

PALLISER TRAIL AREA STRUCTURE PLAN

TOWN OF CANMORE



Final Report

*Prepared by
Southwell Trapp & Associates Ltd.
for
Alberta Social Housing Corporation
May 17th, 2000*

TOWN OF CANMORE

BYLAW 34-99

PROVINCE OF ALBERTA

BEING A BYLAW TO ADOPT THE PALLISER AREA STRUCTURE PLAN OF THE TOWN OF CANMORE, IN THE PROVINCE OF ALBERTA

WHEREAS

The Municipal Government Act, R.S.A. Part 17, Section 617, provides that a Council of a Municipality may adopt plans and measures for the purpose of achieving the orderly, economical and beneficial development and use of land;

WHEREAS

Section 633 of the Municipal Government Act R.S.A., 1994, as amended, provides that a Council of a Municipality may for the purpose of providing a framework for subsequent subdivision and development of an area of land within the Municipality, adopt an Area Structure Plan;

WHEREAS

Part 4, Section 3.3, Subsection I and Part 6, Section 4, Subsection g, of the Municipal Development Plan (Bylaw 30 -- 98) state that an area structure plan is required for the Palliser area;

NOW THEREFORE

The Municipal Council of the Town of Canmore in the Province of Alberta, duly assembled, hereby enacts as follows:

1. This Bylaw may be cited as the "Palliser Area Structure Plan Bylaw"
2. The Palliser Area Structure Plan is attached hereto as Schedule "A" and forms part of this bylaw.
3. This Bylaw comes into full force and effect on the date of the Third and Final Reading.

FIRST READING: October 5, 1999

SECOND READING: May 16, 2000

THIRD READING: May 16, 2000


MAYOR


DESIGNATED OFFICER

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SECTION 1: INTRODUCTION

The land that is governed by this Plan is located within the Town of Canmore and is strategically situated adjacent to the Trans Canada Highway on the doorstep to Banff National Park and the UNESCO Rocky Mountain World Heritage Site.

It is the purpose of this Plan to provide a framework to guide future subdivision and development that will lead to an environmentally sensitive urban environment to complement this unique site and gateway location.

The Palliser Trail Area Structure Plan is a planning document designed to provide policies and guidelines for the future development of 23.9 hectares (59 acres) of land located adjacent to Palliser Trail and the Trans Canada Highway. **Exhibit 1** shows the site location within the Town context and **Exhibit 2** shows the site boundary and main physical features.

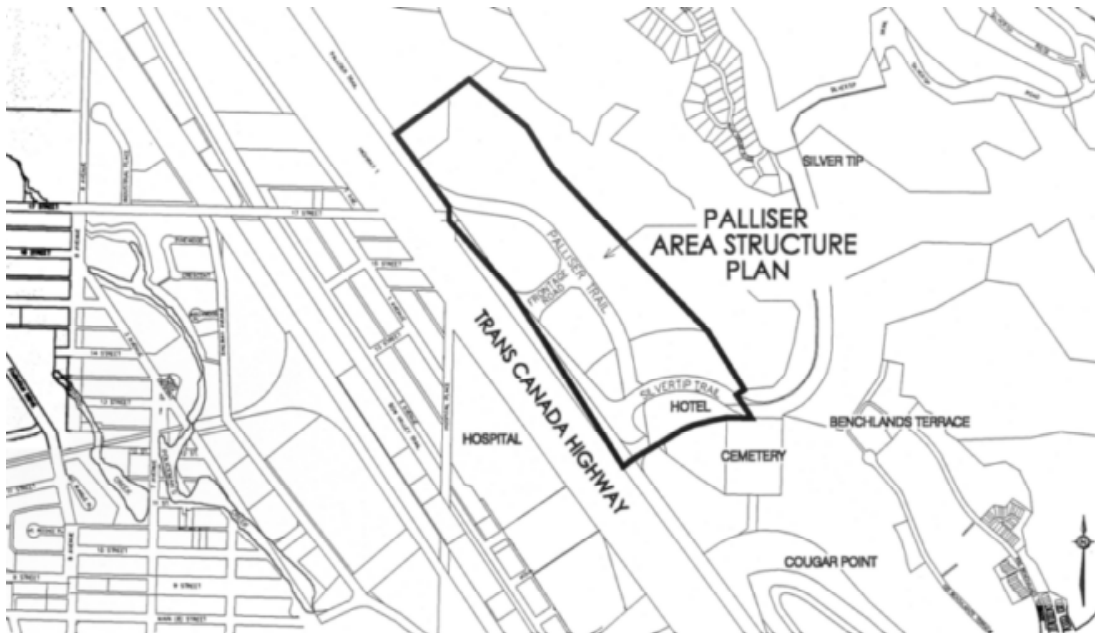


EXHIBIT 1

1.1 STATUTORY FRAMEWORK

The plan is prepared in accordance with the provisions of the Municipal Government Act and policy requirements established in the Town of Canmore Municipal Development Plan (Bylaw 30-98). The Municipal Development Plan indicates that prior to any land use redesignation an Area Structure Plan shall be approved by Council.

In addition, Section 14(e) of the Subdivision and Development Regulation (AR 212/95) states that: "Subject to Section 16, a subdivision authority must not in a municipality other than a city approve an application for subdivision if the land that is subject of the application is within 0.8 kilometres of a highway where the posted speed is 80 kilometres or more unless the land is contained and permitted within an area structure plan satisfactory to the Minister of Transportation and Utilities."

Section 16 gives the Minister of Infrastructure authority to waive the requirements of Section 14.

Part 6, Section 4.0, Subsection d) of the Municipal Development Plan establishes the general content requirements of the Area Structure Plan including: development phasing, land uses, open space distribution, transportation and utility servicing as well as policies addressing design guidelines, architectural controls, visual and environmental impacts.

The SilverTip Master Plan approved by Council will continue to be the primary planning and policy document covering Block 18, Plan 931 2238 and Block 17, Plan 971 1512.

SECTION 2: GOALS AND OBJECTIVES

2.1 GOAL

The primary goal of the Palliser Trail Area Structure Plan is to support the vision, objectives and policies set out in the Municipal Development Plan. Importance is placed on attracting high quality and environmentally sound uses, some of which may have provincial, national and international significance. These key uses will be complemented by high quality residential, commercial and cultural activities designed to provide visitors and Canmore residents with an attractive, vibrant residential/commercial/cultural area that contributes to the Town's development as a community and is sensitive to adjacent uses and the surrounding natural environment.

2.2 GENERAL OBJECTIVES

The general objectives for the Palliser Trail Area Structure Plan are:

- a) To encourage a mix of high quality, residential, cultural and commercial land uses, which reinforce the "gateway" location to the Town of Canmore and to the Rocky Mountains which including features of international significance such as the UNESCO Rocky Mountain World Heritage Site,
- b) To clearly identify developable and non-developable lands within the Palliser area and to minimize environmental impact on areas considered to be a wildlife corridor,
- c) To provide a policy plan for an attractive residential and commercial development area which implements the goals and objectives contained in the Municipal Development Plan,
- d) To provide a basis for orderly planning, subdivision and development in the Palliser Trail area which will contribute to the Town's commercial assessment base,
- e) To provide flexibility for other non-commercial uses which support and compliment the commercial activity,
- f) To ensure that future development and utility servicing is planned and constructed in a logical phased sequence and does not restrict development potential of the existing R3 and EHD zoned lands to the west,
- g) To preserve the integrity of adjacent land uses, and

- h) To incorporate the visual components, including views, architecture and landscaping elements into the overall planning and development of the Palliser Trail commercial area.



Existing Four Points Sheraton Hotel

SECTION 3: LAND USE CONCEPT AND POLICIES

3.1 **LAND USE CONCEPT**

The proposed land use concept for the Palliser Area is shown on the Land Use Concept Plan, **Exhibit 3**.

Non-developable Lands (Future Environmental Reserve): This category includes a portion of the lower SilverTip Wildlife corridor and environmentally significant areas generally to the east and northeast which include steeper sloping lands. It is proposed that these lands remain in a natural state and ultimately be transferred to the Town of Canmore as Environmental Reserve or other open space designation through the normal rezoning process.

Developable Lands (Future Development Areas and Future Municipal Reserve): The second land use category, which includes the balance of the Palliser Area, is proposed primarily for cultural and commercial development and related uses, however residential development may also be appropriate in these areas. It is not the intention of Council that this area develop as a traditional highway commercial district. High quality visitor orientated uses intended to serve the traveling public may be encouraged along with complementary cultural, business, residential and open space components. Council may consider additional or different uses where these are deemed to be consistent with section 2.1 and do not degrade the function of the area as a gateway to Canmore. The area will provide for the efficient movement of vehicles, future transit circulation, bicycle and pedestrian movement.

Existing Zoned Lands: The plan recognizes existing R-3 and EHD zoned lands to the northwest have considerable development potential for higher density residential uses and related activities and that vehicular, pedestrian and utility linkages will be required through the Palliser area to serve these lands.

SilverTip Master Plan: Lands within Blocks 17 and 18 in the southerly portion of the study area are subject to the plans and policies contained within the SilverTip Master Plan document approved by Council. It is proposed that the SilverTip Master Plan remain the primary planning document for these lands unless superseded by a formal Area Structure Plan. Council may consider reclassification of the existing Direct Control zoning following adoption of the Palliser ASP.

3.2 POLICY AREAS

Policy Areas: For ease of identification and policy planning, the Palliser area has been divided into four Policy Planning Areas A-D as shown on **Exhibit 4**.

3.2.1 POLICY AREA A (Gross Area 5.6 Hectares)

Overview – Policy Area A includes the treed, steeper sloping environmentally significant lands along the east edge of the study area and an area of coniferous tree vegetation immediately adjacent to Palliser Trail and its intersection with Frontage Road. This flatter area adjacent to Palliser Trail does not technically meet the criteria for environmental reserve. However, ASHC has agreed to dedicate these lands as environmental reserve, at the time of subdivision, in order to ensure protection of the existing vegetation and continuity of the wildlife corridor. Policy Area A abuts existing Environmental Reserve lands owned by the Town (Lot 7 ER, Block 1 Plan 861 0873), and includes a portion of the lower SilverTip Wildlife corridor. Slopes are generally in the 15 – 35 percent range. The following policies relate to those portions of Policy Area A within Block 5 only. Land within Block 18 will be dealt with in the review process for the Silvertip Master Plan.

Policies (Block 5 lands only)

- a) **No new development shall be permitted in the area.**
- b) **As future subdivision occurs in the Palliser Area, the integrity of Policy Area A (and the associated Lower Silvertip wildlife corridor), shall be maintained through:**
 - **protection of the land as environmental reserve or other appropriate natural open space designation,**
 - **the creation of non development buffers within lots,**
 - **the implementation of protection and construction management plans as adjacent lands develop, and**
 - **Use of “Wildlands Conservation” zoning.**
- c) **Existing utility installations and maintenance access requirements will be permitted but any expansion should be discouraged.**
- d) **Exact boundary locations for future Environmental Reserve will be established at the time of subdivision and land use redesignation.**
- e) **The long term use of existing walking trails through this area shall be subject to review based on the Town policies adopted for human use controls within designated wildlife corridors.**

3.2.2 POLICY AREA B (Gross Area 4.5 Hectares)

Overview - Located on the northwest edge of the study area and north of Palliser Trail, this area includes 3.3ha of the most westerly portion of Block 5 and 0.87 hectares owned by the New Life Christian Center (Block A Plan 6416 JK). The area is generally flat with some minor slope in the 6 to 15 percent range along the eastern boundary. This eastern edge is also the most sensitive from an environmental standpoint as it lies adjacent to the Lower SilverTip wildlife corridor and supports mixed coniferous and deciduous tree stands. Other treed areas include aspen stands within and adjacent to the Church property. The remainder of the site has been cultivated and supports grassy vegetation. Existing development includes a residential style building on the church property.

Development opportunities include good access from Palliser Trail, generally flat or gently sloping topography and attractive south and west mountain views.

Potential Uses – This parcel has an attractive and unique setting within the study area although it is perhaps less attractive for commercial uses requiring visibility from the highway or direct access from higher traffic volumes. Consideration should be given to encouraging larger high profile extensive uses such as convention facilities, visitor accommodation, cultural and institutional uses. Residential use, including employee housing, is also considered suitable for this area. A single use comprehensive design is preferred but if future subdivision is required the design should encourage larger deeper lots backing proposed Environmental Reserve areas (Policy Area A). Building setbacks and natural buffer strips should be provided to help preserve existing treed areas and minimize impacts on the wildlife corridor. A municipal reserve parcel of 0.4ha (1.0 acres) will be provided in the north corner of Policy Area.

Policies

- a) **Encourage a mix of more extensive commercial or quasi commercial uses such as convention facilities, visitor accommodation and cultural establishments as well as employee housing components.**
- b) **Building form and architectural detailing shall reflect the unique alpine setting of Canmore as specified in the Architectural and Urban Design Standards for Commercial Development in the Town of Canmore.**
- c) **The environmental effects of construction and development of lots adjacent to Palliser Policy Area A shall be minimized through development and implementation of environmental protection measures.**
- d) **A minimum 15 meter undisturbed natural buffer shall be provided as shown on the Land Use Concept, Exhibit 3.**
- e) **Some vegetation management, where required to reduce fire risk, may be permitted within the buffer zone provided it forms part of an overall environmental protection plan for the proposed development.**

- f) Existing tree stands outside the designated buffer strip shall be maintained where possible and integrated into the overall site planning and landscaping design.
- g) Further subdivision will be considered by the approving authority. However, further subdivision will require comprehensive concept planning with particular attention to building envelopes, building orientation, use of existing treed areas within development parcels, view potential, parking and landscape design.
- h) Lot sizes less than 0.5 hectares (1.2 acres) shall be discouraged.
- i) A 12 m wide landscaped strip shall be provided within all lots fronting Palliser Trail and visible from Highway 1.
- j) A municipal reserve site of 0.4 hectares (1.0 acres) shall be provided in the north corner of Policy Area B as shown on Exhibit 3. This will be dedicated as municipal reserve to the Town at the time of subdivision and will constitute the extent of municipal reserve owing by ASHC for Block 5.

3.2.3 POLICY AREA C (Gross Area 6.9 Hectares)

Overview – Policy Area C includes Block 5 lands between Palliser Trail and Highway 1 and a 0.5 hectare area east of Palliser Trail. These areas were created by the realignment of Palliser Trail during the development of the new highway access/egress road works by Alberta Transportation. Several remnant road areas were also created adjacent to the Highway 1, and it is proposed that these be consolidated with the adjacent lands in Blocks 5 and 18.

The lands between Palliser Trail and Highway 1 contain no special natural features and have been disturbed and replanted to grass following the intersection construction. A sewage lift station is located in the south corner of Area C. Development constraints include higher noise levels adjacent to the highway, no direct access from Highway 1, limited access from Frontage Road, noise from the generator at the lift station, potential smell from the lift station, service vehicles accessing the lift station, and no natural screening or tree cover.

Positive attributes for commercial development include, “gateway” location, attractive view potential, high visibility, high traffic volumes and relatively easy vehicular access from Palliser Trail. The land area east of Palliser Trail is gently sloping with some tree stands and attractive south and west views. Close proximity to the wildlife corridor will require sensitive treatment as set out in Section 3.3.4. Existing treed areas along this edge should also be preserved where possible or integration of this vegetation into the landscaping component of the development through development setbacks.

Potential Uses - Council will encourage high quality comprehensive development proposals on both sites west of Palliser Trail. Developments of local, provincial,

national or international importance will be encouraged. Supporting tourism orientated uses including high quality visitor services and activities, mixed use commercial, retail, employee housing, apartment rental, and perpetually affordable housing components will also be encouraged. However, large scale retail stores and expansive surface parking will be prohibited. High quality architectural design and landscaping will be essential. Due to potentially higher traffic noise levels, residential components should be set back from Highway 1, based on an acoustic evaluation. Acoustic buffering should be incorporated into residential or mixed use development adjacent to Highway 1. A public utility lot (PUL), to accommodate the existing sewage lift station and possible storm water facility, will be required on the lower lands adjacent to the Highway,

Smaller scale retail and service uses will be encouraged within this Policy Area on the lands east of Palliser Trail. Potential uses include neighbourhood commercial, boutique retail, arts and crafts studios and other specialty stores. A related residential component may be considered above commercial uses. An integrated approach to planning this area, together with the adjacent portion of Block 18 immediately to the south, will be encouraged.

Policies

- a) A mix of tourism orientated uses and services shall be encouraged including visitor accommodation and facilities as well as mixed retail outlets to serve residents and visitors.**
- b) Building form and architectural detailing shall reflect the unique alpine setting of Canmore as specified in the Architectural and Urban Design Standards in the Land Use Bylaw.**
- c) A visual impact assessment to analyze potential impact of new development adjacent to Highway 1 will be required at the development permit stage.**
- d) Maximum building height shall be restricted to four stories on lots immediately adjacent to Highway 1 or as otherwise specified in the Town of Canmore Land Use Bylaw.**
- e) A landscaped buffer with a minimum width of 12 m should be incorporated into lots adjacent to Highway 1 and Frontage Road.**
- f) Signage directly orientated to or legible from Highway 1 shall not be allowed.**
- g) Further subdivision will be considered by the approving authority. However, further subdivision will require comprehensive concept planning with particular attention to building envelopes, building orientation, view potential, internal traffic movement, parking and landscape design.**
- h) Lot sizes less than 0.25 hectares (0.6 acres) shall be discouraged. However, smaller lots may be considered in Policy Area C east of Palliser Trail.**
- i) Residential components shall be discouraged on lots adjacent to Highway 1 unless appropriate noise mitigation is incorporated.**

- j) **Remnant road parcels adjacent to Highway 1, where not required for public utility purposes, shall be consolidated with adjacent proposed commercial parcels.**
- k)
- l) **Development within the lands east of Palliser Trail adjacent to the power lines shall be designed to protect, wherever possible, the existing trees along the eastern edge of the parcel adjacent to the wildlife corridor.**

3.2.4 POLICY AREA D (Gross Area 6.9 Hectares)

Overview – Policy Area D includes portions of Block 17 (Sheraton Hotel), Block 18 west of the power line right of way and potential surplus highway lands west of Block 18. Development opportunities include a key corner location, potential access to Palliser Trail and Silvertip Trail, generally flat or gently sloping topography and attractive south and west mountain views.

Existing Zoning: A Direct Control (DC) zone exists on blocks 17 and 18 adjacent to Silvertip trail.

Potential Uses – Future uses in this area will be established through the SilverTip Master Plan (as amended) as approved by Council. A storm retention facility may be required in the south west corner of this Policy Area.

Policies

- a) **Future development in this area will form part of the Silvertip Master Plan and will recognize the need compatibility with the existing hotel south of Silvertip Trail.**
- b) **Rezoning of existing DC lands to a new Palliser Commercial District may be considered by Council following adoption of this Area Structure Plan.**
- c) **Remnant road parcels adjacent to Highway 1 shall be consolidated with adjacent parcels where feasible.**

Recommendation

- a) In order to provide continuity with the planning principles established for protection of the wildlife corridor in Block 5, it is recommended that the lands east of the power line in Block 18 remain undeveloped. This issue may be addressed at the time of redesignation of land following from adoption of this ASP and through a review of the Silvertip Master Plan.

3.3 GENERAL DEVELOPMENT POLICIES (Policy Areas B & C)

3.3.1 PHASING

- a) Development phasing shall proceed in a logical sequence from southeast to northwest.
- b) Utility extensions to areas further west shall be permitted as required by development staging.

3.3.2 UTILITY SERVICING

- a) All commercial lots shall be serviced by municipal water and sewer facilities.
- b) The location, size and general standards of these services shall be in conformity with the Town of Canmore Engineering Design Standards unless otherwise approved by the Town Engineer.
- c) Details of site grading and on-site storm water management plans will be required prior to any subdivision approvals. These plans will address both water quality and quantity.
- d) Provision shall be made through the Palliser area for the extension of utility services to service areas to the west.
- e) All development shall conform to the Canmore “Ground Water Protection Policy”.
- f) To ensure safety guidelines for development adjacent to the overhead power lines are met, no portion of a building shall be built within 5.2 metres of the existing powerline right of way.

3.3.3 ARCHITECTURAL GUIDELINES

- a) Standards in the Town of Canmore Land Use Bylaw relating to Site Development, Building Design and Signage are all relevant to the Palliser Area except where specific reference is made to the Canmore Town Centre.

- b) Following approval of the Palliser Area Structure Plan, the Architectural Standards contained in the Land Use Bylaw shall be amended to include the Palliser area.
- c) Individual pylon signs will not be permitted in the Palliser Area. However, consolidated signage at key points will be encouraged.
- d) Outside lighting design shall follow the Architectural Standards contained in the Land Use Bylaw. Lighting should be kept to a pedestrian scale and orientated away from the wildlife corridor lands to the north east. Lighting requirements for the highway intersection may require increased illumination and height for safety reasons.

3.3.4 ENVIRONMENTAL PROTECTION & CONSTRUCTION MANAGEMENT

The environmental effects of construction and development within the Palliser area shall be minimized. These measures will be detailed as conditions of subdivision approval and implemented through the Subdivision Servicing Agreement and Development Permit process. At the Development Permit stage, an environmental impact statement shall be submitted. Subject areas to be addressed include but are not limited to:

- a) site clearing and grading including seasonal timing considerations particularly in Policy Area B,
- b) protective fencing during construction around Environmental Reserves, Municipal Reserves and protective buffer zones,
- c) construction vehicle circulation and parking control,
- d) garbage disposal measures with particular reference to wildlife issues,
- e) vegetation management, and
- f) lighting, signage and general protection measures to minimize disturbance of wildlife in designated movement corridors.

3.3.5 TRANSPORTATION

- a) An integrated transportation system will be planned to accommodate transit, cars, pedestrians and bicycles, both within and through the area.
- b) Any new road system and intersections resulting from further subdivision in the Palliser area shall be designed in accordance with Town of Canmore Engineering Design Standards unless otherwise approved by the Town.
- c) Access and egress from Palliser Trail and Frontage Road will be controlled to the locations shown on Exhibit 3. Detailed location and

design shall be subject to approval by the Town Engineer and where appropriate, Alberta Transportation and Utilities.

- d) Sound analysis studies will be required for proposals incorporating visitor accommodation and residential components adjacent to high traffic movement areas.

3.3.6 PEDESTRIAN MOVEMENT

- a) A pedestrian pathway shall be incorporated on both sides of Palliser Trail as shown on Exhibit 3. The alignment and construction detail of this pathway shall be subject to approval by the Town Engineer.
- b) As development proceeds in the Palliser Area proposed residential lands to northwest, Council shall consider the viability of a Highway 1 pedestrian overpass to aid with pedestrian safety and reduce the need for internal vehicular trips. *(A suggested location would be immediately northwest of the Palliser ASP boundary with easy access from the proposed higher density residential uses in the area.)*

3.3.7 PLAN IMPLEMENTATION

- a) Land use redesignation will be required prior to subdivision and development in the Palliser Area. The Town of Canmore Land Use Bylaw will include Palliser Land Use Districts outlining the permitted and discretionary uses, application requirements, architectural standards and other regulations applicable to the Palliser Area.
- b) The normal Town of Canmore process of subdivision application and approval procedures shall be required for further subdivision of lands and the creation of any new land titles within the Palliser Area.
- c) The normal Development Permit process of application and approval procedures will be required prior to the commencement of any development within the Palliser Area.

SECTION 4: TECHNICAL REVIEW

4.1 TECHNICAL REPORTS

Technical analysis has been prepared to support the policies and guidelines in the Palliser Trail Area Structure Plan. These analyses included:

- a) Environmental Analysis,
- b) Geotechnical Analysis,
- c) Visual Impact Analysis,
- d) Utility Servicing, and
- e) Storm Water Analysis.

4.2 ENVIRONMENTAL AND GEOTECHNICAL ANALYSIS

4.2.1 ENVIRONMENTAL CONSIDERATIONS

An initial environmental evaluation has been prepared for the Palliser area by Komex International Ltd. The study terms of reference was approved by the Town of Canmore Council and met the requirements of the Municipal Development Plan for an Environmental Impact Statement. The study is intended as a screening tool to identify environmental conditions on site and determine appropriate mitigation measures. This study has been reviewed by the Town of Canmore Environmental Review Committee (EARC) and that Committee's recommendations, including development limits and buffering, have been incorporated into the Palliser Area Structure Plan.

4.2.2 GEOTECHNICAL CONSIDERATIONS

The environmental evaluation was supplemented by a preliminary geotechnical analysis undertaken by Sabatini Geotechnical Inc. This study reviewed site geology, soils, groundwater conditions and slope stability. The report concluded that the slopes are stable under present conditions and that slopes up to a gradient angle of 30% are stable and meet a factor of safety of 1.5. **Exhibit 5** shows the slope analysis information for the Palliser area. Further detailed geotechnical analysis will be required prior to any development approval.

4.2.3 ENVIRONMENTAL AND GEOTECHNICAL ANALYSIS

The main recommendations resulting from the environmental study, geotechnical overview and review by EARC are summarized below.

- a) All areas with continuous slopes in excess of 22% gradient should be maintained as natural areas and designated as Environmental Reserve.
- b) The south and west boundary of the Environmental Reserve lands should be aligned as shown on the **Land Use Concept, Exhibit 3**.
- c) The area northeast of the intersection between Palliser Trail and Frontage Road should be left undeveloped to preserve the coniferous trees and provide an aesthetically pleasing view at this important Town entry point.
- d) To help minimize the impact of potential development on the Lower Silvertip Wildlife Corridor which is partially included within the east and north portions of the study area, a 15 meter natural buffer should be maintained within the rear yard of any lots north of Palliser Trail and west of Frontage Road. This buffer should be widened to between 25 and 30 meters in the extreme north corner of the site as shown on **Exhibit 3**. No development zones will be registered concurrently with the plan of subdivision.
- e) An Environmental Protection Plan must be submitted to the Town at the development approval stage to provide site-specific measures with regard to environmentally responsible site planning and construction practices. In particular, development adjacent to the north and east Environmental Reserve boundary must minimize disturbance to wildlife.
- f) Existing mature Douglas Fir tree stands should be preserved.

4.3 VISUAL ANALYSIS

A large part of the Palliser area adjacent to Highway 1 is devoid of tree cover and highly visible from the highway and the access and egress roads. To help visualize the scale and impact future development may have, a visual analysis using generic building forms was prepared including a cross section analysis, digital terrain model, and a 3D computer massing model. The analysis resulted in three enhanced representative views (**Exhibits 6a, 6b and 6c**) of the site showing the likely visual impact of development and associated landscaping from Highway 1 and a typical site cross section (**Exhibit 6d**). At the detailed development stage, further analysis will be required to visualize specific proposals. The main conclusions from this visual analysis are as follows:

- a) Building heights of 2 stories are preferred adjacent to the highway, but higher may be considered where noise levels and visual impact are acceptable.

- b) Because of the steep terrain backdrop to the east, buildings further removed from the highway and particularly within the north part of the site, can be of greater height without creating visual problems.
- c) Roof lines, architecture detailing, materials, colour and landscaping will be critical to the overall success of the area from a visual perspective. The existing Sheraton Four Points Hotel provides a good example of how a large building with appropriate architectural design can be integrated into the area landscape.
- d) To soften the visual edge impact of development, clustered tree planting, including large trees, and berming will be important particularly adjacent to Highway 1. It is not intended, nor is it desirable, that this treatment act as total visual barrier.
- e) As with other commercial districts in Canmore, the Town of Canmore Land Use Bylaw will establish the design requirements and conformity of the future Palliser Commercial District with the Architectural and Urban Design Standards for Commercial Development in the Town of Canmore.
- f) The top of the escarpment forming the backdrop to this area must remain visible from the highway (see Figure 6c and 6d).

4.4 UTILITY SERVICING REQUIREMENTS

4.4.1 STORM DRAINAGE

Alberta Social Housing Corporation commissioned Southwell Trapp & Associates Ltd. to prepare a Western and Central Basins Drainage and Hydrogeological Study for the West and Central Basins. This study draws on previous data including the "Stormwater Management Master Plan for the Silvertip Development Area" prepared by Urban Systems Ltd. in 1995, and the "Town of Canmore Highway 1A Drainage Study" prepared by CH2M Hill Engineering Ltd. for Alberta Transportation and Utilities in 1990.

Previous reports have identified stormwater issues at the culverts under the Trans Canada Highway, opposite Silvertip Trail. Development has occurred in areas directly affected by these culverts, and no work has been done to rectify the issues.

Exhibit 7a shows the proposed storm water servicing schematic. Additional analysis and recommendations are contained in the Western and Central Basins Drainage Hydrogeological Study. The following are the study conclusions and recommendations:

- a) A detailed engineering design of the storm water facilities proposed in the respective Policy Areas in the Western and Central Basins Drainage and Hydrogeological Study shall be prepared prior to an application for subdivision being approved.
- b) Should the 2 acre parcel and the 1 acre MR parcel contained in Policy Area B shown in Exhibit #3, be subdivided prior to comprehensive study of the

stormwater issues, stormwater management must be dealt with on site to the satisfaction of the Town of Canmore.

- c) Stormwater management within Block 5 shall be provided on site in accordance with the recommendations of the West and Central Basins Drainage and Hydrogeological Study. Each respective Policy Area shall be responsible for its own stormwater management as outlined in the West and Central Basins Drainage and Hydrogeological Study.
- d) All required approvals to construct the storm water facilities proposed in their respective Policy Areas in the Western and Central Basins Drainage and Hydrogeological Study shall be obtained prior to the approval of any subdivision application for lands contained within this ASP.
- e) Should the necessary approvals from Alberta Infrastructure not be granted to construct storm water facilities in the Trans Canada Highway right of way as shown in Exhibit 7a, then any necessary storm water facilities required to manage storm water shall be constructed within Block 5 or managed by other alternatives, such as a piped system.
- f) Any engineering evaluation conducted as part of a subdivision application shall consider and investigate the impact of any proposed storm water facilities on ground water quality in the Town of Canmore.
- g) Runoff from the Policy Areas, as identified in this Area Structure Plan, can be handled through individual infiltration basins. Policy Area C must be filled in certain areas to at least an elevation of 1310m, based on the high water level of the Bow River, and subject to geotechnical analysis at a subdivision stage.
- h) The existing gravel soils in the location of Pond W, as identified in the Stormwater Management Master Plan for the Silvertip Development Area can infiltrate runoff at a high rate. All runoff from the Western Basin during the 1:100 year storm can be infiltrated into the ground at this location.
- i) The existing soils in the Palliser Area are also porous, but less porous than the gravels in the Western Basin. Runoff from the Central Basin can be accommodated in an infiltration basin between the Trans Canada Highway and Palliser Trail opposite Silvertip Trail. This location is contingent upon geotechnical analysis.
- j) Treatment of all stormwater should be provided as per Town of Canmore and Alberta Environmental Protection guidelines and subject to Best Management Practices (BMP's).
- k) It is essential that regular maintenance be performed on infiltration basins to ensure a proper functioning system.

- I) Emergency overflows should be provided on all infiltration basins to ensure an escape route exists in case of failure of a component. This includes some enhancement of the ditch area on the south side of the culverts under the Trans Canada Highway.



Existing Highway Culverts

4.4.2 SANITARY SEWERS

Overview: As part of the Silvertip development, a lift station was constructed within the Palliser area. This lift station is located north of the Trans Canada Highway and southwest of the intersection of Silvertip Road and Palliser Trail, as shown on **Exhibit 7b**. Design information for the lift station was examined as detailed in the “Major Utility and Roadway Development for the Silvertip Development Area” prepared by Urban Systems Ltd. in October 1993. A detailed analysis of the capacity of the lift station will be required prior to development approvals in the area.

Future Requirements: An existing 200mm stub has been provided on the west side of the existing lift station to service the Palliser lands and other lands to the northwest. Extending this 200mm sewer west at the minimum grades for a 200mm sanitary sewer, as dictated by Alberta Environmental Protection and the Town of Canmore, results in insufficient cover and difficulties in servicing parcels on the east side of the ASP. As a result, the existing 200mm stub should be replaced with a 250mm stub and a pipe laid at minimum grade. The remaining sanitary system should be located generally as shown and extended to individual parcels as subdivision and development progresses. Provision for a connection from lands to the west must also be included. Parcels at the northeast portion of the ASP can be serviced by a 250mm sanitary sewer installed at minimum grade to connect with the existing 300mm sanitary sewer servicing Silvertip at Silvertip Trail.

Endeavors to assist must be resolved as part of the subdivision approval process.

4.4.3 WATER DISTRIBUTION SYSTEM

Overview: The water distribution for the ASP was conceived as part of the “Water Supply and Distribution Master Plan for the Silvertip Development Area” prepared

by Urban Systems Ltd. in December 1993. It consists of an existing 300mm watermain adjacent to the Trans Canada Highway directly south of the extension of Silvertip Road.

Future Requirements: The proposed water distribution system for the ASP is shown on **Exhibit 7b**. It will consist of a connection to the existing 300mm watermain which can be constructed parallel to the proposed sanitary sewer with a stub provided at the west boundary of the ASP. A 300mm loop must eventually be provided, by others, into the western part of the Silvertip development, as per the above referenced Master Plan. The northeast portion of the Palliser area can be serviced by a 150mm watermain that will connect with the existing 300mm watermain servicing the existing Sheraton Hotel at Silvertip Trail.

Endeavors to assist must be resolved as part of the subdivision approval process.

4.4.4 TRANSPORTATION NETWORK

Overview: Palliser Trail was designed and constructed by Alberta Transportation and Utilities in 1996/1997 as part of the intersection linking Highway 1, with Benchlands Trail and the existing highway overpass. **Exhibit 3** shows location of Palliser Trail and Frontage Road linking the access and egress roads from Highway 1 with Palliser Trail. Prior to construction, traffic volumes were studied by Alberta Transportation and Utilities to establish the required road cross sections. Data was analyzed that included existing traffic volumes and proposed developments within the Palliser area, and potential development lands to the west and within Silvertip.

Palliser Trail, east of the Frontage Road has been classified and constructed as four lane arterial road. Palliser Trail west of Frontage Road is a two lane collector standard with current low utilization. However, with the development of commercial uses in the Palliser area and possible future residential development on the R3 lands to the west, volumes will increase substantially but should remain within the design capacity.

Future Requirements: Access from Palliser Trail will be limited to large parcels only. Smaller parcels will have to be accessed from internal roads. Approximate locations, subject to detail analysis, are shown on **Exhibit 3**. Internal roadways can be either rural or urban cross section, subject to detailed design and storm water management requirements.

4.4.5 PEDESTRIAN NETWORK

The proposed trail system within the Palliser Area functions within the overall trail master plan for the Town. It is important to recognize the sensitivity of the wildlife corridor in this area and discourage high levels of bicycle or pedestrian movement on the upper slopes east of the power line right of way. The main trail alignment will follow the Palliser Trail alignment linking Benchlands Trail to the south east with lands to the north west. A secondary link east to SilverTip Trail is also shown on the Land Use Concept Exhibit 3. A local pedestrian network will be integrated into the

various development cells within the Palliser Area. Guidelines for the creation of a “pedestrian friendly” atmosphere are included in the “Site Development” guidelines contained within the Town of Canmore Land Use Bylaw.

4.4.6 SHALLOW UTILITIES

Shallow utilities are presently available with spare capacity at the east part of the ASP. The following shallow utilities can be expanded as development proceeds:

- a) Electrical – TransAlta Utilities Corporation
- b) Natural Gas – ATCO Gas
- c) Telephone – Telus Communications
- d) Cable TV – Monarch Cable

4.5 HOUSING IMPACT

4.5.1 JOB GENERATION

The number of jobs likely to be generated through development the Palliser area is difficult to estimate due to the wide range of potential uses and scale of buildings possible. However, using averaged data from other resort and commercial uses existing and planned in Canmore, it is expected that the number of jobs generated will be approximately 1 per 150 sq. m of gross site area. The total gross developable area within the Palliser area excluding the existing Sheraton Hotel is approximately 11.9 hectares (29.4 acres). This figure includes proposed highway buffer strips and natural buffer areas. Based on this area and assuming 1 job per 150 sq. m of gross site area, the total estimated jobs generated on site is approximately 790.

4.5.2 ENTRY LEVEL HOUSING REQUIREMENT

Of the total number of jobs generated research has indicated that between 25% and 50% of jobs may include seasonal, low income and part time employees requiring entry level housing. Using these figures the requirement for entry level housing could be in the 200 – 400 range.