

Big White Ski Resort

DRAFT MASTER PLAN

October 2020



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Executive Summary



EXECUTIVE SUMMARY

The Executive Summary of the Big White Ski Resort 2020 Master Plan describes and illustrates an exciting opportunity for the Resort to double the size of its all-season recreation offering, improving the quality and mix of those facilities as well as the overall resort experience. It has been completed by Brent Harley and Associates Inc. (BHA) with extensive input from the owners and managers of Big White Ski Resort (Big White).

The intent of the Executive Summary is to provide an overview of the proposed development at Big White Ski Resort. It showcases Big White's proposed developments designed to improve the quality of the experience offered at the Resort in an environmentally and economically sustainable fashion. The resort review, study area analysis, discussion, and resulting preferred concepts included here form the foundation to realize the defined resort vision, goals, and objectives to buildout.

THE PLANNING PROCESS

To initiate the Master Planning process, BHA revisited the Resort's earlier vision, goals, objectives, opportunities, constraints, and concepts developed for Big White through previous planning processes. With this foundation, BHA initiated a comprehensive planning and design exercise with a perspective that respected previous planning and upgraded the earlier work.

Building upon the opportunities inherent to the local terrain and anticipating a growing market demand for mountain resort product, BHA identified the opportunities and weaknesses of the existing mountain and base area facilities in the context of the surrounding landscape and undertook a preliminary, conceptual planning exercise. Through this process, BHA explored the potential to diversify the winter product, differentiating Big White from other 'typical' ski resorts, combined with the potential to develop of a full range of summer season recreation activities, including mountain biking, an alpine coaster, aerial adventure park, golf courses, and hiking.

With the concepts in hand, BHA then determined the Comfortable Carrying Capacity (CCC) of the lift-serviced skiing and snowboarding, the dominant resort recreation activities. The cumulative capacity of the existing and proposed attractions (i.e. alpine skiing and snowboarding, Nordic skiing, ice skating, tubing, and snowmobiling) was then calculated to determine the Balanced Resort Capacity (BRC) of the resort. Cumulatively, this established the appropriate amount of base area development and accommodation required at Big White.

These concepts were then refined into the detailed components of the Master Plan. The results lead to the Implementation Program, sequentially defining the all-season phased development of Big White in a well balanced and integrated fashion, both on the mountain and in the base areas, well into the future.

FIRST NATIONS

Throughout of the planning process, Big White Ski Resort has engaged in a continuous dialogue with the Westbank First Nation, sharing the vision and intent for future development at the Resort while working to ensure that the proposed plans align with their vision for the lands. The Master Plan has been informed by this dialogue and development will continue to be shaped by Big White's strong relationship with the Westbank First Nation.

A VISION FOR THE FUTURE

Visioning sessions held early in the planning process established that Big White has a strong reputation for delivering an excellent "winter in the mountains" experience. The combination of reliable "champagne powder" snow with world-class family friendly mountain facilities, the largest ski to/ski from village in Canada, and ease of access, has made Big White the second biggest ski resort in British Columbia, next to Whistler Blackcomb.

The Vision for Big White is:

"To be the perfect four-season mountain resort, distinguished for the high-quality experience our guests always receive."

And Big White's Mission is:

"To go the extra mile to ensure our guests enjoy a memorable alpine experience in a positive, safe and friendly environment."

Complementing this, the following goals and objectives acted to guide in the creation of the Big White Master Plan:

- Respect the natural attributes of the mountain and the setting, recognizing that these are Big White's primary attraction and currency;
- Continue to strengthen the working relationship with the Westbank First Nations (WFN) – one that will aid both Big White and the WFN in their efforts to achieve sustained prosperity;
- Provide state-of-the-art all-season facilities on the mountain and in the village and base areas;
- Focus on the development and operation of a wide variety of recreation and retreat pursuits;
- Accommodate the needs and expectations of day-use guests, destination guests, weekend guests, and the growing population of full-time residents;
- Provide a well-balanced lift serviced alpine skiing and snowboarding experience as the primary winter attraction;

- Offer a diverse range of winter attractions to complement the alpine skiing including Nordic skiing, tubing, snowshoeing, snowmobiling, and skating, among others;
- Establish summer attractions by developing lift-serviced mountain biking trails and bike park, cross-country mountain biking trails, a par 3 golf course, at least one eighteen-hole golf course, zip lines, nature trails, and hiking;
- Maintain a diverse mix of specialized resort retail and equipment rental, restaurants, pubs, bistros, workout and training facilities, and “unique to Big White” outlets and galleries;
- Develop an appropriate mix of facilities that will cater to longer term guests and residents, including a grocery store, liquor store, day care, community centre, hardware store, theatre, and banking services, among others;
- Maintain and maximize the “ski to/ski from” attribute of the base area and Village that already defines Big White as a truly unique ski resort.

EXISTING RESORT

Location

Big White is an existing ski resort located approximately 47 kilometres east of Kelowna, BC. The Kelowna International Airport provides easy access for guests from eastern Canada, North America, and from all over the world.



Big White Ski Resort Regional Context

Existing Facilities

Mountain Facilities

The current alpine skiing facilities at Big White consist of 15 ski lifts servicing 108 designated trails covering an approximate area of 607 skiable hectares (1,500 acres) (Fig. E-1). Skiing and snowboarding are offered on the south and southwest slopes of Big White.

These facilities have a Comfortable Carrying Capacity (CCC) of approximately 9,390 skiers/boarders per day (any future reference to skiers will refer to both skiers and snowboarders). The CCC is a measure of the optimum number of skiers that can utilize the resort over the course of the day while being guaranteed a pleasant recreational experience and without causing a decline in the quality of the environment.

An analysis of the existing ski runs found that there is an oversupply of intermediate and novice ski terrain and a lack of beginner, advanced, and expert terrain. Big White has committed to addressing this imbalance through the development of new ski terrain.

The Balanced Resort Capacity (BRC) is the total number of people that the resort's facilities can accommodate per day (i.e. CCC plus complementary activities). This becomes the cornerstone when defining the appropriate amount of base area facilities (e.g. built space, infrastructure, parking, and bed units). The capacity of alpine skiing, Nordic skiing, tubing, skating, snowplay, snowmobiling, and passive guests brings Big White's existing BRC to a total of 11,488 guests per day.

Base Area Facilities

The core existing base area facilities are found in Big White Village. Support facilities are located in Happy Valley, the Ridge Base, the Westridge Base, and the Black Forest Base. The analysis of these facilities, as they relate to the BRC, found that the amount of built space for restaurants, bars and retail as well as primary skier services are well provided for. However, compared to industry standards, there appears to be an opportunity to add more equipment rental and ski school space. As these are primary profit centres for a resort, the Big White Master Plan incorporates these important components, catering to an expanded destination marketplace. Similarly, an apparent lack of destination specific built space (e.g. recreation facilities, entertainment, spa treatment, convention meeting space facilities) will increasingly be added to the offering designed to optimize the resort experience for destination and international tourists.



Big White Ski Resort
Master Plan
2020

Legend

- Existing Big White CRA
- Existing Ski Lifts
- Existing Roads
- Existing Glading
- Existing Vegetation
- Lakes

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Existing Conditions

Figure E-1

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View of Big White Ski Resort - Existing (3D)

Overnight Accommodation

The existing residential and commercial accommodation facilities at Big White have evolved over time to coincide with the development of the skiing facilities. As the destination status of the Resort improves, and the CCC and the BRC increase, so too must Big White's ability to provide for overnight guests. Currently 100% of the overnight accommodations are ski to/ski from. This is a very significant and positive quality that differentiates Big White from most other mountain resorts in North America (As a comparison, only approximately 20% of Whistler's bed base can be designated as ski in/ski from). The existing and committed overnight accommodation at Big White totals 3,019 residential and commercial units of development, which equates to 10,533 bed units.

Parking

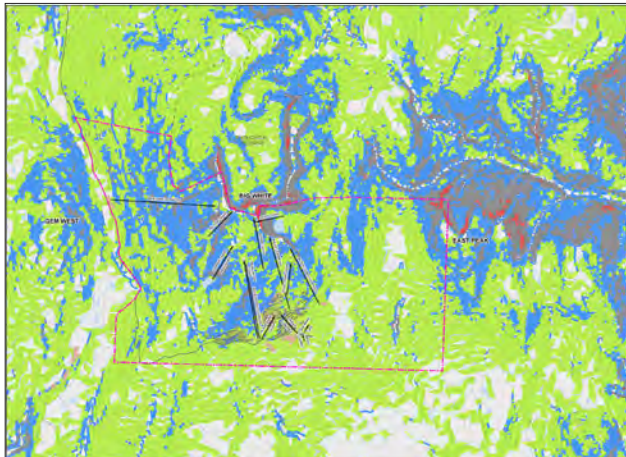
Parking for destination guests is provided at their accommodation units. Parking capacity at onsite accommodation totals 3,128 cars which supports 7,820 guests. Parking for day-use guests is provided in the Happy Valley Base, the Westridge Base, and the Black Forest Base. The day-use parking lot capacity totals 1,430 cars equating to 4,290 day-use guests. The parking capacity at the Resort appears to be sufficient at this time. However, as Big White expands, the capacity of the day-use parking facilities must also increase.

SITE ANALYSIS

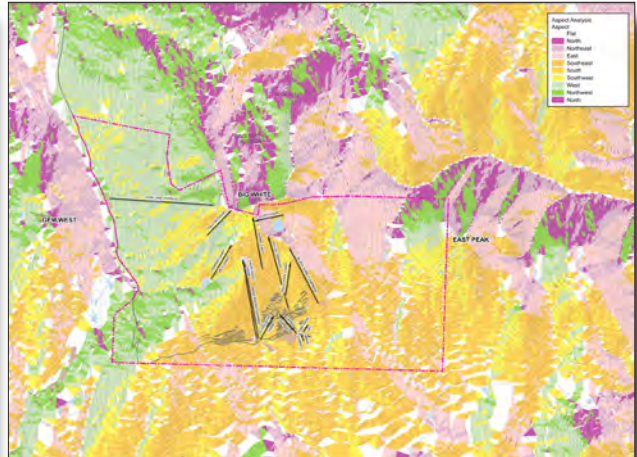
THE MOUNTAIN AND THE BASE

The Master Plan study area was analysed in terms of slope, elevation, aspect, and fall-line to gain an understanding of the alpine skiing, mountain biking, Nordic skiing, and base area development potential and its capability to physically and environmentally support additional four-season recreation activities. The East Peak was identified as offering a significant opportunity to develop north facing, high-quality ski terrain. This is the type of advanced and expert terrain that is currently lacking at Big White. Further, the surrounding Crown lands offer backcountry adventure opportunities for the Resort to capitalize on and cater to.

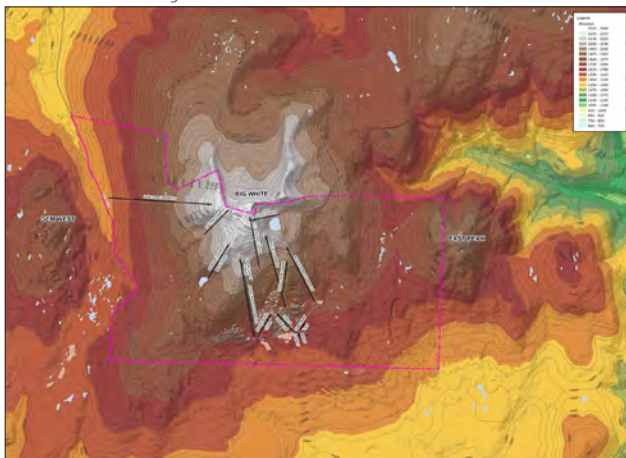
Slope Analysis



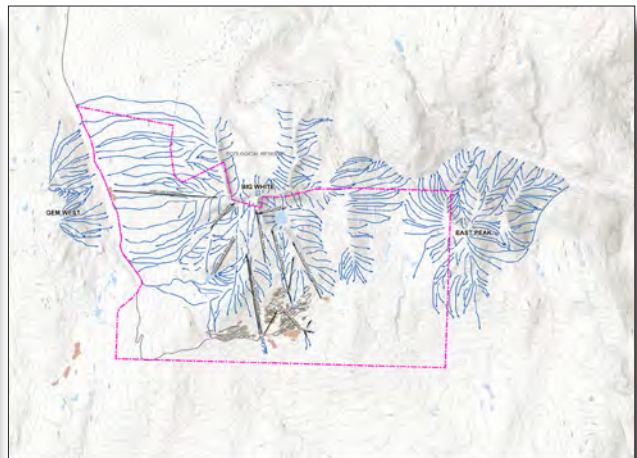
Aspect Analysis



Elevation Analysis



Fall-line Analysis



ENVIRONMENTAL REVIEW

From initial concept to final design, the intent of Big White Ski Resort has been to develop a Master Plan that reflects the type, quality, quantity and sensitivity of the local environmental values. Big White has completed a series of environmental reviews and studies through the planning process; As part of the aborted 2006 planning process, an environmental review of the Controlled Recreation Area and surrounding lands was completed by Cascade Environmental Resource Group Ltd. (CERG). Further, in preparation for the construction of the mountain bike park and the addition of the Black Forest Connector and Backcountry Chair, CERG completed site-specific analyses of the study areas. From this, an environmental mitigation plan was drafted for the proposed mountain bike trails in the spring of 2016, and a follow-up report drafted in fall 2018. These reports, their findings and recommendations, were synthesized into a single comprehensive report for clarity and accessibility (CERG, 2020).

The CERG report (2020) provided general conclusions and a series of recommendations that shaped the preferred concept, an environmental mitigation strategy, and will continue to inform development and operations at Big White. In summary, the reports found that climate, geology, and vegetation did not present any obvious constraints to development. It was noted that the proposed concept will likely impact hydrology in the area (e.g. potential for increased erosion and sedimentation) and wildlife (e.g. species displacement due to tree removal), and that there is limited potential for at-risk species to occur in the study area. Further, the recommendations included Best Management Practices to address any of the potential impacts. The CERG report (2020) is provided as an appendix to the Resort Master Plan.



MASTER PLAN

The Big White Ski Resort Master Plan describes the proposed transformation of this successful ski area into a world-class, all-season destination resort (Fig. E-2 & E-3). It is divided into two principal parts – the mountain facilities and the base area facilities.

MOUNTAIN FACILITIES

The Mountain Facilities are the elements developed at the Resort to complement the natural environment and setting on which they are built. They are the attractions utilized by visitors and guests to enjoy their escape in the mountains. The Master Plan defines an array of proposed facilities for Big White, including ski lifts and trails, Nordic skiing, skating, tubing, snowshoeing and snowplay, snowmobiling, and zip lining in the winter, and downhill and cross-country mountain biking, golf, hiking, zip lining, alpine coaster, and ATVing in the summer.

MOUNTAIN FACILITY DEVELOPMENT GOALS

Winter Season

The primary development goals for the mountain as they relate to winter facilities are to:

- Ensure that all mountain facility development is completed in an environmentally sensitive fashion;
- Maximize the development of advanced and expert terrain to improve the balance of terrain offered at Big White;
- Provide beginner terrain to the greatest extent possible near to the primary staging areas at Big White;
- Provide intermediate and entry level glades that are 'feathered' into more advanced gladed terrain;
- Preserve, develop, and enhance the ski to/ski from capabilities of the base area developments;
- Develop a comprehensive snowmaking system;
- Continue to develop alternative winter activities for guests, recognizing the diverse needs and expectations of destination guests, such as ice skating, snowshoeing, Nordic skiing, tubing, snowmobiling, and health and wellness;
- Preserve, enhance, and expand on snowmobile trails, with Big White acting as the primary staging location for the regional snowmobile market as well as accommodating snowmobile trail access from existing developments.



Big White Ski Resort
Master Plan
2020

- Legend
- Existing Big White CRA
 - Proposed CRA
 - Proposed Golf Courses
 - Proposed Roads
 - Proposed Parking Lots
 - Existing Ski Lifts
 - Proposed Lifts
 - Proposed Trails
- Proposed Glading
- Existing Glading
 - Glading Thin
 - Glading Dense
 - Proposed Vegetation at Buildout
- Proposed Buildings
- Existing Buildings
 - Proposed Buildings

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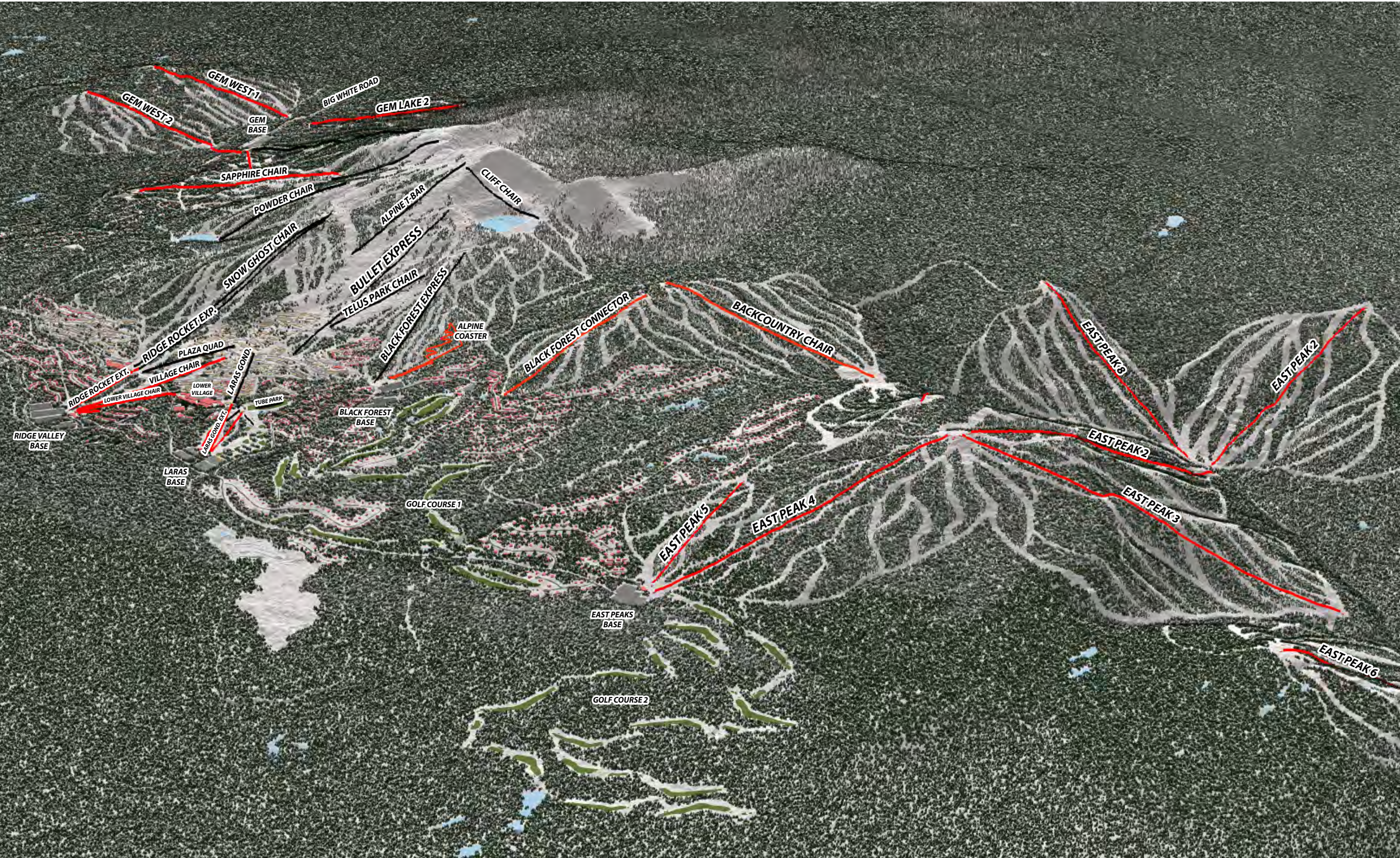
Resort Master Plan
at Buildout

Figure E-2

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Big White Ski Resort
Master Plan
2020



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Resort Master Plan
At Buildout - 3D

Figure E-3

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Summer Season

The primary development goals for the mountain as they relate to summer facilities are to:

- Continue the development of world-class lift serviced and cross-country mountain biking;
- **Enable Big White to host major mountain biking events;**
- Pursue the development of a par 3 golf course and one or more 18-hole golf courses that stage from the existing and/or future base areas;
- Plan for the development of zip lines, an extensive network of adventure trails and an alpine coaster;
- Preserve, develop, and enhance the bike to/bike from access to all base area developments.

EXPANSION AREAS

Areas suitable for ski terrain expansion were identified with an emphasis on the development of the East Peak. Complementing this are the proposed developments of the **Gem Lake expansion and infill, the adventure skiing north of the East Peak,** the beginner skiing associated with the extension of the Ridge Rocket, and the specialized skiing of Gem West. Once established, the skiing experience offered will be diverse, with guests able to choose to focus on a single area of the Resort or spend their day exploring the mountains – travelling on skis from one end of Big White to the other. Conceptually this creates a resort experience similar to that found in Europe.

Lifts and Runs

At buildout of the Master Plan, Big White will consist of 37 ski lifts servicing 329 formal trails plus glades. This includes the addition or improvement of 25 ski lifts and 221 ski runs from what is currently in place, and results in approximately 1,021 hectares (2,523 acres) of new ski terrain. This will bring Big White's total developed ski terrain to approximately 1,628 hectares (4,023 acres). Importantly, with the planned increases to the advanced, expert, and beginner ski trails, the terrain offering at Big White will more closely align with the distribution of skier skill classes found in the skier marketplace.

Summer Attractions

Big White has the physical potential to create a dynamic and compelling summer recreation product and realize their summer season goals. The Big White bike park opened in 2017 and has expanded every year since. Big White intends to build on the popularity of both lift-serviced and cross-country mountain biking, developing mountain biking as the core summer activity. The Black Forest Express, Bullet Express, Alpine T-Bar, Snow Ghost Chair/Ridge Rocket Express as well as the slopes below of Cliff Chair and the area surrounding Rondha Lake have been identified as ideal terrain for both lift-accessed and cross-country mountain biking.

Complementing the mountain biking attractions, the Master Plan illustrates designs for a par 3 golf course and two 18-hole golf courses. The par 3 will be based in Happy Valley, with guests progressing downhill to the proposed Lara's Base and using Lara's gondola to return to Big White Village. The first 18-hole course will stage from the Black Forest Base, and the second will be based out of the future East Peak Village Base. Detailed planning and golf course architecture remain to be completed and development of these golf courses will be dependant on outside investment interests.

Further, analyses indicate that the terrain accessed from the Black Forest Express is well-suited for an Alpine Coaster and zip line network. Additional summer facilities, such as an adventure trail network, equestrian adventures, and ATVing (among others), will be considered and pursued as detailed planning for summer use and programming continues.

Balanced Resort Capacity

In total, at resort buildout the alpine skiing facilities will have a Comfortable Carrying Capacity of approximately 25,624 skiers per day. The expansion of Nordic skiing, tubing, skating, snowplay, snowmobiling and passive guests adds another 4,151 guests per day to the total. Cumulatively, this forms the Balanced Resort Capacity (BRC), and results in a total of 31,825 guests per day.

BASE AREA FACILITIES

The proposed improvements and expansion of the base area development at Big White have been designed to complement the mountain's attributes and planned facilities. These developments will be gradually taken on in balance with the establishment of additional skiing and associated mountain resort attractions, all in response to market demand.

Base Area Facility Development Goals

The primary development goals for the base area facilities are to:

- Ensure that all base area development is completed in an environmentally sensitive fashion;
- Develop the base areas at Big White in a comprehensive fashion that caters to day-use and destination guests, second homeowners, and a growing permanent population;
- Incorporate direct linkages to and from the base areas and the resort residential developments by establishing and maintaining ski to/ski from trail development as well as a highly integrated all-purpose trail network;
- Establish the scale and composition of base area facilities and resort residential development in direct response to the Balanced Resort Capacity of the mountain facilities;
- Incorporate a variety of resort residential accommodation types tied to earned bed units as they relate to the BRC;
- Incorporate affordable resident and employee housing;
- Improve the quality and all-season capacity of all base area elements at Big White in an all-season capacity.

Built Space

Built space requirements at a ski resort are driven by the BRC of the resort's recreation offerings and based on industry standards. At buildout, Big White must have the ability to provide for the needs of approximately 31,825 guests on any given day. The types of built space need to complement the expectations and requirements of day-use and destination guests. These include restaurants, bars, commercial and retail outlets, rental and repair shops, guest services, ski school, patrol and first aid, day care, lockers, resort administration and employee facilities.

As Big White grows in stature and reputation as a destination resort, these facilities need to be broadened to provide for the expectations of guests staying for extended visits. These include a greater variety of restaurants, retail outlets, convention, seminar and retreat facilities, theatre, spas and recreation facilities. Further, as more accommodation is used by full-time residents, their needs also must be considered, including such facilities as a grocery store, liquor store, day care, drug store, hardware, post office, church, and community centre, among others.

As planned, by buildout the amount of skier related space will increase from 215,133 square feet to 485,965 square feet. Destination and resident-oriented space will grow from the current 19,276 square feet to 194,386 square feet. This amounts to a total of 680,351 square feet of built space at Big White at buildout.

The location of these base area facilities will be spread over the resort in a variety of locations, directly associated and in balance with the adjacent mountain facilities and resort residential development.

Overnight Accommodation

Overnight accommodation is defined by the number of bed units that in place at Big White. Based on the All Season Resort Guidelines (ASRG) Bed Unit Model, Big White earns a bed ratio of 1:1.4. With a calculated BRC of 31,825 guests per day, the number of bed units that could be developed at Big White at buildout is 44,555. However, in response to current demand for overnight accommodation and consistent with the recent changes to the Environmental Assessment Office Reviewable Project Regulations, Big White is only applying for a total of 20,600 bed units, comprised of the 13,800 bed units approved in the 1999 Master Plan, plus an additional 6,800 bed units. This stated, Big White wishes the Crown to acknowledge that the Resort has earned 44,555 bed units as per the ASRG Bed Unit Model, to which the Resort will make application at the appropriate time in the future.

Development Areas

The development areas defined within the Master Plan include, Big White Village, the Lower Village, Chateau Blanc, the Ridge Valley Base, the Black Forest, the East Peaks Base, Backcountry, Snowpines, Horsefly, Westridge, Gem Lake Base, and the Sapphire Base (Fig. E-4). Each of these areas have special qualities, attributes, and characteristics and have been conceptually laid out to service and complement the adjacent mountain facilities.

The Lower Village has been identified as a critical and iconic focal point at Big White. Once developed it will become the centre of the community and resident activity of Big White. On a year-round basis it will house such fundamental resident needs as a grocery store, liquor store, post office, medical centre, school, chapel, community services centre, library, theatre skating rink, hardware and retail stores. This will be augmented with tourist-oriented facilities such as restaurants bars, cafes, Big White specific galleries, shops and specialized retail and sporting goods outlets.

Recognizing the importance of the site, architectural programming and preliminary grading plans for the Lower Village have been completed to define and preserve this opportunity. As planned, it will be a pedestrian-oriented Village, with easy vehicle access to day-use, destination, and short-term parking. It will have direct connections to the skiing, the golf and the backcountry. Done well the Lower Village will become the defining image of Big White. The Village Stroll will link the three plazas together, each with a different character designed to optimize the guest experience.

CRA Boundary Adjustment

To accommodate the envisioned growth of Big White, the Controlled Recreation Area (CRA) Boundary will require adjustment (Fig. E-5). The proposed revision will be negotiated as part of the new Master Development Agreement with the Province.

As proposed, the existing CRA (3,140 hectares, 7,759 acres) will grow to 6,900 hectares (17,050 acres), an increase of 3,760 hectares (9,290 acres). It is important to note that the proposed expansion of the CRA respects the boundaries of the Big White Mountain Ecological Reserve. Internal to the new CRA, the total base area development (existing and proposed) that would be privatized through Crown land grants would be approximately 516 hectares (1,275 acres).



Big White Ski Resort Master Plan 2020

Legend

- Existing Big White CRA
 - Proposed CRA
 - Existing Ski Lifts
 - Committed Lifts
 - Proposed Lifts
- ### Proposed Development Areas
- Backcountry
 - Black Forest
 - Chateau Blanc
 - East Peaks
 - Horsefly Road
 - Ridge Valley
 - Snowpines
 - Village
 - Westridge

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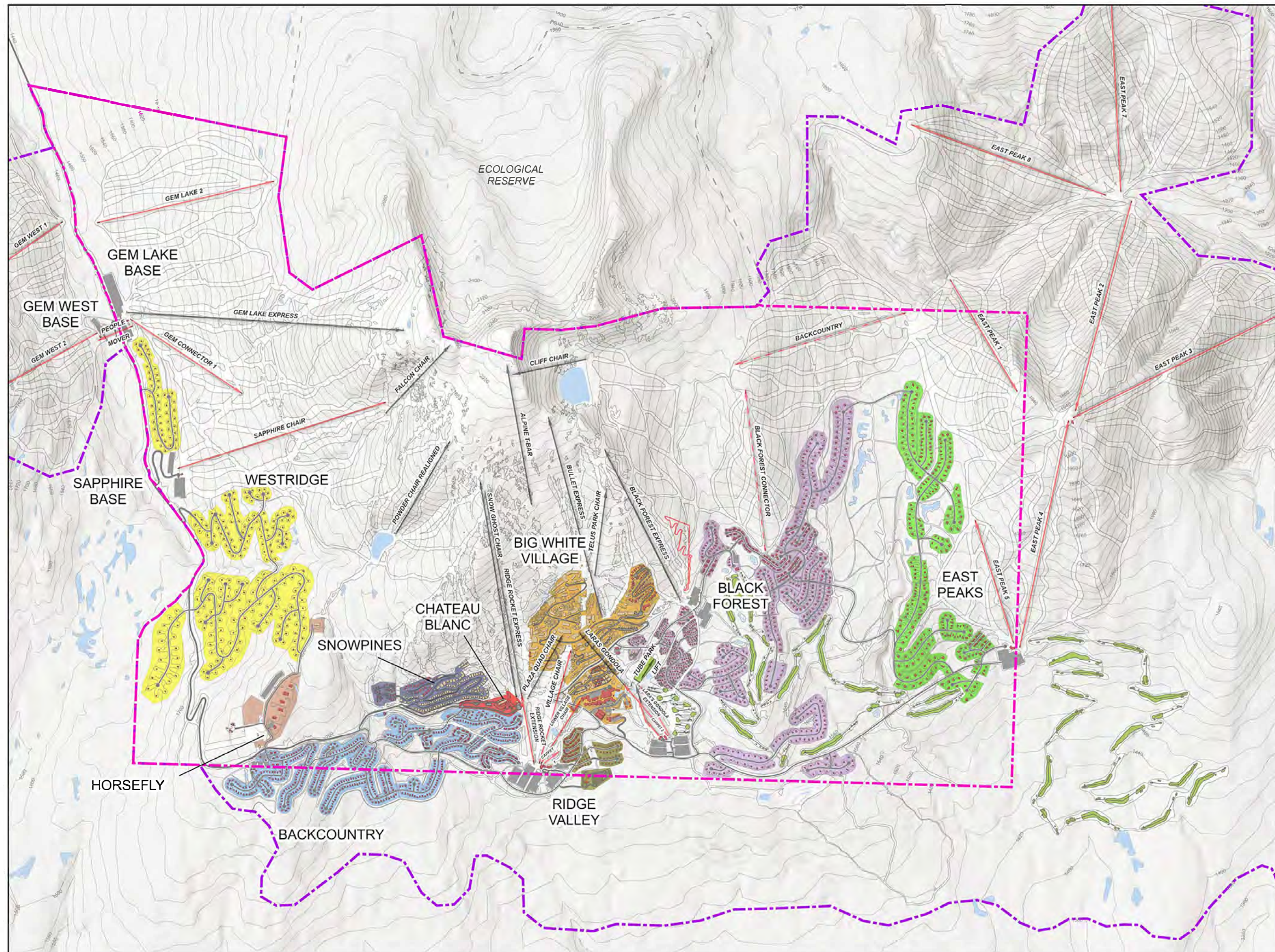
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Base Area Development Plan

Figure E-4



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Big White Ski Resort
Master Plan
2020

- Legend
- Existing Ski Lifts
 - Committed Lifts
 - Proposed Lifts
 - Existing Big White CRA
 - Proposed CRA
 - Existing Ski Runs
 - Committed Ski Runs
 - Proposed Ski Runs
 - Proposed Multi-Use Trails

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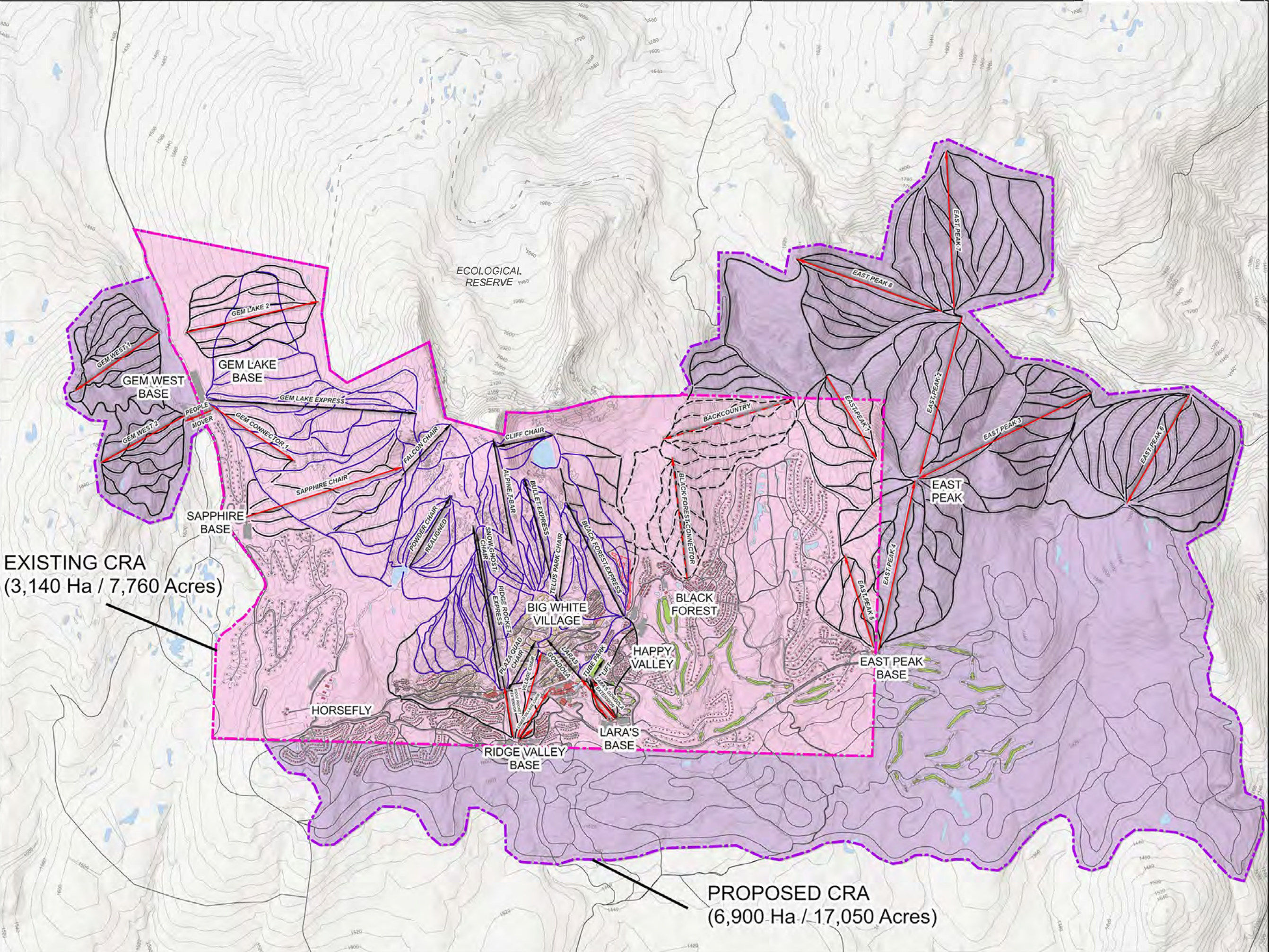
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Proposed CRA
Boundary

Figure E-5



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IMPLEMENTATION STRATEGY

The pace of implementation of the Big White Master Plan will be driven by the resort marketplace and economic conditions. However, a series of short-term implementation strategies have been developed, designed to set the plan in motion. These are:

- Obtain all high-level approvals for development;
- Improve the existing on-mountain and base area facilities at the Resort;
- Expand the Summer Use Development Program;
- Develop the East Peak as a Cat Skiing operation.

Each of these have a series of specific Action Steps, described in detail within the Master Plan, directly associated with realizing the strategy.

Over a longer time frame the implementation strategies will be expanded to include:

- Initiate the ski lift and trail development associated with the East Peak;
- Develop and implement a Master Plan for the Lower Village;
- Expand the Gem Lake and Sapphire lift and trail system;
- Create detailed Real Estate Development Plans;
- Develop a Base Area Master Plan for the East Peak Village.

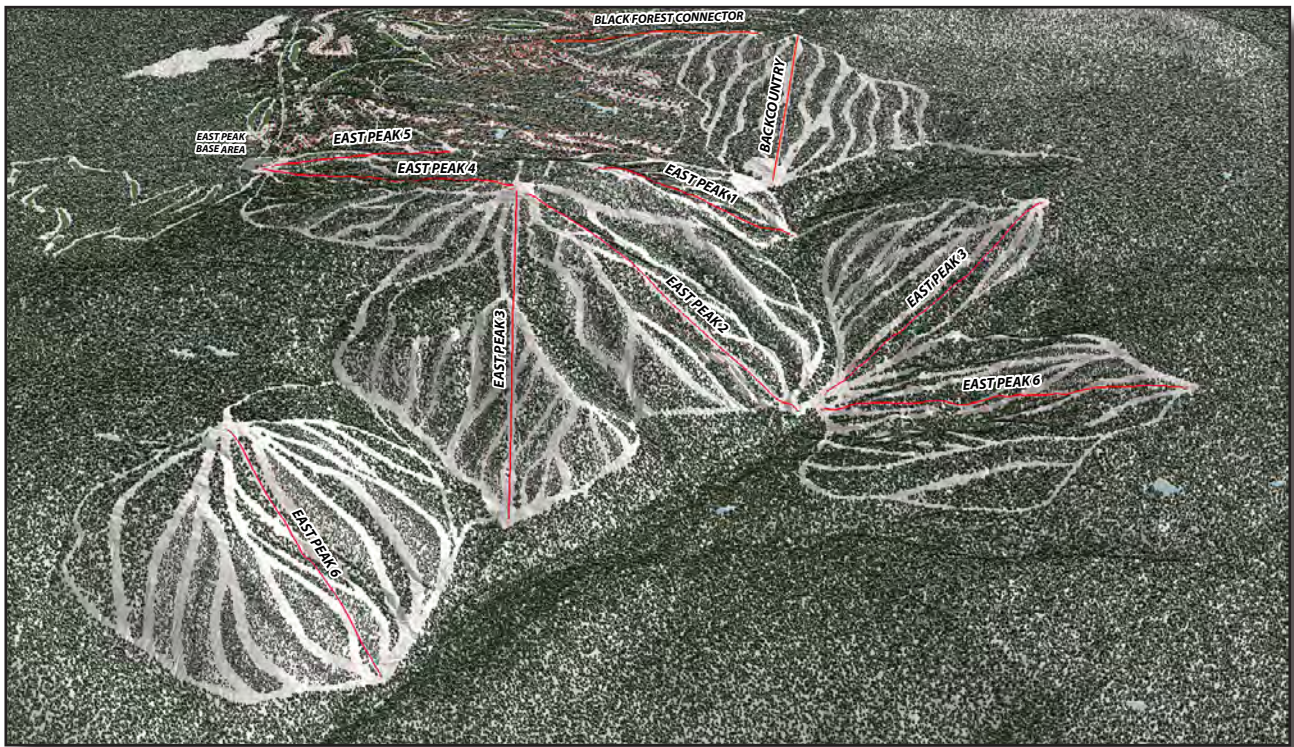
Each of these strategies are directly aligned with the vision of Big White becoming a major world-class destination resort.

DEVELOPMENT SUMMARY

The key points of the Big White Master Plan are summarized in the following table:

Big White Ski Resort Master Plan Summary			
	Existing Conditions	Proposed Development*	Potential Total Buildout
Controlled Recreation Area	3,160	3,740	6,900
Ski Lifts			
Carpet Lifts	3	3	6
T-Bars*	1	0	1
Double Chairs	3	2	5
Triple Chairs	0	0	0
Fixed Quads	2	9	10
Detachable Quads*	4	9	12
Detachable Six Packs	1	0	1
Gondolas (8 Seats)	1	1	1
Pulse Gondolas	0	1	1
Total Lifts	15	25	37
Ski runs	108	221	329
Skiable Terrain (Hectares)	607	1,021	1,628
Comfortable Carrying Capacity	9,390	16,234	25,624
Additional Winter Activities - Capacity			
Nordic Skiing	100	400	500
Fat Tire Biking	0	50	50
Snowshoeing	50	50	100
Skating	100	50	150
Tube Park	200	0	200
Snowmobiling	50	50	100
Snowplay	100	0	100
Zipline	0	100	100
Spa	0	100	100
Alpine Coaster	0	100	100
Conference	0	500	500
Winter Camping	0	25	25
Equestrian	0	25	25
Additional Passive Guests	1,498	2,653	4,151
Summary			
Balanced Resort Capacity	11,488	20,337	31,825
Bed Units Earned	13,800	30,755	44,555
Existing and Committed Bed Units	10,533	-	10,533
Bed Units Remaining	3,267	30,755	34,022
Bed Units Requested	-	6,800	20,600
Skier Related Built Space (Sq.ft)	215,133	270,832	485,965
Destination Space (Sq.ft)	19,276	175,110	194,386

*Includes Replacement or Upgrade of Existing Lifts/Facilities



View of the Proposed East Peak (3D)



View of Big White Village - Existing and Proposed (3D)