


**SUBDIVISION APPROVING AUTHORITY ITEM
 PLANNING AND DEVELOPMENT REPORT TO COUNCIL
 SUBDIVISION APPLICATION
 October 2, 2024**

REQUEST FOR SUBDIVISION APPROVAL	
APPLICATION INFORMATION	FILE NO. F2103-06NE
	LEGAL DESCRIPTION: NE 06-21-03 W5M
	LANDOWNER: Delaine Fisher
	AGENT: Jeff Badke of Badke Consulting Ltd.
	AREA OF SUBJECT LANDS: 155.11 acres
	CURRENT LAND USE: Agricultural District
<p>PROPOSAL: Subdivision to create one 29.76 +/- acre Agricultural District first parcel out from the 155.11-acre quarter section, leaving +/- 120.21 acre Agricultural District balance.</p> <p>PLEASE NOTE: A land use application to support this proposal was refused on May 10, 2023, the details of that motion are listed below within the "Background" section of this staff report. The applicant is now requesting the Subdivision Approving Authority to provide a decision on the enclosed subdivision application, in order to appeal a potential refusal decision to the Land and Property Rights Tribunal.</p> <p>LOCATION: The subject parcel is located directly south of Highway 549, approximately 800 meters east of 288th Street West and approximately 4 kilometers west of the Hamlet of Millarville.</p>	
DIVISION NO: 3	COUNCILLOR: Barb Castell
FILE MANAGER: Brittany Smith	

PURPOSE OF REQUEST:

Request of the Subdivision Approving Authority to consider the subdivision application which proposes the creation of one 29.76 +/- acre Agricultural District parcel from NE 06-21-03 W5M, leaving a 120.21 +/- acre Agricultural District balance parcel.

BACKGROUND:

June 22nd, 2022, a Public Hearing took place regarding a land use amendment application to create one 31.26 +/- acre Agricultural District from the 155.11-acre Agricultural District parcel, leaving +/- 123.85-acre Agricultural District balance. At this time Council postponed their decision to allow administration time to obtain additional information regarding easement access, road allowance, and road access.

July 13th, 2022, administration provided Council with the additional information regarding easement access, road allowance, and road access. Upon review of this information, Council postponed their decision a second time and requested the applicant provide a revised site plan illustrating access to the highway from the balance parcel via a panhandle on either the east or west side of the parcel. In addition, Council requested information regarding the developability

of the panhandle and suitability of the proposed approach location to meet Alberta Transportation requirements.

May 10th, 2023, the agent submitted a revised site plan and accompanying letter addressed to Council as well as a supporting technical memorandum to address the requirements noted in Council's July 13th, 2022 postponement motion. The submission was reviewed by both the Public Works department and Alberta Transportation and Economic Corridors and they had no concerns.

Council refused the application for an amendment to the Agricultural District land use rules to allow for the future subdivision of one new 29.76 +/- acre Agricultural District parcel, leaving a 120.21 +/- acre Agricultural District balance for the following reasons:

In consideration of Policy 2 of the Agriculture section of the MDP2010, Council did not find sufficient merit in the proposal to consider removing the subject lands from the Agricultural Land Use District. In addition, Council is not supportive of the proposed access and feels that the application is contrary to MDP agriculture policy regarding access and the County's Land Use Bylaw Sec 9.1 regarding access to the proposed balance parcel.

SITE CONSIDERATIONS:

Physiography:

The proposed +/- 29.76-acre parcel is relatively flat with some rolling topography around the proposed south property line adjacent to the creek and has flat to rolling terrain throughout consisting mostly of grassland.

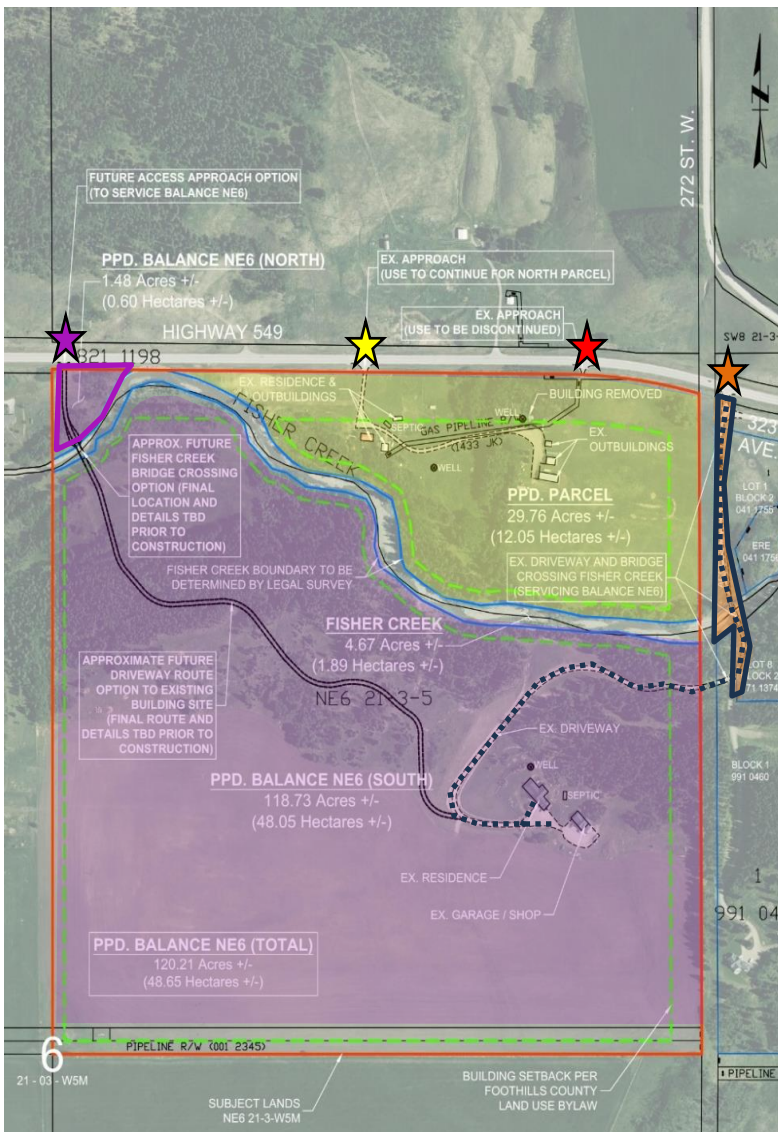
The balance 120.21-acre parcel has substantial elevation change moving from north to south. The proposed north property line adjacent to the creek is the lowest point and the highest point of the parcel is located along the south property line. South of the creek there is a distinct incline of approximately 30 metres or 98 feet in elevation change. This elevation change occurs over approximately 100 metres moving south from the creek through an existing driveway leading to an existing dwelling and oversized garage/shop.

Existing Development:

The proposed +/- 29.76-acre has an existing dwelling, four sheds, garage, a Quonset, an open agricultural building, along with a water well and septic system. One of the existing sheds does not appear to meet the required front yard setback. However, this structure is considered a non-conforming structure. The structure is approximately 65 metres from the centerline of Highway 549W when it should be located 70 metres from the centerline.

The balance 120.21-acre parcel has an existing dwelling, a garage/shop, along with a water well and septic system.

ACCESS:



CURRENT ACCESS:

Proposed Parcel (shown shaded in yellow):

Most westerly existing approach off of Highway 549 will provide access to the proposed +/- 29.76 acre parcel. *The location of this approach is shown by the yellow star.*

Most easterly existing approach off of Highway 549 is to be fenced off. *The location of this approach is shown by the red star.*

Balance Parcel (shown shaded in purple):

Existing approach from Highway 549 via a shared private driveway with a bridge crossing over Fisher Creek will provide access to the proposed balance parcel. *Approach location shown by the orange star and existing driveway shown by the dotted black lines.*

The approach and shared private driveway also provides access to 2 other properties via 3 access easement agreements. The access easement area is identified under access right-of-way plan 9910461 and is shown shaded in orange.

A comprehensive review of the easement agreements was completed by the landowner's legal counsel and because of their comments, the landowner would be willing to obtain a new access easement agreement that ensures adequate protection of the current access for the balance lands.

FUTURE ACCESS:

Proposed Parcel: No changes proposed from what is outlined above for current access.

Balance Parcel: Should future issues arise regarding the current access by way of easement, the site plan also illustrates the following potential future access to the balance lands that would not require any easements:

- The northwest portion of the subject quarter section that lies north of Fisher Creek and adjacent to Highway 549 is proposed to be maintained within the proposed boundaries for the balance parcel. *This area is approximately 1.48 acres and is shown shaded and outlined in purple.*
- A future approach location from Highway 549 to the lands described in point 1 has been identified on the site plan. *Possible future approach location is shown by the purple star.*

- An analysis was conducted by the agent and confirmed that the existing topography is suitable for the construction of the future approach and a new private driveway with a new bridge crossing at the westerly side of the proposed balance. *The approximate future driveway location is shown by the solid black lines.*
- No concerns were noted by the County's Public Works department.

ALBERTA TRANSPORTATION COMMENTS REGARDING ACCESS:

Alberta Transportation has advised that dedication of a service road running from the northwest corner of the existing quarter section, south to the proposed new property line dividing the proposed north and south parcels shall be required. The width of this service road shall be to an acceptable municipal standard.

Public Works has advised the width of the service road requirement to be 30m.

Please note: Full circulation response from Alberta Transportation and Economic Corridors has been provided in Appendix B of this staff report.

MUNICIPAL RESERVE:

Section 663(a) of the Municipal Government Act and the County's Municipal Reserve Policy, set out that reserves are not required to be provided when one lot is to be created from a quarter section.

REFERRAL CIRCUALTION:

CIRCULATION REFERRALS	
REFEREE	COMMENTS
INTERNAL	
Public Works	Public Works expressed no comments or concerns
Rural Addressing	If alternate approach is created in future, this could lead to address changes for the balance parcel.
EXTERNAL	
Alberta Transportation & Economic Corridors	<ul style="list-style-type: none"> • Requirements of Section 18 are met, no variance is required. • Requirements of Section 19 are not met. To ensure future access management requirements are met a service road is required. Pursuant to Section 20(1) of the Regulation, Transportation and Economic Corridors does not grant approval from the subdivision authority to vary the requirements of Section 19 of the Regulation, and will accept service road dedication as described below: <ul style="list-style-type: none"> - The proponent is advised that the ATEC shall require the dedication of a service road running from the northwest corner of the existing quarter section, south to the proposed new property line dividing the proposed north and south parcels. The width of this service road shall be to an acceptable municipal standard (30m as per Public Works).

CIRCULATION REFERRALS	
	<ul style="list-style-type: none"> • ATEC provides the following additional comments: <ul style="list-style-type: none"> - The easternmost access to Highway 549 from northernmost proposed parcel shall be removed at time of subdivision.
Telus	No concerns with proposed activities
Atco Gas	No Objection – existing Utility Right of Way
Atco Pipelines	No Objections
PUBLIC	
Landowners (adjacent)	No Submissions

POLICY EVALUATION

The application has been reviewed within the terms of the South Saskatchewan Regional Plan (SSRP), the Municipal Development Plan (MDP2010), and Land Use Bylaw 60/2014.

This proposal is not aligned with the policy direction within the South Saskatchewan Regional Plan (SSRP). The most relevant policy sections of the SSRP are related to the Efficient Use of Land and Economy sections with respect to reducing the fragmentation of agricultural lands and the efficient use of land section with respect to utilizing the minimum amount of land necessary for new development and reducing the conversion of land for other uses.

Policy 2 of the Agricultural Section of the MDP2010 states the MD supports maintaining the integrity of the agricultural land base and discourages the fragmentation of agricultural land, including the subdivision of land into smaller agricultural parcels.

Policy 5.3 of the Agricultural Section of the MDP2010 states the parcel should have year-round physical and legal access to a developed MD roadway.

Section 9.1.1 of the County's Land Use Bylaw 60/2014 states that all newly created parcels must have a direct legal, physical access. Further, Section 9.1.5 states an easement agreement or easement does not constitute legal access unless a future road dedication or utility right of way has been registered over the easement area and the County has become a party to the easement to ensure that it cannot be removed without Council resolution.

REQUEST OF THE SUBDIVISION APPROVING AUTHORITY:

The Subdivision Approving Authority is respectfully requested to provide a decision with regards to the application for subdivision of one new 29.76 +/- acre Agricultural District parcel from NE 06-21-28 W4M, leaving a 120.21 +/- acre Agricultural District balance parcel.

Please note: there is no Land Use approval in place for this application.

Staff has provided the following option for the Subdivision Approving Authority to consider:

SUBDIVISION REFUSAL

The Subdivision Approving Authority may choose to refuse the subdivision of one 29.76 +/- acre Agricultural District parcel from Ptn. NE 06-21-28 W4M, leaving a 120.21 +/- acre Agricultural District balance parcel for the following reasons:

In consideration of Policy 2 of the Agriculture section of the MDP2010, Council did not find sufficient merit in the proposal to consider removing the subject lands from the Agricultural Land

Use District. In addition, Council is not supportive of the proposed access and feels that the application is contrary to MDP2010 Agriculture Policy 5.3 and Section 9.1 of the County's Land Use Bylaw 60/2014 regarding access to the proposed parcel.

Further, the application for amendment to the Agricultural Land Use District for NE 06-21-03 W5M to allow for the future subdivision of one 29.76 +/- acre Agricultural District parcel was refused by Council on May 10, 2023, and therefore the proposed subdivision does not comply with Land Use Bylaw 60/2014.

APPENDICES:

APPENDIX A: MAP SET

LOCATION MAP

SITE PLAN

ORTHO PHOTO

APPENDIX B:

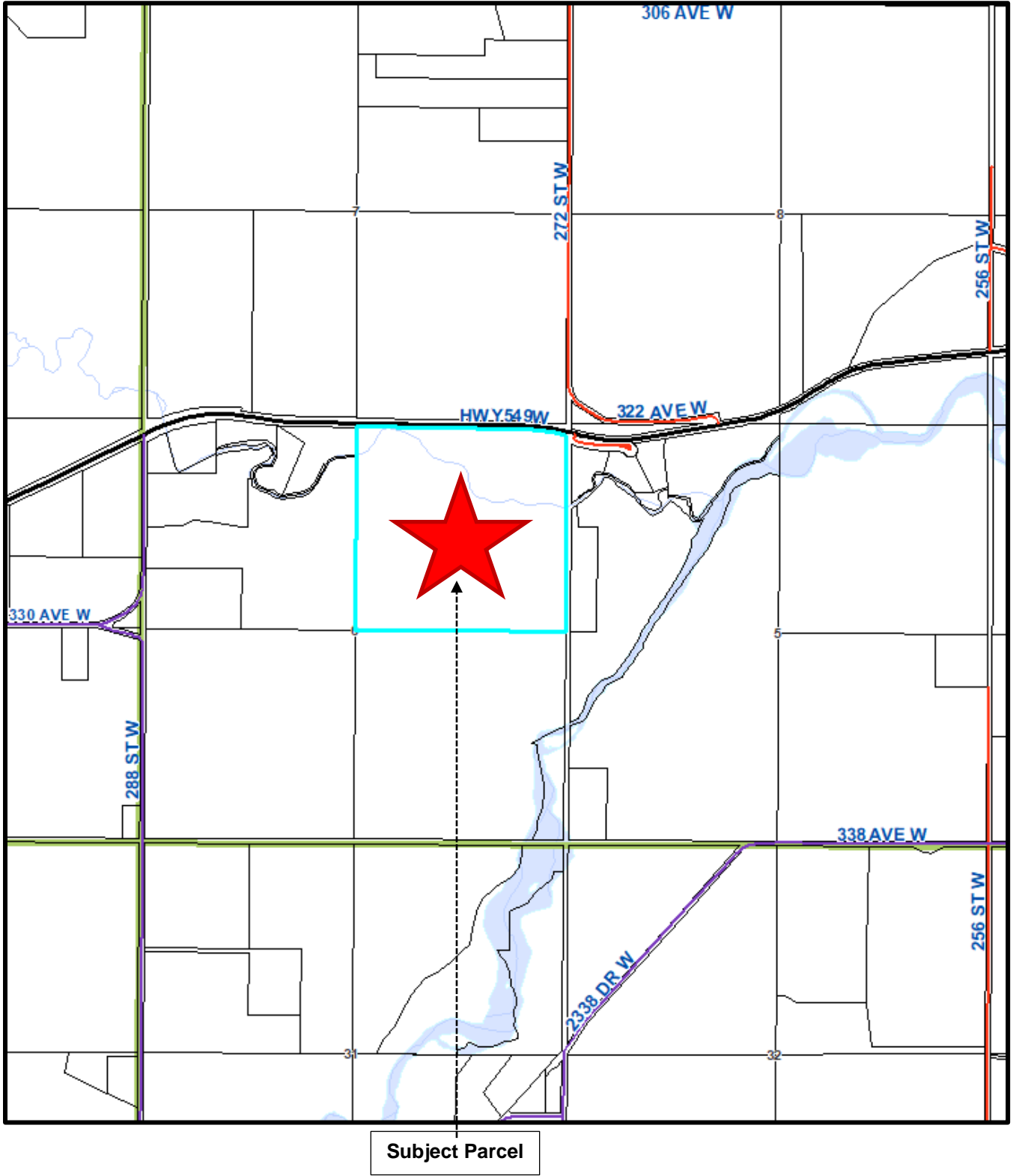
ALBERTA TRANSPORTATION CIRCULATION RESPONSE

ALBERTA TRANSPORTATION MAP RE: SERVICE ROAD LOCATION

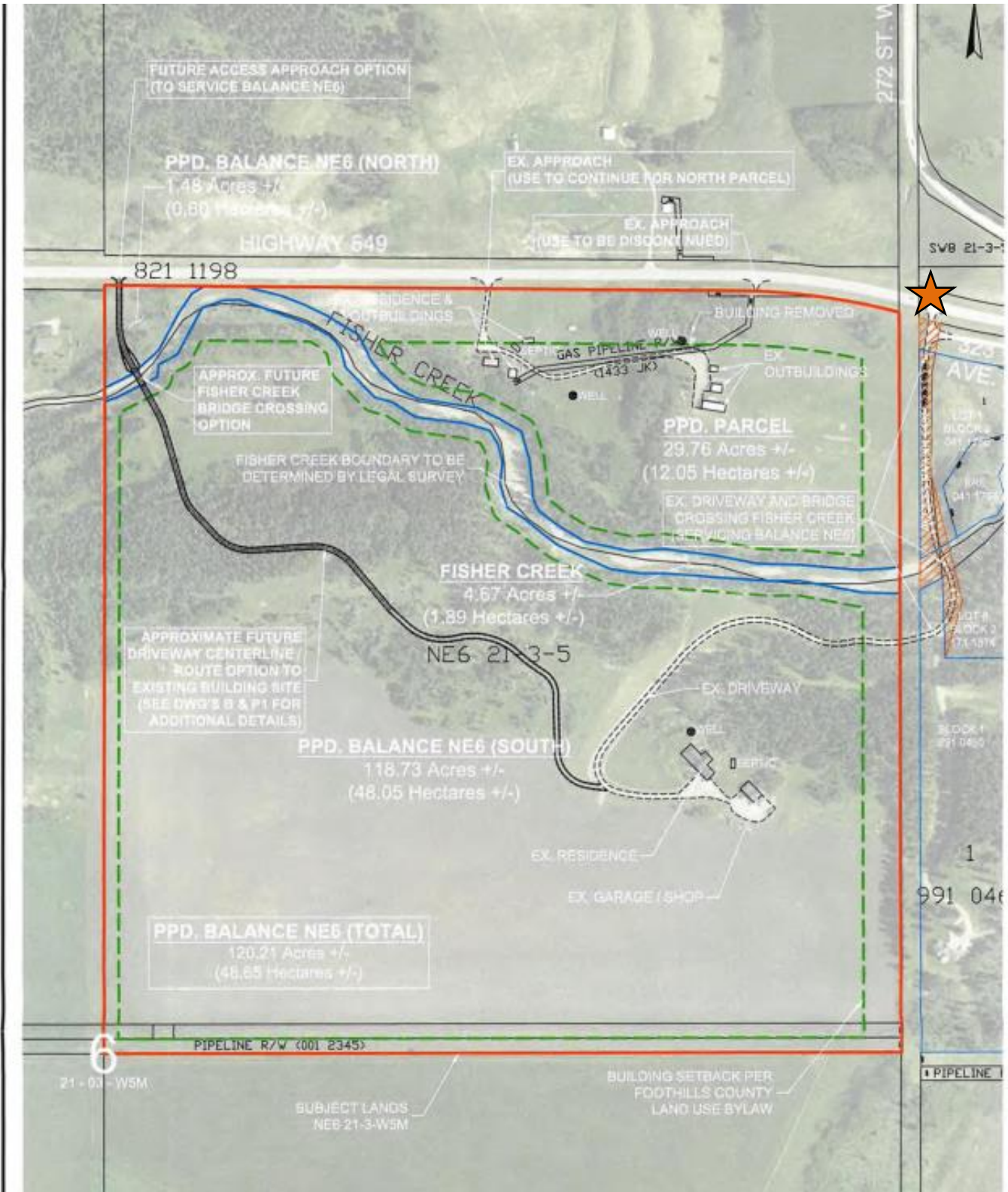
APPENDIX C:

COVER LETTER AND TECHNICAL MEMO PROVIDED BY AGENT

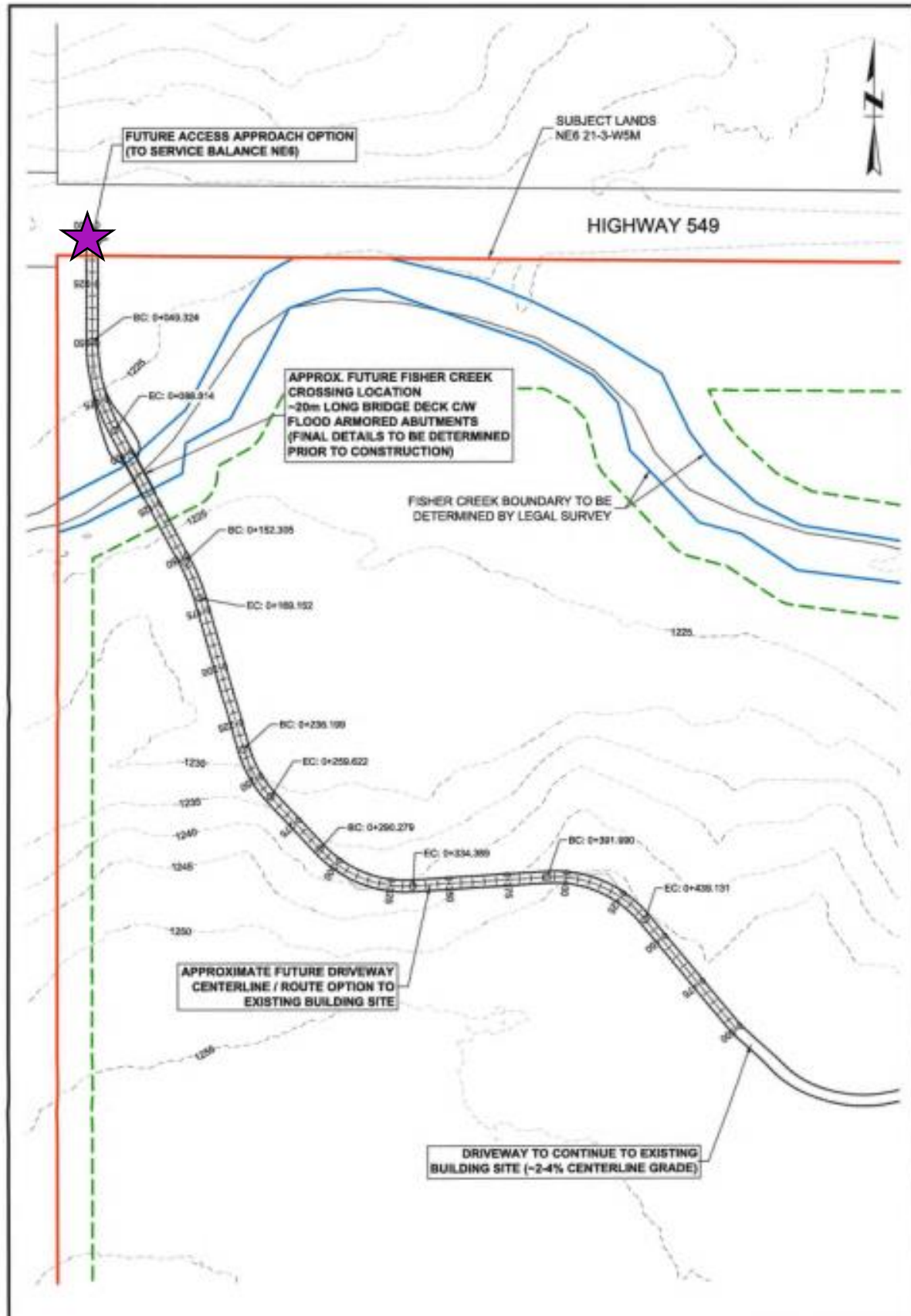
APPENDIX A: LOCATION MAP



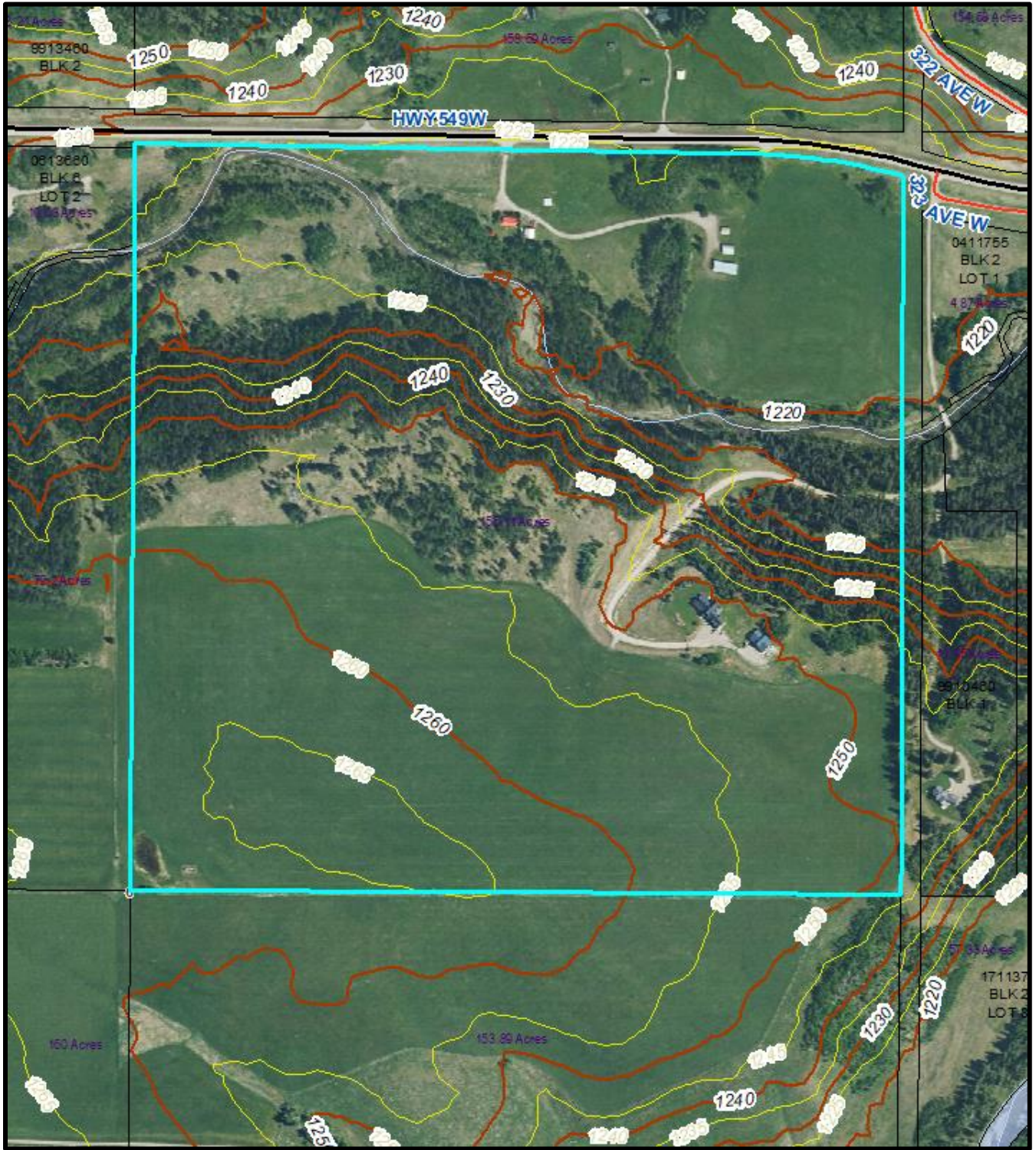
APPENDIX A: SITE PLAN – (preferred access - orange star)



APPENDIX A: SITE PLAN (optional access, if issues with existing easement arise - purple star)



APPENDIX A: ORTHO PHOTO

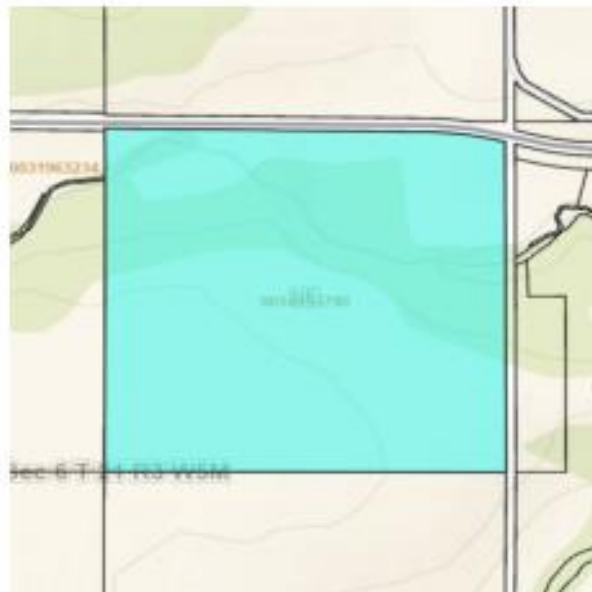


APPENDIX B: ALBERTA TRANSPORTATION & ECONOMIC CORRIDORS CIRCULATION RESPONSE

Transportation and Economic Corridors Notification of Referral Decision

Subdivision in Proximity of a Provincial Highway

Municipality File Number:	F2103-06NE	Highway(s):	549
Legal Land Location:	05-NE SEC-06 TWP-021 RGE-03 MER-5	Municipality:	Foothills County
Decision By:	Evan Nelsen	Issuing Office:	Southern Region / Calgary
Issued Date:	2024-06-27 09:06:56	Appeal Authority:	Land and Property Rights Tribunal
RPATH Number:	RPATH0043456		
Description of Development:	Subdivision proposing one new +/- 29.76 acre Agricultural District 1st parcel out		



This will acknowledge receipt of your circulation regarding the above noted proposal. The subsequent subdivision application would be subject to the requirements of Sections 18 and 19 of the Matters Related to

Subdivision and Development Regulation (The Regulation), due to the proximity of Highway(s) 549

Transportation and Economic Corridors offers the following comments with respect to this application:

The requirements of Section 18 are met, therefore no variance is required. While no variance is required, the department expects the municipality will mitigate the impacts from this proposal to the highway system, pursuant to Policy 7 of the Provincial Land Use Policies and Section 648(2)(c.2) of the Municipal Government Act.

The requirements of Section 19 of the Regulation are not met. To ensure future access management requirements are met a service road is required. Pursuant to Section 20(1) of the Regulation, Transportation and Economic Corridors does not grant approval for the subdivision authority to vary the requirements of Section 19 of the Regulation, Transportation and Economic Corridors will accept service road dedication as described below:

The proponent is advised that the Alberta Transportation and Economic Corridors (TEC) shall require the dedication of a service road running from the northwest corner of the existing quarter section, south to the proposed new property line dividing the proposed north and south parcels. The width of this service road shall be to an acceptable municipal standard.

Transportation and Economic Corridors has the following additional comments and/or requirements with respect to this proposal:

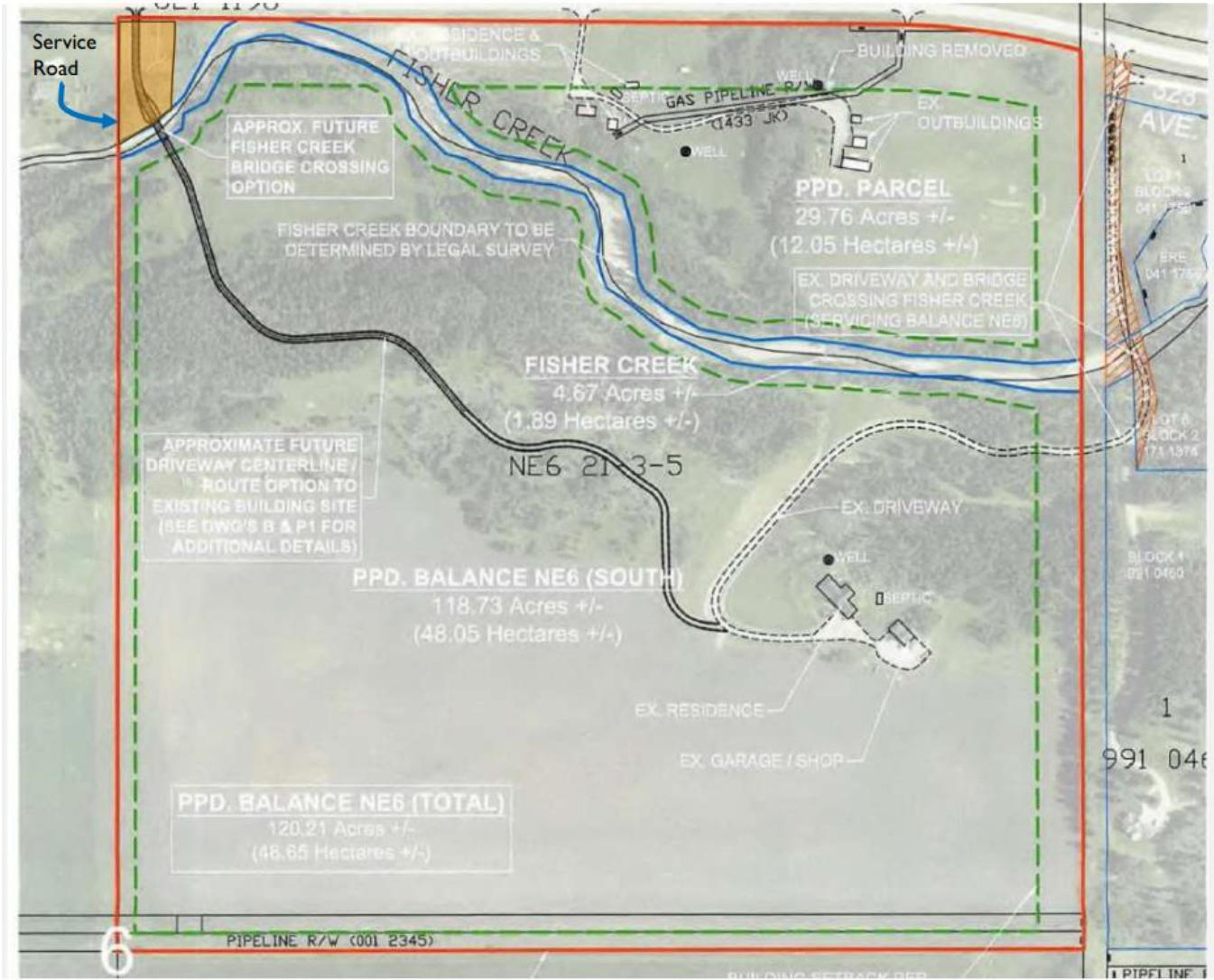
1. The department expects that the municipality will mitigate the impacts of traffic generated by developments approved on the local road connections to the highway system, pursuant to Policy 7 of the Provincial Land Use Policies and Section 618.4 of the Municipal Government Act
2. TEC shall require that the easternmost access to Highway 549 from northernmost proposed parcel shall be removed at time of subdivision.
3. The proponent is advised that the Alberta Transportation and Economic Corridors (TEC) shall require the dedication of a service road running from the northwest corner of the existing quarter section, south to the proposed new property line. The approximate location of this service road has been illustrated in an uploaded map for your reference.

Please contact Transportation and Economic Corridors through the [RPATH Portal](#) if you have any questions, or require additional information.



Issued by **Evan Neilsen, Development and Planning Tech**, on **2024-06-27 09:06:56** on behalf of the Minister of Transportation and Economic Corridors pursuant to *Ministerial Order 52/20 – Department of Transportation and Economic Corridors Delegation of Authority*

APPENDIX B: ALBERTA TRANSPORTATION MAP RE: SERVICE ROAD LOCATION



APPENDIX C: COVER LETTER & TECHNICAL MEMORANDUM PROVIDED BY AGENT

BADKE
CONSULTING Ltd.

Suite 2, Bay 2, 87 Elizabeth Street, Box 238, Okotoks, Alberta T1S 1A5
p. (403) 982-7773 - f. (403) 278-3734
info@badkeconsulting.com

Civil Engineering - Planning - Surveying

May 6, 2024

Foothills County
P.O. BOX 5695,
High River, Alberta
T1V 1M7

Attention: Samantha Payne, Application Coordinator

Re: **Fisher Lands – Subdivision Application**
NE 6-21-3-W5M

The attached application is being made on behalf of **Delaine Fisher**, owner of the subject lands which are 155.1 acres (more or less) in area.

The purpose of this application is to allow for the subdivision of a new Agricultural District parcel comprised of the portion of the subject lands that lie north of Fisher Creek.

- The new parcel is proposed at approximately 29.76-acres +/- and is the first parcel out of the parent quarter section;
- The 120.21-acre +/- balance of the quarter is to remain Agricultural District;
- The proposed parcel and balance lands are naturally separated by Fisher Creek. The attached plans show the location and size of the existing and proposed parcels, as well as Fisher Creek;
- We note that the proposed and balance parcel sizes are subject to verification of the current north and south banks of Fisher Creek to be conducted by future legal survey.

As supportive information, we are enclosing the following:

1. Application form for subdivision,
2. Credit Card Authorization form for \$3100, that is, \$1000 application fee times one new lot, plus \$100 filing fee, plus \$2000 subdivision appeal deposit,
3. An area context plan, aerial photograph plan, and lot plan, all showing the proposed and balance parcels,
4. Current Land Title,
5. Letter of agency,
6. Abandoned well site form and map.

Additional background information regarding this application is included in the attached discussion. We trust the foregoing to be in order; please feel free to contact the undersigned should you have additional questions with respect to this application.

Yours truly,

Badke Consulting Ltd.



Jeff Badke, Principal

cc. Delaine Fisher, Landowner

FISHER LANDS NE6 21-3-W5M

1-LOT SUBDIVISION

The proposed first parcel out subdivision is described as follows:

Location of Subject Lands

The Subject Lands, on which the Agricultural District subdivision is proposed, is located within Division 3 in the westerly region of Foothills County. These lands are located approximately 5km west of the Hamlet of Millarville.

Legal Description

The subject lands are legally described as

THE NORTH EAST QUARTER OF SECTION SIX (6)
TOWNSHIP TWENTY ONE (21)
RANGE THREE (3)
WEST OF THE FIFTH MERIDIAN
CONTAINING 64.7 HECTARES (160 ACRES) MORE OR LESS
EXCEPTING:
PLAN NUMBER HECTARES ACRES
ROAD 8211198 1.930 (4.77)
CUT-OFF 8211198 0.049 (0.12)
EXCEPTING THEREOUT ALL MINES AND MINERALS AND THE RIGHT TO WORK SAME.

These lands are identified on the attached plans and are owned by Delaine Fisher.

Zoning

The subject lands are currently zoned Agriculture District (A) and the new parcel and balance lands are proposed to remain zoned as Agricultural District.

Area Description

The region of Foothills County in which the subject lands are located primarily contain agricultural parcels, with some farmstead isolations and Country Residential development. Topography in the area is of high relief, consisting of v-shaped valleys, with moderate to steep sloped terrain. Vegetation in the region consists of mixed coniferous and deciduous forest with interspersed hay/grazing lands. Primary access to the lands is by way of Highway 549, which bounds the lands at the north.

Description of the Subject Lands

The subject lands are an unsubdivided quarter section located west of 272 Street West and south of Highway 549. Topography is comprised of gently rolling hayfield within the southerly portion of the quarter, with a pronounced slope dropping approximately 25m to Fisher Creek. Fisher Creek, runs from

west to east through the northerly portion of the subject lands. North of Fisher Creek, the lands are gently rolling, with areas of moderate relief. Vegetation in the lands consist of mixed coniferous and deciduous forest with interspersed hay/grazing lands.

An existing building site is in north of Fisher Creek approximately at the mid-point east to west. This building site is comprised of several outbuildings, as well as a log-house, which is one of the original Fisher homestead buildings. On the south side of Fisher Creek, at the top of the slope, a newer single-family residence and shop are found near the easterly side of the quarter.

Proposed Subdivision

The proposed 29.76-acre parcel is comprised of the portion of the subject quarter that lay north of Fisher Creek, excepting the 1.48-acre +/- triangular shaped portion of land in the north-west corner of the quarter section. Fisher Creek serves as a natural division between the proposed 29.76-acre parcel and the 120.21-acre +/- balance of the quarter section.

As part of the estate process of the applicant's late husband, it is the applicant's intention to sell the balance lands, while retaining the 29.76-acre portion. These lands were the original Fisher family homestead, and it is the applicants desire to keep this portion within the family.

Access

Proposed Parcel Access

Access to the existing building site within the 29.76-acre parcel is by way of an existing paved approach from Highway 549, as shown on the attached drawings. Access for the proposed 29.76-acre parcel is proposed to remain as-is. Use of a second existing approach, to the east, is proposed to be discontinued.

Balance Lands Access

The building site on the balance lands is serviced by way of an existing approach off a portion of existing municipal roadway, 272 Street West. A gravelled driveway, shared with a portion of Lot 8 Block 2 Plan 171 1374 and Block 1 Plan 991 0460, crosses Fisher Creek via an existing bridge. This shared access is subject to existing Easement and Access Right of Way Agreements. These agreements are registered with Alberta Land Titles as instruments 991040922, 041192936 and 201161826 and reference registered Access Right of Way Plan 991 0461. On the south side of Fisher Creek, the driveway heads to the west, traversing the slope to the existing building site.

This existing shared access arrangement benefits having multiple landowners utilizing a single bridge crossing over Fisher Creek:

- Lowered potential environmental and hydrologic impacts due to reduced crossing locations,
- Multiple landowners sharing the responsibility for maintenance and long-term care of the bridge crossing makes sense as costs are not solely borne by a single landowner.
 - This has been the case to date, with the current landowners using the driveway and bridge working together on historical maintenance and repair.

As the proposed subdivision does not introduce any additional users of the existing bridge crossing, there is no reason to expect that these mutual benefits would not continue in the future. Currently, only

2 lands utilize the driveway for access. That is, the applicant's land (NE6-21-3-W5M) and the Block 1, Plan 991 0460. Lot 8, Block 2, Plan 171 1374, is currently undeveloped. Access to the 120.21-acre +/- balance of the quarter is proposed to remain as-is.

An alternate to the current existing access is available by way of a possible future approach from Highway 549 at the north-west corner of the Subject Lands. The 1.48-acre +/- triangular shaped portion of land in the north-west corner of the quarter section provides direct access for the balance of the quarter to Highway 549.

Additional discussion and detail regarding existing and future access to both the proposed and balance parcels is contained in a technical memo previously prepared for the applicant. This technical memo is included in Appendix A.

Water and Sewage

Both existing building sites are fully serviced, with existing water wells and private sewage disposal systems. No changes to these systems are proposed at this time.

Closure

We trust we have provided sufficient information for Council approval of this application. Please feel free to contact us if you require any additional information.

Sincerely,

Badke Consulting Ltd.

A handwritten signature in blue ink, appearing to read 'Jeff Badke', with a long horizontal flourish extending to the right.

Jeff Badke, Principal

cc. Delaine Fisher, Landowner

Technical Memorandum

Date: 2023-02-11 (rev.1 2023-03-29)
To: Delaine Fisher
From: Jeff Badke
Project: First Parcel Out Subdivision, NE6 21-3-W5M, Foothills County, Alberta
Re: Potential Future Access Analysis

Purpose and Background

Delaine Fisher has engaged Badke Consulting Ltd. to conduct a review of potential future access to the portion of the NE6 21-3-W5M (Subject Lands) that lie south of Fisher Creek. This requirement arose in relation to a Foothills County Land Use Amendment application to allow for the subdivision of a first parcel out of the parent quarter section.

The Subject Lands are an unsubdivided quarter section located west of 272 Street West and south of Highway 549. Topography is comprised of gently rolling hayfield within the southerly portion of the quarter, with a pronounced slope dropping approximately 25m to Fisher Creek. Fisher Creek, runs generally from west to east through the northerly portion of the Subject Lands. As the creek enters the Subject Lands from the west, it bends to the north-east, intersecting with the Highway 549 road allowance. This effectively isolates a small triangular portion of the Subject Lands, approximately 1.5-acres in size, from the rest of the lands to the north of the creek. The creek continues to the south-east and the easterly out of the Subject Lands. North of Fisher Creek, the lands are gently rolling, with areas of moderate relief. Vegetation in the lands consist of mixed coniferous and deciduous forest with interspersed hay/grazing lands.

An existing building site is located in north of Fisher Creek approximately at the mid-point east to west. This building site is comprised of several outbuildings, as well as a log-house, which we understand to be one of the original Fisher family homestead buildings. On the south side of Fisher Creek, at the top of the slope, a newer single-family residence and shop are found near the easterly side of the quarter.

The proposed subdivision aims to split the quarter section into 2 titles, generally along Fisher Creek, which provides a natural division.

Our analysis includes a geometric review of existing access to both building sites. In addition, we have reviewed a potential access point located at the north-west corner of the quarter section, should alternate access be required in the future. This includes a geometric review of a potential new approach off Highway 549, plus driveway and bridge crossing Fisher Creek to provide access to the lands to the south of Fisher Creek. The potential new access location has been analysed for the purpose of confirming that future construction is feasible. Detailed analysis and design is required prior to construction.

Existing Access

North Building Site

Access to the existing building site north of Fisher Creek is by way of a paved approach, generally perpendicular to the south shoulder of Highway 549. Based on a height-of-eye at 1.05m and an object height of 1.30m, sightlines along Highway 549 from the existing approach are approximately 330m to the east and 710m to the west, both of which are adequate for residential use. A cattle-guard is located at the property line, with a graveled 4-metre average width driveway providing access to the building site. Driveway grades to the existing building site range between 0.5% and 7.5%. No geometrical concerns were noted with the existing north building site approach and driveway. The location of the existing north building site approach and driveway is identified on the attached site plan, Dwg. A.

It is noted that a second approach off Highway 549 to the lands north of Fisher Creek is located approximately 270m east. Use of this approach is understood to be discontinued.

South Building Site

The building site on the lands to the south of Fisher Creek is serviced by way of an existing approach south, off a portion of existing municipal roadway, 272 Street West. The existing intersection at 272 Street West and Highway 549 is controlled by stop sign for road users entering onto the highway.

From the approach, a gravelled driveway, shared with Lot 8 Block 2 Plan 171 1374 and Block 1 Plan 991 0460, heads south over a portion of Lot 1 Block 2 Plan 041 1755 before crossing Fisher Creek via an existing bridge. On the south side of Fisher Creek, the driveway heads generally southerly to a 'y'-intersection, with Block 1 Plan 991 0460's driveway continuing south. From the approach to just north of the 'y'-intersection, the driveway falls entirely within the area shown on registered Access Right of Way Plan 991 0461. This area is shown with orange hatching on attached Dwg. A. Currently, there is no approach or driveway providing further service to Lot 8 Block 2 Plan 171 1374. Driveway access for the Subject Lands continues west from the 'y'-intersection, crossing a portion of Block 1 Plan 991 0460 and undeveloped road allowance, before traversing the slope to the existing building site located at the top. For reference, the location of the existing access route is identified on the attached site plan, Dwg. A.

The existing bridge crossing Fisher Creek is approximately 5.5m wide by 20m in length and comprised of steel structural elements and timber decking. At the time of our site inspection, the bridge crossing appeared to be in good working order; detailed structural inspection and analysis is outside of the scope of this review. It is noted that maintenance responsibilities for the bridge crossing are shared between the landowners of NE6 21-3-W5M, Lot 8 Block 2 Plan 171 1374 and Block 1 Plan 991 0460 by way of an existing easement agreement registered on the affected titles.

Existing driveway grades range between 0.3% and 5.5% for the flatter portions to the north of the slope. The portion of the driveway that traverses the slope within the Subject Lands reaches a maximum grade of 13.5%. This section is a long straight run up the slope, shallowing out at the top of the slope as the driveway curves east towards the south building site.

No geometrical concerns were noted with respect to the existing south building site approach, driveway and bridge crossing. The driveway and bridge crossing should be regularly maintained and kept in good repair, including consistent snow removal in the winter months.

Potential Future Access to South Building Site

While the existing access driveway and bridge crossing appear adequate in their existing condition, a review of a potential alternate access at the west side of the quarter has been undertaken.

Future Approach Location

In order to provide direct access to the balance of the Subject Lands to the south of Fisher Creek, inclusion of the small isolated 1.5-acre triangular portion of land located in the north-west corner with the balance title is required. This effectively provides direct access to Highway 549, should it be required.

A potential future approach location off Highway 549 was identified as suitable. Its location is shown on the attached site plans, Dwg. A & B. Preliminary discussions with Alberta Transportation and Economic Corridors indicated that the department had no concerns with the access proposal. Based on a height-of-eye at 1.05m and an object height of 1.30m, sightlines along Highway 549 from the existing approach are approximately 700m to the east and 340m to the west. Determination of final sightlines along Highway 549 is subject to future detailed design and analysis.

Future Driveway and Fisher Creek Crossing

From the potential future approach location, a driveway route, first crossing Fisher Creek and subsequently traversing to the top of the slope, was selected for analysis. Final selection of driveway route, creek crossing location and type is subject to detailed design and analysis at the time of construction and may reasonably differ from the location analysed.

Utilizing the selected route, existing topography was analysed in order to provide a preliminary determination of required driveway grades and creek crossing bridge geometry. Plan view of the driveway route is identified on Dwg. A & B. Profile view of the potential driveway grade is shown on Dwg. P1. Along the analysis route, grades ranging between 3% and 12% were utilized, suitable for all-season access for residential and agricultural use, subject to suitable surfacing and maintenance.

For the Fisher Creek crossing location, a bridge deck approximately 20m in length, similar to that in current use on the existing driveway route, is expected to be suitable. The analysed crossing location, including preliminary bridge deck and abutment locations, is shown on the attached drawings. Final construction materials are to be determined at the time of construction, and could include steel, timber, concrete, or suitable combination. The bridge abutments will require adequate armouring to prevent erosion damage from typical creek flows, as well as high flow flood events. Detailed analysis and design for a future bridge crossing is required at the time of construction.

Conclusions and Recommendations

Based on our analysis, the existing access to both the north and south building sites are adequate for typical residential and agricultural use. Existing driveways and bridge crossing should be regularly maintained and kept in good repair, including consistent snow removal in the winter months.

In the event that alternate access to the lands south of Fisher Creek be required for any reason, a suitable approach location off Highway 549 is available. A revision to the proposed subdivision plan is required to include the small triangular portion of land in the north-west corner of the Subject Lands, providing direct access to Highway 549.

The purpose of our analysis is to confirm if construction of alternate access is feasible. A driveway route and creek crossing location similar to what we have analysed can provide suitable alternate access to the lands south of Fisher Creek. At the time of construction, detailed design should incorporate suitable optimizations including construction material cut / fill balance and minimization of construction footprint.

Closure

This technical memorandum was prepared by Badke Consulting Ltd. ("Badke") for the sole use of Delaine Fisher and the approving Development Authority. Its content represents Badke's best judgement based on the information available at the time of its writing.

Please contact the undersigned should you have any questions.

Yours truly,

Badke Consulting Ltd.

Reviewed by,



Jeff Badke, Principal Consultant



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ID# 15855

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