Laurin Industrial Park

Area Structure Plan

Amended – March 2009

Prepared by:

Avillia developments

PREFACE

The Area Structure Plan (ASP) for the Laurin Industrial Park, as encapsulated in this document, is replacing the previously 2006 approved Laurin Industrial Area Structure Plan. The first Laurin Industrial Park ASP replaced the original ASP, under the name "Sherwood Industrial Park West", which was improved in 2001 by Strathcona County Council.

Avillia Developments has met with administration from Strathcona County to discuss a minor change to the Concept Plan. The County suggested that due to the new connection and looping of the easterly road in the Plan Area, that an amendment to the ASP would be required to be submitted. Avillia Developments, on behalf of 1121378 Alberta Ltd. and Denron Development Limited (the two land owners of the Plan area) prepared this amendment as per the County's request.

As one reads through this document, it will become obvious that the intent of the document and goal of the development of this land has not changed from what is identified in the previously approved Area Structure Plan. The subject area's boundary has not changed, its zoning designation IM (Medium Industrial) has not changed, and the infrastructure needs (water, sanitary sewer, storm water management and road accesses) are predominately the same – just updated to reflect the new site layout.

The studies, which accompany the previous ASP submissions, are still relevant. Some further studies and reports are required for the Denron portion of the lands, and will be provided to the County prior to the approval of any subdivision of their lands

All references to the Area Structure Plan in this document will be referring to this Amended ASP. Any reference to the previously approved ASP will be specifically stated.

SUMMARY

The Laurin Industrial Park Area Structure Plan (ASP) has been prepared to describe what and how will be developed on the proposed Laurin Industrial Subdivision. It explains the essential elements of subdivision development – land uses and infrastructure servicing.

The Laurin Industrial Subdivision consists of approximately 86.2 hectares of land located within the west half of Section 29-52-23-W4. The subject property is bounded on the north by 92 Avenue, on the west by 17 Street, on the south by the Sherwood Park Freeway, and on the east by the half section line.

Given that industrial lands to the north, west, south and even east of the Plan Area are fully or partially developed, it is surprising that no development has yet occurred here. A previous Area Structure Plan, referred to as Sherwood Industrial West ASP, was prepared and approved in 2001; however no development has taken place.

The proposed infrastructure servicing plan presents a logical extension of adjacent infrastructure. The onsite water, sanitary, storm, and roadway plans ensure a practical and efficient servicing scheme.

This ASP is consistent with Strathcona County's Municipal Development Plan, Land Use Bylaw, and Industrial Development Plans. This subdivision, which is districted Medium Industrial (IM), will help address the need for various sized industrial parcels.

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1.0 INTRODUCTION

1.1 PURPOSE

The purpose of the Laurin Industrial Park Area Structure Plan (ASP) is to provide a document which describes how the subject lands will be developed; both in terms of land uses and infrastructure. This ASP follows the guidelines and policies set forth by Strathcona County for the development of new industrial areas. Further, this document fulfils the requirement set by Strathcona County to provide a plan and descriptive document that allows the County to approve the Area Structure Plan as bylaw. The Laurin Industrial Park ASP has been prepared as a Statutory Plan that adheres to Section 633 of the Municipal Government Act of Alberta.

1.2 SUBJECT LANDS

The Laurin Industrial Park Area Structure Plan consists of land located within the west half of Section 29-52-23-W4 and includes an area of approximately 86.2 hectares. The NW ¼ Section of 29-52-23-W4 is owned by 1121378 Alberta Ltd. while the SW ¼ Section of 29-52-23-W4 is owned by Denron Developments Ltd.

Figure 1.0, Location Plan, provides the area context of the subject lands. Specifically, the ASP is defined by the following boundaries:

- North Boundary - 92 Avenue
- West Boundary - 17 Street
- East Boundary - east ½ Section of 29-52-23-W4
- South Boundary - Sherwood Park Freeway

In examination of the Location Plan, it is evident that the Laurin Industrial Park supports development in a logical manner - in terms of planning and infrastructure. The Medium Industrial zoning is consistent with adjacent land uses. Providing underground and roadway infrastructure to these lands is easily achieved through the rational extension of services from the north, south, and west.

1.3 BACKGROUND

The preparation of the Laurin Industrial Park Area Structure Plan is intended to ready these lands for development by illustrating and supporting land-use and servicing.

The original Laurin Industrial Park ASP (formerly know as the Sherwood Industrial Park ASP) was established 27 years ago in 1981. The subject lands (west ½ of 29-52-23-W4) was considered for a Restricted Industrial (RI) District. The lands to the east of the subject lands (east ½ of 29-52-23-W4), were actually included in the original ASP and were identified as General Industrial (GI).

LAURIN INDUSTRIAL

LOCATION PLAN

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Figure 1

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Since 1981, the lands around the boundary of this ASP experienced varied growth. The Strathcona County Municipal Development Plan (Bylaw 38-98), which was approved in 1998, identified that the subject lands are included in the Light/Medium Industrial Area of Strathcona County. The 2001 Land Use District Map for the Sherwood Park Urban Service Area (Bylaw 8-2001) confirms the districting of the subject lands as IM (Medium Industrial).

In 2001, Strathcona County adopted a new ASP for the Laurin Industrial Park (again named the Sherwood Industrial Park). This ASP now only concentrated on the westerly half of the entire 29-52-23-W4 Section. Though approved, no improvements were ever carried out on this site.

In 2007, the Laurin Industrial Park Area Structure Plan was approved by Strathcona County. This ASP is an amendment to it.

1.4 PLAN OBJECTIVE

The Objective of this Area Structure Plan is:

> *"To provide a plan for the development of an industrial subdivision within Strathcona County which:*
> - *Is complimentary to adjacent development;*
> - *Supports County Planning Documents (i.e. Strathcona County Municipal Development Plan (MDP);*
> - *Adheres to current Servicing and engineering Standards;*
> - *Provides a framework to deliver a high quality, comprehensively planned industrial subdivision; and*
> - *Allows for the feasible delivery of fully-serviced land parcels that responds to market needs for Medium Industrial use."*

Approval of the Laurin Industrial Park Area Structure Plan will lead to the commencement of development for the subject lands. The location of these lands, within the context of other the built-up areas, means that existing underground and roadway infrastructure will be better utilized. Tax revenue from usage of these subdivided parcels will provide Strathcona County with additional revenue with only marginally higher County services requirements (i.e. snow removal).

This ASP describes how the development objective creates a plan which identifies the size, location, and land use of the subject lands. The ASP further identifies how underground and roadway infrastructure needs are addressed.

The Laurin Industrial Park ASP has been prepared as a comprehensively planned industrial area which addresses existing conditions such as:

- topography
- pipeline rights-of-way
- existing trees and natural areas
- current overland water courses

- boundary infrastructure
- future development of adjacent areas

2.0 SITE CONDITIONS

As shown on Figure 2.0, Existing Features, the subject area is a combination of tree stands and cleared land. The cleared areas were once used for agricultural purposes but there has been limited crop-use since the early 1980s. The barren land has mostly been used for grazing over the last number of years.

2.1 TOPOGRAPHY

The topography of the Laurin Industrial Park Lands illustrates a ridge in the northern end of the Subject area running east and west. The land north of this ridge generally slopes to the northwest; while the land south of the ridge generally slopes to a gully in the midpoint of the western boundary. The southern portion of the subject area slopes to both the southwest and southeast area of the site (refer to Figure 4.0 – Storm Drainage Concept).

The elevation of the ridge is approximately 714.0 m on at the east end, and 709.0 m on the west end. The northwest corner of the site drops to about 706.0 m. The gully on the western boundary drops to about 692.0 m. The eastern pipeline ROW splits drainage along the southern portion of the site; hence two low areas (southwest and southeast) lay at about the 690.0 m elevation.

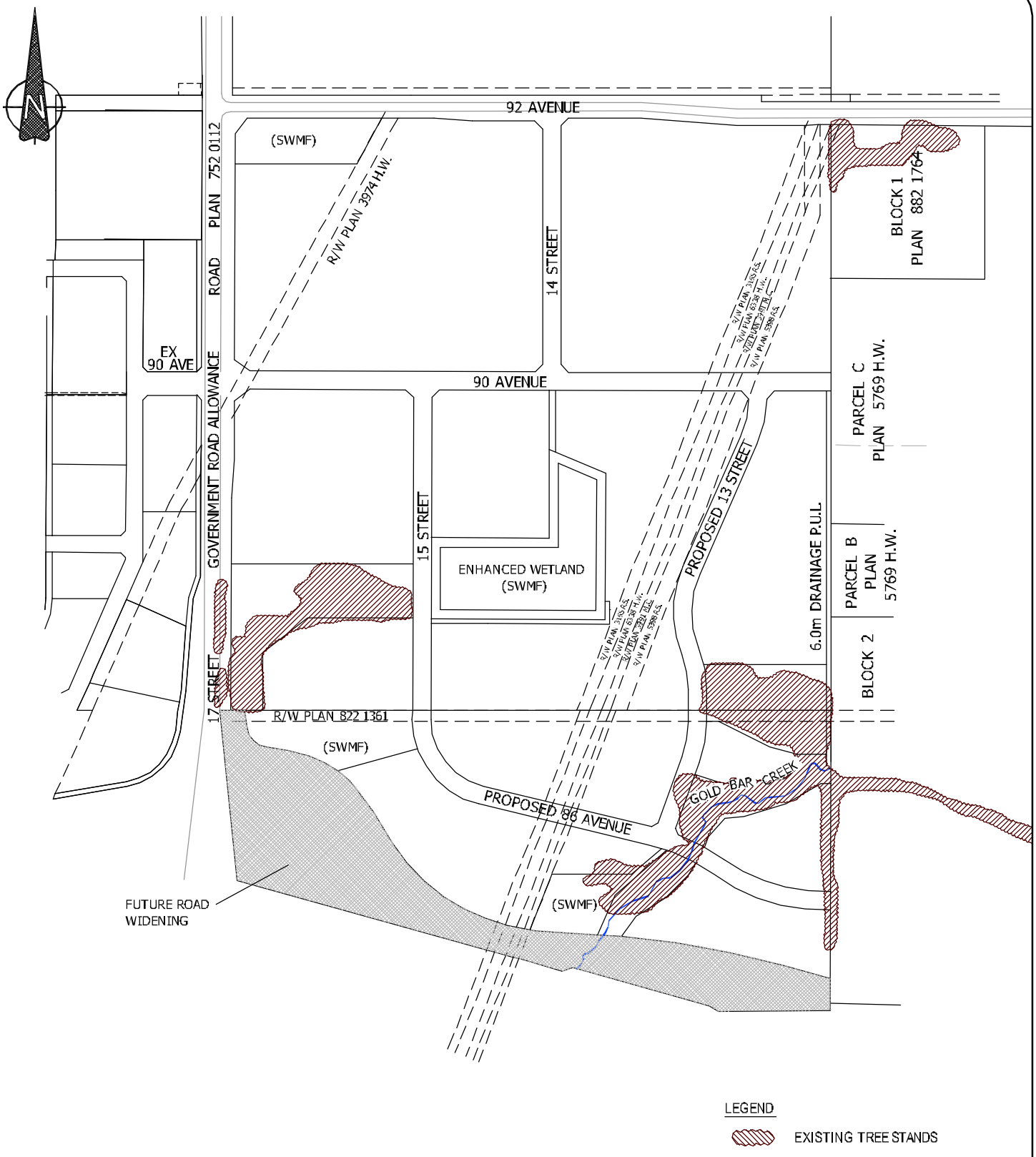
2.2 SOILS

A Geotechnical Investigation was conducted for this area in 1981. From that study, a variety of soil types were found on and under this ASP subject area. This is not surprising given the size of this land, the topography, and the permanent and seasonal water courses.

The site generally consists of a surface mantle of black organic topsoil ranging from 100mm in some areas to 900mm in others – the latter being predominant in the low lying areas. The subsoil (which lies under the topsoil) is divided into three broad groups.

The first group in the northern third of the site consists of a thin layer of silty clay and silty clay till. These are generally light brown, moist, stiff, and contain traces of sand. Underlying this soil is the poorly lithified clay shales and sandstones of the Edmonton formation which contains interbedded coal layers.

The second group, which is located in the central portion of the subject lands, shows sandy clay till immediately below the topsoil. It is of a grey brown colour near the surface and becomes darker grey as the depth increases. This till stratum contains numerous sand lenses.



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EXISTING FEATURES

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Figure 2

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The third group, located in the southern part of the ASP area, contains highly variable soil conditions. These conditions are somewhat poorer than those found in the first two groups. In general, underlying the topsoil is a layer of dirty clay sand which overlays a thin layer of light brown silty clay or sandy clay till. It was found that soils in this area are sandier, moister, and softer.

2.3 ENVIRONMENTAL SITE ASSESSMENT

An Environmental Site Assessment was conducted for the subject property in November of 2000. Based on a review of the information within this Phase I ESA, three areas of potential environmental concern were identified. They were, however subsequently deemed as low concern.

First, it was observed that small traces of car wash sands were present outside the eastern boundary of the subject lands. Although there is the possibility that these sands could contain metals and may leach onto the site, the small quantity of sand would have little, if any, negative impact on the site.

Second, there have been some repairs conducted on the pipelines that traverse the site through two pipeline rights-of-way on the subject lands. It has been confirmed that soil remediation has been done and releases granted. There have been no pipeline incidents reported since the submission of the ESA in 2000.

Third, the construction debris landfill, located outside the subject lands to the southeast, may or may not contain materials that could impact the Subject Property. Historically, it was noted that runoff waters from the landfill had an oily sheen; however, water that currently runs along the southern border of the landfill (and ultimately onto the subject lands) has no sheen and no stressed vegetation was observed.

2.4 BIOPHYSICAL INVESTIGATION

A Biophysical Investigation was conducted in September 2005 and an assessment report was submitted to the County. This section summarizes the objective and findings of this assessment.

The objective of the Biophysical Investigation was to determine the importance and conservation value of various natural areas contained within this Area Structure Plan. The investigation consisted of a biophysical survey to assess and determine the significance of any identified wetlands and woodlots. The investigation also included recommendations on how any identified wetlands and woodlots may be incorporated into the development. Finally, the investigation also included a general vegetation and wildlife survey, a review of existing reports, maps and an aerial photograph review.

With the completion of the biophysical investigation and accompanying assessment, document review, and aerial photograph review, it was concluded that:

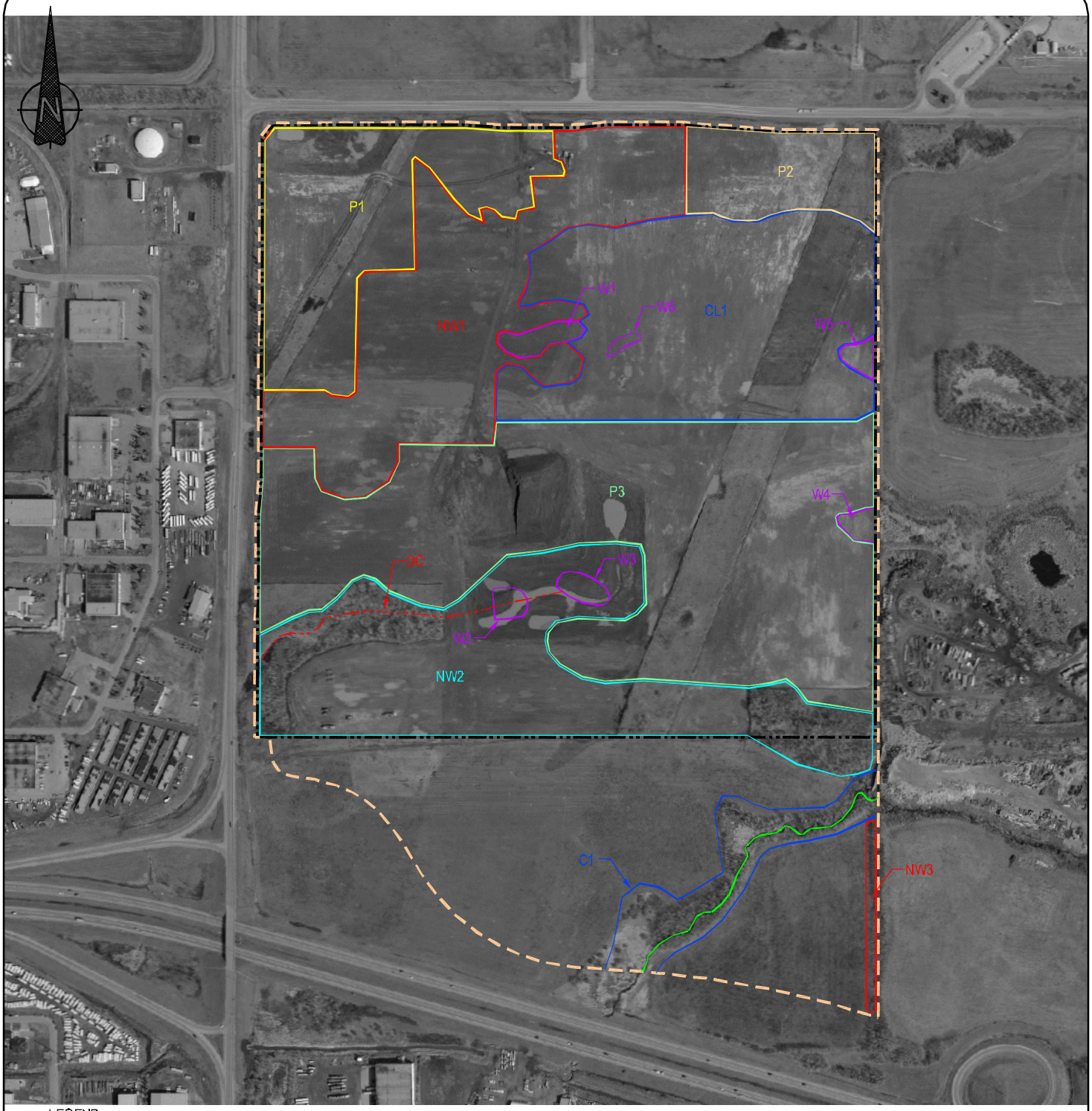
- No rare plants or animals were observed during the site reconnaissance
- Potential negative environmental impacts to natural areas from development include the loss of woodlands and the alternation or loss of historical drainage courses/ephemeral wetlands
- Connectivity with adjacent natural areas will be reduced

The natural areas were prioritized as a function of their potential for sustainable ecological conservation and wildlife habitat as follows:

- Unnamed creek: high priority
- Portion of poplar/aspen forest along the southern border of the NW1/4 section: moderate priority
- The wetland (W3 on Figure 3): low-moderate priority

Based on the ecological assessment, the following recommendations were provided:

- Retain the creek (C1 on Figure 3) and its associated riparian area located on the SW ¼ of the Section 29
- Retain as much of the drainage course as possible
- If the existing topography is changed during development, the drainage patterns should be preserved, as much as possible
- If possible, consider incorporating wetland (W3 on Figure 2.3.1) into the industrial park design
- An area of 1.6 ha located in SW ¼ of Section 29 is designated as Environmental Reserve (ER), which includes the flood plain of the creek (Figure 4).



LEGEND

	ASP AMMENDMENT AREA	W2	WETLAND
	SUBJECT PROPERTY	W3	WETLAND
DC	DRAINAGE COURSE	P1	PASTURE
C1	CREEK	P2	PASTURE
CL1	CULTIVATED	P3	PASTURE
NW1	NORTH WOODED AREA	W4	DEPRESSION AREA
NW2	SOUTH WOODED AREA	W5	DEPRESSION AREA
NW3	SOUTH EAST TREE LINE		

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HABITAT AREA DESIGNATIONS

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Figure 3

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NATURAL AREAS

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Figure 4

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HISTORICAL RESOURCES

There are no historical resources for this land identified in the January 2001 publication (2nd Edition) of "A Listing of Significant Historical Sites and Areas" from the Alberta Historical Resources Foundation.

2.5 EXISTING LAND USES

There are five pipelines crossing the site in a northeast to southwest direction and the Regional Water Line runs east-west along the quarter line.

The pipelines crossing the site are:

1. R/W Plan 3974 HW – (northwest ROW)
   Owned by Terasen Pipelines Inc.
   - High Pressure Pipeline carrying Low Vapour Pressure Petroleum products in liquid form.
2. R/W Plan 6338 H – (east ROW)
   Owned by Pembina Pipeline Co.
   - High Pressure Pipeline carrying Low Vapour Pressure Petroleum products in liquid form.
   - Abandoned Pipeline
3. R/W Plan 6557 MH - (east ROW)
   Owned by Rimbey Pipe Line Co. Ltd.
   - High Pressure Pipeline carrying High Pressure Vapour Gas products (propane)
4. R/W Plan 3165 RS – (east ROW)
   Owned by PB Canada Ltd.
   - High Pressure Pipeline carrying Natural Gas Liquid (NGL)
5. R/W Plan 5398 RS (east ROW)
   Owned by Imperial Oil Ltd.
   - High Pressure Pipeline carrying Low Vapour Pressure Petroleum products (gasoline, diesel, jet fuel) in liquid form.

Prospective lot owners will be made aware of the 15 m setback requirement from the edge of the right of way for industrial buildings (1 m for accessory buildings); and will be put in contact with the pipeline companies to receive any additional limitations that they may impose including crossing of the pipelines.

In March of 1989 Laidlaw Waste Systems made application for the development of a Sanitary Landfill & waste Management Facility on the NW quarter section. The application was subsequently abandoned.

An old residence and associated farm buildings are located in the north-central part of the plan area. More specifically, assessment records list a

Garage (1954), Shop (1955), single-wide mobile home (1984) as improvements on the property. There is also photographic evidence of an older single dwelling, older barn, and newer fabric Quonset. A commercial hayride operation has been operated by Dick Laurin where arable land to the east is being used for hay and oats and the remainder of the parcel is used for grazing the hayride horse stock. All of these buildings and operation will be destroyed prior to completing the servicing of the respective lot that they sit on.

2.6 SURROUNDING DEVELOPMENT

Areas adjacent to the Laurin Industrial Park ASP are either already developed as industrial, zoned for industrial, or designated for future industrial in the Strathcona County Municipal Development Plan.

3.0 DEVELOPMENT CONCEPT

3.1 CONCEPT PLAN

The development concept for the Laurin Industrial Park subdivision has been prepared in response to current market demands for Medium Industrial uses in Strathcona County and the region.

When developing the layout Concept, various factors, such as topography, adjacent infrastructure, roadway access, pipeline ROWs, parcel sizes, parcel shapes, and parcel locations were all taken into account. After numerous iterations, a Concept Plan (Figure 5) was developed on which the ASP is based.

The Concept Plan shows how the environmental sensitive areas, such as the creek and heavily treed areas, have been retained as Environmental Reserve or converted into an enhanced Stormwater Management Wetland.

The road network has been altered from the 2001 approved ASP to provide for a more efficient use of space as well as better integration of all lands regardless of ownership. The plan also ensures that there are two connections to the east to accommodate future development. This ASP constitutes a logical planning unit with respect to identifiable boundaries and servicing considerations.

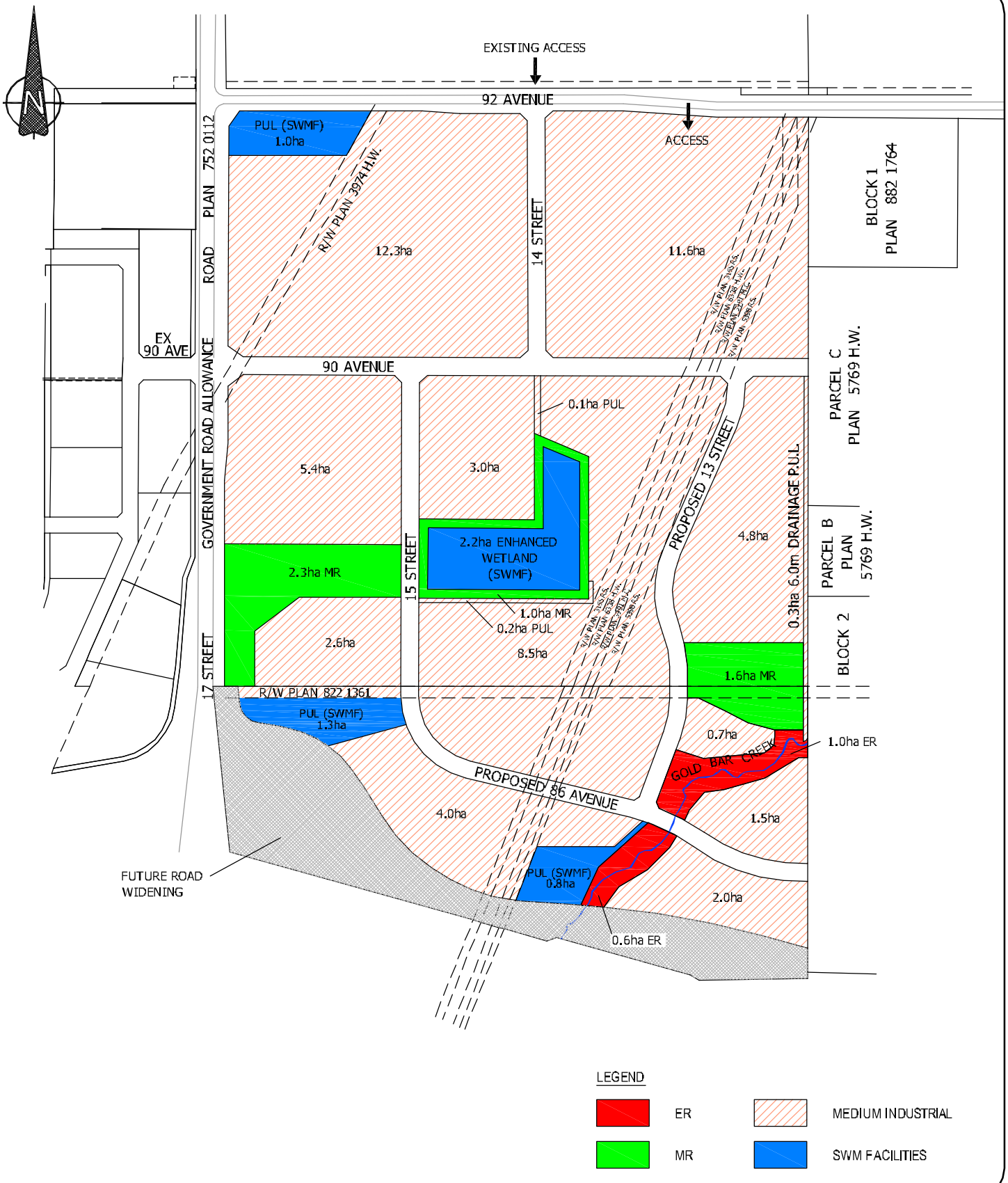
3.2 LAND USE

The Laurin Industrial ASP covers approximately 86.2 hectares (213.0 acres). It is bounded on the north, west, and south by existing roadways while the east bounds current and future industrial land. The land use of this ASP is Medium Industrial (as described in, and is consistent with, the Strathcona County IM zoning in Land Use Bylaw 8-2001). The subject lands are also within the 1.5 km Heavy Industrial Overlay (IH-O)

Although the entire ASP is under the Medium Industrial zoning, other land-use purposes are identified in this plan. These are Roads and Rights of Way, Storm Water Management Facilities, Environmental Reserve, Enhanced Wetlands and Municipal Reserve. The land use statistics are:

	Area (ha)*	% of GDA
INITIAL GROSS AREA	**86.2**	
Road Widening (17 St / Sherwood Park Fwy.)	7.2	
Road Widening (17 St accel / decel lanes)	0.2	
Road Widening (92 Ave decel lane)	0.1	
Environmental Reserve (ER)	1.6	
GROSS DEVELOPABLE AREA	**77.1**	**100.0**
Municipal Reserve	4.8	6.2
Enhance Wetland	2.2	2.9
Storm Water Management Facilities	3.1	4.0
Internal Roads	6.7	8.7
ROWs and PULs	0.5	0.6
Industrial Land (IM)	59.8	77.6

* Note: Areas subject to change with detailed design and subdivision



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CONCEPT PLAN

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Figure 5

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3.3 ENVIRONMENTAL RESERVE

Based upon the Biophysical Investigation, a small portion of this site, Gold Bar Creek, has been identified as Environmental Reserve (ER). The area is only about 0.5 hectares, however a tree buffer (MR) will be retained to assist in the protection of the Environmental Reserve.

3.4 MUNICIPAL RESERVE

As with the Environmental Reserve, it was recommended in the Biophysical Assessment Report which areas may be ideal for Municipal Reserve (MR) dedication. The most sensitive areas identified (adjacent to Gold Bar Creek, and the drainage course ravine) have been retained. Other heavily treed areas and an area surrounding the Enhanced Wetland have also been identified as Municipal Reserve. The total estimated area of the MR is about 5.9 hectares, which provides approximately 7.5% dedication over the entire site. If the total MR dedication is less than 10.0%, then the development of the land will require payment in lieu of land dedication. This will be provided to the County at time of subdivision endorsement.

3.5 STORM WATER MANAGEMENT FACILITIES

There are four stormwater management facilities identified for the site. Each has been located in practical areas in the Laurin Industrial site to address and accommodate the site's grade, overland flow, access, outfalls, and industrial-use continuity. The overall storm water and drainage for this area is described in detail in Section 4.

3.6 ENHANCED WETLAND

The Biophysical Report identified two small water bodies in the middle of the ASP Area. These wetlands are fed by overland flows from the ASP area, as well as some rerouted over flows from the lands to the east. In order to maintain these wetlands after this area is developed, the two wetlands will be incorporated into an Enhance Wetland stormwater management facility. This Wetland will act as one of the four SWMFs (see above) and be bounded by Municipal Reserve. The estimated size of this wetland is 2.2 ha plus the MR.

3.7 INDUSTRIAL USE

As identified previously, the majority of land within the Laurin Industrial Park ASP is designated Medium Industrial (IM). The proximity of this site to the Sherwood Park Freeway and to Highway 216 allows for easy and proper access (employment and trucking) to the subject lands.

Industrial uses allowed under the IM district include manufacturing, assembly, distribution, service and repair, and other similar uses which

carry out a portion of their operation outdoors or require storage areas. Although it has not been fully determined who will be operating on each parcel, the type of operation will be consistent with the ASP and IM zoning as well as the IH-O Heavy Industrial Overlay. Further, each parcel has been designed to allow for ample-sized building envelopes which will adhere to Pipeline and other setbacks.

3.8 TRANSPORTATION / ROW / PUL

The transportation network within the Laurin Industrial Park ASP was developed to ensure proper and easy access to both 17 Street and 92 Avenue. The internal roadways provide good access to each industrial parcel while minimizing overall road area.

Since this land is within Strathcona County's Urban Service Boundary, the roads will be constructed to an Urban Standard. Future road widening has been identified on the southwest and western portions of the site to accommodate a potential 17 Street / Sherwood Park Freeway grade separation as well as acceleration and deceleration lanes for 90 Ave and 92 Ave. Section 4 provides further detail regarding roads.

The existing Utility ROW that bisects the ASP area east-west will be retained. As well, a 6-metre wide PUL has been identified along the eastern boundary of the site to provide for drainage to the Gold Bar Creek.

4.0 ENGINEERING SERVICES

4.1 STORMWATER DRAINAGE

Storm water drainage concept has been updated for the Laurin Industrial Park ASP. Figure 6, Storm Drainage Concept, illustrates the plan to handle surface run-off for this area. The ASP area has been divided into four catchment areas: north, central, southwest and southeast.

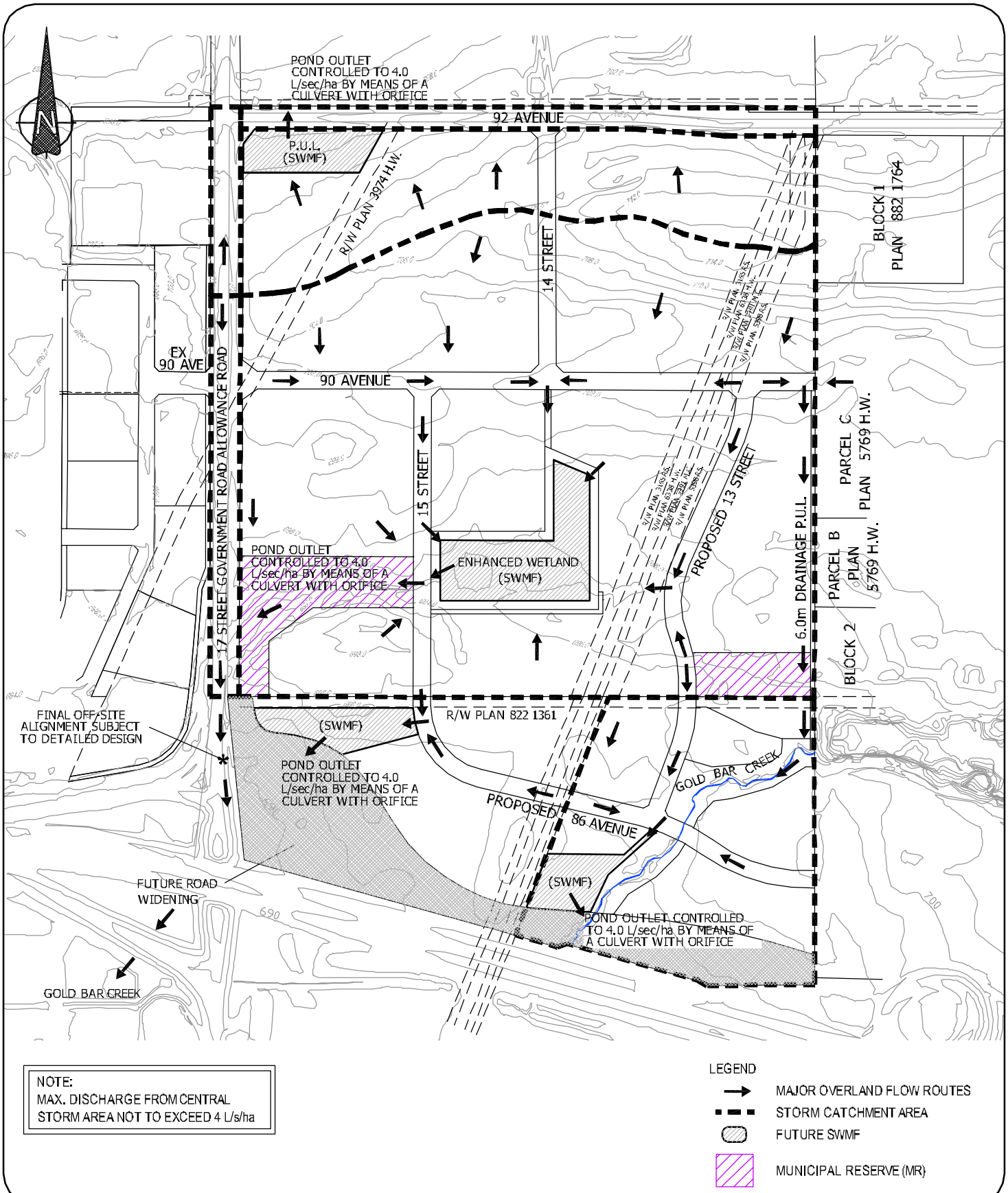
The northern catchment area, approximately 12 ha, is bounded by 92 Avenue on the north, 17 Street on the west, the ridge on the site to the south, and the quarter line on the east. Minor and major flows are directed to the SWMF on the Northeast corner of the site. The outfall from the storm pond is conveyed via culverts north and into the ditch on the east side of 17 Street.

The central catchment area, approximately 48.5 ha, is bounded by the ridge to the north, 17 Street to the west, the quarter line to the south, and the ASP boundary to the east. Minor and major flows are directed to the enhanced wetland storm facility in the middle of the site. The outfall from the wetland travels through the existing drainage course to the west and through a few culverts which direct the flow across 17 Street and Sherwood Park Freeway to Gold Bar Creek.

The south western catchment area, approximately 8.7 ha, is bounded by the quarter line to the north, 17 Street to the west, the Sherwood Park Freeway (and future road widening) to the south, and the central pipeline ROW to the east. Minor and major flows are directed into the stormpond in the southwest corner of the site. The outfall from the pond travels through a culvert which crosses under the Sherwood Park Freeway and into Gold Bar Creek.

The southeastern catchment areas, approximately 9.0 ha, is bounded by the quarter line to the north, the central pipeline ROW to the west, the Sherwood Park Freeway (and future road widening) to the south, and the ASP boundary to the east. Minor and major flows are directed to the storm pond at the south of the site. The release rate of this pond will be controlled by an outfall which will discharge to the creek onsite which makes it way under the Sherwood Park Freeway and into Gold Bar Creek.

The Gold Bar Creek Area Master Plan, prepared by UMA, sets some design criteria for dealing with storm water runoff in the Gold Bar Creek basin; for which the Laurin Industrial Park ASP is part. Gold Bar Creek itself flows through the south-eastern portion of the site and a tributary flows through the northern portion. Both of these drainage courses have limited capacity. Because of this and the need to protect properties and control erosion downstream, storm water management is required as part of the development.



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STORM DRAINAGE CONCEPT

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Figure 6

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The purpose of the storm water management facilities would be to temporarily store storm water run-off from the developed areas and release flows to the drainage courses at a rate equivalent to that existing prior to development. This scheme would take the form of four separate storage facilities - one for each catchment area.

Each storm water management facility would consist of an excavated pond (or wetland) which is sized to accommodate the storage needed to retain a 1:100 year storm event without exceeding the discharge rate.

Storm run-off would be directed from individual sites on the surface to road side ditches and ultimately to the storage pond within its identified catchment area. Outflows from the ponds into the existing drainage courses would be controlled by culverts and orifices.

Details regarding discharge rates and catchment areas can be found in the February 2006 Laurin Industrial Park Storm Water Management Report.

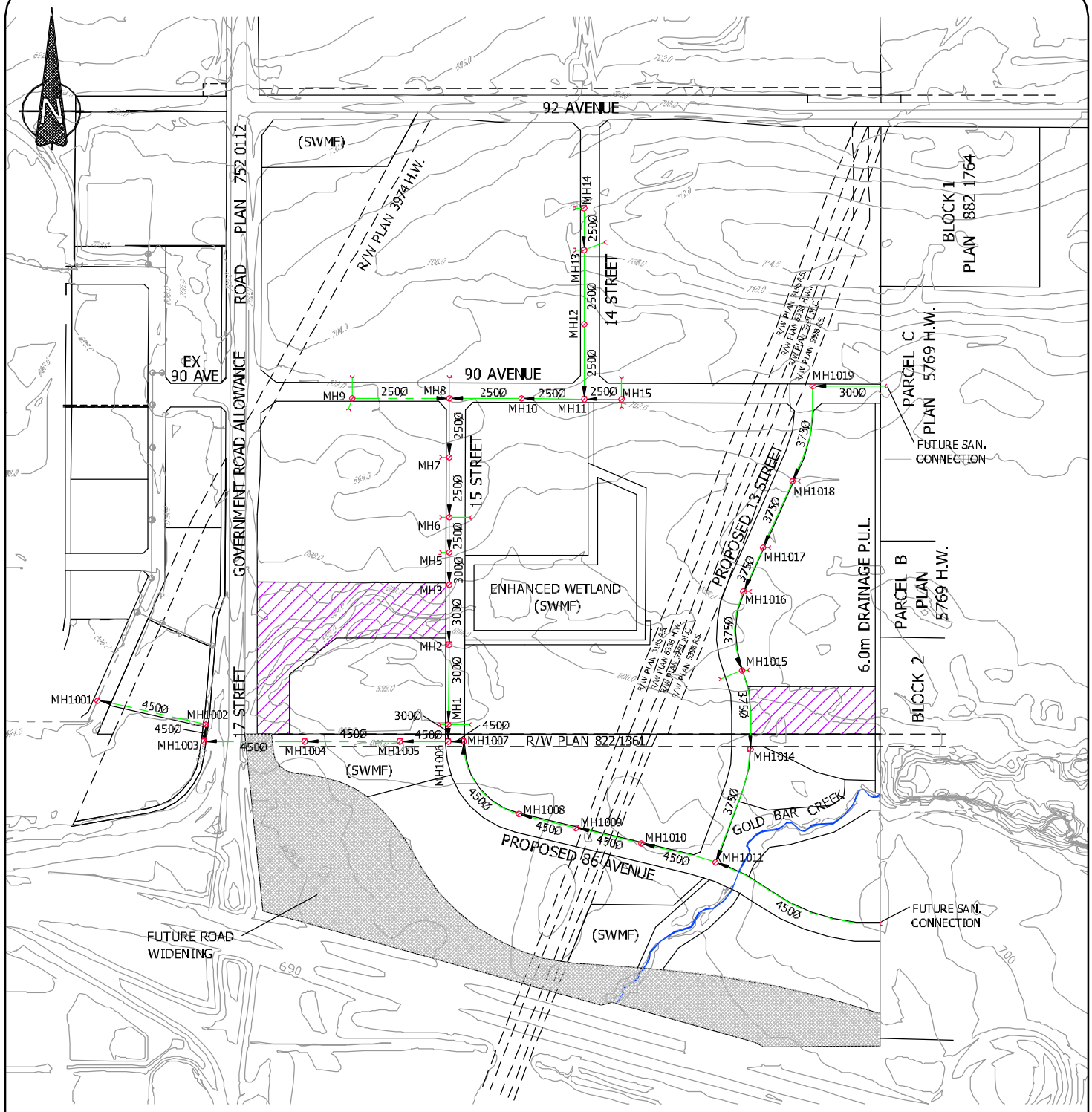
Details regarding discharge rates and catchment areas can be found in the February 2006 Laurin Industrial Park Storm Water Management Report.

4.2 SANITARY SERVICING

Sanitary sewage for the Laurin Industrial ASP would be discharged to the existing sanitary system on 18 Street. The existing system at 18 Street was sized to include the subject lands (see Figure 7).

A 450 mm diameter line will be installed east from sanitary manhole 1001 on 18 Street through and across 17 Street and to the Laurin Industrial Park. This 450 mm line will ensure that the grade of the sanitary line is minimal so to service almost all the properties in the ASP area and to the east by gravity. The other reason for the large pipe size is to keep the line as deep as possible so that it can be installed under the 900 mm diameter waterline which bisects the site.

Sanitary sewer will be extended throughout the Plan Area along the planned road network to service all of the industrial sites by gravity. The sanitary line would be laid as deep as possible as it heads west to ensure gravity drainage from buildings constructed on the southern portion of the site adjacent to the Sherwood Park Freeway, and for the lands east of the ASP area.



NOTE:
ALL PIPE SIZES SUBJECT TO DETAILED DESIGN.

LEGEND

MUNICIPAL RESERVE (MR)

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SANITARY SEWER CONCEPT

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Figure 7

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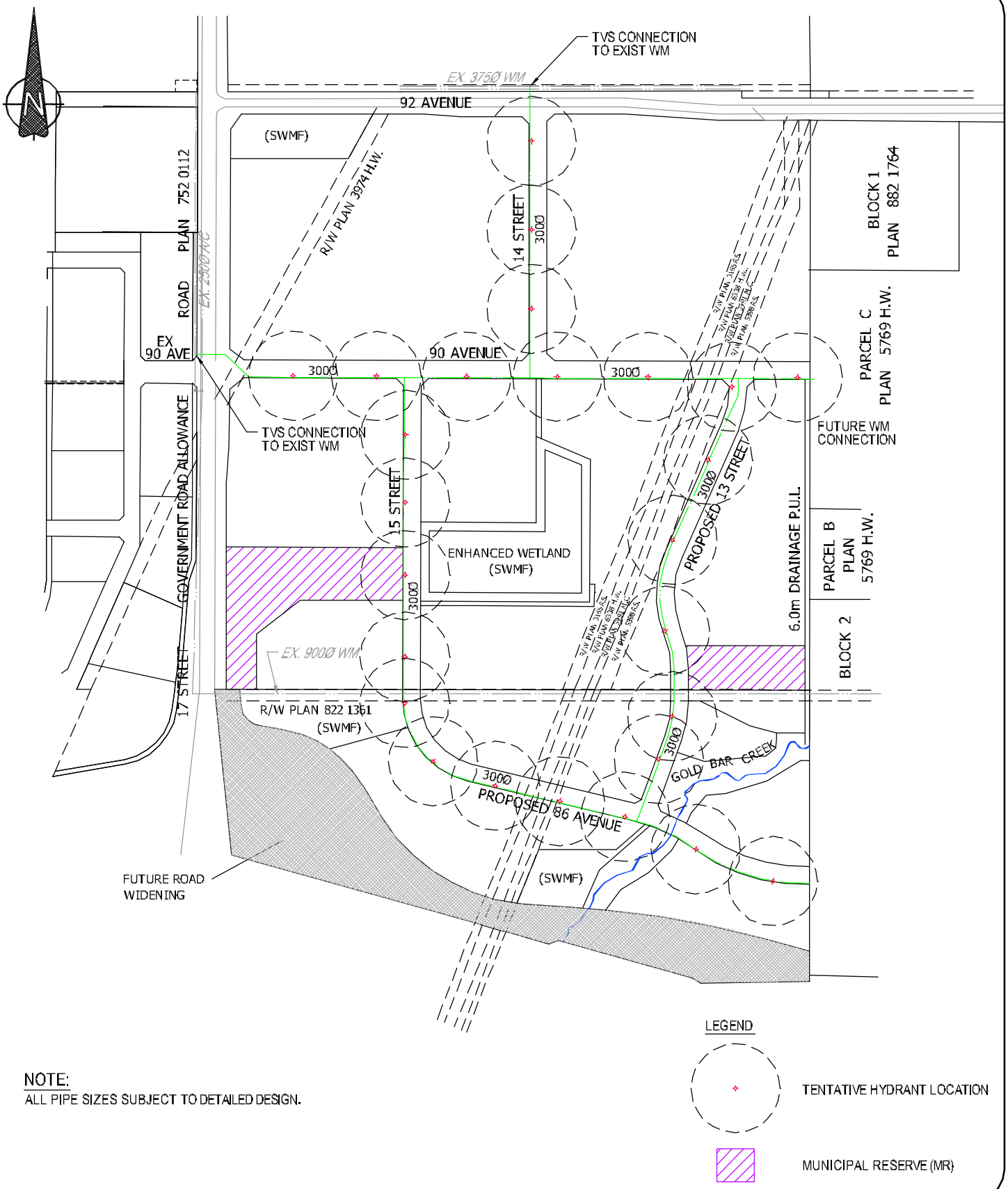
4.3 WATER SERVICING

There are several existing water supply lines through and adjacent to the Plan Area. There are three existing water mains along 92 Avenue adjacent to the north boundary of the site: 150mm, 250mm and 375mm diameters. There is a waterline along 17 Street to the west, and a 900mm high pressure transmission main along the quarter line which bisects this land.

Figure 8, Water Distribution Concept, identifies how the Plan Area will be serviced by water. A connection will be made from the west along 90 Avenue on the west side of 17 Street. A further connection will be made from the north to the 375 mm main along 92 Avenue. These two connections will allow two water source points for the Plan Area and allow for ~~some~~ looping. Since these two water sources are in differed pressure zones, a Pressure Reducing Valve will be required to maintain proper and consistent water pressures in the Plan Area.

Although the 900mm high pressure transmission line cuts through the lower third of the property, the connection to this line is not supported by the County. The plan does allow for the looping of the waterline internally as well as externally. There are also two waterline stubs located on the east end of the property – one at the north, and the other at the south. These future connections have been included in the plan so as to assist in the servicing and looping of the lands to the east when they develop.

Water network analysis will be completed during the detailed engineering stage to ensure the adequate sizing of mains for consumption and fire protection throughout the Plan Area.



NOTE:
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WATER DISTRIBUTION CONCEPT

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Figure 8

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4.4 TRANSPORTATION

As identified earlier in this ASP, the transportation network has been developed to allow for good circulation within the Plan Area. Since no direct access is allowed directly to the Sherwood Park Freeway, boundary connections are made to the outside road network at 92 Avenue and 17 Street (see Figure 9).

A Traffic Impact Assessment (TIA) was conducted and submitted to the County in September 2001. Although the internal layout of the road network has changed, the external access points are almost the same. There is an access to 17 Street at 90 Avenue which is identical to the 2001 ASP. Even though there is now only one access to 92 Avenue from the site instead to two, the reduction in the number of parcels in this Plan Area may mean that the double left turn identified in the previous TIA ~~for the~~ at the 92 Avenue / 17 Street intersection (westbound to southbound movement) is no longer required.

Based on the TIA results, there will be the need for the installation of traffic signals at the 17 Street / 90 Avenue intersection. The reasoning is not so much intersection capacity, but for the safe movement of vehicles in and out of the site due to the gradeline on 17 Street which impedes the sight distance of oncoming vehicles at this intersection. Furthermore, large trucks (a mainstay of Medium Industrial land use) will have an easier time making the left turn off of 17 Street and onto 90 Avenue with a signalized intersection versus non-signalized. The Laurin Industrial Park will be responsible for half of the cost for signalizing this intersection and the County the other half.

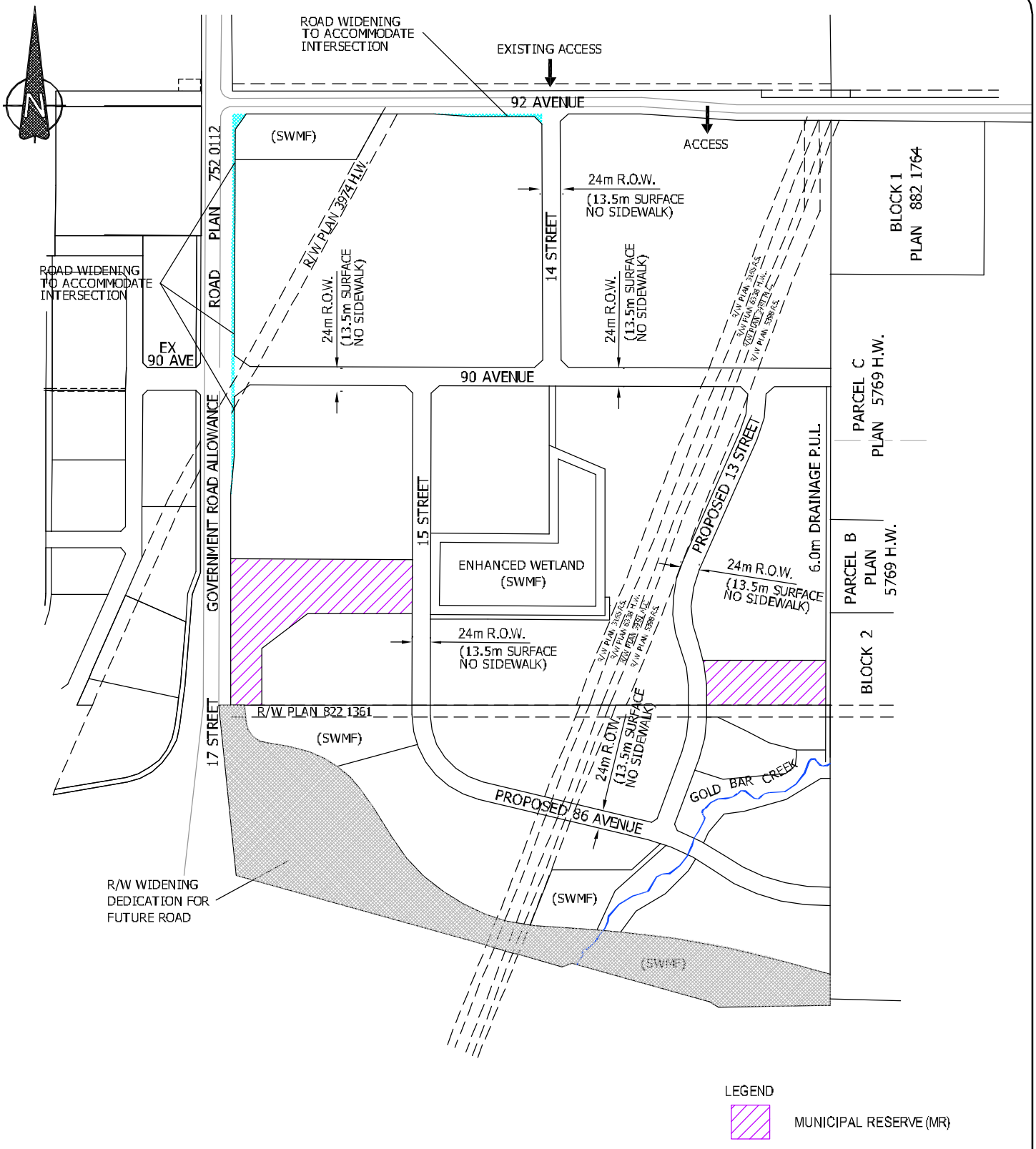
Other improvements to the external roadway connections will include the construction of acceleration and/or deceleration lanes for the 17 Street / 90 Avenue intersection, 17 Street / 92 Avenue intersection, and the 15 Street / 92 Avenue intersection. Additional road ROW dedication will be given to provide for the short and long term road widening and highway intersection requirements (refer to Figure 9).

The roads within the Plan Area will be constructed to the current County Standards consisting of an urban cross-section (paved road with curb and gutter) with street lighting. All roads will be designed to the Industrial Collector standard of a 24-metre ROW with a 13.5 metre carriage way.

The Concept Plan also shows two connection points to the east. Figure 10 illustrates how this road connection would tie into a possible road network for the lands east of the Laurin Industrial Park, north of the Sherwood Park Freeway, south of 92 Avenue and west of Highway 216. The final road network to the east will ultimately depend on Alberta Transportation's widening plans for Highway 216 (the Anthony Henday), and the land owners' plan for development.

4.5 SHALLOW UTILITIES

All shallow utilities will be extensions of those already in place in adjacent developments. Adequate infrastructure is available to accommodate the proposed development.



LAURIN INDUSTRIAL

ROAD ALIGNMENT CONCEPT

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Figure 9

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POSSIBLE ROAD ALIGNMENT

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Figure 10

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5.0 IMPLEMENTATION

5.1 DEVELOPMENT STAGING

The Laurin Industrial Park ASP contains only two land owners. The largest portion of land, everything north of the quarter line, is held by 1121378 Alberta Ltd. The southern portion is owned by Denron.

After review of market conditions and possible demand for serviced Medium Industrial lots, 1121378 Alberta Ltd. is anticipating the development of their land will occur in two stages. At this time, it is assumed that the land south of the quarter line, which is owned by Denron will be developed in one stage. Figure 11, Staging Concept, illustrates the Staging Plan.

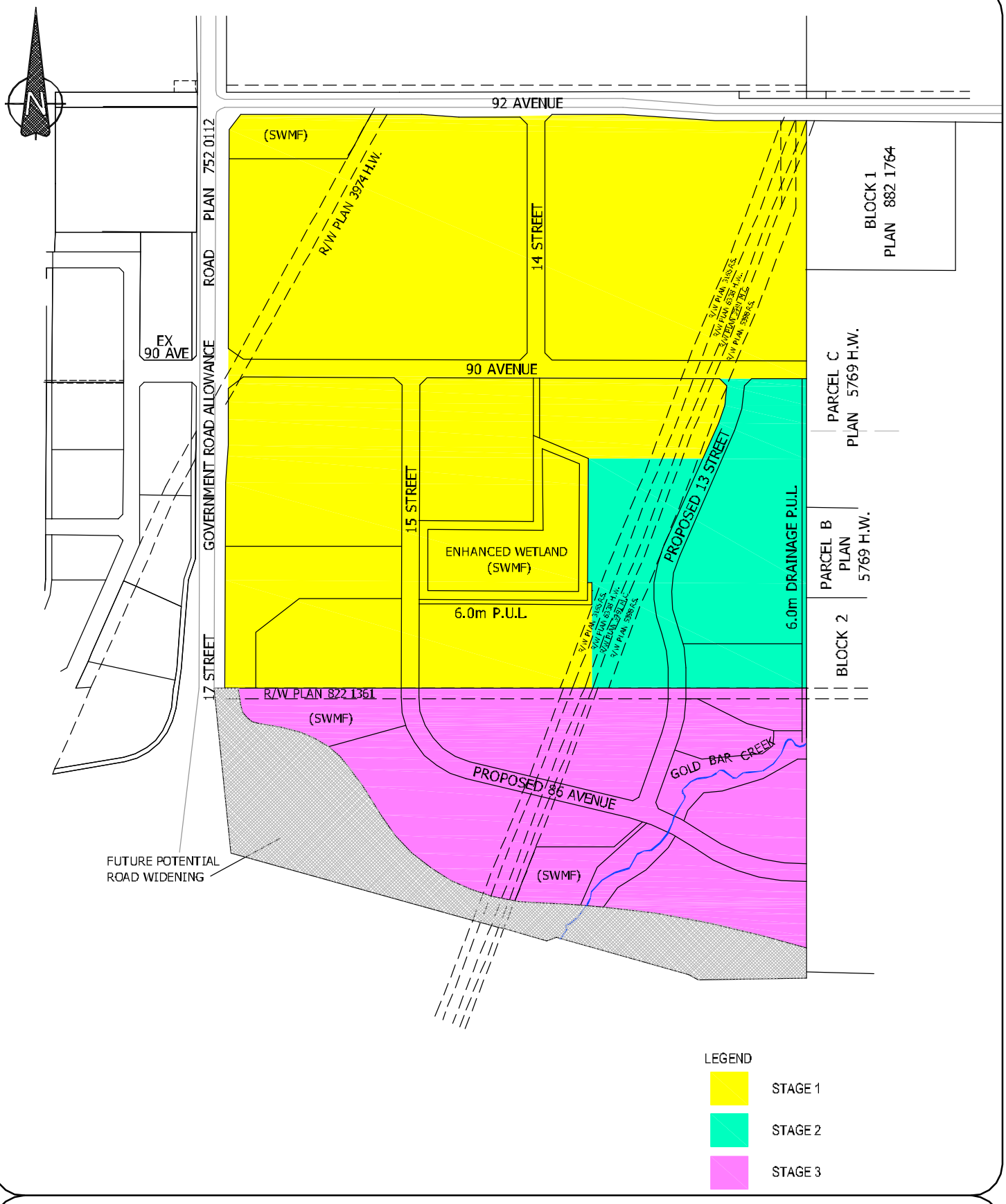
Temporary road turnarounds, if required due to staging, will be identified at time of subdivision.

5.2 REDISTRICTING & SUBDIVISION

The land is currently zoned IM (Medium Industrial) hence redistricting is not required.

Although the land is zoned IM, it is also located within the IH-O (Heavy Industrial Transition Overlay) 1.5 Km. This means that all development and building on all lots will comply with the IH-O guidelines.

Subdivision will occur separately for each stage, and be undertaken by the respective land owner.



LAURIN INDUSTRIAL

STAGING CONCEPT

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Figure 11

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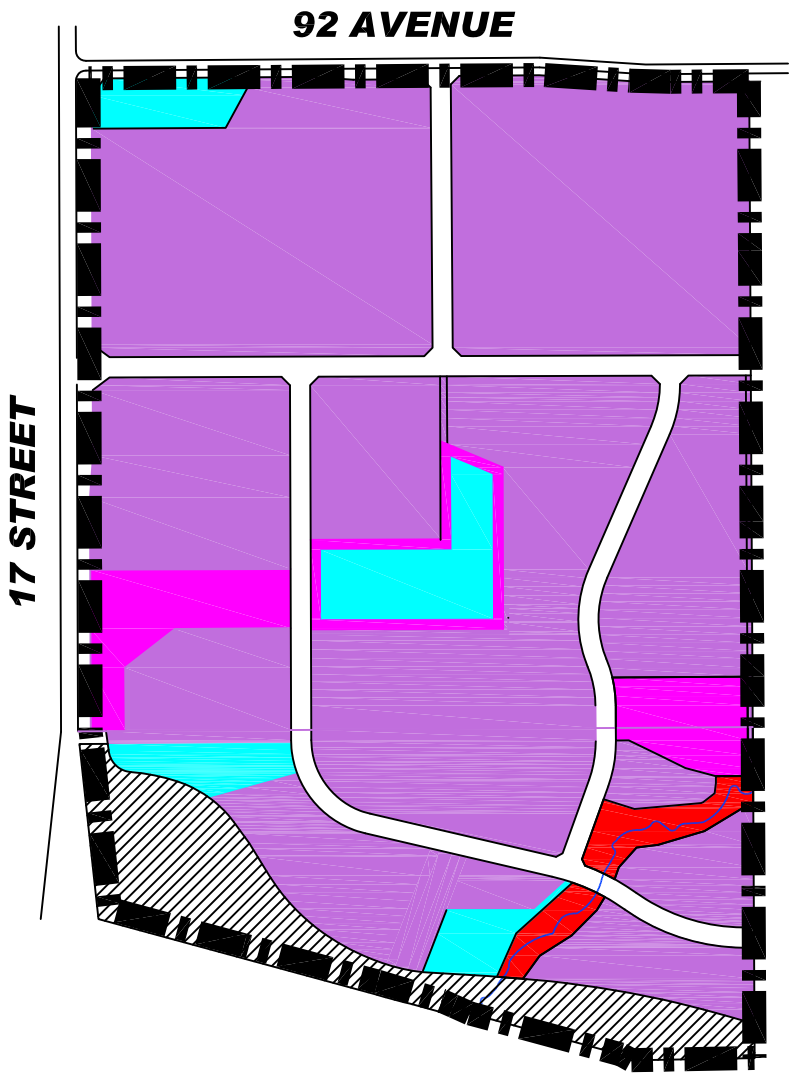

Laurin Industrial Park
Area Structure Plan
Bylaw 14-2009 (Amendment 1)

EXISTING LAND USE

- Medium Industrial
- Municipal Reserve
- Stormwater Management Facilities
- Enviromental Reserve
- Future Road Widening
- Road Plan
- ASP Boundary

Date of Adoption February 20, 2007

STRATHCONA COUNTY - Planning and Development Services	DRAWN: K.Stone	DATE: 22/07/09	SCALE: NTS		DWG NAME: DUEH0002