



Edson East Area Structure Plan



March 2010



BYLAW NO. 3.10

BEING A BY-LAW TO ADOPT AN AREA STRUCTURE PLAN

WHEREAS, the Municipal Government Act, Being Chapter M-26, R.S.A., 2000, and amendments thereto, authorize a Council to adopt an area structure plan for the purpose of providing a framework for subsequent subdivision and development of an area of land;

AND WHEREAS, a public hearing was held in respect to the proposed amendments to the area structure plan on the date written below;

NOW THEREFORE, the Council for Yellowhead County, in the Province of Alberta, duly assembled, hereby enacts as follows:

- 1) That the document entitled "East Area Structure Plan", dated January 2010 attached hereto as Schedule "A" is hereby adopted as an Area Structure Plan.
- 2) This bylaw comes into force at the beginning of the day that it is passed in accordance with Section 189 of the Municipal Government Act, Being Chapter M-26, R.S.A., 2000.
- 3) And that Bylaw No. 7.97 is hereby rescinded.

READ a first time this 12 Day of January A.D., 2010.

PUBLIC HEARING held this 9 Day of February A.D., 2010.

READ a second time this 9 Day of February A.D., 2010.

READ a third time this 23 Day of March A.D., 2010.

SIGNED this 23 Day of March A.D., 2010.

Mayor Gerald Soroka

Chief Administrative Officer, Jack Ramme

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1 INTRODUCTION

1.1 Purpose

This Area Structure Plan (ASP) provides a framework for the future rezoning, subdivision and development of lands located in Yellowhead County north of Highway 16, adjacent the east boundary of the Town of Edson. The Plan has been prepared in response to the policy directions of the Edson Urban Fringe Intermunicipal Development Plan Bylaw No.11.07. The Intermunicipal Development Plan was prepared as a joint initiative by Yellowhead County and the Town of Edson in recognition of the need to plan for future growth in the Edson Fringe in a manner that recognizes the impact of the proposed Highway 16 bypass alignment on subdivision and development. The proposed bypass is shown on Figure 1.

Intermunicipal Development Plan Policy 9.1.14 specifically requires that the County prepare an Area Concept Plan for IDP Policy Area 2. Policy Area 2 corresponds to Edson East and the County considers a statutory Area Structure Plan to be more appropriate than a concept plan.

In addition to further refining the industrial use of the Plan area as per the Intermunicipal Development Plan future land use designation, this Area Structure Plan considers future road and municipal servicing systems, stormwater management requirements, and Environmental and Municipal Reserve dedication.

1.2 Location

The location of the Area Structure Plan area is illustrated by Figure 1. The area is bounded by:

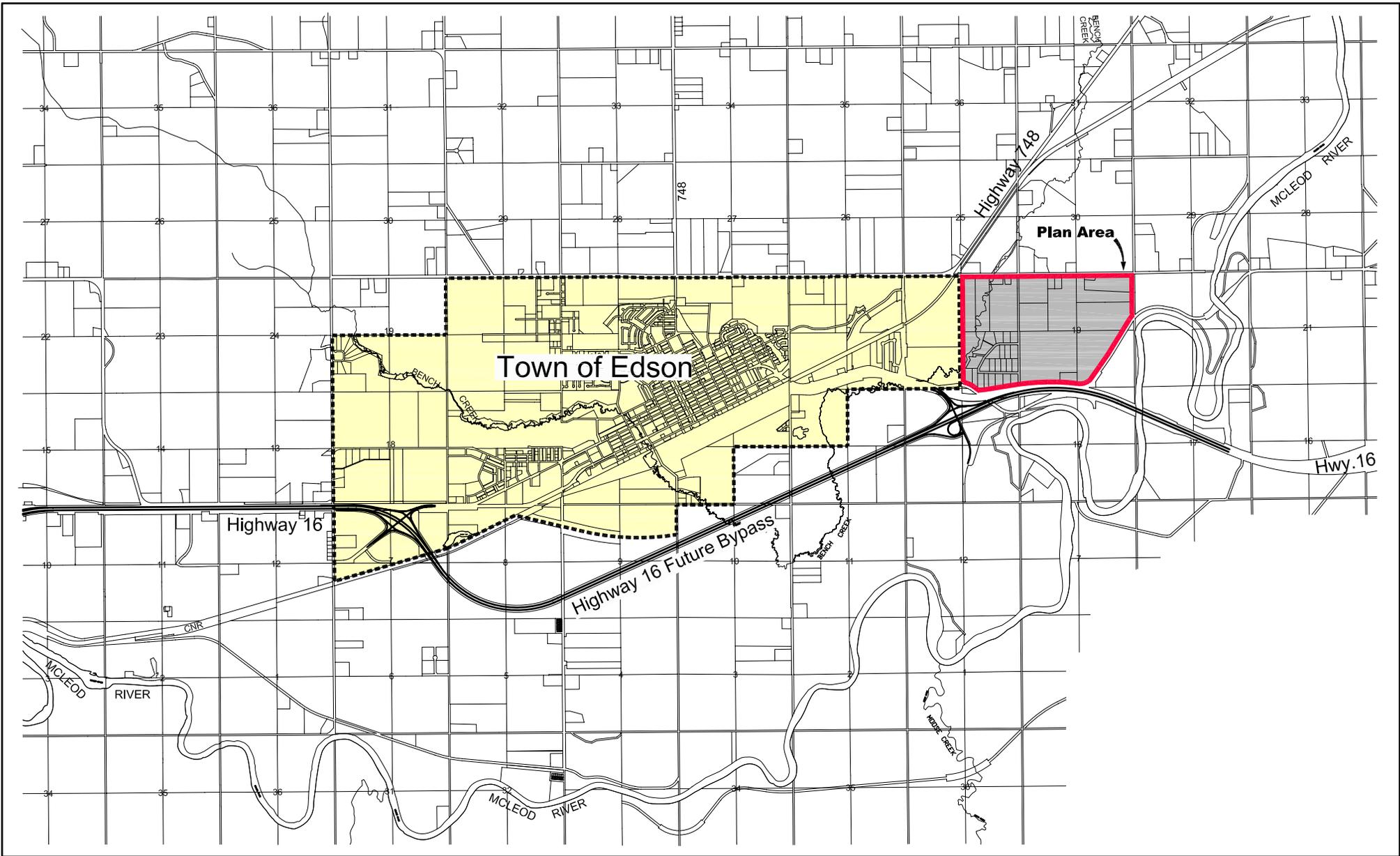
- Highway 16 and Township Road 533 (the old Highway 16) to the south;
- Range Road 165 to the east;
- East Crossing Road (Township Road 534) to the north; and,
- The east boundary of the Town of Edson to the west.

The Plan area comprises 352 hectares (870 acres) and contains the E ½ of Section 24-53-17 W5M and all of Section 19-53-16 W5M except for a portion of the SE ¼ of 19 that is bisected by Range Road 165.

1.3 Policy Context

This Area Structure Plan complies with the provisions of section 633 of the Municipal Government Act and, as is noted above, the Edson Urban Fringe Intermunicipal Development Plan Bylaw No.11.07. The Plan also complies with the provisions of Yellowhead County's Municipal Development Plan Bylaw No. 1.06. Specifically, the Area Structure Plan complies with the General Requirements for Various Planning Subdivision and Development Applications listed in Appendix B of the Municipal Development Plan.

Mizera Area Structure Plan Bylaw No.7.97 is included in Edson East. The area is commonly referred to as the Mizera Subdivision. Upon adoption of the Edson East Area Structure Plan, Area Structure Plan No.7.97 will be rescinded.



**Edson East
Area Structure Plan**

**Figure 1
Location
Plan**



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1.4 Process

In preparing the Edson East Area Structure Plan, considerable emphasis was placed on input provided by affected landowners and the public. A comprehensive landowner and public participation program was developed to encourage dialogue and to obtain direct input into the development of the Plan document. The program included the following elements:

1. **Landowner Meetings** – Two land owner meetings were held – one to gather input for preparing the Area Structure Plan and a second to present a draft subdivision design and Plan policies. Invitations were mailed to all area landowners. Fifteen (15) landowners attended the two sessions. Although some concerns were expressed at the first meeting, these concerns were resolved such that the landowners expressed general satisfaction with the draft components of the Edson East Area Structure Plan presented at the second meeting.
2. **Public Information Sessions** – Two public information sessions also were held – one to obtain public input early in the plan preparation process and a second to present the draft design and plan policies. The sessions were advertised twice in the Edson Leader and all landowners were invited to attend. Twenty participants and a representative from the Edson Leader attended the two sessions. No concerns were expressed by the public in response to the draft components of the Area Structure Plan.
3. **News Releases** - Articles in the form of news releases were provided to local newspapers at the initiation of the project and in advance of the public sessions. The releases promoted key Plan events, kept the public informed on plan progress, and maintained ongoing interest in the Area Structure Plan.

Alberta Transportation was contacted directly for input into the Traffic Impact Assessment prepared in support of this Area Structure Plan. The Plan has been circulated to other public agencies but input was minimal given the recent adoption of the Intermunicipal Development Plan and the considerable involvement of agencies in the preparation and approval of that Plan.

In addition to the input provided by agency representatives, landowners and the public, the plan preparation process involved a comprehensive investigation and evaluation of all relevant information pertaining to future development within the Plan area. An internal road system and municipal servicing options were considered as well as stormwater management requirements.

A Steering Committee was established to provide overall project guidance and direction, and to assist in refining the land use concepts and policies. The insights, advice and direction provided by the Steering Committee, which is based on considerable local knowledge and understanding, is recognized by the Area Structure Plan. The 14 member Committee included:

<p><u>Town of Edson</u></p> <p>Mayor Greg Pasychny</p> <p>Councillor Jim Gomuwka</p> <p>Councillor Arlan Delisle</p> <p>Clarence Joly, Town Manager</p> <p>Dawit Solomon, Engineering Director</p> <p>Bob Bown, Planning Manager</p>	<p><u>Yellowhead County</u></p> <p>Mayor Gerald Soroka</p> <p>Councillor Cheryl Bissell</p> <p>Councillor Larry Richter</p> <p>Jack Ramme, CAO</p> <p>Brent Shepherd, Planning & Development Supervisor</p> <p>Barb Lyons, Director of Planning & Corporate Services</p> <p>Don O'Quinn, Director of Infrastructure Services</p> <p>Jan Karasek, Development Officer</p>
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2 EXISTING CONDITIONS

The Edson East Plan Area is characterized by a diversity of natural and man-made features and land uses. This Section summarizes those existing conditions that are significant for future subdivision and development. Conditions described include the surrounding land use pattern, natural features, existing land use and zoning, infrastructure systems and pipelines.

2.1 Surrounding Land Uses

As is noted in Section 1, the Plan area is located adjacent the east boundary of the Town of Edson directly across from the Town's sewage lagoon. (see Figure 1). The lagoon comprises two cells with opportunity to construct further cells on site. Heavy and medium industrial uses surround the sewage lagoon within the Town. The CN mainline extends through this segment of Edson. Industrial development in the Plan area, therefore, will continue to be compatible with similar uses in the Town and complies with the 300 metre setback from a sewage lagoon provision of the Subdivision and Development Regulation of the Municipal Government Act. The 300 metre setback applies to residential and similar uses, not to industrial uses. A mix of country residential and agricultural uses exist north of the Plan area. A strip of country residences is located along the north side of East Crossing Road across from similar uses within Edson East. The McLeod River is the dominant feature to the south and east.

2.2 Natural Features

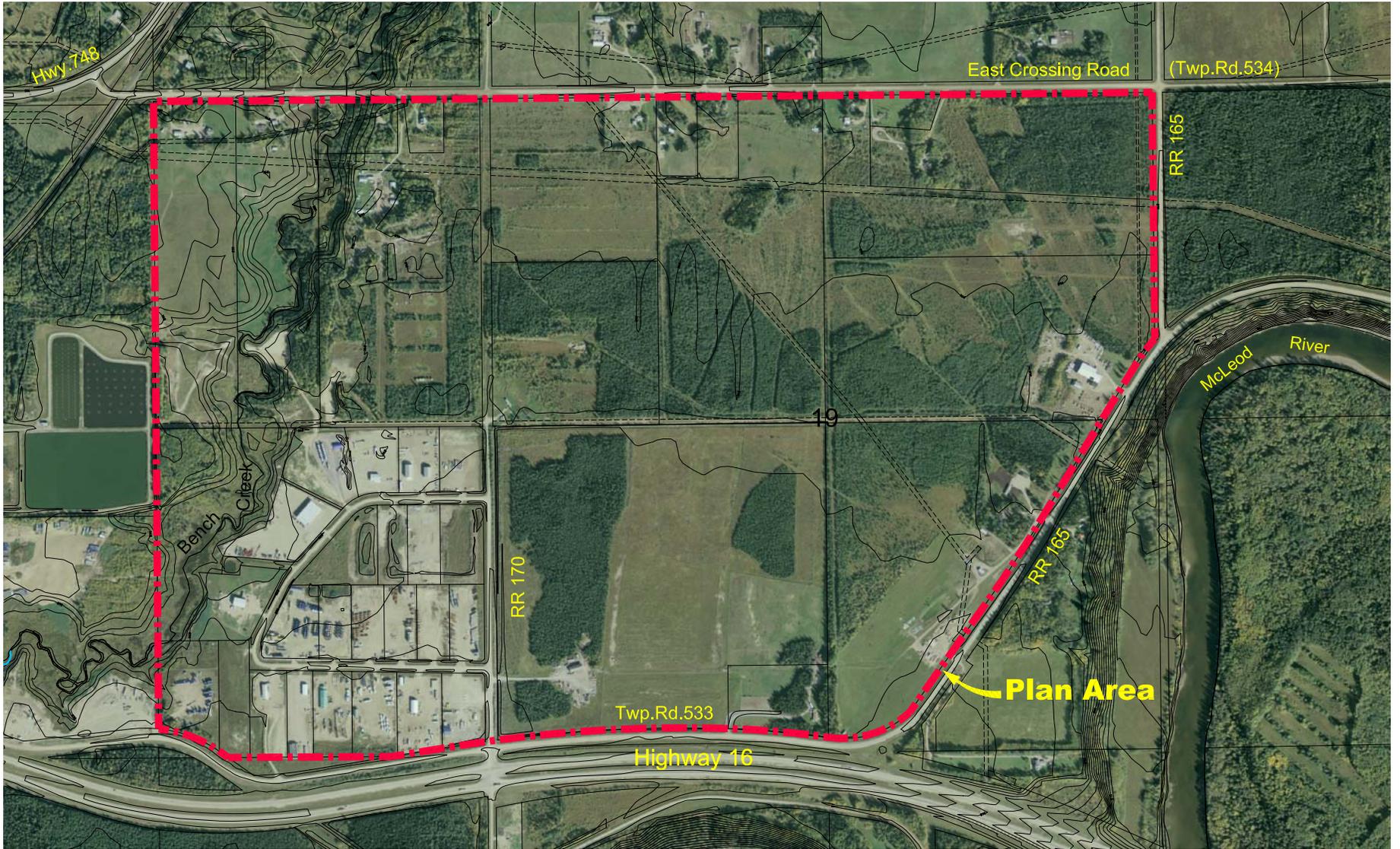
Natural features are shown on Figure 2 – Aerial Photo. Bench Creek meanders through the west portion of the Plan area and is the most significant natural feature in Edson East. The creek defines the west boundary of the Mizera Subdivision. Tree cover along this segment of the creek has been removed and some slumping is evident. Further north, the natural tree cover along both sides of Bench Creek remains. The northerly segment of Bench Creek is contained in a relatively deeply incised and treed valley as compared to the upper reach in the Mizera Subdivision. Bench Creek is a fish bearing water body. This means that any road crossings of the creek must comply with Fisheries and Oceans Canada regulations.

Although much of the Plan area has been cleared as hay fields and for grazing, significant tree stands dominated by spruce exist. The lands are relatively flat and the presence of spruce forests suggests that the near surface ground water table may be high and will need to be thoroughly investigated in advance of subdivision and development. However, extensive muskeg concentrations are not evident.

The west and north central portions of the Plan area drains towards Bench Creek while the balance drains east and southeast to the McLeod River that is located just outside the area. The stormwater management concept proposed for Edson East will need to consider direction of overland flow.

2.3 Existing Land Use and Zoning

The existing land use pattern in the Plan area is a mix of rural industrial, extensive agriculture and some developed country residential parcels most of which front onto East Crossing Road. The Mizera Subdivision located in the southwest corner of the Plan area contains 22 industrial lots and an Environmental Reserve lot extending along Bench Creek. Most of the industrial lots are developed.



Edson East Area Structure Plan

Figure 2 Aerial Photo



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Two land use districts apply to the Edson East Plan area as shown by Figure 3. The Mizera Subdivision legally defined as the SE ¼ of section 24-53-17-W5M is zoned Rural Industrial. The SW ¼ and the south ½ of the NE ¼ of section 19 53-16- W5M that combined contain some 97 hectares (240 acres) are also zoned Rural Industrial and may be further subdivided.

The balance of the Plan area is zoned Rural District. Yellowhead County's Land Use Bylaw allows for up to four parcels to be subdivided out of a ¼ section zoned Rural District. This means that a ¼ section can contain five parcels including the remnant. Smaller subdivided parcels often contain a residence which is a permitted use in the Rural District.

Existing residences fronting onto East Crossing Road are not compatible with future industrial development to the south but are compatible with the developed residential parcels fronting the north side of East Crossing Road. The existing residential use along East Crossing Road, therefore, should be maintained in future but will need to be buffered from potential industrial development to the south.

However, the two 16 hectare (40 acre) parcels located on the west side of Bench Creek that each contain a residence fronting onto East Crossing Road are located directly south of a developed Rural Industrial parcel. These two parcels that are also located near the Town sewage lagoon may better utilized for future industrial development.

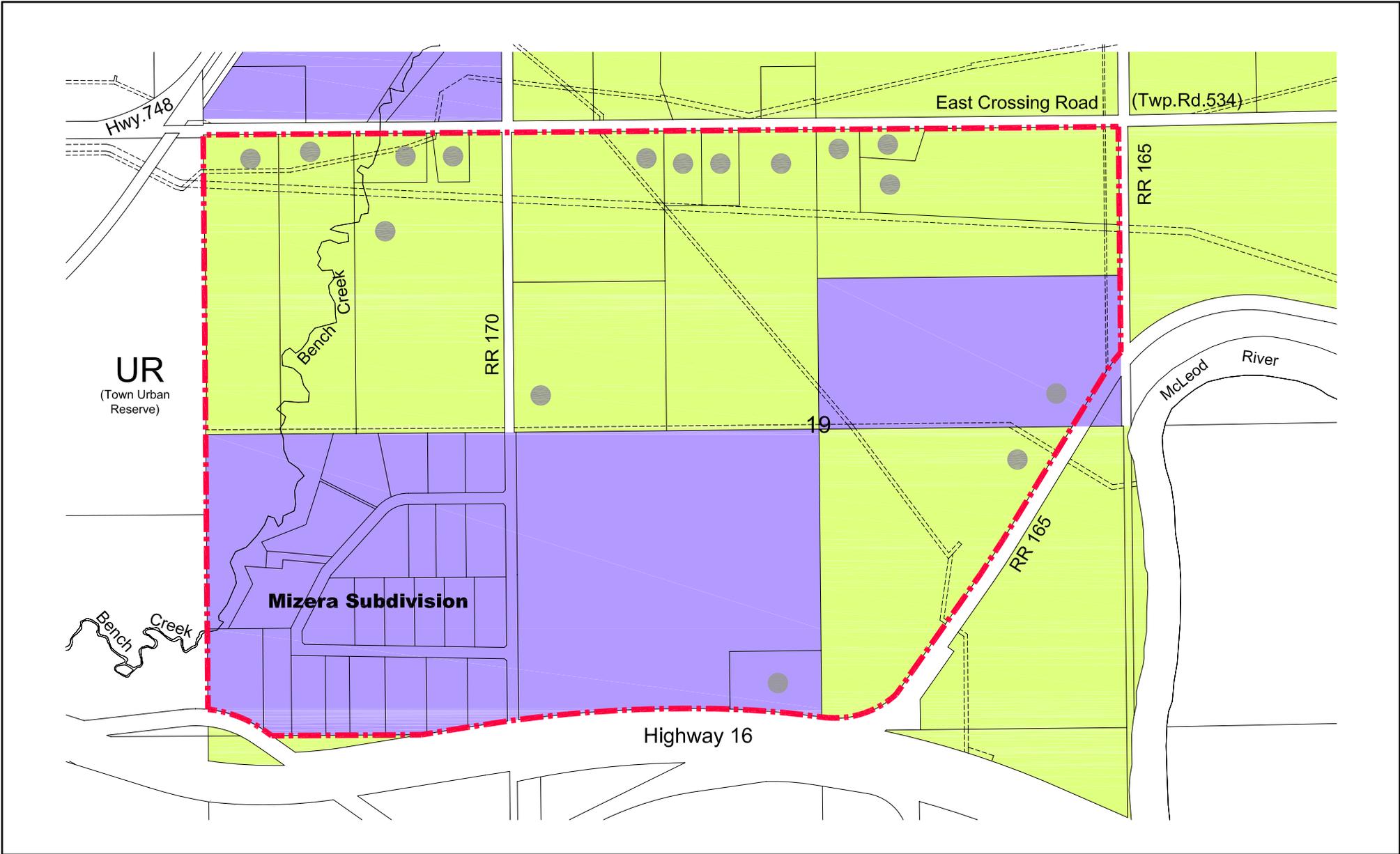
Home industry is a discretionary use in the Rural District that may apply to some of the residential parcels zoned Rural District in the Plan area. Home industry means a business or occupation of an industrial nature carried out on a rural parcel or farm unit by the owner or operator as an accessory use to a residential use. Home industries in Yellowhead County are typically related to construction activities or oil and gas field services. Home industry uses, therefore, are generally compatible with rural industrial uses.

At the time of industrial subdivision and development, the Rural District lands will need to be rezoned to Rural Industrial in compliance with this Area Structure Plan and the Intermunicipal Development Plan. The country residential parcels fronting onto east Crossing Road may retain the Rural District zoning except for those parcels located on the west side of Bench Creek adjacent the Town's sewage lagoons.

2.4 Existing Road System

Access to most of the Plan area is currently off the old highway and the Highway 16 service road that extends along the south boundary of the area (see Figure 3). The service road connects with Highway 16 within the Town of Edson. An all directional approach onto Highway 16 is located at the southeast corner of the Mizera Subdivision. This approach will be closed once the interchange for the proposed Highway 16 bypass is constructed as per the Functional Planning Study prepared for Alberta Transportation. All access to Highway 16 will be via service roads that will link to the interchange shown on Figure 1.

The old highway connects to a bridge crossing of the McLeod River. The bridge is in need of upgrade and is located directly east of the Plan area providing an alternate crossing to the newer Highway 16 bridge. The old bridge is used by County residents living east of the McLeod River to access the Town of Edson. Yellowhead County and Alberta Transportation will be extending the functional life of this bridge for another 15 years. Thereafter, a new bridge may be constructed further north that would link directly to East Crossing Road (Township Road 534).



**Edson East
Area Structure Plan**

**Figure 3
Existing Land Use
and Zoning**

- RD Rural District
- RI Rural Industrial
- Existing Residence



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Range Road 170 provides access to the Mizera Subdivision that contains an internal subdivision road. The Range Road extends only ½ mile north of Highway 16. A further ½ mile of roadway would need to be constructed to link Range Road 170 with East Crossing Road. Range Road 165 that extends along the east side of the Plan area links with East Crossing Road and the old bridge crossing.

East Crossing Road is the primary road link used by adjacent residences to access Highway 748, located just northwest of the Plan area, and the Town of Edson. The stacking distance on this road between Highway 748 and the CN rail line is minimal creating safety issues. Area residents indicate that truckers are using East Crossing Road and the old McLeod River bridge as a bypass around Edson to gain access to Highway 748 so that traffic issues are further exacerbated.

Additional east/west connections to Highway 748 are restricted by the need to cross the CN mainline. However, improved road access to the south is feasible with the construction of the ½ mile of Range Road 170 which will allow for a more complete grid system. In the interim, more residential development along East Crossing Road should not be encouraged.

2.5 Municipal Services

2.5.1 Water

Existing developments in the Plan area are served by on-site water wells or cisterns. Until piped water from the Town can be extended into the Plan area, the range of industrial uses will be limited because of lack of pressurized water required for firefighting purposes. A 200 mm water stub is located about 1,200 metres west of the Plan area. A detailed calibrated model will be required to address water servicing strategies for the area. The Town of Edson and Yellowhead County have initiated the preparation of a Municipal Servicing Plan that will consider strategies and required upgrades to the Town's water system that will determine the feasibility of extending a piped water system into part or all of East Edson.

2.5.2 Sanitary Sewage

On-site private sewage disposal systems that may include pump-out tanks are used in the Plan area. These systems must comply with Alberta Labour's Private Sewage Disposal Standard of Practice Regulation. The County allows sewage to be hauled to the Town's lagoon but only if it can be demonstrated that an on-site system is also feasible. As is noted in Section 2.1, the Town's sewage lagoon is located adjacent the Plan area.

The Municipal Servicing Plan will consider required upgrades to the Town's sanitary sewage system including increased lagoon capacity requirements to service Edson and potentially Edson East. The current capacity of the Town's lagoon is 10,000 persons. The Town's current population is 8,365. Preliminary investigation undertaken as part of the Intermunicipal Development Plan process suggest that because most of the Plan area drains to the east, extending a gravity type sanitary system from the Town into the area may be problematic.

2.5.3 Stormwater Management

Stormwater in the Mizera Subdivision is collected in roadside ditches and drains directly into Bench Creek. Overland flow into the creek also occurs. This means that contaminants from industrial uses may be entering the creek. Future subdivisions in Edson East will need to submit a stormwater management plan that includes storing stormwater on site, filtering out contaminants and then releasing the stormwater into Bench Creek or the McLeod River at predevelopment rates as per provincial regulations.

All stormwater management plans should generally comply with the comprehensive stormwater management concept described in Section 3 and must meet the requirements of Alberta Environment and Yellowhead County.

2.6 Oil and Gas Pipelines

Pipeline rights-of-way that extend through the Plan area are shown of Figure 3. No sour gas lines exist so that the setback from development is the pipeline right-of-way based on Energy Resources Conservation Board (ERCB) Directive 056: Energy Development Applications and Schedules (July 2008). No permanent development can occur on a pipeline right-of-way. This means that to the extent possible subdivision plans should be designed such that rights-of-way are located along the perimeter of lots thereby maximizing the size of the building pocket on the lot.

2.7 Implications for Future Development

The most significant implications for future development of the foregoing existing conditions are summarized as follows.

- The tree cover adjacent to the northerly segment of Bench Creek within the Plan area should be retained to prevent slumping and to protect the integrity of the creek.
- Near surface groundwater conditions will need to be investigated along with the remaining subdivision and development related investigations required by Yellowhead County and the Province.
- At the time of industrial subdivision and development, the Rural District lands will need to be rezoned to Rural Industrial in compliance with the Intermunicipal Development Plan and this plan.
- Except for those parcels located on the west side of Bench Creek adjacent the Town's sewage lagoon, the existing developed country residential parcels fronting onto East Crossing Road should retain the current Rural District zoning to ensure compatibility with residential uses located along the north side of East Crossing Road.
- The existing residential parcels should be buffered from future industrial development to the south.
- Some 97 hectares (240 acres) currently zoned Rural Industrial within the Plan area can be further subdivided and developed in compliance with this Area Structure Plan.
- Additional residential subdivision accessing East Crossing Road should be discouraged until such time as Range Road 170 is extended ½ mile north to connect with East Crossing Road resulting in an alternate safe access to the Town of Edson.
- The old highway bridge remains open but requires upgrades. The bridge is being used by County residents located east of the McLeod River traveling to Edson and by truck traffic to access Highway 748 by bypassing Edson. This additional traffic suggests a need to maintain low densities until such time as an alternate access is provided.
- On-site water and sanitary sewage disposal systems that meet the requirements of Yellowhead County and the Province will continue to be considered until such time that the Municipal Servicing Plan is completed.

- Stormwater management plans should be required for new subdivisions and developments to ensure contaminants are not released into Bench Creek or the McLeod River and to comply with provincial regulations.

The foregoing implications are considered in developing a future land use concept for the Edson East. This concept is described in Section 3.

3 LAND USE CONCEPT

The proposed Land Use Concept for the Edson East Plan Area is shown on Figure 4. The primary land use proposed by the concept is Rural Industrial in compliance with the Edson Urban Fringe Intermunicipal Development Plan. Industrial development is compatible with the existing Mizera Subdivision.

The concept is described in greater detail below. Future roads, municipal servicing and stormwater management considerations are also described.

3.1 Future Land Use

Although the Land Use Concept designates most of the lands contained in the Plan area as future Rural Industrial, the existing country residential parcels fronting onto East Crossing Road are designated future residential because, **first**, they already contain residential dwellings and, **second**, this use is compatible with existing residential parcels located on the north side of east Crossing Road.

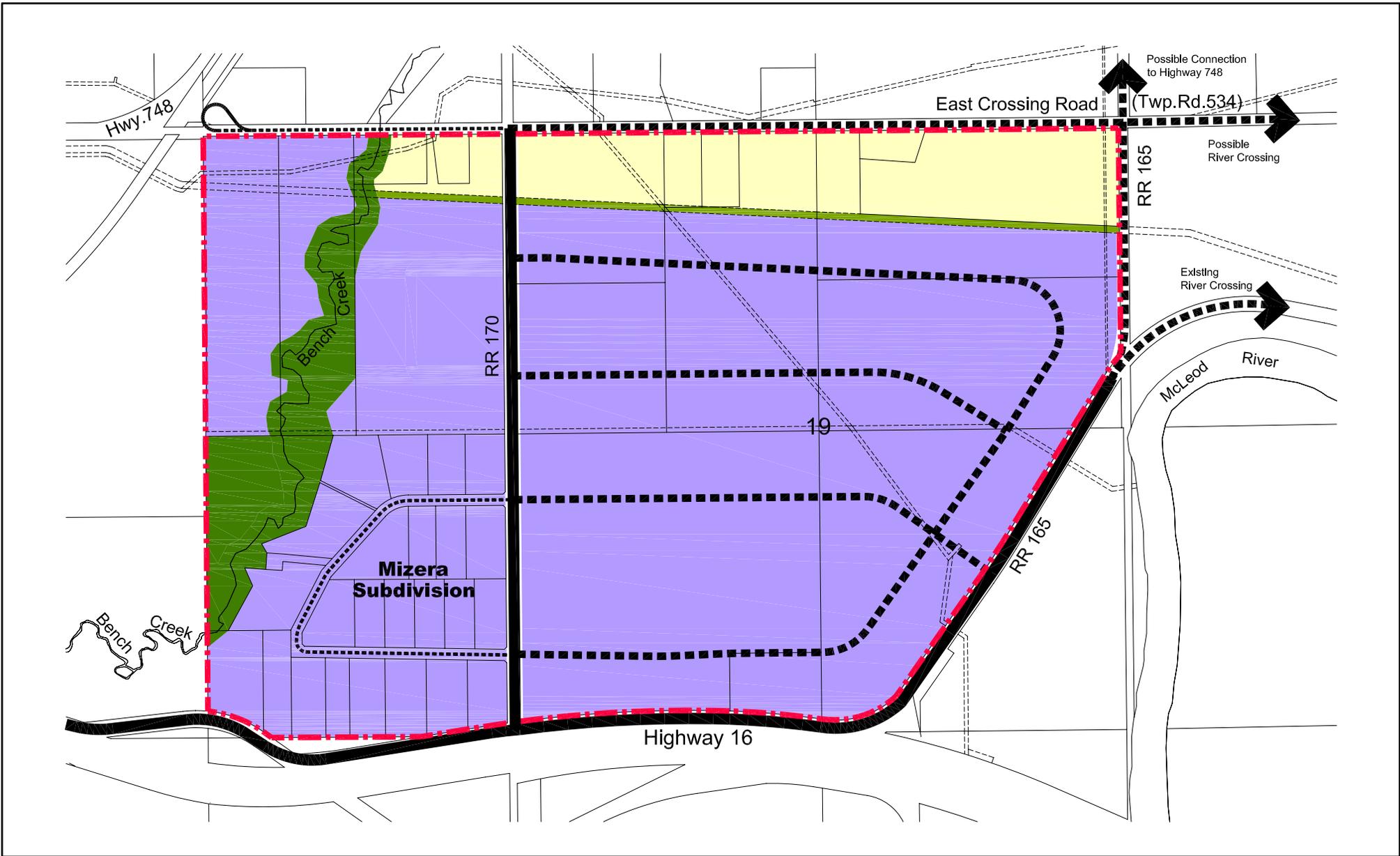
The two 40 acre lots fronting onto East Crossing Road are located mostly west of Bench Creek and are separated from residential uses to the east by the creek. Although both lots contain a residence fronting East Crossing, the lots are located adjacent the Town's sewage lagoon that may be expanded in future. Some land contained within the lots is outside the 300 metre setback from a sewage lagoon to a residence. However, nuisance factors such as smell may extend beyond 300 metres. Also, as is noted in Section 2, the parcel located north of the lots directly across East Crossing Road contains an industrial operation and is zoned Rural Industrial District. As a result, the most appropriate future use for the two lots is industrial.

The east/west pipeline right-of-way extending through the Plan area on the south side of the residential parcels provides an opportunity for a logical boundary to separate residential from industrial uses. The right-of-way also provides an opportunity to develop a paralleling buffer strip.

Four parcels fronting onto East Crossing Road extend south of the pipeline right-of-way. Each parcel contains a residence and three of these residences are located north of the pipeline. The one residential development located south of the pipeline appears to be operating a home industry and may, therefore, be compatible with industrial uses.

In future, if the four parcels are further subdivided, the pipeline right-of-way will form the subdivision boundary between industrial and residential lots. Industrial lots backing onto the residential parcels and the pipeline right-of-way may be required to provide an effective buffer paralleling this pipeline. The buffer should comply with the provisions of Yellowhead County's Land Use Bylaw and should be consistent along its entire length.

The Mizera subdivision contains an Environmental Reserve parcel that is owned by Yellowhead County and contains the creek and adjoining lands. The Land Use Concept proposes that all lands below the top of the bank of Bench Creek further north also be designated Environmental Reserve. Additional lands along the top-of-bank may be required to protect the integrity of the creek. The linear Environmental Reserve parcels create for future trail opportunities.



Edson East Area Structure Plan

Figure 4 Land Use Concept

- | | | | |
|---|------------------|---|----------------|
|  | Rural Industrial |  | Buffer |
|  | Residential |  | Arterial Road |
|  | Natural Area |  | Collector Road |
| | |  | Existing Road |



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3.2 Future Road System

The future road system proposed to serve the Land Use Concept is shown on Figure 4. The system has been designed to recognize:

- Existing roadways and subdivisions;
- Alberta Transportation's Functional Planning Study for the Highway 16 bypass that requires all at grade intersections to the highway be closed once the interchange at the west side of Edson is built. All highway traffic will be directed to this interchange.
- The Traffic Impact Assessment (TIA) prepared in support of the Functional Plan and this Area Structure Plan.

The conclusions and recommendations of the TIA are listed below:

1. To be consistent with Alberta Transportation's plan to operate Highway 16 as a freeway, direct access to Highway 16 cannot be permitted from the existing Highway 16 access point due to the proximity to a planned Edson bypass interchange to the west.
2. Future access to the Edson East Plan area from Highway 16 will be from a service road connection to Highway 16, about one mile west of the existing Highway 16 access and connecting to Highway 748.
3. The proposed service road connection to Highway 748 is to be *bulbed* in order to maximize the spacing along Highway 748 between the service road intersection and the Highway 16 intersection. This spacing should be as generous as possible, preferably in the order of 400 metres, given the significant amount of traffic generated by the Edson East ASP and its limited access to Highway 16.
4. The Edson East ASP will generate about 24,000 daily vehicle trips on the service road connection. A supplemental traffic analysis showing the number of acres that could be developed prior to a signal being triggered at the Range Road 170/Highway 16 intersection will be undertaken.
5. The following actions are recommended to facilitate traffic movements in Edson East.
 - Closure of East Crossing Road at Highway 748 once Range Road 170 is extended a further ½ mile north to connect with East Crossing Road or when the year round road ban on Range Road 165 is removed.
 - Closure of the existing north-south connection to Highway 16 when a signal is warranted or when the Edson bypass is constructed.
 - Construction of a *bulbed* service road connection to Highway 748 and additional lanes at the intersection of Highway 16 and Highway 748.

3.3 Municipal Servicing

As is noted in Section 2, water wells and cisterns currently serve the Plan area and on-site sewage disposal systems that may include pump-outs are used to treat wastewater. The Master Servicing Plan will determine if water can be economically extended from the Town of Edson into all or a portion of the Plan area. If a pressurized water system for firefighting can be extended to some of the industrial area including the Mizera Subdivision, the range of industrial uses that may develop in Edson East will increase.

In the interim, all multi-lot subdivision proposals should provide details of an adequate water supply for firefighting purposes. The residential parcels fronting onto East Crossing Road will likely continue to be most efficiently served by on-site water wells.

The Master Servicing Plan will also determine the feasibility of extending the Town's piped sewage system into East Edson. However, as is also noted in Section 2, the topography of the Plan area suggests that an economic gravity type sewage collection system may not be feasible. If one or more lift stations are required, the costs of such a system will increase significantly. Most industrial uses do not generate large volumes of wastewater and some recycle water so that the continued approach of on-site treatment or pump-outs may continue to be most viable.

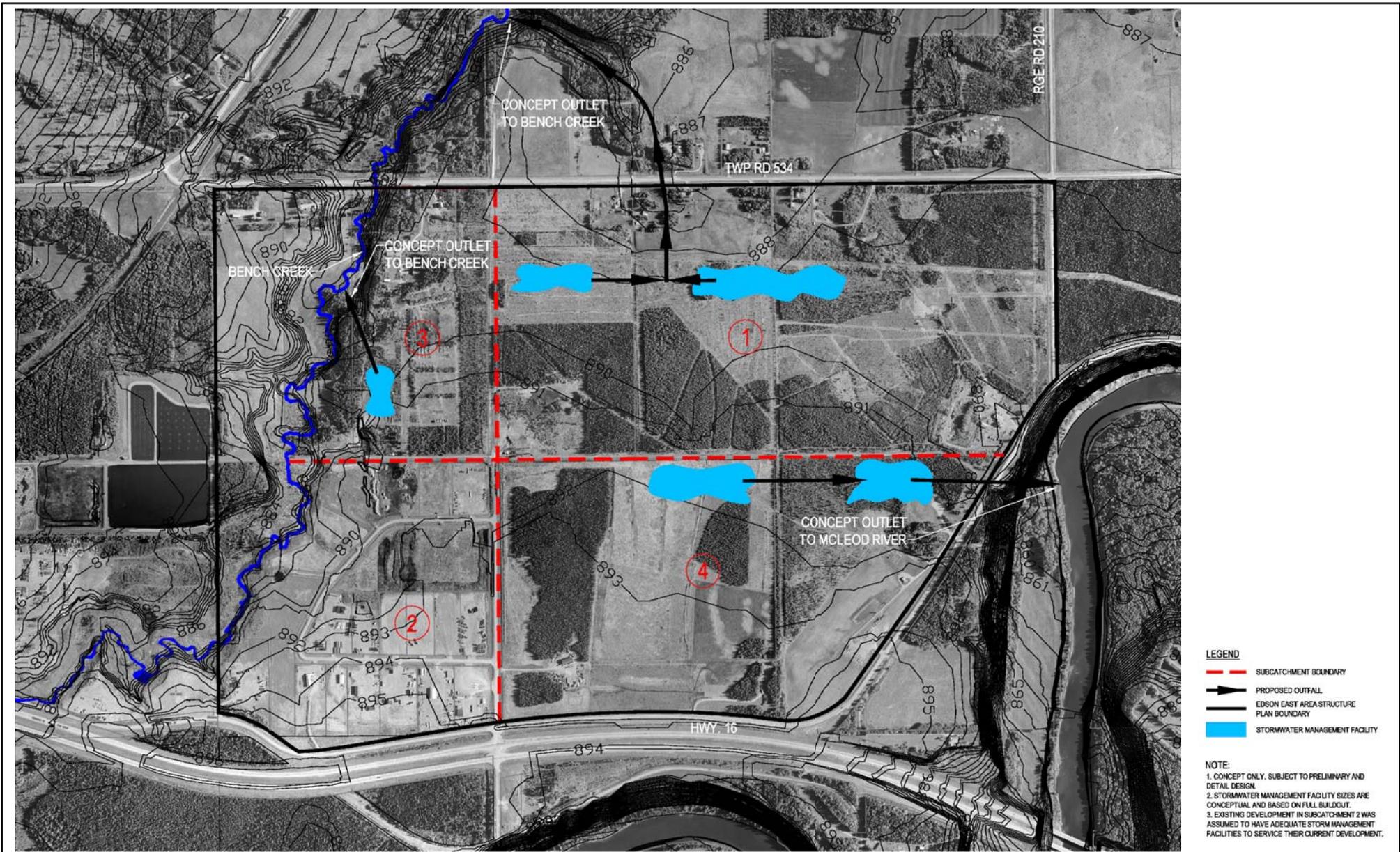
3.4 Stormwater Management

As illustrated on Figure 5, the Plan area will be serviced by interconnected stormwater management facilities. Two stormwater management facilities service subcatchment 1, south of Township Road 534. The ponds discharge flows to a common conveyance system into Bench Creek. Subcatchment 3 is serviced by one stormwater management facility which conveys flows to Bench Creek. The west pond within subcatchment 4 releases flows to the east pond which conveys flows to the McLeod River.

The stormwater management facilities will be designed to contain the 1:100 storm event within their drainage basins. The location of these facilities is shown conceptually on Figure 5. The areas that have been allocated relate to that required for full build out within the basin. The individual facilities can be constructed in stages, and expanded as growth within the basin occurs. Preliminary sizing of the system has been done on the basis that any existing developments already have sufficient onsite stormwater management.

Design of the stormwater management facilities within the Plan area is based upon a discharge rate equivalent to predevelopment flow rates. An initial review of historical watershed characteristics for nearby water bodies, along with review of previous stormwater studies, and assessment of predevelopment flow rates within neighbouring municipalities was completed to determine a predevelopment flow rate for the Plan area. The predevelopment flow rate of 3.0 L/s/ha was determined for the Plan area and will be reviewed in the Master Servicing Plan. It is envisioned that each individual stormwater management facility will discharge predevelopment flows relative to its drainage basin, and each will be sized to allow upstream storm flows to pass through the storm facility without further retention.

In addition to stormwater quantity control, stormwater quality management is required for the Plan area. Stormwater quality can be improved by using stormwater best management practices to aid in improving water quality. Stormwater quality improvement should be addressed before discharging into Bench Creek and the McLeod River. Discharging into the Bench Creek and McLeod River will require government approvals which will be addressed at time of development.



- LEGEND**
- - - SUBCATCHMENT BOUNDARY
 - PROPOSED OUTFALL
 - EDSON EAST AREA STRUCTURE PLAN BOUNDARY
 - STORMWATER MANAGEMENT FACILITY

NOTE:
 1. CONCEPT ONLY. SUBJECT TO PRELIMINARY AND DETAIL DESIGN.
 2. STORMWATER MANAGEMENT FACILITY SIZES ARE CONCEPTUAL AND BASED ON FULL BUILDOUT.
 3. EXISTING DEVELOPMENT IN SUBCATCHMENT 2 WAS ASSUMED TO HAVE ADEQUATE STORM MANAGEMENT FACILITIES TO SERVICE THEIR CURRENT DEVELOPMENT.

Edson East Area Structure Plan

Figure 5 Stormwater Management Concept Plan



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4 PLAN POLICIES

The Area Structure Plan land use, transportation, municipal servicing and implementation policies are listed below. All new subdivision and development applications must comply with these policies.

4.1 Land Use Policies

- 4.1.1 All future redistricting, subdivision and development shall comply with the Land Use Concept Figure 4 and policies of the Area Structure Plan.
- 4.1.2 Applications for redistricting and subdivision shall be processed concurrently to ensure compliance with the Area Structure Plan. This policy applies to single and multi-lot subdivision applications. The minimum area to be redistricted shall correspond to the area being subdivided.
- 4.1.3 The Rural Industrial (RI) District of Yellowhead County's Land Use Bylaw shall apply to all lands designated Industrial by the Land Use Concept.
- 4.1.4 Applications for permits for a discretionary use pursuant to the Land Use Bylaw shall be considered only if the proposed use complies with the intent of the Land Use Concept Figure 4, and the policies of this Area Structure Plan.
- 4.1.5 All future subdivisions shall have regard for pipeline rights-of-way by ensuring that internal subdivision roads and lot configurations allow for rights-of-way to be located in a manner that will not jeopardize their integrity. This means that, to the extent possible, rights-of-way should be located along the periphery of a lot and that a suitable building pocket should be contained within each lot that is unencumbered by a right-of-way. No permanent structures are permitted on a pipeline right-of-way.
- 4.1.6 ERCB setback guidelines from pipelines, wells and other facilities shall be applied in considering new subdivisions.
- 4.1.7 The subdivision requirements of the Development Authority shall apply. The following items must be considered:
 - (a) Staging of subdivision and development if applicable;
 - (b) A stormwater management plan that recognizes and refines the stormwater management concept as proposed by this Area Structure Plan;
 - (c) The provision of interim on site municipal servicing that will consider water supply and the method for treating wastewater in compliance with municipal standards and provincial legislation;
 - (d) Identifying what will be required to extend telephone, cable, electricity and gas service to each site;
 - (e) The amount and location of Municipal Reserve or cash in lieu of Municipal Reserve; and,
 - (f) The amount and location of Environmental Reserve.

- 4.1.8 Yellowhead County shall amend its Land Use Bylaws to adopt the Highway 16 Corridor Overlay District proposed by the Edson Urban Fringe Intermunicipal Development Plan.
- 4.1.9 The Highway 16 Corridor Overlay District (see Appendix A) shall apply to all lots located along or visible from Highway 16 and at the discretion of the Development Authority.
- 4.1.10 All multi-lot subdivision proposals shall be required to implement wildfire mitigation measures as contained in the Partners in Protection Program (1999) ***FireSmart: Protecting Your Community from Wildfire***.
- 4.1.11 Existing natural features, including vegetation, shall be preserved, wherever possible by integrating these features into the design of new subdivisions.
- 4.1.12 Industrial subdivision applications located along Bench Creek shall be required to have the top of the bank surveyed by an Alberta Land Surveyor.
- 4.1.13 All lands below the top of the surveyed bank and a 20 metre wide strip of land along the top of the bank of Bench Creek shall be dedicated as Environmental Reserve to allow for trail development and/or to protect the integrity of the bank.
- 4.1.14 No trees shall be removed within 20 metres of the top of the bank and including the bank itself of Bench Creek.
- 4.1.15 Cash in lieu of Municipal Reserve for 10 percent of the gross developable area shall be provided at the time of subdivision.
- 4.1.16 New industrial subdivisions and developments backing onto the buffer strip as shown on the Land Use and Design Concept (Figure 4) must provide for buffering from existing and future country residential as per section 57 of Yellowhead County's Land Use Bylaw to the satisfaction of the Development Authority. A consistent approach to buffering shall be required along the entire length of the buffer strip which may include combinations of berming, fencing and landscaping. At a minimum, a landscaped yard with a minimum width of 4.5 metres adjacent to the property line shall be required. The buffer strip shall be contained in the backs of industrial lots and shall parallel the pipeline right-of-way

4.2 Transportation Policies

- 4.2.1 Any future upgrading required at access points to Highway 16 in advance of the construction of the Highway bypass shall be in accordance with the Traffic Impact Assessment prepared in support of this Area Structure Plan, and to the satisfaction of Alberta Transportation and the Development Authority.
- 4.2.2 The future road system shown on Figure 4 is conceptual and will be refined at the time of subdivision to the satisfaction of Yellowhead County and Alberta Transportation.
- 4.2.3 The County will assume responsibility for closing Range Road 170 once traffic volumes trigger a signal at Highway 16. The County will also assume responsibility for the construction of the bulbed service road connection to Highway 748 as well as the required Highway 748 intersection improvements.

- 4.2.4 All subdivisions located within ½ mile of Highway 16 shall continue to be referred to Alberta Transportation for comment and input.
- 4.2.5 Rights-of-way required for local, collector and arterial roads shall be dedicated at the time of subdivision as per municipal standards and in compliance with the Traffic Impact Assessment prepared in support of this Area Structure Plan .

4.3 Municipal Servicing Policies

- 4.3.1 A comprehensive storm water management plan shall be required to be submitted to the Development Authority and Alberta Environment for all subdivision and development proposals. The management plan shall consider the stormwater management concept as proposed by the Area Structure Plan and will demonstrate how the storm water will be stored on site and released at predevelopment rates and how the storm water will be treated for contaminants prior to release.
- 4.3.2 Interim private on-site sewage disposal systems and cisterns or private water wells shall be considered consistent with the requirements of the Development Authority until such time as the recommendations of the Town of Edson Master Servicing Plan can be implemented. All developments shall be required to comply with the recommendations and standards of the Master Servicing Plan that may include the need to tie into piped water and sewer services as these services become available.
- 4.3.3 All multi-lot subdivision proposals shall be required to provide details of an adequate water supply for fire-fighting purposes as required by the Alberta Building Code. Subdivision or development and construction of any development or structure cannot begin until evidence is provided, to the satisfaction of the Development Authority, that the requirements of the Alberta Building Code have been met with respect to provision of an adequate water supply for fire-fighting purposes

4.4 Implementation Policies

- 4.4.1 Yellowhead County Council shall have responsibility for the implementation of the Edson East Area Structure Plan. Council shall:
 - (a) Adopt the Edson East Area Structure Plan by bylaw;
 - (b) Adopt the Highway 16 C;
 - (c) Make all necessary changes to the Land Use Bylaw to comply with the provisions of the Edson East Area Structure Plan;
 - (d) Review and/or amend the Edson East Area Structure Plan as required.
- 4.4.2 Upon adoption of the Edson East Area Structure Plan, existing Mizera Area Structure Plan Bylaw No.7.97 shall be rescinded.

5 CONCLUSION

This Area Structure Plan provides a basis for further redistricting and subdivision of land in Edson East for rural Industrial purposes. It will be updated to reflect the recommendations of the Town of Edson Municipal Servicing Plan slated for completion in 2009. However, the Area Structure Plan polices support continued industrial development based on interim on-site municipal services that must comply with the requirements of Yellowhead County.

Appendix B provides a subdivision design for the Plan area that recognizes the proposed land use and arterial and collector road systems. The subdivision design is for illustrative purposes. As is noted in Section 4, applications for subdivision will be required to meet the provisions of Yellowhead County's Land Use Bylaws.

APPENDIX A: DRAFT HIGHWAY 16 CORRIDOR OVERLAY DISTRICT

Appendix A

DRAFT Highway 16 Corridor Overlay District

1. PURPOSE

To establish a positive visual impression of the Highway 16 corridor by:

- *Providing greenery and seasonal colour to visually soften paved areas and buildings;*
- *Preserving existing trees wherever possible;*
- *Screening unsightly equipment or materials from the view of the highway, adjacent roadways or adjoining properties; and,*
- *Enhancing the quality and appearance of developed properties within the overlay district.*

2. APPLICATION

- 2.1 The Overlay regulation applies to the development or redevelopment of all lots that are located adjacent to or are visible from Highway 16 at the discretion of the Development Authority.
- 2.2 The Overlay District regulations are to be applied as a condition of a Development Permit.
- 2.3 The Overlay District applies to the redevelopment of existing buildings and facilities as well as all new development.
- 2.4 Wherever possible, trees existing on the site shall be preserved and protected or replaced. Notwithstanding the status of existing vegetation, landscaping of the site shall be subject to the provisions of the Overlay District.
- 2.5 Where the provisions of the Overlay District conflict with other regulations of this bylaw, the more restrictive provisions shall take precedence.

3. GENERAL

- 3.1 All applications for development permits shall be accompanied by a landscaping plan completed by Landscape Architect or a person qualified to perform such work. No development permit shall be issued prior to the approval of the required landscaping plan.
 - 3.2 The landscaping plan shall include the following:
 - (a) Boundaries and dimensions of the subject site;
 - (b) Location of all the buildings, parking areas, driveways and entrances;
 - (c) Location of all exterior lights on the site and their projected light patterns in relation to adjacent public roadways and developments;
 - (d) Location of existing plant materials to be retained;
 - (e) Location of new plant materials;
 - (f) Plant material list identifying the name, quantity and size of plant material;
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- (g) All other physical features, existing or proposed; including berms, walls, fences, outdoor furniture, lighting and decorative paving; and,
 - (h) A location plan showing the proposed development and landscaping relative to the landscaping and improvements on adjacent properties.
- 3.3 The owner of the property, or his/her successor or assignees, shall be responsible for landscaping and proper maintenance. As a condition of a development permit, an irrevocable letter of credit may be required, up to a value of the estimated cost of the proposed landscaping/planting to ensure that such landscaping/planting is carried out with reasonable diligence. The conditions of the security being that:
- (a) If the landscaping is not completed in accordance with this Bylaw and the landscaping plan within one year after occupying the building or site, then the municipality shall use the security to complete the approved landscape development; and,
 - (b) If the landscaping does not survive a two (2) year maintenance period, the applicant must replace it with a similar type of species and with a similar calliper width or forfeit the portion of the amount fixed equal to the cost of replacing the affected landscaping materials.
 - (c) The letter of credit will be released when the landscaping and other improvements have been completed to the satisfaction of the Development Authority and the two-year maintenance period has expired.

4. PLANTING STANDARDS

- 4.1 All required yards on the site shall be landscaped in accordance with the approved landscaping plan.
 - 4.2 To provide year round colour and interest, a tree mix of approximately 50% coniferous and 50% deciduous, shall be provided.
 - 4.3 50% of required deciduous trees shall be at least 50mm (2.4 in.) calliper and 50% shall be a minimum of 75mm (3.0 in.) calliper above the root ball.
 - 4.4 75% of coniferous trees shall be a minimum of 2.0m (6.6 ft.) in height and 25% shall be minimum of 3.5m (11.5 ft.) in height above the root ball.
 - 4.5 Trees or shrubs shall be provided in accordance with this Section. The number is determined on the basis of the following:
 - (a) One (1) tree for every 40.0 m² (430.6 ft²) and one (1) shrub for each 20 m² (215.3 ft²) of any required yard or setback;
 - (b) One (1) tree for each 25.0 m² (269.1 ft²) and one (1) shrub for each 10.0 m² (107.6 ft²) of required parking area islands. In no case shall there be less than one tree per required parking area island.
 - 4.6 Trees or shrubs should be clustered or arranged in planting beds within the site.
 - 4.7 Trees and shrubs shall be evenly placed at regular intervals when used for screening of adjacent development.
 - 4.8 As required by the Development Authority, all required yards and all open spaces on the site excluding parking areas, driveways, and outdoor storage and service areas shall be landscaped in accordance with the approved landscaping plan.
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- 4.9 Planting beds shall consist of an odd number of trees to approximate a site mix of 50% coniferous and 50% deciduous with shrubs in a mulched medium such as shredded wood, rocks, or similar materials. Mulch shall not be used as a substitute for plant materials.
- 4.10 At a minimum, a planting bed shall be composed of a mix of three (3) coniferous trees, two (2) ornamental deciduous trees and shrubs.
- 4.11 As required by the Development Authority, the undeveloped portion of the site, excluding parking areas, driveways, outdoor storage and service areas must be graded, contoured and seeded.
- 4.12 On the advice of a Landscape Architect or Arborist, planting standards may be altered to suit unique site topography or soils or micro-climatic conditions.
- 4.13 Retained natural vegetation may be applied to satisfy landscape yard requirements. These plantings may be extended with plant material as specified in this section.

5. LANDSCAPE ISLANDS WITHIN PARKING AREAS

- 5.1 Landscape islands shall be required within at-grade parking areas with a capacity of twenty-five (25) or more vehicles. These islands shall be landscaped in accordance with Section 4 – Planting Standards.
- 5.2 Parking islands shall be placed to provide visual relief and to organize large areas of parking into smaller cells. The number of islands provided shall be to the satisfaction of the Development Authority.

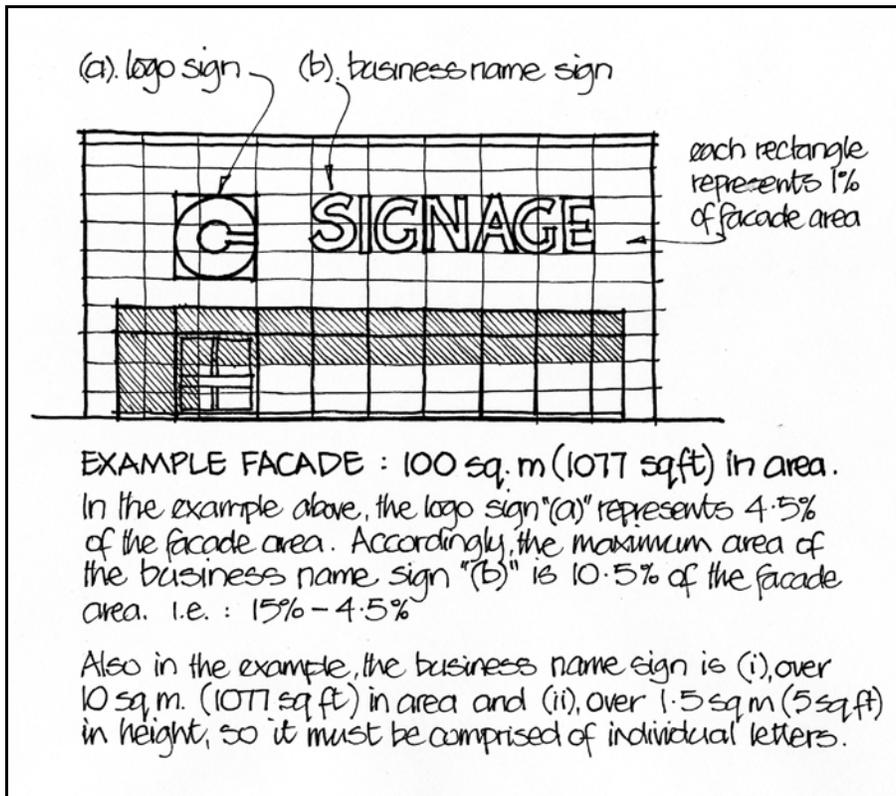
6. ADDITIONAL AESTHETIC REGULATIONS

- 6.1 The Development Authority may require the application of additional aesthetic regulations, if in the opinion of the Development Authority:
 - (a) There is a likelihood that the proposed development will generate undesirable impacts on surrounding sites, such as poor appearance, excessive noise, light, odours, traffic, litter, or dust;
 - (b) There is a likelihood that undesirable impacts may be generated on the site, and cause conflicts with other businesses within the development;
- 6.2 The additional aesthetic regulations that may be required at the discretion of the Development Authority may include, but are not limited to, the following:
 - (a) Additional separation space between incompatible use classes;
 - (b) The use of trees, shrubs, opaque fences, walls, and berms to buffer or screen uses of negative impact;
 - (c) The use of trees, shrubs, planting beds, street furniture and surface treatments to enhance the appearance of a proposed development.

7. SIGNS

- 7.1 Signs shall identify on site developments or facilities only. Signs advertising off-premises developments or facilities (billboards) are not permitted within the overlay district.
 - 7.2 Where more than one business occupies a building, additional signage shall be located in accordance with a comprehensive signage package prepared for the building, and submitted as part of the required landscape plan.
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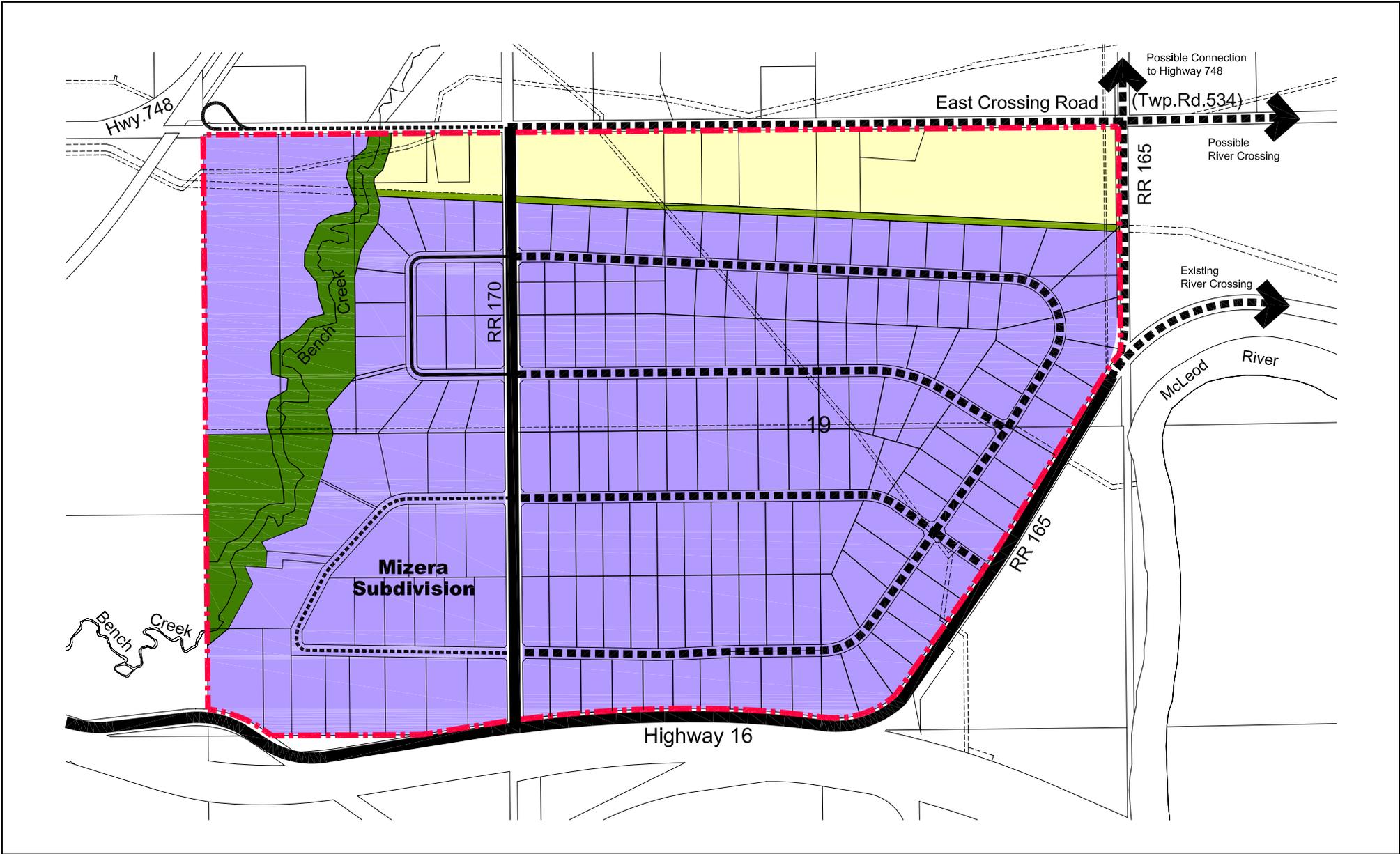
- 7.3 One freestanding identification sign per lot shall be allowed. The sign shall not exceed 9.13 metres (30.0 ft.) in height with no dimension exceeding 4.5 metres (14.76 ft.)
- 7.4 Illuminated freestanding signs shall not exceed 7.62 m (25.0 ft.) in height.
- 7.5 Moving or animated signs and electronic message boards that may distract adjacent highway users are not permitted within the overlay district.
- 7.6 Where buildings about the highway corridor, signs facing and visible from that corridor may be considered by the Development Authority if they comply with the following principles:
- One illuminated logo sign per visible façade. The maximum dimension of such sign shall not exceed 3.0m (9.8 ft.) in vertical and horizontal direction, parallel to the façade of the building, nor exceed a depth of 0.305m (1.0 ft.)
 - One illuminated business name sign per visible façade shall not exceed 15% of the area of the façade of the building or business premises, whichever governs and shall in no case exceed 40.0 m² (430.6 ft²) (less the area of any logo sign: see a above).
 - To discourage the use of building facades as billboards a business sign exceeding an area of 10.0 m² (107.7 ft²) and 1.5m (5.0 ft.) in height, shall be limited to individual letters or shapes.



8. LIGHTING

- 8.1 Outdoor lighting provided for security, display or attraction purposes for any development shall be arranged so that no direct rays of light are directed at any adjoining site or interfere with the effectiveness of adjacent traffic, and shall comply with the following provisions:
- (a) No light structure shall exceed a height of 7.62m (25.0 ft.);
 - (b) No light shall be attached to a structure above a height of 7.62m (25.0 ft.) along that structure;
 - (c) The developer shall provide a plan indicating the location of all exterior lights, including the projected light patterns in relation to adjacent public roadways and developments; and,
 - (d) No flashing or strobe, or revolving lights, which may impact the safety of motorists using adjacent public roadways, shall be installed on any structure or site.
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APPENDIX B: ILLUSTRATIVE SUBDIVISION DESIGN



Edson East Area Structure Plan

Land Use and Design Concept

- Rural Industrial
- Residential
- Natural Area
- Buffer
- Arterial Road
- Collector Road
- Existing Road



N.T.S.
January 2010

