SOUTHPOINTE

NEIGHBOURHOOD AREA STRUCTURE PLAN

RED DEER



Adopted November 2nd, 2009 Bylaw 3217/E-2009

SOUTHPOINTE

NEIGHBOURHOOD AREA STRUCTURE PLAN

PLANNING TEAM:













PREPARED FOR:





THE BOWER FAMILY

SUBMITTED BY:

InterPLAN strategies inc.

November 2009

NOTE

The Neighbourhood Area Structure Plan for Southpointe is a planning document prepared for adoption by City Council under the provisions of the Municipal Government Act. The Supporting Information contained in the provided Appendices are for information purposes only and are not adopted by Bylaw.

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SOUTHPOINTE NASP

1.0 LOCATION AND PURPOSE

1.1 LOCATION

Southpointe Neighbourhood Area Structure Plan (The Plan) (Figure 1) is located in the southern part of The City of Red Deer between the Queen Elizabeth II Highway (formally Highway #2) and Taylor Drive, south of Waskasoo Creek and north of 19th Street.

The Southpointe Neighbourhood Area Structure Plan boundary was delineated by City of Red Deer Administration.

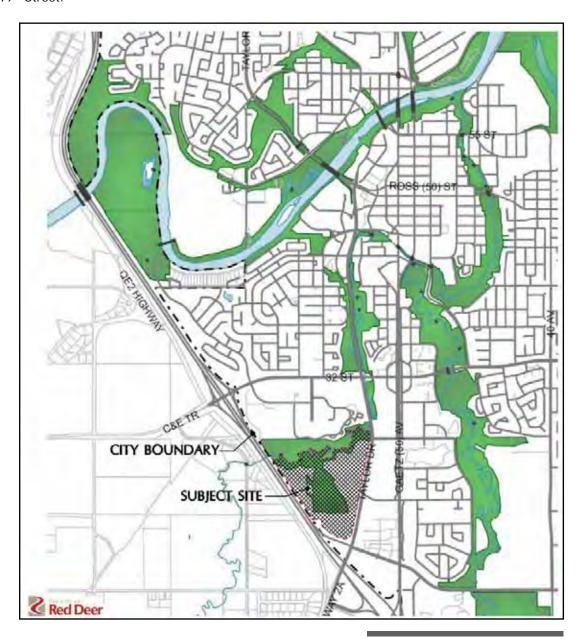


FIGURE 1: LOCATION

1.2 PURPOSE

The Neighbourhood Area Structure Plan (NASP) for Southpointe is intended to provide a foundation for subdivision and development. In preparation of this Neighbourhood Area Structure Plan, careful attention was paid to the edge conditions on all sides and the policies and objectives set forth in The City of Red Deer Municipal Development Plan (Bylaw 3404/2008), the Neighbourhood Planning Guidelines and Standards, the Red Deer Trails Master Plan and Council direction of August 13, 2007.

The NASP describes how ± 157.0 acres (± 63.54 hectares) of vacant land will be developed in an efficient and orderly manner. Included in the NASP are four distinct areas:

- The Waskasoo Creek Natural Area south of the creek:
- The natural area (referred to as the Bower Natural Area) which lies near the centre of the area;
- The lands belonging to the Red Deer College which have been planned by the College according to their own Master Plan; and
- 4. A 95 acre± (38.44 ha±) parcel, referred to as Southpointe Junction (SP Junction), being proposed by Qualico for the development of a mixed use urban village incorporating residential, retail, office, open space and a potential location for a hotel/ convention facility.

As part of the NASP, the developer, Qualico, on behalf of the landowner, has negotiated an agreement with The City Of Red Deer regarding the preservation of a portion of a natural area referred to as the Bower Natural Area that will run north south along the middle of part of the NASP

area and link with the Waskasoo Creek Natural Area to the north.

INTERPLAN has prepared, on behalf of Qualico and Red Deer College, a Neighbourhood Area Structure Plan for Southpointe.

The following sections of this report are intended to discuss the NASP objectives, policy framework, site characteristics, proposed development concept and land uses, municipal reserve and open space requirements, transportation and access, proposed site servicing and implementation strategy.



View looking north west from east side of subject site

SOUTHPOINTE NASP

2.0 NEIGHBOURHOOD AREA STRUCTURE PLAN OBJECTIVES

The following is a list of objectives for the Neighbourhood Area Structure Plan for Southpointe:

- To establish a comprehensive Neighbourhood Area Structure Plan that describes uses and strategies for appropriate development of the Plan area;
- To provide a policy framework consistent with the provisions of the relevant City of Red Deer policies for guiding development and subdivision of the plan area;
- To create the opportunity for potential development that meets the needs of The City of Red Deer and is accepted by local residents;

- To illustrate the physical characteristics of the plan area and describe the proposed development;
- To identify any constraints on the plan area and how these will be addressed in the proposed development, and
- To address the servicing, transportation and open space requirements associated with the proposed development.

SOUTHPOINTE NASP

3.0 POLICY FRAMEWORK

3.1 INTERMUNICIPAL DEVELOPMENT PLAN

The NASP area is situated outside of the legislative framework of the Intermunicipal Development Plan.

3.2 MUNICIPAL DEVELOPMENT PLAN

The City of Red Deer <u>Municipal Development Plan</u> was adopted by City Council as Bylaw 3404/2008 in May 2008 concurrent with the preparation of this NASP. The role of the MDP is identified as: "guides and directs future growth and development for Red Deer, ensuring orderly, economical and beneficial development while balancing the environmental, social and economic needs and desires of the community."

It is the requirement of the NASP to comply with the MDP. The "Generalized Land use Concept" Map in the <u>Municipal Development Plan</u> shows the land use for the Southpointe NASP site as a combination of Open Space, Major, Commercial, Residential and Public Service. The area is further identified as a mixed use area under 'Intensification and Mixed Use Opportunities'.

The MDP defines Mixed Use as: "A combination of different uses, such as, but not limited to, residential, office commercial, retail commercial, public or entertainment, which are horizontally integrated (i.e. uses located on the same site beside on another) and/or vertically integrated (i.e. uses located on different floors in the same building) within a single compact form of urban development. The mixes of uses are to be compatible, mutually beneficial, and integrated into the community, for example, live/work in the same complex. Mixed use also relates to a range of dwelling types that could provide residences to a diversity of living arrangements and incomes"

The NASP complies with all relevant principles in the MDP, the following chart outlines the more specific sections of the MDP and how the goals and/or principles contained are reflected in NASP.

| MDP Section # | Principle/Goal/Objective | Southpointe NASP |
|--|---|---|
| Section 3.0: Vision and Guiding Principles | 3.1 A Vision for the Future "a community with a unique natural environment preserved and enhanced by careful community planning; A community which reflects high standards in terms of quality of life; A caring community with a strong volunteer ethic; A community which offers a wide range of opportunities for employment, education, recreation and culture" | Maintains a portion of the natural environment in balance with a need for urban development to sustain growth and to provide high quality and varied opportunities for living and working environments. |

| MDP Section # | Goal / Principle | Southpointe NASP |
|---|--|--|
| Section 3.0: Vision and Guiding Principles | 3.2.3: "Ensure the efficient use of land for urban purposes by encouraging integration of uses, increased densities and innovative designs" | Adheres to all 16 overall guiding principles listed but focuses most specifically on the key principles listed here. Ensures efficient use of land. |
| | 3.2.4: "Sustain the natural environment and protect natural systems by paying attention to site resources (hydrology, terrain, geology, biodiversity of vegetation and wildlife) while providing a climate for community and economic growth." | Promotes community and economic growth to occur while allowing the City, Red Deer College, and the Developer to protect natural systems through careful consideration and stewardship of site resources. |
| | 3.2.10: "Build vibrant, attractive and safe neighbourhoods that provide for a range of housing choices, access to services, local employment, recreation, and open space." | Offers a range of housing choices, access to services, local employment, recreation, and open space. |
| Section 5.0: Growth Management and Urban Form | A stated Goal is: "Ensure the efficient utilization of lands and infrastructure, while encouraging a greater mix of uses and socio-economic activities in both new and established areas." | Fulfills this goal |
| | 5.0(b) "Encourage growth in locations and patterns that can utilize existing or planned infrastructure capacity and reduce overall travel demands;" | Location along existing major transportation routes and adjacent to existing infrastructure. Employment and residential opportunities in the same location thereby potentially reducing the need for travel. |
| | 5.0(d) "Minimize conflicts between efficient urban growth, the preservation of ecologically important natural areas," | Attains a balance between development and the preservation of a significant and ecologically important natural area. |
| | 5.0(e) "Encourage a compact and efficient urban form;" | Provides higher density residential developments contained in a smaller footprint. |
| | Policy 5.7 "The City should ensure new development is contiguous to the existing built-up area." | Provide for sequential development from east to west. |

| MDP Section # | Goal / Principle | Southpointe NASP |
|---|---|---|
| Section 5.0: Growth Management and Urban Form | Policy 5.9 "The City shall seek to reduce travel demands by seeking to locate: • Appropriate employment opportunities in or adjacent existing and future residential areas. • New residential areas adjacent to existing and future employment opportunities: • Appropriate commercial and community services in proximity to residential areas." | Includes a variety of uses including Public Service, Commercial, Office and Residential and makes it an ideal example of how to reduce travel demands. |
| Section 7.0: Urban Design | Goal: "To create a physical environment that is attractive, safe, functional, vibrant and a source of community pride, where residents and visitors experience a strong sense of place." | Provides for an attractively designed, pedestrian oriented mixed use urban node focusing on a central main street and open space. |
| Section 9.0 Environmental and Ecological Management | Goals: "To preserve and integrate significant natural areas into the open space system. To foster the creation and maintenance of attractive, clean and ecologically responsible natural and built environments. To recognize and promote environmentally sustainability initiatives and trends in land development." | Design facilitates the preservation, through a City land acquisition, of a significant component of the existing natural area and directs development to incorporate environmentally sustainable initiatives. |
| Section 10.0 Housing and Neighbourhood Design | 10.0(b) "Provide for a mix of housing types to meet a variety of lifestyles, special needs, life cycle demands and market preferences;" 10.0(e) "Promote the efficient utilization of land by achieving increased residential densities" | Provides different housing products, including live work units, intended for varied demographics in increased densities. |
| | 10.4 Housing Form "The City shall encourage the creation of a wide variety of housing forms. This may include dwelling units in combination with compatible non-residential uses, live-work units and secondary suites." | Provides opportunities for live–work units and secondary suites in varied housing types. |
| Section 12.0: Commercial Development | 12.0(b) "Ensure the quality and aesthetics of development along major commercial corridors; 12.0(c) Recognize emerging trends in retailing and commercial land use, including the creation of mixed use town centres where appropriate; and 12.0(d) Promote commercial development that generates opportunities for local employment;" | Commits to innovative and quality commercial development and provides for a Mixed Use Area, with commercial, residential, office and public service uses and opportunities for local employment. |

| MDP Section # | Goal / Principle | Southpointe NASP |
|---|---|---|
| Section 14.0: Parks, Recreation and Culture | Policy 14.3 Trails and Pathways "Trails and pathways shall be designed and constructed in accordance with the direction provided through the Trails Master Plan, as amended from time to time" | Provides for trails designed in accordance with the Trails Master Plan. |
| | Policy 14.4 Open Space Connections "As new areas are planned and developed, The City shall ensure the design of the parks and open space system provides: Linkages to the major open space, Linear corridors and pedestrian connections within and between neighbourhoods; and Consideration of continuous wildlife corridors and key wildlife habitat" | Provides clear linkages between the open space systems both within the NASP area and connections to outside systems. |
| | Policy 14.8 Gathering Spaces "In conjunction with streetscapes and other public realm areas, parks and open space shall be designed to be easily accessible to pedestrians and create opportunities for area residents to gather and interact wherever possible" | Provides for an open space system with gathering places and easy access. |
| Section 16.0: Transportation | Goal: "Provide for the safe and efficient movement of people and goods within and through Red Deer. Encourage the use of alternate means of transportation to the private automobile. Concentrate the planning of land use and transportation." | Provides an efficient road network, an opportunity for a well situated transit service, and the provision of an extensive selection of pedestrian and bicycle pathways. |
| Section 17.0 Utilities | Goal: "Provide environmentally responsible, safe, efficient and reliable utility systems to serve the City" | Meets or exceeds all City of Red Deer engineering standards. |

Policy 12.2 of the MDP establishes a hierarchy of commercial places. The commercial uses in the NASP will be a mixture of Arterial Commercial and District Commercial as defined in the MDP.

It is the intention of the NASP to concentrate the office use permitted in the commercial area into a central location within the NASP. The rationale behind this is to provide the opportunity for office development to occur within the development near

or on the main street. If deemed appropriate by the developer, a market analysis may be conducted to rationalize an application for higher than the permitted floor area of office space.

In an Administration report to Council on May 5th, 2008, Attachment "A" (Document #: 753507) has acknowledged the NASP area "...as having great potential for mixed use residential, commercial, and institutional development both in single

multi-purpose The purpose and buildings. Administration sees this as a good candidate for a mixed use area, which could be treated uniquely due to the circumstances of geography and the surrounding uses." The response goes on to add, "Should the developer come forward with an acceptable plan calling for and substantiating a town centre or other designation, supporting amendment could be considered concurrently with the adoption of the neighbourhood area structure plan."

The NASP has been prepared in accordance with the <u>Municipal Development Plan</u>.

3.3 CITY OF RED DEER LAND USE BYLAW

The City of Red Deer Land Use Bylaw 3357/2006 establishes the land use districts in The City of Red Deer and their associated permitted and discretionary uses and regulations. The current land use for the NASP area is divided into three districts: PS Public Service (Institutional or Governmental) District throughout the Waskasoo Creek area and north; P1 (Parks and Recreation) District in the west portion of the site; and A1 (Future Urban Development) District in the eastern and southern part of the parcel (see Figure 2).

The City of Red Deer Land Use Bylaw Constraints Map conceptually identifies a number of constraints on the subject site including floodway, flood fringe, escarpment, and major entry areas. These constraints have been reviewed with Administration and are addressed in the NASP. In summary:

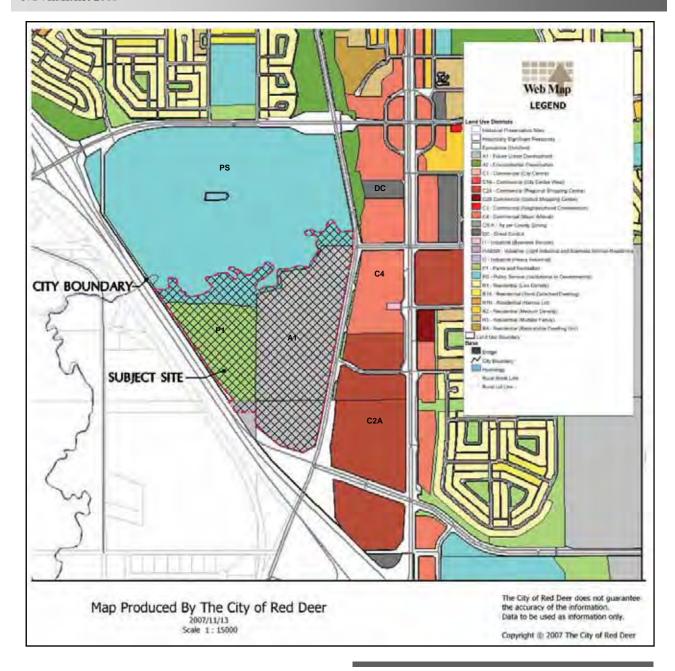
 Both the floodway and the flood fringe along Waskasoo Creek have been examined, modeled, and refined by the Developer and relevant City Departments. Results of these efforts are reflected in the design concept and accompanying reports to the NASP. All proposed development in the flood fringe, as identified, will comply with both the land use bylaw and the building code requirements for flood proofing.

- Extensive examination of the escarpment areas has taken place during both an Environmental Assessment and the Geotechnical Investigation. The investigations concluded that slopes stable and are suitable development. The investigations also provide recommendations and measures development.
- Because Taylor Drive is identified as a major entry area, architectural guidelines, landscaping, and other design elements will be addressed at the development permit and detailed design stage to ensure that the interface with Taylor Drive is complementary with existing development to the east and to the satisfaction of the Approving Authority.

3.4 CITY OF RED DEER NEIGHBOURHOOD PLANNING GUIDELINES AND STANDARDS

The City of Red Deer Neighbourhood Planning Guidelines and Standards adopted by City Council on December 16, 2002 (revised November 30, 2006) provide "guidelines and standards for the planning and design of neighbourhoods including parks and public facilities/amenities in The City of Red Deer." The Neighbourhood Planning Guidelines and Standards define a neighbourhood as "A predominately residential area, which is usually a quarter section (65 hectares or 160 acres) in size."

SOUTHPOINTE NASP



The Southpointe NASP is not a typical quarter section neighbourhood and does not contain predominantly residential uses, however the NASP has given careful consideration to these and additional guidelines and standards outlined in the Neighbourhood Planning Guidelines and Standards. The NASP strives to follow all relevant guidelines and standards outlined as well as the following General Design Considerations.

FIGURE 2: EXISTING LAND USE

- "A. Neighbourhood planning and design in The City of Red Deer strives to create desirable and sustainable places for healthy living, learning, working and recreation for families and individuals of all ages and with varying needs, interests and desires.
- B. Community development calls for people-friendly streets and a sense of place. Developers are encouraged to incorporate considerations and elements which

enhance the sensed quality of the built environment. The street and block layout should create opportunities to integrate sidewalks, trails, parks, squares, transit stops and large residential, commercial and public or semi-public buildings into a coherent whole rather than unrelated individual parts. This may include design considerations such as siting, orientation, visual sequences, viewpoints, spatial connotation, proportion and scale."

3.5 RED DEER TRAILS MASTER PLAN

Map 3.0 of the <u>Red Deer Trails Master Plan</u> approved by City Council on October 11, 2005 identifies the future trail network for the NASP and surrounding areas. The relevant section of the map is shown in Figure 3.

The NASP complies with the intent of the future trail network outlined in the Red Deer Trails Master Plan. The proposed future Waskasoo Trail will be accommodated through the site by linking to the North College lands across the existing concrete bridge and then extending south along the east edge of the wooded area before linking east and south to the arterial trail located along Taylor Drive. The Proposed Future Bikeway can be accommodated along the edge of the proposed collector road running north south through the centre of the eastern portion of the site or along the arterial trail along Taylor Drive. Nature Trails as shown in the Master Plan will be maintained or realigned to accommodate development.

3.6 COUNCIL DIRECTION AUGUST 2007

At The City of Red Deer Council meeting on August 13^{th,} 2007 the following motion was introduced and passed:

"Resolved that Council of the City of Red Deer having considered the report from the Recreation, Parks & Culture Manager, dated August 7, 2007, re: Southpointe Junction Concept Development, Bower Natural Area Preservation, hereby agrees in principal to the amount of area and location of the open space and natural area design and directs Administration to develop an agreement with the developer and land owner to:

- 1. Purchase +/- 12.26 acres of treed escarpment,
- 2. Purchase the additional noted 2.76 acres of open space for \$1.00,

Direct the additional 1.95 acres of owned municipal reserve to be applied to the natural treed area and Waskasoo Creek for the purpose of preserving additional amounts of natural environment and current natural trail connections."

3.7 ENTRANCEWAY CORRIDOR GUIDELINES

A draft version of the Entranceway Corridor Guidelines was prepared for the City of Red Deer and Red Deer County in February 2009. Consideration will be given to the final version of this study for all areas within the proposed overlay district at the time of detailed design.

¹ Since this agreement was made, it has been determined by The City and the developer that there is no reserve owing on the Southpointe Junction portion of the lands (A Subdivision by Re-plotting, approved Nov. 20, 1969).

SOUTHPOINTE NASP

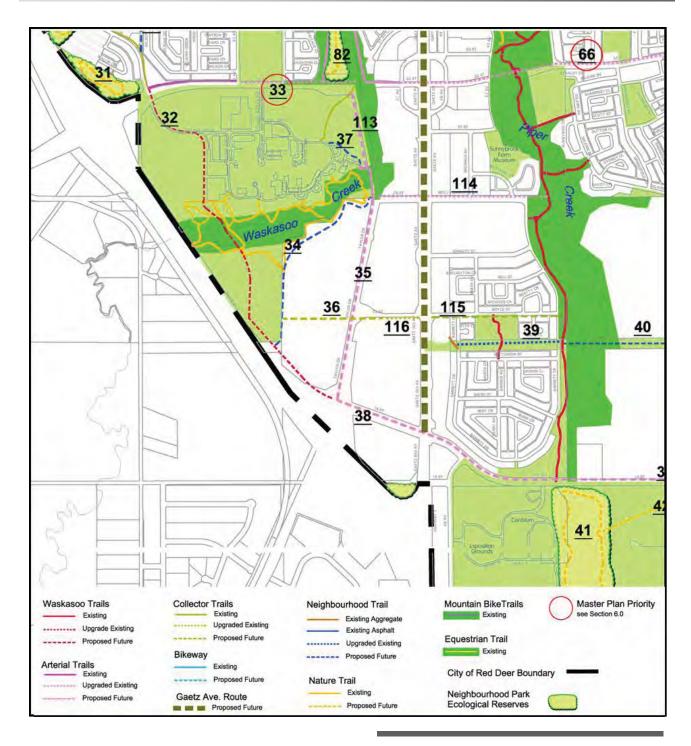


FIGURE 3: RED DEER TRAIL MAP
Source: Red Deer Trails Master Plan

4.0 SITE CHARACTERISTICS

An air photo and a topographic map of the NASP area are illustrated in Figures 4 and 5 respectively.

4.1 LEGAL DESCRIPTION AND OWNERSHIP

The legal description and land ownership for the subject site are indicated below. The site is currently divided into five legal entities.

1) Red Deer Junior College

- Title Number: 012 370 530
- All that portion of the NW ¼ Section 5, TWP 38, Range 27, W of 4 which lies east of the north easterly and south easterly limits of the road.
- Containing 34.2 hectares (84.43 acres) more or less (including lands outside the NASP area)
- Excepting thereout:
 - 0.174 hectares (0.43 acres) more or less for creek diversion
 - Plan 0125532 Road (1.245 hectares / 3.08 acres more or less)

2) The Red Deer College

- Title Number: 012 027 698
- A portion of the SE ¼ Section 7, TWP 38,



View looking south east from north side of subject site.

- Range 27, W of 4 which lies south of Waskasoo Creek.
- Containing 3.05 hectares (7.53 acres) more or less

3) AltaLink Management Ltd.

- Title Number: 022 202 207 +1
- A portion of the SW ¼ Section 5, TWP 38, Range 27, W of 4 : Plan 5003NY
- Excepting thereout:
 - Plan 8922991:
 - Road (0.221 hectares / 0.55 acres more or less)
 - Railway (0.220 hectares / 0.54 acres more or less)

4) Her Majesty the Queen in Right of Alberta*

- Title Number: 932 133 824
- Plan 9321221: Storm Detention Pond within NE ¼ Section, TWP 38, Range 27, W of 4
- Containing 1.375 hectares (3.40 acres) more or less

5) James Bower and Cynthia Bower-Pelech

- Title Number: 972 391 239
- Plan 977RS, Block B, within E ½ Section 5, TWP 38, Range 27, W of 4
- Containing 42.4 hectares (104.67 acres) more or less
- Excepting thereout:
 - Plan 9222024: Road (3.894 hectares / 9.62 acres more or less)
 - Plan 9321221: Public Work (1.375 hectares / 3.40 acres more or less)

The legal parcels are shown on Figure 4.

^{*}Note: Agreement with Alberta Transportation at the time of Expropriation 3(d) "The Detention Pond may be relocated at the Owner's discretion in future at the Owner's expense in accordance with good engineering practice."

EXISTING CONCRETE BRIDGE Altalink Management Ltd. Tide Number 022 202 207 41 -POWER POLES NATURAL LOW AREA OWER POLES FORMER GAS WELL SITE M DETENTION GATED ENTRY

SOUTHPOINTE NASP

AIR PHOTO & LEGAL DESCRIPTIONS

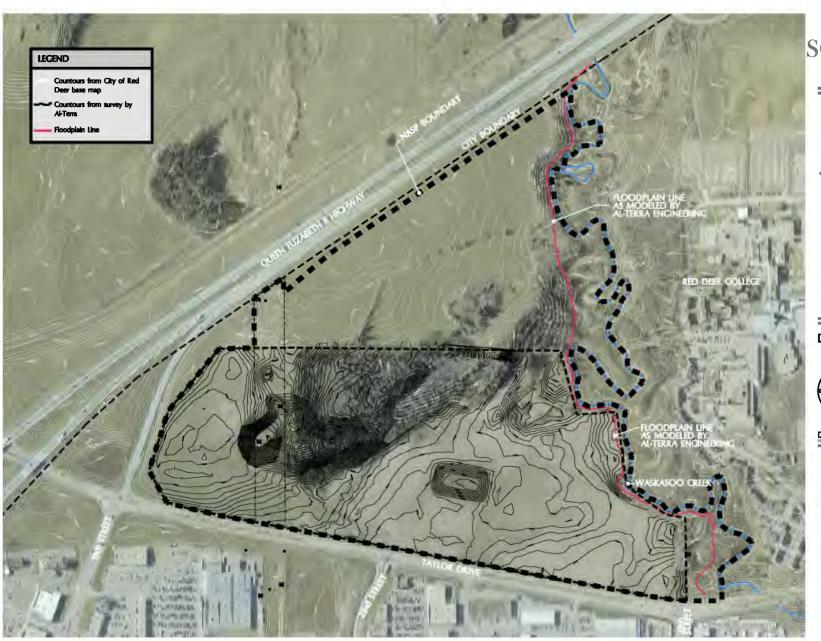
DATE: September 2009



DRAWING BY: Group 2/AI-Terra



InterPlan strategies inc. Land Planning Services

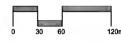


SOUTHPOINTE NASP

FIGURE 5 SITE **TOPOGRAPHY**

DATE: September 2009





DRAWING BY: Group 2/Alterra





InterPlan strategies inc.
Land Planning Services

4.2 PLAN AREA

The subject site contains approximately 157 acres (63.54 ha) more or less.

4.3 HISTORY OF SITE

Prior to settlement, the land was largely comprised of small treed hills and valleys and small meadows. The Bower family acquired the east parcel in the mid 1920's and proceeded to farm the meadows and run cattle in the wooded areas. Gradual clearing occurred in both the east and west parcels as the treed areas were used as wood lots. The sand mining operation was initiated with the construction of Highway 2 in the early 1960's and clearing occurred for the power line installation around the same time. In the later part of the 1960's the land to the west was purchased by Red Deer College from the original farmer, Lawrence Banting, and further clearing of that portion occurred to make way for more farm land.

During this period additional sand mining occurred on the east portion of the site, slightly north of where the existing storm pond is located. A then existing hill was used for fill, initially for developments to the east and later for the hospital site. The 1990's saw the construction of Taylor Drive and further sand extraction was used for the project. In the mid 1990's a joint project with Alberta Transportation and the City of Red Deer saw the purchase and development of the existing storm pond.

The sand mining operation was ended approximately six years ago. The remainder of the two portions of land have been farmed through their post settlement history with the exception of the wooded parcel.

4.4 CURRENT LAND USE CONTEXT

The lands to the north of Southpointe NASP are designated as PS Public Service (Institutional or Governmental) District and include the Waskasoo Creek Natural Area and the Red Deer College Lands (Figure 6). The lands immediately to the west are outside of The City of Red Deer boundary and are currently owned by Alberta Transportation for QE II Highway. Agricultural uses occur further to the west in Red Deer County. The lands to the east include a small strip along the east side of Taylor Drive that are designated P1 (Parks and Recreation) District and then a combination of C4 Commercial (Major Arterial) District to the north and C2A Commercial (Regional Shopping Centre) District to the south. The lands to the east are developed with the exception of a parcel at the south east corner of 22nd Street and Taylor Drive which is under construction. South of 22nd Street is Southpointe Common, a commercial containing a range of commercial tenants including Wal-Mart as well as two hotels. North of 22nd Street are a combination of commercial uses such as Petland and Michael's, restaurants and several commercial buildings offering rear bays.

The lands within the subject site proposed for future development are currently designated as A1 (Future Urban Development) District to the east and P1 (Parks and Recreation) District to the west.



Southpointe Common

FIGURE 6
LAND USE
CONTEXT

DATE: September 2009



DRAWING BY: Group 2/Al-Terra



4.5 LAND FORM

The majority of the site has been used as farmland and is gently undulating. A heavily treed area runs north south through the centre of the NASP area linking to the Waskasoo Creek Natural Area. The south east end of this treed area is steeply sloped and at the south end the rise has been partially removed by sand mining operations. This can be seen in the aerial photo shown in Figure 4 and the site topography map in Figure 5. There is an overall downward slope in the eastern portion of the site towards the existing storm detention pond located near the center of the open area to the east of the trees.

Two natural low areas also exist on the site, both at the north end of the treed Bower Natural Area and south of Waskasoo Creek.

Figure 5 also shows the floodplain line south of the creek as modeled by Al-Terra Engineering.

4.6 ECOLOGICAL PROFILE

An ecological evaluation of the natural area that runs north south through the centre of the NASP area as well as a portion of the Waskasoo Creek Natural Area was initially carried out in November 2004 by Al-Terra Engineering Ltd. and The City of Red Deer, Recreation Parks and Culture Department. The Waskasoo Creek Natural Area and the Red Deer College portion of the NASP was evaluated again in November 2007 by Al-Terra Engineering Ltd., Red Deer College, and The City of Red Deer, Recreation Parks and Culture Department. Both of these evaluations have been included under separate cover with the NASP submittal.



Existing path in Bower Natural Area

The evaluations of the major natural features included an evaluation of the tree types and locations, established path systems, wetland areas, ridges, and established a boundary delineating the natural areas. This boundary helps in establishing the natural areas to be protected or maintained during development and is reflected in the Concept Plans.

The initial ecological evaluation helped to determine the outline of the portion of lands to be designated as the Bower Natural Area as well as the placement of proposed future wetlands.

The subsequent evaluation identified the need to accommodate a 2.5 metre pathway adjacent to the west side of the treed edge on the Red Deer College side of the NASP. It was determined the area to be preserved would extend 2.5 metres into the current crop area. Also two linear treed hedges were identified, one located near the middle of the College South Lands and the other closer to the south end of the College South Lands, and were determined and agreed to by attending

representatives of the City of Red Deer Parks Department to be "preserved at the discretion of Red Deer College"²

Further recommendations by the City included that plant material from these two hedges could be salvaged and used elsewhere should eventual development determine that they cannot be preserved. Red Deer College will also consider offering equitable green space in their eventual final plan to compensate for these hedge areas should they be removed.

4.7 CURRENT ACCESS

There is an existing access road entering the south eastern portion of the site directly across from the intersection of Taylor Drive and 22nd Street. This entrance is gated and was used to access the sand mining area at the south end of the site. A second gated entrance is located across from 28th Street into the natural area. Figure 4 shows these access points. Alternate access is through the network of pathways that traverse the site from the Waskasoo Creek Natural Area and an existing concrete bridge that crosses the Creek. The bridge is currently used for pedestrian traffic and agricultural equipment crossing to farm the south College lands.

4.8 VEGETATION

In addition to the treed area discussed in Section

2 Ecological Profile: Assembled in November 2007 by AL-Terra in conjunction with City of Red Deer, Recreation, Parks and Culture Department. 4.6 the remainder of the subject site is largely cultivated farmland. The treed area is predominantly spruce and aspen forest with some pine and poplar. In addition to the manufactured storm retention pond on the east side of the site, there are two low areas between Waskasoo Creek and the majority of the treed area to the south which support the associated vegetation.



View of eastern side of subject site looking north.

4.9 ENVIRONMENTAL SITE ASSESSMENT CONSIDERATIONS

A Phase I Environmental Site Assessment (ESA) for the subject site, a copy of which is submitted under separate cover, was performed by Parkland Geotechnical Consulting Ltd. in May 2006 for the eastern portion of the site including the area referred to as the Bower Natural area. The primary objectives of the Phase 1 ESA were to identify environmental issues associated with the subject property and to determine whether any identified issues required a detailed site investigation or other action.

The Assessment identified a number of potential issues which are shown on Figure 4:

"A former Canadian Fina Oil Ltd. Well was located on the subject property at LSD 07-05-38-27-W4. There was

no visual indication of contamination or environmental impacts from this site. The area was also mined so the potential for residual surface contamination from the reclaimed site is very low. If any indication of hydrocarbon contamination is detected during site grading and preparation, further investigation may be required to determine the nature and extent of the contaminants.

Two former City landfill sites are located north of the subject property at SE 8-38-27-4. The landfills are both down-gradient and over 300 m from the subject property. Therefore the potential for environmental impact on the property is negligible. The subject property meets the existing planning setback of 300 m from a closed landfill so there are no regulatory restrictions to property development.

The EUB reported a release of crude oil relating to activities from a former oil well on the adjacent quarter to the west of the subject property at LSD 14-05-38-27-W4. Due to the distance from the subject property and the cross gradient position of the well, this facility is not expected to pose significant adverse environmental impacts."

In conclusion, the assessment stated that "...the subject property is considered to have a "low" rating in terms of environmental risk....No other additional site investigation is recommended at this time."

In November 2007 Parkland Geotechnical Consulting Ltd. conducted a further Phase 1 Environmental Site Assessment on behalf of Red Deer College for the lands on the west side of the subject property. Based on the information gathered the report made the following conclusion:

"In summary, no environmental issues were identified during this assessment. Parkland GEO considers the level of environmental risk associated with the subject property to be low. The level of information for this property is considered to be sufficient at this time for the assessment of the site. No further investigation is required at this time."

4.10 EXISTING STRUCTURES

There is an AltaLink power line running east west through the southern part of the site. As shown in Figure 4, AltaLink own the portion of the R.O.W. directly east of the QE II Highway, the remainder of the R.O.W. is under the ownership of the Bowers. Towers supporting this line are located at the southern end of the forested area in the existing Utility Easement. AltaLink has been consulted with and acknowledges that there are no particular issues at this stage. Specific development related issues will be reviewed with AltaLink at the time of detailed design stage.



View west under the AltaLink power line.

The concrete bridge described in Section 4.6 is also located partly on the NASP site. In addition there is a constructed storm water pond located in the centre of the cultivated portion of the NASP area on the east side of the trees. These structures are shown on the aerial in Figure 4.

4.11 GEOTECHNICAL CONSIDERATIONS

Parkland Geotechnical Consulting Ltd. completed a Geotechnical Investigation, submitted under separate cover, for the eastern portion of the

subject site in August 2006. The investigation generally concluded that "The soil conditions at the site are considered to be suitable for the proposed development...". The evaluation goes on to list several geotechnical issues that may impact site development. The report provides geotechnical recommendations "...with respect to design, development layout and installation of underground services, general foundation conditions, roadway subgrades and flexible pavement design for proposed roads."

In conclusion the report states "it is recommended that on-site inspection and testing be preformed to verify that actual site conditions are consistent with assumed conditions which meet or exceed design criteria."

An addendum to the Geotechnical Investigation was completed in April 2007 by Parkland Geotechnical Consulting Ltd. to review slope development issues. This investigation concluded that "... slope issues will not be a significant obstacle to safe construction of residences and commercial developments on this property provided reasonable design and construction practices are followed." The investigation provided some general recommendations in order to minimize potential disturbance to slopes in the



Existing Storm Detention Pond.

NASP area. This addendum is also included under separate cover.

The City of Red Deer has advised that the College lands will not require a specific Geotechnical Investigation until detailed servicing drawings are being prepared, therefore it is not a requirement of this NASP.

4.12 SITE SERVICING

Sanitary and water servicing of the site will be accomplished by extending the existing city system into the development. Storm water servicing will be accomplished by discharging into the Waskasoo Creek.

A Development Agreement will be required for payment of off-site levies and other development charges as well as for construction of roadway and utility improvements.

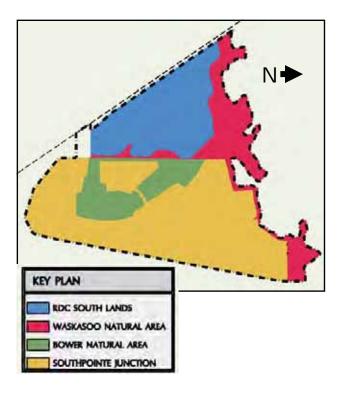
5.0 DEVELOPMENT CONCEPT

Based upon The City of Red Deer policies, market considerations and site characteristics, a Development Concept has been prepared for the entire ± 157.00 acre (± 63.54 ha) site as illustrated in Figure 7. The Southpointe NASP incorporates four distinctive areas (see Key Plan):

- The South Red Deer College Lands (west of the Bower Natural Area and south of Waskasoo Creek Natural Area);
- 2) The proposed Bower Natural Area located along the centre of the NASP area and oriented north south;
- The Waskasoo Creek Natural Area south of the creek; and
- 4) The east and south portion of the lands referred to as Southpointe Junction (SP Junction).

Concept plans have been developed based on anticipated future use for both SP Junction and the South College Lands and include retaining and incorporating portions of the Bower and Waskasoo Natural Areas. A figure illustrating this conceptual layout is included in Appendix A.

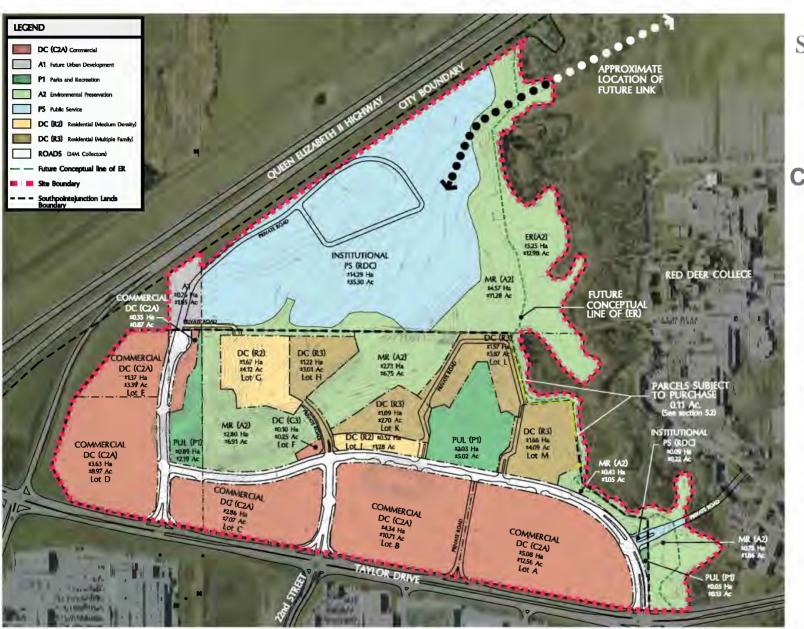
A more detailed description of the development concept will follow in Sections 5.1 to Section 5.6 and will discuss Land Use, Open Space, and more detail on the four areas described above.



5.1 LAND USE

The Southpointe Neighbourhood Area Structure Plan proposed land uses are shown in Figure 7: Land Use Concept Plan. The proposed development will see the land delineated into a combination of Land Uses.

The Red Deer College South Lands, including the Waskasoo Creek Natural Area currently under Red Deer College ownership, will, at the time of future subdivision, be comprised of a combination of PS (Public Service) District (±35.28 acres / 14.28 ha) and A2 (Environmental Preservation) District (±24.89 acres / 10.07 ha). Based upon the ecological survey of the lands in November 2007 (discussed in Section 4.5), a conceptual boundary of these designations has been established. South of Waskasoo Creek to the conceptual boundary will be designated as A2. The



SOUTHPOINTE NASP

FIGURE 7 LAND USE CONCEPT PLAN

NOTE: All private roads will have a Public Access Easment.

DATE: September 2009



DRAWING BY: Group 2 / Al-Terra





remainder of the south College lands would be designated as PS to allow for future development with the exception of several pockets of natural area along the eastern edge of the College South lands and connected to the Bower Natural Area.

Based on the ecological profile described in Section 4.6, a line delineating the conceptual future division of ER (Environmental Reserve) and MR (Municipal Reserve) is shown on Figure 7. This line is subject to change at the time of Subdivision of the College Lands. As will be explained in more detail in Section 5.5, Red Deer College is in the early stages of visioning and planning the south lands.

Retained areas of the Bower Natural area will be designated a combination of P1 and A2 as determined by The City, as will a portion of natural area south of Waskasoo Creek within the SP Junction lands.

The land to the east, which encompasses SP Junction, would be designated a mixture of commercial, residential and P1 districts. All commercial and residential parcels are to be designated DC Districts. The purpose of DC Districts "...is to provide for innovative developments, which in the opinion of Council, require specific regulations unavailable in other land use districts." The commercial parcels will be based primarily on the C2A (Commercial (Regional Shopping Centre) District "...to facilitate the development of a regional trade centre, which also include services, offices and dwelling units as secondary functions,...".

The SP Junction proposal includes six parcels under two residential direct control districts based on R2 (Residential (Medium Density) District and R3 (Residential (Multiple Family) District. The DC (R3) component comprises approximately \pm 13.68 acres (\pm 5.53 ha) and is intended to accommodate medium and high density residential development

in Lots H, K, L and M. The DC(R2) District comprises \pm 5.41 acres (\pm 2.19 ha) in Lot G and Lot J. The DC designation is intended to facilitate the opportunity to create an urban context for the proposed neighbourhood by accommodating a denser, pedestrian-oriented, mixed-use environment. The general guidelines of the Residential DC Districts are described in more detail in Section 5.6.1. The location of these residential parcels is shown in Figure 7.

The commercial portion of the proposal (including ± 43.84 acre (± 17.74 ha) is Lot F) comprising proposed as DC (Direct Control). The DC designation is necessary to facilitate more concentrated office space in the NASP area. The SP Junction commercial component allows for a maximum of 636,603 ft² ($\pm 59,142$ m²) of floor area (based on 17.74 ha of commercial area). According to the C2A district Bylaw, a maximum 10% of the gross leasable area can be office which totals approximately $63,660 \text{ ft}^2 (\pm 5914 \text{ m}^2)$. The entire commercial area is comprised of five lots, the intention is that through the DC designation, the office space from these five lots could be concentrated in one or two of these lots.

In addition, a DC designation would provide an opportunity to vary setback depths of commercial buildings along the "main street" collector road. Setback depths will be determined with the DC guidelines at detailed design stage. The general guidelines for the Commercial DC parcels is included in Section 5.6.2.

Lot F of the SP Junction portion of the concept is proposed as DC(C3) to provide a opportunity for a District Energy Facility (\pm 0.25 acres (\pm 0.10 ha). At this time, the Developer is assessing the feasibility of this proposed use. However it is the intent of the Developer to conduct more detailed discussions with the City, as well as the relevant

provincial authorities and regulatory bodies, should they decide to proceed with this concept. A more detailed explanation of the District Energy Facility is included in Section 5.6.5.

Should the need for this use not materialize, the intent is for Lot F to revert to PS District land use. If the Facility goes through as intended, provision of a social care site in the SP Junction development is envisioned as a leasing opportunity

within one of the commercial buildings being proposed, and would be held for a minimum of six months, after which, if there is no interest, the property would revert to commercial uses.

All proposed districts will be designed to otherwise adhere, where applicable, to Part 3: General Regulations Applicable to All Districts in the <u>Land Use Bylaw</u>. The proposed Land Use Allocation for the neighbourhood is summarized in Table 1.

TABLE 1:

LAND USE ALLOCATION FOR SOUTHPOINTE NEIGHBOURHOOD*

| | ±Area (ha) | % of Gross Plan Area |
|--|------------|----------------------|
| Gross Plan Area* | | |
| Southpointe NASP Boundary | 63.54 | 100 |
| Gross Plan Area less | | |
| Red Deer College Lands (PS) | 14.28 | 22.5 |
| Red Deer College Lands (P1) | 10.07 | 15.8 |
| AltaLink (A1) | 0.75 | 1.2 |
| Net Developable Area for Southpointe (SP) Junction | 38.44 | 60.5 |
| Residential Uses | | |
| Multi Family Dwelling Units DC(R2) | 2.19 | 3.4 |
| Multi Family Dwelling Units DC(R3) | 5.53 | 8.7 |
| Open Space | | |
| Municipal Reserve (Lands Subject to Purchase) | 5.96 | 9.4 |
| Possible Future Environmental Reserve (Lands Subject to Purchase) | 0.04 | 0.06 |
| Public Utility Lot | 2.97 | 4.7 |
| Transportation | | |
| Collector Roadways | 3.92 | 6.2 |
| Commercial | | |
| Commercial Regional District DC(C2A/C3) | 17.74 | 27.9 |
| Other Uses | | |
| Institutional (RDC) | 0.09 | 0.14 |

^{*}Note: Gross plan area is the entire Southpointe Neighbourhood

SOUTHPOINTE NASP NOVEMBER 2009

The proposed land uses for the Neighbourhood Area Structure Plan boundary are summarized in

Table 2. The proposed land uses for SP Junction are summarized in Table 3.

TABLE 2:

LAND USE STATISTICS FOR SOUTHPOINTE

| Land Use | Acres± | Hectares± | Percent |
|--|--------|-----------|---------|
| PS (Public Service) | 35.50 | 14.37 | 22.6 |
| P1 (Parks and Recreation) | 7.46 | 3.02 | 4.8 |
| A2 (Environmental Preservation) | 39.58 | 16.02 | 25.2 |
| A1 (Future Urban Development) | 1.85 | 0.75 | 1.2 |
| DC (R3)(Residential (Multiple Family)) | 13.68 | 5.53 | 8.7 |
| DC (R2)(Residential (Medium Density)) | 5.41 | 2.19 | 3.4 |
| DC (C2A/C3)(Commercial) | 43.84 | 17.74 | 27.9 |
| Roads ¹ | 9.68 | 3.92 | 6.2 |
| Total | 157.00 | 63.54 | 100 |

¹Roads include: All public roads as shown on Figure 7

TABLE 3

LAND USE STATISTICS FOR SOUTHPOINTE JUNCTION

| Land Use | Acres± | Hectares± | Percent |
|--|--------|-----------|---------|
| P1 (Parks and Recreation) ¹ | 7.46 | 3.02 | 7.8 |
| A2 (Environmental Preservation) ² | 14.71 | 5.95 | 15.5 |
| DC (R3) (Residential (Multiple Family)) | 13.68 | 5.53 | 14.4 |
| DC (R2) (Residential (Medium Density)) | 5.41 | 2.19 | 5.7 |
| DC (C2A/C3) Commercial | 43.84 | 17.74 | 46.2 |
| Roads ³ | 9.68 | 3.92 | 10.2 |
| PS (Public Service) | 0.22 | 0.09 | 0.2 |
| Total | 95.00 | 38.44 | 100 |

¹P1 includes the land subject to purchase within PUL lots.

²A2 includes the land subject to purchase. ³Roads include: All public roads as shown on Figure 7.

The proposed land uses for the Direct Control (DC) component of SP Junction are summarized in Table 4. Conceptual plans for the commercial areas shown as DC are based primarily on the bylaws for a C2A (Commercial Regional (Shopping Centre)) Land Use District.

The anticipated population for Southpointe Junction is outlined in Table 5.

${\bf TABLE~4}$

DIRECT CONTROL (C2A/C3) COMPONENT OF SOUTHPOINTE JUNCTION

| Total DC Area (±acres/ha) | % of Site Area (Max) area | Max. Allowable Floor Area (m² / ft²) based on 33% of total | Max. % of DC Floor Area for Office | Max. anticipated Office Space (m ² / ft ²) |
|------------------------------|---------------------------------|---|---------------------------------------|--|
| 43.84/ 17.74 | 33% | 59142 / 636,620 | 10% | 5914 / 63,662 |

${\rm TABLE}\ 5$

ANTICIPATED POPULATION OF SOUTHPOINTE JUNCTION

| Lot | Proposed Land Use | Maximum # of Units | Persons per Unit | Anticipated Population | Area (ha) | Density Per Net Residential ha |
|-------|----------------------|-----------------------|---------------------|---------------------------|--------------|-----------------------------------|
| Lot G | DC R2 (D52)* | 86 | 3.2 | 275 | 1.67 | 52 units/ha |
| Lot H | DC R3 (D99) | 120 | 2.2 | 264 | 1.22 | 99 units/ha |
| Lot J | DC R2 (D58) | 30 | 3.2 | 96 | 0.52 | 58 units/ha |
| Lot K | DC R3 (D107) | 116 | 2.2 | 255 | 1.09 | 107 units/ha |
| Lot L | DC R3 (D115) | 180 | 2.2 | 396 | 1.57 | 115 units/ha |
| Lot M | DC R3 (D102) | 168 | 2.2 | 369 | 1.66 | 102 units/ha |
| Total | | 700 | | 1655 | 7.73 | 91 units/ha |

 $^{^{\}star}$ D x area = the maximum number of units

5.2 OPEN SPACE AND MUNICIPAL RESERVE

Figure 8 shows the distribution of open space envisioned for the NASP area and includes the natural areas, public open space, and public utility lots. The natural areas, as shown, are comprised of two distinct but connected areas: the Waskasoo Creek Natural Area along Waskasoo Creek and the College South Lands, and; the proposed Bower Natural Area. Figure 8a shows the natural areas to be disturbed or removed. FireSmart and grading plans at detailed design stage will further refine the boundaries of these areas.

Pursuant to Section 666 of the Municipal Government Act, The City of Red Deer, as the Approving Authority, may require the owner of a parcel of land that is the subject of a proposed subdivision to provide up to ten (10) percent of the parcel as:

- 1. land for municipal reserve, school reserve or municipal and school reserve,
- 2. money in place of municipal reserve, school reserve or municipal and school reserve, or
- 3. a combination of land or money.

The area of the NASP identified as the lands owned by the Bowers and Her Majesty the Queen in Right of Alberta (Section 4.1) comprises a total area of ± 95.0 acres (± 38.4 ha). The 10% of MR from this portion has been previously dedicated through a prior agreement between The City and the landowner (A Subdivision by Re-plotting, approved Nov. 20, 1969).

At the time of future subdivision, the Red Deer College south lands (including parcels north of the Waskasoo Creek NASP boundary) will have to accommodate 13.21 acres (5.35 ha) of MR as per the above mentioned 1969 agreement, in addition to the standard 10% required. A letter stating

agreement to these terms from the College to the City has been included in Appendix B. Refer to Figure 8 for a clarification of the lands that will be included when the owed MR is dedicated.

The City has identified that a significant portion of the treed natural area, referred to as the Bower Natural Area (see Figure 8) be preserved. The developer, Qualico, and the land owner, the Bower Family, have entered into negotiations with The City of Red Deer regarding the preservation, through municipal purchase, of this portion of the Southpointe NASP. This land, though privately owned, has long been utilized by both the College and the public and contains a network of trails and is considered by The City to be a valuable part of the regional open space system in and around Red Deer.

Therefore, at The City of Red Deer Council meeting on August 13^{th,} 2007 the following motion was introduced and passed:

"Resolved that Council of the City of Red Deer having considered the report from the Recreation, Parks & Culture Manager, dated August 7, 2007, re: Southpointe Junction Concept Development, Bower Natural Area Preservation, hereby agrees in principal to the amount of area and location of the open space and natural area design and directs Administration to develop an agreement with the developer and land owner to:

- 1. Purchase +/- 12.26 acres of treed escarpment,
- 2. Purchase the additional noted 2.76 acres of open space for \$1.00,
- 3. Direct the additional 1.95 acres of owned municipal reserve to be applied to the natural treed area and Waskasoo Creek for the purpose of preserving additional amounts of natural environment and current natural trail connections."1

The Bower Natural Area shown as MR/A2 (see

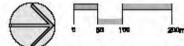
1 As already discussed, since this agreement was made, it has been determined by The City and the developer that there is no reserve owing on the Southpointe Junction portion of the lands (A Subdivision by Re-plotting, approved Nov. 20, 1969).



SOUTHPOINTE NASP

OPEN SPACE CONCEPT

DATE: September 2009



DRUMBING BY: AECOM



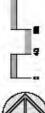






InterPlan emogies la: Land Housing Services NOTE Conceptual pless enty. To be finalized at detailed design please.

DATE: September 2009







COMPAGENT: Group 2 / Al-Term

Group2 ALTERAL

RDO InterPlan response



COMMERCIAL DC (COA) SIN H SIN H MS A

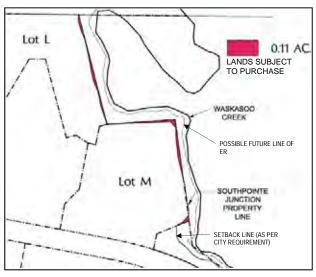
Figure 7) totals ± 16.94 acres (\pm 6.85 ha). This area will be purchased by The City based on Council resolution on August 13, 2007 and is comprised of:

- ± 13.66 acres (5.53 ha) in the Bower Natural Area*
- ±2.19 acres (0.89 ha) of open space in the utility ROW south of the woods**, and;
- ±1.05 acres (0.43 ha) south of Waskasoo
 Creek.**

*Note: Due to concept refinement, this area is greater then the ± 12.26 acres discussed at Council in August 2007.

**Note:These portions will be sold by the developer to The City for \$1.00, the value in excess will be recognized as a tax deductible donation.

In May 2008 a further agreement was made for the purchase (under the same conditions as the Bower Woods Agreement - see * above) of three additional parcels of land located at the north end of SP Junction and totaling ± 0.11 acres (± 0.04 ha) (see detail below). These will be used by The City to facilitate efforts to maintain the path system on the south side of the creek.



Detail of north property line.

The Waskasoo Creek Natural Area, with the exception of the small strips of land shown above and the ± 1.05 acre parcel east of Lot M, is under the control and ownership of the College.

The Red Deer College Master Plan lists a number of principles for the Waskasoo Creek Natural Area that will guide its future maintenance and preservation:

- "Preservation of the central core of the natural area should be an overriding goal.
- Facilitate greater management and monitoring.
- Integration of natural and developed areas.
- Maintain current uses of the natural area (education, recreation, habitat, wildlife corridor).
- Acknowledge need to link the areas north and south of the creek, but in the least obtrusive way.
- Minimize impact on natural area through proper management of storm water, utilities, roads and pathways.
- Facilitate access for the General Public."

As discussed above and illustrated in Figures 7 and 8, a portion of the natural lands south of the creek are being retained as the Waskasoo Creek Natural Area.

All pathway connections to both the Waskasoo Creek and Bower Natural Areas from the proposed development will be maintained or realigned as discussed in Section 5.2.1 Pedestrian Trails and Linkages.

The open space, shown in Figure 8, includes the constructed wetland and the public spaces to the north, south, west and east of it. In addition there will be a naturalized open space beneath the existing power lines in the utility ROW. These are shown as Public Utility Lots (PUL). Also part of the public open space realm is the streetscape along the collector roads.

The private open space will be identified at the detailed design stage and will include significant green space in SP Junction on both residential and commercial sites and will contribute to the visual appeal of the development. Both soft and hard landscaping is envisioned for these areas in order to enhance pedestrian use and overall aesthetics.

The private open space in the Red Deer College lands will eventually be developed to reflect their guiding principles as outlined in the Red Deer College Master Plan;

"Landscape designs will express a park-like setting that unifies the campus while stimulating social interactions among community members, offering comfort and security and reflecting the college's environmental consciousness."

It should be noted that not all existing vegetation can be preserved but effort will be made to retain existing trees where possible and have them incorporated as a development feature.

5.2.1 PEDESTRIAN TRAILS AND LINKAGES

The proposed trail system and linkages in the NASP area are illustrated in Figure 9 and follow the recommendations of the Red Deer Trails Master Plan.

As illustrated in Figure 9, there will be a hierarchy of trails in both the natural and urban areas which will connect both the existing retained trails, proposed trails, and the elements of the plan. One pedestrian gathering place has been identified on the SJ Junction side of the NASP at the plaza on the constructed wetland. Barrier free pedestrian links can be accommodated in developed urban areas wherever considered necessary at the detailed design stage.

Development along the north south collector road in SP Junction is intended to create an inviting pedestrian environment and as such, poses some design challenges. There are considerable distances between public road intersections and driveway locations have yet to be finalized. Due to the distances between intersections, the need may occur to provide mid-block crossings to facilitate pedestrian movements. Should a mid-block crossing be appropriate, design elements will be included at the detailed design stage to ensure pedestrian safety and vehicle flow (ie. marked and signed crossings, bump outs, pavement texture/colour change).

The legend on Figure 9 more fully explains the proposed trail/sidewalk sizes and materials. Existing trails that fall within the Bower and Waskasoo Creek Natural Areas will be retained, and may over time be rehabilitated or upgraded by The City. Due to the density of the vegetation within the Natural Areas, the existing trails could not be located using GPS. All trail locations within vegetated areas are estimated only and final realignment, where required, will have to be undertaken in the field during detailed design and/ or construction by The City.

An above grade pedestrian crossing will be provided where the Bower Natural Area trails cross the private residential connector road into lots G and H (see Figure 9). This crossing will help maintain the continuity of the path system in this area. The actual bridge design and location will be determined at a future stage of development however, some description of what is intended follows.

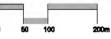
The pedestrian bridge will be developed to carry walkers, joggers, and cross country skiers and the occasional quad used by the park staff. As per discussions with Parks staff, the bridge will not be



PROPOSED TRAIL SYSTEM

DATE: September 2009





DRAWING BY: AECOM









InterPlan strategies inc. Land Planning Services

required to support a maintenance vehicle such as a truck nor does it need to be totally enclosed. The bridge may be of weathered steel with the top rail and decking clad in wood. The weathered steel will provide a more natural feel to the structure and allow it to blend into the site. A photo of a similar bridge design is included below. In order to retain the site as natural as possible the trail grades and alignments leading up to the bridge will be field fit to provide ready access to the bridge.



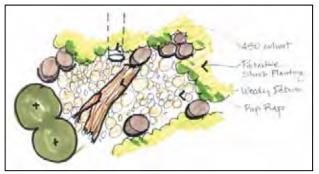
Example of pedestrian bridge design

Funding for the pedestrian bridge will be provided by the developer, however, should any City funds remain in the recreation amenity fund planned for this development, the City has agreed that these could be directed to offset the bridge cost.

Trails in the Waskasoo Creek Natural Area north of the creek are outside the NASP area but their connections with the south side are relevant to the NASP trails and linkages. The Red Deer Trails Master Plan, Section 4.3.1 (pg 55) deals specifically with the standards desired for the Waskasoo Trails.

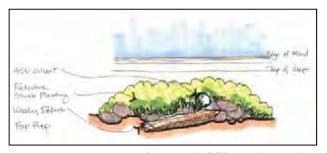
5.2.2 ANIMAL CONNECTIONS

Animal crossings were also considered in the preparation of the NASP open space and trails system. The intent is to provide connections for large and small animals now found on, or moving through, the site. This is particularly relevant where the private access road to residential Lots G and H crosses the Bower Natural Area and where the north south road linking the north Red Deer College lands and SP Junction crosses Waskasoo Creek. A more detailed description of these roadway designs is included in Section 6.1.



Conceptual wildlife crossing plan.

Efforts will be made to minimize road widths in the Bower Natural Area, while the possibility of an enlarged culvert accommodating Waskasoo Creek and serving as a wildlife/pedestrian crossing where the proposed easterly road link is located will be explored at the detailed engineering and design stage. The Red Deer College Master Plan does indicate that the crossing at this location will be at grade.



Conceptual wildlife crossing section.

5.2.3 RECREATION OPPORTUNITIES

There will be a diverse range of recreational amenities available in the NASP area. The existing trail system in the Bower and Waskasoo Creek natural areas provide an opportunity for both passive and active recreation with walking, running, cycling and cross-country skiing as potential activities.

The strong link between the community and Red Deer College will also offer additional opportunities in several different ways. The College offers noncredit courses for the public in a variety of areas, including culture and fitness. The varied fitness facilities on campus are available for rent or for use through a community membership and include racquet courts, playing fields, weight training facilities and gymnasiums. Future plans for the South Campus may include additional facilities. Child care facilities, arts and culture events and a public library are also offered at the College.

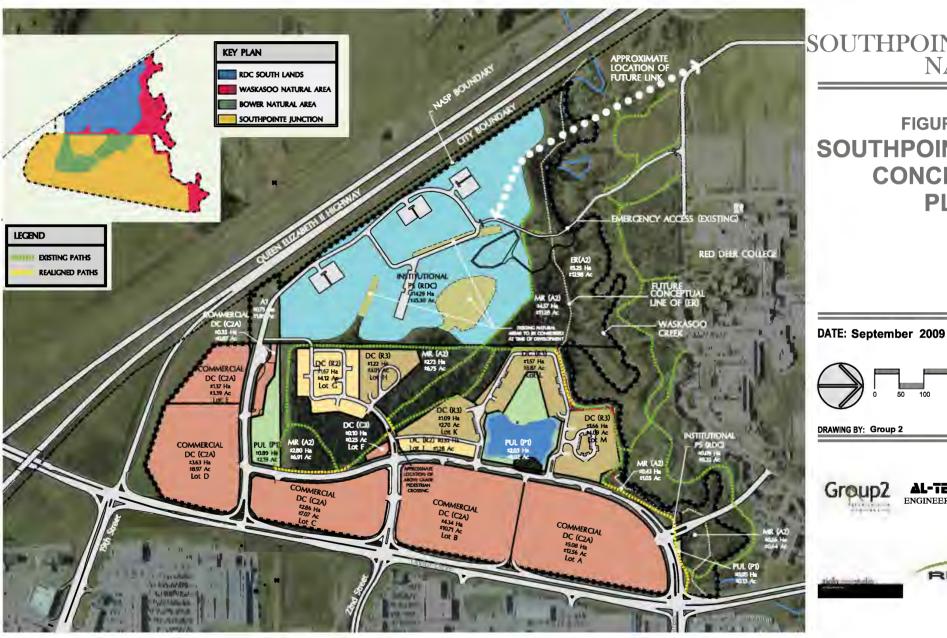
5.3 WASKASOO CREEK NATURAL AREA

The area described as the Waskasoo Creek Natural Area is shown in the Key Plan on Figure 10. Only the area south of Waskasoo Creek is included in the NASP, however the natural area should be considered in the overall context of the entire Waskasoo Creek open space system. The Waskasoo Creek Natural Area, in combination with the proposed Bower Natural Area, has been functioning as a significant open space within The City of Red Deer. A large portion of the Waskasoo Creek Natural Area between the QE II and Taylor Drive is owned and maintained by the Red Deer College (grounds staff and volunteers).

The vision for this portion of the NASP is to maintain and protect the natural aspects of this area. It has been recognized by the College and The City that pedestrian and vehicular links across this natural area are, and will be, necessary as development of both the College and SP Junction lands proceeds. In order to mitigate the possible negative impact these crossings may have on the creek and surrounding area, the intent is to introduce pedestrian and vehicular crossings as close to the east and west fringes as possible.

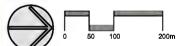
Both The City and the College have identified the need for a transportation corridor linking the campus core and the proposed development to the south east. As seen in Figure 10, a proposed access road is shown across the creek just west of the intersection of Taylor Drive and 28th Street. In addition, it is recommended that an emergency access road and creek crossing would be incorporated farther west where an existing concrete service bridge is located. This bridge is currently used for pedestrian access across the creek as well as farm equipment, from the north, to service the agricultural land currently leased by Red Deer College to a local area farmer. As the Red Deer College South Lands become developed, it is anticipated that future studies will indicate the need for another vehicular north south link at the west boundary of the creek. Should this become a necessity, it is proposed that the approximate location of the future road link occur next to the QE II Highway right-of-way, thereby reducing its impact on the natural area.

The NASP recognizes the importance of the Waskasoo Creek Natural Area and addresses maintaining the system of pedestrian and bike pathways in and through the area as well as introducing new links to both the existing College Campus and the proposed future development to



SOUTHPOINTE

FIGURE 10 **SOUTHPOINTE CONCEPT PLAN**



AL-TERRAENGINEERING LTD.



the south. This will in part be accomplished by a negotiated sale of lands south of the creek at the north end of SP Junction as discussed and shown in more detail in Section 5.2.

5.4 BOWER NATURAL AREA

The establishment of the Bower Natural area will be an attribute for both The City of Red Deer and the Southpointe NASP. As outlined in Section 5.2 Open Space, the area includes ± 2.19 acres (0.89 ha) in the Utility R.O.W. at the south end and ± 13.66 acres (5.53 ha) of the treed area.

The negotiations to formalize this natural area will continue during the NASP, zoning and subdivision process. The overall success of these negotiations rests largely on the success of these processes, and the achievement of the Developer and The City in reaching agreements for several key components of the proposed development as well as the financial obligations, which where outlined in Section 5.2.

Additionally, discussions on the limit of disturbance into the Bower Natural Area during the construction phases of Lots G and H are ongoing and will be addressed at the detailed design stage. All vegetation removal will be done in accordance with City of Red Deer urban forestry best practices and will include consultation with urban forestry staff. Accommodation of grade differences and meeting the FireSmart requirements for the clearing of underbrush within the surrounding natural area will be dealt with at detailed design stage. Initial examinations of the FireSmart requirements have been made and a draft plan delineating the areas affected is included in Appendix C.

The proposed boundary for the Bower Natural

Area is shown in the key plan for Figure 10.

5.5 RED DEER COLLEGE SOUTH LANDS

Red Deer College developed a Land Use Master Plan in June 2003 which illustrates how the College proposes to guide future development on its lands. The Master Plan includes a Demonstration Plan (see Appendix A) showing conceptual road layout and building locations in the south lands. This is conceptual only, but the general road layout is included in the NASP Concept Plan in order to show the potential links between the developable areas in the NASP and the College lands to the north.

The Master Plan describes its vision for development as follows: "...it:

- 1. recognizes the educational mandate of the College as paramount
- 2. acknowledges that the College land is a trust and the College is the steward of this trust
- 3. reflects the College's relationship with the larger community and surroundings
- 4. supports mutually beneficial partnerships
- 5. promotes a strong identity and visible presence within the larger community
- 6. provides integrated design contributing to a strong sense of place
- 7. manages long-term development needs in a sustainable manner"

In the Master Plan, the College lands have been described as being divided into Precincts (see Section 5 Precinct Analysis, page 45 of the Land Use Master Plan). Those lands included in the Southpointe NASP are divided into two precincts: Precinct 5 (Natural Area) and Precinct 6 (South Lands). Although the Bower Natural Area is not part of the College lands, Precinct 5 of the Master Plan includes the Bower Natural Area and assumes that it will remain as is. However, the document

deals more specifically with the natural area around Waskasoo Creek. The recommendations for Precinct 5 are as follows:

"In response to the stewardship commitment in the "Vision for Land Development Master Plan" discussed to in chapter 3, the natural area is depicted as being effectively untouched. To minimize future impact, vehicular access through the natural area is kept to the fringe areas. A new road access to the college core (Precinct 1) is recommended, but is kept as close to Taylor Drive as possible. A low-impact vehicular access (for emergency and service vehicles only) located within the western portion of the natural area is recommended (complete with access control gates at each end), which would link the Campus Core (Precinct 1) to the South Land (Precinct 6). The existing, concrete service bridge would be incorporated into this route. The major use of this road would be pedestrians and cyclists. A more formal path system (i.e. paved or graveled) is proposed for the perimeter of the natural area. An analogy is the sea wall at Stanley Park where the perimeter of the park is well defined by a formal path system with natural / low impact paths branching off into the natural area. Vehicle parking would be incorporated at the trailhead to provide a convenient access point to the Natural Area trails.

For planning purposes, the assumption is made that the natural lands on Bower property will be set up as a natural reserve and continue to be an integral part of the college natural lands, in a consolidated cluster. A joint management strategy for the natural area needs to be developed between the College, the Bower family and The City of Red Deer. The proposal is to develop a core reserve system which identifies priority areas for minimal activity (scientific / educational study) and includes buffer zones that help to maintain the naturalness and ecological function of the priority areas while providing for human use and enjoyment ..."

The South Lands, as identified by the report, include the area south of Waskasoo Creek, east and north of QE II Highway and west of the Bower Natural Area. This area is referred to as Precinct 6 and several potential uses and opportunities for

this area have been identified by the College:

- "Centre for Sustainable Development including applied research / partnerships, interpretive / conference centre
- · Recreation, sports fields
- · Family housing along easterly edge
- Public / Private partnerships"

As with Precinct 5, the following recommendations are made for Precinct 6:

"This area has been divided into two zones. The zone in the west area, with excellent visual exposure to Highway 2 is depicted as Private / Public Partnership land use, where long-term land leases would be incorporated. The building forms would be developed into three or four clusters along the highway with a prominent landscape buffer. The access road (and utility service corridor) would be routed through the Bower Lands from the south. The road would parallel Highway 2 and loop back. No major road linkage is proposed to connect to the College lands to the north. * An existing service bridge across Waskasoo Creek is proposed to be upgraded and utilized for emergency and service vehicle access that will also serve as a pedestrian / bike path.

The pocket of land nestled between the highway zone land use and the natural area is depicted as a low-impact land use zone. Uses that could be considered are a center for sustainable development, in conjunction with demonstration projects, an interpretive center and possibly a small-scale conference center. This type of activity is deemed appropriate because of its visual isolation from Highway 2 and adjacency to the natural area."

*Although the 2003 Land Use Master Plan does not depict a north/south link in the westerly region for regular vehicles, a potential future road link could be built very close to the QE II Highway to facilitate better connectivity and functionality between college activities on both sides of Waskasoo Creek. Final alignment of this potential road would be determined at the time of

subdivision in consultation with affected stakeholders.

The Master Plan goes on to discuss the relevancy of the Bower Lands and their impact on the connectivity of the north and south College lands:

"This area is not within the control of the college, yet the future development will influence the college in a number of ways. Any transportation linkage from the south into the north college lands would have to be through the Bower lands. Furthermore, the college's South Lands would require transportation and service linkage from the south and other portions of the Bower land. The timing of the development of Bower lands will likely dictate the college development of the South Land. A perimeter pedestrian / bicycle path system, as described in the Natural Area Precinct, hopefully, would be included in the future development of the Bower Lands."

Figure 10 illustrates three natural areas within the plan that have been identified. Though included in the potential future development area, efforts will be made to retain the areas or at minimum, relocate the vegetation to a more suitable location.

5.6 SOUTHPOINTE JUNCTION

The east and south portion of the NASP area are being planned by Qualico and this portion of the NASP area is called Southpointe Junction (SP Junction). A concept plan of the proposed development is shown in Figures 7 and 10 and in more detail in Appendix A.

SP Junction is envisioned as a Mixed Use Urban Village incorporating residential, retail, office, recreation amenities, and potentially, hotel / convention facilities, within the confines of a ± 95 acre (± 38.44 ha) site (including the Bower Natural

Area). The goal of Qualico is to create an environment that attains many of the principles of smart growth and sustainability by: including a variety of housing choices; offering a broad spectrum of employment opportunities and services; and by providing for both active and passive recreation; all within walking distance of a village centre. SP Junction intends to achieve the balance of uses required to offer and create a multi dimensional live-work-play community.

The focal point of the village will be a constructed wetland / dry pond / public gathering place centrally located in the village. This central area would feature a series of pathways connecting the hard surfaced public realm to the trail system of the Bower Natural Area and the Waskasoo Natural Area. Placed around this wetland is a combination of residential uses in the form of higher density apartment buildings and townhouses.



Conceptual view of constructed wetland looking north east.

The main road running through this live—work—play urban village will contain a pedestrian orientated section with a main street feel. In the pedestrian section, the built forms will be sensitive to the street including strong architectural detailing and elements of pedestrian orientated functionality. The office component of the development could be located in this part of the development. The remaining commercial development will be between the internal road



running north south and Taylor Drive, as well as west along the south end of the site.

The following sections explain and illustrate the separate components of this concept plan in more detail.

5.6.1 RESIDENTIAL COMPONENT

The residential component of the plan is to be located west of the internal north south road and borders with the proposed Bower Natural Area and the Waskasoo Creek Natural Area thereby taking full advantage of the opportunity provided by these natural areas.

As illustrated in Figure 11, SP Junction is divided up into a series of parcels reflecting their proposed land use. The residential parcels are identified as lots G, H, J, K, L and M and collectively constitute ± 19.09 acres (± 7.72 ha). The current vision for these developments is outlined below but are subject to change based on market demand and future approvals.

FIGURE 11: CONCEPT PARCELS

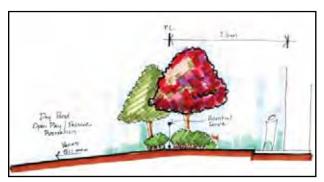
The proposed buildings for Lots K, L and M (shown conceptually in plan in Appendix A) are all located around the focal point of the proposed village concept which is the constructed wetland and dry pond. These buildings are envisioned as four story apartment condo units with balconies which will offer views of either the natural areas to the west and north or the urban open space system envisioned in this area. The architectural design style will be specifically reviewed, developed and resolved to compliment the development of both the residential as well as the commercial components of the proposed



Conceptual view of wetland, central plaza and Lot L.

development. It is envisioned that this will develop a cohesive and strong aesthetic for the entire community. Each building could include such amenities as underground parking, a fitness and wellness centre and car wash facilities.

The buildings located in Lot M will also include an elevation along the north south collector road. Careful attention to a relationship with the street will be included in the eventual design of this building. The building located in Lot L will embrace the dry pond planned for this area and be separated from the public realm by a fenced private garden which will be landscaped to compliment the views of the residents as well as the views from the opposite side of the wetland.

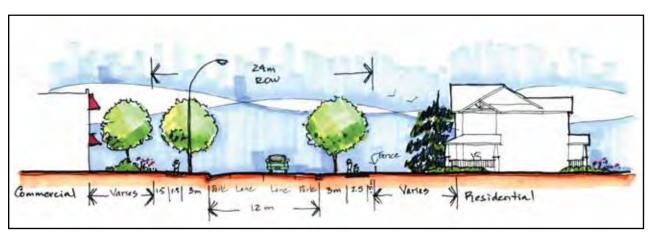


Conceptual section from building L to the dry pond.

To the south of the wetland and located along the major north south road is Lot J. The residential

component in this parcel is envisioned as three two storey townhouse blocks. Parking and vehicle access to these units will be from a rear service road. These units offer an exciting opportunity to live in between natural and urban amenities. Especially important to these units will be their relation to the vibrant streetscape envisioned for this section of the north south collector road. Each unit would boast its own fenced front yard opening to the street which will contribute to the visual diversity of the streetscape. Also envisioned for this development is the opportunity to offer "Live Work Units". These are units where the resident can incorporate their business establishment into their dwelling based on a set of guidelines for acceptable uses.

Lots G and H, as shown in Figure 11, will be accessed by private roads bridging the natural area. The first, labeled lot H would contain a building similar in design to the four storey apartment condos described above. Market demand will ultimately determine the details of this development, but there is a possibility of offering a 55 plus building either here or in one of the other apartment condos. Additional amenities for a 55 plus building could include private facilities for a games room, an internet café, a small theatre, a library and sitting room and possibly guest suites.



Section through collector between Lots J and B.



Conceptual view of Lots G and H looking north.

The buildings envisioned for Lot G are townhouses ranging in size from 700 ft² (bachelor units) to 1800 ft² (3 bedroom units). Parking for residents could be contained in underground parking structures immediately accessible to the units thereby removing a majority of the parking from the landscape of the neighbourhood. Specific unit designs are at an early stage but could offer shared open space amenities that would be professionally managed and maintained.

Townhouse units contained in lots J and G may be designed with the opportunity to provide varied unit widths in the building blocks to accommodate housing options such as in-law suites, student housing and expansion possibilities.

In order to achieve the Developer's vision for these residential parcels, all proposed residential blocks will be zoned as DC Districts, based on either R2 or R3 Land Use Districts as explained in Section 5.1. The intent of the DC zoning is to reinforce the creation of an urban-context for the proposed neighbourhood by committing to a denser. pedestrian oriented. mixed-use smaller footprints, environment in preserving, protecting, and invigorating the natural and public areas. The general intent of the DC Residential Districts is summarized below. This list is to serve as a summary only and includes, but is not limited to, the design elements envisioned for these developments.

General Principles for DC (R2) and DC (R3)

- Increased densities to properly complement the adjacent commercial areas with an increased emphasis on walkability.
- Reduced setbacks to maintain close proximity and access to sidewalks and improve the pedestrian realm; and/or accentuate the proximity to the natural areas.
- Unit types allowing for a variety of living styles within the same neighbourhood.
- Potential for "Live Work Units", particularly along the collector road.
- Varied unit widths in the townhouse blocks to provide housing options such as in-law suites, student housing and expansion possibilities.
- Pedestrian oriented frontages along the collector road to increase the "Main Street" feel and increase street access.
- Landscaping offering a visual continuity with both the urban and natural areas.

The DC Guidelines will be part of the Land Use Bylaw Amendment Application.

5.6.2 COMMERCIAL AND OFFICE COMPONENT

As indicated, the intent of the NASP for SP Junction is to allow for the planning of a full spectrum live-work-play community. An important component of this concept is the commercial and office uses planned on the easterly side of the NASP area. By providing a mix of residential, commercial (both service and retail), and office development, the proposed development will have a broader appeal to both potential residents and businesses looking to locate in this district, and will contribute to the underlying goal of achieving a



Conceptual view of commercial component looking south.

sustainable node.

The proposed commercial and office components of the concept plan, shown in the parcels labeled A, B, C, D and E in Figure 11, total ±43.84 acres (±17.74 ha). The parcels have been planned to accommodate a range of commercial uses, including big box style development to the south (Lot D), and smaller retail and service uses accommodated in parcels A, B and C. Lot E is envisioned as an opportunity for the development of a hotel and conference facility. In addition, Lot F is proposed to house a district energy facility. A more detailed description of this proposed use is included in Section 5.6.5.

It is envisioned that the office component be consolidated in Lots A and B. The buildings proposed along the western boundary of these Lots would vary in height and would be encouraged to contain a component of ground floor retail orientated towards the street. The development envisioned in Lots A and B are expected to have a higher degree of interface with

the residential development to the west and would be designed to encourage a pedestrian friendly environment. Lots D and E will have a different type of commercial development and effective pedestrian access will only be provided along the north boundary and into the site development. Care will also be taken to ensure that the facades along the freeway will have aesthetic treatment. Lot C forms a transition zone between the pedestrian and vehicular oriented commercial uses and will be designed to reflect this. In particular the intersection of 22nd Street and the internal collector road will demand corner treatments of the commercial buildings in both Lots C and B that will be both visually appealing and user friendly for pedestrians.

The level of detailing and design on the buildings in Lots C, D and E will be somewhat reliant on the setbacks that are eventually achieved. Smaller setbacks will lead to increased building detailing, while larger setbacks will provide an alternative of a greater degree of landscaping and screening.

Ultimately the market will dictate the viability of this component of the development. If the developer feels that the market demand exceeds the standard 10% of office permitted, a market analysis can be conducted and presented to The City. As outlined in Section 3.2, Administration may support an amendment to the NASP should the developer be able to supply adequate supporting information. Should office uses in this location be deemed by the market not to be desirable, then it could either be relocated in SP Junction or revert to a more conventional retail form.

Both soft and hard landscaping will be employed within the commercial areas to enhance the visual appeal and facilitate pedestrian connections. The vision for the ultimate design of SP Junction's commercial and office components is to offer a visually cohesive, high quality range of buildings that include interesting design features and offer easy pedestrian and vehicular accessibility and ample parking for users.

In order to achieve the developers vision for these commercial parcels, all proposed commercial blocks will be zoned DC Districts, based primarily on C2A land uses as explained in Section 5.1. The intent of the DC zoning is to facilitate the creation of a vibrant mixed use retail and office centre as part of a pedestrian oriented area that relates to the neighbouring residential and recreational uses. The intent of the DC Commercial Districts is summarized below. This list is to serve as a summary only and includes, but is not limited to, the design elements envisioned for these developments.

General Principles for DC (C2A/C3)

 Facilitate the concentration of the allowable maximum of 10% Office component from all commercial parcels in SP Junction in one or more of the proposed commercial parcels. Once the 10% allocation has been achieved, no further office space will be granted in SP Junction without an amendment to the NASP.

- Allow for variable setbacks to enhance the relationship of buildings to the streetscape, increase pedestrian accessibility, safety and offer protection from the elements.
- Taylor Drive is identified as a Major Entry and, as such, all development along this corridor will be given special consideration and will compliment the existing development along the east side of Taylor Drive.
- Ensure that development is visually attractive and is safe for pedestrian and vehicular traffic.
- Special attention will be given to the pedestrian precinct along the collector road to achieve a pedestrian and transit friendly environment. This will include, but not be limited to, the following:
 - i. Setbacks along the collector road will be varied to a minimum of 1.6m.
 - ii. Careful consideration will be given to frontage treatments as well as access configurations. Building infrastructure to allow for double frontages will be incorporated where appropriate in Lots A and B.
 - Encourage commercial uses at ground floor level through the DC District permitted and discretionary uses.
 - iv. Include pedestrian scale street lighting.
 - Shop front composition within the pedestrian precincts will reflect the following principles.
 - Have a human scale
 - Offer a variety of architectural detailing compatible with the overall architectural theme.

All of the commercial and office parcels would be designed using The City of Red Deer Land Use

Bylaws and other relevant guidelines as a base.

5.6.3 MAIN STREET COMPONENT

Particularly important to the vision of this development is the establishment of a Main Street component along the north south collector road. The treatment of the street in this area is important to the success of the Urban Village concept. As described in Section 5.6.1, the residential units that face this collector road will be designed to be sensitive to this relationship.

The proposed commercial and office building designs in lots A and B along this collector road would also include design elements that address the street, provide a facade and definition of edge, as well as introduce activity and interest. This would include such elements as varied street front depths, awnings or other overhangs to provide protection from the weather, and pedestrian scaled lighting. Road and sidewalk design could incorporate width variations to accommodate bus stops and parking, and corner bulbing could be added to mark pedestrian crossing areas.



Conceptual view of 'main street' looking north.

Extensive hard and soft landscaping will be used in this segment of the collector road to define the main street. Street tree planting and creative applications of paving patterns will add visual interest as well as providing opportunities for seating and gathering.

Central to this main street component is the constructed wetland, dry pond, and public plaza envisioned for this area.

5.6.4 CENTRAL PLAZA, CONSTRUCTED WETLAND AND DRY POND

The constructed wetland and dry pond will perform a number of tasks in the plan beyond their function as a stormwater retention facility. A conceptual plan view is shown in Figure 12.

The west side of the area is a public space but is bounded by private space and the proposed building located in Lot L, whereas the eastern portion will be surrounded by public spaces offering a range of recreational opportunities to both residents and visitors of the area. The dry pond to the west will be developed with landscaped edges encompassing undulating side slopes. Landscaping in the dry pond will add visual interest and offer opportunities for passive recreation. A garden in front of building 'L' would provide a private green space between the building and the public realm and would be planted with colourful trees and shrubs to further improve the backdrop. An ornamental fence will separate yet provide clear views between the



Conceptual view of the dry pond.

public and private lands.

The east side of the open space would contain a constructed wetland with a controlled water level to maintain a minimum level during dryer periods as well as being developed to improve water quality. The shallow waters would be planted with emergent vegetation known to actively improve water quality. Deeper areas may contain submergent vegetation also to assist with cleaning the water. A deeper section of open water would be located near the plaza in order to provide



FIGURE 12: CONSTRUCTED WETLAND CONCEPT PLAN

potential for leisure skating opportunities in the winter months.

The north, south and west sides of the wetland are envisioned as relatively natural with viewing areas alongside and pathways along the north and south sides. These would be planted with native riparian species that can withstand water fluctuations due to storm events. The east side of the wetland would be directly tied to the streetscape and the public realm with a public plaza. The plaza would incorporate two connected levels. The lower level would be a concrete boardwalk ramped down to the water in order to provide closer interaction with the water, offering visual access to the water for school studies, seating and gathering and physical access for winter skating. This boardwalk would potentially be flooded during major storm events. Further refinements including lighting



Conceptual view of main plaza.

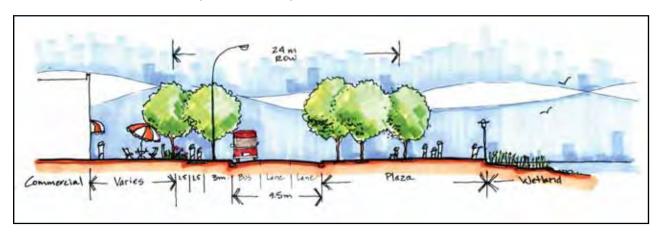
maintenance equipment access will be addressed at the detailed design stage.



Conceptual view of main plaza from east.

The second level, above the high water level of the wetland, would be the main plaza. This plaza will incorporate the pedestrian walk along the collector road. It will be framed to the east by a series of trees planted within a hard surface area. Other features of the plaza area could include benches, waste receptacles, and picnic tables. A further design element could be the inclusion of a labyrinth in the paving pattern to offer additional visual interest.

The plan provides for a raised patterned crosswalk linking the plaza to the commercial area to the east. As a natural meeting and gathering place, this plaza will serve both the immediate area and The City as a whole.



Section through collector road and plaza.

Page 46

5.6.5 DISTRICT ENERGY FACILITY

The Developer is investigating the inclusion of a District Energy Facility in Lot F of SP Junction. The following is a summary of the nature of the Facility.

The District Energy Facility is envisioned to be a private co-generation unit, producing a supply of hot water within centrally located boilers which is then piped through heat exchange transfer units to heat domestic hot water and hot water heating systems within individual residential buildings. A spin-off benefit from the operation of the District Energy Facility's hot water boilers is the creation of surplus electrical energy which is also fed into the buildings or sold to the electrical grid. The potential to include a cooling function within the District Energy Facility is also being investigated.

At this stage, only the multi-family residential buildings are proposed to be connected to this system although the potential to link one or more commercial / office buildings is being investigated. The District Energy Facility is intended to be owned and operated by Qualico in partnership with experienced energy management an company. The parties would construct the facility, commission the equipment, and operate the facility on property owned by Qualico. The City would not be involved other than as the approving body for matters which fall within the municipal mandate (e.g. planning, land use, engineering design specs, etc.) The facility is intended to be set up as a showcase of "environmental sustainability" in reducing greenhouse gases.

An additional aspect of this concept is the possibility of tying in the proposed facility with the recreation areas through trails, a shelter and/or some interpretive materials. Lot F is designated as DC (C3) and the DC guidelines would reflect those

included in Section 5.6.3.

The intent by the Developer is to perform a fiscal analysis on the proposed facility to ensure its viability. Following a satisfactory analysis, the process will be to conduct more detailed discussions with the City, as well as the relevant provincial authorities and regulatory bodies, should they decide to proceed with this concept.

6.0 TRANSPORTATION

6.1 TRANSPORTATION NETWORK

Figure 13 shows the proposed road system for the NASP. The internal and external roadway plan provides for both the continued expansion of the Red Deer College Campus (both the north eastern and South Lands precincts) as well as the proposed land uses within the SP Junction Lands. Intersection configurations and driveway locations as shown are conceptual only and are subject to change at detailed design stage.

Access to the NASP area is restricted to primarily the east side of the area due to the lands location east and north of the QE II Highway and the Waskasoo Creek and Red Deer College to the north.

Four access points are proposed off Taylor Drive. The first access will be provided at the intersection of Taylor Drive and 28th Street at the northern end of the SP Junction Lands. A future proposed north south connection next to Taylor Drive between the Red Deer College North and SP Junction will intersect at the north end of this entrance road and will facilitate additional access to the Red Deer College Lands as well as serving as an equally important alternative to 32nd Street.

The second access at 22nd Street and Taylor Drive is an all turns access near the centre of the proposed development. The third is a right-in, right-out access off Taylor Drive, proposed between 22nd and 28th Streets.

The fourth access point is proposed as a signalized intersection with Taylor Drive at the south end of SP Junction. This access is critical for the future development of the Red Deer College South Lands and the SP Junction south development as it

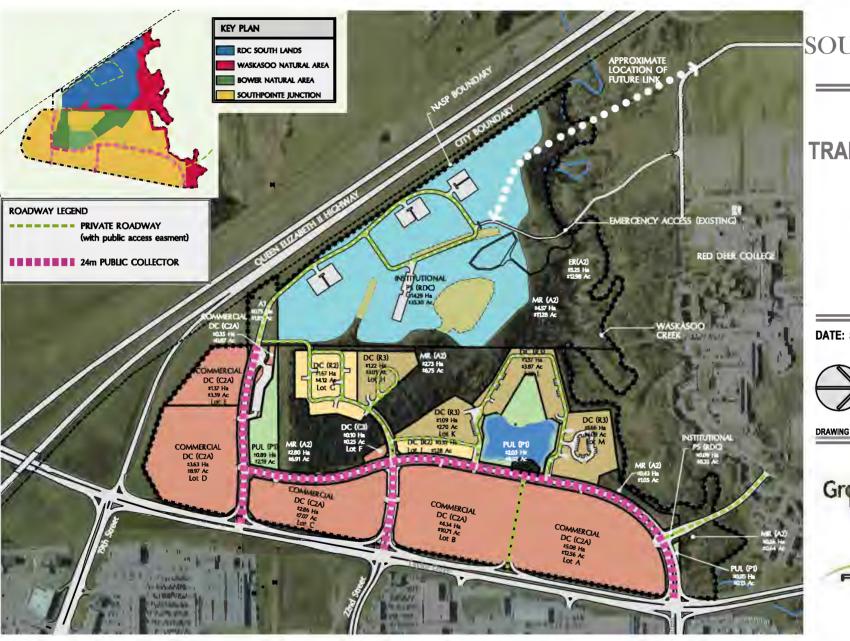
provides the most functional and direct link opportunity available. The intersection design is intended to be a right-in/ right-out / left-in. The final configuration of the intersection will be to the satisfaction of the Alberta Ministry of Transportation and the City of Red Deer.

A summary of the Traffic Impact Assessment completed for these lands is included in Section 6.2.

The eventual development of the Red Deer College south lands may signify a need for a further north south vehicular link at the west end of Waskasoo Creek and connecting north to 32nd Street. The approximate location of the future roadway is conceptually located as shown immediately adjacent to the QE II Highway across Waskasoo Creek. This location would reduce the potential fragmentation of the Waskasoo Creek Natural Area. The roadway may be constructed when improvements to QE II take place. Limited mitigation measures will likely be required at that time in order to accommodate both the QE II road widening and the north south connection for Red Deer College.

The internal roadway system is designed to access Taylor Drive at three intersections effectively creating a separation of traffic within the NASP Area. The Red Deer College South Lands will have access from Taylor Drive at the south intersection, the Central Commercial Lands access at the south access road, 22nd Street and 28th Street and the North East College Lands access to/from 28th Street.

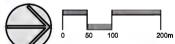
All roads are designed and located to handle traffic in a balanced and efficient manner.



SOUTHPOINTE

FIGURE 13 **TRANSPORTATION NETWORK**

DATE: September 2009



DRAWING BY: Group 2, AL-TERRA, INTERPLAN



AL-TERRA ENGINEERING LTD.





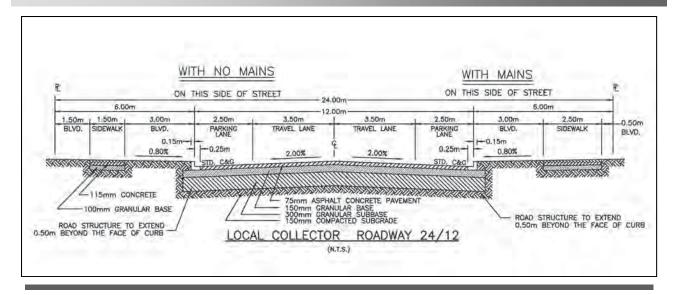


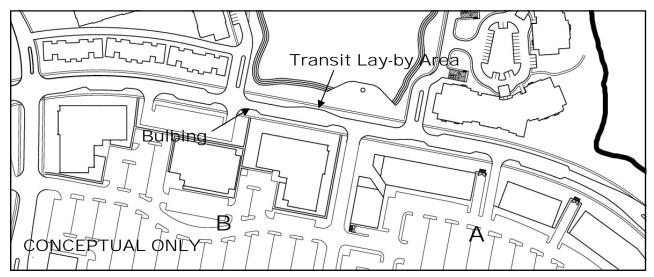
FIGURE 14: LOCAL COLLECTOR STANDARD

Source: City of Red Deer Design Guidelines, Figure 5.07

The internal public roads shown in the Waskasoo South NASP have been designed based on The City of Red Deer standards with some exceptions. Figure 13 indicates the hierarchy of road standards proposed. These include the 24 metre ROW Collector Roadway running from the intersection of Taylor drive and 28th Street and south through to the entrance into Lot D. The entrance from Taylor Drive and 22nd Street is also proposed to be 24m as is the southern entrance leading west into the NASP area and through to

the College South lands. The entrance road between 28th and 22nd Streets is private. Figure 14 shows the standard road section for The City of Red Deer 24 m Collector Roadway.

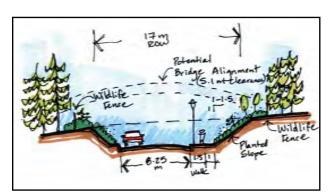
The variation to this standard is a portion of the north south collector road along Lots A and B where crosswalk bulbing, transit lay-by areas and varying building setbacks are recommended to add interest and improve the pedestrian friendliness and safety of the roadway. The illustration below



Collector road concept.

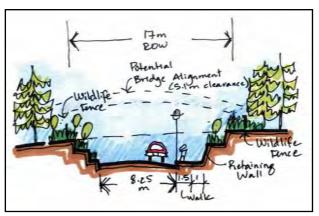
shows the intent for this section of road. Final configuration of this section of the collector road will be designed and reviewed during the servicing study process.

The residential roads in this plan are private roads with a public access easement, and, with one exception, will be 7.3 metres wide (see Figure 17). All private roads will be posted as "Local Traffic Only" and have a public access easement. The roadway that extends from 22nd Street through the proposed Bower Natural Area from the internal north south collector to the residential Lots G and H is also intended to be a private road. This road is recognized as an important link between the residential lots and the rest of the development envisioned for Southpointe Junction. At the same time the road will cross a significant natural area and efforts to reduce its impact on the natural environment are to be considered. The proposed roadway configurations are shown in section and plan in the following pages. Two alternatives are shown for the road edge condition.



Non Standard Residential Road through Bower Natural Area Option 1: Section

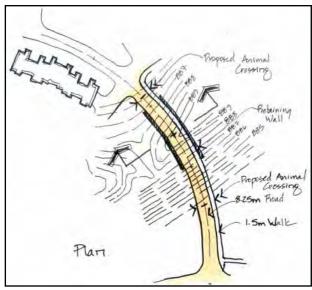
The proposed travel lanes would be 8.25 metres wide in total (verses 7.3 m) with a single 1.5 metre sidewalk on the north side. There would be no parking on this portion of the road. Options for the ROW would be retaining walls or planted slopes on the sides with a wildlife fence at the top



Non Standard Residential Road through Bower Natural Area Option 2: Section

of the slope to prevent animal crossings other than in established crossing areas. One above grade pedestrian crossing is proposed on this road to allow for pathway connections through the Bower Natural Area and was described in more detail in Section 5.2.1.

Should the eventual development of the South College lands lead to an issue of shortcutting through Lots G and H, traffic calming measures will be implemented and ultimately, if necessary, either the south west or east private entrance roads can be modified to accommodate a gate allowing for local and emergency traffic only.



Non Standard Residential Road through Bower Natural Area Plan View

The roadway proposed from the 28th Street entrance north to the College lands is a private road and would be designed to be accommodated within a 32 metre right-of-way. This road will bridge Waskasoo Creek, possibly using an enlarged culvert.

The loop road through the College lands is proposed to be the 24 metre standard to the edge of the College lands. From there, the road becomes a private road.

6.2 TRAFFIC IMPACT ANALYSIS

A Traffic Impact Analysis (TIA) for the Plan area was completed by Morasch Transportation Consultants Ltd. in April 2007. The complete report is submitted under separate cover.

The City of Red Deer had requested that two road network options be evaluated, Option A: an all-turns access between 22 Street and 19th Street (Delburne Road) and Option B: a right-in/right-out access between 22 Street and 19th Street (Delburne Road). The NASP is using a modified Option A which is supported by the subsequent TIA information submitted in support of the plan in this document. Table 6 summarizes the land use concepts for the preferred road network.

TABLE 6:

DEVELOPMENT SUMMARY FOR ROAD NETWORK OPTION

| Use | Road Network Option A** | |
|-----------------------------|--|--|
| Multi-Family Residential | 687 units | |
| Office | 165,000 ft ² gross floor area (GFA) | |
| Commercial | 324,000 ft ² GFA | |
| Hotel / Convention Facility | 200 rooms | |

^{*}RDC Research Park

Due to concept refinement, the numbers listed in the above table have been altered. The now confirmed numbers related to the most recent concept (supplied by the Developer) indicate a revised land use plan with the following divisions:

Residential 700 units
Hotel and Convention 200 rooms
Office 63,662 ft²
Commercial 372,958 ft²

^{250.000} ft² GFA

^{*}Source: Bower West Lands, Traffic Impact Assessment, Section 4.1.1

^{**}Concept numbers have altered since the TIA was produced. Please see below for clarification.

Table 7 illustrates a comparison of the original and revised land uses in terms of AM/PM Trip Numbers for the development.

TABLE 7:

NET DIFFERENCE TO TIA FROM REVISED CONCEPT

| | Total Trips AM | Total Trips PM |
|-------------------------------------|----------------|----------------|
| Multi Family | | |
| Original (687 Units) | 234 | 350 |
| Revised (700 Units) | 238 | 357 |
| Difference | +4 | +7 |
| Hotel / Convention Facility | | |
| Unchanged | 12 | 118 |
| Office | | |
| Original (165,000 ft²) | 248 | 248 |
| Revised (63,662 ft ²) | 96 | 96 |
| Difference | (-152) | (-152) |
| Commercial | | |
| Original (324,000 ft ²) | 324 | 1620 |
| Revised (372,958 ft ²) | 373 | 1865 |
| Difference | +49 | +245 |
| Net Difference | (-99) | +100 |

The net overall traffic for the AM and PM are insignificant relative to the overall volumes compared to the original project TIA. In percentage terms the AM trips are reduced by 10.8 % while the PM trips are increased by 4.2 %.

In addition, roadway infrastructure improvements arising from the proposed development will significantly improve the overall capacity of the roadway network and provide a good level of surplus capacity for additional future development.

6.3 PUBLIC TRANSIT

The proposed transit service for the NASP area is illustrated in Figure 15. With the development of SP Junction a two directional transit route may be possible on the main north south collector road. With the additional development of the College South lands, a further bus route or extension may be added to connect with the College.

Transit stops would be located to accommodate the maximum walking distance standard of 400 metres.

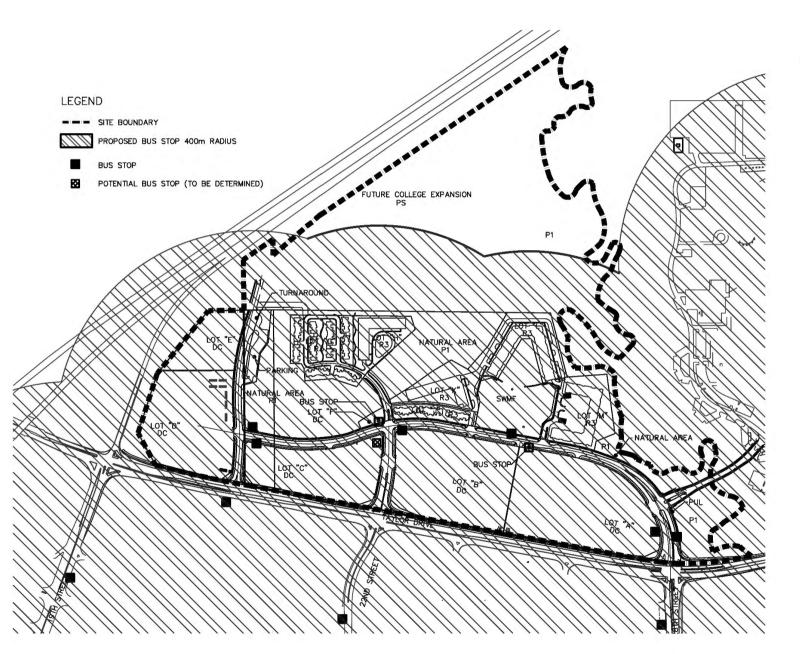


FIGURE 15 **PUBLIC TRANSIT**

DATE: SEPTEMBER 2009



DRAWING BY: AL-TERRA



AL-TERRA ENGINEERING LTD.



7.0 SERVICING SCENARIO

The servicing scenario developed for the NASP will support all conceptual planning for the NASP.

Sanitary and water servicing of the site will be accomplished by extending the existing city system into the development. Storm water servicing will be accomplished by discharging into the Waskasoo Creek. Alternative construction methods for the water and sanitary main extensions into the west quarter section will be evaluated during detailed design.

7.1 STORM WATER MANAGEMENT

Storm water management will be based on both a piped (minor) and overland (major) systems.

7.1.1 EXISTING STORM WATER CHARACTERISTICS

All storm water management shall be in accordance with the Best Management Practice outlined within the Alberta Environment Standards and Guidelines for Storm Water Management for the Province of Alberta. Figure 16 illustrates the existing and proposed piped storm sewer system.

The current flows from the site travel overland and discharge into the Waskasoo Creek at the north side of the site. The City of Red Deer currently operates a storm water management facility in the form of a dry storm water detention pond on the site. It is located on the east side of the site and connected to the storm line along Taylor Drive. The facility currently operates off-line and provides relief to the down stream storm line during an intense or prolonged rainfall event.

As explained in Section 4.1, an existing agreement permits the current owner to relocate the pond.

7.1.2 SOUTHPOINTE STORM WATER MANAGEMENT STRATEGIES

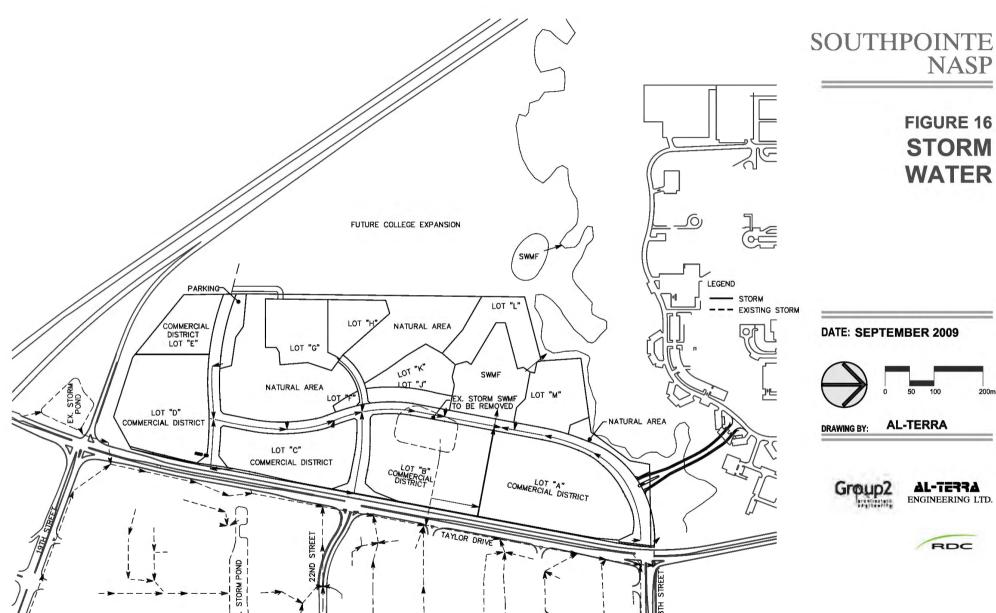
Runoff from storms up to a one in five year event will be handled via a gravity piped system. The piped system will consist of catch basins and catch basin manholes to collect runoff and route the runoff to a storm water management facility and then to Waskasoo Creek. The design will be completed in accordance with City of Red Deer Design Guidelines. Due to site grading and ownership, the site will utilize two storm water detention ponds, one for each the east and west side of the NASP area. Both will discharge to the Waskasoo Creek.

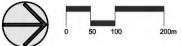
It is currently anticipated that the creek outlet can be constructed within a 10 metre wide construction area. Detailed alignment will be done in consultation with the Parks Department.

Storm water runoff that is routed to the existing pond will be routed to the future east pond. A volume equal to the existing pond will be allocated in the new pond to allow for continued service of the Taylor Drive storm line. The future east pond will also be designed to service the proposed development.

In areas serviced by the underground storm water conveyance system, runoff from storms larger than 5 year event will be routed via the roadways.

To accommodate this situation, roads will be





designed to route the majority of the overland flow runoff to either of the north storm detention ponds. Some ponding will occur within the roads and parking areas. The detailed design process will ensure that the major overland drainage system is designed in accordance with The City of Red Deer Design Guidelines. Routing of the major storm system and the 100 year flood event can be seen in Figure 16. Outlet design, including erosion control and creek bank protection, will be determined during the detailed design stage.

The north east storm water pond will contain manmade wetlands, Figure 12 in Section 5.6.4 shows the concept plan for this constructed wetland. This will provide enhanced quality to the runoff prior to being discharged into Waskasoo Creek.

The storm water management system within the Plan area shall be in accordance with the Storm Water Management Plan and to the satisfaction of The City of Red Deer and Alberta Environment. The Storm Water Management Report will also address erosion and sediment control measures.

7.2 SANITARY SEWER

The sanitary sewer system will be extended at two locations, one located at 22nd Street and Gaetz Avenue, and a south connection located within the AltaLink right of way.

The north connection will be a 150 mm forced main with a lift station located at the north side of the northwest quarter. Due to downstream limitations, the lift station will operate during off peak hours. Approximately 60% of the site area will utilize this connection.

The remainder of the site will be serviced by a 300

millimeter gravity sanitary main located at the AltaLink right of way. Figure 17 illustrates the conceptual layout.

7.3 WATER SUPPLY

The water distribution system required to service the subject lands is a direct extension of the water distribution system along Taylor Drive. Three connections to the existing system will be made:

- A 250 mm diameter water main located along 28th Street.
- A 250 mm diameter water main located at 22nd Street
- A 300 mm diameter water main located south of the AltaLink right of way.

The water mains will be connected to form a loop within the subject lands. Computer Modeling will be utilized to evaluate the actual water mains sizes within the subject quarter section. Figure 18 illustrates the conceptual layout.

7.4 SHALLOW UTILITIES

Electrical, telephone, cable TV and natural gas utilities will be extended into the plan area by The City of Red Deer Electric Light and Power, Telus, Shaw and Atco.

7.5 SITE GRADING

Proposed road grades and drainage courses will take into consideration the existing topography to minimize grading requirements over the Plan area.

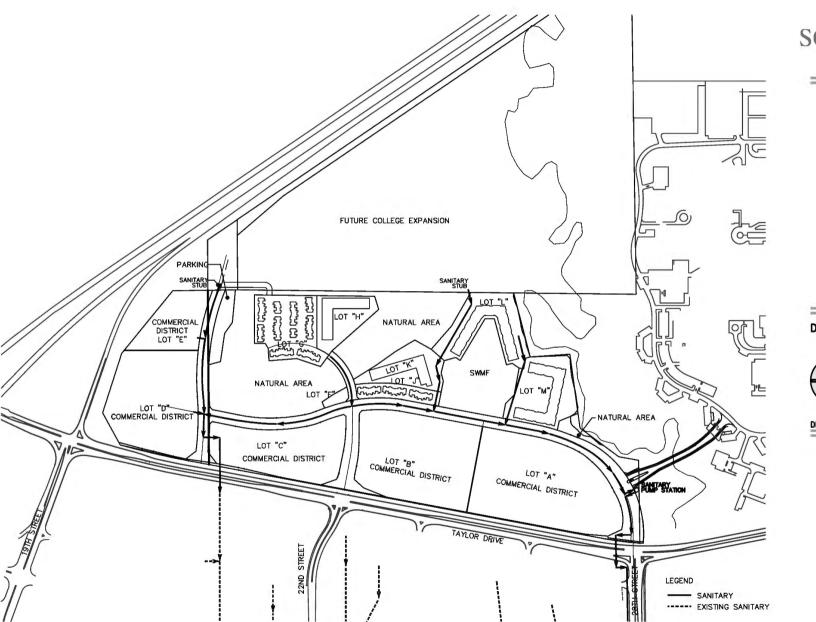
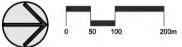


FIGURE 17 SANITARY SEWER

DATE: SEPTEMBER 2009

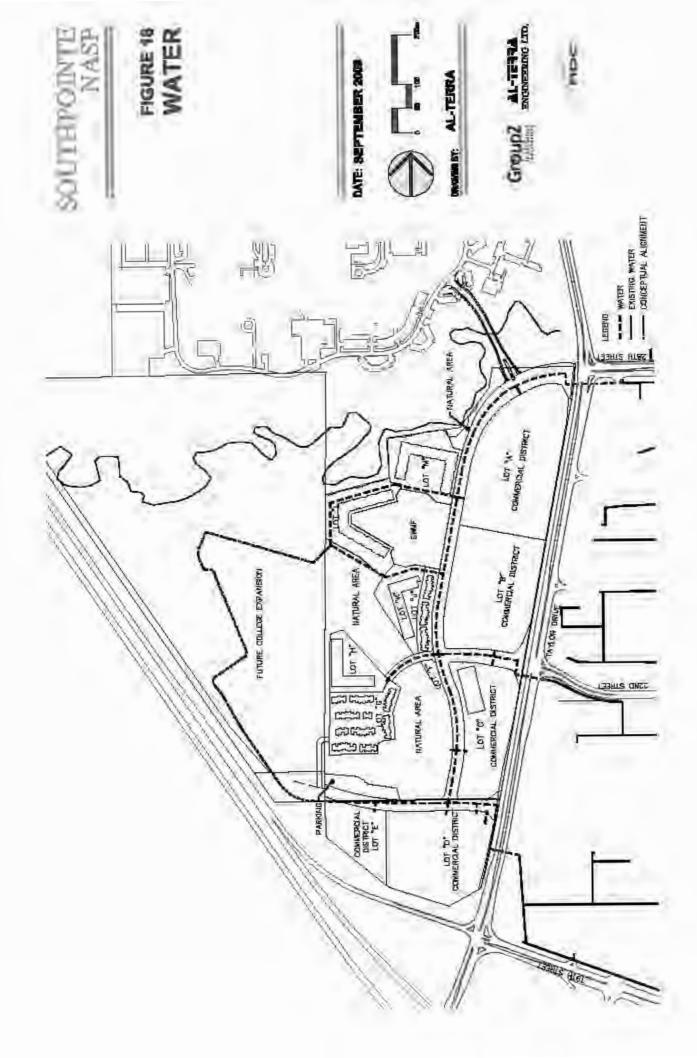


DRAWING BY: AL-TERRA



AL-TERRA ENGINEERING LTD.





Site grading will be completed using conventional excavation equipment and techniques for the Red Deer area. All erosion and sedimentation measures required will be in place prior to commencement of grading and topsoil stripping. Detailed information regarding erosion and sedimentation measures while working within the area will be included with the Stripping and Grading Permit application. Efforts will be made to minimize damage to vegetation along slopes. Transitioning grades will be addressed at the time of detailed design on a site specific basis. Transitioning may include retaining walls, bioengineering or other methods as determined during detailed design.

All vegetation removal for both grading and FireSmart protection will be done in accordance with City of Red Deer urban forestry best practices and will include consultation with urban forestry staff.

For the proposed locations of the topsoil stockpiles, refer to Figure 19. Note that a majority of the stripped topsoil will be disposed of off-site.

7.6 WASTE DISPOSAL

Access to bins or individual home pick-up will be required to be provided for waste disposal to the satisfaction of The City of Red Deer.

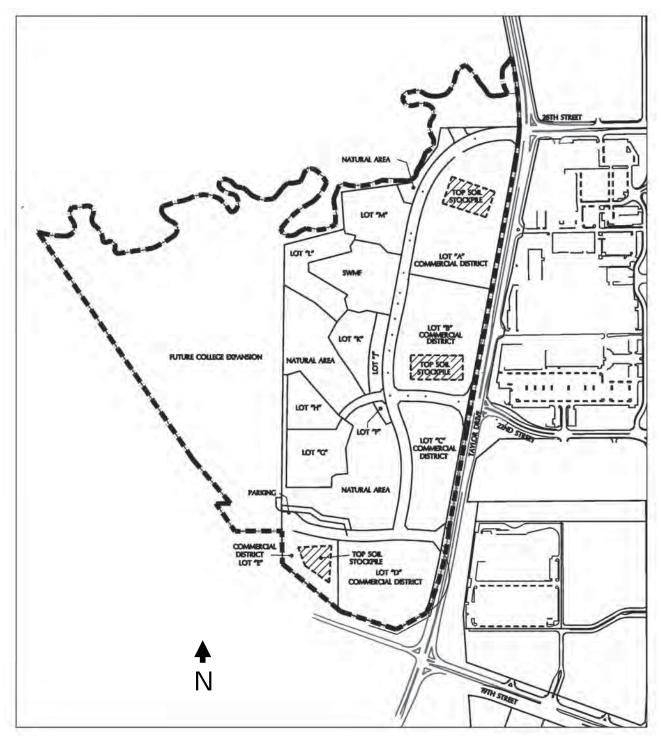


FIGURE 19: TOPSOIL STOCKPILE LOCATIONS

Source: City of Red Deer

8.0 DEVELOPMENT STAGES

NOVEMBER 2009

The NASP area is proposed to develop in several stages as illustrated in Figure 20. The staging boundaries are shown conceptually and may vary from those shown when redistricting and subdivision applications are made. As well, portions of separate phases may be developed concurrently if there is sufficient demand and/or if the municipal servicing is made more efficient.

Upon subdivision of the subject lands, the ownership of the open space will transfer, as agreed, to The City of Red Deer. Maintenance, upgrading and development of pathways in these areas will be the responsibility of the appropriate

City departments. For the remaining trail system and linkages as shown in Figure 9 within SP Junction and eventually the Red Deer College South lands, construction will occur concurrently with the land development. Where and when development interrupts existing public trails, the developer agrees to replace and/or repair disturbed portions as necessary. Temporary linkages to facilitate construction may also be provided if necessary.

9.0 PUBLIC CONSULTATION

A public meeting of Council was held in Council Chambers on August 13, 2007 relating to the preservation of the treed portion of Southpointe Junction (Bower natural area). Several options were presented to Council and the public by The City of Red Deer Recreation, Parks and Culture. Presentations were also made by the developer, the landowner and numerous members of the public. After all parties were heard Council supported a framework for the preservation of trees in the Bower natural area which included the ultimate purchase of a significant potion of the natural area. The proposed Waskasoo South NASP reflects the framework and direction for the preservation of trees established by Council at the public meeting.

A public Open House was held on January 28th,

2009 following the circulation and review of the NASP by administration. One person from the public attended and submitted supportive comments.

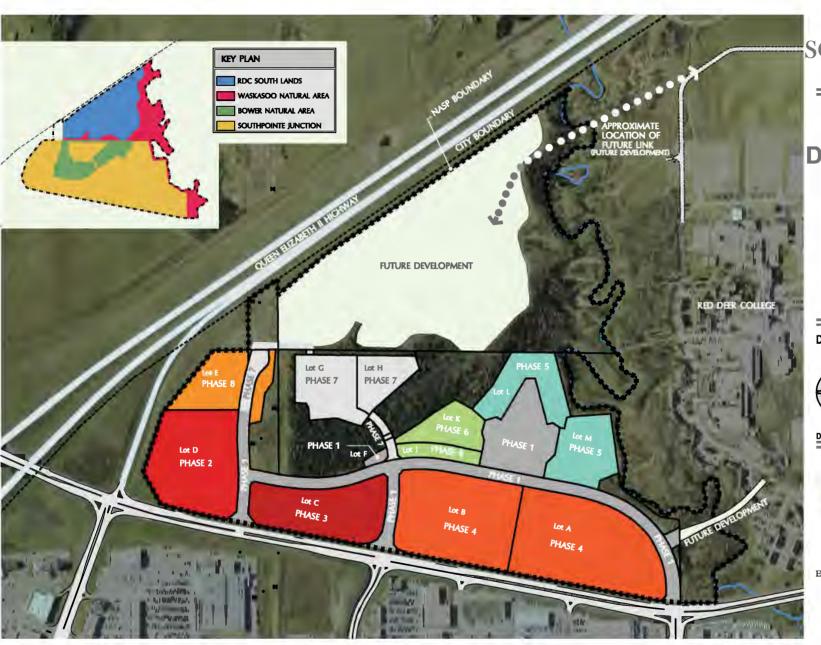
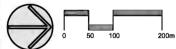


FIGURE 20 DEVELOPMENT STAGES

DATE: September 2009



DRAWING BY: Group 2



InterPlan strategies inc. Land Planning Services





10.0 PLAN SUMMARY

THE SOUTHPOINTE
NEIGHBOURHOOD AREA
STRUCTURE PLAN COMPLIES
WITH THE INTENT AND POLICIES
OF:

CITY OF RED DEER MUNICIPAL DEVELOPMENT PLAN BY:

- Providing a range of residential developments that are innovative, compact, efficient and attractive, and are integrated with open space, recreation, employment opportunities, have access to services, and reflect contiguous development;
- Providing commercial developments that reflect emerging trends in retailing and that function as a community focal point while offering local and regional employment and service opportunities;
- Preserving as many natural features and existing vegetation as possible, while maintaining a system of pathways.

CITY OF RED DEER LAND USE BYLAW BY:

- Providing for suitable land use districts to accommodate the intended land uses,
- Adhering to the provisions of the Land Use Bylaw.

RED DEER TRAILS MASTER PLAN BY:

- Acknowledging the existing trails in the NASP area to the extent possible,
- Providing for trail systems that reflect the proposed future trails of the Red Deer Trails Master Plan.

ECOLOGICAL PROFILE OF THE NATURAL AREAS BY:

- Preserving the area in the centre portion of the NASP thereby protecting the existing tree stand and natural area;
- Directing the storm water from the proposed development to the constructed wet lands;
- Where possible, and within reason, preserve existing trees;
- Considering a conceptual site plan for Southpointe that acknowledges the edge condition with the Reserve areas of the proposed Bower and Waskasoo Natural Areas;
- Providing for residential development that takes advantage of the nearby natural amenities.

THE RED DEER COLLEGE LAND USE MASTER PLAN (2003) BY:

- Identifying the Natural Areas to be preserved and maintained;
- Providing opportunities for future transportation links to the south lands;
- Providing sufficient developable land for the College to locate potential uses in the future.

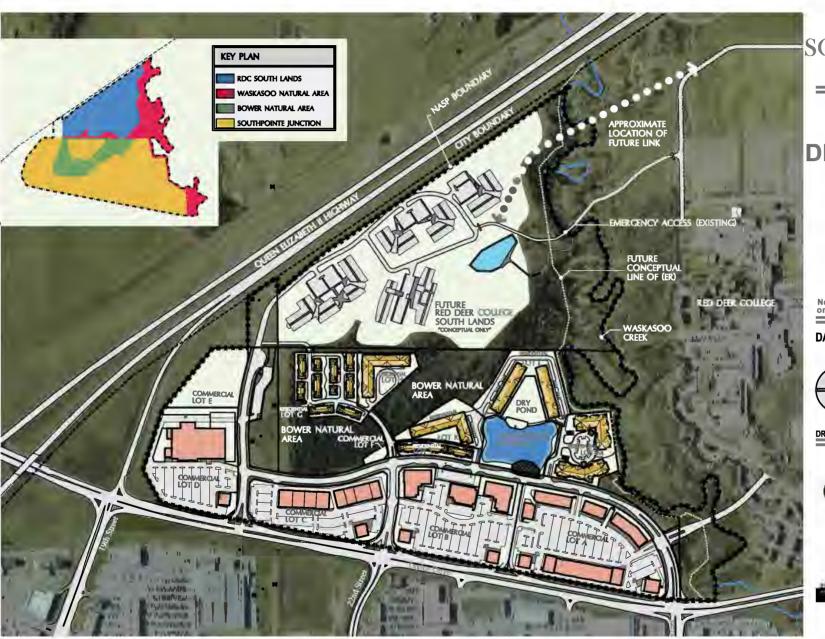
THE SOUTHPOINTE NEIGHBOURHOOD AREA STRUCTURE PLAN:

- Fits within an overall context,
- Does not unduly compromise the development of adjacent lands, and
- Addresses the intent and aspirations of The City of Red Deer.

APPENDIX A

PRELIMINARY DEVELOPMENT CONCEPT

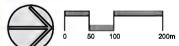
Please Note: The development concept included in this Appendix is included for illustration purposes only and is subject to change.



DEVELOPMENT **CONCEPT**

Note: Building Layout is conceptual only and is subject to change.

DATE: September 2009



DRAWING BY: Group 2









APPENDIX B

LETTER FROM RED DEER COLLEGE TO CITY OF RED DEER



Office of the President
Box 5005
Red Deer, Alberta, Canada T4N 5H5
Phone: 403.342.3233 Fax: 403.341.4899

April 21, 2008

Mr Craig Curtis, City Manager City of Red Deer, 2nd Floor 4914 – 48 Avenue Red Deer AB T4N 3T3

Dear Mr. Curtis:

Re: College Natural Area

In response to your letter dated August 15, 2007, Red Deer College has not located any records which suggest that the City's records as summarized in your letter are inaccurate. Red Deer College agrees that the 13.21 acres of reserve will be "replaced" out of the lands to the southwest of the College when such lands are developed and that such will be in addition to the normal 10% Municipal Reserve dedication.

We trust that the foregoing is satisfactory.

on Wordund.

Yours truly,

Ron Woodward President & CEO

APPENDIX C FIRESMART DRAFT PLAN

Please Note: The building footprints and setbacks shown in this Appendix are included for illustration purposes only and are subject to change.



residential parcel property lines maximum extent of building pockets as per DC zoning

zone 1:

Flammable vegetation surrounding buildings is eliminated or converted to less flammable species. Distance between building footprint and untreated trees is 10 m.



Area of reduced flammable vegetation, with variety of thinning and pruning actions.

firesmart interpretation

of maximum vegetation setbacks based on maximum building footprints



> 1:2000