

City of Leduc

Grayson Estates Outline Plan

September 5, 2025

(Approved December 8, 2025)

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1 Introduction

This section describes the purpose and context of the Grayson Estates Outline Plan. This Outline Plan is a non-statutory document and is approved by the motion of Council, after a non-statutory public hearing is held.

1.1 Plan Purpose and Scope

The purpose of this Outline Plan (OP) is to describe the land use framework, infrastructure servicing concept and development objectives for the future development of Lots 1 Block 1 Plan 2220827, and Lot 3 Block 1 Plan 2420741. The OP was initiated to facilitate development of the subject lands.

The Grayson Estates Outline Plan provides a more detailed planning and preliminary engineering design than the approved West Area Structure Plan.

1.2 Plan Location

The plan area is bound by 65 Avenue at the north and by 74 Street at the west. The east and south boundaries of the plan area are delineated by the legal property lines for of the Certificates of Title. The Woodbend Outline Plan provides the land use framework for the lands to the south, which is currently undergoing development. The southwest parcel of the quarter section, legally described as Pt. NW 33-49-24-4, is not participating and are excluded from the plan area. See **Figure 1: Location Plan**.

1.3 Land Ownership

The subject lands contain approximately 49.2 ha currently held under two certificates of title. Lot 1, Block 1, Plan 2220827 accounts for 42.72 ha of the subject area, and Lot 1, Block 1, Plan 2420741 for the remaining 6.48 ha. The quarter section contains 4.09 ha under certificate of title NW 33-49-25-4. These lands are within the quarter section however this area is not part of the plan area. See **Figure 2: Land Ownership**.

2 Policy Framework

2.1 City of Leduc Municipal Development Plan

The *City of Leduc Municipal Development Plan* (MDP) Bylaw No. 1057-2020, as amended is a high level, long-range planning document that directs the City's use of land, community service priorities and investment in infrastructure. The MDP designates the north half of Grayson Estates as Employment Area and the south half as Residential Area. The land use concept proposed in this OP is consistent with the intent of the MDP. Grayson Estates meets the intent of the following relevant Employment and Residential policy areas of the City of Leduc MDP:

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MDP Policy	OP Compliance
<i>3.3.1 Require that all new residential area structure plans meet or exceed the Minimum Greenfield Residential Density mandated by the Edmonton Metropolitan Region Growth Plan.</i>	Grayson Estates provides for a residential density of 33.71 du/nrha which exceeds the pre-existing Capital Region Growth Plan target of 25-30 du/nrha, which the underlying WASP was adopted under.
<i>3.3.10 Encourage residential dwellings and parks to be located within walking distance of one another</i>	A municipal reserve parcel is proposed central to the plan area providing access for residential properties to the larger stormwater management facility open space which connects to the larger pedestrian system within the Deer Creek natural area.
<i>3.4.3 Require that impacts on nearby development from non-residential development be mitigated through enhanced design and physical measures.</i>	Grayson Estates has been designed as a north commercial/business employment precinct and south residential precinct. While pedestrian connections are maintained, vehicular access is restricted between the two precincts to prevent commercial traffic shortcutting through the residential area.
<i>3.4.7 Encourage commercial and industrial development to locate strategically in order to maximize benefits from nearby transportation corridors, the presence of the Edmonton International Airport, and adjacent employment areas</i>	Proposed business commercial and employment uses in the north plan area benefit from adjacency to the Edmonton International Airport.
<i>3.4.8 Encourage employment areas within the west 65th Avenue corridor and the East Telford Lake Area Structure Plan to focus on logistics and distribution, manufacturing, value-added agribusiness and airport related development, while providing flexibility to be responsive to market demand.</i>	Land uses proposed along 65 Avenue corridor include business employment, with business commercial uses south of the collector road in the north precinct. These land uses promote employment within the areas highlighted in MDP Policy 3.4.8.

2.2 West Area Structure Plan

Grayson Estates consists of one of four quarter sections approved under the *West Area Structure Plan*. The *West Area Structure Plan* (ASP) was approved as Bylaw 863-2014 on January 12, 2015. The latest amendment was February 27, 2023 as Bylaw No. 1141-2022. The plan meets the following policies of the West ASP:

ASP Policy	OP Compliance
<i>Policy 5.4.1.2 Provide opportunities for views and vistas to the natural creeks.</i>	A small Municipal Reserve parcel is proposed within the eastern-most low-density residential area to provide a vista and pedestrian access into the Deer Creek natural area.
<i>Policy 5.4.1.3 Create a sense of surveillance and occupancy where public and private space interface.</i>	A robust pedestrian network is proposed to provide safe connectivity and an activated public realm.
<i>Policy 5.4.2.1 Consider sustainable development principles in the planning and design of the neighbourhood.</i>	Sustainability strategies focusing on minimal disturbance of the environmental area (Deer Creek), while providing avenues to access the amenity.
<i>5.4.2.2 Encourage naturalized landscaping on public and private lands to maximize environmental benefit.</i>	Naturalized landscaping will be considered for incorporation into Municipal Reserve and Environmental Reserve land, and the stormwater management facility.
<i>5.4.3.1 Protect the natural creeks from development</i>	The portion of Deer Creek within the plan area is to be dedicated as Environmental Reserve through subdivision in accordance with the Municipal Government Act, and City of Leduc standards and provide opportunities for public access.
<i>Policy 5.4.4.1 Ensure that the environmental status of lands in the West ASP neighbourhood is suitable for development and the Environmental Site Assessments (ESA) are complete and up-to date.</i>	ESA reports shall be submitted prior to acceptance of subdivision applications as deemed necessary to confirm environmental conditions of the site are suitable for development.
<i>Policy 5.4.4.2 Ensure that urban development around the abandoned well site adheres to the policy requirements of the Alberta Energy Regulator (AER)</i>	The abandoned well (ID# 0494253312000) has been considered in the planning of Grayson Estates and shall be located within a setback per the requirements of the AER. The abandoned well site setback area will be reviewed at the subdivision stage to the satisfaction of the City of Leduc.
<i>Policy 5.4.4.3 Ensure the ongoing operation and integrity of existing pipelines and utility infrastructure</i>	Pipeline right-of-way(s) have been considered in the planning of the Grayson Estates. Dedication of the public utility right-of-way(s) will occur at subdivision.
<i>Policy 5.4.5.1 Identify and protect items with historical significance in the West ASP.</i>	Historical Resources Act approval to be obtained as deemed necessary, at time of subdivision.

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<i>5.4.6.1 Establish residential densities that meet the density target set out by the Capital Region Growth Plan. The neighbourhood shall provide residential densities consistent with the "Priority Growth Area E" defined as 25 to 30 units per net residential hectare in the Capital Region Growth Plan.</i>	Grayson Estates provides for a residential density of 33.71 du/nrha which exceeds the pre-existing Capital Region Growth Plan target of 25-30 du/nrha, which the underlying WASP was adopted under.
<i>Policy 5.4.6.2 Provide a variety of housing types that serve a range of age groups, income levels, and lifestyle needs.</i>	Grayson Estates provides for a variety of housing types from low to high residential densities. Grayson Estates introduces the opportunity for innovative low density housing forms that respond to a broader range of needs.
<i>Policy 5.4.6.3 Locate the highest levels of population in areas with convenient and efficient access to transit routes.</i>	The proposed medium and high density residential sites are located adjacent to collector roadways and future transit routes.
<i>Policy 5.4.6.4 Minimize exposure of residential development to non-compatible land uses that could cause nuisance.</i>	The land use concept proposes a separation of business employment and business commercial uses from residential land uses through a road network that separates land uses.
<i>Policy 5.4.7.2 Provide active and passive recreation opportunities through a connected system of public open spaces.</i>	Pedestrian connections have been identified at key locations to provide easy access to the amenity areas such as Deer Creek, the school site, and the stormwater management open space area.
<i>5.4.7.3 Provide school sites for the anticipated population growth in the West ASP and neighbouring area.</i>	A municipal reserve parcel has been provided for in the south of the plan area to be consolidated with future MR in the lands to the south and west to accommodate a school site.
<i>Policy 5.4.8.1 Provide convenient access to commercial uses for pedestrians and vehicles from the West ASP and surrounding neighbourhoods.</i>	Business commercial uses have been located along the north collector road. Pedestrian connections are provided in the proposed stormwater management facility and Environmental Reserve areas.
<i>Policy 5.4.10.1 Create an area of employment opportunities in support of industrial uses identified north of future 65 Avenue, Nisku, and the northeast business park.</i>	Land uses proposed along 65 Avenue corridor include business employment, with business commercial uses south of the collector road in the north precinct.
<i>Policy 5.4.12.1. Pedestrian and vehicle linkages shall be provided to connect residential areas with ponds, parks, the natural creeks, the commercial sites, employment areas, and adjacent neighbourhoods using sidewalks, walkways, shared use paths, and local and collector roads.</i>	Grayson Estates has been designed with a north business commercial/employment precinct and south residential precinct. Key pedestrian connections have been identified to connect the residential area with the pond, parks, and commercial uses.
<i>Policy 5.4.12.4 Provide a collector roadway system that allows efficient movement of vehicular traffic through the neighbourhood and discourages shortcutting on local roadways.</i>	Two separate collector roads are proposed in Grayson Estates: the north collector accessed via 65 Avenue and 74 Street provides access to the north business commercial/employment precinct; the south collector

	accessed via 74 Street provides access to the residential precinct and then south to the Woodbend neighborhood. Vehicular access is restricted between the two precincts to prevent commercial traffic shortcutting through the residential area.
<i>Policy 5.4.13.3 Incorporate walkway connections into the street system</i>	Pedestrian connections have been identified at logical locations to provide easy access to the amenity areas throughout the plan area. The pedestrian network connects both precincts to Deer Creek, the school site, park space, and the stormwater management open space area.
<i>Policy 5.4.15.1 Provide services in accordance with the City of Leduc standards</i>	The proposed servicing concepts provide for efficient and effective servicing of the plan area.

3 Existing Conditions

3.1 Existing Land Uses

The area encompassing Grayson Estates is currently under agricultural use and is intended to be developed for future business employment, commercial, and residential development. Within the plan boundary, The City of Leduc owns the northwesternmost lands, also under agriculture use. A residential acreage is situated in the southwest corner of the quarter section. The north and west plan boundary are also the City of Leduc municipal boundary line. The quarter section to the south (SW 33) contains the residential subdivision of Woodbend which is currently undergoing development. Adjacent lands to the east and west of the plan area are predominantly agricultural with associated farm buildings or residential acreage lots. The adjacent lands to the north are utilized by the Edmonton International Airport. See **Figure 1: Location Plan**.

The proposed Outline Plan area represents a logical extension and progression of development along 74 Street to advance development in the West ASP area.

3.2 Site Considerations/Constraints

The characteristics and context of NW 33-49-25-4 as described below are shown on **Figure 3: Existing Site Features**.

3.2.1 Topography & Vegetation

The topography of NW 33-49-25-4 is generally flat with elevations in the plan area slightly sloping to the north. The highest elevation is approximately 717m in the south and the lowest approximately 710 m in the northwest corner of the quarter section. The subject lands continue to be used for agricultural production, resulting in minimal natural vegetation. Deer Valley creek runs north-south through the eastern portion of the quarter section, producing a defined creek bed and valley.

3.2.2 Wells, Pipelines and Utility Right-of-Ways

There is one abandoned well site (Well ID# 0494253312000) located in the south collector road right of way adjacent to the medium density residential area. According to the Alberta Energy Regulator (AER) an abandoned well requires provision of a 10 x 15 m work area with the well located no less than 5 m from the setback boundary. Detailed plans will be required for review by the City of Leduc prior to subdivision of any portion of the residential E/W collector. The alignment of the road right-of-way shall ensure that the abandoned well is located within the boulevard area of the right-of-way, not the road surface.

An abandoned high-pressure natural gas pipeline owned by Alta Gas (URW #2121 HW) extends northwest to southeast through the subject lands. This pipeline URW is proposed to be discharged to facilitate development.

A fibre optics right-of-way runs east-west along the south boundary. A Capital Region Southwest Water Services Commission ROW (URW #872 239 701) is located along the northwest boundary of the OP lands.

3.2.3 Proximity to YEG Edmonton International Airport

Grayson Estates is located just south of Edmonton International Airport (YEG). While the Airport Vicinity Protection Area Regulation (AVPA) limits residential development near YEG, Grayson Estates falls outside this boundary. However, additional considerations are necessary to mitigate potential risks to airport operations.

Transport Canada's TP1247E document, *Land Use in the Vicinity of Aerodromes*, provides guidelines for developments in proximity to airport operations, and Grayson Estates aligns with these recommendations.

To reduce the risk of aircraft bird strikes, appropriate bird deterrents will be implemented. Stormwater facilities and natural areas will be strategically positioned away from runway alignments to minimize this concern. The Grayson Estates Development Concept designates Business Employment Uses near YEG, requiring careful attention to lighting impacts. Measure to prevent upward projections of light sources within these sites, and street lighting as well as advertising signage will be considered in design to minimize light projection.

4 Development Strategy

4.1 Land Use Concept

The Outline Plan has been prepared in response to the development aspirations of the landowner in the plan area. The development enables the logical extension of contiguous residential uses along 74 Street in the City of Leduc and provides for a precinct development framework to transition and separate the residential uses at the south of the plan from the business commercial uses at the north. West of Deer Creek, the Stormwater Management Facility and the major collector roadway provides a transitional area separating industrial and residential land uses.

Grayson Estates will contain low and medium density residential, business commercial, business employment and open space areas. The land use arrangement for the plan area considers the need for the separation of business employment land uses and residential land uses through the provision of a compatible land use such as commercial. The proposed land use concept is shown on **Figure 4: Development Concept**. Land use and population statistics for Grayson Estates are contained in **Table 1 Land Use Statistics**.

4.2 Residential Uses

The south half of the plan area accommodates predominantly residential land uses. Low density residential is the primary land use and will typically include a variety of low-density residential forms, such as single detached, duplex (side-by-side), secondary suites, and garage suites. Low density residential does not include townhouses of any kind.

The Development Concept provides opportunity for the introduction of innovative housing products that expands the housing spectrum in the City of Leduc.

Medium density residential land uses are focused to the southwest corner of the plan area adjacent to the south collector road. Medium density residential areas will typically include townhouse products and low-rise multi unit buildings. Medium density, fee-simple townhouses are sited in consideration of supporting neighbourhood amenities including but not limited to enhanced park amenities, school sites, commercial land uses and transit stops.

One of the two medium density parcels south of the E/W collector road shall be developed as low-rise apartments. At the City's sole discretion, an alternative form of multi-unit development may be considered at the time of subdivision only. Any such consideration may require supporting studies or other information to demonstrate that this change in housing form on the site is in the public interest which may include, but is not limited to, a market study, that is deemed acceptable to the City.

The residential uses in Grayson Estates will provide ample opportunities for a range of built forms.

The City of Leduc maintains a 400-metre buffer for residential development in proximity to the airport. The aim of this buffer is to preserve the integrity of business operations around the airport. The Outline Plan proposes a residential density of 33.71 dwelling units per net residential hectare which exceeds the pre-existing Capital Region Growth Plan target of 25-30 du/nrha under the West ASP.

4.3 Commercial Uses

The development concept proposes business commercial uses within the north precinct of the OP area. This land use typically includes personal/professional services, general retail and business services, vehicle-oriented uses (fuel stations), food and beverage services, fitness/leisure, medical services, and any other similar uses. The business commercial areas will serve as a buffer between the south residential areas and the more industrial land uses at the north edge of the plan area.

4.4 Business Employment Uses

The development concept proposes business employment sites adjacent to 65 Avenue, and the north collector roadway. Business employment uses include a host of light industrial, and business commercial opportunities. For the less intensive uses, there may be some overlap of uses within Business Employment and Commercial areas, vehicle-oriented opportunities, and fitness/leisure uses for example and any other uses outlined in the applicable Land Use Bylaw district.

4.5 Open Space, Parks, and Recreation

The development concept proposes open space through dedication of Environmental Reserve, Municipal Reserve and Public Utility Lots where necessary creating an integrated open space and pedestrian trail system providing pedestrian and open space connectivity to all land uses in the plan area. This connectivity is shown on **Figure 5: Parks and Open Space**.

4.5.1 Municipal Reserve

Municipal Reserve (MR) in Grayson Estates is dedicated through the provision of a shared school park site, dedicated greenways, a central park site, and areas used to enhance and provide access to Deer Creek Environmental Reserve. Grayson Estates OP proposes the dedication of 2.98 ha which equates to 7.00% Municipal Reserve. The remaining 3.00% will be paid to the City as cash in-lieu. MR will be dedicated to the City at the time of subdivision.

As a combination of cash in-lieu and land dedication MR will remain at 10% throughout the West ASP and Grayson Estates.

4.5.2 School and Park Sites

1.15 ha of Municipal Reserve has been allocated for the school site in the southern portion of the plan. This site has been identified to connect to the approximate 3.12 ha joint site with Woodbend and private Truss lands, which will facilitate development of a consolidated site for joint use.

The municipal reserve allocation for the plan area will be utilized to accommodate a variety of parks and open spaces that serve the public and the local community. These spaces could include passive and active parks with features such as picnic areas/BBQs, seating areas, play spaces, and multiways, with naturalized landscapes and plantings, buffers, and viewpoints. These spaces will be collaboratively planned with the City in support of residents throughout development. The developer will be obligated to construct the amenities.

Initial concepts for park amenities have identified the opportunity for a rest area or gazebo in the southeast corner of the plan area, adjacent to the west bank of the environmental reserve. Park benches may be installed at strategic points surrounding the Storm Water Management Facility, and along the multiway adjacent to Deer Creek. Once developed further, playgrounds, picnic areas, or BBQs may be identified to be included in the larger park sites in the interior of the plan area.

Grayson Estates recognizes the importance of observing Alberta Fire Smart principles in reducing fire risk. Development of Grayson Estates will seek to incorporate Alberta Fires Smart principles where appropriate, minimizing wildfire risks.

4.5.3 Environmental Reserve

Approximately 6.65 ha surrounding Deer Creek has been dedicated as Environmental Reserve (ER). The creek valley provides a significant open space amenity for the plan area through which a trail system will be developed. The Environmental Reserve area has been identified through a top of bank analysis. The Grayson Estates development concept provides a 15-meter buffer zone from the top of bank. A small Municipal Reserve parcel is proposed within the eastern-most low-density residential area to provide a vista into Deer Creek.

The Environmental Reserve within Grayson Estates shall remain as naturalized as possible. Any vegetation, trees, etc., that are within the boundary of the Top of Bank, will be left as is, apart from construction of the multiway, and any required outfalls.

4.5.4 Stormwater Management Facility

A central open space is proposed in the development concept for the stormwater management facility (SWMF) in the plan area. Like the ER area, the SWMF, where applicable, may be in a naturalized state. The SWMF is considered a passive amenity area and part of the overall open space system, providing pedestrian linkages between the residential and commercial areas of the plan. This open space system extends south to the residential precinct through a central park.

5 Transportation Network

The transportation network bordering and within Grayson Estates consists of a system of arterial, collector and local roadways, pedestrian connections, walkways, and corridors to accommodate the movement of vehicles, goods, and people. The proposed road connections are shown on **Figure 6: Transportation Network**.

5.1 Regional Network Accessibility

The plan area is bound by 65 Avenue to the north. A right of way to accommodate road widening to 65 Avenue is included within the OP boundary. A north-south collector road connection is proposed central to the north boundary to provide access to the business employment/commercial precinct in the north half of the plan area.

Grayson Estates is bound by 74 Street to the west. This arterial road connects to the two east-west collector roadways providing access to Grayson Estates. 74 Street ultimately connects south to 50 Avenue and then east to the Queen Elizabeth II Highway. Grayson Estates will benefit from the high level of accessibility by virtue of its proximity to these major roadway systems.

Access to the arterial roadway network is limited to collector roadways. The City of Leduc Transportation Master Plan (TMP) prohibits accesses onto arterial roadways, except at major intersections. Accesses for residential, retail centres, or industrial land uses in Grayson Estates will be in compliance with the TMP.

5.2 Internal Roadway System

Grayson Estates is served by two main collector roadways. The north collector roadway is accessed from both 74 Street and 65 Avenue and provides access to the north employment/commercial precinct. A second collector roadway is accessed from 74 Street which provides access to the south residential precinct and will connect south to the Woodbend neighbourhood.

The OP proposes disconnecting the road network between the north and south precincts to prevent commercial traffic from utilizing the residential roads.

The local roadway network will be designed to meet the City of Leduc standards for local roads, lanes, and cul-de-sacs.

5.3 Pedestrian Connections, Walkways, and Corridors

A robust pedestrian and multiway system is proposed that leverages and connects the significant open space amenities of the plan area. The multiway system is designed to provide multiple access points to the open spaces such as Deer Creek ER, while also providing an efficient transportation network for non-vehicle traffic. The Pedestrian Connections can be viewed on **Figure 5: Parks and Open Space**.

Multiways will be constructed in accordance with the City's *Minimum Engineering Design Standards*. The type and exact location of these multiways will be determined at the time of subdivision.

6 Utility Infrastructure

Details regarding servicing shall be provided in Neighbourhood Design Brief to be submitted under separate cover to support the subsequent subdivision application(s). The following section provides an overview of the neighbourhood servicing scheme.

The areas east of Deer Creek are to be serviced in conjunction with the adjacent lands within the 65 Avenue ASP. The proposed servicing schemes are depicted on **Figure 7: Water Servicing; Figure 8: Sanitary Servicing; and Figure 9: Stormwater Servicing**.

6.1 Water Servicing

The proposed water system will be looped from Woodbend to the south and the future neighbourhood east of Grayson Estates (within the 65 Ave ASP) by 300mm diameter watermains. The proposed primary water system will consist of a 300mm watermain running through the collector systems. Connections to the primary water distribution network will be made available to all stages of development. The first stage will consist of a connection to the Woodbend neighborhood and an additional external loop to meet the City of Leduc operational looping requirements. Alternative water looping solutions are to be explored in future stages which may include crossing the creek to efficiently bring on residential development.

Until separate pressure zones are constructed in the city, the Grayson plan area does not meet minimum pressure standard requirements in the City of Leduc. A future water pressure reducing valve (PRV) will be required prior to development. These constraints and potential solutions will be addressed under separate cover in the Hydraulic Network Analysis report. The proposed water servicing concept is illustrated on **Figure 7: Water Servicing**.

6.2 Sanitary Servicing

The proposed sanitary plan requires a portion of the onsite gravity pipe to flow to an onsite lift station (within the plan area). The lift station will then carry the sewage south by forcemain to a proposed 250mm gravity pipe and connects to a 300mm sanitary pipe to cross into Woodbend. This 300mm sanitary pipe flows to the existing lift station situated within Woodbend and is to be carried to the west Leduc trunk system. The proposed plan allows an opportunity for a portion of the proposed residential area in the south section of Grayson Estates to be serviced via a gravity sanitary sewer directly to the gravity sanitary sewer within Woodbend without the need of a lift station.

Given existing topography, the sanitary east of Deer Creek is proposed to go east via gravity into the future Neighbourhoods shown in the 65 Avenue ASP which will ultimately collect in the Lift Station located in the Deer Valley Neighbourhood. This proposed servicing scheme has been approved in principle by the adjacent landowners.

The City of Leduc needs to protect the future alignment of a sanitary forcemain moving north. This forcemain will travel north from the existing lift station in Woodbend, adjacent to the collector roadway. The Grayson Estates development concept provides a PUL along the southern boundary moving eastward for this forcemain. The proposed sanitary concept is illustrated on **Figure 8: Sanitary Servicing**.

6.3 Stormwater Servicing

The general storm servicing system adheres to the West ASP amendment report. The proposed major and minor storm consists of basins which drain by major flow routes and gravity mainlines to a central storm water management facility (SWMF) and provide storm services to each proposed parcel.

The major flow routes are designed to accommodate runoff exceeding the minor pipe capacity and will flow to the SWMF located west of Deer Creek. Grading within the proposed site is designed to direct major flows to the SWMF and limit ponding depths to a maximum of 0.30m.

Basin 1 is 9.59Ha located east of Deer Creek and consists of business employment and medium density which will flow west across Deer Creek to basin 2. The lands west of Deer Creek are serviced independently but will flow into the same central SWMF. Basin 2 consists of 15.96Ha of business employment and business commercial. The minor storm sewer will convey flows from Basin 2 to the northwest portion of the SWMF via a 1050mm inlet. Basin 3 consists of 24.12Ha of medium density residential, single family residential and park sites. The minor storm system will convey a portion of the flows to the southwest portion of the SWMF via a 1050mm inlet, and a portion of the flows to the southeast portion of the SWMF via a 900mm inlet. The SWMF outlets east via a 675mm storm pipe that will discharge to the nearby Deer Creek at a controlled release rate.

The proposed stormwater servicing concept is illustrated on **Figure 9: Stormwater Servicing**.

6.4 Shallow Utilities

Shallow utilities including power, gas and telecommunication services are all located in close proximity to the proposed development. The shallow utilities will therefore be extended into the Grayson Estates OP area as required.

7 Implementation

7.1 Staging of Development

Development in Grayson Estates represents a logical and contiguous extension of the existing development along 74 Street. Development is planned to begin in 2025-2026, however, staging will be initiated in response to market conditions. See **Figure 10: Staging Plan**.

8 Subdivision Technical Documentation

8.1 Geotechnical Assessment

A geotechnical assessment has been submitted to the City of Leduc. The findings delineated the top of bank of Deer Creek which have been referenced in determining the area of Environmental Reserve. Additional Geotechnical analysis may be required from the Developer by the City in support of multiways located within Environmental Reserve at the time of subdivision.

8.2 Historical Resources Clearance

Historical Resources Act Approval was obtained and submitted to the City of Leduc on March 28, 2024.

8.3 Biophysical Assessment

A biophysical assessment is not required to be submitted to the City of Leduc. A previous assessment was completed in 2013 for the West ASP.

8.4 Blackmud/Whitemud Creek Surface Water Management Report

The Blackmud/Whitemud Creek Surface Water Management Study analyzes the Blackmud and Whitemud Creek basins to develop a stormwater management strategy to accommodate future development in the basin. Deer Creek is a part of this basin network. The report provided numerous recommendations for appropriate water management, including utilizing stormwater management facilities, dedication of environmental reserve surrounding Deer Creek, and preserving the existing channels where present.

The report recommends that the maximum release rate into the basins be capped at 3.0L/s/Ha. Grayson Estates has been designed with a controlled maximum release rate of 1.9L/s/Ha.

8.5 Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) has been submitted to the City of Leduc. The ESA advised that a Phase II be conducted given the presence of an abandoned well. This Phase II ESA has been completed and was submitted to the City of Leduc on March 21, 2024.

The abandoned well site (Well ID# 0494253312000) holds a historical reclamation certificate from 1968 (No. 5924) which certifies the surface lands were in satisfactory condition, when judged against the historical standards. Given the age of this certificate and the potential updated regulations for well site reclamation, the ESA should incorporate a thorough assessment of the well site, at time of subdivision.

8.6 Water Act Approval

Water Act approval will be obtained and submitted to the City of Leduc as required by the Province of Alberta.

8.7 Noise Attenuation Study

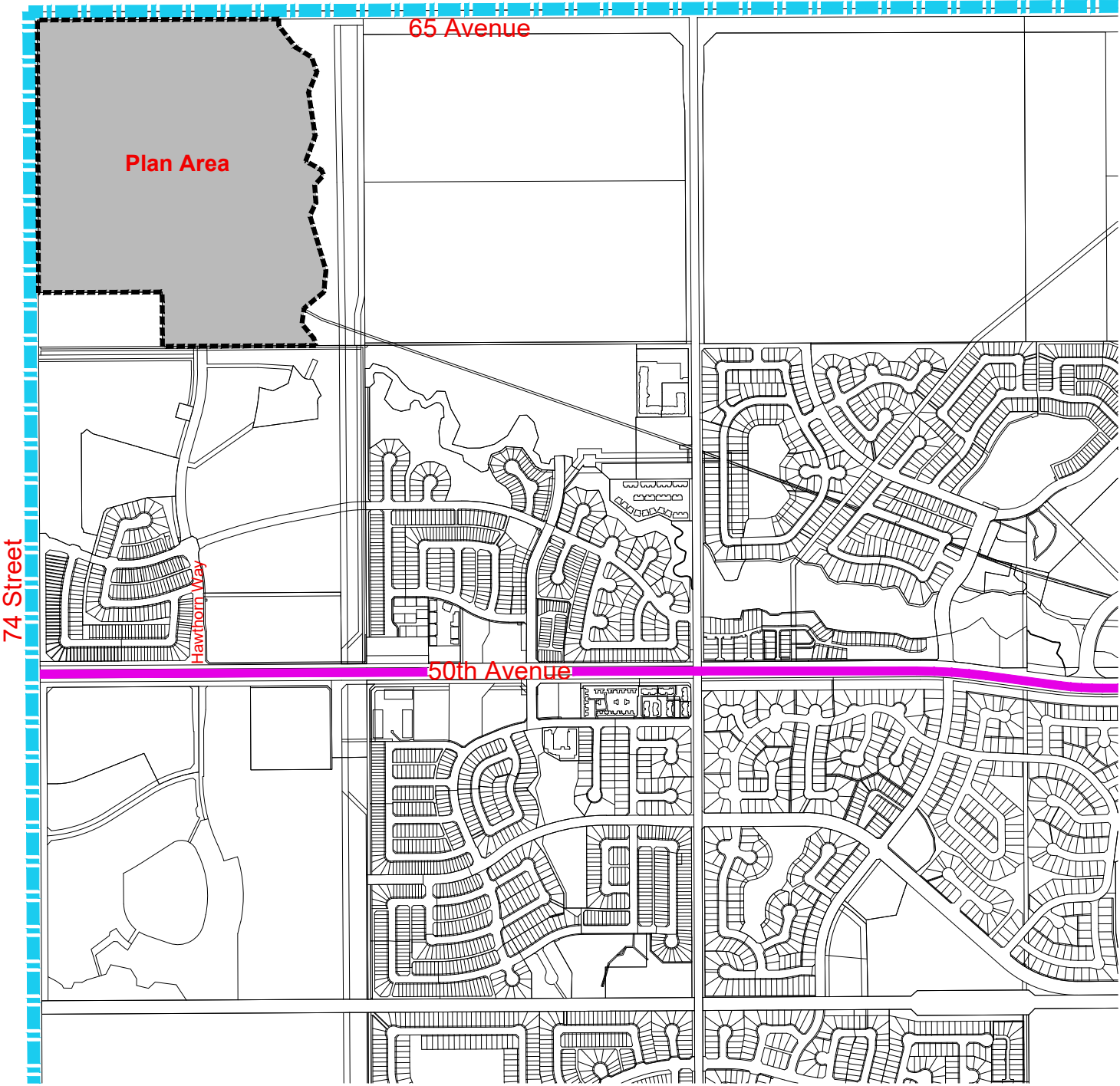
A noise attenuation study will be conducted as deemed necessary prior to approving a subdivision application and any noise attenuation measures determined to be required will be constructed on private property.

9 Land Use Statistics

The land use concept statistics for Grayson Estates provides a breakdown of the allocation of lands in the development strategy. Land use and population statistics are contained in **Table 1 Land Use Statistics**.

Appendix A – Proposed Figures & Tables

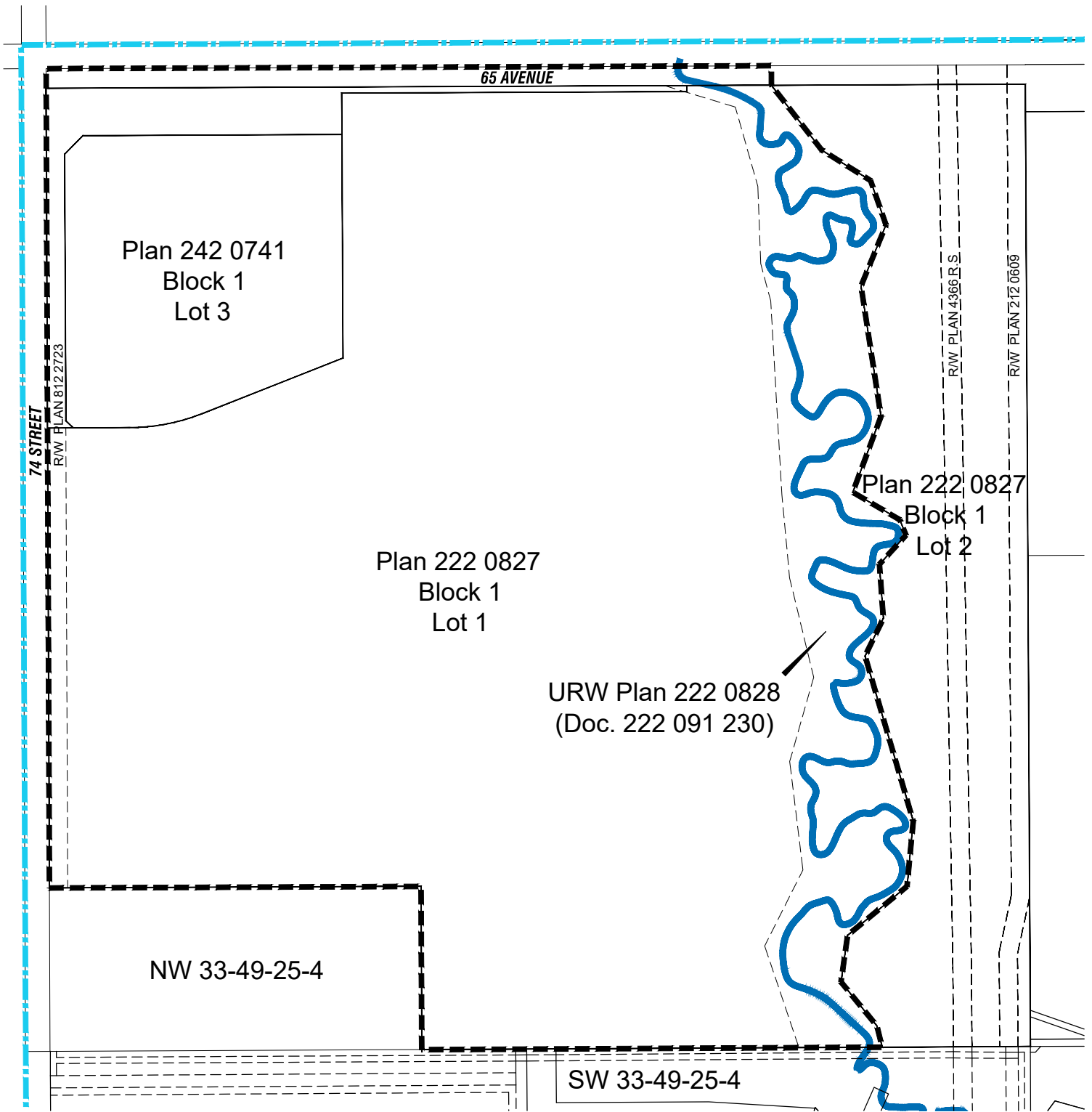
Edmonton International Airport



LEGEND

- Highway 39/50 Avenue
- Outline Plan Boundary
- City Boundary

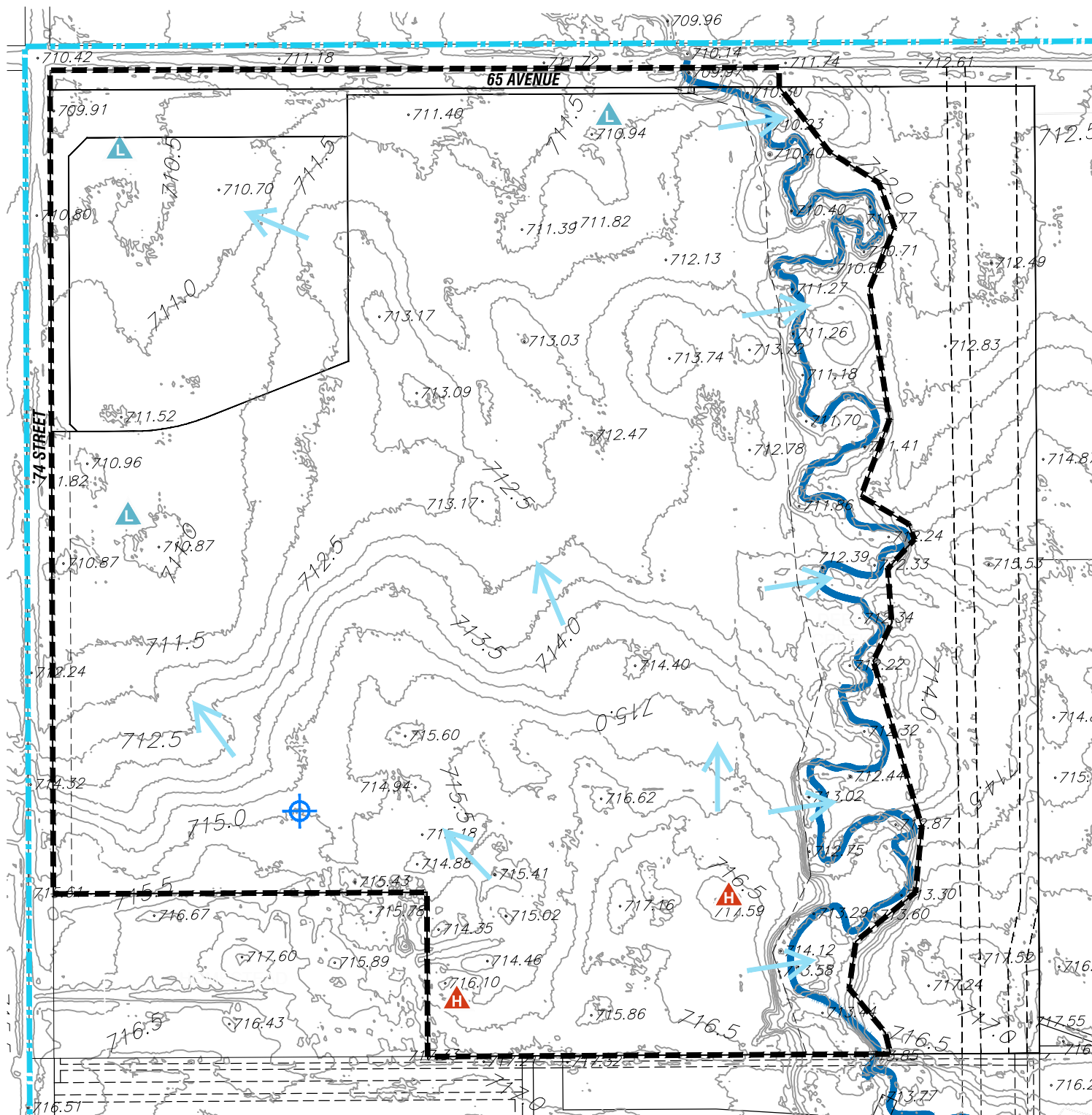




LEGEND

- Outline Plan Boundary
- City Boundary



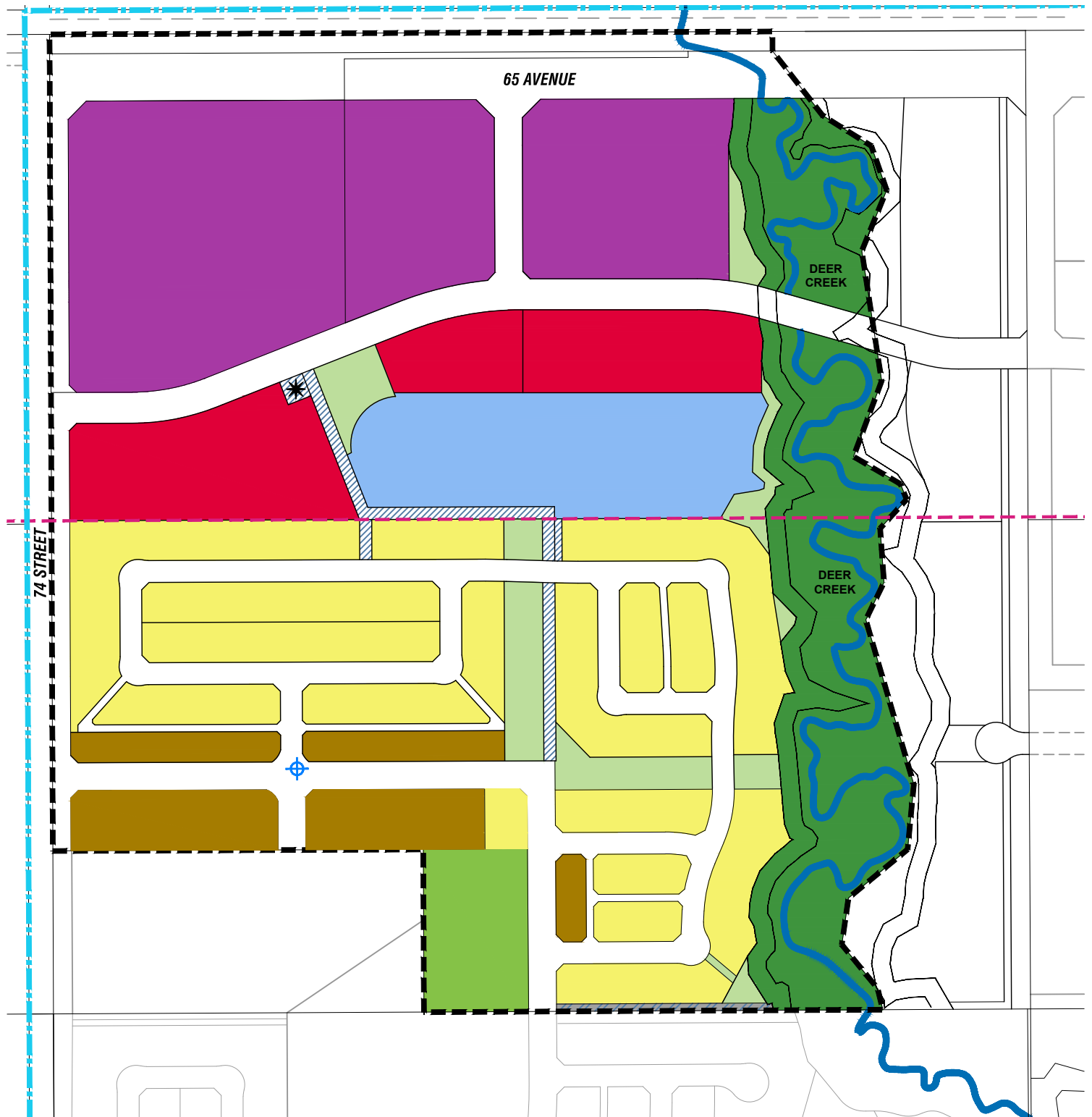


LEGEND

- | | | | |
|--|-------------------------|--|-----------------------|
| | High Point | | Abandoned Well Site |
| | Low Point | | Outline Plan Boundary |
| | Overland Flow Direction | | City Boundary |
| | Contours | | |

716.5 Elevation





LEGEND

- Low Density Residential
- Medium Density Residential
- Business Commercial
- Business Employment
- Storm Water Management Facility

- Park
- School/Park Site
- Natural Area (Environmental Reserve)
- Public Utility Lot
- City of Leduc Sanitary Easement

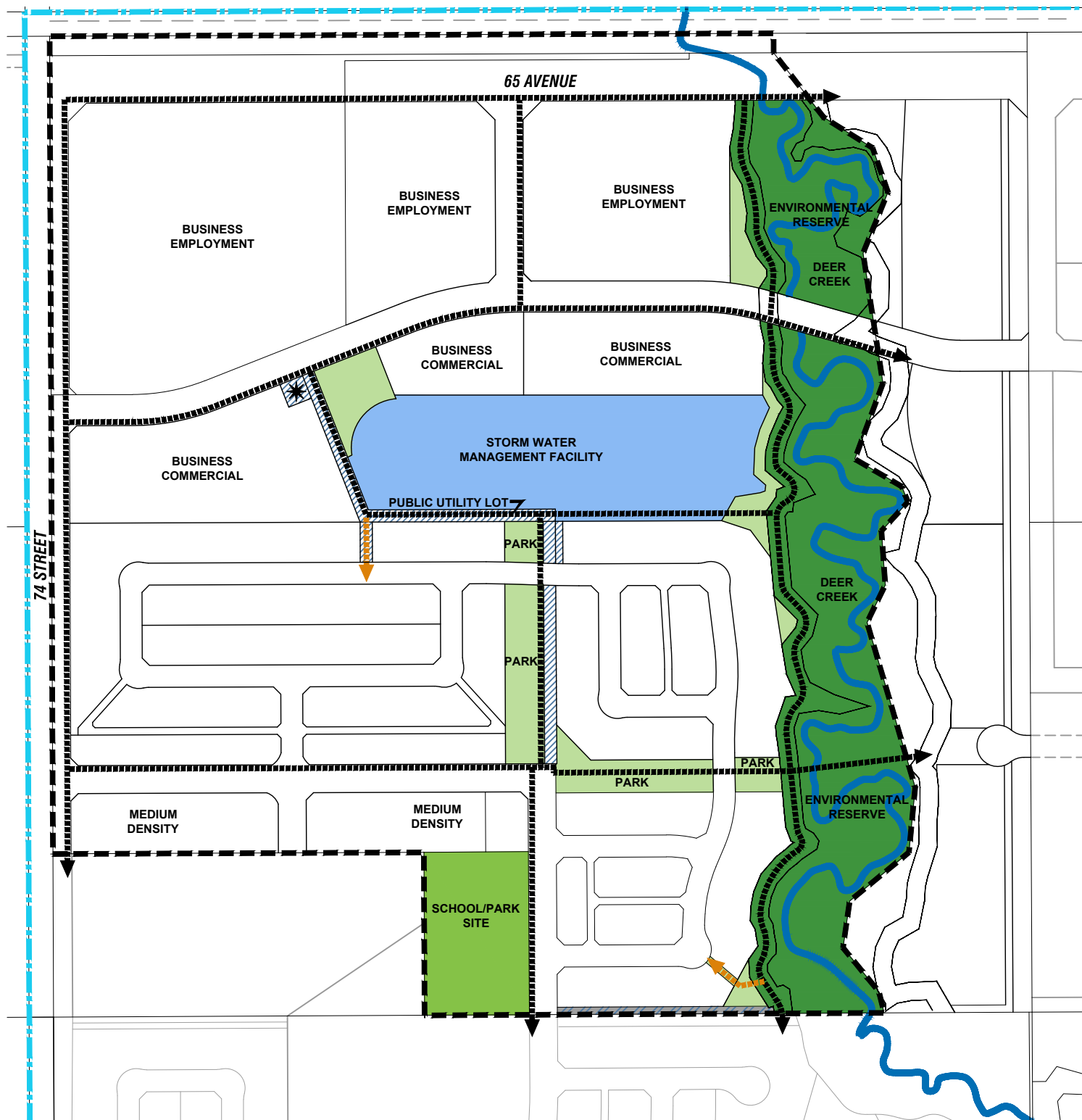
- +

 Abandoned Well Site
- *












 Sanitary Lift Station
- Watercourse
- 400m Residential Boundary
- Outline Plan Boundary

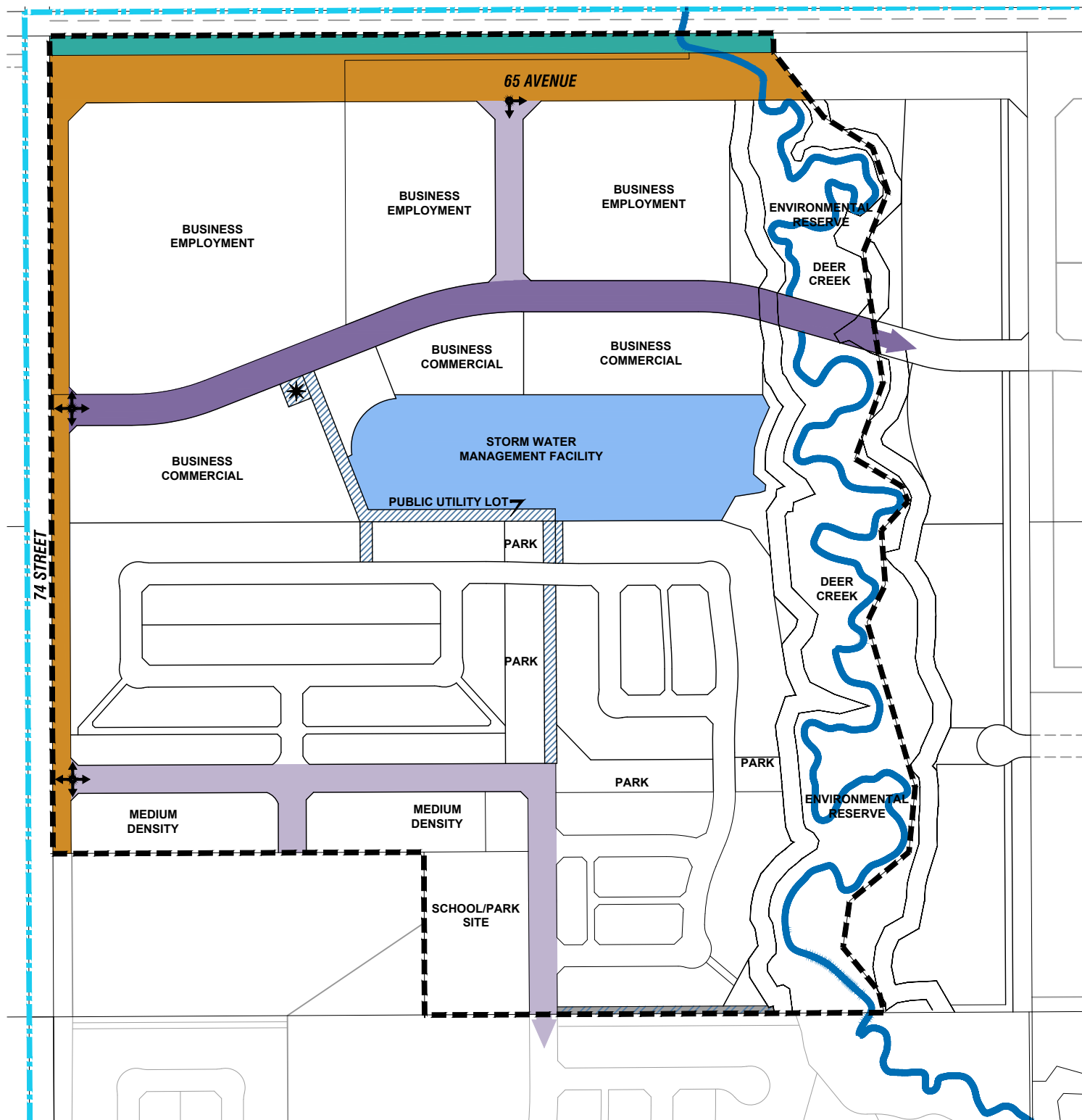
City Boundary

















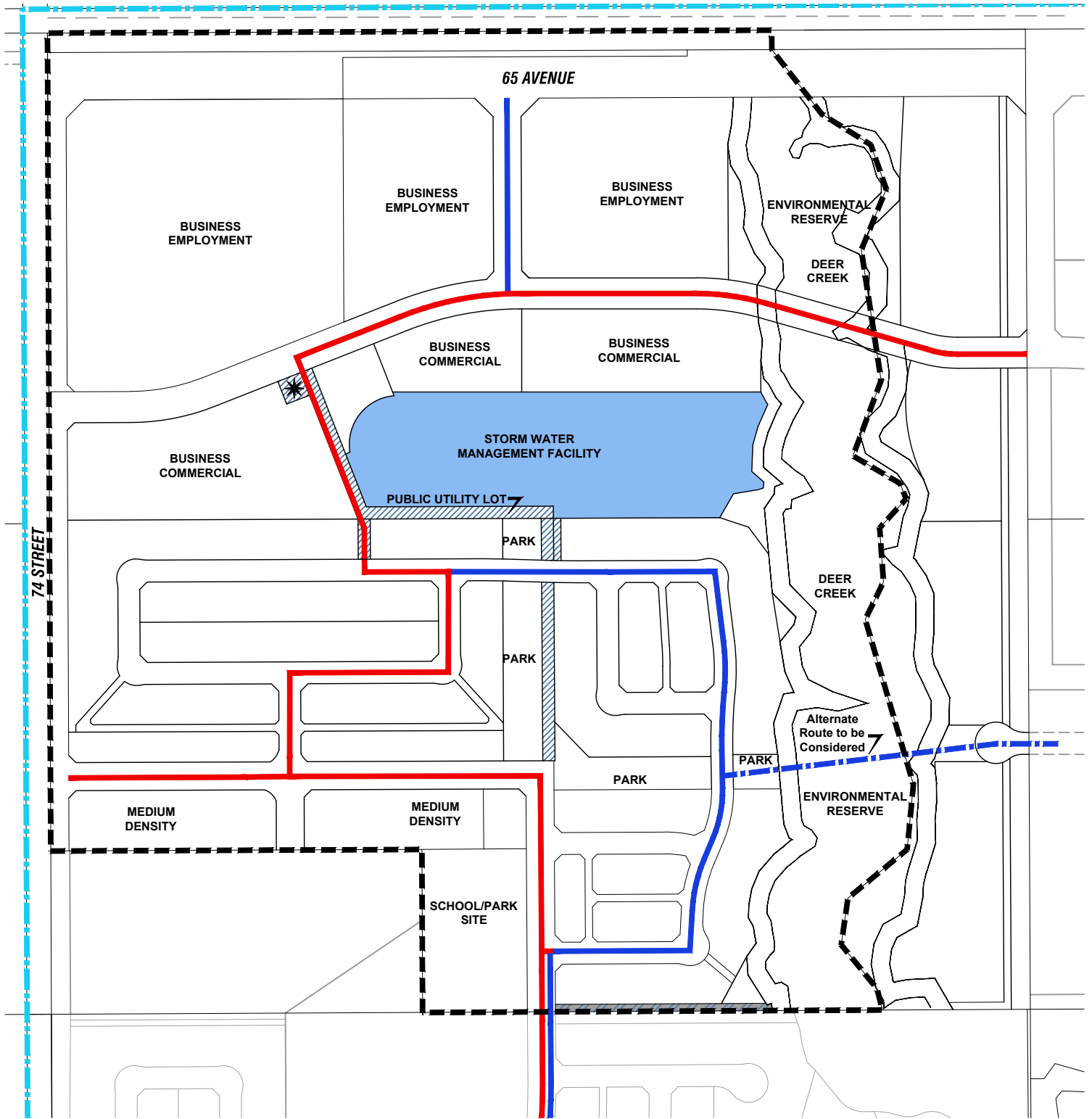
LEGEND

 Park	 Public Utility Lot	 Sanitary Lift Station
 School/Park Site	 City of Leduc Sanitary Easement	 City Boundary
 Environmental Reserve	 3.0 m Asphalt Multiway/ Multiway Connections	 Outline Plan Boundary
 Storm Water Management Facility	 Pedestrian Connections	



LEGEND

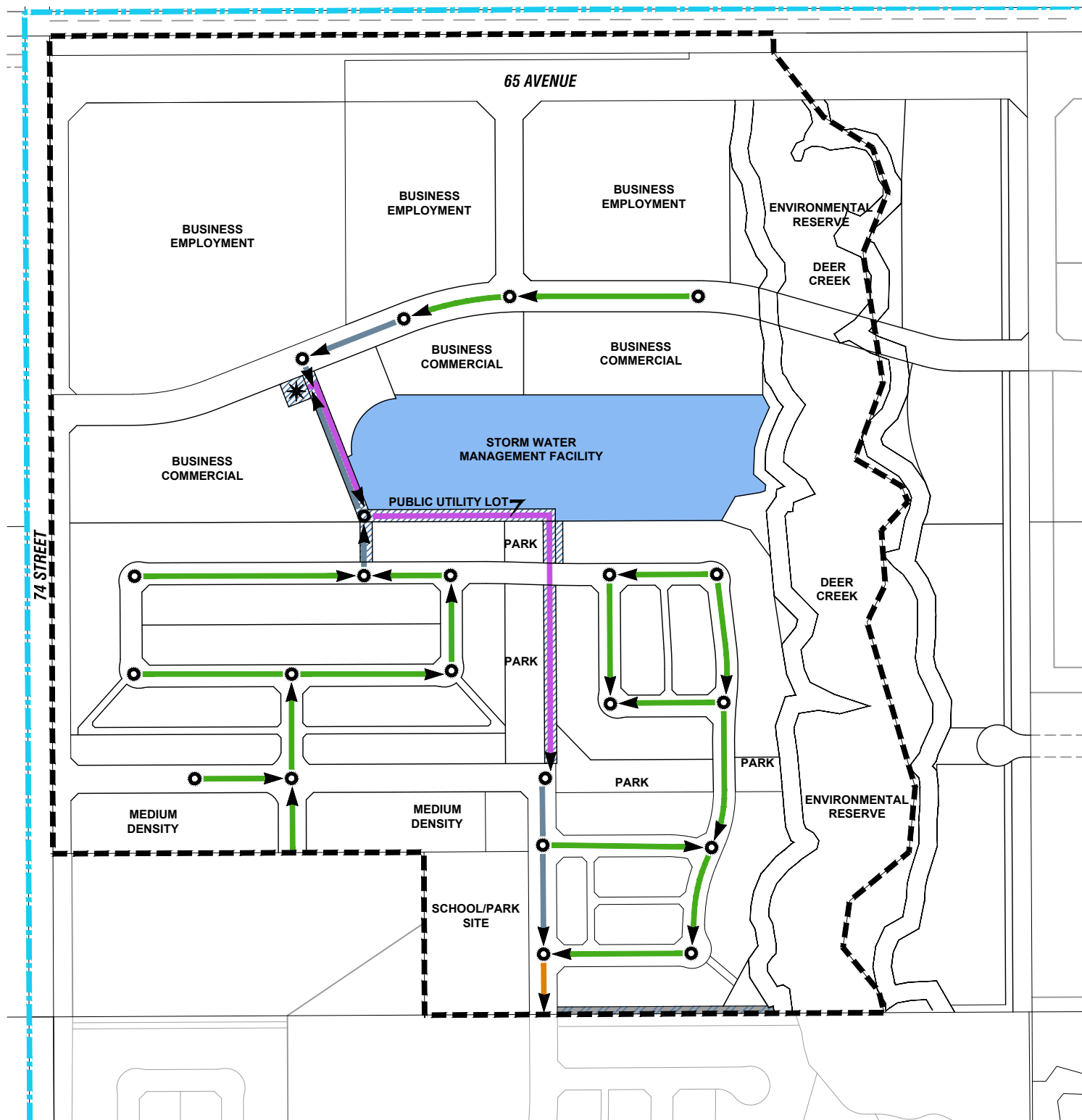
	Collector Road		Public Utility Lot		Right In/Right Out Access
	4 Lane Collector Road		City of Leduc Sanitary Easement		Sanitary Lift Station
	Arterial Road		Storm Water Management Facility		Outline Plan Boundary
	Road Widening		All Directional Access		City Boundary



LEGEND

- | | | |
|---|---|---|
|  200 mm Water Main |  Public Utility Lot |  City Boundary |
|  300 mm Water Main |  City of Leduc Sanitary Easement | |
|  Alternate Route Water Main |  Sanitary Lift Station | |
|  Storm Water Management Facility |  Outline Plan Boundary | |

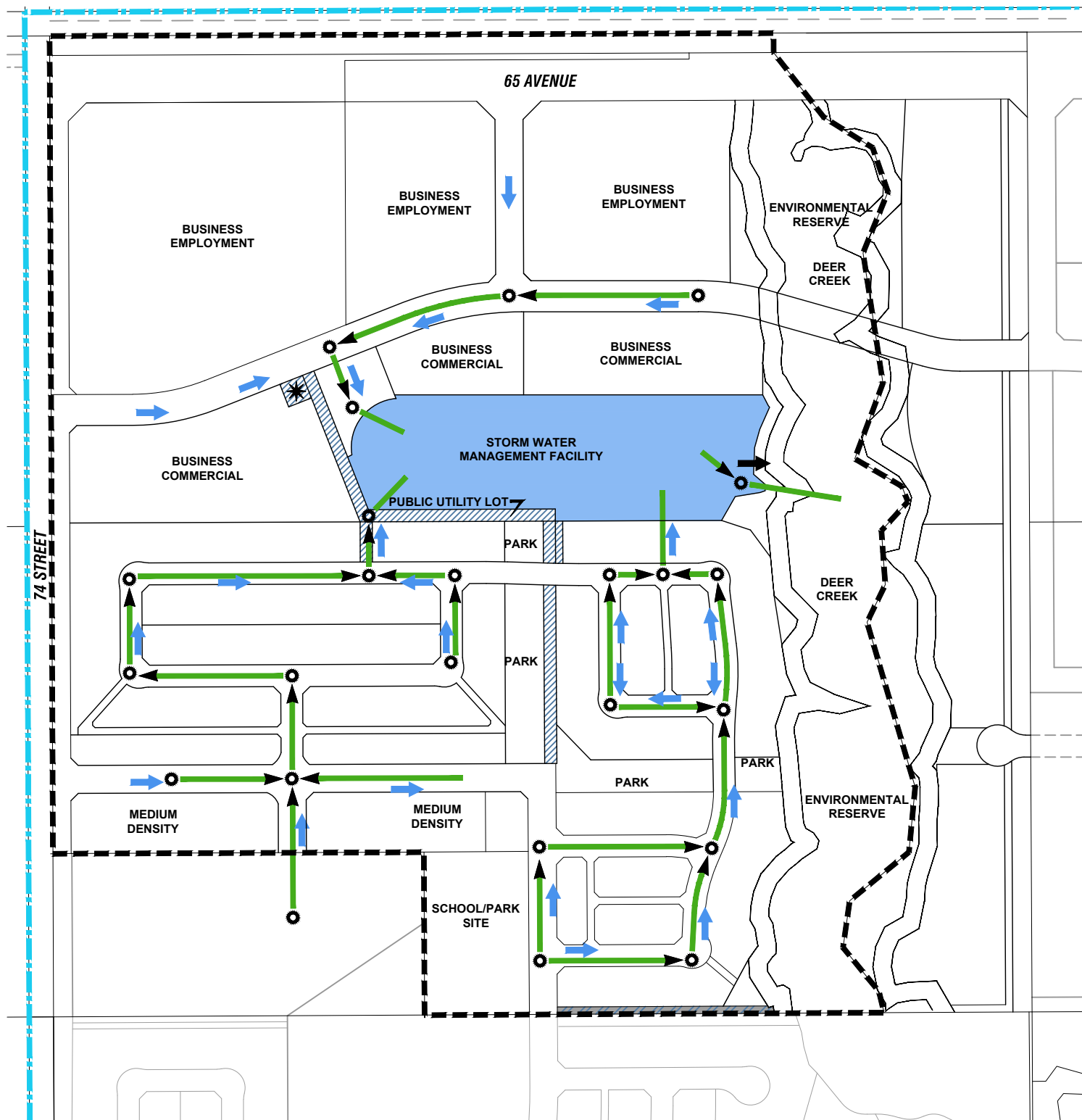




LEGEND

- | | | |
|----------------------|---------------------------------|---------------------------------|
| 200 mm Sanitary Line | Manhole | City of Leduc Sanitary Easement |
| 250 mm Sanitary Line | Flow Direction | Sanitary Lift Station |
| 300 mm Trunk Line | Storm Water Management Facility | City Boundary |
| Sanitary Forcemain | Public Utility Lot | Outline Plan Boundary |

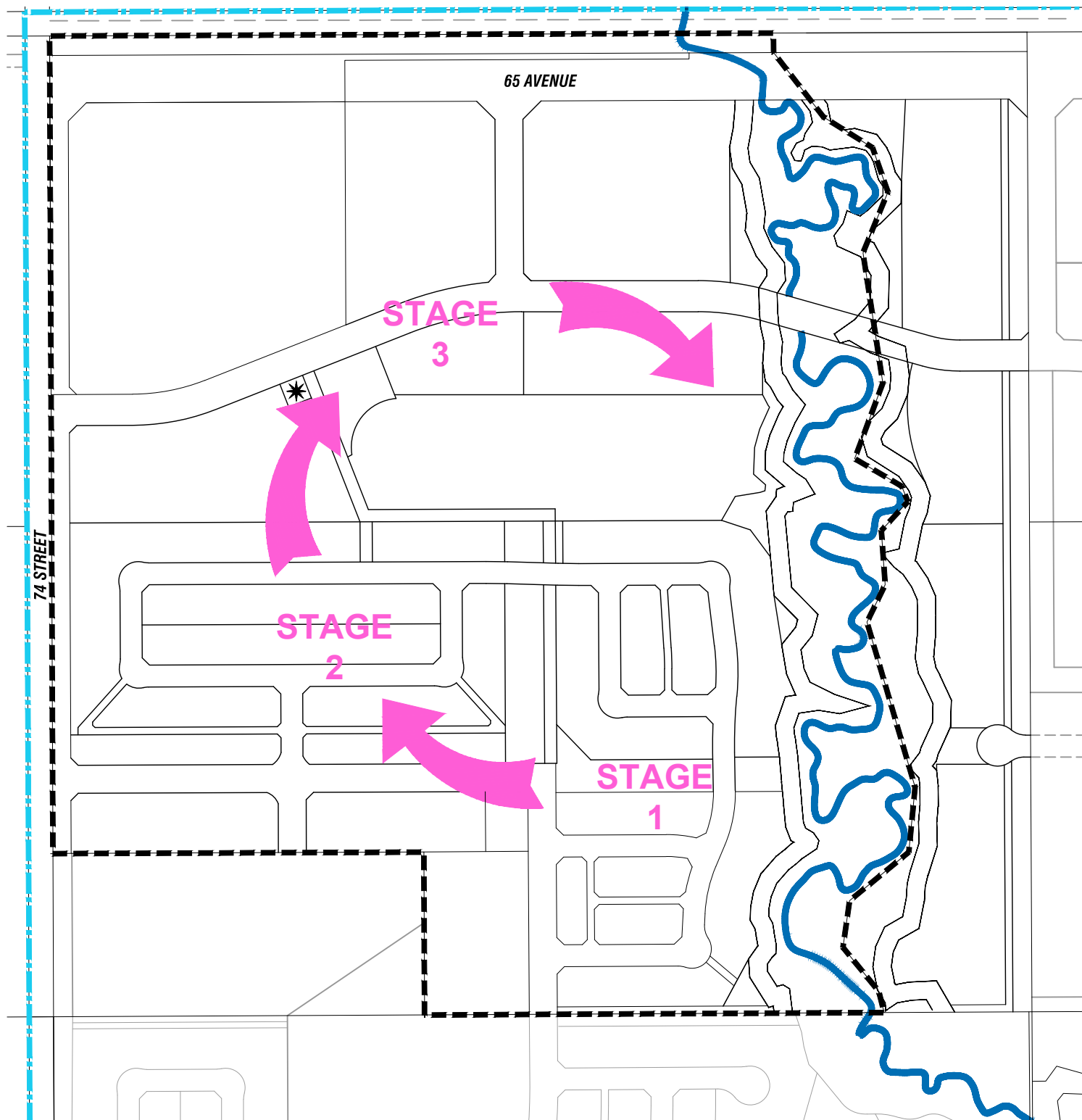




LEGEND

	Storm Water Management Facility		Flow Direction		Sanitary Lift Station
	Major Overland Flow		Storm Line		City Boundary
	Emergency Overland Flow		City of Leduc Sanitary Easement		Outline Plan Boundary
	Manhole		Public Utility Lot		





LEGEND

-  Direction of Development
-  Sanitary Lift Station
-  Outline Plan Boundary
-  City Boundary



GRAYSON ESTATES OUTLINE PLAN

Table 1: Land Use Statistics

Land Use	Area (ha)	Area (Ac)	% of GA	% of GDA
Gross Area (GA)	49.2	121.58	100.00%	
Environmental Reserve	6.65	16.43	13.52%	
Gross Developable Area (GDA)	42.55	105.14	86.48%	100.00%
Commercial	4.00	9.88		9.40%
Business Employment	9.51	23.50		22.35%
Arterial Road Dedication	3.31	8.18		7.78%
Municipal Reserve (School/Parks)	2.98	7.36		7.00%
Collector Roads	3.57	8.82		8.39%
Local Roads	3.53	8.72		8.30%
Storm Water Management Facility	3.19	7.88		7.50%
Public Utility Lot	0.66	1.63		1.55%
Total Non-Residential Area	30.75	75.98		72.27%
Net Residential Area (NRA)	11.80	29.16		27.73%

Residential Land Use	Area (ha)	Units/ha	Units	% Total Units	People/Unit	Populations
Low Density Residential (LDR)	9.23	25	231	58.01%	2.6	600
Medium Residential (MDR)	2.57	65	167	41.99%	2.0	334
Total	11.80		398	100.00%		934

Gross Population Density	21.95	persons per gross developable area
Net Population Density	79.16	persons per net residential area
Gross Unit Density	9.35	units per gross developable area
Net Unit Density	33.71	units per net residential area