

Blamire, Susan

From: Fitzgerald, Matthew
Sent: Sunday, June 13, 2021 7:34 PM
To: Blamire, Susan
Subject: FW: (Revised) Planning Referral RZ00004-2650 Copperfield Rd
Attachments: Letter - Response to Comments.pdf; ATT00001.htm; Trip Generation Study.pdf; ATT00002.htm; Current - Memo re Pedsrtian Crossing Options.pdf; ATT00003.htm

Hi Sue,

Can you please treat this as public hearing correspondence.

Thanks,

Matthew Fitzgerald RPP MCIP

Manager of Development Planning

P: 250-334-4441 (ext. 7255)

E: mfitzgerald@courtenay.ca

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From: Consulting [<mailto:tim@timothyne.com>]
Sent: Sunday, June 13, 2021 3:20 PM
To: Fitzgerald, Matthew
Cc: Thompson Rex
Subject: Re: (Revised) Planning Referral RZ00004-2650 Copperfield Rd

Matthew,

Thanks for your recommendation. Attached below are:

1. Letter summarizing the two studies,
2. Trip Generation Study from McElhanney
3. Memorandum from Current Environmental.

If you think there is something else that should be provided, please let me know.

Tim

Timothy Nye

Land Planning - Development Consulting - Project Management

(604) 720-3685

Email: tim@timothyne.com

Webpage: <http://timothyne.com>

On Jun 11, 2021, at 1:11 PM, Fitzgerald, Matthew <mfitzgerald@courtenay.ca> wrote:

Hi Tim,

I recommend that this information is summarized in a letter from you or the owner with the table and other information attached. This will be provided to Council at the Hearing so it would be beneficial to have a bit of an introduction/summary to tie this information together.

Matthew Fitzgerald RPP MCIP

Manager of Development Planning

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From: Nye Timothy [<mailto:tim@timothynye.com>]

Sent: Thursday, June 10, 2021 9:52 AM

To: Fitzgerald, Matthew

Cc: Thompson Rex

Subject: (Revised) Planning Referral RZ00004-2650 Copperfield Rd

Matthew,

Attached below are two documents responding to Councillors' comments during 2nd reading of our application. One is a "high level" traffic study of the estimated increase in traffic along Copperfield Rd. due to our proposed development. The other is an environmental assessment of the construction of an additional stream crossing to accommodate a trail connection from our proposed development to the existing trail above Steele Crescent.

With regard to the traffic study, I have also attached the accompanying email from Neil Penner for your information.

Can you make these documents available to Council or should I send them to the Councillors directly?

Thank you

Tim

Timothy Nye

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TIMOTHY NYE

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June 12, 2001

Mayor and Council
City of Courtenay

Re: (Revised) Planning Referral RZ00004-2650 Copperfield Rd.

At the Council meeting of May 3 our development application received 2nd reading. During the meeting it was noted by Councillor Hillian that there have been concerns expressed by the residents on Copperfield Road regarding the potential increase in traffic due to the proposed development. It was also suggested by Councillor Frisch that we consider the possibility of another trail connection linking the east end of our proposed development to the existing trail above Steele Crescent. This letter is an effort to properly address those issues.

Traffic

To give Council an idea of the likely increase in traffic we asked McElhanney Consulting to do a “high level” traffic study (attached) to determine the potential increase in traffic along Copperfield Road. The study determined:

- there would be an additional 336 trips per day;
- during morning peak hours between 7am and 9am there would be 24 trips per hour;
- during evening peak hours between 4pm and 6pm there would be 32 trips per hour;
- the 20 off-peak hours would see 222 trips or an average of 11 trips per hour (1 trip every 5.5 minutes).

Trail Connection

To understand the environmental and regulatory impacts we asked Current Environmental to assess the impact of another stream crossing. Their assessment is attached.

Existing Crossing

- the channel is well confined within its banks and is not subject to issues associated with floodplain activation that could undermine the function of the crossing structure;
- connecting the existing crossing with the proposed development should not require additional impacts to sensitive riparian or in-stream aquatic habitat.

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- there are no wetland habitats or their associated riparian setbacks within a concerning distance of the trail extension to the existing crossing.

Steele Crescent Crossing

- the section of channel surrounding this proposed location is lower gradient with an active floodplain that is already somewhat constricted between an existing pedestrian trail and development lots north of Steele Cresc. and the south side of Lot D off Copperfield Road;
- establishing a new trail on the north side of Piercy Creek would require partial clearing of a maturing forest stand and riparian vegetation that would otherwise be outside the influence of development and result in additional impacts;
- this crossing site would necessitate additional impacts to the forested riparian area of Tributary 11;
- Provincial Riparian Areas Protection Regulation (RAPR) Implementation Guidelines state that “The construction of formal trail networks within the SPEA are not supported”;
- approval under the WSA for a second pedestrian/cyclist crossing site is unlikely in consideration for the potential impacts to riparian habitat and additional floodplain constrictions that could lead to increased flooding risk to nearby properties;
- because of the substantial width of the active floodplain at this location (approx. 25 m minimum based on 100 year floodplain drawing) culvert options would not be applicable and a clear span bridge with abutments located outside the floodplain may need to be set back further resulting in a large span that may require a complex/expensive engineering solution;
- Current Environmental recommends that the existing crossing structure at Bickle St. be maintained and do not support the establishment of an additional site at Steele Cresc.

If Council has additional questions concerning these items I will be pleased to answer them to the best of my ability during the Public Hearing.

Thank you.



Tim Nye

To: Tim Nye
From: Dusty Silvester, R.P.Bio

Date: June 10, 2021
Pages: 2
Project: 2030

Cc: Rex Thompson

RE: ALTERNATIVE PEDESTRIAN/CYCLIST CROSSING SITES - LOT A COPPERFIELD

The development proposal for Lot A Copperfield Road includes provisions for connecting existing pedestrian/cyclist pathways from the neighbouring development to the south with new infrastructure proposed for the subject property. Currently, a crossing exists across the Piercy Creek mainstem north of Bickle Street associated with the Swanson Street development. Our understanding of the initial intent of this crossing was to connect the residences around Swanson Street with a future connection towards Arden School that was installed as a requirement of the City's Swanson Street development approval process.

Recently an alternative pedestrian/cyclist crossing site was suggested in a recent meeting of City of Courtenay Council for consideration north of the Steele Cres. SRW along the northeastern boundary of the Lot A Copperfield Development. This memorandum is intended to review the pros/cons for both sites in the context of environmental impact and provide a recommendation for the preferred location.

1. Bickle Street Crossing (existing)

- a) The existing ellipse culvert crossing over the Piercy Creek mainstem north of Bickle Street associated with the Swanson Street development was established in a reach of the creek with a steeper gradient and a channel well confined within its banks that is not subject to issues associated with floodplain activation that could undermine the function of the crossing structure.
- b) Connecting the existing crossing with proposed development on the subject property should not require additional impacts to sensitive riparian or instream aquatic habitat except for some clearing of vegetation to establish a connection between the trail and new infrastructure to the north.
- c) There are no wetland habitats or their associated riparian setbacks within a concerning distance of the trail extension to the existing crossing.

2. Steele Crescent Crossing (alternate)

- a) An alternative crossing site north of the Steele Cres. SRW was suggested in a recent meeting of City Council that would be located immediately downstream of the confluence between the Piercy Creek mainstem, flowing from the west, and Tributary 11 which drains wetlands on DL95, the neighbouring parcel to the northwest.
- b) The section of channel surrounding this proposed location is lower gradient with an active floodplain that is already somewhat constricted between an existing pedestrian trail and development lots north of Steele Cres. and the south side of Lot D off Copperfield Road.

Memorandum

Anecdotally, the owner at Lot D Copperfield has stated issues/concerns with flooding in their backyard that has threatened to reach the house foundation in the past.

- c) Establishing a new trail on the south side of Piercy Creek would require partial clearing of a maturing forest stand and riparian vegetation that would otherwise be outside the influence of development and result in additional impacts.
- d) This crossing site would necessitate additional impacts to the forested riparian area of Tributary 11 as it would effectively parallel the stream on its left (east) bank and require locating it within the Streamside Protection and Enhancement Area (SPEA) between Steele Cres. and Copperfield Road.
 - i. Best management practices dictate that crossings should be situated perpendicular to channel flows to minimize the area of impact to surrounding riparian vegetation.
 - ii. Provincial *Riparian Areas Protection Regulation* (RAPR) Implementation Guidelines¹ state that “The construction of formal trail networks within the SPEA are not supported”. Approval for crossing structures are, however, regulated under the provincial *Water Sustainability Act* (WSA).
 - iii. Approval under the WSA for a second pedestrian/cyclist crossing site is unlikely in consideration for the potential impacts to riparian habitat and additional floodplain constrictions that could lead to increased flooding risk to nearby properties.
- e) Fish passage criteria calls for native bed materials being retained within crossing structures that allow options for either an ellipse culvert, arch culvert, or clear-span bridge. Because of the substantial width of the active floodplain at this location (approx. 25 m minimum based on 100-year floodplain drawing) culvert options would not be applicable and a clear span bridge with abutments located outside the floodplain may need to be set back further resulting in a large span that may require a complex/expensive engineering solution.

Conclusion

The existing crossing structure north of Bickle St. will require little to no additional disturbance to aquatic and riparian areas and will not interact with any wetland habitats. The alternative site at Steele Cres. would require establishing trail connections parallel to and within the SPEA of Tributary 11, and potential constrictions to the floodplain where flood risk is already present.

Considering the above information, and in order to avoid and mitigate unnecessary environmental impacts, we recommend that the existing crossing structure at Bickle St. be maintained and do not support the establishment of an additional site at Steele Cres.

Please feel free to contact the undersigned with any comments or questions.

Sincerely,



Dusty Silvester, R.P.Bio.
Current Environmental Ltd.

¹ https://www.neef.ca/uploads/library/8210_MOE2006_Riparian_Guidebook.pdf

Table 1: Trip Generation Summary

Development Type	Land Use Code ¹	Description	Units	# of Units	Period ⁴	Trip Rate	In / Out Ratio		Trips		
							IN %	OUT %	IN	OUT	Total
Townhome	220 ²	Low-Rise Multifamily Housing	Dwelling Units	6	Daily	7.32	50	50	22	22	44
					AM	0.46	23	77	1	2	3
					PM	0.56	63	37	2	1	3
Triplex	220 ²	Low-rise Multifamily Housing	Dwelling Units	9	Daily	7.32	50	50	33	33	66
					AM	0.46	25	75	1	3	4
					PM	0.56	63	37	3	2	5
Duplex	210 ³	Single-Family Detached Housing	Dwelling Units	2	Daily	9.44	50	50	9	9	18
					AM	0.74	25	75	0	1	1
					PM	0.99	63	37	1	1	2
Single-Family	210	Single-Family Detached Housing	Dwelling Units	22	Daily	9.44	50	50	104	104	208
					AM	0.74	25	75	4	12	16
					PM	0.99	63	37	14	8	22
TOTAL					Daily		168	168	336		
					AM		6	18	24		
					PM		20	12	32		

1. From ITE Trip Gen Manual, 10th Edition

2. Low-rise multifamily housing includes apartments and townhouses with at least three other units

3. Trip generation rates for single-family detached housing were used to remain conservative

4. AM and PM rates correspond to peak hour of adjacent street traffic