



Summary of Existing Pods

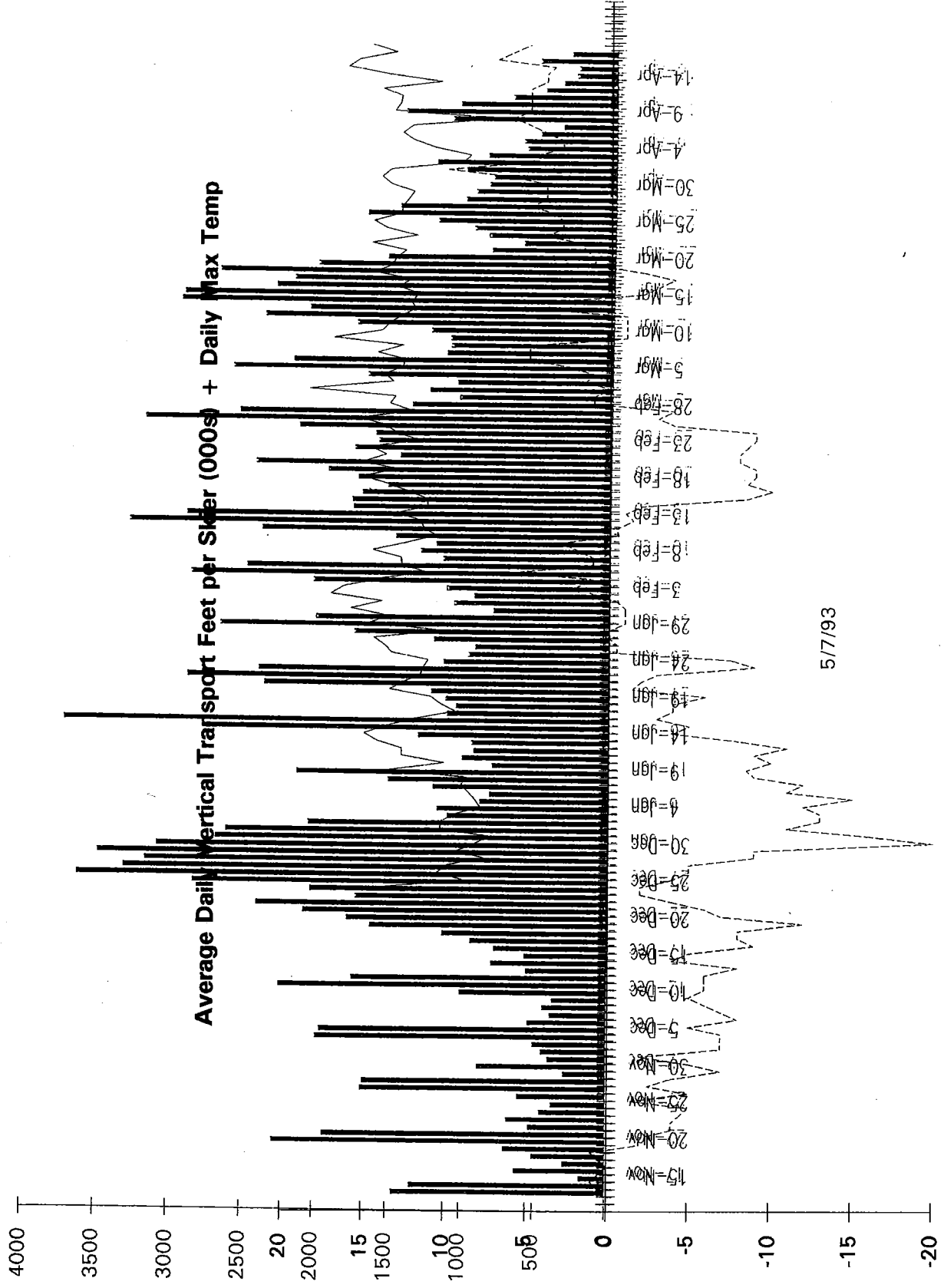
The following summary describes the existing ski area, in terms of skiable terrain, capacity based on skier densities, and the currently installed lift system. The calculation of Skier Capacity by Vertical Transport Feet demand per day is based on the measured average of 14,000 VTF per skier day in the 1992/93 season.

Pod	Skiable Terrain	Skier Cap. By area	Number of Lifts	Lift Cap. (pph)	Lift Cap. (MVTFH)	Skier Cap. By VTF/Day
Vance Creek	89 ha	2700	2	3900	6026	3013
Summit / Attridge	60 ha	1100	2	1750	1286	643
Village	6 ha	350	2	2050	422	210
Putnam Creek	100 ha	1250	1	1500	3099	1550
Totals	255	5400	7	9200	10833	5416

Summary of existing ski area pods

The following table illustrates daily attendance for the 1992/93 season, total VTF skied, and average VTF/skier day

Skier Visits 1992/93



5/7/93

New Terrain

Valhalla

The north slope of the Putnam Creek valley is intermediate to expert in pitch, with a south aspect. It is bounded by the height of land leading into Miriam Creek to the north, the limit of accessible terrain to the east, Putnam Creek to the south, and the height of land to the west.

Access to the pod is through the Putnam Creek pod, or, with a small circulation lift at the head of the valley, from the major Putnam Creek accesses from the summit. All skiers must exit the pod via the Putnam Creek Express.

A major intermediate ridge running NW to SE divides the pod, with creeks to east and west. The height of land to the east leads to generally advanced terrain with a few upper intermediate minor ridges. To the west, there are open expert slopes suitable for gladed tree skiing.

The lower terminal is located at the point of access from the Putnam Creek pod. Additional runs would allow exit from the pod to the Putnam Creek Express lift. The upper terminal would be located at a point allowing access runs to reach the ridgeline between Putnam Creek and Miriam Creek. The circulation lift would be located at a point accessible from the Summit lifts, and end high enough to cross above the west drainage and access the intermediate ridge.

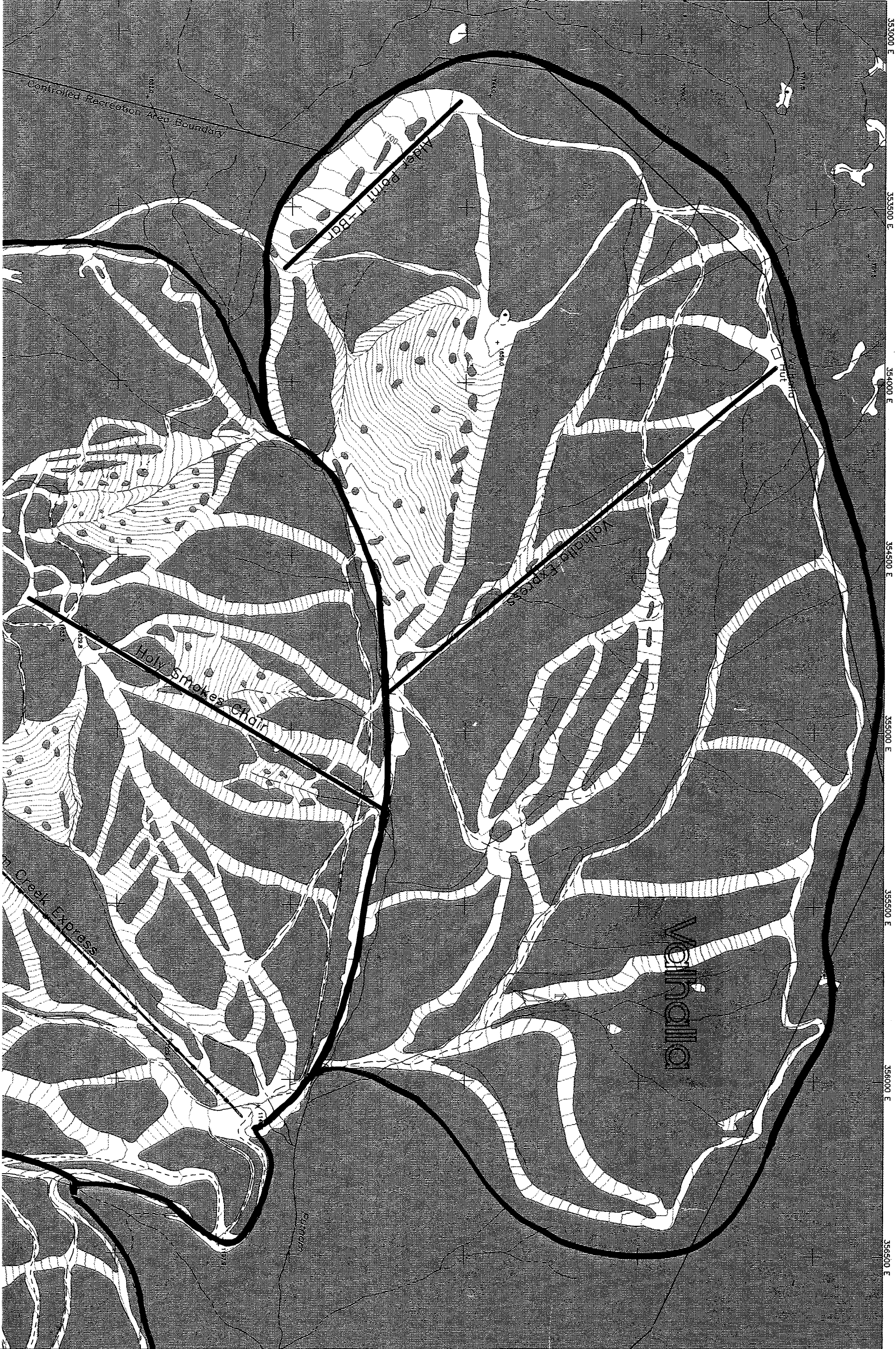
Pod	Valhalla
Total area	319 ha.
Skiable area	160 ha
Beginner	10%
Intermediate	41 %
Advanced	49 %
Skier Capacity	2000 skiers
Proposed Lifts	
Valhalla Express	2400 p.p.h 3,760 MVTFH
Alder Point	800 p.p.h.
T-Bar	496 MVTFH

There are 319 hectares of intermediate and expert terrain in the pod. At a 50 % utilization rate and existing skier densities, the terrain capacity is 2000 skiers.

Initially, the circulation lift alone will allow skiers to ski the major terrain, and exit via the Putnam Creek lift. At full development, a quad detachable lift at a capacity of 2400 passengers per hour will allow complete utilization. There would be no significant circulation use of this lift.

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353000 E 353500 E 354000 E 354500 E 355000 E 355500 E 356000 E 356500 E



Skiers at one time capacity for primary ski runs Valhalla

Run	Class	Length	Width	Area	Skiers	Circ.
1	Exp	1050	450	47.25	378	
2	Up Int	1550	35	5.43	136	
3	Up Int	375	35	1.31	33	
4	Up Int	475	35	1.66	42	
5	Adv	400	40	1.60	19	
6	Adv	1000	30	3.00	36	
7	Int	2200	50	11.00	462	
8	Low Int	550	50	2.75	138	
9	Int	500	40	2.00	84	
10	Low Int	1800	40	7.20	360	180
11	Adv	1300	30	3.90	47	
12	Adv	450	40	1.80	22	
13	Adv	625	40	2.50	30	
14	Adv	850	35	2.98	36	
15	Lo Int	900	50	4.50	225	
16	Low Int	850	30	2.55	128	
17	Beg	4000	20	8.00	500	500
				0.00		
				109.43	2673	680
Net skiers					1993	

Note: Runs 10 and 17 are reduced for circulation purposes

The following skier densities are used for capacity calculations

Class	Skiers/ha
Beginner	62.5
Novice	55
Low int.	50
Int.	42
Up int.	25
Adv	12
Exp	8

Trinity Bowl

The Trinity bowl is located immediately to the east of the Putnam Creek pod. It is low intermediate to advanced terrain with a north east aspect. There are two intermediate ridges with a large central bowl, generally advanced at the top and intermediate in the lower half. It is accessed from the Putnam Creek pod and exits to the Putnam Creek lift system.

The east ridge continues as low intermediate terrain to the east, with a series of minor intermediate ridges returning to the center of the bowl. The head of the bowl is advanced terrain, with a small area of expert terrain at the south east edge. The central and bottom portions of the bowl are intermediate to low intermediate ending in beginner terrain at the bottom of the pod. The west ridge is low intermediate to beginner terrain and is shared with the Putnam Creek pod.

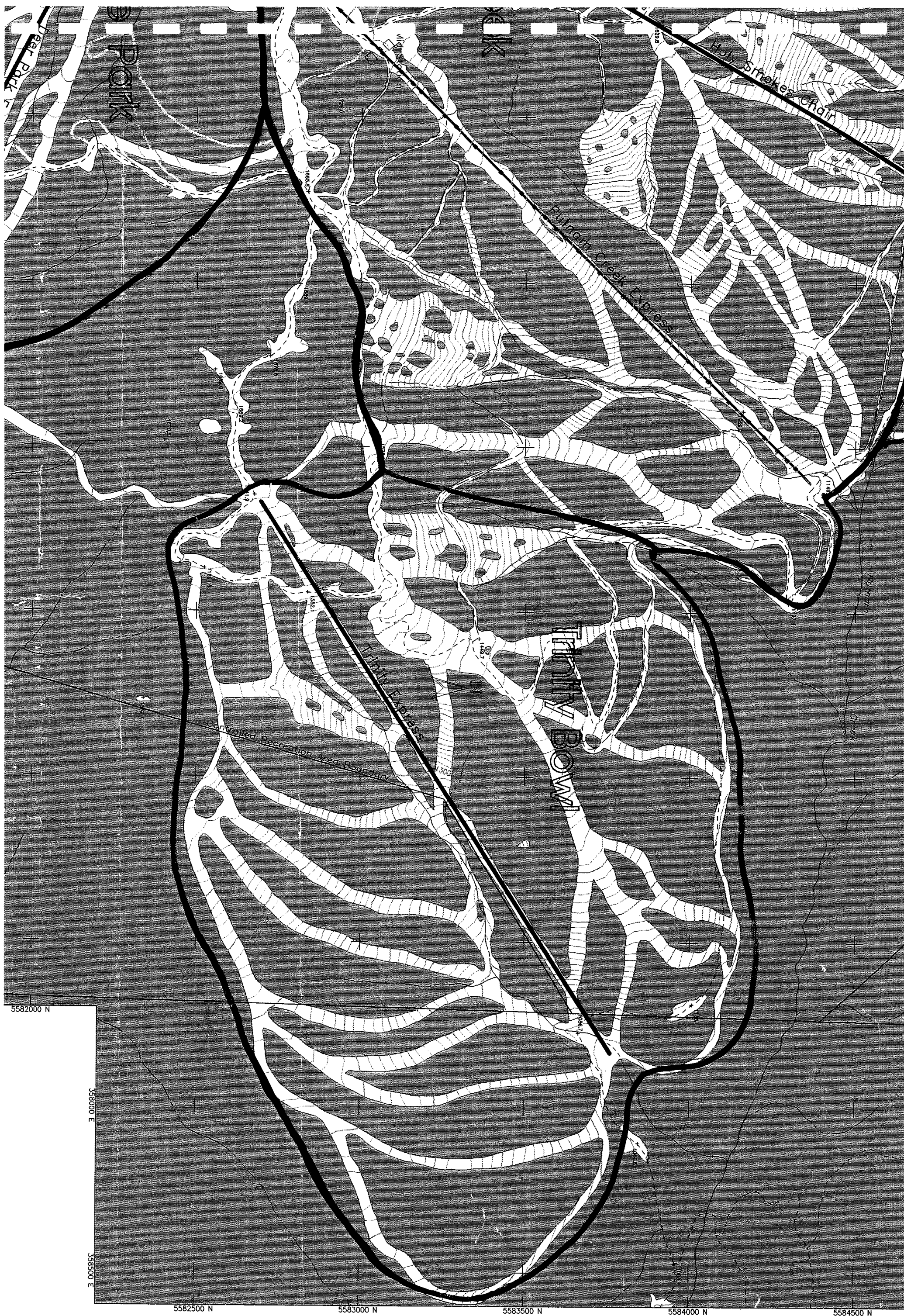
The lower terminal would be located at a point of confluence of the minor eastern ridges in a region of generally beginner terrain. This point can be accessed from all Putnam Creek runs east of Gypsy Queen. The upper terminal would be located at a point high enough to access Gypsy Queen. It would allow emergency access to the Vance Creek pod via the Last Chance Skiway.

Due to the length of the required lift, and the amount of terrain accessed, a quad detachable lift would be required.

There are 219 hectares of generally intermediate terrain. At current Silver Star Mountain densities, the pod would have a capacity of 2700 skiers.

Both the Valhalla and Trinity pods will rely on the Putnam Creek Express lift for returning skiers to the village. This use is estimated to require an average of 1000 passengers per hour of the Putnam Creek Express capacity. As a result, it will be necessary to install an additional 1000 passengers per hour of lift capacity in the Putnam Creek ski terrain to return the pod to a balanced state. The recommended line for this lift, which is in the range of fixed grip chairlifts, is shown as the Holy Smokes 2F lift.

Pod	Trinity Bowl
Total area	220 ha.
Skiable area	110 ha
Beginner	10%
Intermediate	60 %
Advanced	30 %
Skier Capacity	2700 skiers
Proposed Lift	
Trinity Express	2400 pph 4,404 MVTFH



Skiers at one time capacity for primary ski runs Trinity Bowl

Run	Class	Length	Width	Area	Skiers	Circ.
1	int	1825	50	9.13	383	
2	nov	675	50	3.38	186	
3	beg	2850	60	17.10	1069	534
4	up int	325	40	1.30	33	
5	adv	400	45	1.80	22	
6	exp	425	40	1.70	14	
7	int	1725	40	6.90	290	145
8	adv	775	60	4.65	56	
9	up int	600	40	2.40	60	
10	up int	950	50	4.75	119	
11	up int	1000	50	5.00	125	
12	int	700	40	2.80	118	
13	int	475	50	2.38	100	
14	low int	1100	40	4.40	220	
15	low int	900	50	4.50	225	
16	nov	3800	35	13.30	732	366
				85.48	3749	1045
Net skiers						2704

Note: Runs 3,7 and 16 are reduced by 50% for circulation purposes

The following skier densities are used for capacity calculations

Class	Skiers/ha
Beginner	62.5
Novice	55
Low int.	50
Int.	42
Up int.	25
Adv	12
Exp	8

Silver Woods

The Silver Woods pod is east of the Knoll and south of the Vance Creek pod. It is generally intermediate and advanced terrain, with an east aspect. The north and east bounds of the pod are the Vance Creek pod, and the west bound is the knoll. The south bound is determined by snow levels in the lower Vance Creek drainage. The pod is accessed from the Village and Vance Creek pods. The lift would exit directly into the village via the Silver Queen- Village skiway.

There are two terrain areas in the pod, one accessed directly from the lift, and one accessed from the Vance Creek pod. The terrain directly accessed consists of two intermediate faces between branches of the Vance Creek. This terrain has areas of intermediate terrain that are connected by steeper advanced terrain. There is no naturally beginner terrain on this side. Terrain accessed from the Vance Creek is essentially a continuation of the intermediate and beginner runs from the east side of the Vance Creek pod.

The upper terminal of the lift would be located on Roller Coaster at the Village Skiway and allow direct return to the village. The lower terminal could be located in either of two relatively flat creek confluences, the lowest at 1165 meters.

Development of skiing in this pod will require snowmaking on approximately 20 hectares at the bottom of the pod, since it is below the reliable 'snow line.'

Pod	Silver woods
Total area	122 ha.
Skiable area	65 ha
Beginner	0 %
Intermediate	84 %
Advanced	16 %
Skier Capacity	1000 skiers
Proposed Lift	
Silver Woods	2400 pph
Express	2,969 MVTFH



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Skiers at one time capacity for primary ski runs Silver Woods

Run	Class	Length	Width	Area	Skiers	Circ.
1	Beg	850	45	3.83	239	
2	Nov	1075	60	6.45	355	
3	Nov	1100	25	2.75	151	121
4	Low int	475	50	2.38	119	59
5	Int	1050	45	4.73	198	99
6	Adv	300	35	1.05	13	
7	Up Int.	1700	45	7.65	191	
8	Int	1000	50	5.00	210	
9	Int	550	50	2.75	116	
10	Low Int	900	45	4.05	203	
11	Low Int	1350	25	3.38	169	169
12	Nov	1900	35	6.65	366	274
13	Beg	600	20	1.20	75	56
				51.85	2404	779
Net skiers						1625

Note: Runs 3,4,5 and 12,12 and 13 are reduced for circulation purposes

The following skier densities are used for capacity calculations

Class	Skiers/ha
Beginner	62.5
Novice	55
Low int.	50
Int.	42
Up int.	25
Adv	12
Exp	8

Deer Park

The low ridge separating the Vance Creek and Putnam Creek pods is entirely novice and low intermediate terrain. It is bounded at the top by the flat terrain above the Main Street skiway, the Putnam and Vance Creek pods and at the bottom by a steep branch of the Vance Creek.

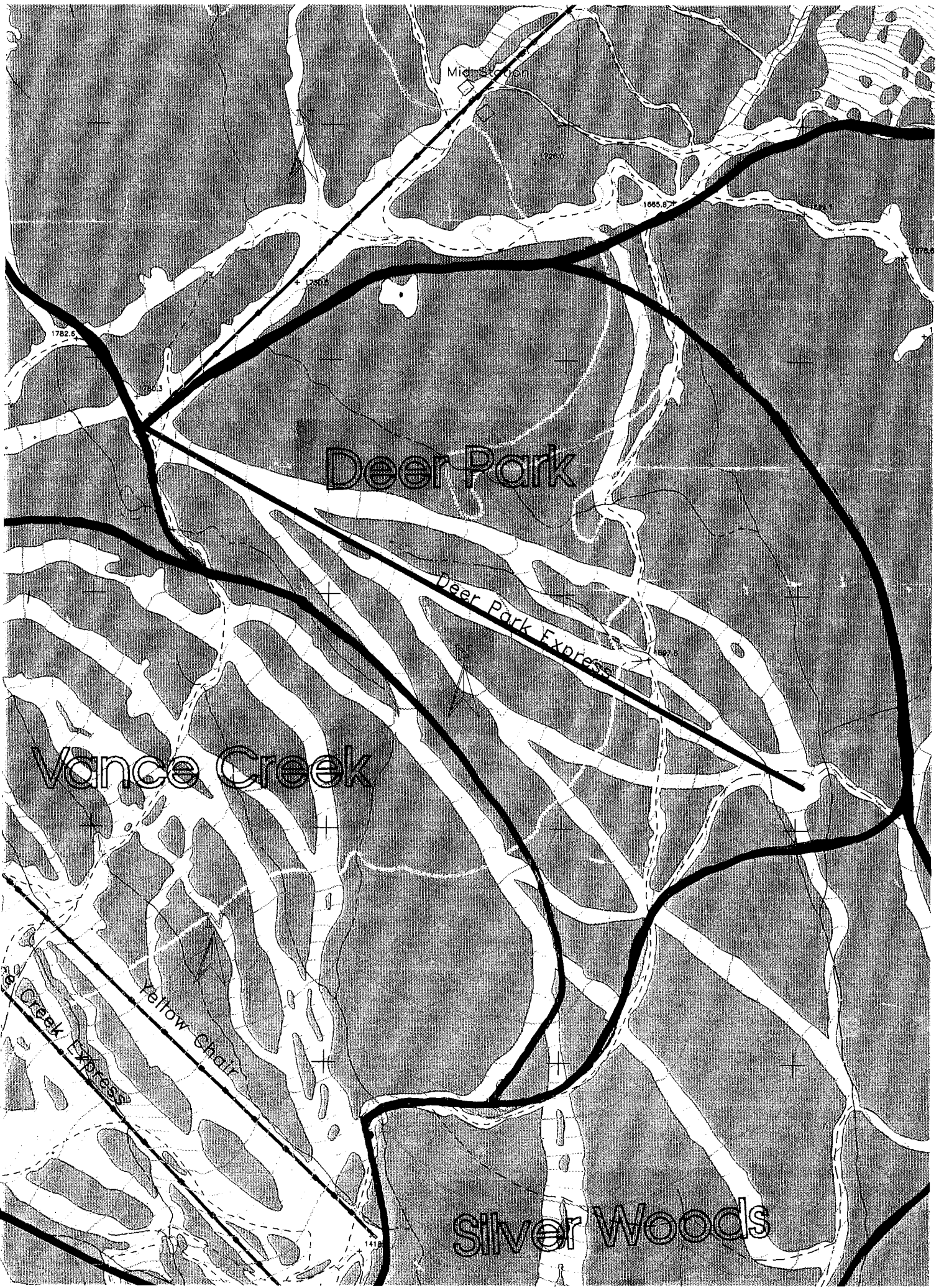
The terrain is novice to middle intermediate, with an average slope of 22%, and a south-east aspect. While sections of the pod have good intermediate pitches, as a whole, most of the developable ski runs will be rated as 'Easiest'

All of the terrain is accessible from the Putnam and Vance Creek pods. The pod can exit from the Main Street Skiway, or through the Vance Creek or Silver woods lifts.

There are several lift options in this pod, ranging from an express lift ending at the top of the Putnam Creek pod, to a small fixed grip lift bringing skiers up only to the base of the Vance Creek Express.

There are 122 hectares of beginner and intermediate terrain in the pod. At current densities, and 50% utilization, the pod has a capacity of 2500 skiers.

Pod	Deer Park
Total area	122 ha.
Skiable area	70 ha
Beginner	60 %
Intermediate	40 %
Advanced	0 %
Skier Capacity	2500 skiers
Proposed Lift	
Deer Park	2400 pph
Express	2,160 MVTFH



Skiers at one time capacity for primary ski runs Deer Park

Run	Class	Length	Width	Area	Skiers	Circ.
1	Beg	2000	50	10.00	625	
2	Nov	825	50	4.13	227	
3	Nov	650	50	3.25	179	
4	Low Int	1350	50	6.75	338	
5	Beg	1425	50	7.13	445	
6	Nov	425	50	2.13	117	
				33.38	1930	0
Net skiers						1930

The following skier densities are used for capacity calculations

Class	Skiers/ha
Beginner	62.5
Novice	55
Low int.	50
Int.	42
Up int.	25
Adv	12
Exp	8

Summary of Skiing Pods

In the following summaries, comparisons are made between the calculated skier capacity of each pod based on the skier density calculations, and the skier capacity based on the average vertical transport demand of 14,000 vertical transport feet per skier day. This comparison ensures that the installed lift capacity is suited to the skiers expected in each pod.

Pod	Skiable Terrain	Skier Cap. By area	Number of Lifts	Lift Cap. (pph)	Lift Cap. (MVTFH)	Skier Cap. By VTF/Day
Vance Creek	89 ha	2,700	2	4,000	6,184	3,092
Summit/Attridge	60 ha	1,100	3	2,350	2,120	1,060
Village	6 ha	350	2	3,600	871	435
Putnam Creek	190 ha	2,340	2	4,200	7,536	3,768
Subtotal Existing	256 ha	6,490	9	14,150	16,711	8,355
Valhalla	160 ha	2,000	2	3,200	4176	2,088
Trinity	110 ha	2,700	1	2,400	4,404	2,202
Deer Park	70 ha	1000	1	2,400	2,160	1,080
Silver Woods	65 ha	1000	1	2,400	2,969	1,484
Subtotals New Terr.	405 ha	6,700	5	10,400	13,709	6,854
Totals	661 ha	13,190	14	24,550	30,420	15,209

Summary of potential development by pods

Pod	Skiable Terrain	Skier Cap. By area	Number of Lifts	Lift Cap. (pph)	Lift Cap. (MVTFH)	Skier Cap. By VTF/Day
Current Ski Area	255 ha	5,400	7	9,200	10,833	5,416
Potential Existing	255 ha	6,490	9	14,150	16,711	8,355
New	405 ha	6,700	5	10,400	13,709	6,854
Subtotal	661 ha	13,190	14	24,550	30,240	15,209
Change	405 ha	7,790	7	15,350	19,407	9,793

Future Alpine Ski Terrain

This plan examines all skiable terrain within the proposed permit area. While terrain outside of that area is beyond the scope of this study, it should be considered at this time, in order to avoid decisions that would preclude development after completion of this master plan.

The land west of the permit area is generally too flat for alpine skiing, with very few sustained pitches. The BX drainage south west of the village is intermediate to advanced in character. It is potential ski terrain, however, the south west aspect will adversely affect snow quality, and connection with the existing terrain will be difficult.

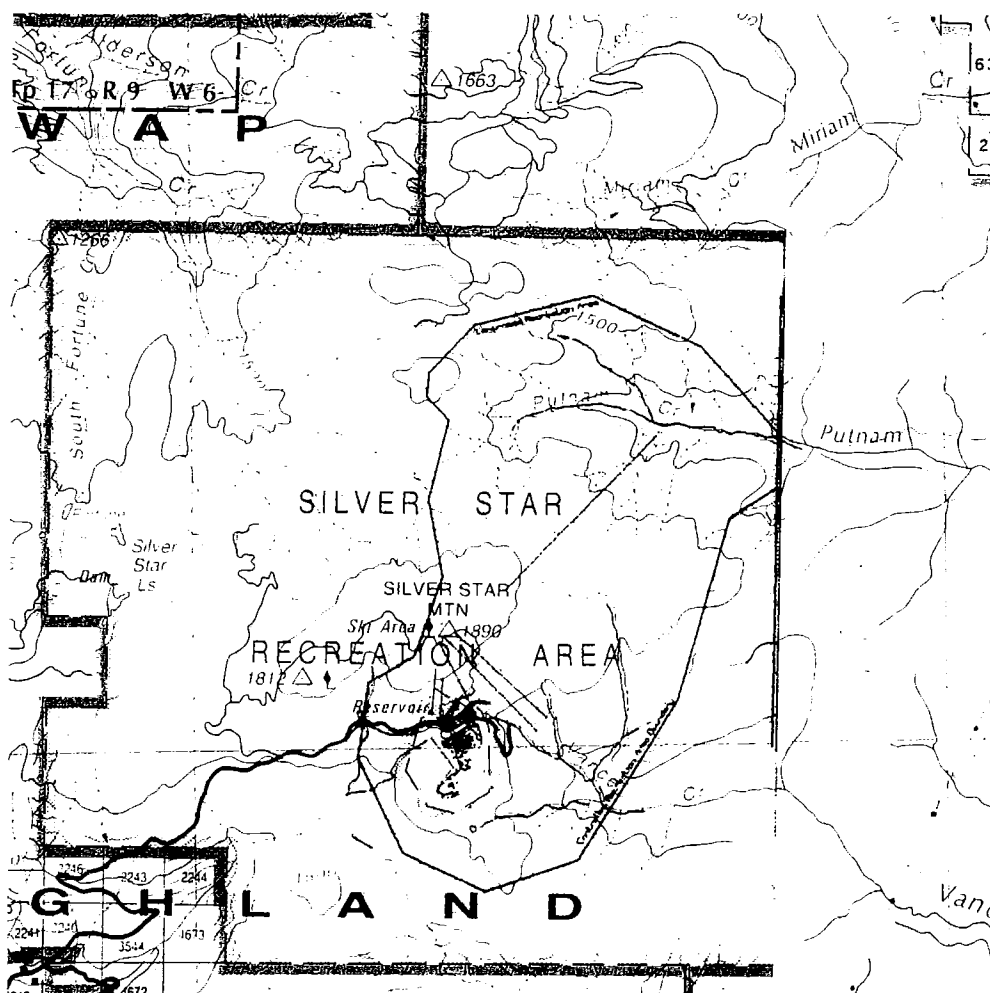
The Coldstream Creek drainage and ridge immediately south of the knoll have only a few slopes of intermediate character, interspersed with broad benches. This terrain is unsuitable for alpine skiing.

The Vance Creek drainage south and east of the village has east facing slopes of good intermediate and advanced slope extending as far as the park boundary. While much of this terrain is well below the reliable snow line, it could be developed with extensive snowmaking. The west facing slopes of the drainage are limited by a broad south facing advanced slope just beyond the permit area.

Directly east of the permit area, the south facing slopes terminate at a broad bench between Putnam and Vance Creeks.

Following the ridge east of Putnam Creek, good intermediate and beginner terrain beyond Trinity bowl slopes north into the Putnam Valley. The north side of the Putnam Valley has upper intermediate potential east of the existing park boundary. Both of these areas would require extensive snowmaking.

North of the ridge along the top of the Valhalla Pod, excellent low and mid intermediate terrain faces north, leading into the Miriam Creek drainage. This is a large bowl of consistent intermediate ski terrain, sweeping around to south facing slopes. All of the terrain in Miriam Creek converges to a natural base at the 3500 foot level, well within the reliable snow line. This bowl has the best potential for long range development, either as a satellite village sharing the advanced and expert terrain of Putnam Creek with the Silver Star village, or as an extension of Silver Star Mountain.



Miriam Creek Pod Analysis

Access to Miriam Creek from Silver Star would be from the Valhalla lifts, after passing through the Putnam Creek pod. Direct road access is possible from Trinity Valley Road to the bottom of the basin, or up from Highway 97 between Armstrong and Enderby to the ridge above the ski terrain. Both sites have potential for development of a base and village complex.

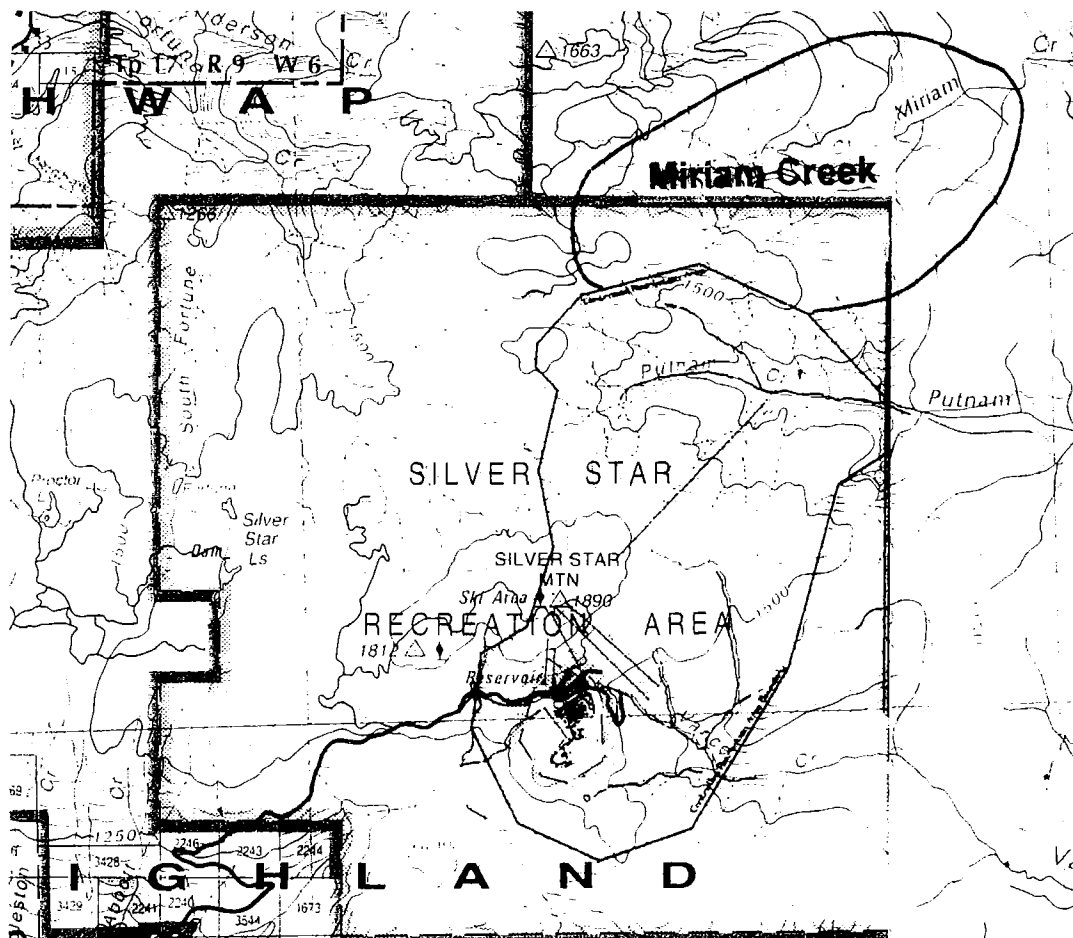
The Miriam Creek basin is a large east facing bowl of intermediate terrain lying just north of the Silver Star Provincial Park boundary. There are 750 hectares of intermediate and lower intermediate terrain, with an average slope of 20%. Assuming a development of 50% of this terrain as ski runs, and using normal densities, the entire bowl would have a capacity of 11,250 skiers.

There is little potential for development of upper intermediate, advanced, or expert terrain in this terrain. In order to balance the ski area, access to the Putnam Creek advanced terrain is required. This combination would create a viable destination ski resort, and fully utilize the advanced terrain in the Putnam Creek and Valhalla pods.

The two village ski complex that would result from the Miriam Creek and Silver Star combination would be one of the largest in North America; there would be over 2000 hectares of ski terrain interconnected with up to 20 lifts. Guests staying in either village would be able to tour to the other village for lunch, and return, creating a European ski environment with North American service and lift standards.

The construction of an additional ski area and village would result in the creation of as much new employment as the existing village has created to date. A second centre would relieve the stress created on a single access road and parking/service area, providing an additional "portal" into the ski area.

It is proposed that the Government of British Columbia set aside the Miriam Creek basin as a reserve for future ski area development.



PROPOSED DEVELOPMENT

Upgrade of Existing Lifts

Over the past ten years, lifts at Silver Star Mountain Resort have been removed, replaced and rebuilt. Several of the existing lifts are currently operating below their designed capacity. These capacity upgrades and overhauls have been considered in the overall terrain/lift balance.

We cannot at this time predict future changes in lift technology. We have focused on the function of each lift when considering the lift service required in each terrain pod. This lift function may be achieved by replacement, doubling, or major overhaul of existing lifts. In some cases, a different lift line may be appropriate to new technology.

The chart below illustrates the existing capacity of the current lifts, and their design capacity.

Lift	Type	Built	Last Rebuilt	installed pph	design pph
Vance Creek Express	4 D	1991		2,730	2,800
Putnam Creek Express	4 D	1991		1,500	2,400
Summit Chair	2 F	1969	1988	1,000	1,000
Yellow Chair	2 F	1969	1978	1,200	1,200
Silver Queen Quad	4 F	1990		1,200	2,400
Mid Tee	2 T	1963	1993	743	800
Town Tee	2 T	1963	1986	850	850
Total capacity				9,223	11,450

Existing Lift System

New Lifts

The following summary of new lifts includes lifts that may be options, depending on demand and amount of terrain developed in each pod. In cases where a lift is installed early in order to open up terrain, it may or may not be replaced by the higher capacity lift, and may remain in place. Please note that the type and capacity of new lifts may vary.

Lift	Type	PPH	MVTFH
Valhalla Express	4 D	2,400	4,176
Trinity Bowl Express	4 D	2,400	4,404
Silver Woods Express	4 D	2,000	2,969
Holy Smokes Chair	3 F	1,800	1,432
Deer park Express	4 D	2,400	2,160
North West Tee bar	2 T	800	521
Attridge Lift		800	620
Total increased capacity		12,600	16,282

New Lift Construction

New Terrain Development

The terrain studied in this section was transferred from the park with the intention of creating downhill ski runs. Experience has shown that there is very little negative environmental impact from proper ski run construction, and that wildlife habitat is improved. The creation of meadows within the forest mimics the natural fire cycle and creates both floral and fauna diversity.

With careful construction, there is very little risk of damage to any elements of the forest environment. The most important factor in minimizing the environmental impact during this development is the time available. If major roads and accesses are built and rehabilitated before they are required for run and lift construction, they will be more stable and much less likely to have negative runoff and aesthetic affects.

Detailed design of ski runs is best done after ground reconnaissance. Topo maps and aerial photos do not reveal all ground features, which may be utilized to enhance the design of each individual run. The runs shown were designed from topo maps and may be modified during the detailed layout phase.

The following general principles will be applied during the detailed design phase. Most new ski run construction will be between 40 and 50 meters in width. This width is approximately twice the average tree height, and gains the best advantage from the forest edge snowfall effect. Runs narrower than this are perceived by skiers as confined or narrow, while wider runs suffer from wind effects. Runs with southern and western aspects which may be adversely

affected by solar warming will be laid out to take maximum benefit from forest edge and tree island shading.

There is a sensitive relationship between the grade and width of ski ways (ski runs that connect two pods or zones of skiing.) The ideal design grade for ski ways is 10%, and the width must be at least 6 meters, and preferably no more than 12. Skiways with less pitch should be built narrower than 12 meters to increase the visual interest and sensation of movement. Those with greater pitch must be progressively wider in order to deal with the increasing speeds. This width allows more room for turning and distributes the much higher surface wear over a wider area. Skiways steeper than 13% should be treated as novice ski runs and built to an appropriate width. This range of skiway grades is the same as preferred grades for access roads. Whenever possible, roads will be laid out on future skiway locations.

Access roads will be required both for log removal from ski runs, and construction of both ski runs and ski lifts. A proposed layout for these roads has been shown on the accompanying maps. In order to minimize environmental impact from road construction relocation of some roads, or additional roads may be required. The exact location of access roads will be detailed in an annual submission before construction commences.

The specific run construction techniques that will be used are detailed in the Silver Star Mountain environmental policy. Some of the important points are:

- ◇ Advanced Forestry Techniques
 - ◆ High Lead Logging
 - ◆ Low Ground Pressure Skidding
 - ◆ Over Snow Winter Logging
 - ◆ Feller Buncher Harvesting
- ◇ Topsoil Conservation
- ◇ Anaerobic Burial of Slash
- ◇ Water Barring and Revegetation

Some environmental impact from soil disturbance will be inevitable. This will generally take the form of siltation in streams during the spring freshet. Continuous monitoring of culvert and stream flow will take place during this period, and problems rectified as they appear. Land will be removed from the forest ecosystem and converted to grassland and open meadow. This will affect some wildlife populations, particularly during the transition period.

Soil Types

Silver Star Mountain is generally composed of metamorphosed shale (neoquartzite), a relatively soft, layered rock, interspersed with bands of harder quartzite and veins of mineralized quartz. These rock types are readily fractured by frost activity, resulting in rounded terrain, free of cliffs or rock bands. Glacial activity has deposited varying depths of glacial till on the south face of the mountain, at a 20 to 40% slope starting at the 5400 foot level and

tending to the SE. These rock and till foundations are overlain by varying depths of topsoil, with pockets of peat and deeper soils.

The Putnam Creek Valley has been eroded into the terrain by spring freshet flows of Putnam Creek. These generally steep (40 - 60%) slopes are overlain by eroded materials (gravels) and top soil. The valley bottom is generally flat and composed of alluvial gravels.

The lower portion (below the Vance Creek Express) of the Vance Creek Valley is eroded into the glacial tills. In several locations, the immediate creek banks have been naturally undercut and are likely to fail in the near future.

Wildlife

The Silver Star Mountain area is typical of the Interior Sub Alpine & Montane bio climatic zones. Small mammal and bird populations appear to be stable and are not noticeably impacted by current development.

Large mammal species include deer, bear, lynx, moose and cougar. Coyotes are also present and appear to be increasing in number.

Ungulate populations have been increasing steadily as more open terrain is created. As a result cougar populations appear to have increased. Continuing creation of forage will increase this resource.

Black bear populations have increased throughout the Interior due to reduced hunting pressure. Mitigation of bear/human conflicts include sealed compaction of garbage, bear proof garbage containers, education and control measures, and where necessary relocation of problem animals.

Measures detailed in the Silver Star Mountain Resort Environmental Policy will continue to be followed. We do not expect major negative impact on wildlife populations during the development of the additional ski terrain.

Integrated Forest Management

One of the most valuable assets of the permit area is its forest setting. This forest defines the ski runs, provides a large part of the mountain experience, and is the foreground in the important viewscape from the village.

New ski run construction will be carried out to meet the 'Okanagan Timber Supply Area Integrated Resource Management Timber Harvesting Guidelines', and the more defined management specifications of Silver Star Mountain Resort's environmental policy.

Preservation of a healthy forest is of primary concern to the ski area's future. There are several destructive agents that can damage or destroy forests. These include the threat of fire, disease, pests and windstorms.

An integrated forest management plan will be implemented, including fire suppression, disease and pest control and salvage of marketable fiber within the permit area. This will preserve the viewscape, provide a recreation experience in a forest environment, allow access to the forest by all interest groups, and ensure the safety of guests, residents and workers. This plan must

be integrated with both the winter and summer master plans of the resort to maximize the total resource uses of the forest ecosystem within the permit area.

Phasing

Experience has demonstrated the difficulty of forecasting future trends in markets and ski technology. The development of Putnam Creek was made possible by technological improvements in detachable lifts, tiller grooming, and the general improvement in ski equipment. This important development was not considered in the 1979 Master Plan. Similarly, the population growth of the Okanagan Valley over the past 10 years has exceeded projections.

The following phasing schedule covers the period 1994 to 2004. It predicts neither major changes in the skiing public's preferences, nor advances in lift technology. This schedule does not anticipate building all of the lifts detailed in this plan during the ten year period. These lifts are proposed as a future phase. For information purposes, the full capacity of each lift is also shown, with it's impact on comfortable carrying capacity.

Phase 1	1994-97	Increase Putnam Creek capacity Install Silver Woods chair
Phase 2	1998-2001	Upgrade Town and Silver Queen lifts Establish Valhalla adventure skiing
Phase 3	2001-2004	Install Trinity Express Valhalla lift, Holy Smokes as needed

Lift	VTFH (000)s	Skier cap.	Current	Phase 1	Phase 2	Phase 3	Future Phase	Full Cap
Existing	10833	5417	5417	5417	5417	5417	5417	5417
Putnam upgrade	1859	930		930	930	930	930	930
Silver Woods	1855	928		928	928	928	928	1485
S. Queen upgrade	146	73			73	73	73	73
Town Chair	303	152			152	152	152	152
Trinity Bowl	2752	1376				1376	1376	2202
Valhalla	2088	1044			Cat skiing		1044	2088
Holy Smokes	2578	1289						1289
Deer Park	2160	1080						1080
		Total Skiers	5417	7274	7498	8874	9918	14714

Comfortable Carrying Capacity

Comfortable Carrying Capacity

In this table, a value of 14,000 vertical transport feet per skier per day is used to calculate the comfortable carrying capacity of each lift. This value is based on measurements of actual lift rides per day collected during the 1992/93 ski season. Analysis of this data shows actual usage of 12,476 vtf per visit. Since this figure includes all use of lifts, including circulation, no further capacity reduction of specific lifts is required. We have used a value of 14,000 vtf/visit in order to allow for the trend to increasing use per day observed as grooming and lift technology improves.

Nordic Centre

There are currently 28 km of Nordic trails, primarily on and around the knolls immediately south of the village. There are additional trails south of the highway to the west of the village. These trails are integrated with the village and knoll skiways, and also with the alpine lift and trail systems. Three trails link the Silver Star Mountain Resort trails with Sovereign Lakes' 54 km network.

The existing Nordic resort includes all levels of trails, including 10 km of FIS homologated World Cup competitive courses. A biathlon range is situated approximately 1 km south of the village. There is an early season training loop at the summit, in cooperation with the Snowmobile club and North Okanagan Cross Country Ski Club.

Additional beginner and teaching terrain is required to round out the existing product. A start and finish stadium should be developed to accommodate early season competitions, which enhance the National Altitude Training Centre's program in October and November.

While it is not Silver Star Mountain Resort's intention to compete commercially with the Sovereign Lakes system, a complete winter resort should include good quality Nordic trails. Integration with and complimenting of the Sovereign Lakes system, while sustaining the training and competitive needs of the National Altitude Training Centre's program will remain the priority of the Nordic Centre trail system.

Skating

The initial season of natural ice skating on the pond beside the Silver Queen Chair was enthusiastically received by resort guests and residents of the North Okanagan. In future years, the ice surface on the pond will be larger, and with appropriate equipment, of a much higher quality. Skating will be an important alternative winter activity in future years.

The natural ice surface can be supplemented with both indoor and outdoor enclosed rinks. The location of these rinks will form part of the Village Master Plan.

Winter Recreation

Other winter recreation activities, including snowshoeing, tobogganing and tubing, winter hiking and camping, sleigh rides and snowmobiling will contribute to the overall activities at the resort in the future. Most of these activities can take place on shared use facilities and do not require detailed planning at this stage. Integration of some activities, such as snowmobile rentals and touring will require careful planning and consultation of all interest groups within the Silver Star Mountain community.

BASE AREA

Highway Access

The highway from the City of Vernon to Silver Star Mountain is adequate for existing peak demands. As the resort and associated highway traffic grow, along with an increasing population in the BX Valley, improvements will be necessary.

Silver Star Road, from the intersection with Pleasant Valley Road, at the outskirts of Vernon, is a paved, two lane road. Some sections have been engineered and upgraded to meet Ministry of Highways standards, while substantial portions have evolved from the original route. Those portions will require upgrading in the future.

The route climbs approximately 1,200 meters in its 22 kilometer length. As there are relatively few safe passing opportunities, traffic flows at the rate of the slowest vehicle, or unsafe passing situations occur. The few existing pullouts are used by a minority of the commercial vehicles that routinely use the road. They require a vehicle to leave the carriageway and stop; thus, they are ignored by most drivers.

Silver Star Road is the property and responsibility of the Ministry of Highways, and not the subject of this master plan, however, plans for its upgrading should be prepared, and implemented as demand dictates. These upgrading plans should include the addition of several passing lanes for uphill traffic.

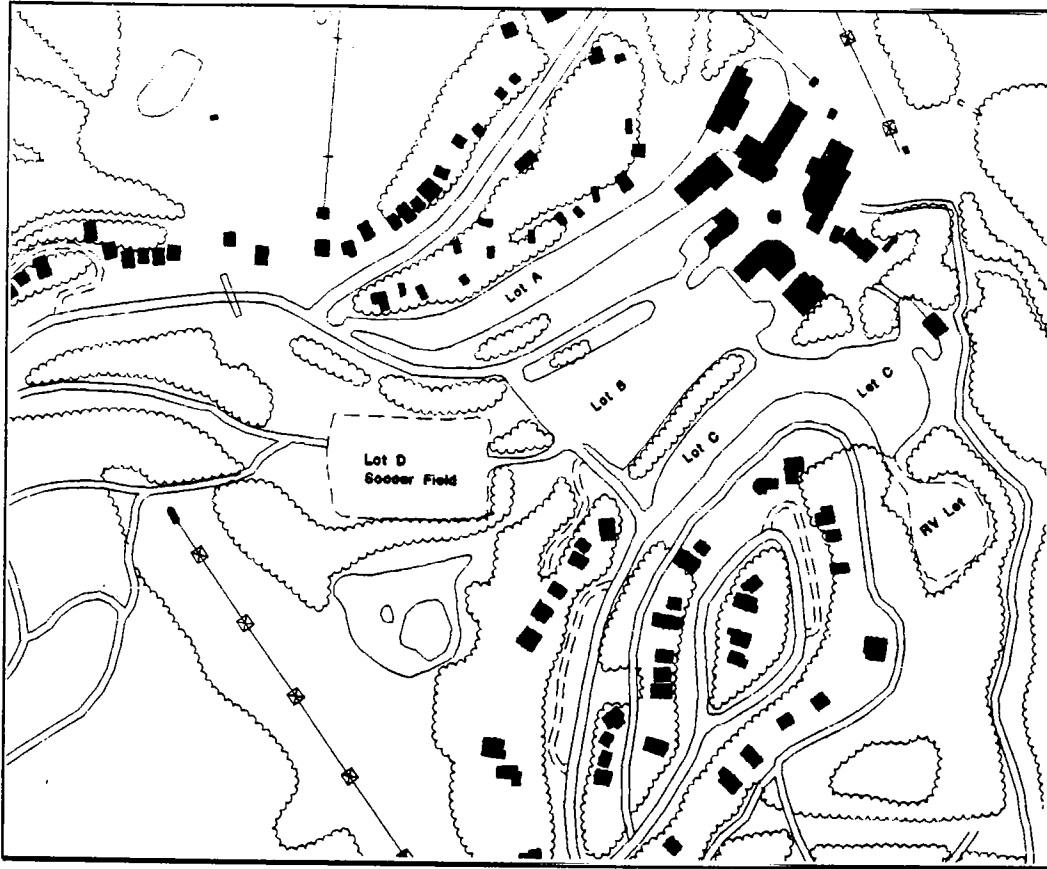
Once this Master Plan has been agreed to by The Ministry of Environment, Crown Lands, discussions should be undertaken with the Ministry of Highways, that they are apprised of planned development, its timing, and the anticipated demand increase expected upon the Highway access.

Parking

Parking demands at Silver Star Mountain Resort are created by the following categories of users:

- ◇ Day Visitors
- ◇ Overnight Visitors - Commercial Accommodation
- ◇ Overnight Visitors - Recreational Vehicles
- ◇ Residential - Short and Long Term Use

Parking with convenient pedestrian access to skiing and/or village facilities is a goal at Silver Star Mountain. As demand increases from all categories of users, the need to manage parking will be as important as the need to increase available space. This management will include the optimal relocation of Recreational Vehicle parking, and the provision of Valet parking for hotel guests. These measures will ensure that the prime access parking is available for short term use.



Parking Lots

This Master Plan anticipates that the traditional pattern of peak resort attendance occurring on less than ten days per annum will continue. Parking for those days will best use overflow parking with transit services as required. It is also anticipated that a substantial portion of the growth to be experienced at the resort will come from skiers resident on the mountain.

Description	Category	Size (Sq. M.)	(Acres)	Capacity
Lot A	Day + O.N.	6764	1.62	219
Lot B	Day	10449	2.51	338
Lot C Main	Day + O.N	5978	1.43	193
West	Day	4279	1.03	138
Lot D	Day	10130	2.43	328
Hotels	O.N.	4631	1.12	150
Residential	O.N.	(130 Units @ 2 cars)		260
Sub Total	Existing	14761	10.14	1626

Existing Parking Capacity

Based on actual car counts and resort attendance figures for the five peak days of December 1994, an average of 3.0 skiers per car was realized. This takes in all visitors to the resort including non skiers and staff. This average is used in

calculating the overall future parking capacity in terms of peak skier attendance as 9570

Exp. Lot C	Day + O.N	6305	1.52	169
Lot E	Day	16226	3.91	520
Residential	O.N.	(500 Units @ 1.75 cars)		875
Sub Total	Expansion	22531	5.43	1564
Sub Total	Existing	14761	10.14	1626
Total Future Parking			15.57	3190

Expanded Parking Capacity

Identified parking will allow an approximate doubling of Silver Star Mountains present realized peak capacity of 4,500 skiers at one time. Should demand increase beyond that level, several factors will possibly influence parking demand and supply.

- ◇ Use of valet parking
- ◇ Increased per percentage of "resident " skiers
- ◇ Increased use of public and group transit
- ◇ Addition of multi level parking

Valet Parking

While future hotel development will contain a significant amount of below grade parking integrated with the project, there will be a continued reliance on outside, grade parking for guests and staff. Continuing hotel development will put excessive demand on the prime day skier parking adjacent to the village. Overnight parking in those lots will lead to further inefficiencies due both to undirected parking and snow plowing difficulty.

Hotel guests seldom require their automobiles during their stay at the resort. It may be a viable solution to provide valet parking for all hotel guests. This would allow the use of a less than prime lot for the main overnight parking function. It would also resolve the issues of low density self parking, and difficulty in plowing occupied lots.

Parking Structures

Future hotel development, as noted above, is likely to include a component of covered parking. All multiple housing units, in the form of condominiums or time share units, will include at least one covered stall per unit, and a minimum of another half stall per unit of grade parking.

A major resort parking garage, centrally located, would be the ideal solution for overnight parking. While it is unlikely that this will be economically feasible in the foreseeable future, the possibility of such a structure should not be ruled out and should be considered in the Village Master Plan.

Public Transport

On typical peak days at this time, public transportation and bus group traffic play a minor role in the overall customer mix. The family market, in which Silver Star Mountain dominates, is by nature closely aligned to the automobile. As the resort grows, new markets may be within groups that are more prone to using group transportation.

Should parking become a restricting factor on attendance and growth, incentives can be developed and promoted to encourage increased ridership on public transit.

The first steps in this direction are discussions commenced with BC Transit in early 1994, with the objective of instituting service to the mountain as soon as possible.

Recreational Vehicle Parking

At this time, Silver Star Mountain provides forty five stalls for RVs serviced with electric power, in a dedicated lot to the south of Lot C. Minimal toilet facilities are located on site, with proper washrooms and showers located in the Swimming Pool Building in the Village Centre. This lot provides relatively good access to both the Village and to skiing.

Use of the RV Lot is heaviest during the Christmas holidays, as well as Spring Break and weekends. Several local skiers take advantage of seasonal rates. There has been demand from resort employees to use this facility on a semi permanent basis, which has been discouraged.

A well laid out RV Lot, with proper facilities, would be a marketable item, persuading skiers who use RVs to choose Silver Star Mountain over resorts with lesser locations and amenities.

It is planned to relocate the RV parking into a dedicated section of Lot D. There will be several advantages to this.

- ◇ Toilet and shower facilities will double as a summer field house next to the soccer field.
- ◇ Lot D offers optimum ski to and from.
- ◇ The site is adjacent to skating, tobogganing, future Children's Resort and Cross Country skiing.
- ◇ It is within reasonable walking distance of the Village.
- ◇ The move will allow for the optimization of Parking Lot C.

Village Services

As Silver Star Mountain grows, there will be increasing pressure to provide optimum service at all facilities. The challenge facing management will be to meet rising expectations from both employees and customers, while at the same time focusing on bottom line profitability of the resort.

This master plan contemplates a resort infrastructure that provides good service at peak times, while remaining cost effective during normal operations. Every change to the resort's service infrastructure must be subject to careful cost benefit analysis prior to implementation. The allocation of capital resources must focus on operational profitability.

Historically, growth at Interior resorts has been far more gradual than at those in close proximity to large urban markets. All aspects of expansion or improvement must be planned and implemented in order to maintain profitability. This will be a challenge in instances where departmental sales must grow into new facilities.

The Silver Star Mountain lift system has a comfortable capacity of five thousand skiers at one time. This should produce annual attendance of 300,000 skier visits with only minor changes to the system. Changes and additions to base facilities would be required to reach this level. The prioritization and profitability of changes will be of utmost importance.

Lift Ticket Sales

At present, lift tickets are available at the main ticket office in the village center, as well as at the adjacent customer service office, and at the Ski School office. Service levels can be enhanced and volumes increased, without major expansion of the ticket facility by offering lift tickets at other existing outlets in the village. They include:

- ◇ Rental Shop
- ◇ Retail Shop
- ◇ Hotel Front Desks
- ◇ Automated Sales Machines

The existing ticket sales building, subject to appropriate renovations, is likely adequate for the foreseeable future. Upon replacement, it may be relocated.

Customer Service - Group Sales

The customer service office provides an essential service link between the skiing public and the Resort. Functions of this office include:

- ◇ Season pass sales and administration
- ◇ Special ticket requirements
- ◇ Group ticket sales
- ◇ Information

- ◇ Lost and found
- ◇ Complaints and suggestions

Rentals Equipment / Ski Service

A rental and repair facility is located in a 2400 sq. foot building on Main Street. The present shop contains 600 sets of rental downhill skis, as well as 75 sets of cross country equipment, 110 snowboards and 50 skates. Included in the space is a service and repair facility occupying approximately 400 sq. ft.

In the medium term, it is possible to expand the rental shop twenty feet to the rear of the building, creating an additional 900 sq. ft. of net usable space. At the point that this expanded rental shop is inadequate, either a move to a larger, new location, or a second facility would be necessary.

A reasonable possibility would be to convert the present "Lock Up" to rental shop space, linking the two operations.

Retail Sales

Presently, retail sales at Silver Star Mountain are centered in the Brian James Ski Shop, located on Main Street. The shop sells a variety of goods, including ski equipment and accessories, snowboards, clothing and souvenirs. A modest grocery store and deli is located in the Lord Aberdeen Apartment Hotel and also offers a small selection of art and crafts.

As the village grows and evolves, and as ski area attendance increases, there will be a need for the retail aspect to evolve to meet new demands. New retail facilities will in themselves add to the growing attraction of the village.

The growth of retail opportunity will depend upon several factors:

- ◇ Increases in attendance, both day and overnight.
- ◇ Evolving consumer profile of visitors.
- ◇ Greater penetration of local markets.
- ◇ Growth of visitation in the non winter seasons

A priority for the resort company will be to create retail outlets of specific products and identities. This would have several advantages.

- ◇ The principal ski equipment store would maintain its "specialty shop" identity.
- ◇ Souvenirs and related clothing would be better merchandised within their own setting.
- ◇ Consumers would have greater variety and competition.
- ◇ Additional floor space would be created as necessary.

Locations for future retail stores or activity would include:

- ◇ Boardwalk rooms, Vance Creek Hotel
- ◇ Palace Hotel
- ◇ New Village Square

- ◇ Mountain Restaurant
- ◇ Children's resort

Ski School

Ski School sales are located at the "School House" at the end of Main Street. This location has a great profile, easy skier access, and a dedicated sales center. The new building has the space to increase sales levels considerably over the next several years.

The School House has been designed and constructed to be easily moved. It is anticipated that this building may be better located in the new village square. However, before that move is made, careful study of traffic patterns and day skier movement will be carried out.

The advent of computerization has made sales of ski school products from remote locations more than possible. That gives other outlets an opportunity to upsell. Sales locations to be considered are:

- ◇ Rental Shop
- ◇ Ticket Sales
- ◇ Customer Service
- ◇ Retail Shops
- ◇ Hotel Front Desks
- ◇ Mountain Restaurants
- ◇ Children's Resort

The role of the Ski School is pivotal to the overall success of the Resort Vacation product, and must be promoted at every opportunity. Skiing is a lifetime sport; good, quality ski professionals can enhance the overall market and improve market share. Junior programs are an important part of the school district curriculum, and a good ski school helps to fill this need.

Children's Resort

Silver Star Mountain continues to build its image and position as a leading family ski resort. This image is created by many factors, including village facilities and ambiance, terrain, grooming, programs and employee effort. Children's programs have increased 33% to mid February this year. While this growth is most encouraging, it also brings home the need to upgrade both our programs and our physical plant.

The existing Children's center, containing approximately 1500 sq. ft., is located in the lower floor of the Town Hall. A beginner's ski area, serviced by a small handle tow, is located immediately to the south of the building.

Licensing requirements instituted by the Province of British Columbia for child minding services have created occupancy constraints on the center. As well, the area used for teaching is limited, and lacks atmosphere. Access to the closest novice ski lift involves children walking some distance up to the Town T. This involves crossing two relatively busy traffic areas.

Without doubt, if growth continues in this program as anticipated, new facilities, both indoors and skiing, must be developed. It is proposed to relocate the children's centre to a new building located adjacent to the Town Tee, between the Vance Creek Hotel and Chilcoat Inn. It will contain approximately 4000 sq. feet. Ancilliary children's facilities are planned for the Silver Queen Chair area.

Food And Beverage Services

Silver Star Mountain is most fortunate in the proximity of the Village facilities to the ski terrain. That, combined with a village layout that is very skier friendly, encourages visitors to use all restaurants rather than being "day lodge" oriented. This means that the base area restaurants are integral parts of the lunch time food service mix.

There are several benefits from this:

- ◇ Hotels utilize seats at three meals per day.
- ◇ Single - meal day lodge seats are minimized.
- ◇ Guests are offered a superior level of service.
- ◇ Prices are competitive with most day lodge situations.
- ◇ Village atmosphere and activity is maintained.

It is unlikely that single purpose, seasonal day lodges can be expected to produce reasonable returns on invested capital when viewed in isolation. In this respect, they must be regarded as an integral part of the overall lift system, and capital costs and returns blended. Likewise, food services, and related washrooms and warming opportunities are an integral part of the mountain experience.

A mountain top restaurant in the Vance Creek terrain pod would contribute to the overall skiers' experience. The excellent views and outdoor dining experience will add a dimension to the resort.

Putnam Creek Restaurant

Putnam Creek is a different situation. Due to the length of skiways entering and exiting Putnam, many skiers would prefer to stay in the valley once there. This would increase significantly once other lifts are added in Putnam Creek. Assuming that the Putnam Creek Express will serve as the only connector lift from the Valley, skiers would be too distant from services located in the Village.

Improved terrain, grooming, and the Mid Station have all assisted in increasing the load levels in Putnam Creek. The opening of Putnam Pete's snack facility at mid station has been well received by skiers, in spite of its modest scope. It appears that a phased restaurant development in the Putnam Creek Valley would be popular, increasing use of that area.

A quality restaurant, strategically located in Putnam Creek, may have potential as an adventure evening dining experience. Access could be provided by skis and or snow cat drawn sleighs. This evening service would not be justified on a regular basis until village occupancy levels increase significantly. However, it

would be a good addition on weekends and holidays within the present structure.

It is proposed to construct in stages, two separate facilities in Putnam Creek. The first will be a cafeteria of approximately 100 seats, eventually expandable to 300 seats. Nearby, a full service restaurant of 150 seats will be added.

Town Hall Facility

The Town Hall, located on the Main Street, serves as the principal day skier facility, including 200 seat cafeteria, 200 seat snack bar and "brown bag " area, washrooms, lockers and pay phones. The building also houses the indoor portion of child minding and children's ski programs.

On its own, the Town Hall would be substantially inadequate to serve as the principal day skier lodge facility for a ski area at the attendance levels of Silver Star Mountain. As discussed earlier, it is a policy decision of the resort not to rely on conventional, large day lodges. The hotels are provided with economic opportunity, and the skiers with a far better product, when several smaller dining rooms and the Saloon augment requirements.

The Town Hall is adequate for normal days with an attendance level of 3000 skiers. This level was exceeded during the following years by the following number of days:

1990 - 91	0 Days
1991 - 92	5 Days
1992 - 93	10 Days
1993 - 94	17 Days

In the event that the Town Hall is judged to be inadequate on enough days of operation, the following options exist:

- ◇ Expand existing building to east by approximately 3000 sq. ft. per level
- ◇ Construct Putnam Creek Restaurant
- ◇ Develop more hotel restaurant capacity
- ◇ Expand into existing Child care area
- ◇ Add washroom capacity at another village location

Ski Locker Facility

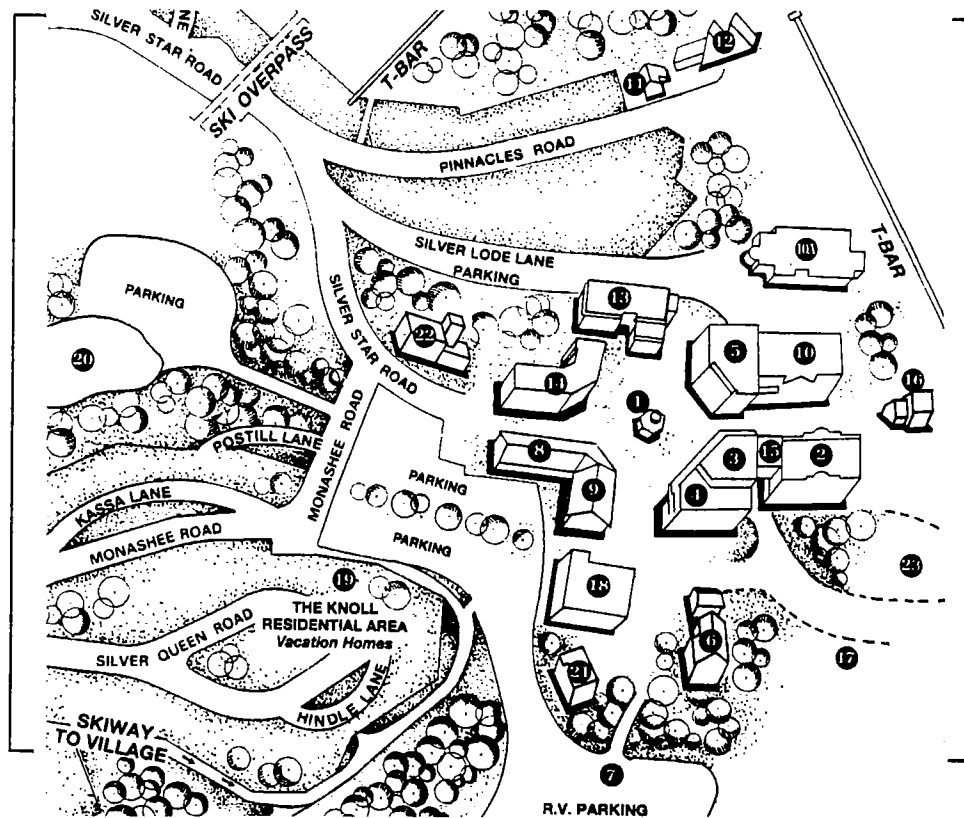
As a convenience to frequent skiers, a ski locker facility is provided in the lower floor of the rental shop building. 420 lockers are rented on a seasonal basis. At present, there is demand for an additional 100 lockers. As the village expands, this facility will likely be relocated, but must remain central and provide easy access to and from skiing.

There is no need to have all ski lockers in one location, and rental locker space can be a valued use of basement and other less desirable space in all mountain buildings.

Ski Area Service Facilities

The efficient operation of the ski resort requires work space and facilities for the ski area staff that run lifts, patrol and groom runs, coordinate the ski area, and interact with government agencies.

Ski area service functions and commercial accommodations are ideally located at the interface between the road network and the lift and ski run network. Innovative solutions are required to preserve development opportunities while maintaining efficiency and service levels in these ski area services.



Ski Area Services

- 1 - Ticket office
- 4 - Pool
- 7 - R.V. Parking
- 17 - X-Country Trails
- 20 - Skating Pond
- 23 - Kid's Country

Hotels

- 8,9 - Putnam Station
- 10A - Chilcoot Inn
- 13 - Silver Lode Inn

- 2 - Town Hall
- 5 - Ski Patrol
- 15 - Ski Rentals
- 18 - Training Centre
- 21 - Ski Club

- 3 - Retail Shop
- 6 - Maintenance shop
- 16 - Ski School sales
- 19 - The Knoll
- 22 - Fire Hall

- 10 - Vance Crk Hotel
- 11 - Kickwillie Inn
- 14 - Lord Aberdeen

- 12 - The Pinnacles

Administration

Ski area administration and corporate offices are housed in the second floor of buildings on the main village square. This 3500 square foot facility is new and it is anticipated that it will be adequate for the foreseeable future.

Maintenance Facilities

The existing maintenance shop occupies prime hotel development land, and is not large enough for the current demands.

Ideally, heavy equipment maintenance and repair should be located away from skier traffic, and residential or commercial accommodation. Since both road maintenance and snow grooming equipment are serviced in the same shop, it should be in contact with both run and road networks, and ideally would have a 'snow' and 'dirt' entrance. Lift maintenance facilities should be located adjacent to major lift installations.

It is proposed to locate the vehicle maintenance shop on land south of the access road, west of the village. While this will create additional travel time for snow grooming equipment, which will travel over Nordic trails to access the shop, it will remove the shop from public access and view. There is sufficient area to accommodate any future expansion or demands.

Some lift maintenance functions will be located in the vehicle maintenance shop for economy. Additional lift maintenance shop space will be built at the top of the Putnam Express lift adjacent to the generator building. This will serve as a 'day' shop and working station for lift maintenance staff during operating days.

Mountain Operations

The existing operations building serves as headquarters for 75 full time employees and is inadequate.

Requirements for a staff facility for an anticipated 125 mountain operations employees would require 3000 square feet of space. This facility is best located centrally to the lift system, and in contact with the road system, and ski run system. As a minimum, it should contain staff locker and change rooms, washrooms, lunch/meeting room, office space and storage.

After the relocation of the Children's Resort is complete, a below grade structure between the Town Hall and Palace Hotel sites will provide adequate space, while still allowing the roof of the structure to be used as a village square.

Prior to construction of this structure, the existing Maintenance shop can be renovated as an interim measure.

Ski Patrol / Clinic

It is ideal for the ski patrol, dispatch and clinic functions to be integrated into the same facility. The first aid clinic is a skier service function, and should be located within convenient pedestrian access from the village. It must also be accessible to snow vehicles for patient delivery, and to the road network for

patient transport to medical attention. This clinic should be large enough to handle four to six bed patients as well as waiting and walk-in treatment area. Storage and washroom facilities should be nearby. The dispatch office should be adjacent to the clinic so that it is attended at all times.

We anticipate a full time patrol staff of 16 to 20 at full development. An additional 75 volunteers will also require space. This facility should include lunch/meeting room, lockers and change area, laundry, washrooms and offices. If this is not located with the clinic, it should be adjacent to the ski run network.

Village Utilities

Silver Star Mountain is now recognized as a community by the North Okanagan Regional District, and that government agency is taking over many of the municipal functions formerly performed by Silver Star Mountain Resort. This discussion is intended to provide an overview of the infrastructure required to sustain a viable community.

Water

The water system is currently providing 120 gallons per minute of potable water from 6 wells. The distribution system is gravity fed from a 250,000 gallon reservoir located within the ski terrain. Additional storage is provided in a one million gallon open reservoir.

This system is administered and maintained by the North Okanagan Regional District. It is Silver Star Mountain Resort's responsibility to provide additional capacity as required to match development in the resort. Currently, an active exploration program is seeking to expand well capacity, and the potential of a large open reservoir is being studied.

Current supply, with some augmentation from new wells, is adequate for all expansion needs, excepting peak flows. A system relying of this ground water supply, augmented with a large reservoir for peak periods will meet the expansion needs detailed in this plan.

Further ground water exploration will be conducted within the Vance and Putnam Creek watersheds; therefore, both power supply to and water pipelines from these potential wells should be considered in this plan. Rights of way for these services will need to be transferred to the North Okanagan Regional District when they are completed.

An additional large water reservoir will be required at the site marked as Paradise Lake on the Putnam Creek map, storing 30 million gallons of freshet water.

Sewage Treatment

The sewage treatment plant is owned and maintained by Silver Star Mountain Resort. It is a secondary treatment plant using exfiltration for effluent disposal. There is currently surplus capacity at the plant, and the potential exists for expansion at this site.

Electric Power

Electric power is provided by a three phase power line owned and maintained by B.C. Hydro, running along the Silver Star road right of way. Power within the resort is underground, and future development will be provided with underground power service.

The current line has surplus capacity, and can be upgraded by increasing the conductor size.

Telephone Service

B. C. Tel has recently upgraded telephone service to a remote switch extension of the Vernon system. This upgraded system is capable of servicing a community of 5000 residents and will be adequate for the foreseeable future.

Cellular service is provided currently by BC Tel mobility. Cantel plans to add service in June of 1994. Both cellular companies are located in the lower level of the forest lookout at the summit. This facility was upgraded with power service in 1993. A larger aerial will be installed in the summer of 1994 to improve service and consolidate the aerials currently on the lookout to a single support.

Radio Services

In addition to cellular phone service, government and private agencies have installed radio repeaters at the summit of the mountain. These include Silver Star Mountain Resort's own repeaters and communication equipment. The repeaters are installed in buildings owned by Silver Star Mountain Resort, with the exception of Wright & Thorburn's small repeater building, and B.C. Tel's large microwave station.

In order to contain the type and number of buildings and aerials, it is proposed that Silver Star Mountain Resort continue to administer and control these radio repeaters. We will make every effort to accommodate all reasonable requests for radio sites.

Propane or Natural Gas

A propane distribution system was installed in 1993 in the commercial core by ICG, and is operated by Silver Star Mountain Resort. This system is capable of upgrading to service the residential development, and conversion to natural gas when that becomes available.

Cable TV

Cable TV service is provided by a private company, and carries a resort information channel.

SUMMARY

Discussion

Although, as discussed above, it is difficult to predict the changes in market demand and technology, it is within the scope of this document to establish a sequence of development which is probable at this time.

Limiting Factors

There are factors which limit the development of any project. In the case of ski area development, the critical factors are ski terrain, access and base facilities, and market.

Terrain

The two components of good ski terrain, slope and snow cover, have been analysed. There is sufficient high quality terrain within the controlled recreation area for a ski area with a comfortable carrying capacity of 12,500 skiers per day. Additional terrain (Miriam Creek) adjacent to the Controlled Recreation Area is capable of carrying an additional 6000 skiers. It is judged, therefore, that terrain is not a limiting factor within the life of this master plan.

Access and Base Facilities

The road and air links in to the area are expanding in capacity due to the general growth in the Okanagan. It is not anticipated that this access will limit ski area growth. The existing mountain access road exceeds standards at many larger resorts, is capable of a higher volume of day traffic, and with upgrading would be capable of handling 12,500 skiers per day.

There are approximately 600 acres of usable land suited to base area development surrounding the existing village. Existing facilities are adequate in the short term, and additional accommodation and services can be constructed near the existing base, although at higher development costs. Parking is adequate for current and mid range demand and more can be developed close to the base area.

Water and sewer services are adequate for current demand, and both can be expanded. If ground water cannot be developed to the higher range of demand, surface storage is possible to meet need. The sewage treatment plant is modular in design and can be expanded as needed.

Market

The development of ski area facilities must be supported economically in the market place. Steady growth in local, regional and destination markets is forecast. If we assume that the economic relationship between skier visits and development of facilities is maintained, we can project that an average growth

rate of 7% compounded annually over the 10 year life of this master plan will require development of all of the terrain and lifts in this plan.

Conversely, growth at the lowest projected rate of 3% will increase skier visits to 350,000 in ten years. At this level of growth, about half of the proposed facilities will be required.

At this time, market is the most important limiting factor in the scope and timing of development at Silver Star Mountain.

Phase I

The following projects are proposed for the immediate future:

- ◇ Continued development of Putnam Creek
The terrain already serviced by lifts in Putnam Creek has not been fully developed. Additional ski runs and glades will be built over the next three seasons to bring this pod to its full potential. Food and other skier services will be expanded.
- ◇ Start building accesses into new terrain
Access and service roads into the new pods in this plan, Valhalla, Silver Woods, Trinity and Deer Park should be completed and allowed to 'harden up' before use. This will minimize the environmental impact of development and reduce costs.
- ◇ Silver Woods
Construction of runs both in the Silver Woods pod and extension of Vance Creek runs will accompany lift construction.
- ◇ Construction of Deer Park runs
In order to maintain terrain balance, it will be necessary to begin construction of some of the Deer Park runs, which can be accessed from Putnam Creek and the Silver Woods Chairs.

Phase II

The medium range plans proposed would take place within the next three to six years, although market demand may accelerate the process. The main goal will be to develop additional intermediate terrain.

- ◇ Upgrade base area
Continued upgrading of base area facilities will be required with even modest growth. This may include the replacement and realignment of the Town Tee, and expansion of the children's resort.
- ◇ Start building Valhalla runs
Success with cat skiing and adventure tour programs during the Putnam Creek development suggest that an introductory period of skiing in Valhalla, before lift construction will attract additional

market, and provide an expanded time scale for run development.

◇ Expansion of base facilities

The construction of two major lifts will require major expansions in parking, skier services and infrastructure in and around the base area. These will be detailed in the Village Master Plan.

Phase III

These projects will complete the development envisioned in this plan and will take place in six to ten years.

◇ Trinity bowl

The intermediate terrain in Trinity Bowl will add significant capacity to the ski area. Run construction and lift installation may take two years to complete. This development will require installation of the Holy Smokes Lift if it is not already installed.

◇ Attridge Lift

Additional portal demand for entry into the ski area may require more lift capacity for the Attridge pod.

Proposals

Establishment of controlled recreation area

It is proposed that a controlled recreation area encompassing the entire area deleted from Silver Star Provincial Park be established immediately, to be administered by Silver Star Mountain Resort under the terms of this Ski Area Master Plan and the Ski Area Master Development Agreement. It is further proposed that the flat ridge south and east of the village be added to the controlled recreation area if that land is deleted from Silver Star Provincial Park.

Boundary study

It is proposed that the feasibility of transferring that land in the Trinity Bowl pod currently in Silver Star Provincial Park and Provincial Forest from those agencies to the controlled recreation area be studied.

Alpine Ski Area development

Approval is requested for the downhill ski runs and lifts outlined in this plan, to be built as needed in the next ten year period.

Nordic Centre development

Approval is requested for the outlined development of the Nordic trails.

Base Facilities development

Ski area base facilities appropriate to the growth of Silver Star Mountain Resort as a whole will be required during the life of this plan. Approval in principal is requested for these facilities, with the specific sites to be determined in the Village Master Plan.

Integrated Forest Management Plan

An Integrated Forest Management Plan will be submitted with the goal of maintaining the health and diversity of the forest within the controlled recreation area.

Village development

Village residential development appropriate to a ski area with a Comfortable Carrying Capacity of 8874 will be detailed in the Village Master Plan to be submitted in 1994 for approval.

Miriam Creek

It is proposed that the Government of British Columbia study the Miriam Creek basin as a reserve for ski area development.

