

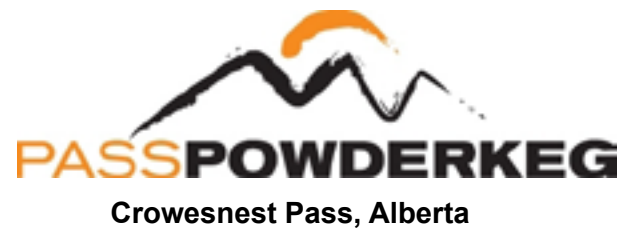


PASS POWDERKEG

MASTER PLAN CONCEPT 2012



MASTER PLAN CONCEPT 2012



Planning by:

BHA *Brent Harley & Associates Inc.*
Distinctive Mountain Resort Design

#4-1005 Alpha Lake Road

Whistler, B.C. Canada

V0N 1B1

Ph: 604-932-7002

Fax: 604-938-1161

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1.0 INTRODUCTION

1.1 Introduction

The intent of this project is to create a Master Plan Concept that can be used to inform interested parties, stakeholders, financiers, and the public about the opportunities to upgrade the skiing experience at Pass Powderkeg. The content of this document outlines the existing conditions, the physical potential for improvements and expansion, and the phased master plan concept which illustrates the gradual development of new lifts and trails, expanded base area development with the possible incorporation of slope side resort residential accommodation.

Vision Statement

Pass Powderkeg is a community focused, family ski area that offers a high quality skiing and snowboarding experience.

1.2 Location

Pass Powderkeg is known as "Alberta's Family Ski Area". Located in Blairmore, Alberta within the heart of the Crowsnest Pass, it is only a 2.5 hour drive from Calgary, 1.5 hours from Lethbridge and 45 minutes from Fernie, BC (See Figure 1-1).





Figure 1-1: Location Map

1.3 Background

Pass Powderkeg has a long history of community involvement and has been a fixture in the community for generations.

Development was originally initiated in the 1930's by a group of dedicated skiers and residents of Blairmore. With volunteer labour and local business support, the Ski Authority was established and the development and operation of the ski hill gradually grew over time.

During the 70s and early 80s, the existing T-Bars were installed, replacing the original rope tow; more ski runs were added; grooming of the terrain was initiated with the purchase of a snowcat grooming machine; the Ski Lodge was built and expanded; and, a ski jump and a luge track were added.

In 1984, the Municipality of Crowsnest Pass hosted the Alberta Winter Games. Grant monies help pay for the snowmaking and improvements to the ski lifts.

Through the 90's and into the 2000's, the popularity of the area has steadily grown. Over the course of an average ski season length of 80 days, skier visits have increased from 4,200 per year in 2004/05 to 15,400 per year in 2011/12.

Recent capital improvements have included expansion of the snowmaking system; the addition of numerous snowmaking guns; the addition of a new BR 350 Snowcat improving the grooming capability at the area; enhancement of the ski area lighting system for night skiing; the development and growth of a terrain park; and, the development of a learn to discover skiing area, serviced by a handle tow. The adoption of ski industry best practices and a Comprehensive Risk Management Program, in addition to the development of new operational procedures and protocols, has allowed Pass Powderkeg to offer its visitors a skiing and snowboarding experience very similar to that found at much larger ski areas. This has established a local community skier demographic with a very large youth contingent. There has also been a surge in regional short haul business which in turn has driven growth in all departments.

Pass Powderkeg has gained a reputation as a great family day skiing area, providing a high quality experience with excellent value.

1.4 Ownership and Tenure Area

As of 2012, Pass Powderkeg is owned by the Municipality of Crowsnest Pass and is operated by the Pass Powderkeg Ski Society. It is funded through operational revenue and municipal funding.

The lands on which Pass Powderkeg has been developed are owned by three different entities (See Figure 1-2).

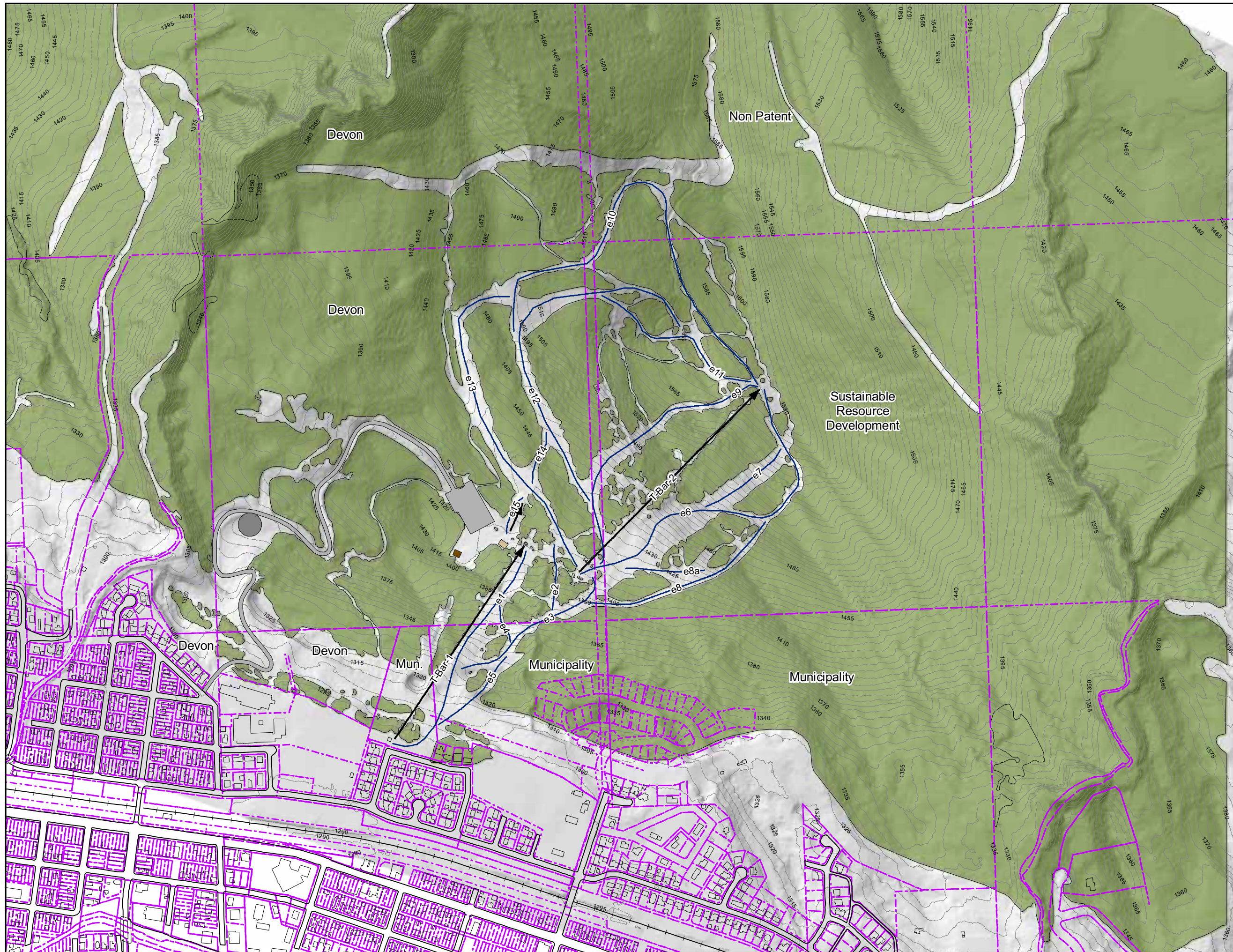
The lower mountain lands are owned by the Municipality of Crowsnest Pass. The upper section west lands are Alberta Sustainable Resource Development lands. The Municipality of Crowsnest Pass has a 20 year lease (expiring in 2029) with an option to purchase.

The upper section east lands are owned by the Devon Development Corporation. The Municipality of Crowsnest Pass has a 25 year lease (expiring in 2035) with an option to purchase.














Ownership & Tenure Area

2011



Legend

-  Existing Runs
-  Existing Ski Lifts
-  Maintenance Buildings
-  Day Lodge
-  Water Tower
-  Mountain Road & Carpark
-  Bridge
-  Buildings
-  Property Boundaries
-  Paved Road
-  Railway

Prepared for:



PO Box 600
Crownsnest Pass, AB, Canada, T0K 0E0
Phone: (403) 562-8334
Fax: (403) 562-2345
Email: info@passpowderkeg.ca

Planning by:



4 -1005 Alpha Lake Rd.
Whistler, BC, Canada, V0N 1B1
Phone: (604) 932-7002
Fax: (604) 938-1161
Email: bha@brentharley.com

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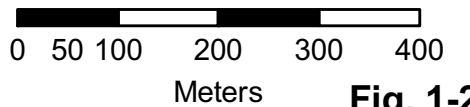


Fig. 1-2

1.5 The Planning Process

In the Fall of 2008, BHA (Brent Harley and Associates Inc.) were retained by Pass Powderkeg to assist in the exploration of future improvement options for ski area. To initiate the project, new topographic mapping of the area was acquired, existing facilities were inventoried and an in-depth terrain analysis completed. This acted as the basis for a fresh look at the potential of the ski area. The planning that followed explored opportunities, leading to a series of concepts, a preferred concept and ultimately, to the proposed plans for this Master Plan Concept.

1.6 Vision, Goals and Objectives 2012

Pass Powderkeg has a long standing reputation as a family oriented, community ski area. The social value to Blairmore and Crowsnest Pass has been very significant in terms of acting as winter recreation facility to the locals of and generally to the surrounding region. Recognizing this, the Vision for the area, as defined by the Pass Powderkeg Board of Directors, is as follows:

Pass Powderkeg is a community focused family ski area that offers a high quality skiing and snowboarding experience. As improvements are made to the layout and operation over time, the area will gradually expand its offering to become a well balanced and integrated year-round facility. While continuing to cater to the recreation needs and expectations of the local and regional residents, the area will gradually expand their market to include day visitors from more distant origins.

To achieve this Vision, the following are the key Development Goals and Objectives of Pass Powderkeg:

- Upgrade the existing lift and trail system in an incremental, economically viable fashion;
- Increase the amount of beginner terrain;
- Improve the mix of skiing with an emphasis on a fun, family oriented experience;
- Bring all facilities into balance;

- Respect the natural environment and setting, acknowledging that this a baseline attraction to Pass Powderkeg;
- Preserve the opportunity to incorporate resort residential accommodation for development at some point in the future;
- Explore the opportunity to facilitate further expansion of the skiing terrain;
- Ensure that Pass Powderkeg is developed as an economic driver to the benefit of the residents of Crownesst Pass in a fully sustainable fashion (socially, culturally, environmentally and economically).

2.0 EXISTING SKI AREA

2.1 Existing Facilities

2.1.1 The Mountain

Currently, Pass Powderkeg operates on Crown land within a tenure area of about 140 hectares (346 acres). Internal to this, there are two T-Bars and one Handle Tow,

Existing Numbers:
 CRA - 140 Ha
 CCC - 380 skiers

servicing approximately 20 hectares of developed ski trails (Figures 2-1, 2-2). Based on the new mapping, the downhill capacity of the trails is about 528 skiers¹ based on medium densities². The uphill capacity of the ski lifts has been calculated to be 380 skiers per day. The Comfortable Carrying Capacity (CCC) of a ski area is defined as the optimum number of skiers that can utilize the alpine skiing facilities per day such that their skiing experience

expectations are being met, while the integrity of the site's physical and sociological environment is maintained. As developed, Pass Powderkeg should be able to comfortably ski about 380 skiers per day.

¹ Any reference to 'skiers' and 'skiing' implies both skiers and snowboarders, and skiing and snowboarding.

² These density numbers are based on the assumption that 40% of the skiers are on the trail, 10% are in the lift queue, 25% are on the lift and 25% are inactive (in the day lodge or elsewhere). The choice of medium densities is a function of the assumed experience expected by the Pass Powderkeg patrons.

2.1.2 The Base Area

The base area at Pass Powderkeg is made up of a mid mountain Day Lodge, a parking lot and two Maintenance Buildings.

The Day Lodge is about 3,520 square feet in size. Based on industry standards, this is about 70% of the size of facility typically required to service the calculated CCC of 380 skiers per day. Key identifiable opportunities for improvements in the future include an increase in built space for the kitchen, washrooms, retail, ski school and public lockers. These shortcomings have also been identified by management as pinch points that compromise the experience on the busiest days.

The current mid-mountain parking lot capacity is about 70 cars. Based on the CCC, Pass Powderkeg should have parking for about 135 cars. Clearly the mid-mountain parking is incapable of accommodating the balanced needs as defined by the ski area's capacity. Operational experience verifies that the existing configuration is insufficient on the busiest days. Some of this may be a function of inefficiencies in the size and layout.
















Existing Conditions

2011

Legend

-  Existing Runs
-  Existing Ski Lifts
-  Maintenance Buildings
-  Day Lodge
-  Water Tower
-  Mountain Road & Carpark
-  Bridge
-  Buildings
-  Property Boundaries
-  Paved Road
-  Railway

Prepared for:



PO Box 600
 Crownsnest Pass, AB, Canada, T0K 0E0
 Phone: (403) 562-8334
 Fax: (403) 562-2345
 Email: info@passpowderkeg.ca

Planning by:



4 -1005 Alpha Lake Rd.
 Whistler, BC, Canada, V0N 1B1
 Phone: (604) 932-7002
 Fax: (604) 938-1161
 Email: bha@brentharley.com

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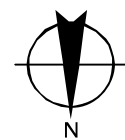
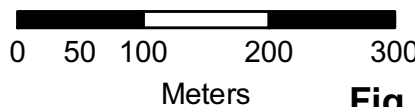


Fig. 2-1



3d View Existing Conditions

2011



Prepared for:



PASSPOWDERKEG
PO Box 600
Crownsnest Pass, AB, Canada, T0K 0E0
Phone: (403) 562-8334
Fax: (403) 562-2345
Email: info@passpowderkeg.ca

Planning by:



BHA The Smart Planning Group
4 -1005 Alpha Lake Rd.
Whistler, BC, Canada, V0N 1B1
Phone: (604) 932-7002
Fax: (604) 938-1161
Email: bha@brentharley.com

3.0 DEVELOPMENT ANALYSIS

3.1 Introduction

With the new map base, the study area was analyzed in an effort to determine areas of potential improvement and expansion. This included a Mountain Terrain Assessment (in terms of the capability of the study area lands to support all-season mountain recreation use and facilities) and a Base Area Terrain Assessment (in terms of the capability of the base area lands to support facilities to stage the mountain recreation facilities).

3.2 Mountain Terrain Assessment

3.2.1 Slope Analysis

The slope analysis (Figure 3-1) divides the topography of the study area into a range of skiable gradients as they relate to the primary skier/snowboarder skill classes. These are as follows:

Table 1: Ski Area Slope Analysis

Colour	Classification	Gradient Criteria
White	Too Flat - ideal for base area development	0-8%
Green	Beginner Terrain	8-25%
Blue	Intermediate Terrain	25-45%
Grey	Advanced/Expert Terrain	45-80%
Red	Too Steep - increased avalanche hazard	>80%

This analysis illustrates the abundance of Intermediate terrain throughout the Pass Powderkeg study area. This is a critical feature in that 60% of the skier marketplace is made up of intermediate skiers. In turn, this confirms the opportunity to increase the amount of developed Intermediate skiing at the area, improving the overall ski product offering.

It is also clear that there are opportunities to increase and improve the beginner skiing in close proximity to the Day Lodge.

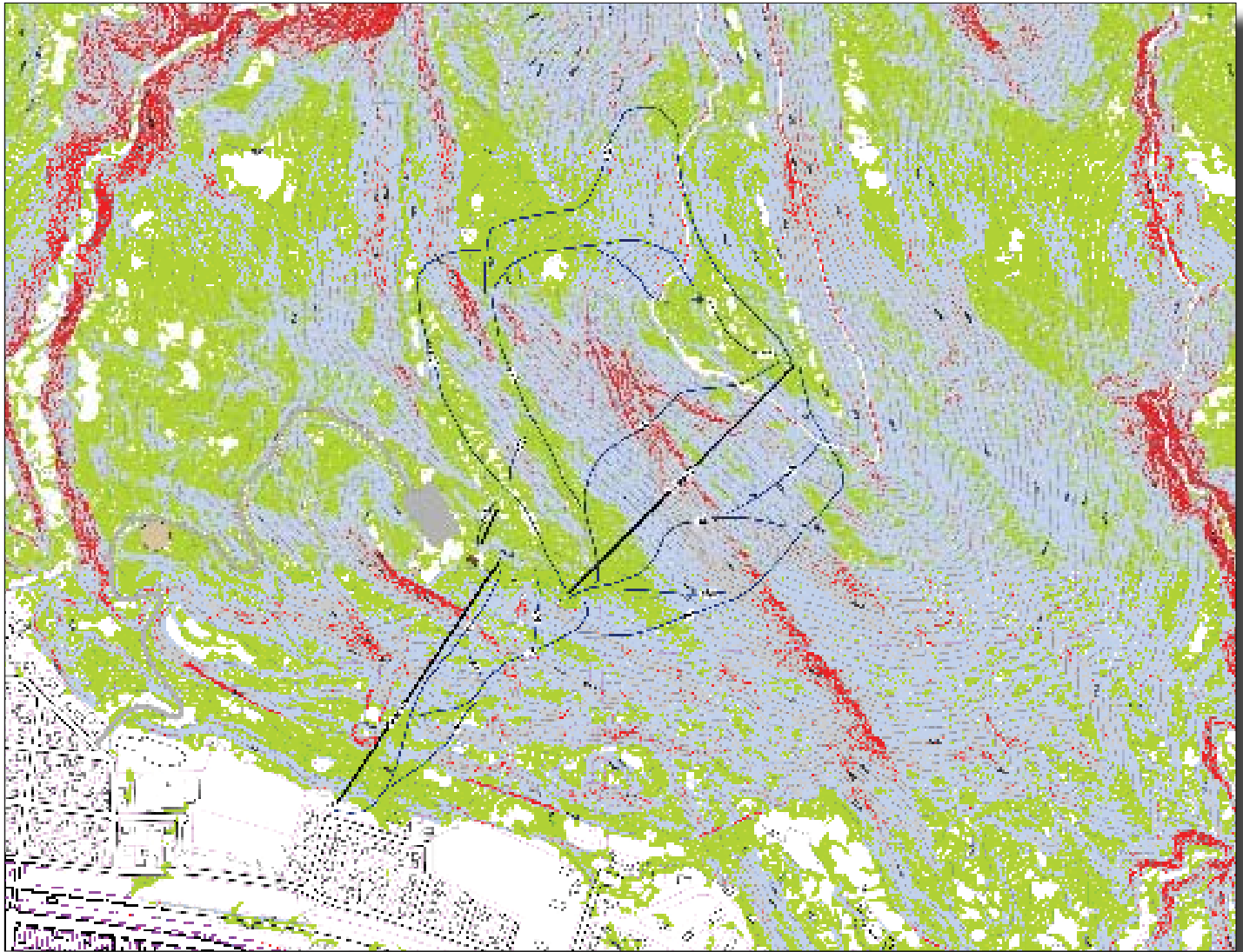


Figure 3-1: Ski Area Slope Analysis

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Blue	Intermediate Terrain	25-45%
Grey	Advanced/Expert Terrain	45-80%
Red	Too Steep	>80%

3.2.2 Elevation Analysis

The Elevation Analysis (Figure 3-2) slices the topographic features of the study area into 20 meter increments. Effectively this analysis illustrates the height and “flow” of the land, identifying potential pods for improvements and expansion of the skiing at Pass Powderkeg.

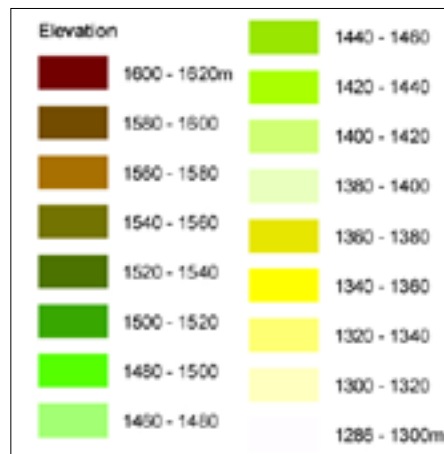


Table 2: Ski Area Elevation Analysis

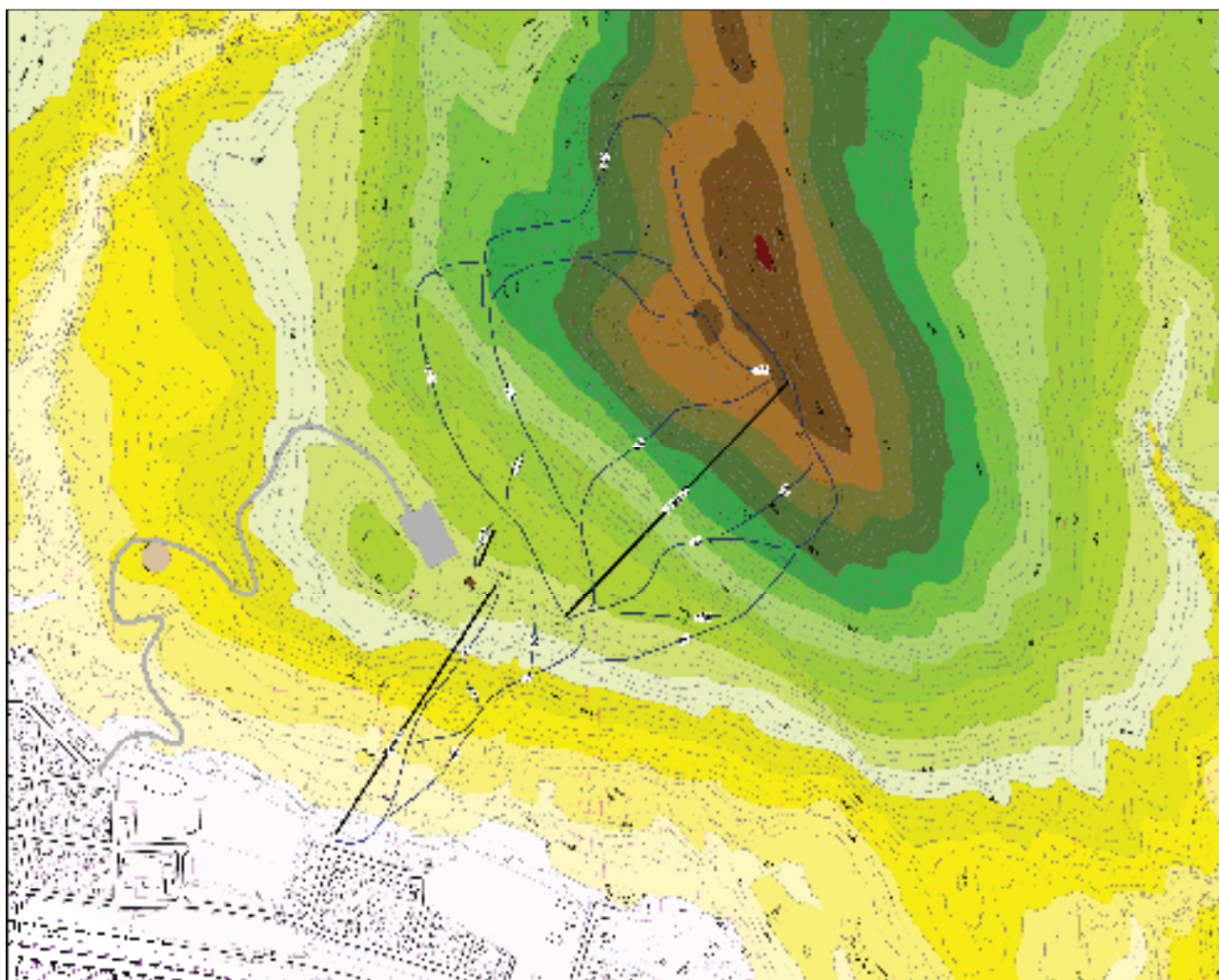


Figure 3-2: Ski Area Elevation Analysis

3.2.3 Aspect Analysis

The Aspect Analysis (Figure 3-3) involves colour coding the topographic features of the study area to illustrate the orientation and geographical exposure with respect to the eight points of the compass. This analysis has been utilized in the design of the ski trail alignments and the positioning of the proposed base area facilities at Pass Powderkeg.

Aspect			
	Flat		South
	North		Southwest
	Northeast		West
	East		Northwest
	Southeast		North

Table 3: Ski Area Aspect Analysis

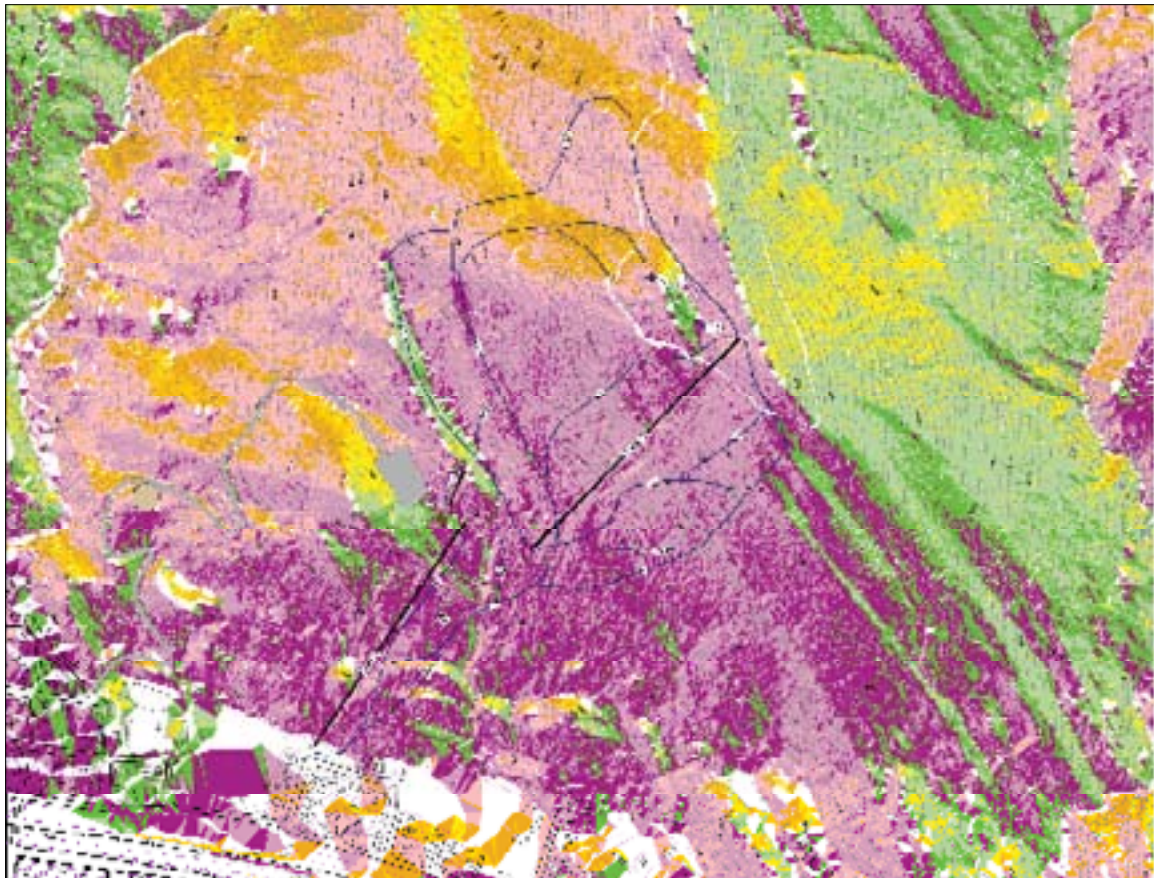


Figure 3-3: Ski Area Aspect Analysis

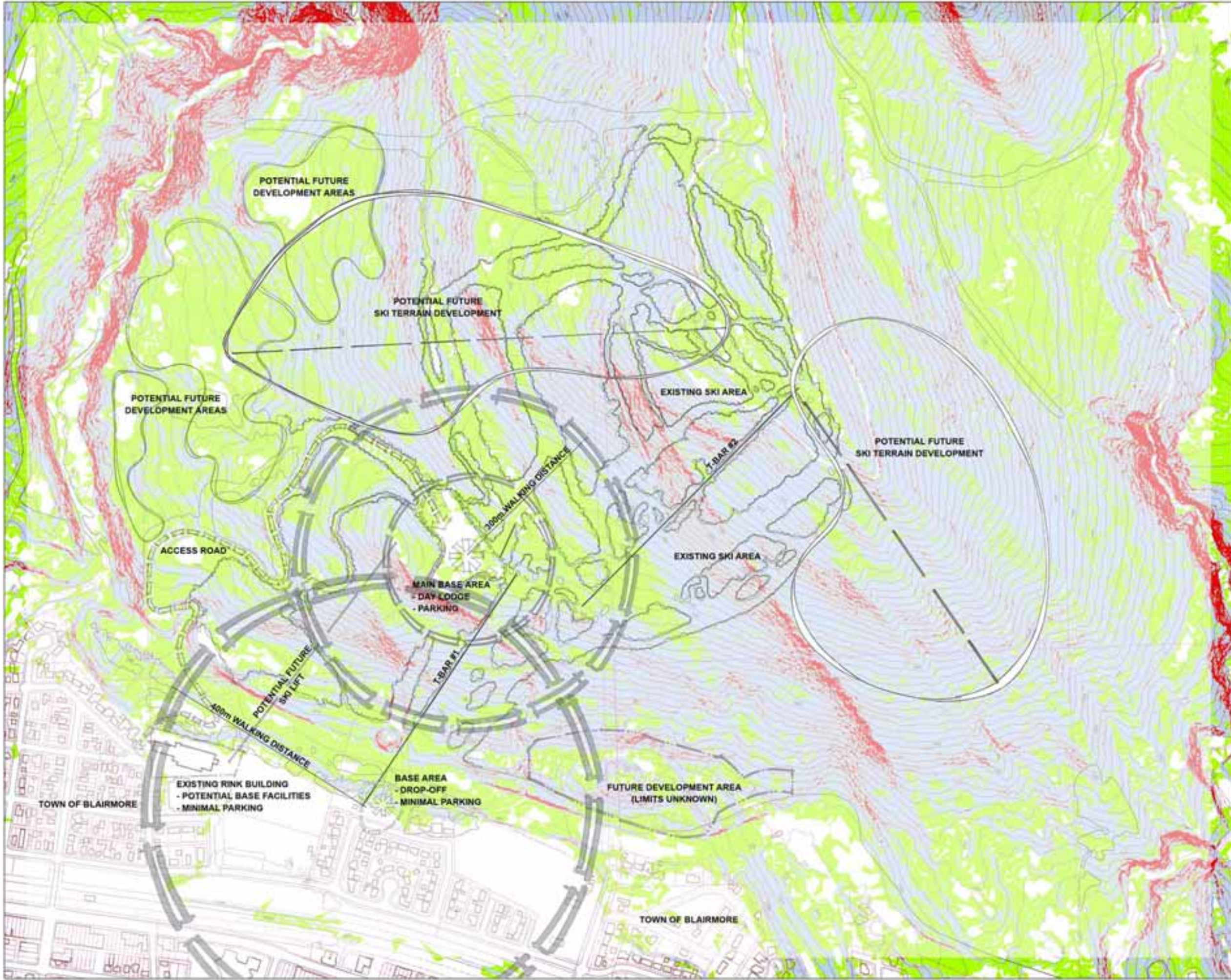
3.2.4 Opportunities and Constraints

The Opportunities and Constraints Plan (Figure 3-4) summarizes the potential improvements and expansion within the Pass Powderkeg study area.






Mountain Opportunities & Constraints 2011



Legend

- Contour Lines
 - Vegetation
 - Ski Lifts
 - - - Access Road
- Mountain Slope**
- > 60%
 - 45 - 60
 - 25 - 45
 - 8 - 25
 - 0 - 8%

Prepared for:



PASS POWDERKEG
 PO Box 600
 Crowstee Pass, AB, Canada, T0K 0E0
 Phone: (403) 562-8334
 Fax: (403) 562-2345
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Planning by:



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 4 - 1005 Alpha Lake Rd.
 Whistler, BC, Canada, V0N 1B1
 Phone: (604) 932-7002
 Fax: (604) 938-1161
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Fig. 3-4

3.3 Base Area Terrain Assessment

3.3.1 Base Area Slope Analysis

The Base Area Slope Analysis (Figure 3-5) defines the potential of the base area lands to accommodate staging facilities that will complement and balance the capacity needs of the mountain recreation facilities. The slope categories, as illustrated below, are aligned with the physical capability to develop the lands

Table 4: Base Area Slope Analysis

Colour	Gradient Criteria	Characteristics
White	0-5%	Flat lands, easy to build on for parking and all building types. Often wet, may be environmentally sensitive.
Yellow	5-10%	Relatively easy to build on, can accommodate terraced parking and all building types.
Green	10-20%	Too steep for parking terraces and high density development, upper limits to medium density.
Cyan	20-30%	Interesting lands for low density development. Upper limits to medium density development, access relatively easy.
Blue	30-40%	Maximum gradients for low density development if access can be created.
Pink	40%+	May be able to accommodate small pockets of very low density development if access can be created and regulations allow.

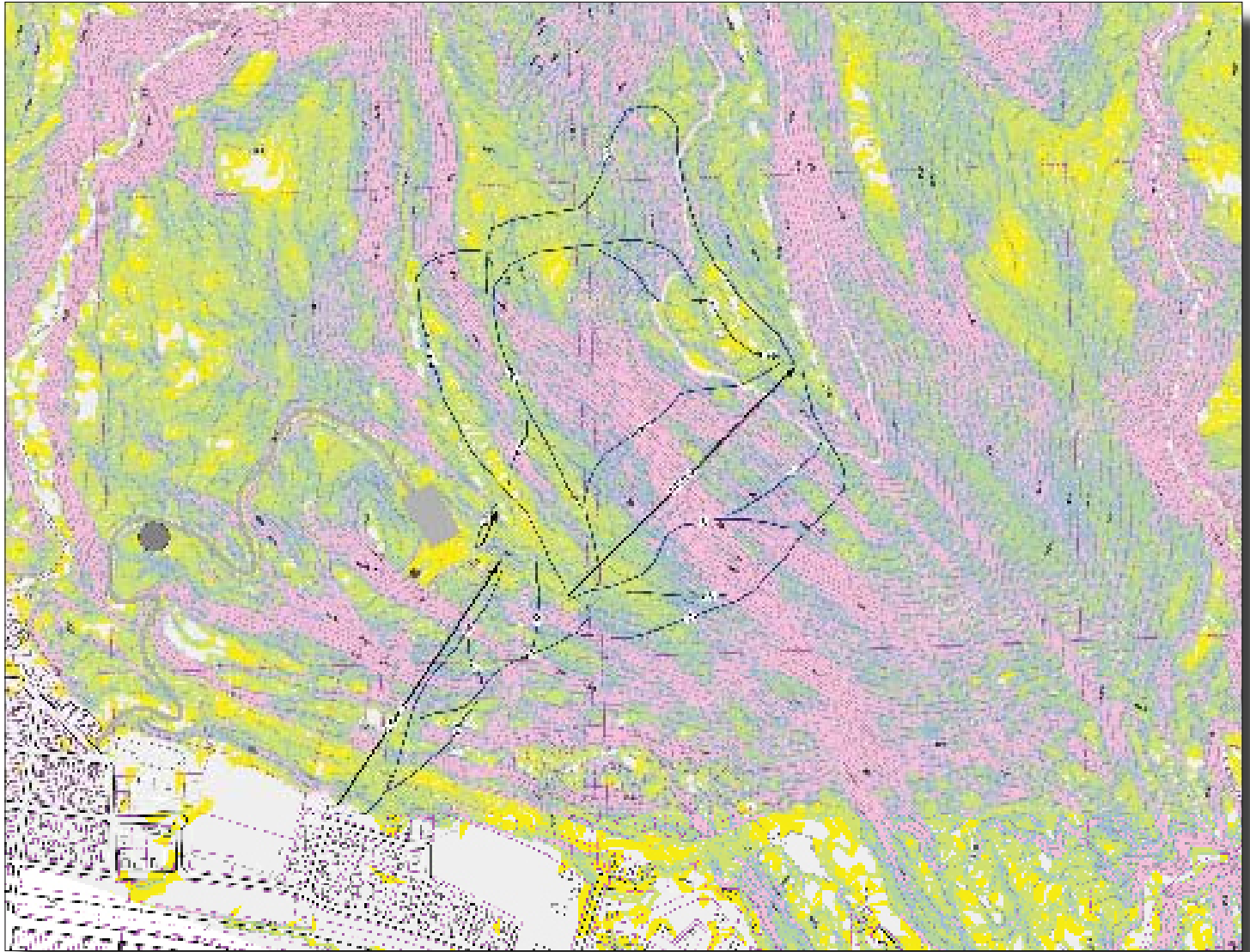


Figure 3-5 Base Area Slope Analysis

Colour	Gradient Criteria
White	0-5%
Yellow	5-10%
Green	10-20%
Cyan	20-30%
Blue	30-40%
Pink	>40%

3.3.2 Base Area Opportunities and Constraints

The Base Area Opportunities and Constraints Plan (Figure 3-6) summarizes the potential development improvement and expansion opportunities both at the mid-mountain base and the bottom of the mountain.







Pass Powderkeg

Base Area Opportunities & Constraints

2011

Legend

	Contour Lines
	Vegetation
	Ski Lifts
	Access Road
Base Slope	
	+60%
	45 - 80
	40 - 45
	30 - 40
	25 - 30
	20 - 25
	10 - 20
	8 - 10
	5 - 8
	0 - 5%

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Phone: (604) 932-7002
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Email: bha@brentharley.com



Contour interval 1m

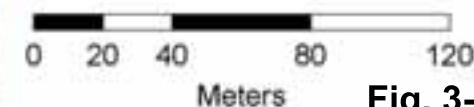


Fig. 3-6

NOTES:

a) Primary Access Road

- Access ski hill at mid-mountain
- Multiple switch-backs, steep slopes
- Labour Intensive Snow Removal
- Difficult Access, Limited Capacity

b) Day Lodge

- Great views
- Close proximity to gathering area for lesson groups
- Located at end of parking with minimal vehicular-pedestrian conflict
- Poor skier interface
- Not in direct association with lifts and beginner area
- Not part of the initial 'sense-of-arrival' experience

c) Maintenance Shop / Space

- Ideal location for groomers to have slope side access
- Direct vehicular access from main road and parking
- Poor location for 'sense-of-arrival' as this is the first building you see upon arrival at the mid-mountain base
- Located in the primary skier circulation area creating more congestion and restricting the flow of skier traffic
- Is there an opportunity to move/relocate this facility?

d) Beginner Ski Area

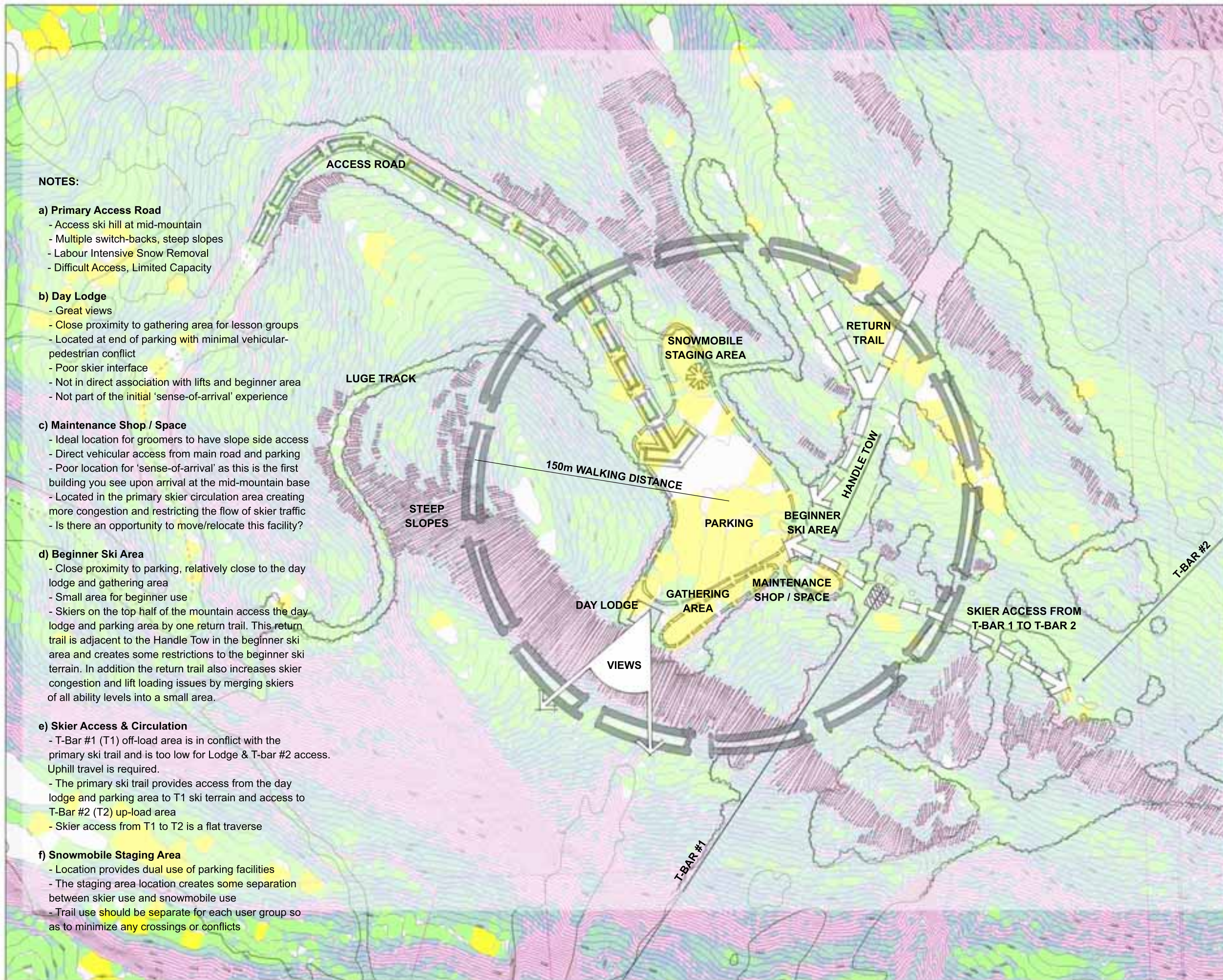
- Close proximity to parking, relatively close to the day lodge and gathering area
- Small area for beginner use
- Skiers on the top half of the mountain access the day lodge and parking area by one return trail. This return trail is adjacent to the Handle Tow in the beginner ski area and creates some restrictions to the beginner ski terrain. In addition the return trail also increases skier congestion and lift loading issues by merging skiers of all ability levels into a small area.

e) Skier Access & Circulation

- T-Bar #1 (T1) off-load area is in conflict with the primary ski trail and is too low for Lodge & T-bar #2 access. Uphill travel is required.
- The primary ski trail provides access from the day lodge and parking area to T1 ski terrain and access to T-Bar #2 (T2) up-load area
- Skier access from T1 to T2 is a flat traverse

f) Snowmobile Staging Area

- Location provides dual use of parking facilities
- The staging area location creates some separation between skier use and snowmobile use
- Trail use should be separate for each user group so as to minimize any crossings or conflicts



4.0 MASTER PLAN CONCEPT

4.1 Introduction

After careful review of the existing conditions in the context of the Vision, Goals and Objectives, and taking into account the environmental and physical realities at Pass Powderkeg, a series of concepts were explored. Based on feedback from the area's management and the Board of Directors, a preferred concept was created. This was refined into the Master Plan Concept. The proposed implementation program delineates a series of incremental development steps, methodically improving and expanding Pass Powderkeg over time. As the development moves forward toward buildout, the following development objectives will be achieved:

1. The skiing experience will be significantly expanded and improved. This will be accomplished by:
 - a. Establishing a bigger mountain skiing product (and creating the opportunity for lift serviced mountain biking) by installing a lift from the bottom of the mountain to the top;
 - b. Creating new Beginner skiing opportunities at the bottom of the mountain;
 - c. Creating new Novice skiing opportunities around the mid-mountain and down to the bottom of the mountain;
 - d. Expanding the skiing with the installation of new lifts and trails to service the Intermediate and Advanced oriented skiing terrain from the top of the mountain to the east and to the northwest;
 - e. Developing a well balanced ski trail system with an emphasis on optimizing the skier experience and catering to the composition of the skier marketplace (20% beginner, 60% intermediate, 20% expert);
 - f. Improving the skier circulation especially as it relates to the mid-mountain Day Lodge;
 - g. Expanding the snowmaking system to ensure top to bottom snow coverage;
 - h. Creating a tubing area at the base of the mountain.

2. The mountain staging will be relocated to the bottom of the mountain. This will be accomplished by:
 - a. Developing a new parking lot at the bottom of the mountain on lands made available by the municipality, sized to match the capacity of the skiing on the mountain;
 - b. Developing a new staging oriented day lodge at the bottom of the mountain.

3. The existing mid-mountain base area will be reconfigured to optimize the visitor experience, maximize capacities and improve skier circulation. This will be accomplished by:
 - a. Expanding the mid-mountain Day Lodge, providing food and beverage services, sized to match the capacity of the skiing on the mountain;
 - b. Decommissioning the existing mid-mountain access road and parking lot for the winter season, in favour of staging at the base of the mountain;
 - c. Creating a ski school teaching area and a snowplay area adjacent to the mid-mountain Day Lodge;
 - d. Relocating the Maintenance Building to a lower profile position on the mountain to improve skier circulation and the quality of visitor experience.

4. Future development opportunities are preserved by:
 - a. Designing the new lift and trail systems to cater to potential ski to/ski from resort residential development on the east facing and north facing base lands.

4.2 Master Plan Concept

The Master Plan Concept for Pass Powderkeg at buildout, within the lands that the Municipality of Crowsnest Pass currently control, is illustrated on Figures 4-1 and 4-2. Its components include: The Mountain Plan; the Base Area Plan; Future Opportunities; and, the Phasing Plan. Each of these will be described as follows.

4.3 Mountain Plan

4.3.1 Ski Lifts

At buildout, the skiing on the mountain will be serviced by a series of ski lifts detailed in Table 5 and described below:

- Lift A: A fixed grip quad chair, replacing the existing lower T-Bar. This provides access from the base of the mountain to the top with an off-load at mid-station positioned to provide novice skier access to the mid-mountain teaching area and the Day Lodge;
- Lift B: The existing upper T-Bar is retained as is and operated on busy days or as low snow conditions require;
- Lift C: A carpet lift, installed to service “never-ever” beginners and the Tube Park at the base of the mountain;
- Lift D: The existing platter lift is relocated to service a novice skier teaching area;
- Lift E: A fixed grip quad chair installed to service the expansion terrain to the east;
- Lift F: A future fixed grip quad chair to service potential expansion terrain to the northwest, should those lands become available.

Table 5: Ski Lifts

Lift Name	Lift Type	Existing/ Proposed	Vertical Drop (m)	Slope Length (m)	Hourly Capacity	Uphill CCC	Downhill CCC
Lift A	Fixed Grip Quad	Proposed	309	1,278	1,200	450	266
Lift B	T-Bar	Existing	174	576	1,200	234	172
Lift C	Carpet Lift	Proposed	29	128	400	63	16
Lift D	Platter Lift	Relocated	20	160	400	43	49
Lift E	Fixed Grip Quad	Proposed	243	1,020	400	396	404
Lift F	Fixed Grip Quad	Proposed	215	838	1,200	296	383
Totals						1,482	1,290

4.3.2 Ski Trails and Comfortable Carrying Capacity

Currently there are 15 ski trails on 20 hectares of developed terrain at Pass Powderkeg. At buildout, the number of ski trails will grow to 51 on a total of 52 hectares of developed terrain by the end of the proposed expansion (not including the potential future Lift F and the associated terrain).

Technically, based on the proposed developed trails, the CCC can grow from the existing 380 to about 1,000 skiers per day at the completion of the proposed expansion and ultimately to approximately 1,300 skiers per day at buildout. The following Table summarizes the area and capacities by skier skill class.

Table 6: Ski Trails and CCC

Capacity by Category								
Pod Name	Trail Area (Ha)	Beginner	Novice	Low Intern.	Intermediate	Advanced	Expert	Downhill CCC
Lift A	14.33	8	51	98	101	8	0	266
Lift B	13.18	0	0	16	96	60	0	172
Lift C	0.45	16	0	0	0	0	0	16
Lift D	1.64	0	49	0	0	0	0	49
Lift E	22.43	0	0	270	134	0	0	404
Lift F	23.28	0	27	120	216	20	0	383
Totals	75.31	24	127	504	547	88	0	1,290

4.3.3 Snowmaking

To optimize the use of the ski terrain, it is critical to maximize the size and coverage of the snowmaking system on the mountain. This is the area's "insurance" against the inevitable low snow years. Of particular importance will be the terrain being serviced by Lift A, establishing a pod of top to bottom skiing catering to all skier skill classes from the beginning of the season to the end.

Initially, Pass Powderkeg's existing snowmaking system will need to be expanded to cover at least one Beginner trail, an Intermediate run from the top of the mountain to the day lodge, and a trail down to the bottom of the mountain. This will require additional guns and waterlines. The existing capacity of the snowmaking pumps should be sufficient to accommodate this expanded capability.

In the future, additional snowmaking coverage will require a full expansion of the whole snowmaking system, to ensure an ongoing and reliable operation.

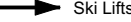
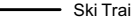
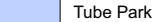
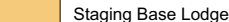



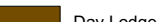










Mountain Plan

2011

Legend

-  Ski Lifts
-  Ski Trails
-  Tube Park
-  Staging Base Lodge
-  Potential Future Real Estate Development
-  Potential Ski Area Expansion
-  New Maintenance Building
-  Day Lodge
-  Water Tower
-  Bridge
-  Buildings
-  Property Boundaries
-  Paved Road
-  Railway

Prepared for:



PO Box 600
 Crownsnest Pass, AB, Canada, T0K 0E0
 Phone: (403) 562-8334
 Fax: (403) 562-2345
 Email: info@passpowderkeg.ca

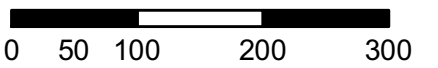
Planning by:



4 -1005 Alpha Lake Rd.
 Whistler, BC, Canada, V0N 1B1
 Phone: (604) 932-7002
 Fax: (604) 938-1161
 Email: bha@brentharley.com

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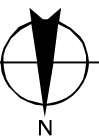


Fig. 4-1




3d View Mountain Plan

2011



Prepared for:



PASSPOWDERKEG
PO Box 600
Crownsnest Pass, AB, Canada, T0K 0E0
Phone: (403) 562-8334
Fax: (403) 562-2345
Email: info@passpowderkeg.ca

Planning by:



BHA The Best Planning Group
4 -1005 Alpha Lake Rd.
Whistler, BC, Canada, V0N 1B1
Phone: (604) 932-7002
Fax: (604) 938-1161
Email: bha@brentharley.com

4.3.4 Summer Use

In terms of expanded all-season use, Pass Powderkeg has the terrain and attributes to accommodate mountain biking and summer hiking. While detailed planning will have to be completed to realize the true potential, preliminary investigations by others indicate that the opportunities are significant. In particular, the International Mountain Biking Association (IMBA) has been studying the region and is interested in seeing Pass Powderkeg as a staging point to a much bigger network of trails. Directly associated with this, a lift serviced downhill mountain biking operation can be developed with the installation of Lift A, which will provide the critical 300 metre plus vertical necessary for the area to be viable. This will access a mix of beginner, intermediate and expert downhill single track mountain biking trails.

To date, eight mountain biking trails have been developed on the mountain and a Jay Hoots Bike Park has been constructed at the base of the mountain.

Another opportunity will be the potential use of the mid-mountain Day Lodge for functions (weddings, family reunions, corporate retreats, festivals) during the summer. The types of events will depend on the quality of building improvements, fixtures and associated landscaping. Access and parking will be via the existing, summer use road and parking lot.

Finally, another all-season opportunity is the potential development of a "Tea House" at the top of the mountain.

4.4 Base Area Plan

4.4.1 Base Area Development

With the development of the new base area at the bottom of the mountain, the programming and uses of land and buildings are reoriented.

The existing mid-mountain Day Lodge will be re-purposed to become the food and beverage focal point of Pass Powderkeg. A renovation and expansion of the existing building will be required prior to buildout of the mountain to provide sufficient space to accommodate the capacity of the mountain.

The new base area facilities at the bottom of the mountain will cater to the beginning and ending of the visitors' day. As such, the parking lot and staging services and facilities (tickets, ski school, rentals, retail, administration, ski patrol, washrooms, public lockers, day care, etc) must be sized to accommodate the needs of about 1,000 skiers per day.

4.4.2 Built Space

As improvements are made on the mountain, increasing the CCC of the skiing, the base area facilities will need to be incrementally increased in size to bring the area into balance. A phased development program for the base area facilities will have to be created.

Ultimately, based on industry standards to service the CCC of 1,000 skiers per day at buildout, Pass Powderkeg would need to establish about 13,425 square feet of built space. Of this, approximately 6,500 square feet would want to be at the mid-mountain Day Lodge providing space for restaurant/bar seating (3,550 sq ft), kitchen/scramble (1,300 sq ft), washrooms (900 sq ft), mechanical/storage (400 sq ft) and circulation/walls/waste (250 sq ft). This will require an addition of 3,000 square feet to the existing mid-mountain Day Lodge.

The remaining 6,925 square feet of built space requirements would be located at the Staging Base Lodge building at the bottom of the mountain. This would include space for tickets (100 sq ft), ski school (550 sq ft), equipment rentals (900 sq ft), retail (750 sq ft), administration (600 sq ft), ski patrol (350 sq ft), washrooms (800 sq ft), public lockers (550 sq ft), day care (1,150 sq ft), employee lockers (150 sq ft), circulation/walls/waste (475 sq ft), mechanical/storage (550 sq ft).

4.4.3 Parking

The new parking lot built at the base of the mountain will need to be able to accommodate 1,000 skiers per day. This equates to approximately 285 cars providing for 85% of the visitors. It is assumed that the remaining 15% of the visitors will be dropped off by bus or other forms of transportation.

In the summer, the type of operations and programming will determine how much space and parking is required. Because the road and the associated parking are available at the mid-mountain for functions tied to that Day Lodge, the requirements and use of the facilities at the base of the mountain will be driven by lift serviced activities of mountain biking, sightseeing and hiking.

4.4.4 Maintenance Area

The Maintenance Area is proposed to be moved to a site near the existing water tower on the existing access road. This will enable direct vehicular access to the maintenance facilities as well providing snow access to the ski terrain. It will also reduce the snowplowing requirements of the access road up to the mid-mountain. Most importantly, this will remove the maintenance activities from the heart of the reconfigured mid-mountain area, improving skier circulation and ambience.

Because of the economic implications, the timing of this will have to be given careful consideration. However, the sooner the maintenance facility is moved, the sooner significant improvements at Pass Powderkeg can be undertaken.

4.4.5 Ski to/Ski from Resort Residential

There is some fairly significant ski to/ski from resort residential real estate opportunities that, if the lands are made available to Pass Powderkeg, could prove to be a source of capital and a captured market for the ski area. The lower elevations of both the east facing aspect and the northwest aspect of the mountain appear to have the physical capability to support low to medium density residential development. With careful planning, a ski trail system can be designed to enable the occupants of these units, direct access to and from the skiing. This has proven to be a very valuable asset to mountain resorts, provided it is judiciously brought on line in an incremental fashion following the development of the associated skiing facilities, when real estate values are maximized. The challenge is to avoid the classic mistake of trying to raise capital for ski area development by selling the undervalued real estate.

5.0 IMPLEMENTATION

5.1 Introduction

The gradual development of Pass Powderkeg is envisioned to initially occur over two phases (see Figures 5-1 to 5-4). Each phase is self contained, effectively being able to function as a finished ski area product with both the mountain and the base area development complementing each other in a balanced and well integrated fashion. The study area is capable of supporting subsequent future development (Figures 5-5 and 5-6) will be driven by demand from the skier marketplace.

5.2 Phase One

Phase One will see the following installation and action steps:

- Remove the Lower T-Bar and either sell it or store it for potential temporary use in a future phase;
- Install Lift A, a fixed grip quad chair from the base of the mountain to the top of the mountain, with an off-load at the mid-mountain for Novice skiers;
- Add new ski trails from the top of the mountain and upgrade existing trails to improve skier circulation;
- Retain Lift B as is, the existing upper T-Bar to be available for busy days and enabling an early season low snow option for the top of the mountain;
- Expand the snowmaking to ensure top to bottom skiing as serviced by Lift A;
- Double the size of the existing mid-mountain Day Lodge;
- Move the Maintenance Building down to a site adjacent to the existing water tower;
- Continue to use the access road and mid-mountain parking lot as is;
- Install Lift C, the carpet lift at the bottom of the mountain, to service new “never-ever” Beginner terrain and a new Tube Park;
- Add new Beginner ski trails serviced by Lift C;
- Build the Tube Park;

- Build a small staging facility for tickets and ski school at the base of the mountain;
- Build about 50% of the planned parking lot at the base of the mountain.





Phase 1

2011

Legend

-  New Lifts
-  Existing Lifts
-  Proposed Ski Trails
-  Existing Ski Trails - with future base redirection
-  Tube Park
-  Staging Base Lodge
-  New Maintenance Building
-  Mountain Day Lodge
-  Water Tower
-  Bridge
-  Buildings
-  Property Boundaries
-  Paved Road
-  Railway

Prepared for:



PO Box 600
 Crownsnest Pass, AB, Canada, T0K 0E0
 Phone: (403) 562-8334
 Fax: (403) 562-2345
 Email: info@passpowderkeg.ca

Planning by:



4 -1005 Alpha Lake Rd.
 Whistler, BC, Canada, V0N 1B1
 Phone: (604) 932-7002
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 Email: bha@brentharley.com

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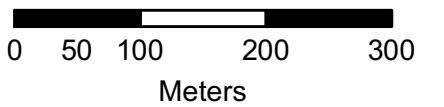


Fig. 5-1




3d View
Phase 1

2011



Prepared for:



PASSPOWDERKEG
PO Box 600
Crownsnest Pass, AB, Canada, T0K 0E0
Phone: (403) 562-8334
Fax: (403) 562-2345
Email: info@passpowderkeg.ca

Planning by:



BHA The Smart Planning Group
4 -1005 Alpha Lake Rd.
Whistler, BC, Canada, V0N 1B1
Phone: (604) 932-7002
Fax: (604) 938-1161
Email: bha@brentharley.com

Fig. 5-2

5.3 Phase Two

Phase Two would be triggered when the area achieves season visits that match approximately a 35% to 40% utilization rate of seasonal capacity. Assuming that the Phase One improvements creates a CCC of 700 skiers per day and has a season length of 80 days, this produces a total potential of 56,000 skier visits. As such, when the area attains about 19,600 to 22,400 skier visits per year, it will time to initiate the Phase Two development, as described below.

Phase Two will see the following installation and action steps:

- Reconfigure the mid-mountain base area to accommodate a Novice skiing teaching area;
- Winter decommission the access road beyond the Maintenance Areas and the parking lot at the mid-mountain base;
- Relocate the existing platter lift to the new Lift D alignment;
- Add new ski trails in association with Lift D and upgrade existing trails to improve skier circulation, with an emphasis on the Novice skiing experience from mid-mountain to the base;
- Install Lift E, a fixed grip quad chair servicing the east facing terrain from the top of the mountain. (Note: the old Lower T-Bar may act as an interim lift solution for a portion of this terrain. Further, if the Upper T-Bar is deemed to be unnecessary in its current position, the two T-Bars may service the whole of this terrain);
- Add new ski trails from the top of the mountain in association with Lift E and upgrade existing trails to improve skier circulation;
- Expand the snowmaking system to cover more terrain;
- Expand the Staging Day Lodge, adding services, facilities and amenities at the base of the mountain;
- Expand parking at the base of the mountain to a capacity of 300+ cars;
- Once Lift E and the associated ski trails are in place, the opportunity for a ski to/ski from development has been established and the real estate value to the associated lands on the lower elevations of the east facing slopes has been

created. At this point (and not before, as the promise of a future amenity will not capture the dollars that a tangible in place development will), initiate the development of the ski to/ski from resort residential real estate. Access to these lands can be achieved via the existing road leading to the maintenance area.



Phase 2

2011

Legend

- New Lifts
- Existing Lifts
- Proposed Ski Trails
- Existing Ski Trails
- Tube Park
- Staging Base Lodge
- New Maintenance Building
- Mountain Day Lodge
- Water Tower
- Potential Ski to/Ski from Real Estate
- Bridge
- Buildings
- Property Boundaries
- Paved Road
- Railway

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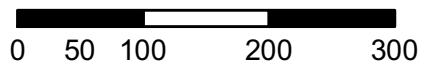
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 Crowsnest Pass, AB, Canada, T0K 0E0
 Phone: (403) 562-8334
 Fax: (403) 562-2345
 Email: info@passpowderkeg.ca

Planning by:

4 -1005 Alpha Lake Rd.
 Whistler, BC, Canada, V0N 1B1
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 Fax: (604) 938-1161
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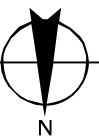


Fig. 5-3



3d View Phase 2

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PASSPOWDERKEG
PO Box 600
Crownsnest Pass, AB, Canada, T0K 0E0
Phone: (403) 562-8334
Fax: (403) 562-2345
Email: info@passpowderkeg.ca

Planning by:



BHA The Smart Planning Group
4 -1005 Alpha Lake Rd.
Whistler, BC, Canada, V0N 1B1
Phone: (604) 932-7002
Fax: (604) 938-1161
Email: bha@brentharley.com

5.4 Future Development

5.4.1 Introduction

Subsequent to the completion of Phase 2, a series of potential developments can come into play. Each of these is dependent upon the clarification and resolution of land ownership. The timing of this expansion would be market driven. One indicator is when Pass Powderkeg achieves winter season visitation that matches approximately a 35% to 40% utilization rate of seasonal capacity. Assuming a CCC of 1,000 skiers per day and a season length of 80 days, this produces a total potential of 80,000 skier visits. As such, when the area attains about 28,000 to 32,000 skier visits per year, it will time to seriously consider another major expansion, as described below.

5.4.2 Future Mountain and Base Area Expansion

A pod of potential Intermediate to Advanced ski terrain from the top of the mountain with northwest orientation is a significant expansion opportunity for the ski area. As these lands are owned by others, a relationship would have to be established where the ski terrain would need to be deeded to the area.

Lift F, as a fixed grip quad, and the associated ski trails would add about 300 skiers per day to the CCC of the Pass Powderkeg (See Figures 5-5 and 5-6). To ensure the product, the snowmaking system will need to be further expanded.

If the land ownership issues cannot be resolved a smaller pod could be developed in the upper elevations that could be serviced by one of the old T-Bars.

Base area expansion will also need to be taken into account. This will require a renovation and expansion of the Base Lodges as well as creating more parking.

Overall, the improvements on the mountain could prove to be a very valuable amenity in the form of catering to the creation of more ski to/ski from resort residential real estate at the lower elevations of the northwest slopes. Ski trails to and from these lands would have to be very carefully designed to effectively maximize land values.

















5.4.3 Future Resort Residential Real Estate

There is an opportunity to develop additional ski to/ski from resort residential real estate on the lower elevations of the northwest facing slopes. Access to these lands can be achieved via the existing road system north of the ski area. Land ownership and possibly a joint venture partnership will need to be established.


The timing of this development will want to follow and complement the development on the mountain. It will also want to take into account the sales and market absorption of the ski to/ski from real estate development at the base of the east facing terrain.



Future Development

- Legend** 2011
-  Potential Future Lift
 -  Existing Lifts
 -  Proposed Ski Trails
 -  Existing Ski Trails
 -  Tube Park
 -  Staging Base Lodge
 -  Potential Future Real Estate Development
 -  Potential Ski Area Expansion
 -  New Maintenance Building
 -  Day Lodge
 -  Water Tower
 -  Bridge
 -  Buildings
 -  Property Boundaries
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Prepared for:



PO Box 600
 Crowsnest Pass, AB, Canada, T0K 0E0
 Phone: (403) 562-8334
 Fax: (403) 562-2345
 Email: info@passpowderkeg.ca

Planning by:



4 -1005 Alpha Lake Rd.
 Whistler, BC, Canada, V0N 1B1
 Phone: (604) 932-7002
 Fax: (604) 938-1161
 Email: bha@brentharley.com

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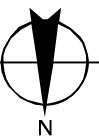
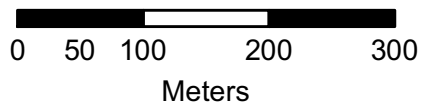


Fig. 5-5



3d View Future Development

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PASSPOWDERKEG
PO Box 600
Crownsnest Pass, AB, Canada, T0K 0E0
Phone: (403) 562-8334
Fax: (403) 562-2345
Email: info@passpowderkeg.ca

Planning by:



BHA The Smart Planning Group
4 -1005 Alpha Lake Rd.
Whistler, BC, Canada, V0N 1B1
Phone: (604) 932-7002
Fax: (604) 938-1161
Email: bha@brentharley.com



#4-1005 Alpha Lake Road
Whistler, B.C. Canada V0N 1B1
Ph: 604-932-7002
Fax: 604-938-1161
www.brentharley.com