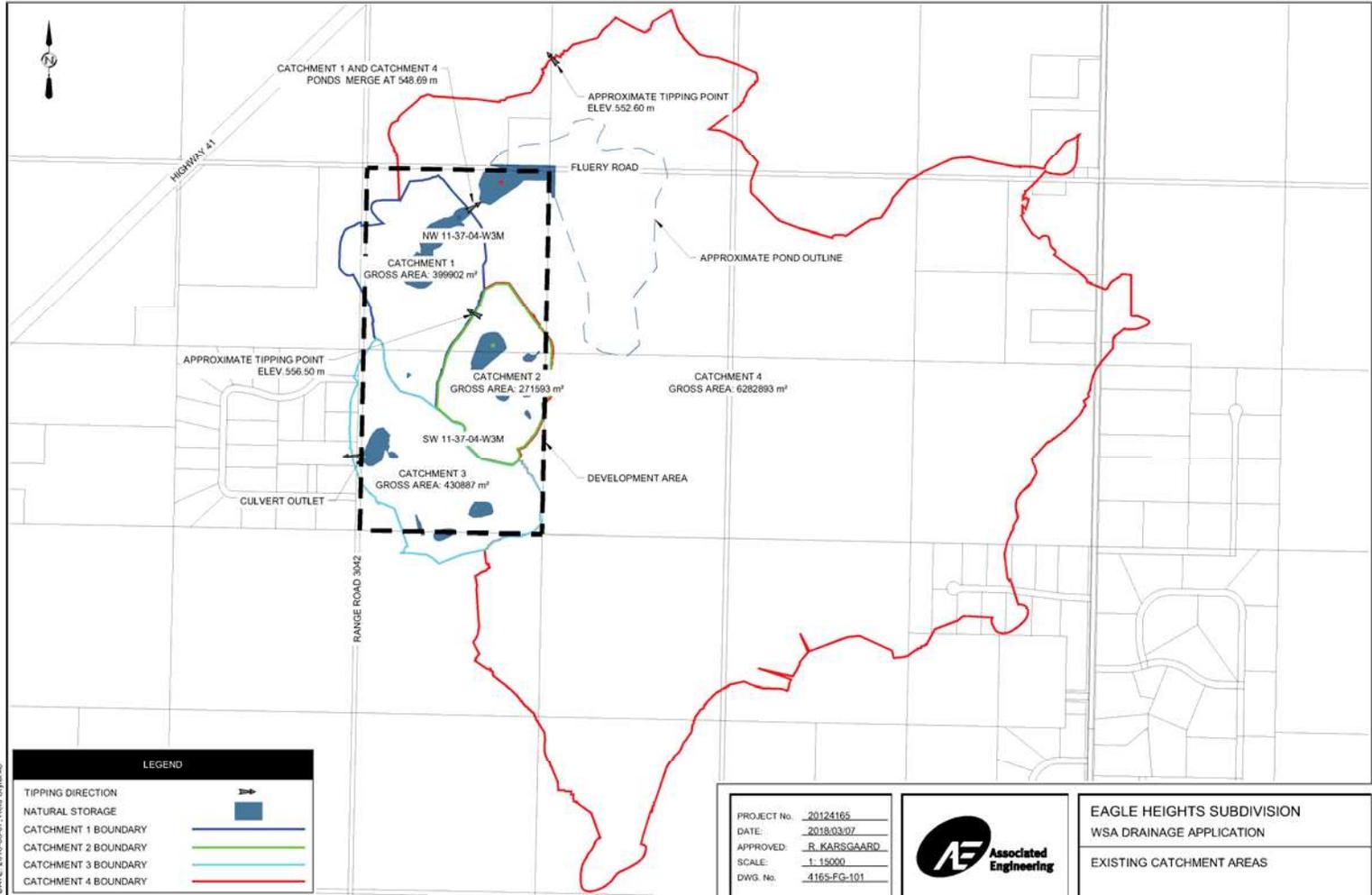
Reviewed by:

Handwritten signature of Bill Delainey in black ink.

Bill Delainey, RPP
Project Manager

Appendix G: Conceptual Drainage Plan

P:\2012\16500_Catchment_Rev_Development_Dwg\100_Catchment16500.dwg
 DATE: 2018-03-07, Reid Strydom



CATCHMENT 1 AND CATCHMENT 4
 PONDS MERGE AT 548.69 m

APPROXIMATE TIPPING POINT
 ELEV. 552.60 m

HIGHWAY 41

FLUERY ROAD

APPROXIMATE POND OUTLINE

NW 11-37-04-W3M

CATCHMENT 1
 GROSS AREA: 399902 m²

CATCHMENT 2
 GROSS AREA: 271593 m²

CATCHMENT 4
 GROSS AREA: 6282893 m²

APPROXIMATE TIPPING POINT
 ELEV. 556.50 m

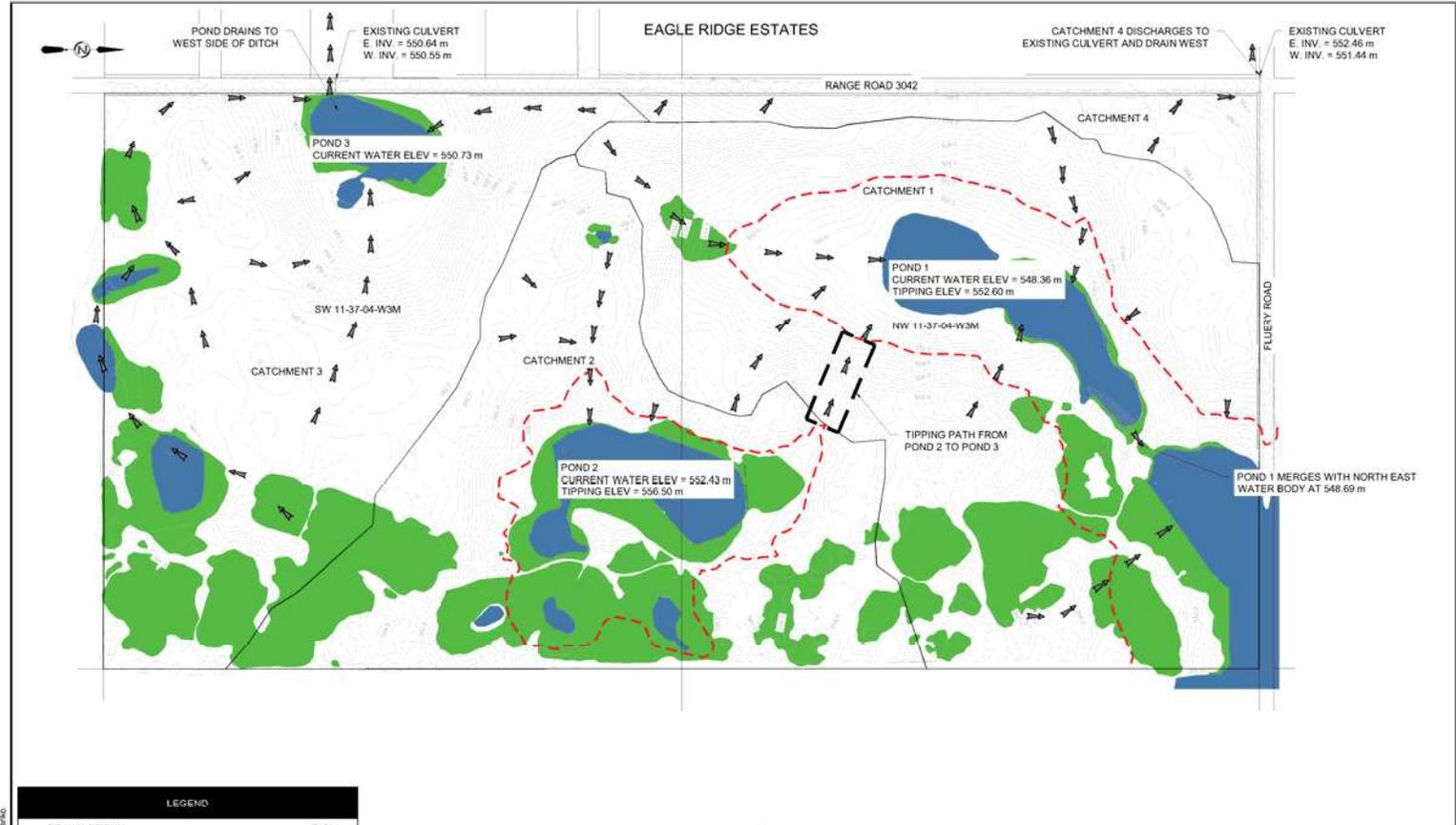
CULVERT OUTLET

RANGE ROAD 3042

SW 11-37-04-W3M

CATCHMENT 3
 GROSS AREA: 430887 m²

DEVELOPMENT AREA



P:\20124165\00_Catchk_Rev_Devel\Working_Dwg\100_Cat4165-FG-102.dwg
 DATE: 2018-03-07, Reid Strydom

LEGEND	
DRAINAGE RUN	
EXISTING PONDING AREAS	
EXISTING TREE AREAS	
WATER LEVEL AT NATURAL TIPPING ELEVATION	
CATCHMENT BOUNDARY	

PROJECT No.	20124165
DATE:	2018/03/07
APPROVED:	R. KARSGAARD
SCALE:	1:5000
DWG. No.	4165-FG-102



EAGLE HEIGHTS SUBDIVISION WSA DRAINAGE APPLICATION
EXISTING DRAINAGE

P:\20124165\00_Cibola_Riv_Draft\Working_Dwg\100_Col4165\FG-103.dwg
 DATE: 2018-03-07, Reid Strydom



LEGEND	
DRAINAGE CHANNEL	
EXISTING PONDING	
MUNICIPAL UTILITY	
DIRECTION OF DRAINAGE	
PROPOSED CULVERT	
FREEBOARD EASEMENT	

PROJECT No.	20124165
DATE:	2018/03/07
APPROVED:	R. KARSGAARD
SCALE:	1:5000
DWG. No.	4165-PG-103



EAGLE HEIGHTS SUBDIVISION WSA DRAINAGE APPLICATION
POST DEVELOPMENT DRAINAGE

Bill Delainey

From: Adam Antoine <Adam.Antoine@wsask.ca>
Sent: Thursday, May 17, 2018 4:35 PM
To: Bill Delainey
Cc: Ryan Karsgaard; Cory Boudreau; Al Keller
Subject: RE: Eagle Heights Conceptual Drainage

Afternoon Bill,

It appears there may have been a miscommunication with respect to our internal review of the proposed subdivision. I hope to provide clear direction and clarification as to what the Water Security Agency (WSA) is concerned with, and what is required of yourselves to alleviate those concerns. The WSA understands the memorandum details a conceptual design, and that a more detailed design would be still to come; however it would be the intention of everyone involved to establish an understanding and direction now, so as to prevent backtracking and further issues as the design and project matures. Based on your comments below, it is apparent you are concerned about overdesign and attempting to account for conditions out of your control and/or mandate. For the following, I have copied your concerns from May 14, 2018 and provided a clarifying statement:

- This pond is a terminal basin which will (in the absence of an extended drought) continue to collect run-off from surrounding lands resulting in an increase in water elevation regardless of new development
This is correct, the pond is contributed to by a much larger area than that just of your proposed development. WSA does not require your design prevent this waterbody from rising, but does require that your design does not contribute more than would be under natural conditions. Due to the sensitivity of the property to the north, the WSA would like to review the pre-post calculations for which you have summarized in the Memo.
- The elevation of the water in the slough could technically increase naturally to a point that causes the water to overtop the constructed berm on the property to the north as evidenced by the two FDRP claims in the past decade based upon the fact that the berm elevation is located at a lower elevation than the pond's tipping point
Agreed, similar to the comment above, due to the sensitivity of the situation we would prefer to review the calculations that led your design outcomes. This added review simply provides further confidence in the design moving forward.
- Development of Eagle Heights does not change the maximum storage volume of this pond, but accelerates the rate at which the maximum water volume and elevation is reached
The implementation of active and permanent storage to counteract development should mitigate any impacts, thus mimicking natural outflow characteristics.
- Your office is concerned that we have not accounted for sufficient storage on our client's property to account for the naturally occurring permanent storage combined with the incremental increase in run-off generated by a change in land use
The Memo describes requirements for permanent storage, but does not include detailed plans showing the retention facilities locations, dimensions, etc. However, this is likely due to still being in the conceptual phase of design. As the design matures, the WSA will require detailed plans showing the locations, dimensions, capacities, elevation and location of discharge pipes, etc. Also, if the design requires expansion or deepening of existing wetlands to act as retention facilities, a detailed geotechnical analysis should be included to ensure the groundwater table is at a sufficient depth so as to not interfere with designed storage capacities.
- Your office is concerned with the use of a 1:100 year 24 hour event for defining the incremental increase in post development run-off and rather would like to see us use a 1:500 year event instead to calculate the incremental storage needed
No, the WSA requires all permanent structures be built above the 1:500 year flood level (SBE). The pre-post design for stormwater purposes should account for a 1:100 year 24 hour event.

- We have surveyed the area surrounding this pond and estimated the tipping elevation which was used to define the spatial extent of water storage on our client's property and the subsequent EPWL (safe building elevation)
Yes, this is fine.
- Our client is being asked to increase his storage on the site to delay the inevitable on the site to the north or alternatively take responsibility for offsite improvements to mitigate flooding of the RM road and this adjacent property because of a lack of consideration of the local drainage conditions at the time of construction
No, we must ensure your clients development does not contribute flow volumes or rates beyond what would contribute naturally.
- For catchment 3, your office is concerned that because no drainage planning was completed for Eagle Ridge, it is difficult to assess the implications of additional flow volume resulting from development of Eagle Heights on current systems and that Eagle Heights should not proceed without a larger drainage plan being completed for the larger area
No, we must ensure your clients development does not contribute flow volumes or rates beyond what would contribute naturally. The WSA is not against the use of municipal infrastructure as flow control/limiting structures, but cautions the RM must be informed of this and accept that this structure is intended to restrict outflows to predevelopment rates.
- Catchment 3 is a more traditional basin with a defined discharge which means our drainage planning is to consider the typical considerations and outcomes (i.e. permanent and incremental storage and maintenance of predevelopment discharge rates)
Yes, you are on the right track. Just ensure the RM is fine with the use of its existing municipal culvert as the flow restrictive device, if not you may have to construct the facility to incorporate a discharge pipe within the development.

In summary, the WSA is satisfied with the direction and intention of the conceptual design. WSA asks that the final design report along with detailed plans and calculations be submitted for review, as described in the comments above. If either party has further questions or concerns, please do not hesitate to contact me.

Thank you,

Adam Antoine - A.Sc.T
 Technologist, Northwest Regional Services
 402 Royal Bank Tower 1101 - 101st Street
 North Battleford, SK S9A 0Z5
 Ph: 306.446.7555 | Fax: 306.446.7461
 wsask.ca | adam.antoine@wsask.ca



 Please consider the environment before printing this e-mail

CONFIDENTIALITY NOTICE: This email was intended for a specific recipient. It may contain information that is privileged, confidential or exempt from disclosure. Privilege and confidentiality is not waived. If the reader is not the intended recipient, use or distribution of this information is prohibited. If you have received this communication in error, please notify the sender by telephone or return email and delete or destroy all copies of the message.

From: Bill Delainey [mailto:delaineyb@ae.ca]
Sent: Monday, May 14, 2018 3:53 PM
To: Adam Antoine <Adam.Antoine@wsask.ca>
Cc: Ryan Karsgaard <karsgaardr@ae.ca>
Subject: Eagle Heights Conceptual Drainage

Good afternoon Adam. My email records indicate that our office had reached out to you several weeks back requesting clarification on what exactly you folks are looking for us to do to satisfy any concerns you may have regarding the proposed Eagle Heights development. Given the fact that our client is anxious to move forward with development of the site, I am contacting you to arrange a conference call to discuss and clarify what your office is seeking from us to allow a positive response to this application. Admittedly I am not a hydrologist nor an engineer so my understanding of the science is somewhat limited. That being said in reading the string of emails associated with this application, I get the

sense that your office has concerns with the impact of development on the volume and elevation of the main slough as well as how any increase in this volume may have detrimental effects on existing development to the north.

To assist my understanding of the situation, I would pose the following statements for further discussion:

- This pond is a terminal basin which will (in the absence of an extended drought) continue to collect run-off from surrounding lands resulting in an increase in water elevation regardless of new development
- The elevation of the water in the slough could technically increase naturally to a point that causes the water to overtop the constructed berm on the property to the north as evidenced by the two FDRP claims in the past decade based upon the fact that the berm elevation is located at a lower elevation than the pond's tipping point
- Development of Eagle Heights does not change the maximum storage volume of this pond, but accelerates the rate at which the maximum water volume and elevation is reached
- Your office is concerned that we have not accounted for sufficient storage on our client's property to account for the naturally occurring permanent storage combined with the incremental increase in run-off generated by a change in land use
- Your office is concerned with the use of a 1:100 year 24 hour event for defining the incremental increase in post development run-off and rather would like to see us use a 1:500 year event instead to calculate the incremental storage needed
- We have surveyed the area surrounding this pond and estimated the tipping elevation which was used to define the spatial extent of water storage on our client's property and the subsequent EPWL (safe building elevation)
- Our client is being asked to increase his storage on the site to delay the inevitable on the site to the north or alternatively take responsibility for offsite improvements to mitigate flooding of the RM road and this adjacent property because of a lack of consideration of the local drainage conditions at the time of construction
- For catchment 3, your office is concerned that because no drainage planning was completed for Eagle Ridge, it is difficult to assess the implications of additional flow volume resulting from development of Eagle Heights on current systems and that Eagle Heights should not proceed without a larger drainage plan being completed for the larger area
- Catchment 3 is a more traditional basin with a defined discharge which means our drainage planning is to consider the typical considerations and outcomes (i.e. permanent and incremental storage and maintenance of predevelopment discharge rates)

I look forward to an opportunity to clarify where my understanding of the current situation and basis for concern is incorrect. I understand that your office is taxed with obligations from a variety of sources and hope that a discussion on the telephone will assist in reducing your time commitment in this regard.

Please let me know when it would be convenient to call you to discuss and I will be sure to have the right persons from our office present so that we can move forward with our application in a efficient manner.

Regards,

Bill Delainey, RPP

Group Manager, Urban Planning

Associated Engineering (Sask.) Ltd.

1 - 2225 Northridge Drive, Saskatoon, SK S7L 6X6

Tel: 306.653.4969 | Cel: 306.261-9612 | Dir: 306.653.2137 Ext. 5489



Associated
Engineering

GLOBAL PERSPECTIVE.
LOCAL FOCUS.



Neal Sarnecki

From: Hartney, Laura <Laura.Hartney@Saskatoon.ca>
Sent: Friday, February 7, 2020 2:24 PM
To: Rebecca Row; Neal Sarnecki
Cc: Bonnie Gorelitz (planningmanager@martensville.ca); Brad Toth; Sheila Crawford; Manastyrski, Jodi; Heinrichs, Galen; King, Sarah; Tanner Tetreault
Subject: [PossibleSpam] Proposed P4G Land Use Map Amendment – RM of Corman Park – Country Residential/Green Network Study Area Proposed P4G Land Use Map Amendment – RM of Corman Park – Country Residential/Green Network Study Area

Hi,

As discussed at the January 20th PAC/REC meeting, thank you for circulating the proposal to amend the Regional Land Use Map (RLUM) from Green Network Study Area (GNSA) to Country Residential (CR), to enable a portion of the proposed Eagle Heights development. We reviewed this with our Sustainability Division, who has expertise in Natural Areas Screenings, natural areas standards, and wetlands policy. Our comments are as follows:

Analysis

The review focused on whether the RLUM should be amended as proposed, and whether the proposed amendment would have an effect on the adjacent Future Urban Growth Area (FUGA). Specifically, the following Regional Plan requirements and resulting questions were considered:

- The Regional Plan enables the GNSA to be refined by site-specific detailed assessment, in addition to P4G's regional-scale refinement projects. The Regional Plan requires the refinement to use consistent methodology, and consider features including wetlands, drainage areas, habitat corridors, and important ecological areas.
 - Has the GNSA been correctly identified here (that is, does the site contain the GNSA features described above), or should the land use designation be amended to CR as proposed?
 - Is the detailed assessment consistent with Regional Plan requirements for GNSA refinement?
 - Is the detailed assessment a suitable template for other site-specific refinements of the GNSA, which can be expected before P4G's regional-scale studies have been completed?
- The Regional Plan encourages development that is designed to avoid wetlands where feasible, ensure the least possible disturbance to wetlands, and compensate for affecting significant wetlands. It requires a 30m buffer around significant wetlands; within the buffer, development cannot occur and native vegetation should be maintained.
 - Does the proposal align with Regional Plan requirements?
 - Are any of the wetlands significant? If so, is a 30m buffer provided?
- The proposed Eagle Heights development is next to a FUGA.

- Would changing the GNSA site to CR as proposed have a negative effect on future urban growth?

The report provided by Associated Engineering relies heavily on desktop information and a single day of field work that was completed on October 25, 2019. Data will not be available in provincial databases unless field work has been conducted. The field work also examined the main habitat types but was not species specific. The timing of the field work was too late in the year to detect breeding birds and flowering plants. As a result, it is not possible to determine if the site contains important ecological areas or wildlife habitat, and whether or not the GNSA designation is appropriate. Two plant species classified as Vulnerable/Rare to Uncommon were identified within 2 km of the site; this suggests these species may also be present on the site. Surveys should be completed according to protocols outlined by Saskatchewan Environment and during the appropriate season for detection of rare plants and breeding birds.

The proposed subdivision design eliminates a Class V (permanent) wetland and 6 Class II (temporary) wetlands. The remaining Class V wetlands are proposed to be graded, used for stormwater management, and surrounded by 15m easements. Grading would eliminate any rare plants and habitat for listed species, and the proposed buffer around the wetlands is less than the Regional Plan requirement for significant wetlands. The proposed subdivision design creates isolated sections of GNSA surrounded by development. A continuous GNSA corridor supports biodiversity and prevents fragmentation of habitat.

Further field work and data collection should be completed to assess the function of the wetlands on the site. Alternate subdivision designs should be explored to avoid wetlands and ensure the least possible disturbance to wetlands. Where wetlands cannot be avoided, a Mitigation Plan should be provided.

The site is next to a FUGA that is east of Saskatoon and outside the 'Growth to 700,000' area on the RLUM. The proposal to redesignate the GNSA site to CR, on its own, would not appear to have a negative effect on future urban growth. If the Eagle Heights development proposal proceeds further, we look forward to reviewing it comprehensively consistent with the Regional Plan policies for country residential developments next to FUGAs.

As identified in the submission, the Eagle Heights development proposal could create drainage issues for adjacent properties. These issues must be addressed to the satisfaction of the Water Security Agency and the RM of Corman Park.

While it was not the focus of this review, it was noted that little water quality analysis was provided in the submission; the effect of additional septic systems on surrounding wells should be analyzed and any issues should be addressed to the satisfaction of the regulators.

Conclusions

In summary, further information and more rigorous field study described above are needed to support the application to amend the RLUM and align with the Regional Plan policies for the GNSA and wetlands. Also, as submitted it is not a suitable template for site-specific refinement of the GNSA.

In the interim before weather enables further field work for the GNSA site, the subdivision design should be reviewed and amendments should be considered to focus on the lands that are currently designated as CR. Work should be undertaken to address the identified drainage issues and demonstrate that there are no water quality issues.

If you have any questions or would like to discuss this, please let me know.

Regards,
Laura

Laura M. Hartney, MCIP, RPP | tel 306.975.2288

Regional Planning Manager

City of Saskatoon | 222 3rd Avenue North | Saskatoon, SK S7K 0J5

Treaty 6 Territory and Homeland of the Métis

laura.hartney@saskatoon.ca

www.saskatoon.ca

www.partnershipforgrowth.ca

*If you receive this email in error, please do not review, distribute or copy the information.
Please contact the sender and delete the message and any attachments.*

Neal Sarnecki

From: Rebecca Row <rrow@rmcormanpark.ca>
Sent: Thursday, April 2, 2020 10:56 AM
To: Neal Sarnecki; laura.hartney@saskatoon.ca; planningmanager@martensville.ca; bradt@warman.ca; sheila@townofosler.com
Cc: Adam Toth
Subject: Eagle Heights Land Use Map Change
Attachments: Mitigation Plan Components-Draft .pdf

Hi everyone,

As a follow up from our discussions on the proposed Eagle Heights land use map amendment we offer the following as an update on the next steps/conditions:

- Conditions of approval on the subdivision & rezoning confirmed with our consultant:
 - The completion of rare plant surveys in accordance with the Saskatchewan Ministry of Environment Rare Vascular Plant survey protocol (<https://publications.saskatchewan.ca/#/categories/2069>) to confirm the sensitivity of this natural habitat and mitigate impacts to plant species of conservation concern at the time of construction;
 - A mitigation plan focusing on minimizing impacts and restoration plans as noted in the attached draft document provided by Saskatoon. There are also some comments on components we won't be focusing on. We note while we are asking for this we don't see it being a P4G approved document; see notes below.
 - With the proposed loss of several Class II wetlands and one Class V wetland, a comprehensive stormwater management/drainage plan will be required to mitigate impacts that the proposed development may have on drainage and flooding. We have previously asked for revisions to these plans and noted them as conditions to the applicant and will be confirming the new considerations;
- We also intend to have discussions with the applicant regarding the buffer and whether there are options to increase this within the final design as other changes may also be required.

Our consultant has suggested there are portions of the mitigation plan document that would be a bit excessive, considering the small size of the development and the pre-existing agricultural disturbances and invasive species present. An example would be a plan for compensation given the small area with lower quality habitat. Also, there are questions as to what extended monitoring would apply to a project of this scope. Perhaps monitoring of the wetland areas to ensure vegetation establishment and invasive species (weed) control would be appropriate due diligence. It does seem like the mitigation plan document is intended as a guideline, and not all components would necessarily apply to this project. We want to be able to work with the applicant through this process as a municipality recognizing it is outside of the current planning district and P4G is not in place. We intend to work with our consultant to ensure the documents submitted meet industry standards but do not want to seek P4G approval of the plan as part of the subdivision and rezoning steps.

We also note the additional information provided to date has been a good example of 'pushing the envelope' while staying within the existing RM policy framework. We are cognizant that things will continue to progress with every subsequent application and would hope the partners can appreciate that progression as well. P4G will need further discussion on wetlands/GNSA standards but we believe this is a good start.

We hope PAC finds this agreeable as Neal proceeds forward with the map amendment to ROC. If you have any questions please let us know. , thanks.

Rebecca Row, RPP, MCIP

Director of Planning & Development

phone: (306) 975-1654

fax: (306) 242-6965

email: row@rmcormanpark.ca

www.rmcormanpark.ca

Mitigation Plans

If natural areas are within or adjacent to the development area, developers should complete a mitigation plan. The mitigation hierarchy of avoid, minimize/restore on-site, and then compensate should be used to develop the mitigation plan

The following steps should be followed in developing a mitigation plan:

1. A general overview of the natural areas within and adjacent to the development area including maps of where the natural areas are in relation to the proposed development. Describe if natural areas may be incorporated into the proposed development.
2. A description of the pre-development condition of the natural area(s) using the appropriate indicators and the specific time when the condition was assessed. The pre-development condition will be important for assessing the outcome of the mitigation plan. For example, if wetlands are within or adjacent to the project area, provide data/information on wetland classification and delineation, wetland area, and wetland functional assessment.
3. Describe the potential impact of the proposed development on the natural area(s) and if the natural area(s) can be avoided or why it can't be.
4. If avoidance is not achievable, state the number of hectares of natural areas which will be impacted and how the impacts will be minimized. Include maps of disturbance areas including ArcMap shapefiles.
5. A plan for restoration, if the area will be partly or fully restored to the pre-development condition. Explain who, what, when, where, how, and why the restoration will be undertaken. For example, who will complete the restoration and what their qualifications are, what will the restoration require such as the type of seed mix and seeding equipment or reduction of slopes and addition of topsoil, when will the seeding take place, what areas will be seeded, how will the seed be planted as will it be drilled or broadcast and harrowed into the soil, and why these techniques and plan was used.
6. A plan for compensation, if the natural area or a portion of the natural area will be removed. Explain who, what, when, where, how, and why the compensation will be undertaken. For example, who will complete the compensation, what type of compensation is being proposed, when the compensation will be completed, where will the compensation take place, how will it be completed and why this type of compensation was chosen.
7. A plan for avoiding or minimizing impacts to wildlife (ex. birds, amphibians) and rare plants that may be present in or adjacent to the natural area. For example, how will the *Migratory Bird Convention Act and Wildlife Regulations* be adhered to, if listed species are present then how will the *Saskatchewan Activity Restriction Guidelines* be used, timing of site clearing, and will a qualified environmental monitor be available.
8. A plan for avoiding or minimizing impacts to natural areas during construction such as during clearing and grading, pipe installation, preventing invasive species introduction,

erosion control, spills, and timing of construction. For example, establishing no access buffers around natural areas, putting up sediment fencing, and making sure equipment is clean and free of debris before entering the site.

9. The restoration and compensation plans and the wildlife and construction plans should be submitted to the regulatory body for review and approval before undertaking any action.
10. A plan for future monitoring of the restoration and compensation sites. For example, are the seeded areas growing, do they need to be re-seeded, how does the restoration compare to the pre-development condition, are the compensation sites similar to the pre-development areas, is basic monitoring sufficient or is more detailed vegetation monitoring needed. Annual verification reports should be submitted showing assessment results and if the project was successful within a certain time period (ex. 3-5 years). More time or alternative actions may be needed if the project is deemed unsuccessful. Once the mitigation plan has been completed, a final report should be submitted stating why the plan was successful and include photos and ArcMap files of the compensation and restoration sites.
11. Financial assurances should be in place to ensure sufficient funds are in place to complete the mitigation provider's obligations to complete the mitigation plan. Financial instruments could include a letter of credit, performance bond, cash in escrow, casualty insurance, or an agreed upon sum held by a third party (e.g. bank).