

7/30/2018

Alexander Area Structure Plan

Within: NE 27-83-23-W5M

For the Municipal District of Peace
No. 135

July 30, 2018 Draft ASP

Plan prepared by: Jason Tran, RPP, MCIP
JASON TRAN CONSULTING
ADMIN@ALBERTAPLANNOW.COM

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1.0 Introduction

1.1 Purpose of Area Structure Plan

The Alexander Area Structure Plan (ASP) provides a framework for the future development of lands in the Municipal District of Peace No. 135 (MD). The primary objective of this ASP is to provide for the development of Country Residential use within the MD of Peace.

The Plan has been prepared in accordance with the Municipal Government Act (MGA), the Subdivision and Development Regulation, the M.D. of Peace No. 135 Municipal Development Plan (MDP), and the M.D. of Peace No. 135 Land Use Bylaw (LUB). The Plan is consistent with the goals, objectives and policies of the MD and addresses the requirements of Alberta Transportation with respect to Highway 2.

1.2 Plan Area

The north-east quarter of Section 27, Township 83, Range 23, West of the 5 Meridian lies at the intersection of Range Road 232 and Highway 2; west of the Town of Peace River and north-east of the Town of Grimshaw. Currently, there are four residential lots subdivided out; one lot in 1992 (Lot 1, Block 1, Plan 922 2604) and three more lots under Plan 152 3598 in 2015. The registered owner of the remainder of the NE ¼ of 27-83-23-W5M is 775998 Alberta Ltd. (Greg Alexander)

The Map 1 - Overview Map shows the subject property location.

The Developer proposes to subdivide out an additional 13 Country Residential Lots and leave the remainder of approximately 14 acres (5.8 ha) in the ownership of the Developer.

Map 3 – Aerial Photo shows a recent air photograph of the subject property.

This area structure plan (ASP) describes the location of the land, its physical characteristics, neighboring land uses, proposed lot layout, and required infrastructure.

2.0 Municipal Policies

The land is in the MD, and development is controlled by the MD's municipal development plan (MDP), land use bylaw, and other planning policies.

Map 3 – Aerial Photo shows that most of the property is covered in trees, three minor seasonal wetlands and one small permanent creek in the south-west corner of the property.

2.1 The M.D. of Peace No. 135 Municipal Development Plan (MDP)

The MDP provides the general policy framework to guide more detailed plans and future development. A primary policy direction of the MDP is to preserve better agricultural land by discouraging subdivision on good agricultural lands. However, the subject property is considered "Low NPR <40" or simply put it is not good for traditional farming purposes as per Schedule F of the MDP.

What is NPR or NET PRODUCTIVITY RATING? It is defined in the M.D. of Peace's MDP as *"the point rating assigned to a soil type based on its ability to produce crops taking into account the soil quality, surface depth, subsoil, surface texture and other miscellaneous items. The rating system varies with poor soil rated as low as zero and the best as high as 100 points. For purposes of this document, the net productivity rating that determines the productivity level of agricultural land within the Municipal District is either more or less than 40 points."*

The proposed ASP complies with the following policies and objectives within the MDP:

Section 7.1. of the Residential Policies in the MDP

"In the event of large scale subdivisions driven by a rapid regional economic growth, the Municipal District envisions such growth to be satiated through a proposed nodal development located along the transportation corridor between the Town of Peace River and the Town of Grimshaw that has the potential to be serviced by communal or municipal infrastructure."

Objective 7.3.1.

"To accommodate small-scale residential development on lands with low agricultural productivity and areas of poor soil quality."

Objective 7.6.1.

"The Municipal District shall encourage multi-lot residential developments of more than 3 lots between the Town of Grimshaw and the Town of Peace River, as identified in Schedule D, to be developed into Nodal Residential Communities."

2.2 The M.D. of Peace No. 135 Land Use Bylaw (LUB)

As shown on Map 2 - Land Use Zoning, part of the quarter, covering about 107 acres (43 ha), is inside an area which was rezoned from Agricultural (AG) to Country Residential (CR) on 2015/01/13 as Bylaw # 14/2014.

The subject property is Country Residential (CR) therefore it complies with the ASP proposal to develop primarily Country Residential lots.

The proposed ASP complies with the Map 1 in the MD's LUB which has identified the subject property as Country Residential and it was approved by Council as Bylaw # 14/2014 on 2015/01/13.

3.0 Provincial Policies/Jurisdiction

Although land use is a municipal responsibility, the MD must also consider provincial regulations set out in provincial legislation, and particularly in the Subdivision and Development Regulation, AR 43/2002.

3.1 Sewer lagoons

Residences must be at least 300 metres away from sewer lagoons. There is no sewer lagoon within the 300 metres setback requirement.

3.2 Waste disposal sites

Residences must be at least 300 metres away from a waste disposal site, and no wells for human consumption must be drilled within 450 metres of such a site.

The present landfill site is outside the 450 metres.

3.3 Proximity to highways

A municipality must not approve a residential subdivision within 1600 metres of a provincial highway without the prior approval of Alberta Transportation (AT).

The closest highway is Highway 2 which is adjacent to the north side of the subject property. Highway 2 at this location is being protected as future freeway by Alberta Transportation as per their letter dated July 18, 2018.

The intersection with the Range Road 232 does not have an acceleration / deceleration lane.

There will be a joint intersection upgrade agreement between the MD and Alberta Transportation. The Developer agreed to deal with MD in term of the Developer's portion that is required by the MD and Alberta Transportation for the intersection upgrade. Alberta Transportation will have to provide further official comment when the ASP goes through a referral process and their comment will be added into the ASP if required.

No additional direct highway accesses will be permitted in the Plan area. The road system was designed to connect into the road system of the neighboring development in the NW of 27-83-23-W5M, with the intent of providing a suitable service road in the event of the twinning of Highway 2. The twinning of the highway is north of the subject property (land within this area structure plan).

3.4 Livestock operations

The Agricultural Operations Practices Act does not allow confined feeding operations close to residences. The minimum separation distance (MDS) depends on the type of operation and its size. The MD applies those setbacks reciprocally, and normally does not allow new residences close to confined feeding operations.

There are no confined feeding operations close enough to affect the proposed lots.

3.5 Airports

The property is about 5 km from The Town of Peace River Airport. Schedule 1 of the LUB confirms that the property is not within Peace River Airport Vicinity Protection Area.

3.6 Sour oil and gas installations

A proposal to build a residence within 1,500 metres of any sour gas well or pipeline must be referred to the ERCB for comments.

There are no such installations on or within 1,500 metres of the property.

3.7 Other oil and gas installations

Residences are not allowed within 100 metres of a sweet oil or gas well, or within the right-of-way of a sweet oil or gas pipeline. There are no wells or high-pressure pipelines on the subject property.

3.8 Abandoned wells

Alberta Energy Regulator map was pulled on September 11, 2017 and it shows no abandoned oil or gas wells on the subject property. This is attached as **Appendix #1**.

Map 5 – Oil and Gas Installation shows one abandoned well on the adjacent quarter section north of Highway 2. Also, it shows a suspended well site a quarter section kitty corner to the subject property to the south-east.

3.9 Local Gas and Water co-op lines

Map 5 – Oil and Gas Installation shows a low pressure local gas line and a water co-op line on the subject property.

3.10 Historical resources

The Alberta Historical Resources Management Branch (HRMB) has the right to require a historical or archaeological assessment of land which is to be developed.

An application was filed and the application number is 012528775. HRMB application will be updated as new information is received from the HRMB.

In summary, there are no provincial regulations which require pre-clearance, or prevent the development of a country residential subdivision on site. Also, the Listing of Historical Resources, updated in the spring of 2017, indicated that there are no known Historic Resource Values within the Project footprint (Alberta Culture and Tourism 2017).

4.0 Other affected municipalities

The Town of Peace River is about 10 km east, and the Town of Grimshaw is about 8 km south-west. Neither is close enough to be affected by the proposed development. Both are beyond the referral area established by the MD's MDP.

5.0 Present land uses

The location of the present site layout is shown on Map 6 - Phase 2. The first parcel out was subdivided in 1992 under plan 922 2604 along the north side of the quarter section. The next subdivision (Phase 1) was registered in 2015 under plan 152 3598 for an additional three more Country Residential lots with the internal subdivision road.

The subject property is zoned as Country Residential as per the MD LUB map 1. Currently, most of the proposed lots are vacant and are covered with trees as per Map 3 - Aerial Photo. Proposed lots 10 to 13 are also vacant and most of the lots are cleared and in production.

As per Section 5.6 of the MD LUB, Country Residential development is allowed in areas of low agricultural potential which this property is well known since historically it is covered in trees and only a small portion along the north side is cultivated.

The permitted uses on Country Residential district are as follow:

- single detached dwelling
- modular dwelling unit
- accessory use and structures
- park
- playground

6.0 Conflicting land uses

Site investigation on August 8, 2017 revealed no nearby land uses that might conflict with a Country Residential development of this site. The existing Country Residential district on the property is compatible with the surrounding Agricultural, Country Residential and Wilderness Park district of the adjacent properties.

Map 2 in the ASP indicates the surrounding district of the subject and adjacent properties.

7.0 Slope and drainage

Map 7 - Site Contour and Drainage shows contours at one metre vertical interval. The contour shows the drainage is going from north-west to south-east.

8.0 Storm Water Management

Flooding assessment of Built Roads/Ditches was performed by River Engineering on November 19, 2017.

"The analysis shows that the flow depths generated by the peak flow out of a typical Lot (7.9 Acres) increases the flow depth in the constructed road ditch by 0.12 m. The Road ditches are approximately 0.8 m deep. Therefore, the incoming outflows from the Lots will cause minor rise in water levels in the constructed road ditches. Most of the Lots have 2 to 3 m rise start from the road to the top so the dwellings if properly located should be safe from flooding.

The MD ditch to the SE of the property was checked with the inflows from the Lots. It was found that the rise in water levels caused by the incoming flows is minor (< 0.10 m), the receiving M.D ditch is 0.80 m deep and has enough capacity to handle the inflows from this subdivision. Also there is factor of flood peaks timing. The flood peaks from the subdivision will arrive earlier than the peak on the MD road ditch.

In conclusion the constructed road ditches constructed by the Developer have enough capacity to carry the flood flows and the M.D road ditch has enough capacity to handle the outflows from the development. This conclusion is based on the limited data from the site. The analysis can be further refined at a later date when more site data is available."

The above statements regarding road ditches are referring to local road ditches or internal roadway ditches.

This engineer's letter has been forwarded to the MD under separate cover. This is attached as **Appendix #2** within the ASP.

Further to the above, two additional studies are being prepared in accordance to the Water Act. An extended storm water drainage (of the surrounding area) study and lot grading plans for the two lots with unaffected water bodies. These two studies should be completed with the submission of the subdivision application in the future.

9.0 Traffic Impact Assessment (TIA)

As per the summary of a TIA by D& A Paulichuk Consulting Ltd. report with a revised date of April 18, 2017:

"In summary, the proposed development of a 17-22 lot Country Residential subdivision development located in NE 27-83-23-W5M triggers the warrant for a Type IIc intersection treatment at the intersection of Highway 2:26 & Range Road 232 which should be sufficient for the next 20 years."

The MD, Alberta Transportation and the Developer are in agreement to complete a cost sharing of the intersection improvement. The Developer agreed to pay the MD in the amount of **\$50,000.00** to support the cost sharing of the intersection improvement.

As pointed out in a summary on Page 51 of the TIA:

"In summary, the proposed development of a 17 – 22 lot country residential subdivision development located in NE 27-83-23-W5M triggers the warrant for a Type IIc intersection

treatment at the intersection of Hwy. 2:26 & Rge. Rd. 232 which should be sufficient for the next 20 years.”

The TIA is attached as **Appendix #3**.

10.0 Biophysical Impact Assessment (BIA)

The Biophysical Impact Assessment letter by Basin Environmental was submitted to MMSA and the MD for review. The report is attached as **Appendix #4**. The assessment has no significant issues that were identified to impede development.

The Developer will accommodate and implement the recommended mitigation measures as outlined by the BIA in Table 9 during the construction of the property. The Developer will minimize negative impact on erosion, sediment and drainage control, loss of soil quality during the construction process. This can be outlined under a Development Agreement as a condition of the subdivision approval.

TABLE 9 RECOMMENDED MITIGATION MEASURES FOR SOIL HANDLING (Page 20 of the report)

Environmental Effect	Recommended Mitigation Measures
Erosion, Sediment and Drainage Control	<ol style="list-style-type: none"> 1. Schedule work during dry periods, and cease construction during wet periods and high pressure rain events. 2. Where possible, minimize clearing or damage to vegetation and do not compact soils. 3. Minimize construction traffic within areas to be reclaimed, particularly when soil conditions are moist. 4. Manage the flow of surface water in and around the construction site during construction in a manner that minimizes increased risks of erosion and sedimentation. If necessary, construct diversion ditches. Divert runoff or water that contains sediment, to a settling pond, sediment trap or through a vegetated area to minimize the addition of sediment to nearby waterbodies. 5. Clear vegetation on unstable or erodible banks by hand wherever possible. Employ erosion and sediment control measures (e.g., sediment fencing and/or check dams) suitable to the site prior to construction. Inspect the erosion and sediment control measures regularly, repair or replace when required. 6. Stockpiles should be designed in a cigar shape, oriented parallel to prevailing winds and perpendicular to topographic slopes to minimize erosion. Stockpiles should be at least 30 m from waterbodies and wetlands. Stabilize stockpiles if necessary by applying water or an approved tackifier. If soil stockpiles are stored for more than one growing season, incorporate a fast-growing cover vegetation to further minimize erosion risks. 7. Consideration should be practiced to prevent ruts from heavy equipment operation that may alter surface drainage.

Loss of Soil Quality	<ol style="list-style-type: none"> 1. A qualified soil specialist should monitor soil stripping and reclamation. 2. During construction activities, topsoil and subsoil should be graded to the colour change between the A (topsoil) and B (subsoil) horizons, salvaged and stockpiled separately. 3. Soil salvage activities should occur under daylight conditions, and not occur during wet, windy, frozen, or adverse field conditions that will result in potential topsoil admixing, loss, compaction, or degradation. In areas where the colour change between topsoil and subsoil layers are not visually distinct, topsoil and subsoil salvage should be based on mean topsoil and subsoil thicknesses for the Property. 4. If being stored on-site, topsoil and subsoil must be stored separately in stockpiles at least 1 m away from each other to prevent admixing. 5. Prior to topsoil replacement, subsoils should be ripped to alleviate compaction. Areas with finer texture topsoil will be disked following replacement. Para-tilling following topsoil replacement will relieve any remaining subsoil compaction. Following construction, the subsoil should be contoured to be consistent with the native landscape, and topsoil or salvaged surface soil should be replaced uniformly at the mean thickness for each Property.
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11.0 Preliminary Geotechnical Site Investigation

The Plan area is characterized by a layer of topsoil over high clay content, as outlined by the "Preliminary Geotechnical Site Investigation" prepared by Alpha Adroit Engineering Ltd. in support of this Plan. In accordance with the recommendations of this report, the site is generally considered to be buildable and can be used for rural residential development if the recommendations provided in the report are followed.

Out of the eight boreholes drilled by Alpha Adroit Engineering Ltd. only three of the boreholes showed sign of water ranging from 1.29 m (hole #2), 1.38 m (hole #3), 2.97 m (hole #6).

The report is strongly recommended that individual home constructions consider seeking individual geotechnical engineering investigation and report for their specific application and location as glacial geology and human activities might present different subsoil and groundwater conditions at their specific building/development location. Both pile and footing foundations can be used for this development (subject to individual geotechnical investigation at individual lots).

Use of moisture barrier or geo-membranes are recommended to promote dry underground spaces. Raising of the site and road access areas via construction of engineered fill is recommended to promote trafficable areas and reduce difficulties associated with freeze-thaw cycles.

The Developer will follow the engineer recommendation based on Section 6.1 of this report which is attached as **Appendix #5**.

12.0 Ground Water Supply

There are a few options for ground water supply:

1. Each lot might have an individual well and this is up to the future land owners to decide whether to drill one or not.
2. Connecting to an existing water co-op line passing through the property. The hook up costs is the responsible of future land owners.
3. The last option is by way of cistern a municipal water service is available about 1 mile and ½ directly west of the subject property.

As there will be more than six lots on the quarter section, the Water Act requires the Developer to provide a report by a professional engineer, geologist, or geophysicist, certifying that a diversion of 1,250 m³ of water per year (754 gallons per day) for household purposes for each of the lots within the subdivision will not interfere with any existing household uses, licensees, or traditional agricultural users.

Thurber Engineering Ltd. was engaged to analyze the availability of groundwater.

Thurber Engineering Ltd.'s report was based on an analysis of Alberta Environment and Parks (AEP) well reports within the surrounding area. It compiled from 71 AEP well records within 1.6 km radius from the subject property. Thurber Engineering Ltd. also had access to pump tests undertaken for the existing wells #95161204, 1665261, 358281, and 358279.

The report concludes that there is water in the Sandstone aquifer of approximately from 3,900 m³/year to 5,200 m³/year. There is significant water in both the Sandstone and Gravel aquifer which are in range of 1,000,000 m³/year to 4,100,000 m³/year on the top of page 5 in the report. Therefore the report concluded that there are plenty of water and it is a lot higher than the minimum requirement of only 1,250 m³ of water per year.

It should be noted that Thurber Engineering Ltd.'s analysis is based on every household drawing 1,250 m³ of water per year. EPCOR, the City of Edmonton's water supplier, says a typical metered household uses only 222 cubic metres of water per year, less than one-fifth of the amount quoted in the Water Act. This provides another large margin of safety.

Thurber Engineering Ltd.'s work assumed for the proposed thirteen lots plus the existing lots on the quarter section. The engineer's report has been forwarded to the MD under separate cover. The report is also attached as **Appendix #6**.

13.0 Development Concept

13.1 Goals of the Plan

The Alexander ASP has been prepared in accordance with the following goals and objectives:

1. To provide a sound planning framework for the future development of the Plan area that is consistent with the goals of the MD.

2. To promote diverse, efficient and viable residential development in the MD through the development of the Plan area for country residential purposes.
3. To provide services to the Plan area.
4. To protect and maintain the operational safety of the Highway 2 corridor and the intersection at Range Road 232.

13.2 Proposed Design

The proposed subdivision design is shown on Map 8 – Subdivision Design.

Map 3 shows lot boundaries superimposed on an air photograph.

All subdivided lots will be residential except for the remainder which will not be developed and will be left in a natural state. They will be served by internal roads, built to MD standards, with no direct vehicle access on to the adjacent Highway 2.

The water body on Lot 10 on Map 8 will not be disturbed in anyway shape or form and will remain in a natural state.

The remainder of the quarter section will remain as a private lot; however, it will be registered with an Environment Reserve Easement. This will prevent any future development and it will remain as natural as possible like the Wilderness Park located kitty corner to the subject property.

The developer (Greg Alexander) will not be further developing the walkway envisioned for the P.U.L, This P.U.L is under MD ownership.

13.3 Road Right of way

The internal roads are being utilized as a service road if the freeway is built, and that the location of the freeway lays north of the existing pavement.

The internal roads will be built on 20 and 25 metre rights of way, with existing utility easements on one side. These roads were registered in 2015 under plans 152 3598 and 152 3599.

13.4 Road Surface

The internal roads will therefore be built with a gravel surface.

14.0 Reserves

14.1 Municipal Reserves

When land is subdivided into multiple lots, the municipality has the right to take ownership of all undevelopable land as environmental reserve, and up to 10% of the developable land as municipal reserve (Municipal Government Act, sections 664 and 665).

Undevelopable land is defined in section 664 of the MGA as a swamp, gully, ravine, coulee, or natural drainage course, or which is subject to flooding, or unstable. Land with a high-water table is not included in this definition. This means that none of the land is required to be dedicated as environmental reserve. Only municipal reserve needs to be considered.

The amount due is 10% of the area of the lots being created. This is 92.456 acres, so 9.2 acres of reserve are due and the Developer will pay cash-in-lieu of a market value for the 9.2 acres owing as per the MD assessment of the property.

14.2 Environmental Reserve Easement

The MD and/or Developer will register a blanket Environmental Reserve Easement on title of the remainder piece at the south-west corner of the quarter section. This will ensure no development on the property and the developer will retain ownership of the remainder.

A wetland assessment was complete by Basin Environmental and it is attached as **Appendix #7**.

14.3 Three Seasonal Marshes/Wetlands

1. Wetland #1 (Seasonal Marsh #1) is to be avoided by the development.
2. Wetland #2 (Seasonal Marsh #2) is to be constructed and paid out by the Developer.
3. Wetland #3 (Seasonal Marsh #3) is to be avoided by the development.

15.0 Sewage Treatment

Each of the proposed lots must have a building site where the water table is at least two metres below ground, so conventional septic tanks and tile disposal fields can be installed. Also, it is recommended to have individual lots to be assessed by Alpha Adroit Engineering Ltd. Once specific building locations have been identified as per the executive summary of the report attached as **Appendix #5**.

The smallest lot in the subdivision will be 4.8 acres or 19,424 square metres. This is more than ten times the minimum of 1,850 m² required for on-site sewage disposal under the Alberta Private Sewer Systems Standard of Practice.

All sewer systems in the development will be constructed in compliance with the Provincial Safety Codes and the Alberta Private Sewage Systems Standard of Practice. Sewage sites and installations will be individually tested and inspected by a certified onsite wastewater practitioner (installer) prior to construction of the sewer system.

16.0 Servicing

North Peace Gas Co-op currently has a ¾ natural gas line servicing the development. This line will not be able to supply more than four additional lots. The Developer will pay to upgrade the gas co-op line to a larger line after the sale of the fifth lot. Lot owners requiring individual gas service will be responsible for obtaining contracts with North Peace Gas Co-op.

Atco Electric has installed an operating power distribution line through to all Phase 1 lots of the development as per U.R.W. Plan 1523599. The Developer plans on financing the completion of this distribution line throughout the U.R.W. upon sale of the fifth lot from the phase 2 development. Lot owners requiring individual power service will be responsible for obtaining contracts with Atco Electric.

The installation of power and gas utility would be deferred until either the sale of 5 lots for Phase 2 or within 5 years after the subdivision approval; whichever comes first. At that time complete installation of the power distribution line and gas trunk line would be completed throughout the subdivision. Utilities will be ran adjacent to the property line, with individual hookups left to future owners, which is consistent with the Phase 1 development.

17.0 Fire Protection

As per Section 12.8.6. in the MD's MDP. The Municipal District of Peace No. 135 will continue its support to member municipalities that are signatory to the Peace Region Mutual Aid Agreement to help combat fire and emergency incidents as requested and to seek aid and help on a reciprocal basis for similar emergencies as required to ensure safety for its residents and properties.

The most reliable source of water is a fire hydrant connected to a municipal system. In this case the closest hydrants are in the Town of Grimshaw (8 km by road/highway). There is a fire protection agreement in place between the MD and the Town of Grimshaw to provide fire protection for the subject property.

18.0 Implementation

18.1 Staging of development

The Developer may create the subdivision in two stages, starting with the southern internal road. Cash in lieu of reserves will be paid on each lot at the time of subdivision.

18.2 Subdivision and Development

The lot sizes and yields identified in this Plan are conceptual and may be altered at the time of subdivision without requiring an amendment to this Plan provided lot sizes remain consistent with the relevant Country Residential district requirements contemplated in this ASP.

Map 8 – Subdivision Design shows the proposed lots are ranging from 4.9 acres to a maximum of 9.6 acres which show the proposed complied to the MD's LUB Section 5.6 (D) (1) (A)

"Residential Uses:

1.2 hectares (3 acres) minimum, 4 hectares (10 acres) maximum unless site conditions, natural features or existing development require a larger or smaller lot, at the discretion of Council."

Developer shall be required to enter into development agreement with the MD as a condition of subdivision approval. The matters to be included in this agreement may include but may not be limited to the provision of internal roads.

19.0 Request for Approval

The landowner requests the MD to adopt this area structure plan by bylaw. Once that is done, the Developer will submit an application for subdivision approval.

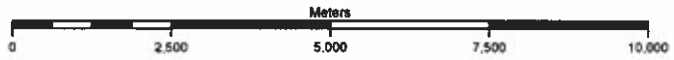
20.0 Amendments to the Plan

An amendment to the Plan will be required where a major land use change is desired or in situations where subdivision activity is proposed that results in a significant increase in overall lot density from what is illustrated in the Plan area. Minor variations to the internal road network may be permitted in the Plan area without amendment to the Plan.



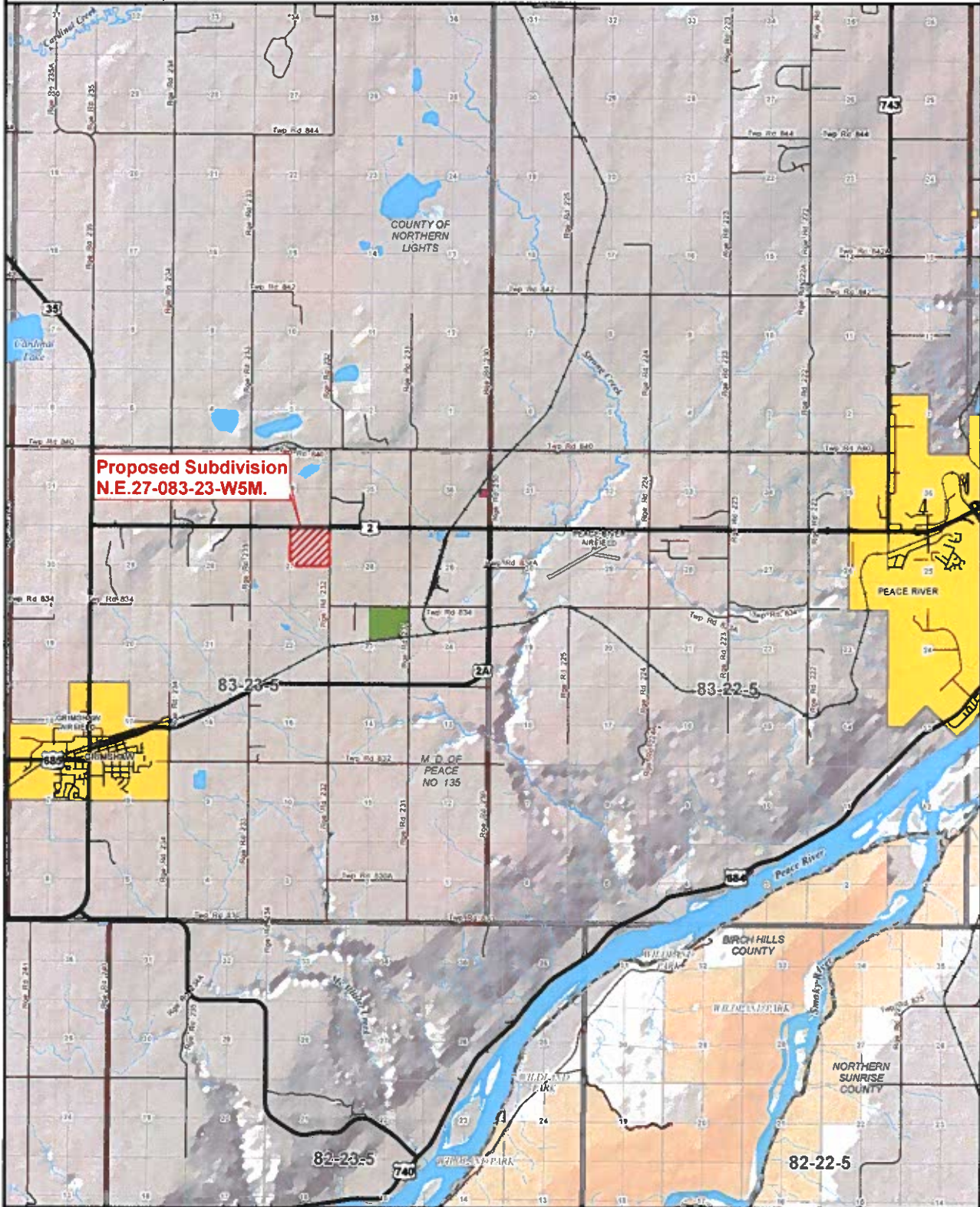
MAP 1:

Overview Plan Showing Proposed Subdivision Within:
NE¼ Sec. 27, Twp. 83, Rge. 23, W.5M.
MD of Peace No. 135, Alberta



SCALE 1:75,000

(NAD 1983 UTM ZONE 11N, PROJECTION, TRANSVERSE MERCATOR, DATUM: NORTH AMERICAN 1983)



LEGEND

- Proposed Subdivision
- Gravel Roads
- Airport Runway
- Environmental Designation
- Drive-In Theater
- Highway
- Railways
- Localities
- Municipal District
- Golf Course

Rev	Description	Date	Job 0555-16
0	Original	Sep 18, 2017	File Overview_11x17_P
1	Update Municipal District	July 17, 2018	
-			Image:N/A

BORDERLINE SURVEYS

10111 - 110th Street, Box 2061
Fairview, AB. T80-330-9939
www.borderlinesurveys.com

Revision

0

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N

Page 16

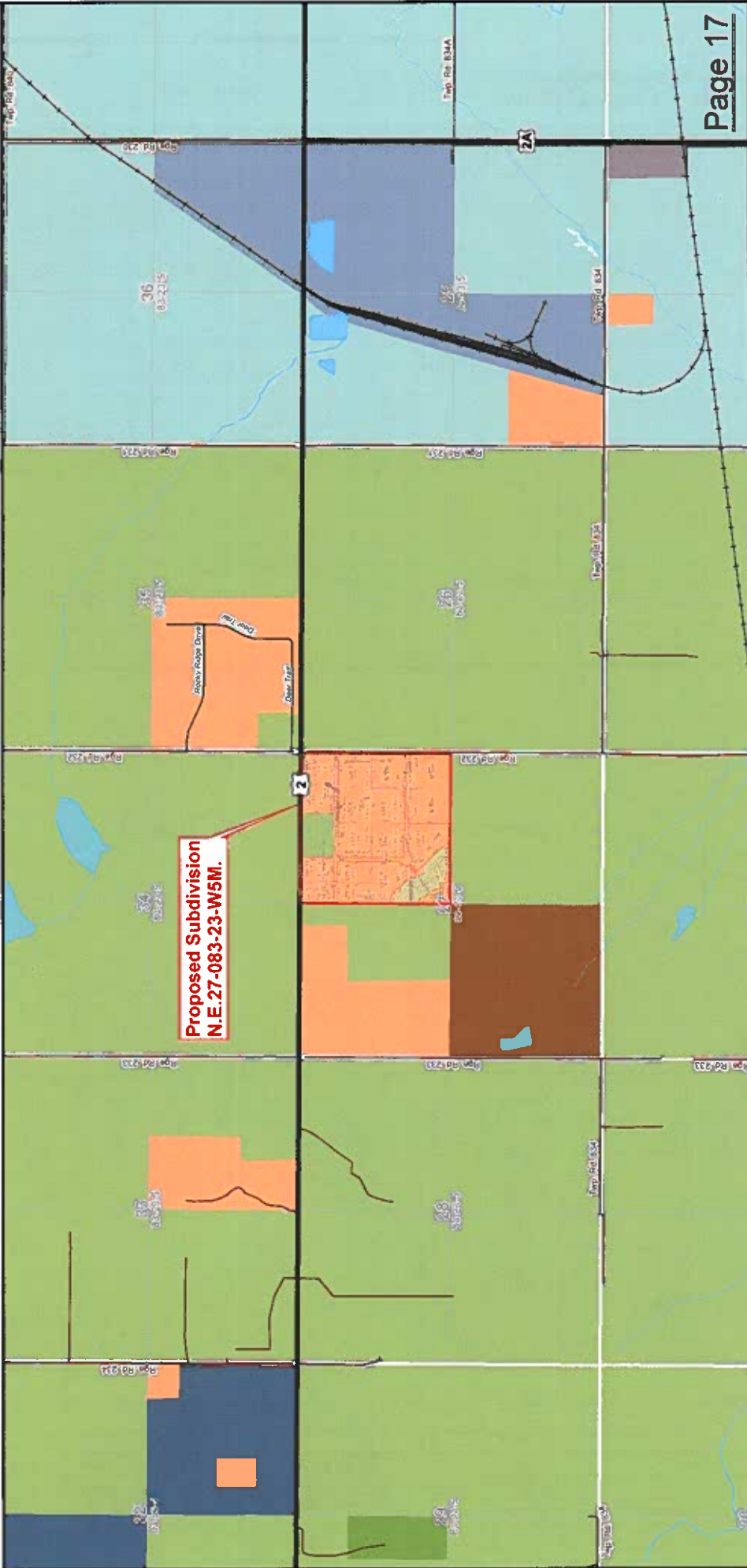


MAP 2:

Plan Showing Land Use Zoning Within:
NE¼ Sec. 27, Twp. 83, Rge. 23, W.5M.
 MD of Peace No. 135, Alberta



SCALE 1:20,000
 (NAD 1983 UTM ZONE 11N, PROJECTION: TRANSVERSE MERCATOR, DATUM: NORTH AMERICAN 1983)



Rev	Description	Date	Job: 6555-18	Revision
0	Original	Sep 16, 2017	See LMS User Manual, 11.12.2	0
1	Update Municipal District	July 17, 2018		1/1
				Page 1/1

BORDERLINES SURVEYS	
10111 - 110th Street, Box 2861 Fairview, AB, T80-330-9839 www.borderlinesurveys.com	

LEGEND	Proposed Subdivision	Agricultural District (AG)	Direct Control District (DC)
Highway		Country Residential District (CR)	Joint Plan Agricultural District (JPAG)
Gravel Roads			
Railways		Country Residential Hobby Farm District (CR2)	Rural Industrial District (RI)
		Crown Land (C)	Rural Industrial: Gravel Pit District (RI-GP)

MAP 3:

Tentative Plan Showing Proposed Subdivision of N.E. Sec. 27, Twp. 83, Rge. 23, W.5M. (For Phase II CR Subdivision Development) Within MD of Peace No. 135, Alberta



Photo Detail
Scale: 1:5000

Note:

1. Phase 1 Road is under construction
2. Atco Powerline (Plan 1523599) is under construction



Photo Date: 2012

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Date: Oct. 14th, 2016

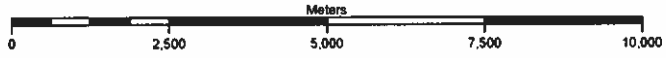
Drawn by: JC

Job No.: 160032



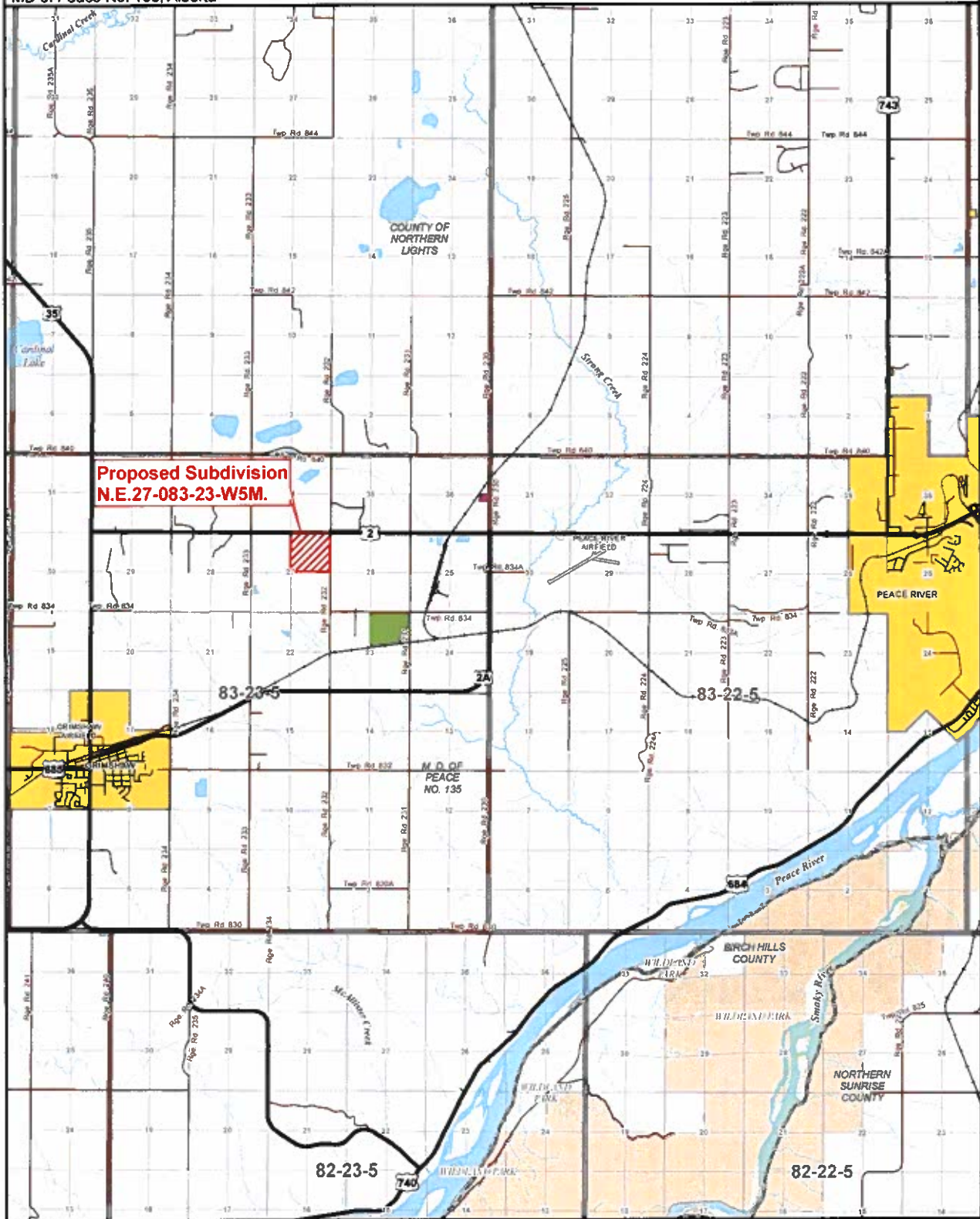
MAP 4:

Plan Showing Access To Proposed Subdivision Within:
NE¼ Sec. 27, Twp. 83, Rge. 23, W.5M.
MD of Peace No. 135, Alberta



SCALE 1:75,000

(NAD 1983 UTM ZONE 11N, PROJECTION: TRANSVERSE MERCATOR, DATUM: NORTH AMERICAN 1983)



LEGEND	
	Proposed Subdivision
	Highway
	Gravel Roads
	Railways
	Airport Runway
	Localities
	Environmental Designation
	Municipal District
	Drive-In Theater
	Golf Course

Rev	Description	Date	Job 0555-16
0	Original	Sep 18, 2017	Plan Read_Accross_11x17.P
1	Update Municipal District	July 17, 2018	-
-	-	-	Image:N/A

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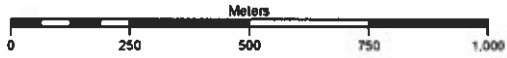
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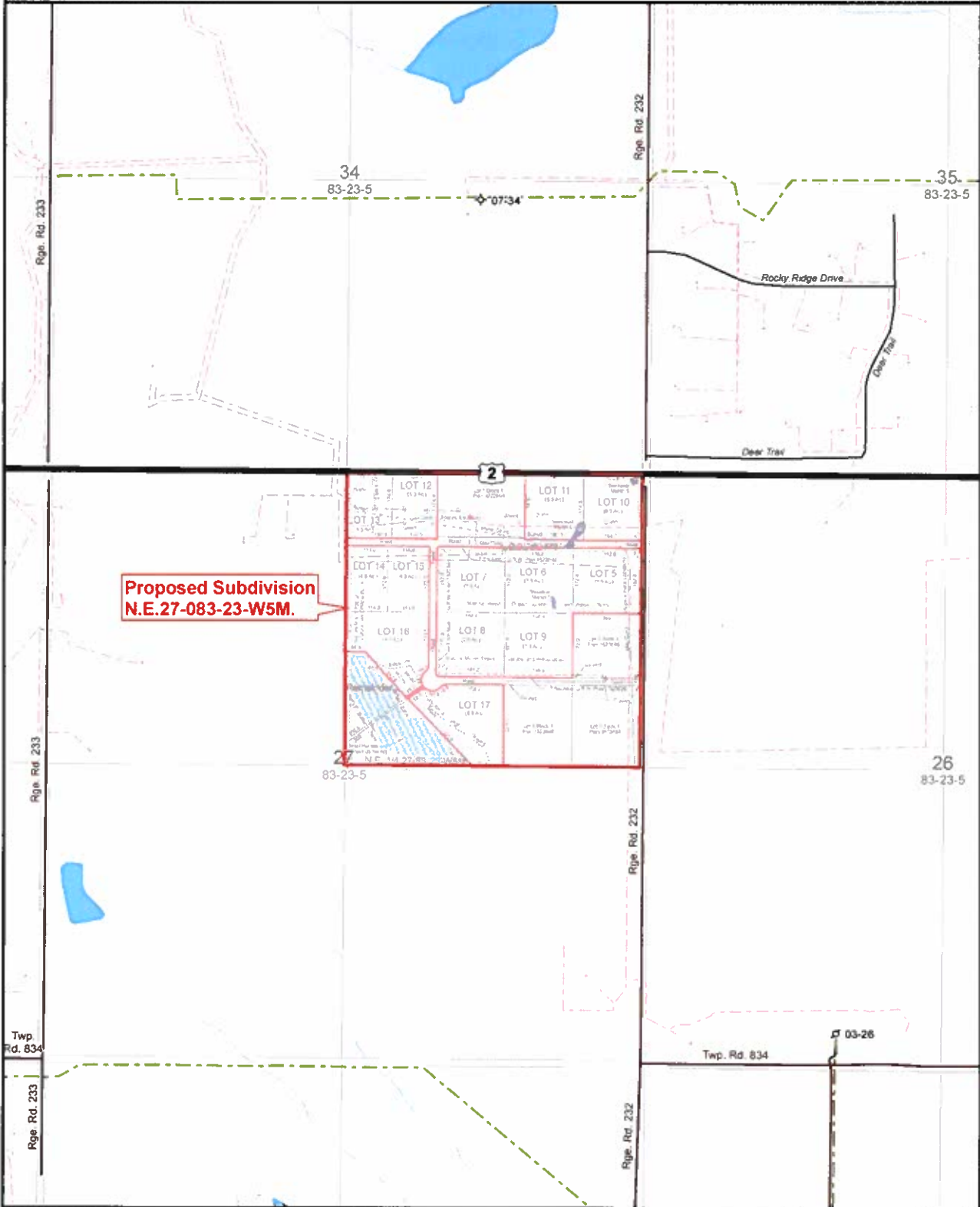
MAP 5:



Plan Showing Oil and Gas Within:
NE¼ Sec. 27, Twp. 83, Rge. 23, W.5M.
MD of Peace No. 135, Alberta

SCALE 1:10,000

(NAD 1983 UTM ZONE 11N, PROJECTION: TRANSVERSE MERCATOR, DATUM: NORTH AMERICAN 1983)



LEGEND

- Proposed Subdivision
- Gravel Roads
- High Pressure Pipeline
- Abandoned Well
- Highway
- Low Pressure Pipeline
- Low Pressure Gas Meter
- Suspended Gas Well

Rev	Description	Date	Job 0555-16
0	Original	Sep 18, 2017	File: Oil_Gas_11x17_P
1	Update Municipal District	July 17, 2018	-
-	-	-	-
-	-	-	Image: N/A

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Revision

0

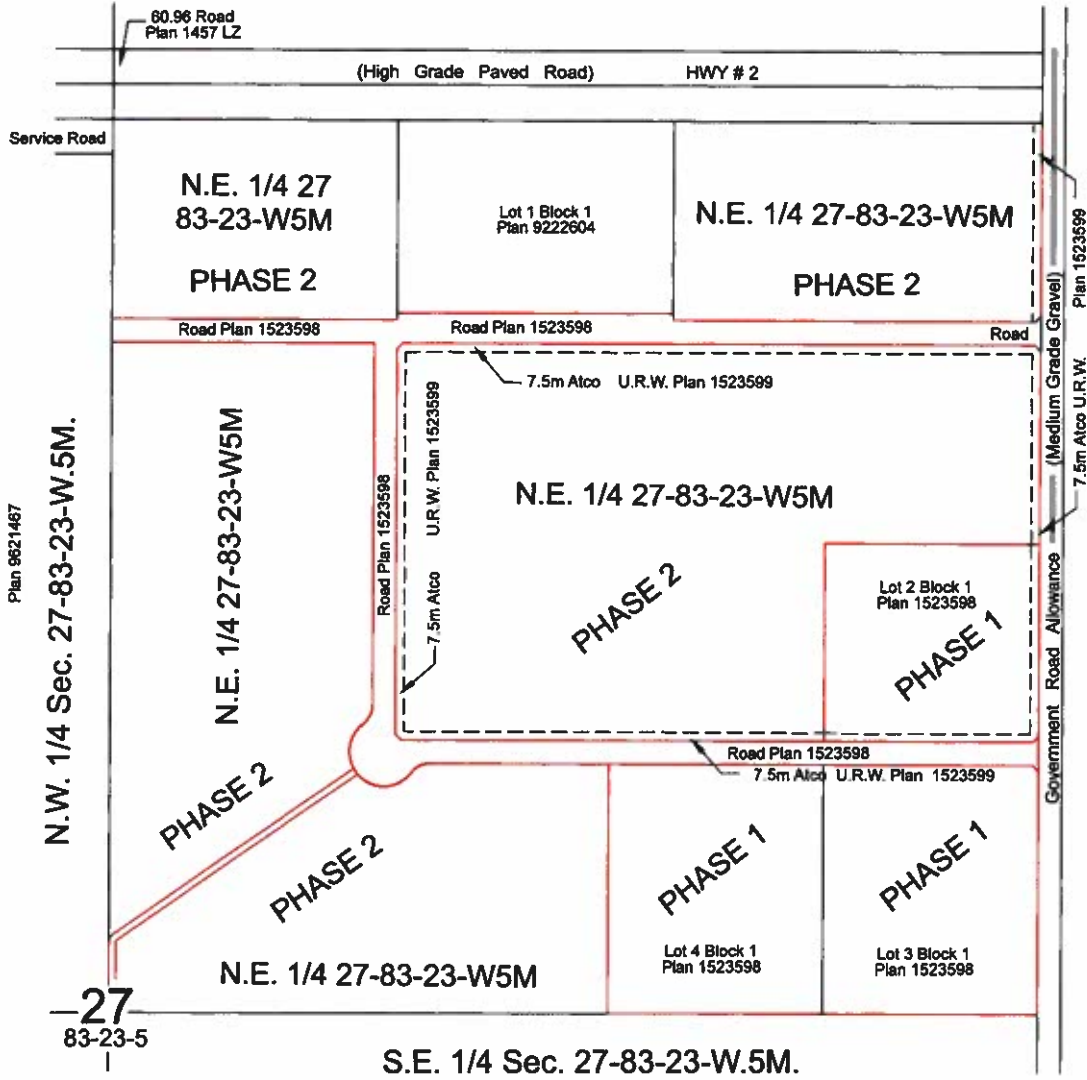
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MAP 6:

**Site Plan Showing
Existing Subdivision of
N.E. Sec. 27, Twp. 83, Rge. 23, W.5M.
(For Phase II CR Subdivision Development)
Within
MD of Peace No. 135, Alberta**



Scale: 1:5000



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Date: Sept. 18th, 2017

Drawn by: JC

Job No.: 160032



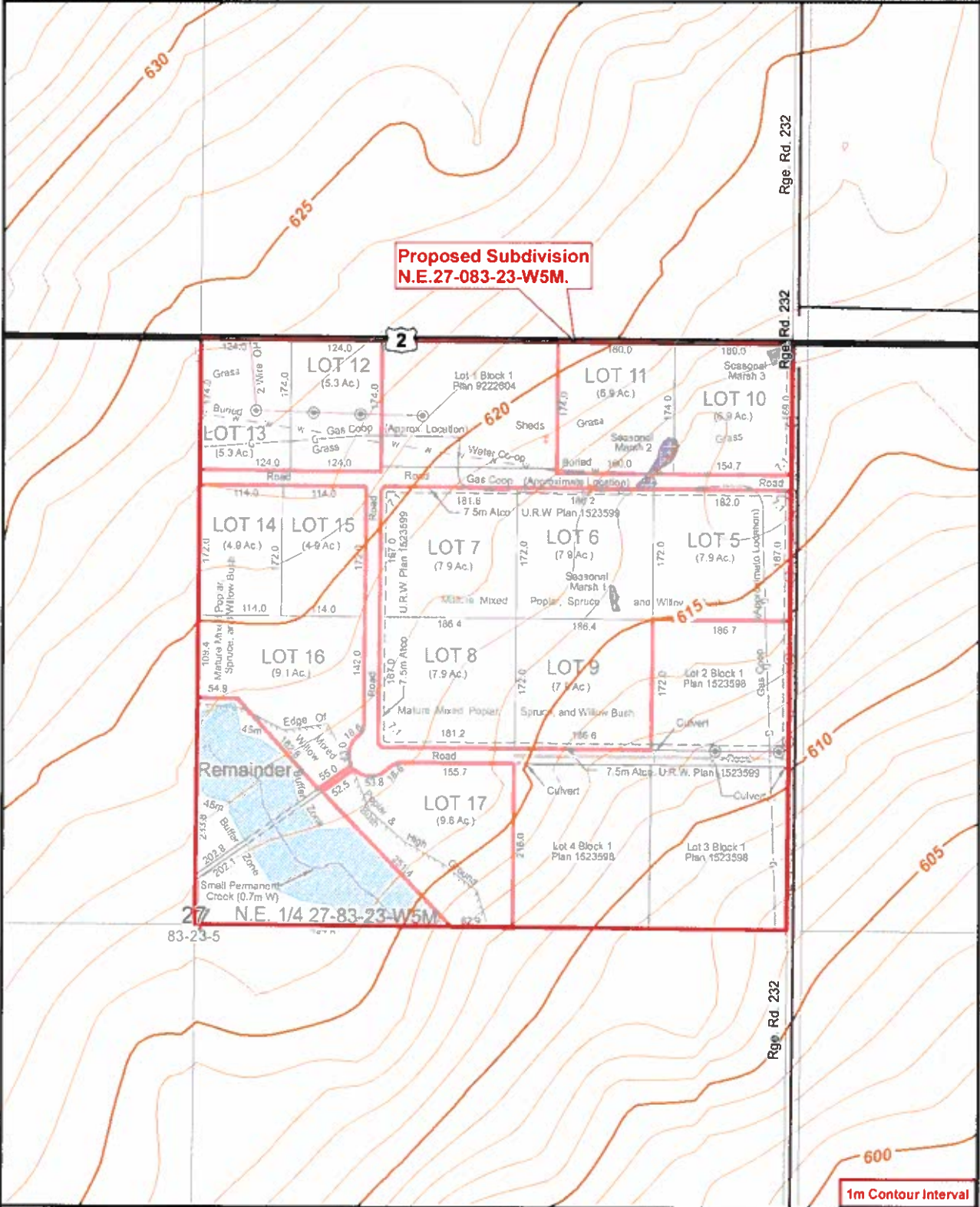
MAP 7:



Plan Showing Contours and Drainage Within
NE 1/4 Sec. 27, Twp. 83, Rge. 23, W.5M.
MD of Peace No. 135, Alberta

SCALE 1:5,000

(NAD 1983 UTM ZONE 11N, PROJECTION: TRANSVERSE MERCATOR DATUM: NORTH AMERICAN 1983)



LEGEND			
	Proposed Subdivision		Gravel Roads
	Highway		Railways
	Contour		Index Contour

Rev	Description	Date	Job 0555-16
0	Original	Sep 18, 2017	File: Contour_11x17_P
1	Update Municipal District	July 17, 2018	
-			Image: N/A

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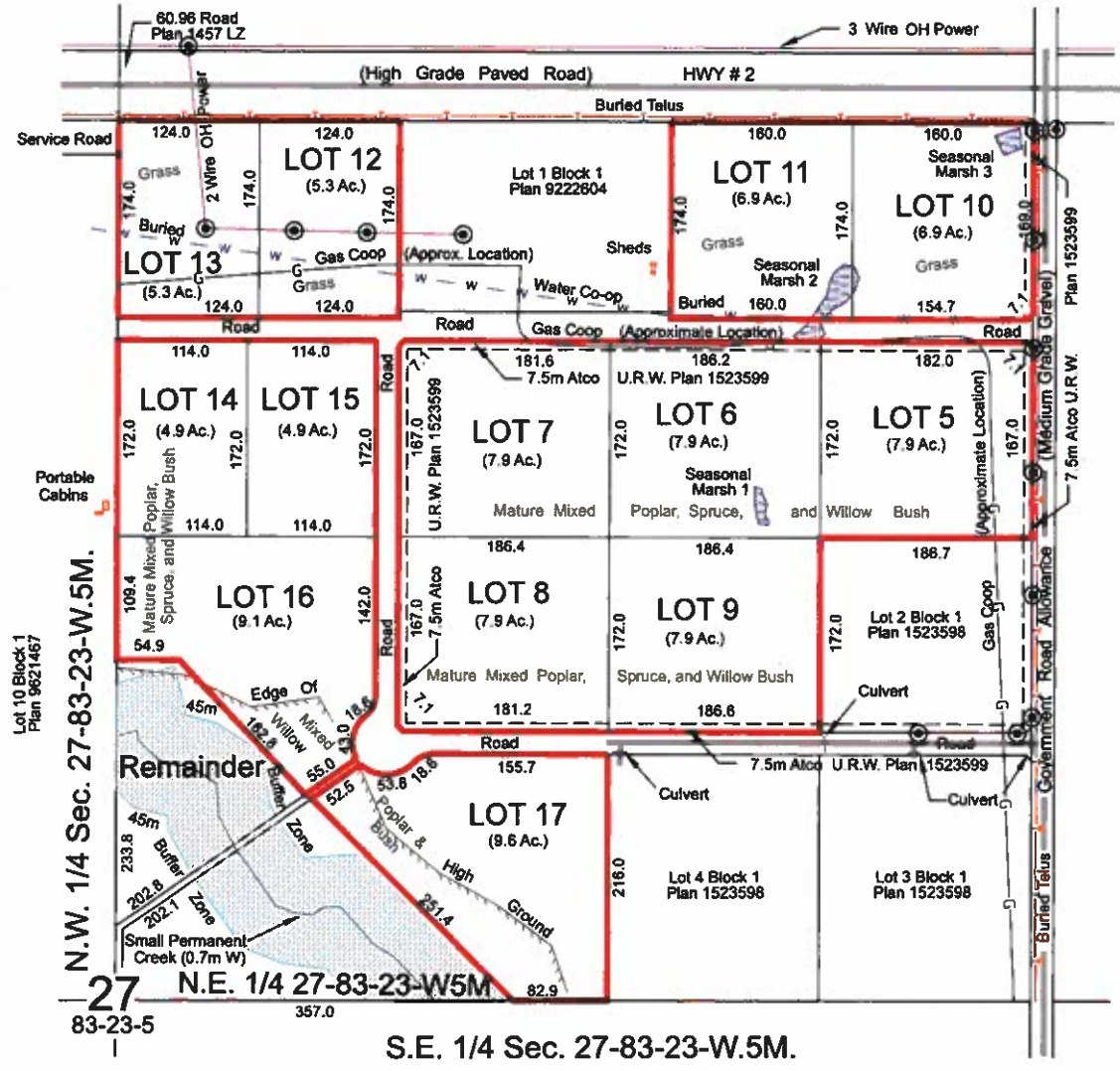
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1m Contour Interval

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MAP 8: Tentative Plan Showing Proposed Subdivision of N.E. Sec. 27, Twp. 83, Rge. 23, W.5M. (For Phase II CR Subdivision Development) Within MD of Peace No. 135, Alberta



N.W. 1/4 Sec. 27-83-23-W.5M.
 Lot 10 Block 1 Plan 9621467
 27
 83-23-5

S.E. 1/4 Sec. 27-83-23-W.5M.

Scale: 1:5000



LEGEND

- Wetland Area
- Creek Buffer Area
- Phase II Lands
- Road C/L
- Overhead 2-Wire Power
- Telus Line
- Water Line (Private)
- Gas Co-op Line
- Edge High Ground
- Power Pole
- Septic Field/Discharge

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Date: Oct. 14th, 2016
Drawn by: JC
Job No.: 160032