

BY-LAW NUMBER 2011/24

BY-LAW NO. 2011/24 is a by-law of the County of Wetaskiwin No. 10 in the Province of Alberta, to authorize the adoption of an Area Structure Plan for the purpose of providing a framework for subsequent subdivision and development of a portion of NW 32-46-24-W4M and SW 32-46-24-W4M in accordance with Section 633 of the Municipal Government Act, Chapter M-26.1, Revised Statutes of Alberta 1994, and amendments thereto.

WHEREAS: at the requirements of County Council, an Area Structure Plan has been prepared for a portion of NW 32-46-24-W4M and SW 32-46-24-W4M

AND WHEREAS: the proposed Area Structure Plan has been widely circulated and discussed within the County pursuant to Section 230, 606(1), and 633(1) of the Municipal Government Act, 1994, Chapter M-26.1, and amendments thereto.

NOW THEREFORE: the County of Wetaskiwin No. 10, duly assembled, hereby enacts as follows:

- (a) The document attached to this By-law as "Appendix A", together with accompanying maps, is hereby adopted as the *Dickau Area Structure Plan NW 32-46-24-W4M and SW 32-46-24-W4M*.

2. This by-law comes into effect on the date of third reading.

READ: A First time this 5 day of May, A.D., 2011.

READ: A Second time this 5 day of May, A.D., 2011.

READ: A Third time and finally passed this 5 day of May, A.D., 2011.


REEVE


SECRETARY-TREASURER

AREA STRUCTURE PLAN

for parts of

NW and SW 32-46-24-4

in the

COUNTY OF WETASKIWIN

Landowner: Dennis Dickau

Prepared by Bob Riddett, MCIP
rriddett@gmail.com

Adopted by Bylaw 2011/24
5 May 2011

Introduction

Until recently, Dennis Dickau owned all of NW and SW 32-46-24-4. The half section is divided by Bigstone Creek, and in 2007 Mr Dickau sold the 75 acres east of the creek, and also 56 acres at the north end of NW 32, leaving him with just under 189 acres. He now wishes to create an additional three residential lots.

The land east of the creek is the subject of the Ruby Hills area structure plan, which was approved by County Council in 2009. This ASP deals with the Mr Dickau's remaining land.

Statutory Plans

The Millet-Wetaskiwin Acreage Study, adopted by the County as Bylaw 2004/28, identifies land which is suitable for subdivision into residential lots. As shown on Map 1, the Dickau property is inside that area.

Map 1 also shows that the Dickau property is outside the City-County intermunicipal development plan area, so there is no need to refer this document to the City for comment.

Provincial regulations affecting development

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

- 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 1500 metres of the Dickau property.
- 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 active or abandoned wells or pipelines on the property, or close enough to affect development.
- Sewer lagoons: Residences must be at least 300 metres away from sewer lagoons.
- The closest sewer lagoon is 8,000 metres away, on the east side of Wetaskiwin.
- 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.
- As shown on Map 1, the present City of Wetaskiwin waste disposal site is 2,650 metres away, on the other side of Peace Hills Heights. The City's previous waste disposal site is 3,700 metres away.
- Proximity to highways: A municipality must not approve a residential subdivision within 800 metres of a provincial highway without the prior approval of Alberta Transportation.
- The Dickau property is more than 2,600 metres west of Highway 2A, and is more than 4,800 metres north of Highway 13.
- Other senior government policies affecting the location of residences are:
- Livestock operations: The Agricultural Operations Practices Act does not allow confined feeding operations close to residences. The required separation depends on the type of operation and its size. The County of Wetaskiwin applies those setbacks reciprocally, and does not allow new residences close to confined feeding operations.

There are no confined feeding operations within two miles of the Dickau property.

Airport

The Dickau property is about 3,500 metres from the end of Runway 30 at Wetaskiwin Regional Airport, and is not under the approach or take-off path.

Historical Resources

Records held by the Alberta Historical Resources Management Branch (HRMB) suggested that there might be a site of historical or archaeological interest on the Dickau property, so Altamira Consulting was engaged to survey the land.

A field investigation was carried out on 30 October 2010, and found nothing of interest. The results were submitted to the HRMB in January 2011. In a letter dated 11 February 2011, the Branch issued a clearance and said that "Dennis Dickau has Historical Resources Act clearance for the proposed residential subdivision located within the NW and SW of section 32-24-46-W4M." The permit number is 2010-274. A copy of that letter and permit has been forwarded to the County under separate cover.

In summary, there is nothing in any provincial regulation to prevent the development of the Dickau property.

Present and former land use

Mr Dickau's family has owned the land since 1954. He has run cattle and, more recently, a herd of elk. He is now semi-retired and has sold all his livestock.

There is no evidence of any land use which might have contaminated the soil, or which might limit future uses.

Map 2 is a recent air photograph of the property.

Site characteristics

Map 3 shows the contours of the land, taken from the Ruby Hills ASP. In most areas there is a gradient of about 1% from the road east to the top of the creek valley. In most parts of the property, the soil is sandy, with poor fertility and low capacity to retain moisture. The subsoil is clay, and there is one area with trapped drainage, but it can be dried out by ditching.

The creek is incised between six and ten metres, with a bank angle of up to 27%. This, combined the friable soil and subsoil, could lead to problems with slope stability. This will not be an issue for the three lots being proposed, as they are about 200 metres from the creek. It might be an issue if the remainder of the land is ever subdivided, and appropriate engineering tests should be made at that time.

Road access

Road access to the Dickau property is via Range Road 245, and thence on to Township Road 470, the correction line road, which is paved all the way to Highway 2A.

RR 245 is a standard County gravel road on a 20 metre right of way. As shown on Map 4, the road undulates, giving limited visibility in some areas. This has been taken into account in placing the access points.

As required by County Policy 6615, the developer will contribute \$2,000 per lot towards the upgrading of municipal roads serving the subdivision, and will dedicate a five metre road widening in front of the new lots.

The County's Policy 6615 requires developers of large subdivisions to pave offsite roads connecting to provincial highways. However, as the subdivision will be just three lots, paving of RR 245 may be deferred under section 2(a) of Policy 6615.

Proposed subdivision design

Map 5 shows the proposed subdivision layout. There are three residential lots. Lots 1 and 2 are each fractionally over 5 acres. Lot 3 covers 13.8 acres. That is larger than allowed by the County's land use bylaw (Bylaw 95/54, Schedule B, Section 3.4), but is necessary for three reasons.

- it contains the present yard site with scattered buildings,
- the future owner, Mr Dickau's son, plans to build at the north end of the yard, with a natural shelterbelt to the north of the house, and
- Mr Dickau originally considered creating four lots, but there is no safe approach on to RR 244 except where shown on Map 5, so the extra land has been added in to Lot 3.

The owner therefore requests the County to relax the five acre maximum size for Lot 3.

The remainder of the two quarter sections will be consolidated into a single title and will stay as an agricultural parcel.

Although Mr Dickau has no plans to create more than three lots, the County requested that this ASP look at the possibility of subdividing the remainder of the land at some time in the future. That can best be achieved by running a road north and south through the Dickau property to connect to the land to the north and south, which is also designated as suitable for subdivision in the Millet Acreage Study.

It was noted above that the creek valley is incised up to ten metres, with slopes as high as 27%. It is possible that these slopes may erode. The internal road must therefore be placed so that each lot has a building site at least 50 metres back from the creek, and 30 metres from the top of slope, made up of (a) a minimum 10 metre setback from the top of slope to the lot boundary, and (b) a further 20 metres being the standard rear yard setback under CR zoning. (A similar

margin of safety was accepted by the County on the other side of the creek in the Ruby Hills ASP, and in the Woodlands ASP near Gwynne.) The road alignment shown on Map 5 allows for such setbacks. However, if the land is to be further subdivided in future, a new ASP must be accompanied by appropriate engineering tests proving slope stability.

Municipal Reserves

No reserves were dedicated when the existing subdivisions were created under files RW/06/96 and RW/06/111 because the lots then created were over 40 acres in size, and were deemed to be agricultural. Reserves are therefore due on the 189 acres which Mr Dickau now owns.

It is proposed that the reserves due on the three lots be deferred into the remainder of the property so that the maximum area can be taken into municipal ownership along the creek if and when the remainder is subdivided. The County's claim for reserves will be protected by a caveat registered on the title of the remainder.

Storm water management

Most of the three proposed lots will remain covered in trees after they are subdivided, so storm water runoff will not be significantly higher than at present. If and when an application is made to subdivide the remainder of the property, a detailed storm water management plan will be prepared by a professional engineer as part of a new ASP.

Water supply

Each of the proposed lots will have an individual well. As there will be more than six lots on the quarter section, the Water Act requires that the developer provide a report by a professional engineer, geologist, or geophysicist, certifying that a diversion of 1,250 cubic metres of water per year for household purposes for each of the lots within the subdivision will not interfere with any existing household uses, licensees, or traditional agricultural users.

An investigation by Envirowest Engineering Inc (their file 1006-42624 dated 21 July 2010) confirms that there is sufficient water for 30+ lots, even after taking into account the proposed Ruby Hills subdivision. That report has been forwarded to the County under separate cover.

Sewage treatment

All lots will be large enough to allow on-site sewage treatment using a septic tank and tile field. The smallest lot proposed in this ASP is five acres (21,000 m²), more than ten times the 1,800 square metres required to comply with the Alberta Private Sewage Systems Standard of Practice.

Because the site is generally well drained, with sandy subsoil in most places, it was not thought necessary to conduct percolation tests at this stage. It is standard practice for the installer to test each site prior to construction in order to size the field.

Fire protection

The subdivision will be served by the Wetaskiwin Rural fire department using tanker trucks.

The County normally requires multi-lot subdivisions to have a fire pond containing 4,000 gallons for each lot, a total of 16,000 gallons (72 cubic metres) in this case.

It is not practical to build a fire pond at the three lots, but there are two alternatives. One is to use the pond which is being built in Ruby Hills. The other is to use the existing dugout shown on Map 5. If that is required by the County, the developer will construct a dry hydrant and all-weather access, and protect that access by easement.

Public participation process

In March 2011 Mr Dickau mailed a letter to all landowners within about a mile of the proposed development, inviting them to an Open House where they could ask questions and get more information. The letter briefly described the proposed development. Map 5 was attached.

The Open House was held at the Terracotta Restaurant in Wetaskiwin from 6:30 to 8:00 pm on Wednesday 30 March 2011. The following people attended:

Erin and Stephen Burgess	SE 30-46-24-4
Clarence Claerhout	SW 29-46-24-4
Paul Gentes	NE 32-46-24-4 (Ganske Subdivision)
Orville Dickie	unknown
Dennis Dickau	W 32-46-24-4
Bob Riddett	Developer's planner

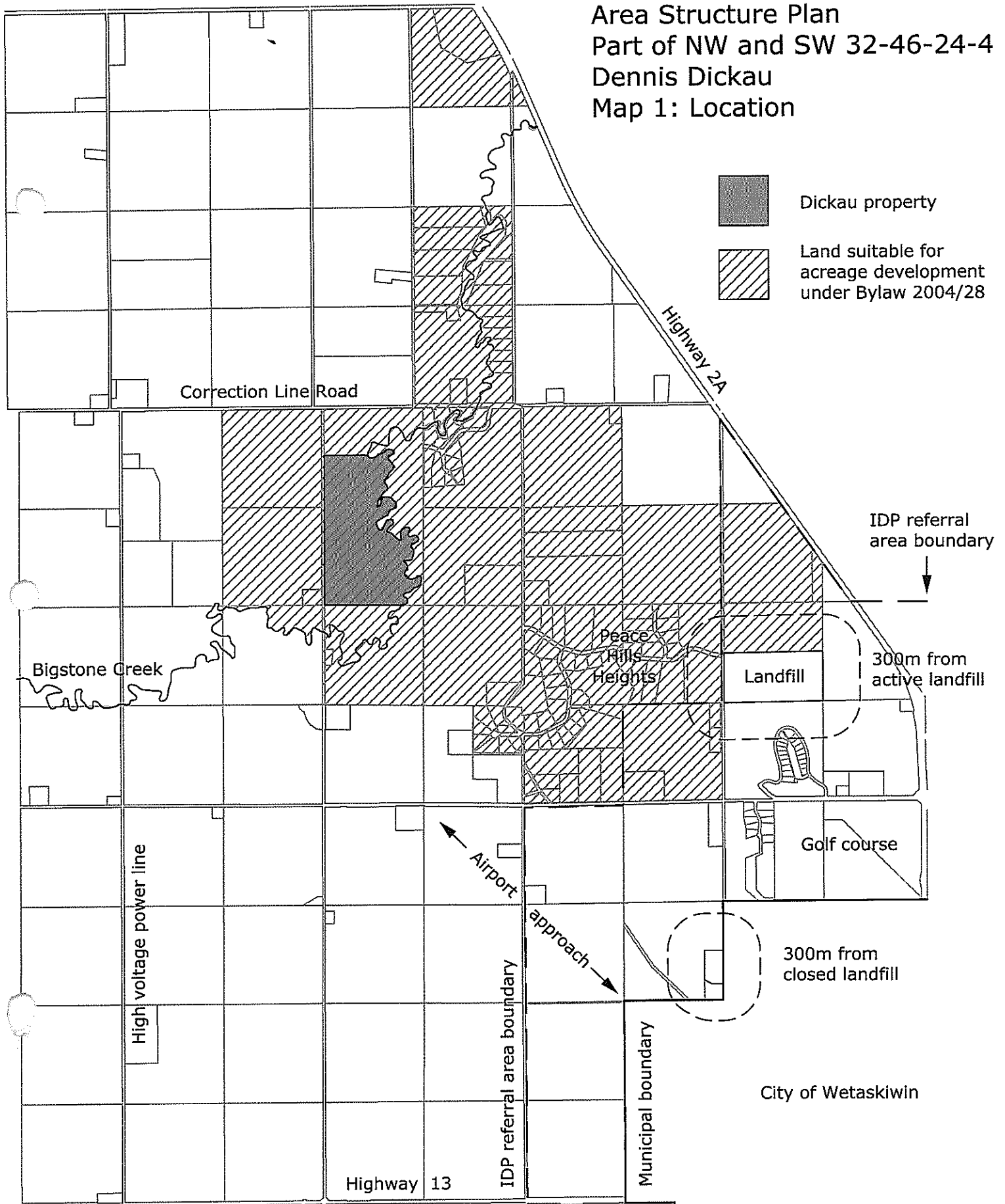
The neighbours who were present expressed no objections to the proposals.

Request for Planning Approval

The owner requests that County Council approve this area structure plan, and rezone 10.25 hectares (about 25.3 acres) from Agricultural to Country Residential to allow the proposed three lots. A subdivision application will follow immediately.

Hillside Road

Area Structure Plan
Part of NW and SW 32-46-24-4
Dennis Dickau
Map 1: Location



0 1000
metres



Area Structure Plan
Parts of
W 1/2 32-46-24-4
Dennis Dickau
Map 2
2007 Air Photo



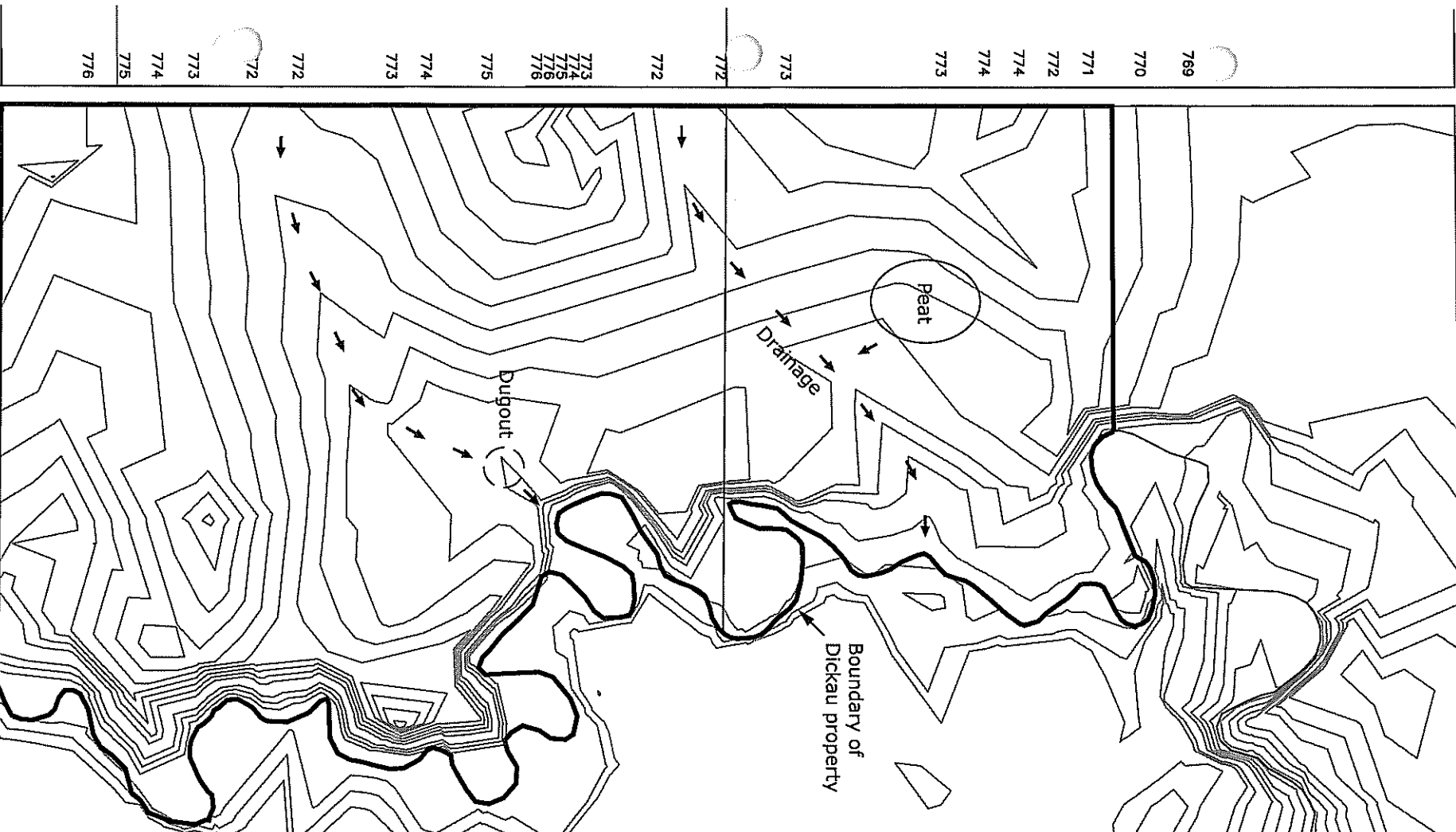
0 200
metres

768
766
765
764
765
766

Area Structure Plan
Parts of
W 1/2 32-46-24-4
Dennis Dickau
Map 3
Contours

Contours from Ruby Hills ASP
Elevations are in metres amsl
Some lines have been omitted
on steep gradients

766
765
764
762
760
760
761
762
764
768
768



0 200
metres

Area Structure Plan
Parts of
W 1/2 32-46-24-4
Dennis Dickau
Map 4
Elevations
along RR 244

Correction line →

Range Road 244

← Joint approach
Lots 1 and 2

← Existing approach to Lot 3

← Future internal road

Section line →

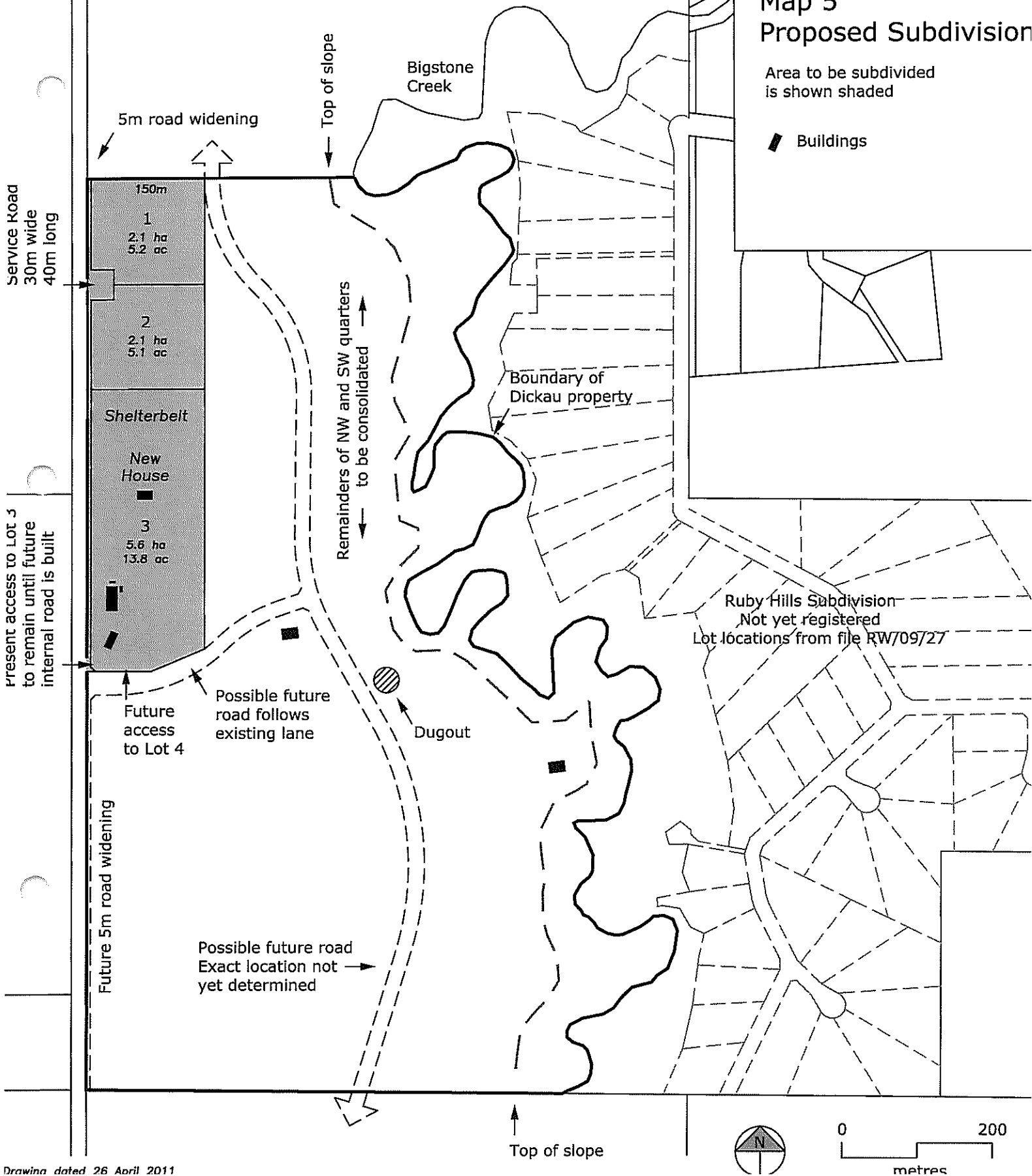
770 771 772 774 776
Metres amsl
Vertical exaggeration 35x



Area Structure Plan Parts of W 1/2 32-46-24-4 Dennis Dickau Map 5 Proposed Subdivision

Area to be subdivided
is shown shaded

 Buildings



REPORT ABSTRACT

At the request of Dennis Dickau, a Historical Resources Impact Assessment was carried out for the Proposed Residential Subdivision Area Structure Plan in the W 1/2 of Sec. 32, Twp. 046, Rge. 24, W4M. This report documents the results of a field inspection of the proposed development carried out on October 30, 2010.

Assessment consisted of a visual examination and pedestrian traverse of the project area as well as subsurface shovel testing. A search of existing historical resource site files revealed that there was a previously recorded archaeology site, FgPi-6, within the project area. No new archaeological or historic sites were recorded in the proposed project area.

This study concludes that no archaeological or historic sites will be impacted by the proposed project; therefore, no further work is warranted.

All recommendations for clearance or further Historical Resource work are subject to approval and vetting by the *Archaeological Survey of Alberta, Historic Resources Management Branch (HRMB)*, *Alberta Culture and Community Spirit (ACCS)* and the *Historical Resources Act* (Province of Alberta 1987).

NOTE: Project development including any land modification activities is not permitted under the *Historical Resources Act* until notification is received in writing from the *Archaeological Survey of Alberta, Historic Resources Management Branch, Alberta Culture and Community Spirit*.

This document contains sensitive information about Historic Resources that are protected under provisions of the *Alberta Historical Resources Act*. This information is to be used to assist in planning the proposed project only. It is not to be disseminated, and no copies of this document are to be made without written permission of Historic Resources Management Branch, Alberta Culture and Community Spirit.



1.0 Executive Summary

Envirowest Engineering Inc. was retained by Dennis Dickau to assess the availability of groundwater resources for the proposed development of a 36 parcel rural residential subdivision. The site is located in Wetaskiwin County at W ½ , Section 32, Township 46 , Range 24 , West of the 4th Meridian. The assessment was based on information from the provincial water well database and resource maps for the area. No additional testing was undertaken as part of this study.

The estimated water use for the proposed development is 1250 cubic meters per household per year or 122.4 m³/day for all proposed parcels. This withdrawal rate represents between 24.5 and 55 percent of the average predicted long term safe pump rate for wells with sufficient data located in close proximity to the subject site. The long term safe pump rate is one which would unlikely impact water resources in the area and was based on a conservative estimate of 2/3 of the drawdown of the well being available for exploitation. An additional factor of 0.7 was applied to the safe withdrawal rate. If the groundwater availability was predicted based on a somewhat less conservative although realistic assumption that all wells reviewed were completed in confined aquifers, the withdrawal rate represents between 16 and 36.5 percent of that available.

This proposed development must be considered in relation to the area development and previously registered and licenced groundwater users. There is a large amount of residential development in the immediate area including a proposed 59 lot residential development on the east side of section 32. Even though the usage estimates are conservative, there could be long term impact in the area once the proposed developments are complete. It is recommended that wells completed for the development be subjected to testing to ensure groundwater availability for the user. A monitoring program was recommended for the 59 lot development. It is recommended that this proposed development participate in the monitoring program.

It is concluded that adequate water resources likely exist in the area of the proposed development. The predicted water withdrawal rate is not expected to adversely impact water quantity in wells in close proximity to the site.