

Yamnuska Village Dead Man's Flats

Conceptual Scheme



Prepared for: Dead Man's Development Ltd.
Prepared by: John Third and Greg Birch
Architectural Design by: Ellard Design Group
Engineering by: McElhanney Ltd.
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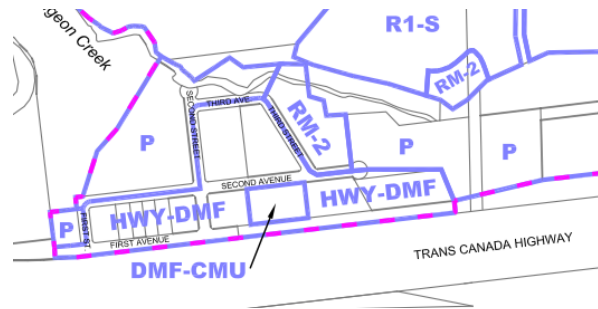
Appendix A - Site and Building Plans, and Design Renderings

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1. Introduction

Dead Man's Development Inc. is proposing to expand the existing Yamnuska Suites motel on Lot 4, Block 3, Plan 1612266 in the Hamlet of Dead Man's Flat's. This will be done through removal of the older detached dwelling currently on the property and the addition of three new multi-use buildings. The existing motel structure will be retained. The name proposed for this new development is Yamnuska Village.

The development permit application process required by Municipal District of Bighorn Land Use Bylaw No. 09-Z/18 (LUB) will be followed. The property is in the Dead Man's Flats Commercial Mixed Use (DMF-CMU) District of the LUB, and this District requires preparation of a Conceptual Scheme prior to application for the development permit. Section 18.7.5 of the LUB established the issues to be addressed in the Conceptual Scheme and this document, including its appendices, addresses those issues.



Subject DMF-CMU District Property

2. Lot Layout and Development Overview

Drawings A-0 and A-1 of the attached Appendix A show the existing and proposed site plans for the project. Key elements of the redeveloped site are:

- Removal of the existing detached dwelling.
- Retention and continued use of the existing motel structure, which contains 17 Visitor Accommodation units.
- Addition of three new mixed-use buildings:
 - Building A, comprising three stories and containing a 40-seat restaurant/pub, 5 Visitor Accommodation units and 12 Flexible Accommodation units.
 - Building B, two stories high and containing a 24-seat coffee shop, 2 Visitor Accommodation units and 2 Flexible Accommodation units. It will be 'attached' to the existing motel by a fire wall but, for Building and Fire Code reasons, will be a separate building with no internal passageway to the existing structure.
 - Building C, comprising three stories and containing an approximate 93 - 140m² (1,000 - 1,500 sq. ft.) of retail space, 5 Visitor Accommodation units and 12 Flexible Accommodation units.
- Retention of the existing property access from the Highway 1 (Trans-Canada Highway) off-ramp, with two new vehicle accesses off of 2nd Avenue and recognition that 2nd Avenue will be the primary orientation of the development as per the Dead Man's Flats Area Redevelopment Plan (ARP).
- On-site parking divided into three areas for easy access to all four buildings. Attractive carport-type coverings are proposed for a few parking stalls in recognition that some Flexible Accommodation

units will be occupied on a long term basis and those residents will desire vehicle shelters, especially in winter.

- Integration of the development into the community with a new sidewalk to be built along 2nd Avenue by the developer, together with shared private - public use amenity areas along this northern property boundary.

Appendix A also provides elevation drawings and the proposed floor plans of the new buildings. These are shown in drawings A-3 to A-6. The individual room layouts will be completed once the Conceptual Scheme is approved. Those room layouts will be provided as part of the development permit application. Generally, the rooms will be designed as either single suite or one-bedroom units, with the potential for a few two-bedroom units. All units will have either full kitchens or kitchenettes.

3. Density

The property is approximately 6,035 m² in area. Given the proposed building design, with a total floor area of about 3,695 m², the floor area ratio will be approximately 0.61.

The population density is more difficult to project because occupancy will change from day to day and with the season. Given this challenge, for the purposes of water and wastewater volume projections, the number of kitchen and bathroom fixtures has been used. This is addressed below and in attached Appendix B.

4. Phasing and Ownership Type

The new buildings will be constructed in alphabetical order, A to C, with the construction period estimated to be about a year. Perhaps more important to the phasing discussion is the intention that ownership of the four buildings will eventually be separated through a bare land condominium subdivision. Because the exact, surveyed positions of the buildings will be critical to establishing the property lines and boundaries for the bare land condominium units, the developer plans to start construction of the buildings before applying for the bare land condominium subdivision.

Ownership within the buildings themselves will be by a conventional condominium plan, prepared in accordance with the Alberta Condominium Property Act.

5. Pedestrian Steetscape

The Yamnuska Village development will help the MD of Bighorn achieve the Pedestrian Circulation objectives set out the Dead Man's Flats Area Redevelopment Plan (ARP). Those objectives are:

- *A circulation system consisting of pathways, sidewalks, courtyards and plazas terminates at common nodes.*
- *Uses are integrated to encourage human interaction and movement.*
- *Pedestrian safety is enhanced by the clear delineation of walkways from roadways.*

As can be seen from the attached Appendix A drawings and renderings, the intention is to construct a sidewalk on the edge of the 2nd Avenue right-of-way to allow easy access to the new development for local residents and visitors. The hope is that the MD of Bighorn will eventually continue that sidewalk to the junction of 2nd Avenue and 2nd Street. That intersection is identified in the Dead Man's Flats ARP as a major focal point for the community, with a "formal town plaza" to be located on the intersection's northwest corner.

The developer plans to blend the sidewalk into the onsite landscaping and pedestrian access points so as to create an integrated public - private open space area along the north side of the development. With a retail area (potential convenience store/liquor store), coffee shop and restaurant/pub, the Yamnuska Village development and the community will both benefit from this open area. In particular, the gazebo is intended as a place that can be used as a focal point for community gatherings and hosting local events, not just for Yamnuska Village residents and guests. There will also be pathways through the development site that, given the long term ARP direction for an extended 1st Avenue when the Highway 1 off-ramp is relocated, will allow pedestrian movement through the middle of the block.

6. Vehicle Access and Traffic Impact

Yamnuska Village will rely on three vehicle access points. The existing access on the Highway 1 off-ramp will be retained, with no reconstruction expected to be necessary. The existing 2nd Avenue property access will be removed and two new accesses will be constructed instead. These new 2nd Avenue accesses will be built to MD of Bighorn standards, with culverts to allow stormwater to pass below them. They will also be constructed with recognition given to the new sidewalk that will run along the property line, ensuring there is good visibility for both sets of users.

As can be seen from attached Appendix A drawing A-1, the easternmost 2nd Avenue access will be connected through on-site parking areas to the Highway 1 off-ramp access. In contrast, the westernmost access will 'dead-end' in an internal parking area. There will also be a limited-use vehicle approach onto 2nd Avenue for a garbage/recycling collection point in the northeastern corner of the property.

The Yamnuska Village motel rooms, longer term housing, restaurant/pub, coffee shop and retail area will increase traffic on Dead Man's Flats roads. However, these roads are not at capacity, and the extra traffic and turning movements related to the site's redevelopment are not expected to significantly affect existing traffic flows. Moreover, because of the pedestrian linkages that are being proposed, some of the business flows to the Yamnuska Village property will not involve vehicles. For instance, persons staying at the Copperstone Resort on the other side of 2nd Avenue will be able to easily walk across the road to take advantage of Yamnuska Village offerings. Similarly, persons living in the River's Bend residential area will be able to bicycle or walk to the property given the MD of Bighorn's intention to link the hamlet's various parts by an interconnected trail, path and sidewalk system (see Dead Man's Flat ARP Figure 7, not attached hereto).

7. Stormwater Management

Attached Appendix B describes in writing and illustrations (Figures C-200 and C-300) the conceptual stormwater management plan for the Yamnuska Village development project. McElhanney's design

follows the direction of the Dead Man's Flats ARP that stormwater be captured on site and dealt with through infiltration, incorporating features such as oil and grit separators, rain gardens and pervious landscaping.

McElhanney's conceptual stormwater management plan will be further refined for the development permit application. Essentially, though, it will comprise a collection system of four drainage catchbasins dispersed across the paved parking and driving surfaces that will drain to a common oil and grit separator. From there, the water will be directed to a drywell that provides approximately 49 m³ of underground storage volume. Combined with the surface trap lows and rain gardens, this system will handle the 1:100 year 1-hour storm event.

For the rare storm event that exceeds this capacity, stormwater will fill the underground system and, once this reaches capacity, will then drain overland into the drainage ditch along 2nd Avenue. As McElhanney notes, this emergency spill location is consistent with the current stormwater drainage from the property. The developer is not aware of any deficiencies with that 2nd Avenue drainage system or its ability to handle stormwater without issue. Additionally, McElhanney points out in its report that the oil and grit separator planned for the Yamnuska Village development will provide an improvement compared to the present situation. Proposed stormwater management will meet Provincial guidelines.

8. Municipal Water Service Demand and Connections

McElhanney's calculations for potable water demand are provided in attached Appendix B. Based on the development proposal, McElhanney estimates total water demand at 16 litres per second (l/s), peak day demand at 40 l/s, and peak hour demand at 80 l/s. McElhanney believes these estimates to be conservative given the estimation process it used, meaning water demand may be less than estimated.

The Yamnuska Village development will be connected to the nearby municipal water main in the 2nd Avenue right-of-way. Building A can be serviced from an existing water line stub that extends to the northeastern edge of the property. Buildings B and C will be connected to the water line that currently services the existing motel building. This site servicing is shown in Figure C-200 of Appendix B.

The required potable water will come from the MD of Bighorn's new (2013) Dead Man's Flats municipal water system. This system is connected to the Town of Canmore's water system, and the established "connection fee" will be paid to the MD by the developer at the time of development. This payment will contribute to the MD's recovery of the water system's construction costs.

9. Sanitary Sewage Flows and Connections

Sanitary sewage flows resulting from the Yamnuska Village development have also been calculated by McElhanney. They are detailed in Appendix B. Total sewage treatment demand is estimated at 16 l/s, with peak day demand projected to be 40 l/s and peak hour demand to be 80 l/s. These are the same as the above water requirements because McElhanney assumes that all water provided to the site will end up as wastewater. This is obviously a conservative (higher than likely) assumption but is useful for planning purposes.

The wastewater flows will be dealt with in a manner similar to the potable water flows. That is, an existing sewer stub extending to the northeastern property line will be used to connect Building A to the municipal sewer main situated in the 2nd Avenue right-of-way. Buildings B and C will be connected to the existing, on-site sewer line that currently serves the motel building. Once the wastewater reaches the 2nd Avenue municipal sewer main, it will gravity feed to an existing lift station in Dead Man's Flats. From there it is pumped by a series of lift stations to the Town of Canmore's sewage treatment plant. Again, the required municipal connection fee will be paid by the developer. It will serve as a proportional contribution to the cost of municipal sewerage.

10. Fire Protection and Suppression

The MD of Bighorn's policies regarding fire prevention reflect the Alberta Government's FireSmart initiative. Because the redevelopment project is within a hamlet, most of that FireSmart guidance does not apply. However, that guidance is applicable to construction materials. The Yamnuska Village buildings will have asphalt shingles for roofing, and asphalt shingles typically provide a Class-B fire resistance rating. The exterior finish of the buildings will be a combination of stone (real or manufactured) and Hardie board. Hardie board is about 90% sand and cement, which makes it extremely fire resistant.

The FireSmart guidelines also apply to landscaping. Only a preliminary landscaping plan for the Yamnuska Village development project has been prepared to date, but the developer intends to incorporate both coniferous and deciduous vegetation into the final design. Coniferous trees and shrubs are more susceptible to fire but are often superior for some landscaping purposes because they are 'green' year round. Consequently, the landscape plan will seek a balance in the use of coniferous and deciduous trees and shrubs in recognition of the relative benefits and drawbacks of both vegetation types. The landscaping plan will ultimately have to be acceptable to the MD of Bighorn because this is part of the development permitting process.

For fire suppression, the buildings will adhere to the requirements of the Alberta Fire Code and the Fire Underwriters Survey (FUS). In particular, the intention is to instal fire sprinklers on all floors of the new buildings. McElhanney's preliminary engineering calculations also indicate the need for a new fire hydrant in order to meet the 60 m hydrant radius coverage for commercial structures. This is shown in Figure C-200 of attached Appendix B, with the new hydrant supplementing two 2nd Avenue hydrants already in place. The new hydrant will be of the type and standard required by the MD of Bighorn, and will be installed by the developer.

Emergency site access and egress is also apparent from the provided site plans. As can be seen from the attached Appendix A drawings, the easternmost 2nd Avenue property access will be connected through on-site parking areas to the Highway 1 off-ramp access. This flow-through vehicle connection will facilitate emergency access and egress for the Yamnuska Village property, and allow flexibility for fire trucks and other emergency vehicles responding to a fire or other event. The requirements of Land Use Bylaw Section 3.12, Fire Prevention and Emergency Access, and of the MD of Bighorn's Fire Department will be met though discussions to occur during the development permit application phase of the project.

11. Conclusion

In conclusion, the proposed Yamnuska Village development has been designed to meet the policies and regulations of the Dead Man's Flats Area Redevelopment Plan and the Land Use Bylaw. The development will be connected to existing hamlet infrastructure at negligible cost to the MD of Bighorn because the developer will install the necessary connections, from road approaches to water and sewer lines. The development will also contribute to recovery of the MD's already-expended costs of municipal water and sewage infrastructure. Yamnuska Village will add visitor and residential units to the existing supply in Dead Man's Flats, as well as bring new retail and restaurant options to the community. Finally, the Yamnuska Village project will contribute to the MD's efforts to expand pedestrian linkages and public gathering areas.