TAHOE DONNER PHASE 1 - 4 TECHNICAL ASSESSMENT AND RESORT CONCEPTS

Prepared for:

TAHOE DONNER℠

September 11th, 2017

Presented by: Eric Callender – Ecosign VP
Adam Schroyen – Resort Planner

ECOSIGN RESORT PLANNERS (2016) LTD.
Whistler, British Columbia, Canada

STUDY AREA


Eureka
Shasta Lake
Redding
LASSEN VOLCANIC NATIONAL PARK
TAHOE DONNER
Reno
Truckee
Mendocino
Lake Tahoe
Carson City
Sacramento
Mono Lake
San Francisco
Oakland
YOSEMITE NATIONAL PARK
Mammoth Lakes
CALIFORNIA
KINGS CANYON NATIONAL PARK
Monterey
Fresno
SEQUOIA NATIONAL PARK
Santa Barbara
Los Angeles


Basin Peak
89
To Reno
TAHOE DONNER
Boreal Mountain Resort
Truckee
80
Soda Springs
Donner Lake
Ponderosa Palisades
Truckee Tahoe Airport
Sugar Bowl Resort
Donner Ski Ranch
Martis Camp
Sugar Bowl Resort
Mt Lincoln
Northstar at Tahoe
The Cedars
Soda Springs
Tinker Knob
89
Mt Watson
Needle Peak
Squaw Valley
Squaw Peak
Tahoe City
Mildred Ridge
Alpine Meadows
89
Google
Tahoe City

AGENDA

1. EXISTING SITUATION SUMMARY (FACILITIES BALANCE)
2. TECHNICAL ASSESSMENT
3. BASE FACILITIES INVENTORY
4. EXISTING ACCESS ANALYSIS
5. MOUNTAIN CONCEPTS A-B, C & D
6. BASE AREA CONCEPTS A, B, C & D
7. PROPOSED ACCESS ANALYSIS

1. MOUNTAIN CAPACITY

- Ability to provide a comfortable skier experience at peak times, measured in skier's at one time (SAOT) which considers those skiing, waiting in lift lines, on lifts, and attending to their service needs.

2. SKIER SERVICE CAPACITY

- Ability to adequately service the requirements of skiers (rentals, ski school, food service)
- Provide suitable space for Mountain Ops

3. ACCESS CAPACITY

- Ability to get Visitors & Skiers to the Ski Area (via Parking and Drop-off etc.)

1. MOUNTAIN CAPACITY

- Ability to provide a comfortable skier experience at peak times

Ski Terrain Capacity 1,980 skiers, Lift Capacity 1,130 skiers

2. SKIER SERVICE CAPACITY

- Ability to adequately service the requirements of skiers (rentals, ski school, food service etc.) built for 75% of Peak (1,700 Peak - 1,300 skiers)
- Provide suitable space for Mountain Ops

Existing Skier Service Capacity for 861 skiers

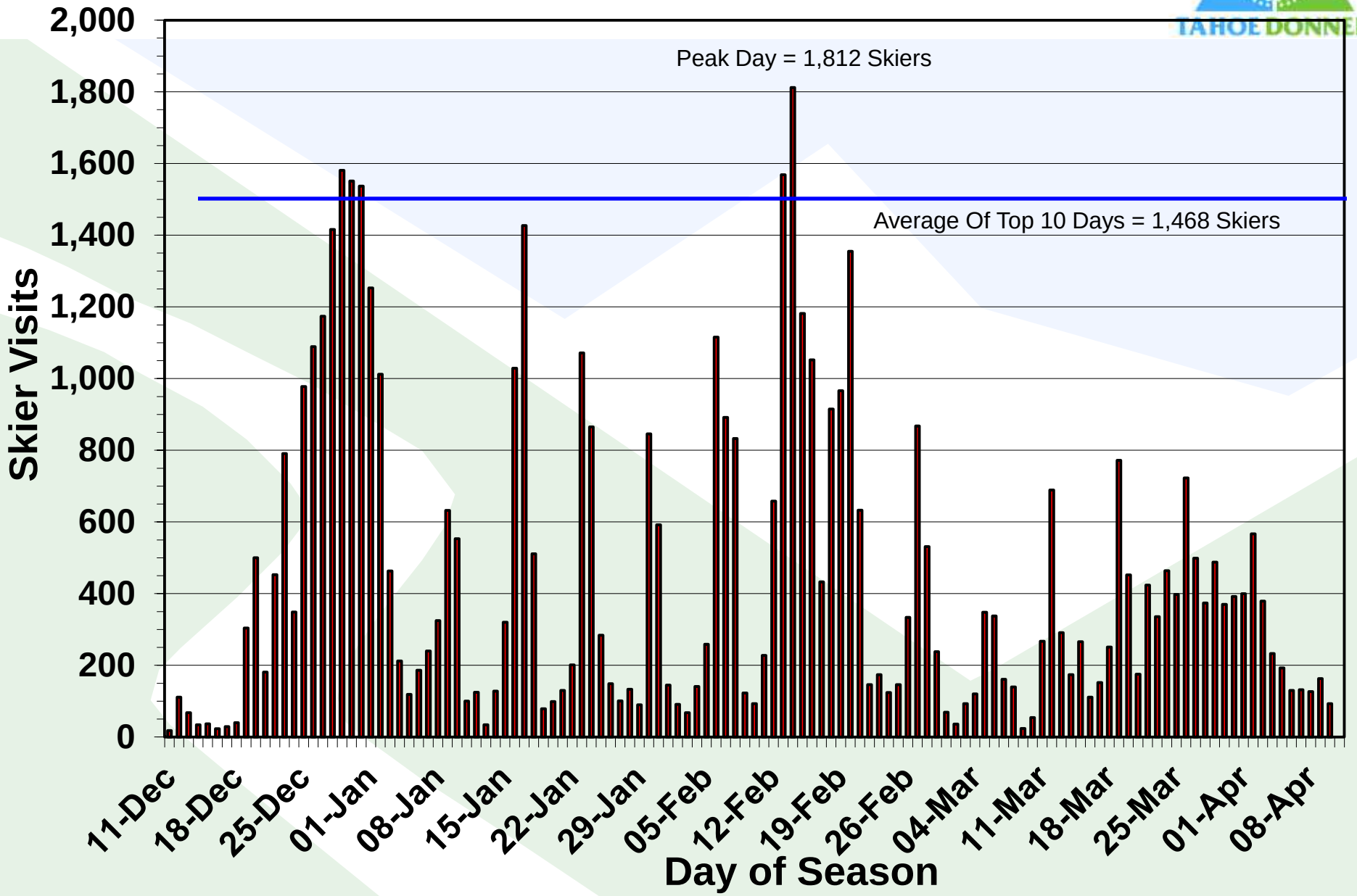
3. ACCESS CAPACITY

- Ability to get Visitors & Skiers to the Ski Area (via Parking and Drop-off etc.)

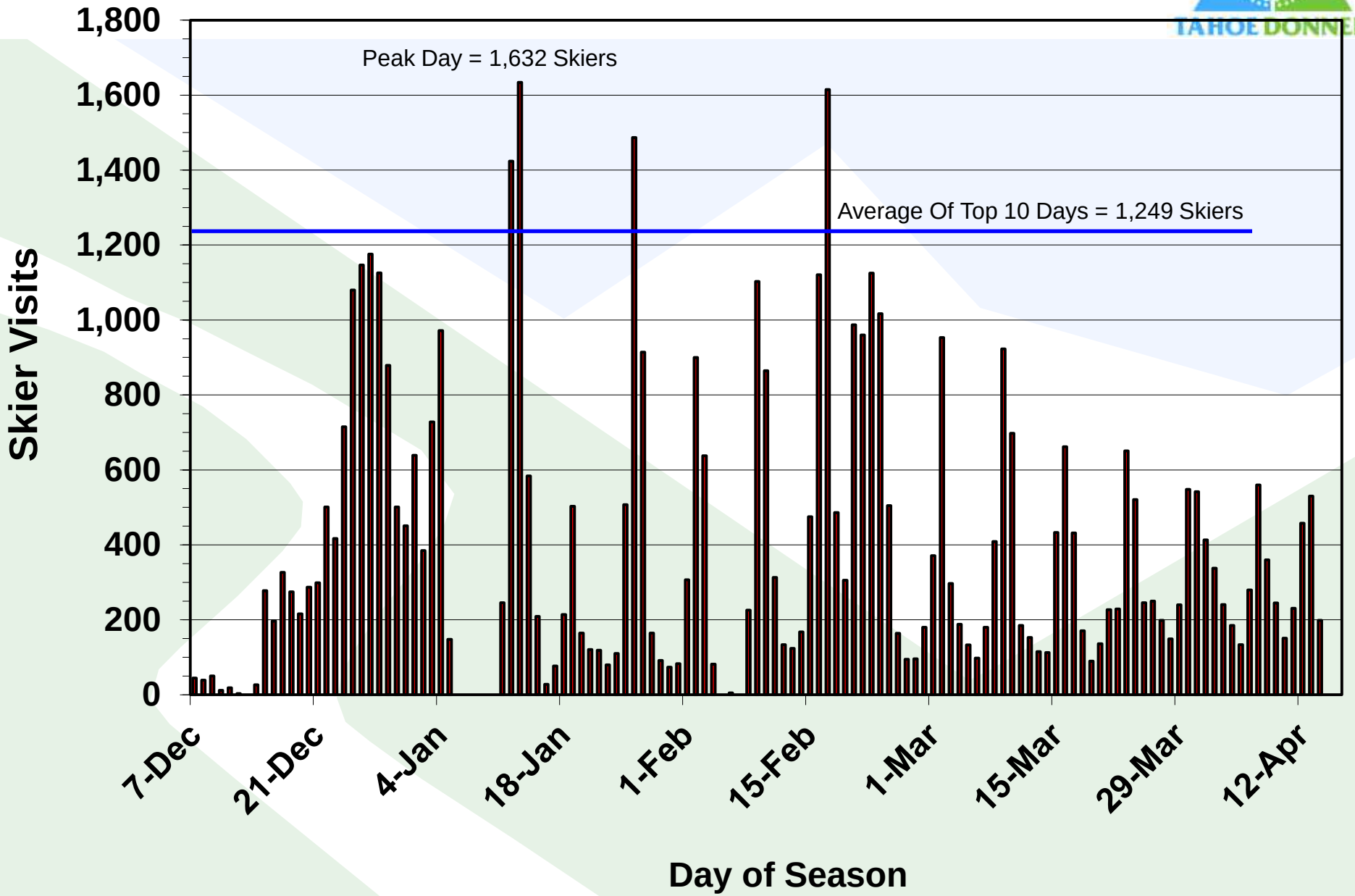
Existing Access Capacity for 1,053 skiers

EXISTING BUSINESS LEVELS

2015/16 SKIER VISITS



2016/17 SKIER VISITS



VISITS AND ASSUMPTIONS FOR CALCULATIONS

- 2016/17 Average Top 10 Days = 1,249 Peak Day = 1,632
- 2015/16 Average Top 10 Days = 1,468 Peak Day = 1,812
- 2014/15 Average Top 10 Days = <1,000
- 2013/14 Average Top 10 Days = <500
- 2012/13 Average Top 10 Days = 1,567

PLANNING ASSUMPTIONS USED DURING THE EXISTING SKIER SERVICE ANALYSIS

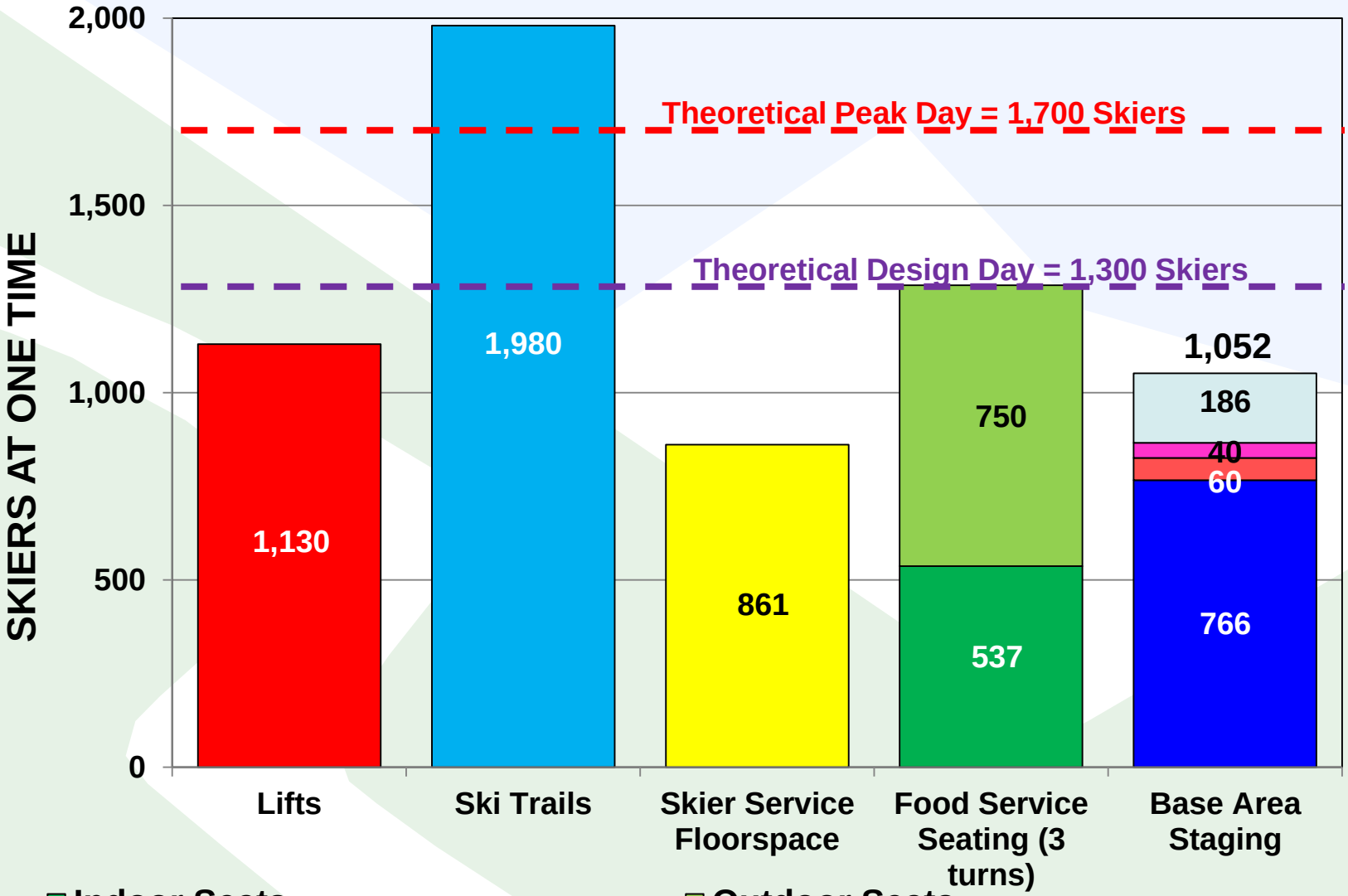
- **Theoretical Peak Day = 1,700**
- **For purposes of estimating Space Use for Skier Services we have used the average top 10 day of 1,300 skiers (representing approximately 75% of Peak Day). This is referred to as the Theoretical Design Day**

CURRENT / FUTURE VISITOR BREAKDOWN

Skier Origin	% of Total Skiers	# of Skiers during Theoretical Peak Day (1,700 Skiers)	5yr Target Skier Origin	# of Skiers during Future Peak Day (1,900)
Public Use (arrive by car for the day)	68%	1,156	71%	1,349
Members in HOA	22%	374	20%	380
Guests of Members	10%	170	9%	171
TOTAL	**100%**	**1,700**	**100%**	**1,900**

- Potential growth coming primarily from an Increase in Public Use
- Estimated Future Peak day of 1,900

EXISTING FACILITIES BALANCE



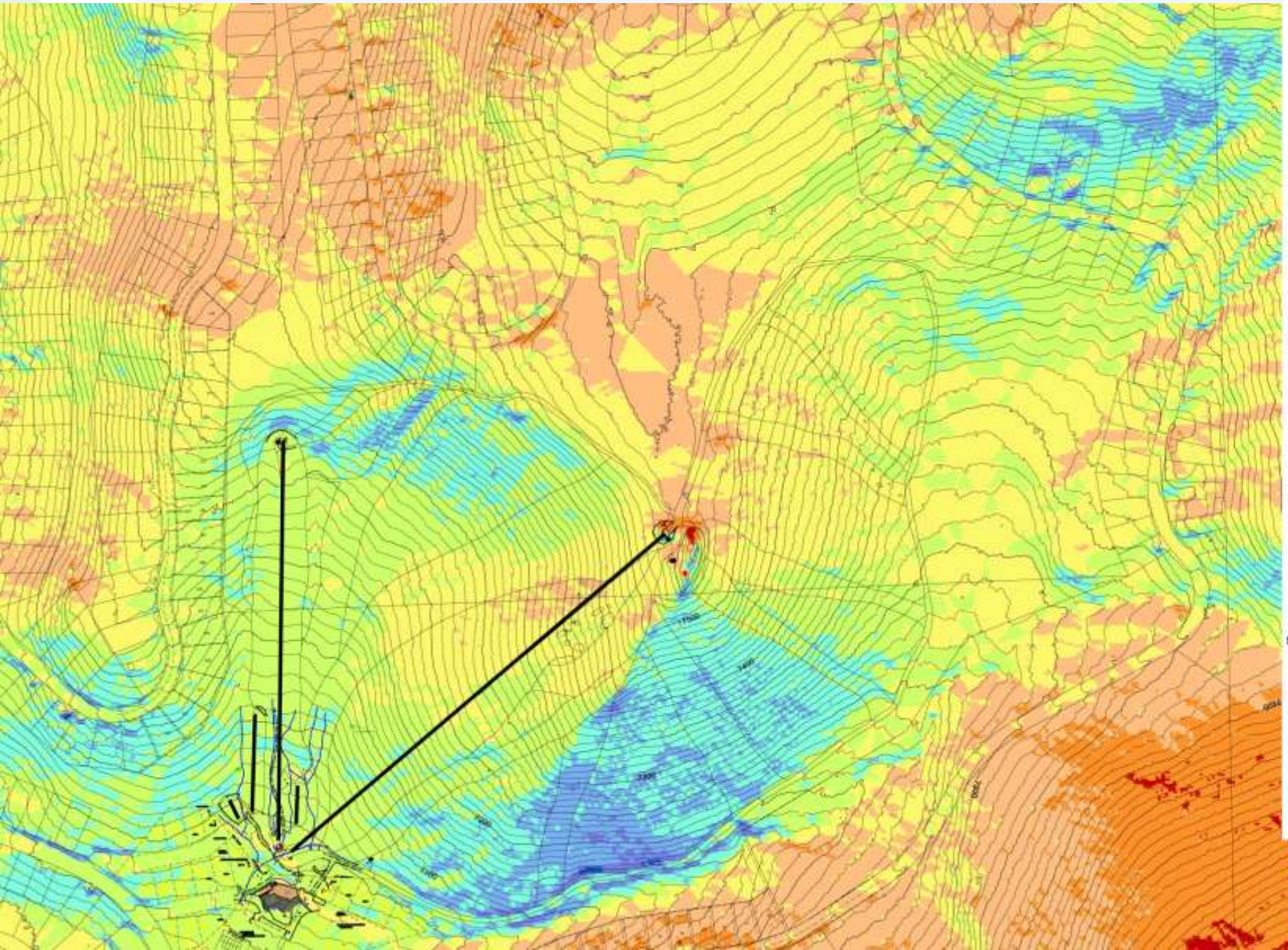
2. TECHNICAL ASSESSMENT

STUDY AREA


Donner Lake
80
Eagle Ridge Summit
7350 Ft.
Ski Slope Way
Snowbird / 2C
Eagle Rock / 4C
MC
MC
MC
Slalom Way
Snowpeak Way
Base Lodge
6750 Ft.
Ski Slope Way
Slalom Way

SOLAR RADIATION – WINTER SEASON
Composite - December – March

TAHOE DONNER



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Contours: 10ft

0ft 200 400 600 800

NOTES:

PERIOD OF CALCULATION:
Daily
Dec 1, 2016 to Mar 31, 2017

DAILY EXTENTS OF CALCULATION:
03:00 hrs - 22:00 hrs

INTERVAL OF CALCULATION:
15 minutes

NUMBER OF DAYS ANALYZED:
121 days

AVERAGE NUMBER OF DAYLIGHT HRS:
10.09 hours/day

MINIMUM INCOMING ENERGY:
214.2 KWh/ft2

MAXIMUM INCOMING ENERGY:
1592.2 KWh/ft2

AVERAGE INCOMING ENERGY:
1057.2 KWh/ft2

SUNRISE SUNSET

WINTER SOLSTICE

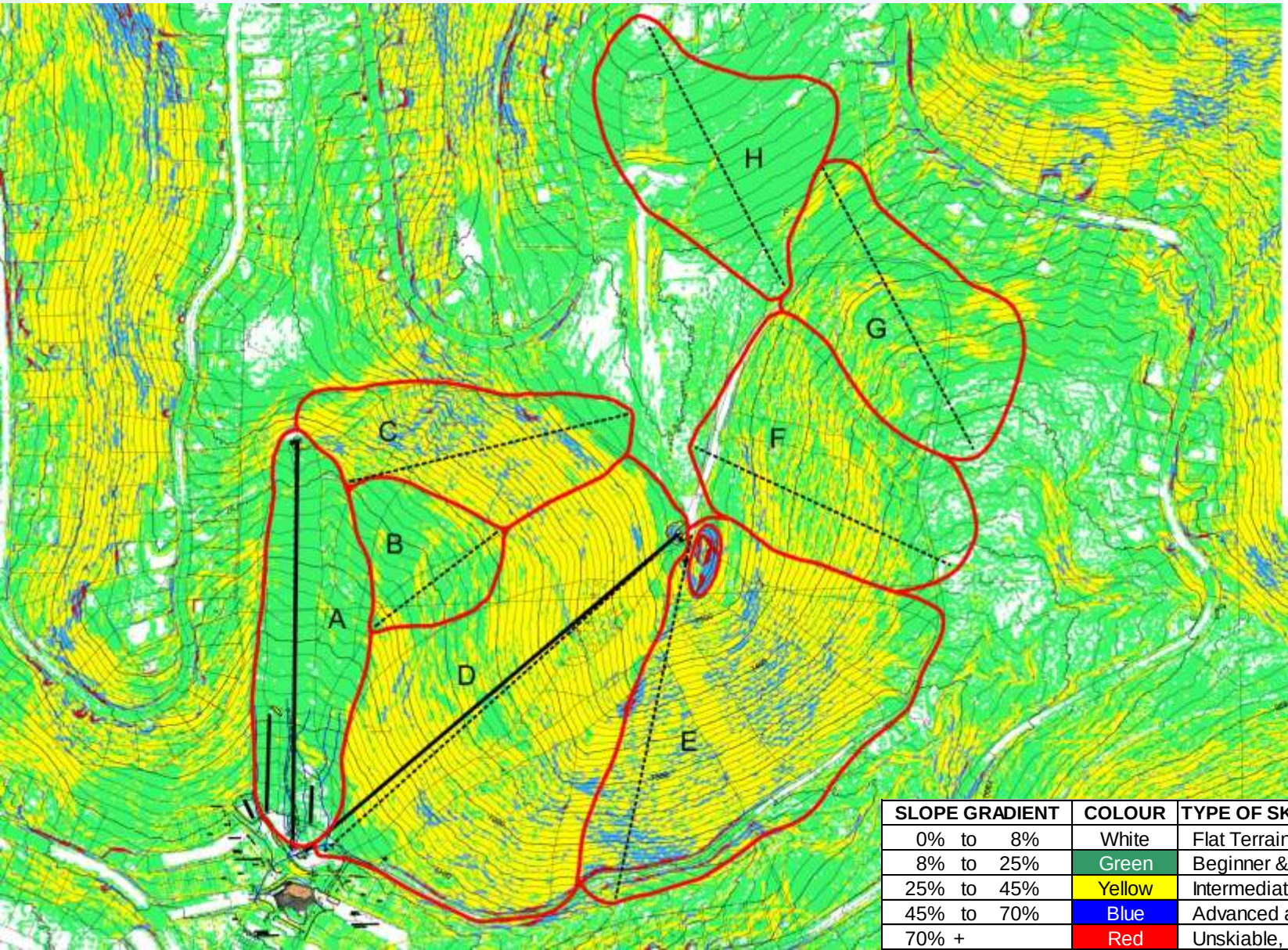
SUMMER SOLSTICE

NORTH

LATITUDE = 39° 21' 1.74" North
LONGITUDE = 120° 15' 44.78" West
8 hrs. behind of UTC

MOUNTAIN SLOPE & TERRAIN CAPACITY ANALYSIS

TAHOE DONNER



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Contours: 10ft

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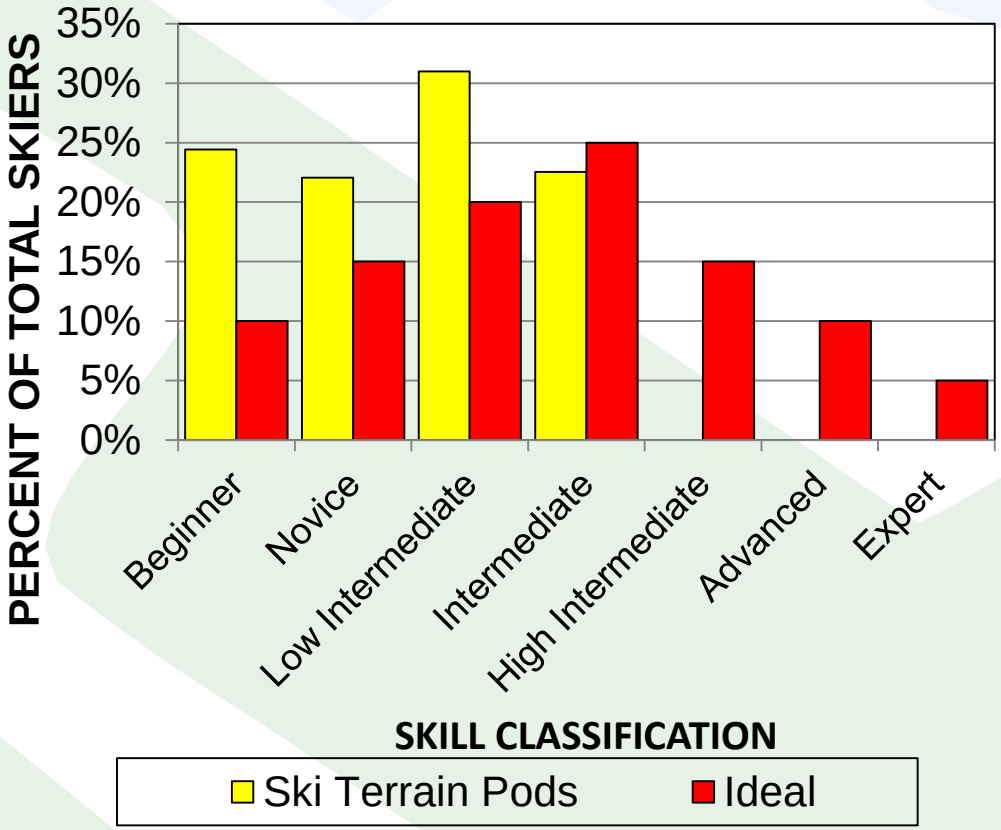
MOUNTAIN SLOPE GRADIENT

0-8%
8-25%
25-45%
45-70%
70% +
Existing Lift
Ski Pod
Straight Line Slope

SLOPE GRADIENT	COLOUR	TYPE OF SKIING/ SNOWBOARDING
0% to 8%	White	Flat Terrain, Marginal Skiing
8% to 25%	Green	Beginner & Novice Skiing
25% to 45%	Yellow	Intermediate Skiing
45% to 70%	Blue	Advanced and Expert Skiing
70% +	Red	Unskiable, Hazard Area

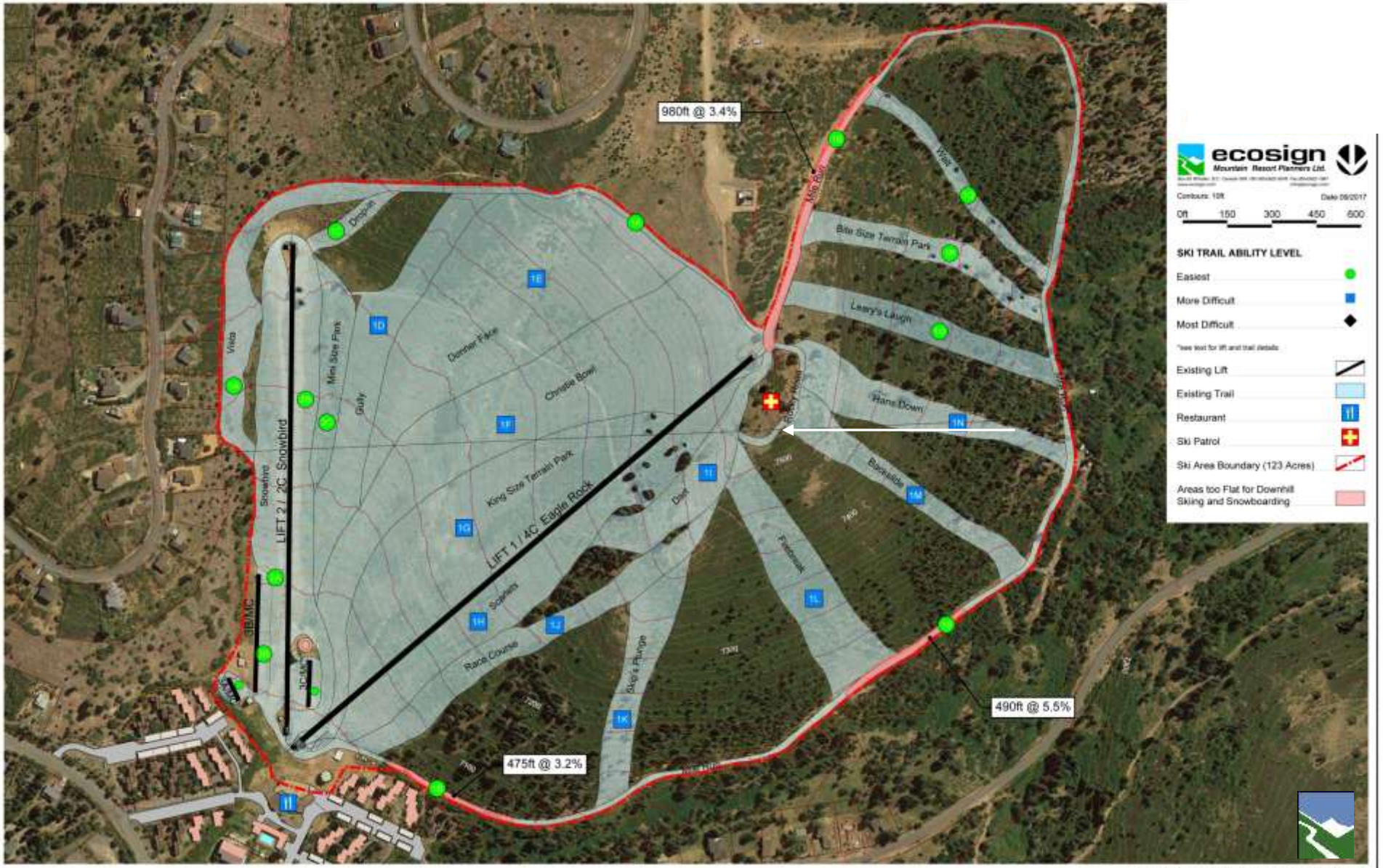
MOUNTAIN TERRAIN CAPACITY ANALYSIS

Terrain Pod	A	B	C	D	E	F	G	H	TOTAL
Skill Class	1	2	4	3	4	2	2	1	
Total Area Ac.	13.9	6.4	12.3	36.8	30.0	17.7	15.5	15.2	147.8
% Ski Terrain Developable	90%	90%	90%	75%	30%	30%	30%	30%	
Available Ski Terrain	12.5	5.8	11.1	27.6	8.8	5.3	4.7	4.6	80.4
Total Skiers	**380**	**170**	**270**	**660**	**210**	**160**	**140**	**140**	**2,130**



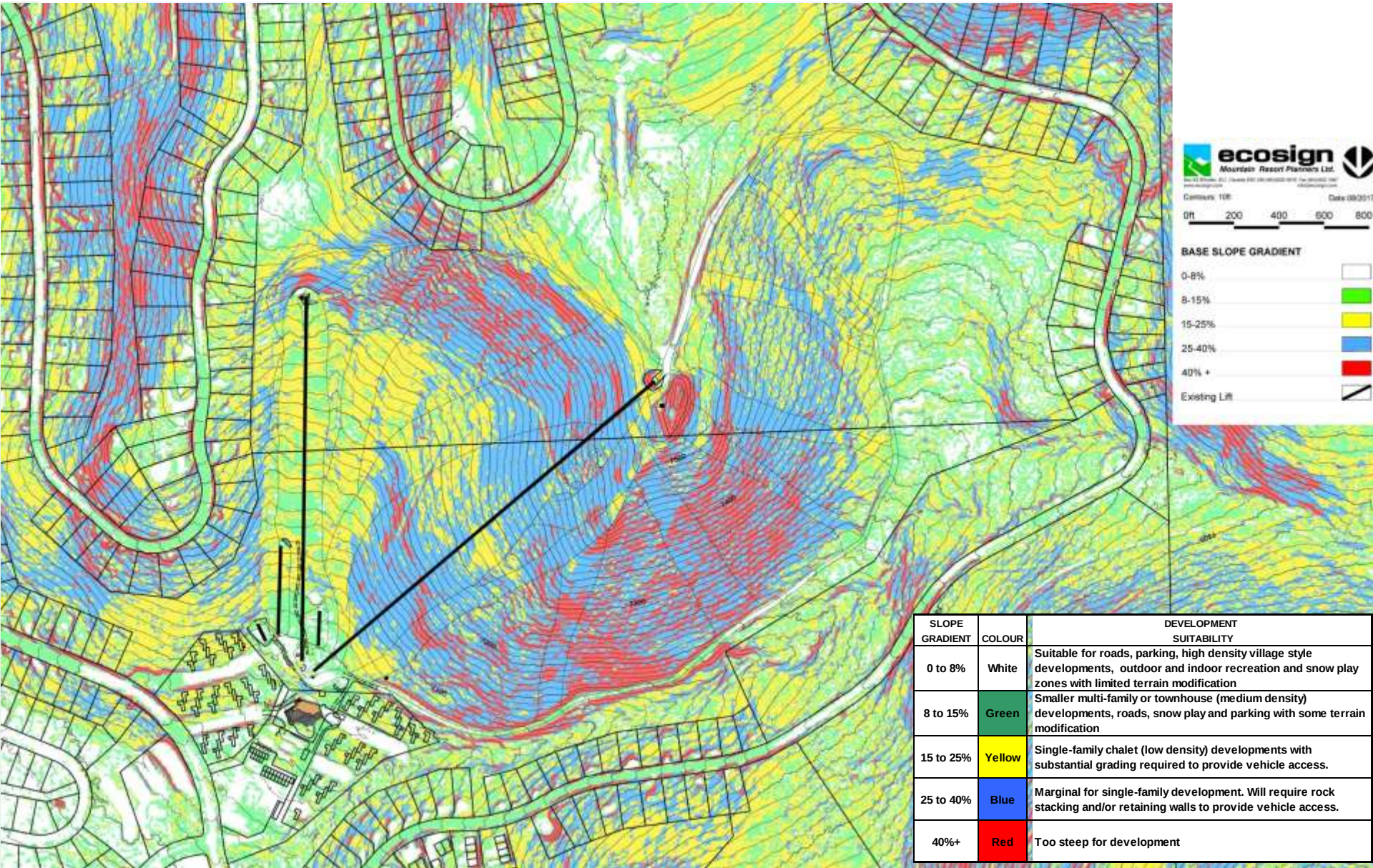
EXISTING MOUNTAIN FACILITIES

TAHOE DONNER



RESORT BASE AREA SLOPE AND DESIGN ANALYSIS

TAHOE DONNER

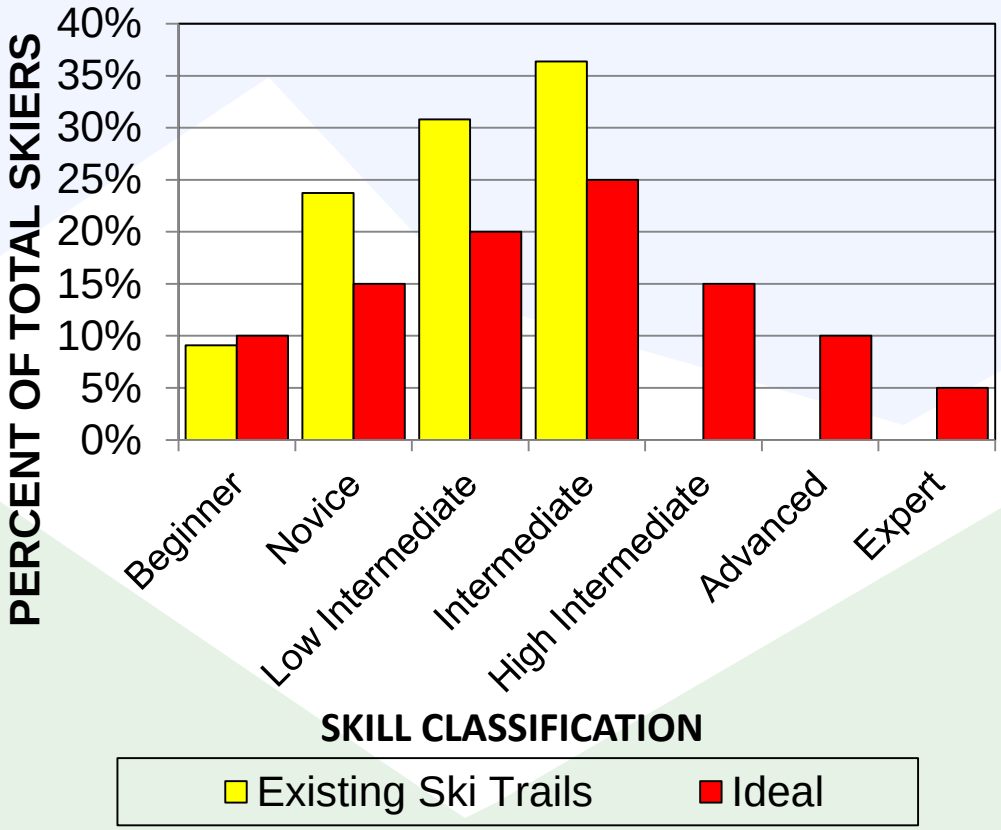


SLOPE GRADIENT	COLOUR	DEVELOPMENT SUITABILITY
0 to 8%	White	Suitable for roads, parking, high density village style developments, outdoor and indoor recreation and snow play zones with limited terrain modification
8 to 15%	Green	Smaller multi-family or townhouse (medium density) developments, roads, snow play and parking with some terrain modification
15 to 25%	Yellow	Single-family chalet (low density) developments with substantial grading required to provide vehicle access.
25 to 40%	Blue	Marginal for single-family development. Will require rock stacking and/or retaining walls to provide vehicle access.
40%+	Red	Too steep for development

EXISTING MOUNTAIN FACILITIES

Ski Terrain

- Ski Terrain- 123 acre ski area boundary, 26 ski runs, 6.0 miles long, 76 acres of groomable terrain which comfortably supports **1,980** skiers at one time.
- Skier skill class weighted to lower ability levels- no high intermediate, advanced, or expert ski terrain.
- Ample Novice terrain, however access from existing base area is poor as guests must ski out and around “Mile One” for each lap



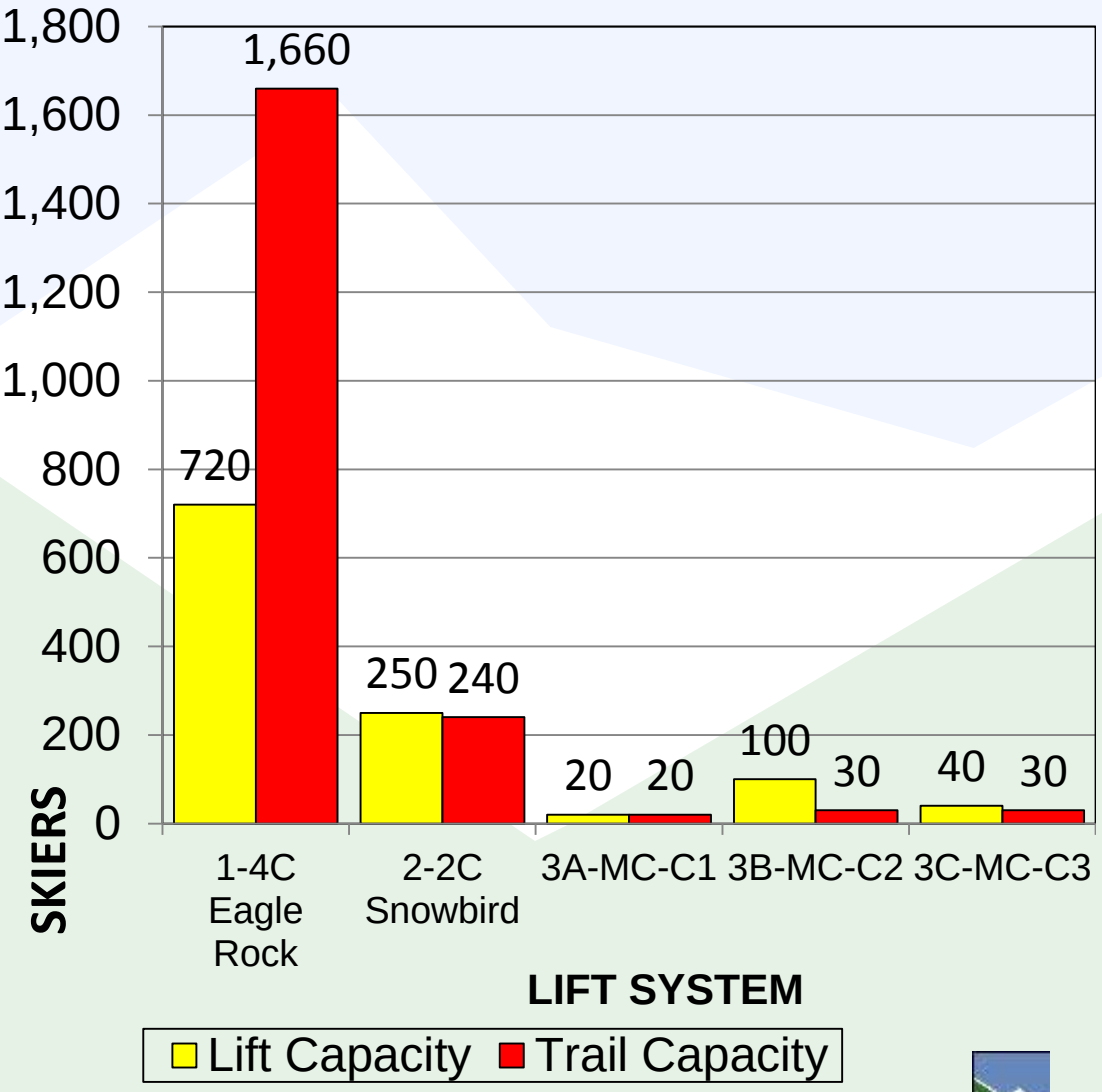
MOUNTAIN ANALYSIS CONCLUSIONS

Existing Facilities

- 2 chairlifts, 3 moving carpets- Snowbird Chairlift 46 years old
- Combined Lift Capacity calculated at **1,130** skiers at one time

Lift / ski trail capacity balance

- Eaglerock - Lift supports 720 skiers while Ski trails support 1,660 skiers per day
- Snowbird - Lift supports 250 skiers while Ski trails support 240 skiers per day



EXISTING MOUNTAIN FACILITIES – GENERAL OBSERVATIONS

- Both the existing chairlifts are operated at 75% of their rated capacities to avoid misloads/ stoppages. For Eaglerock, this means that the uphill lift capacity is only 43% of the ski trail capacity. For Snowbird, due to the limited amount of terrain, the uphill lift capacity and downhill ski trail capacity is balanced.

- The “Mile Run” ski trail is not a good experience for first time users of Eaglerock chair as it contains 3 long sections of trail which are well below the minimum 8% slope needed for downhill sliding and boarding. Currently, there is a need to improve the “easiest way down” from Eaglerock Chair.

- While somewhat constrained in space and farther from the Daylodge than ideal, the three moving carpets function well and provide a graduated learning experience

3. BASE FACILITIES INVENTORY

PROCESS

- **INVENTORY** - Understand and document all spaces used as “Skier Service” space
- **ANALYSIS TARGET** – Create new TD Planning Standard (derived from Regional, Local Competition, USFS Standards)
- **COMPARE** - Comparative Analysis between existing situation and new TD Planning Standard to discover Excess/Deficit in Skier Service Space
- **SCENARIO’s** – Comparative Analysis between Existing Skier Service Space and different Skier Demand Periods (Cost Impact)

EXISTING SKIER SERVICE INVENTORY

Guest Service Function	Existing Skier Service Floorspace (Main Daylodge) (ft^2)	Existing Skier Service Floorspace (Yurt) (ft^2)	Total Existing Skier Service Space (ft^2)
Staging Facilities			
Ticket Sales	304		**304**
Public Lockers	200		**200**
Equipment Rental & Repair	2,065		**2,065**
Guest Services / Ski School/ Adaptive	260	170	**430**
Children's Programs/Day Care	585	170	**755**
Staging Subtotal	**3,414**	**340**	**3,754**
Commercial Facilities			
Food & Beverage Seating	2,180	350	**2,530**
Kitchen & Scramble, Bar	800		**800**
Bar/Lounge	-		**-**
Restrooms	930		**930**
Accessory Retail	160		**160**
Commercial Subtotal	**4,070**	**350**	**4,420**
Operational Facilities			
Administration	917		**917**
Employee Facilities	1,046		**1,046**
First Aid & Mountain Patrol	486		**486**
Operational Subtotal	**2,449**	**-**	**2,449**
TOTAL FUNCTIONAL SPACE	**9,933**	**690**	**10,623**
Storage	2,915		**2,915**
Mechanical, Circulation/Walls/Waste*	2,280	20	**2,300**
GROSS BUILDING AREA	**15,128**	**710**	**15,838**

EXISTING SKIER SPACE USE PLANNING STANDARDS FOR TAHOE DONNER WITH PLANNING TARGET

TAHOE DONNER

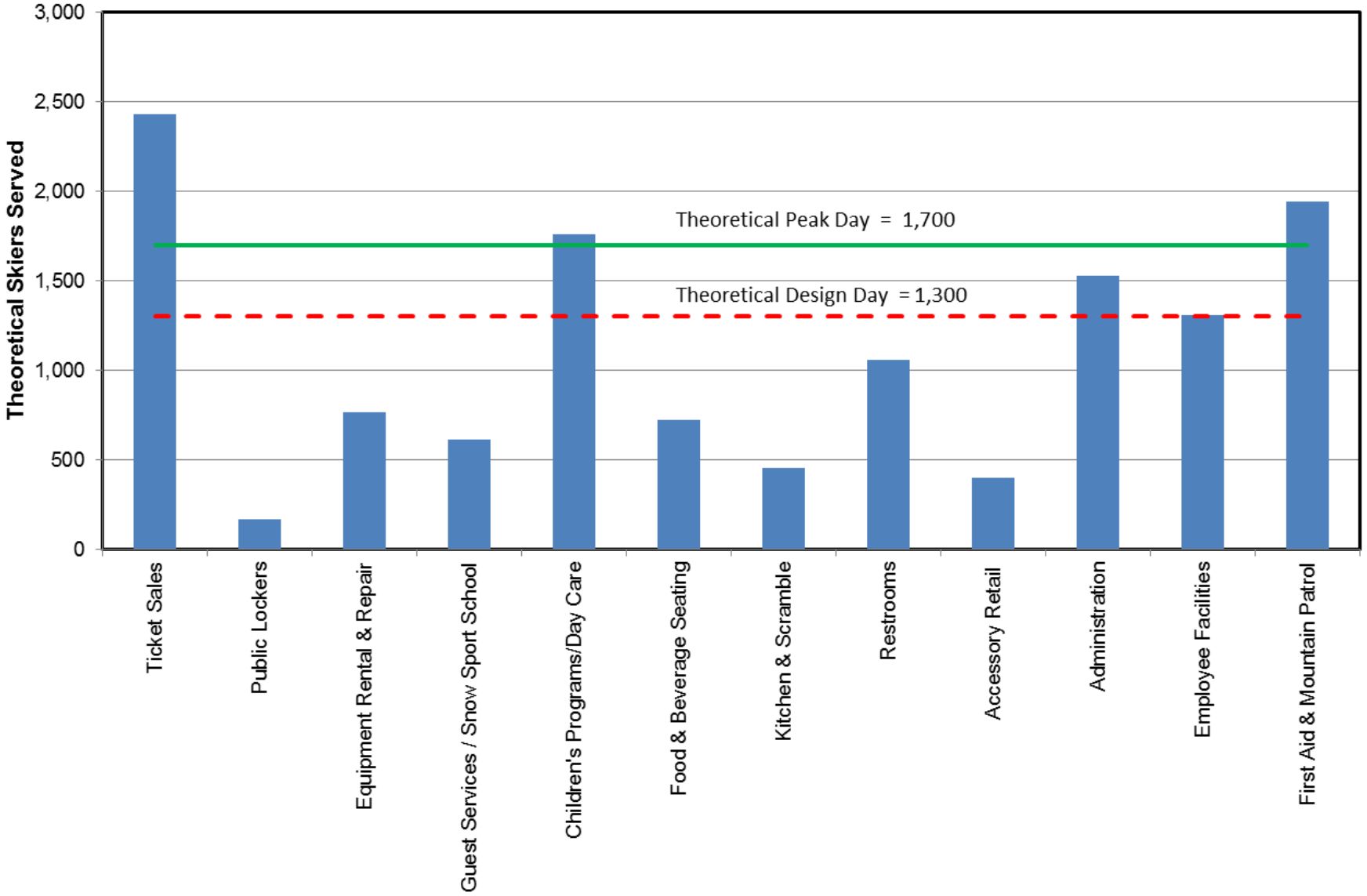
Guest Service Function	Day Ski Area ft²/skier	Average ft²/skier	Resort Area ft²/skier	Ecosign Recomm. area / Skier for Tahoe Donner (DRAFT) ft²/skier	NOTES
Staging Facilities	-	-	-		
Ticket Sales	0.10	0.13	0.15	0.13	Use average ticket sales
Public Lockers	0.70	0.95	1.20	1.20	Used higher end due to beginners renting. Do you want extra for Homeowners?
Equipment Rental & Repair	0.80	0.90	1.00	2.70	3 X the average standard based on regional anlysis and competition
Guest Services / Ski School/ Adaptive	0.25	0.38	0.50	0.70	2 X the average standard based on ski school utilization / regional anlysis and competition
Children's Programs/Day Care	0.35	0.43	0.50	0.43	Use average space
Staging Subtotal	**2.20**	**2.78**	**3.35**	**5.16**	
Commercial Facilities	-	-	-		
Food & Beverage Seating	3.25	3.50	4.00	3.50	Use average as slight increase due to watchers using seating
Kitchen & Scramble, Bar	1.75	2.50	3.00	1.75	Use kitchen as half seating space
Bar/Lounge	0.30	0.40	0.50	0.30	Use Day Ski Area standard
Restrooms	0.75	0.88	1.00	0.88	Use average standard
Accessory Retail	0.40	0.57	0.75	0.40	Use Day Ski Area standard
Commercial Subtotal	**6.45**	**7.85**	**9.25**	**6.83**	
Operational Facilities	-	-	-		
Administration	0.60	0.80	1.00	0.60	Use Day Ski Area standard
Employee Facilities	0.30	0.40	0.50	0.80	2 X the average standard based on ski school utilization / regional anlysis and competition
First Aid & Mountain Patrol	0.25	0.30	0.35	0.25	Use Day Ski Area standard
Operational Subtotal	**1.15**	**1.50**	**1.85**	**1.65**	
TOTAL FUNCTIONAL SPACE	**9.80**	**12.13**	**14.45**	**13.64**	
Storage	0.98	1.21	1.45	1.36	Calculated as 10% of Total Functional Space
Mechanical, Circulation/Walls/Waste*	2.45	3.03	3.61	3.41	Calculated as 25% of Total Functional Space
GROSS FLOOR AREA	**13.23**	**16.37**	**19.51**	**18.40**	
Food Service Seating	-	-	-	-	
Turns/Indoor Seat (Cafeteria)	4.00	3.50	3.00	3.00	use low turnover (indicated guests stay longer in seating area)
Turns/Indoor Seat (Table Service)	3.00	2.50	2.00	2.50	use average (indicated guests stay longer in seating area)
Indoor Seats/ Skier	0.25	0.29	0.33	0.25	use average
Outdoor Seats/Skier	0.13	0.15	0.17	0.15	use average
Square Feet/ Indoor Food Service Seat	12.00	12.00	12.00	12.00	use standard

TAHOE DONNER SPACE USE ANALYSIS
BASED ON DESIGN DAY (75% OF PEAK = 1,300)

Guest Service Function	Total Existing Skier Service Space (ft²)	Existing Skier Service Space per Skier ft²/skier	Ecosign Recomm. area / Skier for Tahoe Donner (DRAFT) ft²/skier	Recomm. Floorspace (ft²)	Percent of Recomm. Floorspace	Theoretical Skiers Served
Staging Facilities						
Ticket Sales	**304**	**0.23**	0.13	163	187%	2,432
Public Lockers	**200**	**0.15**	1.20	1,560	13%	167
Equipment Rental & Repair	**2,065**	**1.59**	2.70	3,510	59%	765
Guest Services / Ski School/ Adaptive	**430**	**0.33**	0.70	910	47%	614
Children's Programs/Day Care	**755**	**0.58**	0.43	559	135%	1,756
Staging Subtotal	**3,754**	**2.89**	**5.16**	**6,702**	**56%**	**728**
Commercial Facilities						
Food & Beverage Seating	**2,530**	**1.95**	3.50	4,550	56%	723
Kitchen & Scramble, Bar	**800**	**0.62**	1.75	2,275	35%	457
Bar/Lounge	**-**	**-**	0.30	390	0%	-
Restrooms	**930**	**0.72**	0.88	1,144	81%	1,057
Accessory Retail	**160**	**0.12**	0.40	520	31%	400
Commercial Subtotal	**4,420**	**3.40**	**6.83**	**8,879**	**50%**	**647**
Operational Facilities						
Administration	**917**	**0.71**	0.60	780	118%	1,528
Employee Facilities	**1,046**	**0.80**	0.80	1,040	101%	1,308
First Aid & Mountain Patrol	**486**	**0.37**	0.25	325	150%	1,944
Operational Subtotal	**2,449**	**1.88**	**1.65**	**2,145**	**114%**	**1,484**
TOTAL FUNCTIONAL SPACE	**10,623**	**8.17**	**13.64**	**17,726**	**60%**	**779**
Storage	**2,915**	**2.24**	1.36	1,768	165%	2,143
Mechanical, Circulation/Walls/Waste*	**2,300**	**1.77**	3.41	4,431	52%	675
GROSS FLOOR AREA	**15,838**	**12.18**	**18.40**	**23,925**	**66%**	**861**

- Note: this is recommended floorspace req. to satisfy existing business levels.
- In total, the current floorspace satisfies only 66% of the proposed comfortable space requirement at existing business levels.
- According to the target space/skier the existing ski area can comfortably satisfy 861 skiers (That represents a Theoretical Peak Day of 1,150 skiers)

EXISTING SKIER SERVICE - SPACE USE ANALYSIS



EXISTING FOOD SERVICE SEATING ANALYSIS

Building/Restaurant	Indoor Seats			Outdoor Seats			Total Seats	
	Number of Seats	Turns per Seat	Guests Served	Number of Seats	Turns per Seat	Guests Served	Number of Seats	Guests Served
Daylodge	150	3.0	450	220	3.0	660	370	1,110
Children's Yurt Building	29	3.0	87	30	3.0	90	59	177
TOTAL	**179**		**537**	**250**		**750**	**429**	**1,287**

- Existing seating has inefficient layout of space, current number of indoor seats at 179. (incl. Daylodge and Yurt *estimated.*)
- During good weather there should be enough seating to satisfy 1,287 guests (with 3.0 turns per seat) both inside and outside.
- Current ratio is that indoor seats represent 42% of total seats (indoor & outdoor)
- Lunch is based from 11:30 to 2:00pm (At 3 turns this equates to a 50 minute lunch)

PRELIMINARY COST ESTIMATE

Peak Day Demand	Design Day (75% of Peak)	Skier Service Floorspace Required (sqft)	Estimated Cost (incl. Hard & Soft) @$600USD/sqft	Notes:
1,900 skiers	1,425	26,200	$ 15,720,000	Future Peak Day SCC
1,700 skiers	1,275	23,500	$ 14,100,000	Peak day average of the last 2 seasons (design day +/- average of top 10 days 1,300)
1,400 skiers	1,050	19,300	$ 11,580,000	Peak day if designing to the average of the the top 20 days = 1,070 (2009/2013)
1,150 skiers	863	15,900	$ 9,540,000	To match the existing floorspace area.

- Based on $600USD / sq ft. (as directed by client)
- Not including underground parking (if required, potential for 20+ stalls)
- GFA based on 18.40 sq ft./skier as per assumptions

Client group agreed to go forward with the target of 1,900 skiers at Peak Day

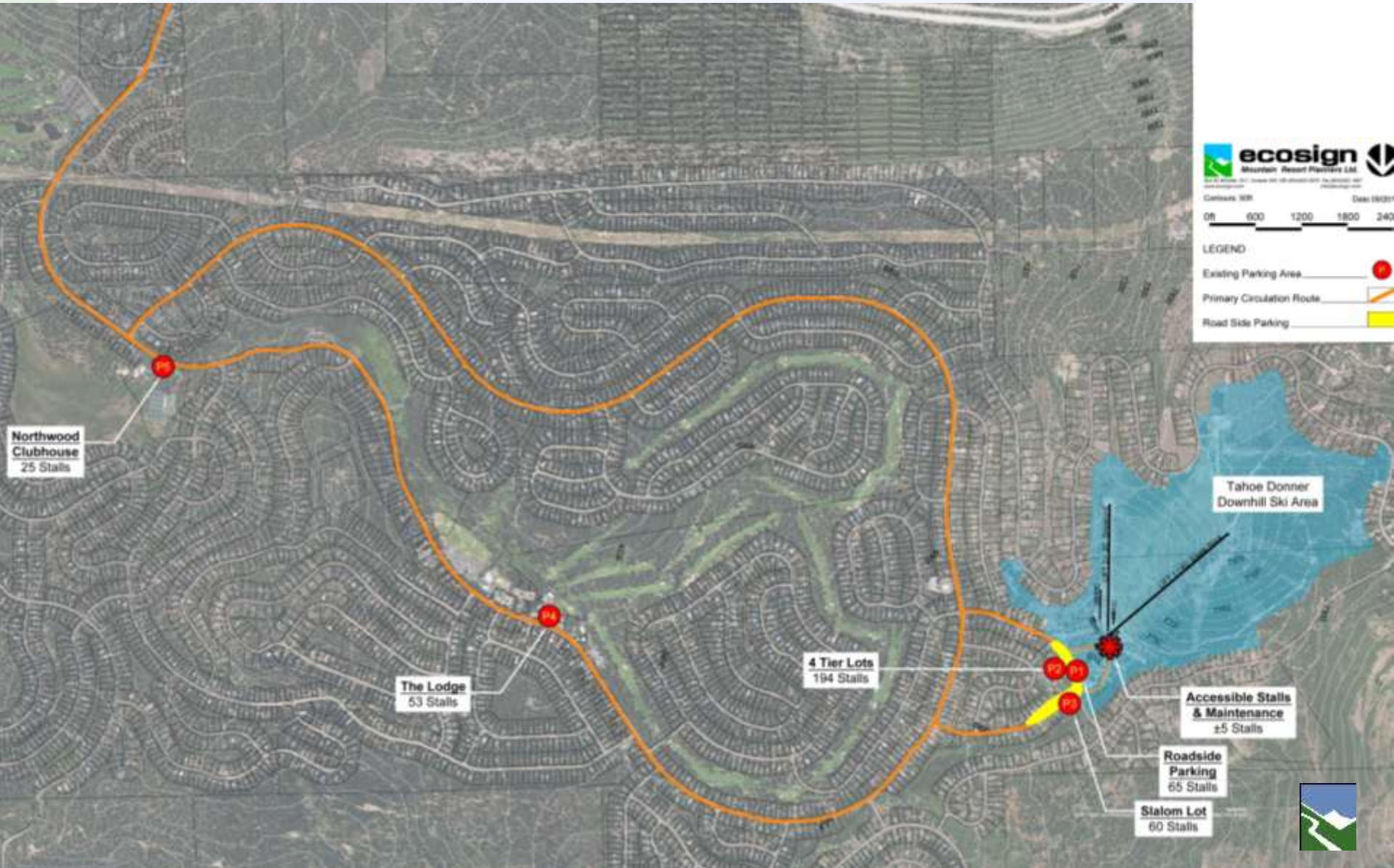
EXISTING BASE AREA SITE PLAN

TAHOE DONNER

EXISTING PARKING

EXISTING PARKING CONCEPT

TAHOE DONNER



EXISTING PARKING

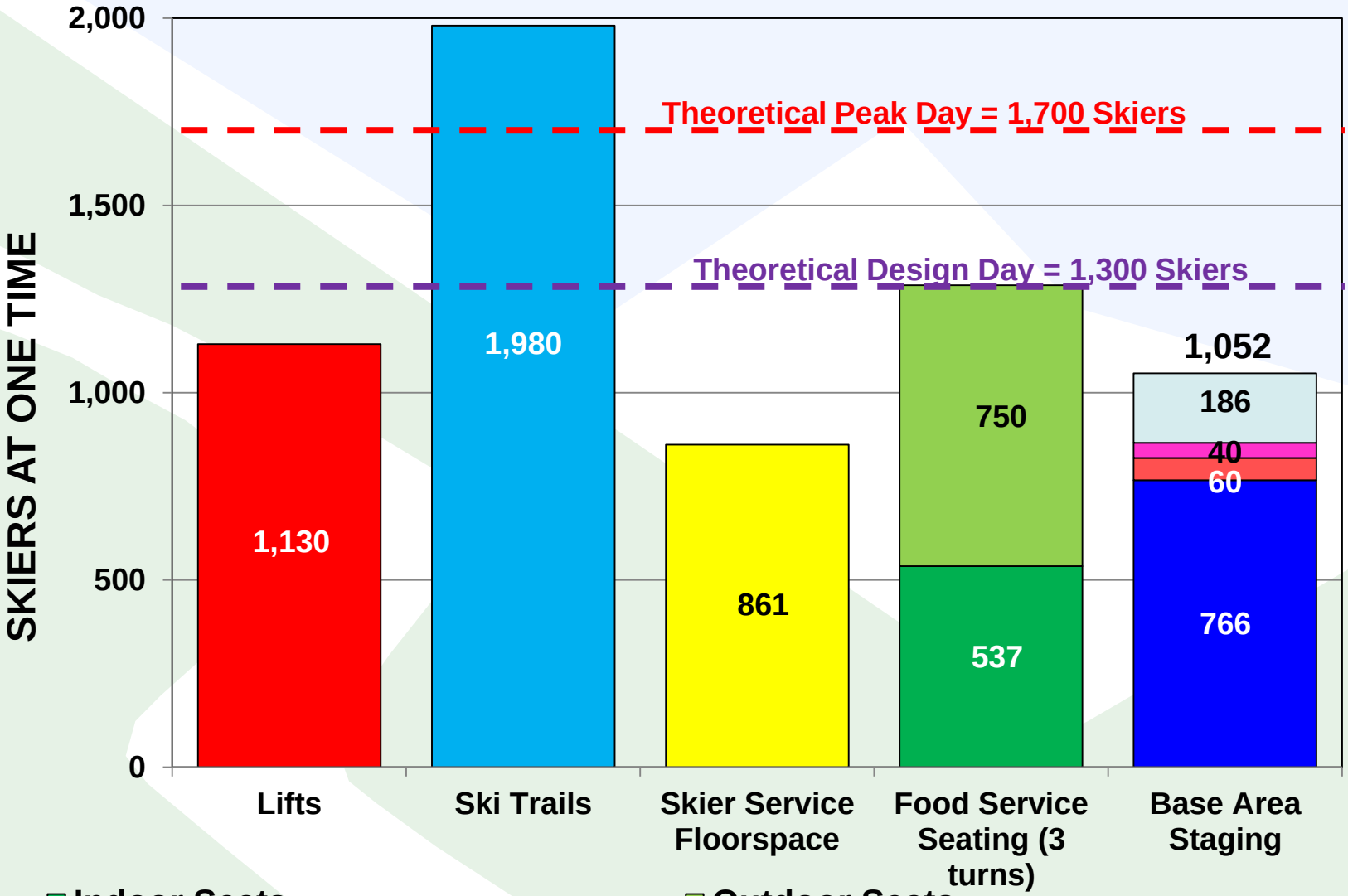
Lot Number	Lot Name	Number of Cars	% Total Within/ Outside SWD	AVERAGE Number of Visitors 2.6 pp/car	PEAK Number of Visitors 3.0 pp/car	PEAK Number of Skiers at 80% Participation
Tahoe Donner						
Within SWD						
P1	Roadside - Snowpeak Way & Slalom Way	65		169	195	156
P2	4 tier lots (60% take shuttle / 40% walk)	194		504	582	466
P3	Slalom lot	60		156	180	144
Subtotal Within SWD		**319**	80%	**829**	**957**	**766**
Outside SWD						
P4	The Lodge (Golf Course Parking, half used for XC)	53		137	158	126
P5	Northwoods Clubhouse Parking	25		65	75	60
Subtotal Outside SWD		**78**	20%	**202**	**233**	**186**
Total Tahoe Donner		**397**	*100%*	**1,031**	**1,190**	**952**

- Currently allowance for employee parking is tentative in condo development, may be removed in future.
- Will need to plan for more future employee stalls.

EXISTING ACCESS ANALYSIS

	During Theoretical Peak Times (1,700 skiers)	
	Number of Visitors	**Number of Skiers**
Tahoe Donner		
Within SWD		
From Pillows (Walking)	50	40
From Parking (Walking)	957	766
Charter Bus, Private Drop Off from surrounding homes (8%)	77	61
Subtotal Within SWD	**1,084**	**867**
Outside SWD		
From Parking (Arrive by Shuttle)	233	186
Total Tahoe Donner	**1,317**	**1,053**

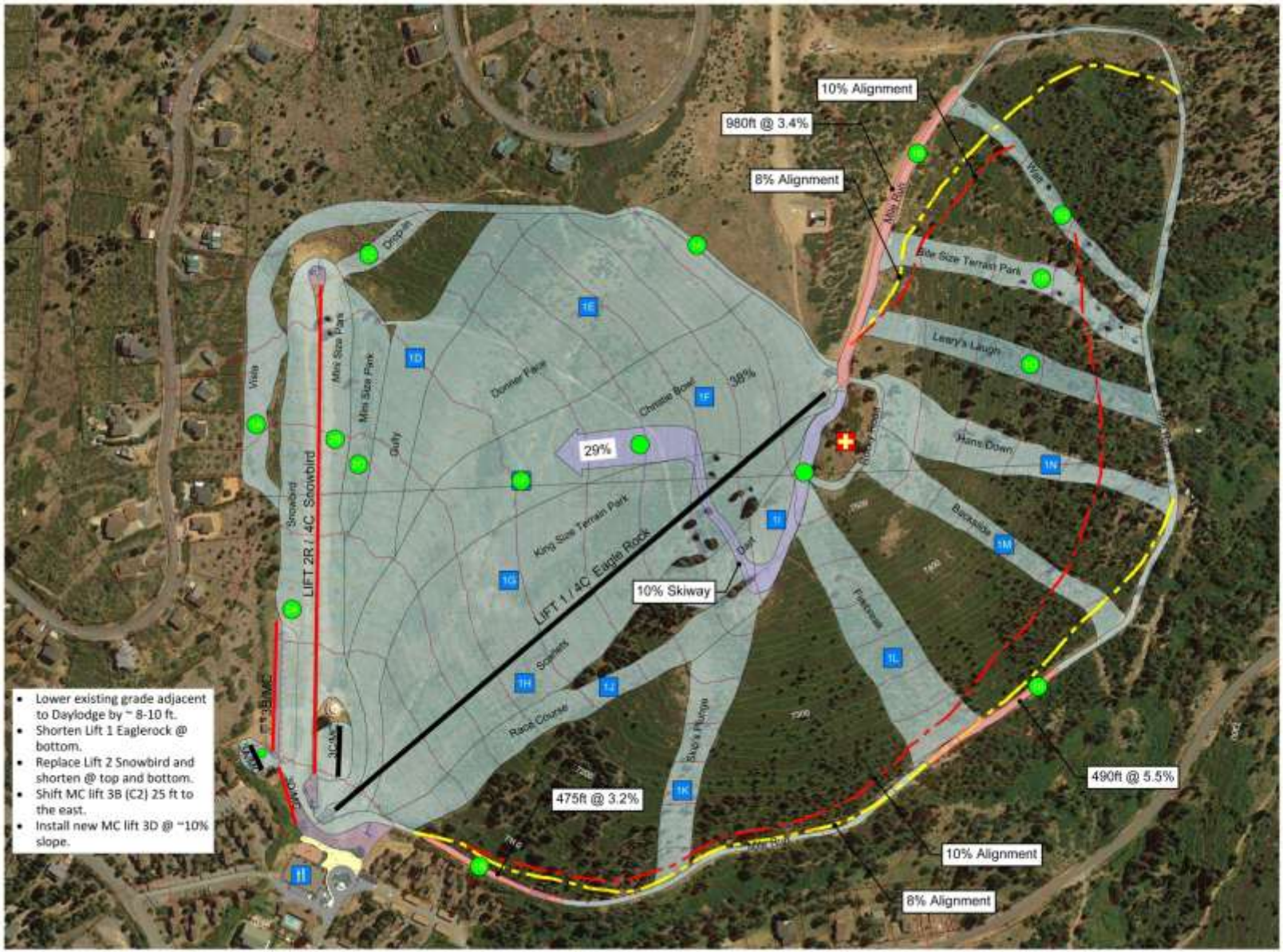
EXISTING FACILITIES BALANCE



5. MOUNTAIN CONCEPTS A-B, C & D

MOUNTAIN CONCEPT A & B

TAHOE DONNER



ecosign Mountain Resort Planners Ltd.

Contours: 10ft Date: 09/2017

0ft 150 300 450 600

SKI TRAIL ABILITY LEVEL

- Easiest
- More Difficult
- Most Difficult

*see text for lift and trail details

- Existing Lift
- Lift to be Removed
- Proposed Lift
- Existing Trail
- Proposed Trail
- 8% Skiway
- 10% Skiway
- Areas too Flat for Downhill Skiing and Snowboarding
- Restaurant
- Ski Patrol

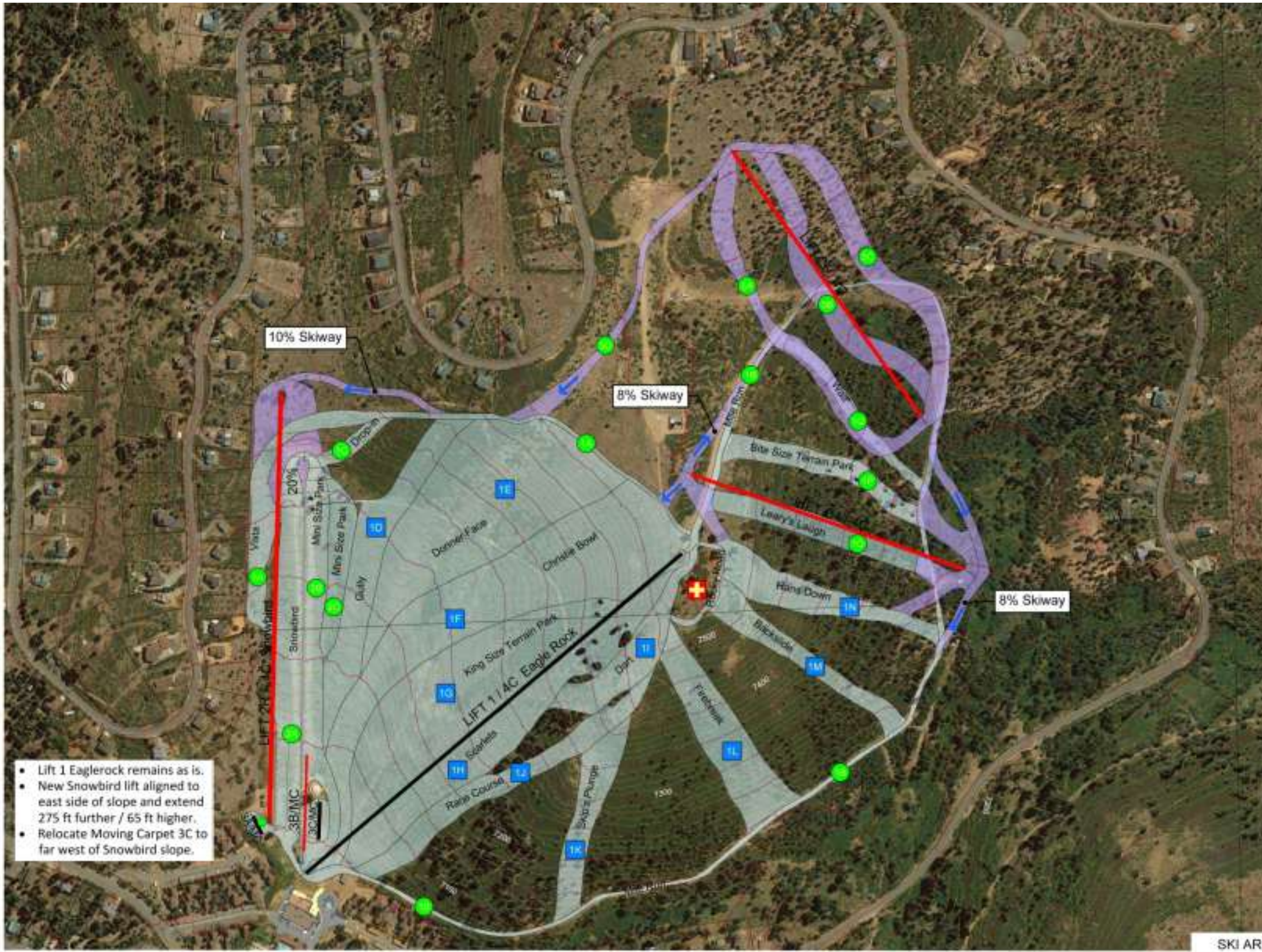
MOUNTAIN CONCEPT A & B - SUMMARY

- Mountain Concept A/B (to match base area concepts) provide a Buildout SCC of 1700 skiers at one time to match theoretical business levels. Eaglerock is upgraded (replaced if necessary) to provide 2400 pph (up from current 1970 pph rated / 1478 operated)
- Snowbird is replaced by a 4 passenger fixed-grip lift with 1200 pph capacity, the lift is shortened top and bottom to improve skier circulation.
- A Novice route down Christie Bowl is illustrated to provide a high quality “novice” ski route down Eaglerock.
- Mile Run is improved- an 8% alignment (minimum) is illustrated, as well as an “ideal” 10% alignment for reference

Pros- Minimal changes from existing, lowest cost.

Cons- ski back route for all west facing Eaglerock ski trails is very long & although improved, uphill lift capacity does not balance with downhill ski trail capacity.

MOUNTAIN CONCEPT C



ecosign Mountain Resort Planners Ltd.

Contours: 10ft Date 09/2017

0ft 200 400 600 800

SKI TRAIL ABILITY LEVEL

- Easiest
- More Difficult
- Most Difficult

*see text for lift and trail details

- Existing Lift
- Lift to be Removed
- Proposed Lift
- Existing Trail
- Proposed Trail
- Restaurant
- Ski Patrol

MOUNTAIN CONCEPT C - SUMMARY

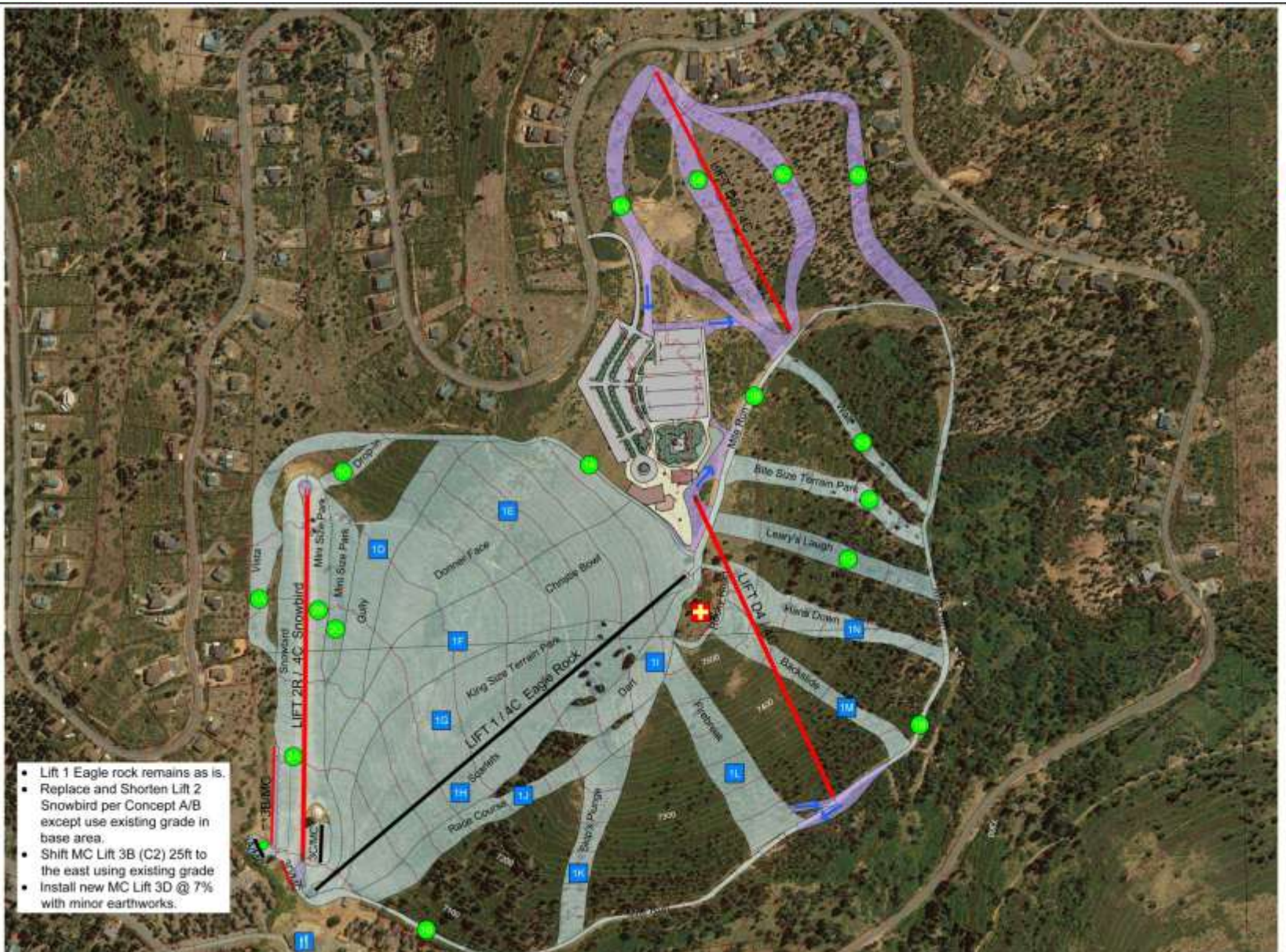
- Mountain Concept C provides a Future SCC of ~1900 to 2000 skiers at one time to maximize the natural terrain. Eaglerock is upgraded to provide 2400 pph and two new 4 passenger fixed-grip lifts are envisioned.
- Snowbird is replaced and realigned and extended.
- Moving Carpet 3B is aligned to west side of snowbird.
- Lift C4 is aligned skiers left down Leary's laugh. The top terminal allows for an 8% skiway above the upper Mile Run flat section.
- Lift C5 extends high enough to allow skiback 5D to connect to 1A. This lift services novice (class 2) ski terrain

Pros- Snowbird accesses otherwise unused terrain & lift towers moved to side of a very wide Snowbird ski trail Maximizes class 2 ski & extends.

Cons-Snowbird steepest slope increases from 16% to 20% and is longer meaning slightly more difficult than existing. Backslide and Firebreak still have a long return ski on Eaglerock. Lift C5 Ski trail crossings at Mile Run (manageable with fencing)

MOUNTAIN CONCEPT D

TAHOE DONNER



- Lift 1 Eagle rock remains as is.
- Replace and Shorten Lift 2 Snowbird per Concept A/B except use existing grade in base area.
- Shift MC Lift 3B (C2) 25ft to the east using existing grade
- Install new MC Lift 3D @ 7% with minor earthworks.

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Contours: 10ft Date: 09/2017

0ft 200 400 600 800

SKI TRAIL ABILITY LEVEL

- Easiest
- More Difficult
- Most Difficult

*see text for lift and trail details

- Existing Lift
- Lift to be Removed
- Proposed Lift
- Existing Trail
- Proposed Trail
- Restaurant
- Ski Patrol

MOUNTAIN CONCEPT D - SUMMARY

- Mountain Concept D provides a Future SCC of ~1900 to 2000 skiers at one time. Eaglerock is upgraded to provide 2400 pph and two new 4 passenger fixed-grip lifts are envisioned.
- Snowbird is replaced on existing alignment per Concept A/B.
- Lift C4 is aligned to allow skiers from Backslide and Firebreak to return cycle.
- Lift C5 extends to the top of the mountain adjacent to Topshop.
- Concept D considers a mountain top skier staging area.

Pros- Maximizes class 1 ski terrain on Lift C5 and provides additional ski-in-ski-out access to homesites- no ski crossings at Mile Run.

Cons-Requires new skier staging area to be located adjacent to new Class 1 beginner ski terrain – otherwise the terrain serviced by Lift C5 is too far from the existing base area.

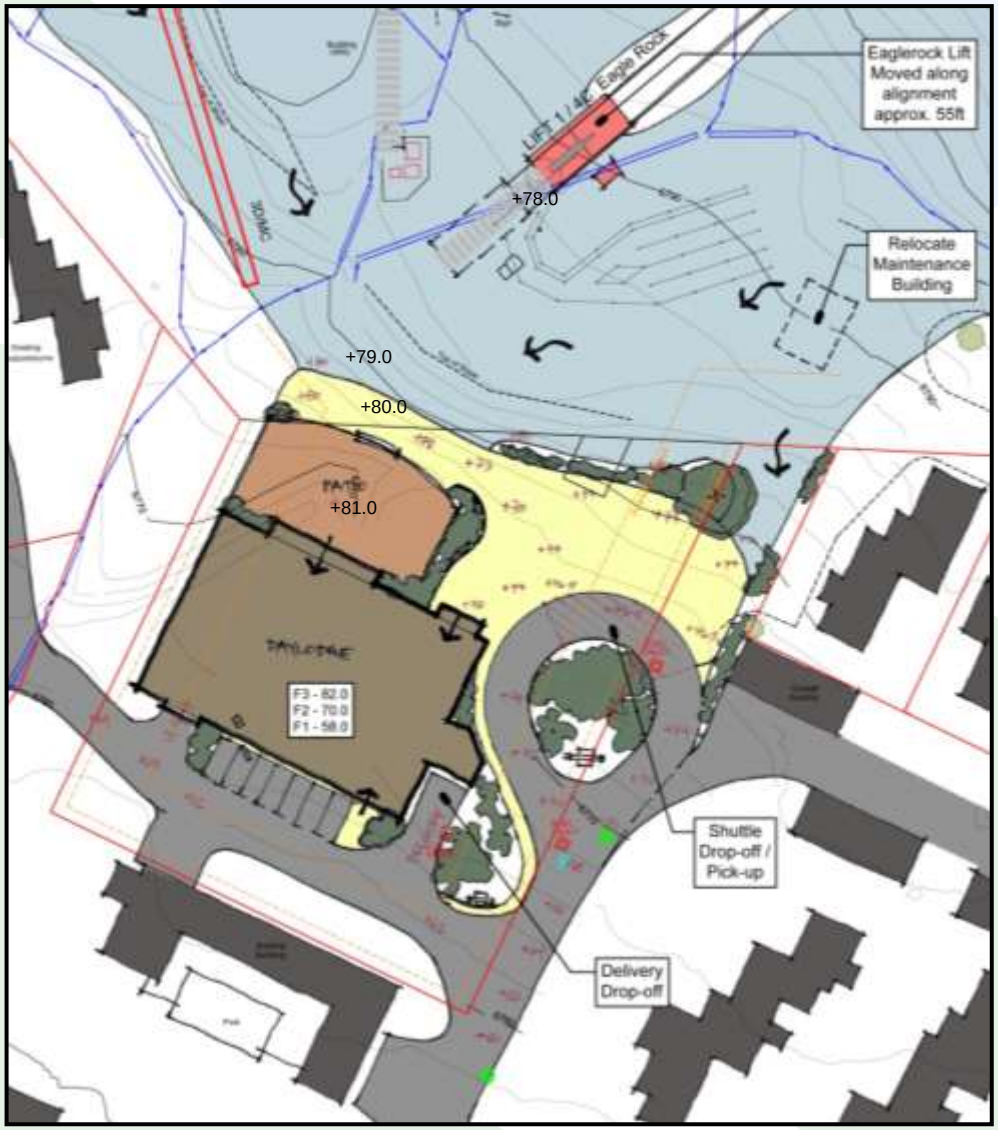
6. BASE AREA CONCEPTS A, B, C & D

BASE AREA SKIER SERVICE TARGET

Guest Service Function	Ecosign Recomm. area / Skier for Tahoe Donner (DRAFT) ft²/skier	Recomm. Floorspace (ft²)
Staging Facilities		
Ticket Sales	0.13	178
Public Lockers	1.20	1,710
Equipment Rental & Repair	2.70	3,848
Guest Services / Ski School/ Adaptive	0.70	998
Children's Programs/Day Care	0.43	613
Staging Subtotal	**5.16**	**7,346**
Commercial Facilities		
Food & Beverage Seating	3.50	4,988
Kitchen & Scramble, Bar	1.75	2,494
Bar/Lounge	0.30	428
Restrooms	0.88	1,254
Accessory Retail	0.40	570
Commercial Subtotal	**6.83**	**9,733**
Operational Facilities		
Administration	0.60	855
Employee Facilities	0.80	1,140
First Aid & Mountain Patrol	0.25	356
Operational Subtotal	**1.65**	**2,351**
TOTAL FUNCTIONAL SPACE	**13.64**	**19,430**
Storage	1.36	1,938
Mechanical, Circulation/Walls/Waste*	3.41	4,857
GROSS FLOOR AREA	**18.40**	**26,225**

- Based on Future Peak Day of 1,900 (Mountain Concepts C & D)
- This results in a Future Design Day of 1,425 Skiers.
- According to our skier service space per skier target of 18.40 this results in 26,225sqft required across all potential & existing skier service buildings.

BASE CONCEPT A – NO PHASING



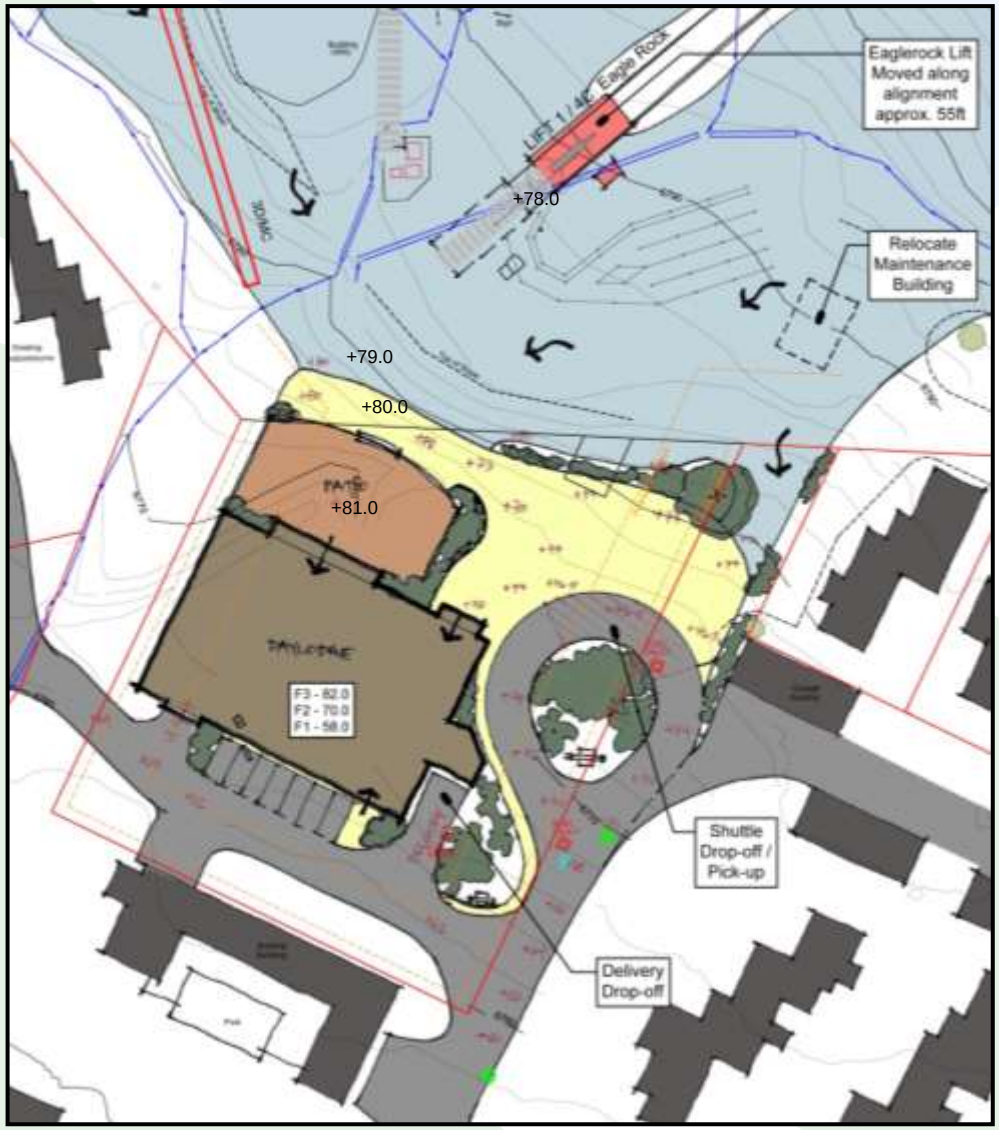
Concept A	GFA	Theoretical Skiers Served (75% of Peak)
PHASE 1		
TEMP ATCO Trailer for staff (14' X 40')	1,500	82
TEMP ATCO Trailer for Staging Facilities (14' X 40')	15,000	815
Demolish Existing Daylodge	-	-
Keep Yurt	754	41
TOTAL PH1	**17,254**	**938**
PHASE 2		
Keep Yurt	754	41
Build New Daylodge (over 2 summers)	25,500	1,386
TOTAL PH2	**26,254**	**1,427**

*Phase 2 - ATCO Trailers (3 staff, 27 for Staging)

Daylodge Building Program - CONCEPT A

Elevation	Level	Description	GFA
6782.0	L3	Restaurant & Patio	10,200
6770.0	L2	Daylodge General Space	10,200
6758.0	L1	Drop Off Level & UG Parking	5,100
TOTAL			**25,500**

BASE CONCEPT A - SUMMARY



PROS:

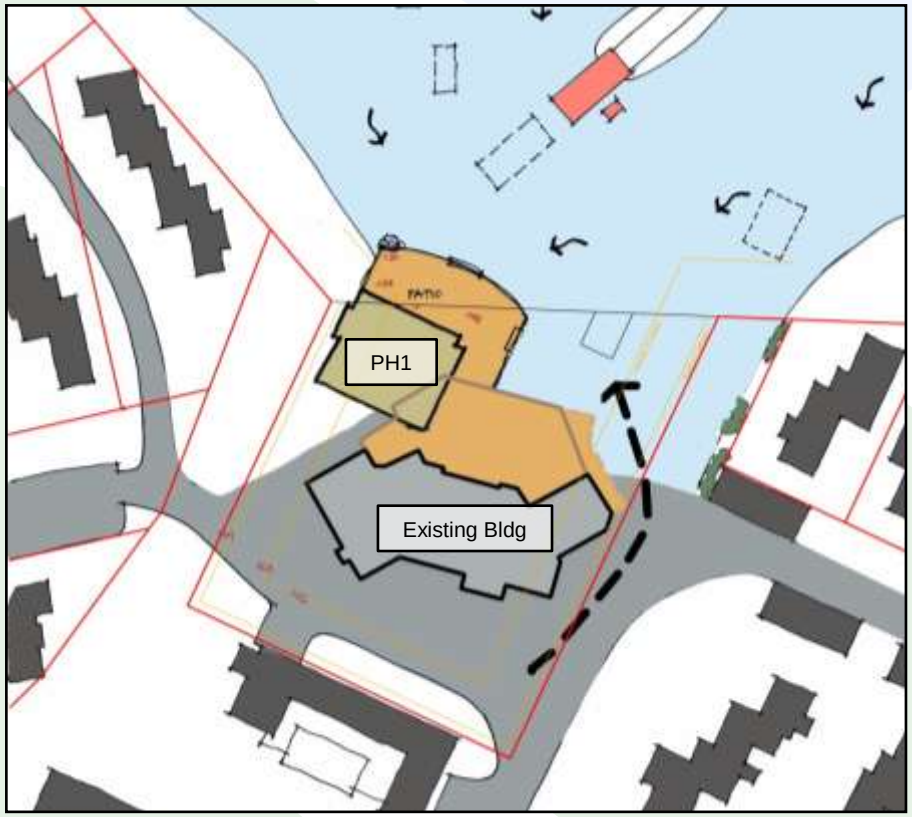
- Single development area.
- Perhaps more efficient to construct (single building)
- Lowered the lift to load at +78 improves vertical connection to drop off.
- Building is lower – can have higher floor to ceiling heights,
- 18 Stalls UG (not included in GFA) + 7 short term stalls

CONS:

- Difficult (or impossible to phase construction)
- Will need to rely on temporary building if built over two summers – ATCO trailers. (3 for Staff, 27 for Staging)
- Recommend shifting Lift terminal up alignment

BASE CONCEPT B - PHASE 1

Phase 1

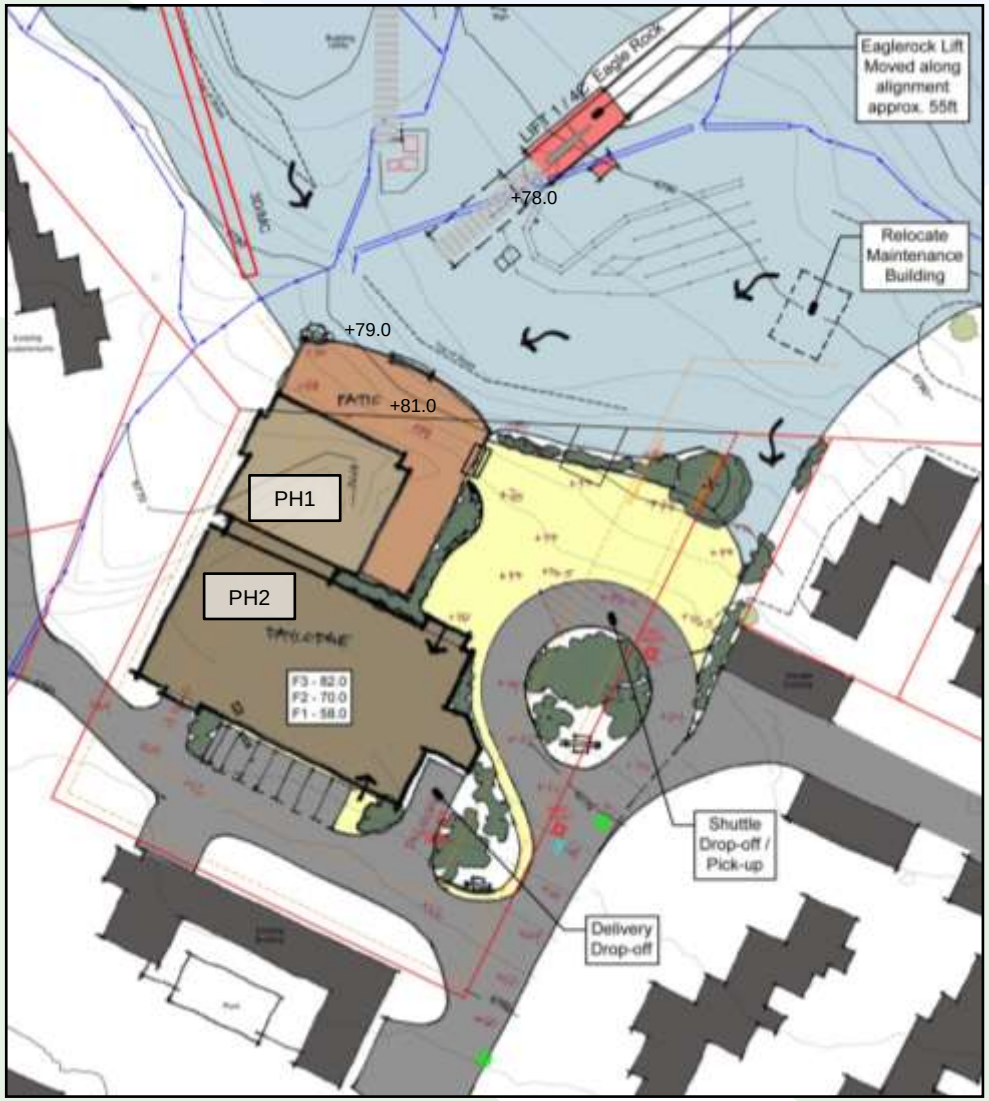


CONCEPTUAL PHASING:

Concept B	GFA	Theoretical Skiers Served (75% of Peak)
PHASE 1		
Keep existing Daylodge	15,128	822
Operate new PH1 Building	6,600	359
Modify Drop-off		
Keep Yurt	754	41
TOTAL PH1	**22,482**	**1,222**
PHASE 2		
Keep Yurt	754	41
TEMP ATCO Trailer for staff (14' X 40')	1,500	82
TEMP ATCO Trailer for Staging Facilities (14' X 40')	10,000	543
Demolish Existing Daylodge		
Operate new PH1 Building	6,600	359
TOTAL PH2	**18,854**	**1,045**
PHASE 3		
Keep Yurt	754	41
Operate PH1 Daylodge	6,600	359
Operate PH2 Daylodge	19,800	1,076
TOTAL PH3	**27,154**	**1,475**

*Phase 2 - ATCO Trailers (3 staff, 18 for Staging)

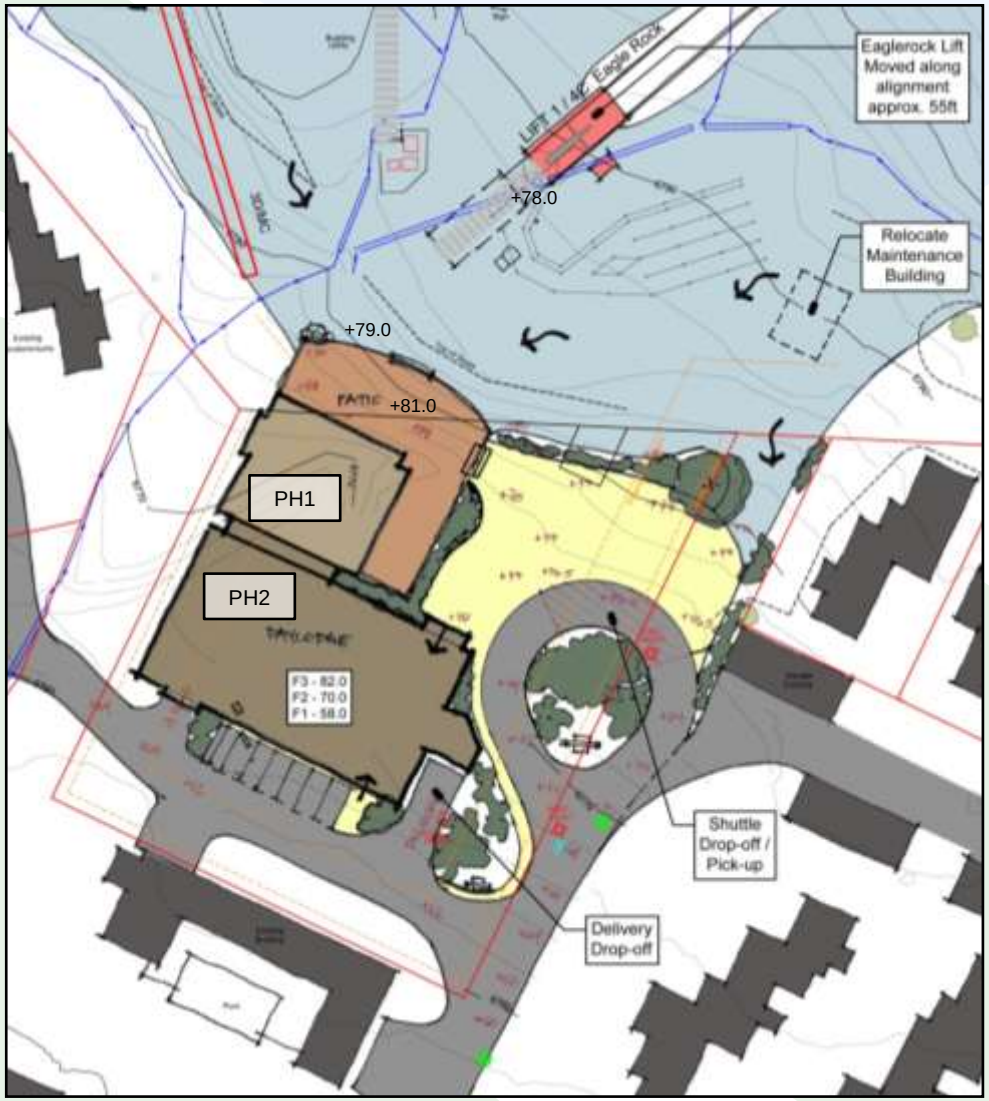
BASE CONCEPT B - BUILDOUT



Daylodge Building Program - CONCEPT B

Phase	Elevation	Level	Description	GFA
P1	6782.0	L3	Restaurant & Patio	3,300
P1	6770.0	L2	Daylodge General Space	3,300
TOTAL PH1				**6,600**
PH2	6782.0	L3	Restaurant & Patio	8,000
PH2	6770.0	L2	Daylodge General Space	8,000
PH2	6758.0	L1	Drop Off Level & UG Parking	3,800
TOTAL PH2				**19,800**
TOTAL BUILDING				**26,400**

BASE CONCEPT B - SUMMARY



PROS:

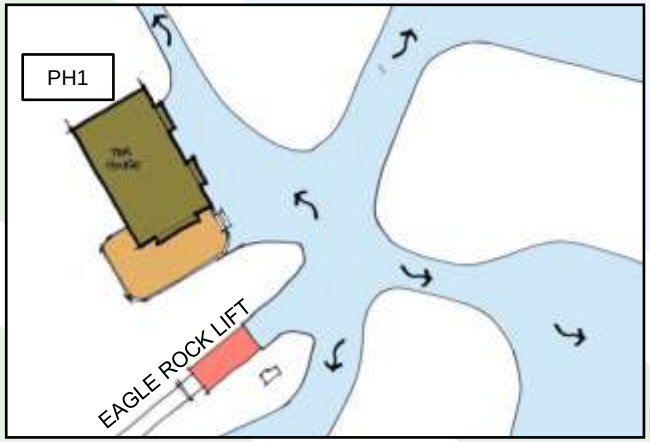
- Allows for Phasing. (PH1 6600sqft, PH2 19,800sqft)
- Lowered the lift to load at +78 improves vertical connection to drop off.
- Building is lower – can have higher floor to ceiling heights,
- 18 Stalls UG (not included in GFA) + 7 short term stalls

CONS:

- Pushes further into the snowfront and limits available circulation. In Ecosign recommendation, this option will require the moving of the Eagle Rock Lift to 55ft up the existing alignment
- Need Temp buildings (3 staff, 18 for Staging)

BASE CONCEPT C - PHASE 1

Mountain Top “Tea House” (Top of Eagle Rock Lift)



PHASE 1:

CONCEPTUAL PHASING:

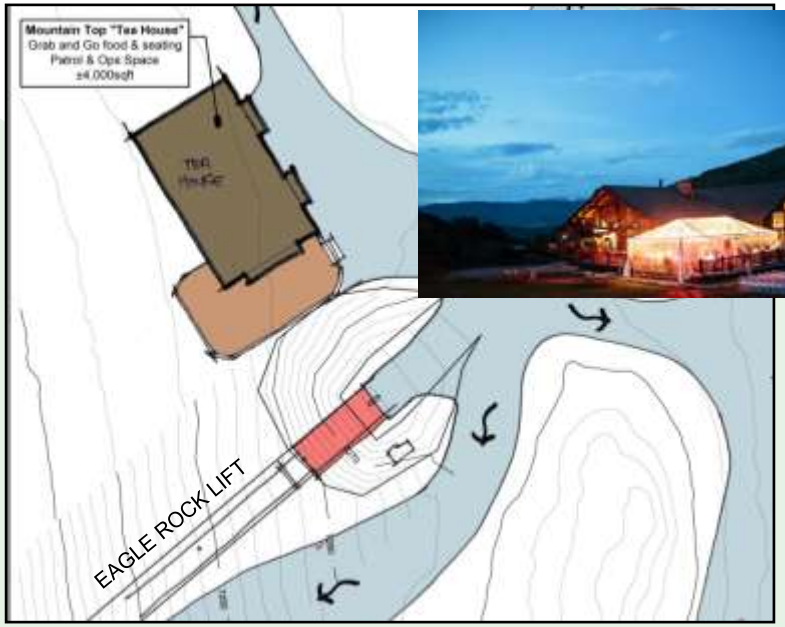
Concept C	GFA	Theoretical Skiers Served (75% of Peak)
PHASE 1		
Build New Mountain Top Tea House	4,000	217
Keep existing Daylodge (possible reconfig.)	15,128	822
Keep Yurt (possible relocate)	754	41
Construct Drop-off		
TOTAL PH1	**19,882**	**1,080**
PHASE 2		
Demolish Existing Daylodge		
Operate Yurt	754	41
Operate Mountain Top Tea House	4,000	217
TEMP ATCO Trailer for staff (14' X 40')	1,485	81
TEMP ATCO Trailer for Staging Facilities (14' X 40')	8,941	486
TOTAL PH2	**15,180**	**825**
PHASE 3		
Keep Yurt	754	41
Operate New Daylodge	21,500	1,168
Operate Mountain Top Tea House	4,000	217
TOTAL PH3 (with tea house open)	**26,254**	**1,427**
Mid week usage (tea house closed)	**22,254**	**1,209**

*Phase 2 - ATCO Trailers (3 staff, 16 for Staging)

BASE CONCEPT C - BUILDOUT

Daylodge Building Program - CONCEPT C

Phase	Elevation	Level	Description	GFA
P1	Detailed Mapping Req.	L2	Restaurant	2,000
P1	Detailed Mapping Req.	L1	Restaurant & Patio, Patrol	2,000
TOTAL PH1				**4,000**
PH2	6790.0	L3	Restaurant & Patio	7,000
PH2	6776.0	L2	Daylodge General Space	10,500
PH2	6764.0	L1	Drop Off Level & UG Parking	4,000
TOTAL PH2				**21,500**
TOTAL BUILDING				**25,500**



BASE CONCEPT C - SUMMARY

PROS:

- Shuttle Drop-off is located much closer to the existing snowfront elevation of +88/+86. About 18 steps.
- Respected the 30’ setbacks (except for the delivery area.)
- Possibility for underground parking (24 stalls) plus 10 short term/ADA outside building
- Ability to close the 4,000sqft mountain top restaurant mid-week.
- Mountain Top building could be iconic building at DSA, event space, recreation use in summer.
- Option to maintain the existing Eagle Rock terminal location

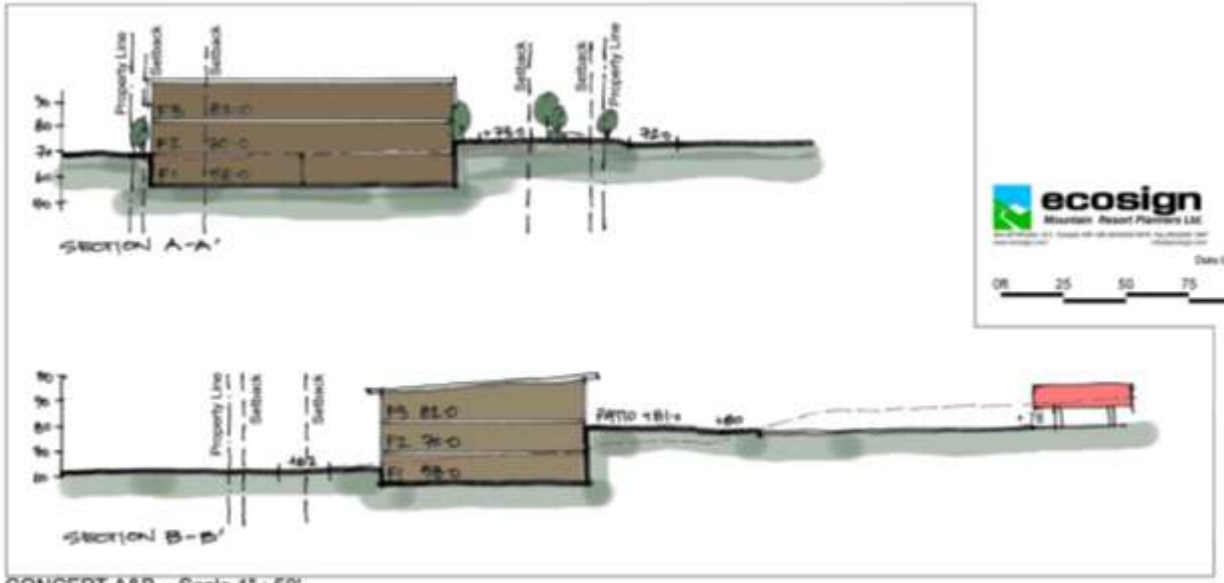
CONS:

- Phasing requires the use of temporary structures. ATCO trailers Can be leased for 1 year. 3 for Staff and 16 for Staging based on 14’ X 40’.
- Building is hitting the 35’ height limit. Would improve the floor to ceiling heights if this could be raised.

BASE CONCEPT A, B & C - SECTIONS

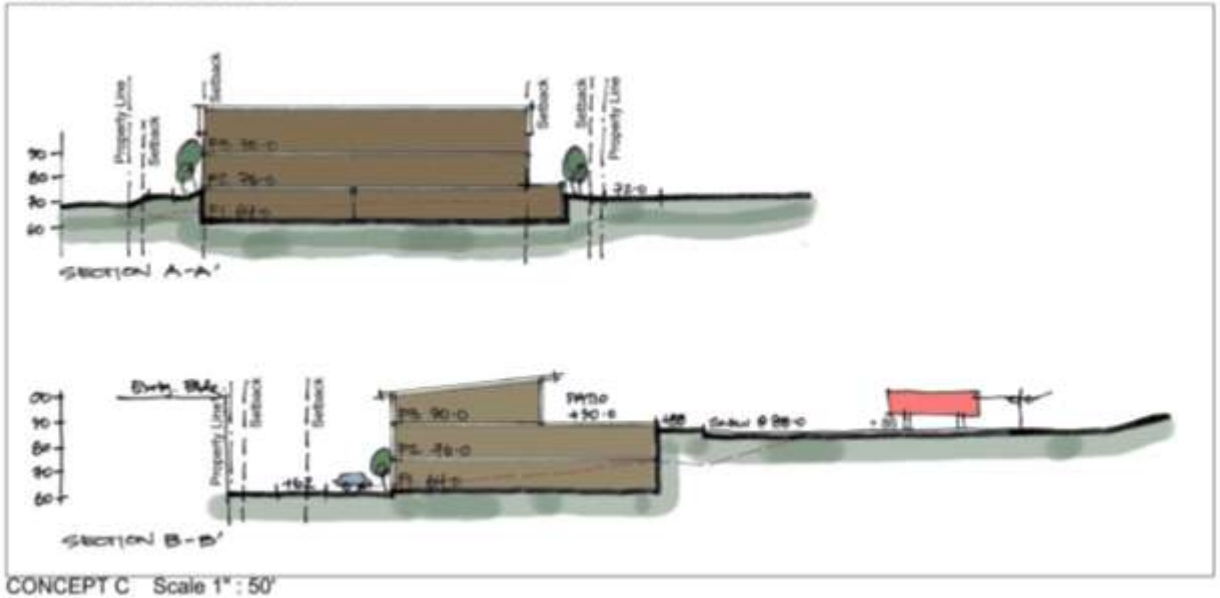
TAHOE DONNER

CONCEPT A&B Key Plan - Scale 1" : 100'



CONCEPT A&B Scale 1" : 50'

CONCEPT C Key Plan - Scale 1" : 100'



CONCEPT C Scale 1" : 50'

BASE CONCEPT A, B & C
PROPOSED FOOD SERVICE SEATING ANALYSIS

TAHOE DONNER

CONCEPT A&B

Building/Restaurant	Indoor Seats			Outdoor Seats			Total Seats	
	Number of Seats	Turns per Seat	Guests Served	Number of Seats	Turns per Seat	Guests Served	Number of Seats	Guests Served
New Base Daylodge	416	3.5	1,456	200	3.0	600	616	2,056

CONCEPT C

Building/Restaurant	Indoor Seats			Outdoor Seats			Total Seats	
	Number of Seats	Turns per Seat	Guests Served	Number of Seats	Turns per Seat	Guests Served	Number of Seats	Guests Served
New Daylodge	300	3.5	1,050	140	3.0	420	440	1,470
Mountain Top Tea House	142	3.5	497	40	3.0	120	182	617
Children's Yurt Building	-	3.0	-	-	3.5	-	-	-
TOTAL	**442**		**1,547**	**180**		**540**	**622**	**2,087**

- Lunch is based from 11:30 to 2:00pm (At 3.5 turns this equates to a 42 minute lunch)
- Designed to 75% of Peak Day (1,425 skiers), there are enough seats to have everyone seated inside comfortably (based on 3.5 turns per seat)
- Approximately 70% of Total seats are indoor.

CONCPET A, B & C – OPTIONS DURING CONSTRUCTION

Temporary ATCO type Trailers:

- Lease instead of purchase

BASE CONCEPT D

Concept D	GFA	Theoretical Skiers Served
PHASE 1		
Operate Existing Daylodge	15,128	822
Build Full Facilities at top of Mountain over multiple seasons		
Keep Yurt	754	41
TOTAL PH1	**15,882**	**863**
PHASE 2		
Demolish Existing Daylodge		
Operate Mountain Top Facilities - Building 1	18,000	978
Operate Mountain Top Facilities - Building 2	9,000	
Build Accommodation Buidling at Existing Base?		
TOTAL PH2	**27,000**	**1,467**
Mid week usuage (one building closed)	**18,000**	**978**

Daylodge Building Program - CONCEPT D

Phase	Elevation	Level	Description	GFA
PH2	Detailed Mapping Req.	L2	Restaurant	9,000
PH2	Detailed Mapping Req.	L1	Staging Facil.Restaurant & Patio	9,000
TOTAL BUILDING 1				**18,000**
PH2	Detailed Mapping Req.	L2	Childrens Facil. Employee	4,500
PH2	Detailed Mapping Req.	L1	Childrens Facil. Employee	4,500
TOTAL BUILDING 2				**9,000**
TOTAL GFA				**27,000**

BASE CONCEPT D - SUMMARY

PROS:

- Very easy to phase construction, Can run the existing base while fully constructing the top development. Can break the Mntn top development into multiple phases as desired.
- No temporary buildings required.
- Potential to construct new development at existing base area site to offset costs. (Private real estate/ hostel/ Rental Accom./ Condos etc.)
- More flexibility for potential design, (less implications of prop boundaries, less existing services issues.)
- Close connection to ski area – no uphill walking required. All parking is within walking distance to lifts / trails. No Shuttle Busses required
- Overall improvement in visitor experience. Arrival Experience. Increased views & sun exposure

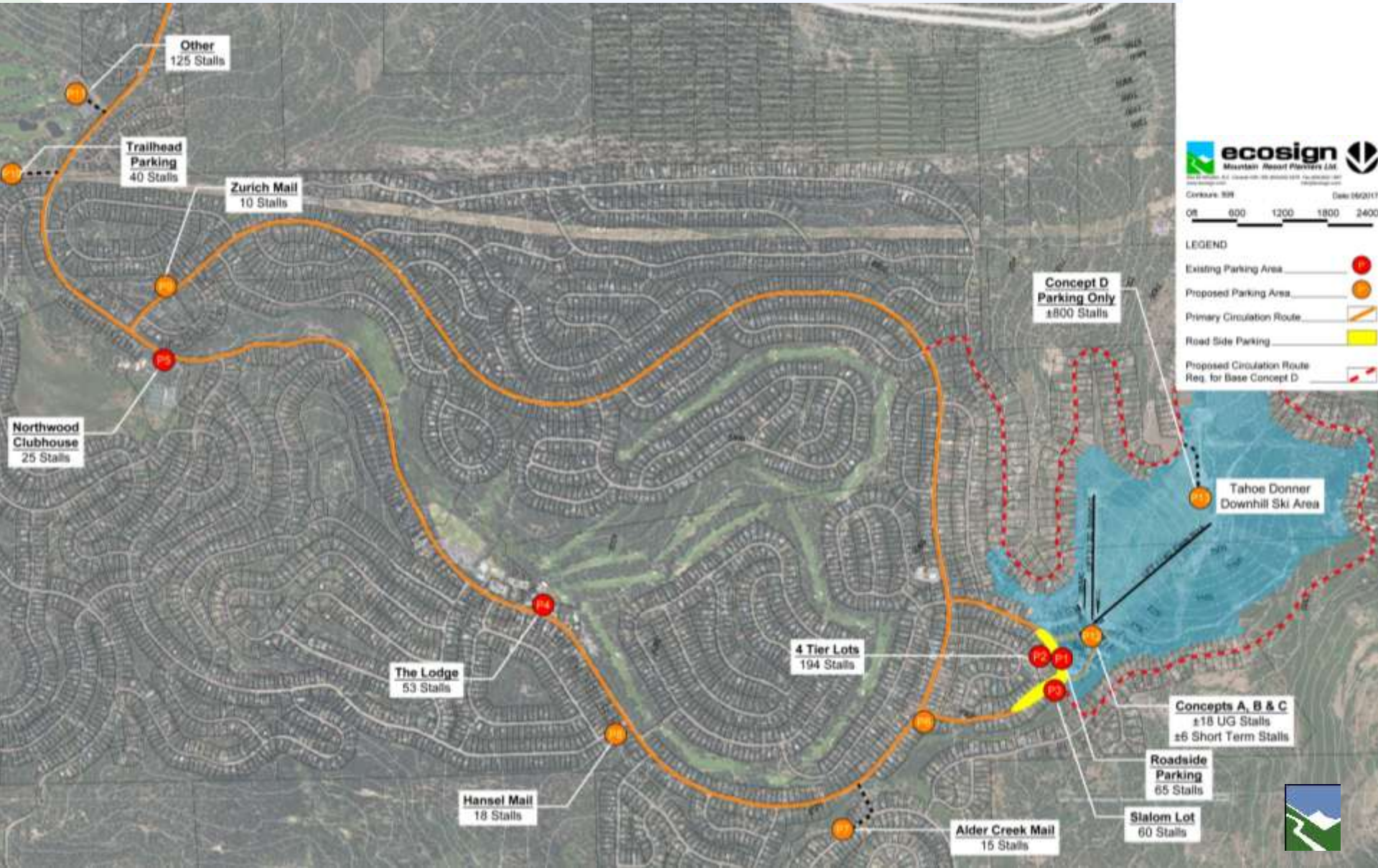
CONS:

- Road access – some parts of road go to 12% Unlikely to be able to re-align road to decrease steep sections.
- Potential negative response from homeowners with increased traffic on road
- Existing cellphone tower

7. PROPOSED PARKING & STAGING ANALYSIS

PROPOSED PARKING – CONCEPTS A, B, C & D

TAHOE DONNER



PROPOSED PARKING

Lot Number	Lot Name	Number of Cars	% Total Within/ Outside SWD	AVERAGE Number of Visitors 2.6 pp/car	PEAK Number of Visitors 3.0 pp/car	PEAK Number of Skiers at 80% Participation
Tahoe Donner						
Within SWD						
P1	Roadside - Snowpeak Way & Slalom Way	65		169	195	156
P2	4 tier lots (60% take shuttle / 40% walk)	194		504	582	466
P3	Slalom lot	60		156	180	144
P12	Base Area Concepts A, B & C - UG and Short Term Stalls	24		62	72	58
Subtotal Within SWD		**343**	*51%*	**891**	**1,029**	**824**
Outside SWD						
P4	The Lodge (Golf Course Parking, half used for XC)	53		137	158	126
P5	Northwoods Clubhouse Parking	25		65	75	60
P6	Corner Lot	45		117	135	108
P7	Alder Creek Mail*	15		39	45	36
P8	Hansel Mail*	18		47	54	43
P9	Zurich Mail*	10		26	30	24
P10	Tahoe Donner Trailhead Parking incl. roadside parallel**	40		104	120	96
P11	Potential Lot***	125		325	375	300
Subtotal Outside SWD		**331**	*49%*	**860**	**992**	**793**
Total Tahoe Donner		**674**	*100%*	**1,751**	**2,021**	**1,617**

**Ecosign estimate based on 140 cars per acre*

***Consider this area for staff parking*

****Potential lot near Coyote Moon*

Lot Number	Lot Name	Number of Cars	% Total Within/ Outside SWD	AVERAGE Number of Visitors 2.6 pp/car	PEAK Number of Visitors 3.0 pp/car	PEAK Number of Skiers at 80% Participation
P13	Base Area Concepts D - Surface Parking	800	*100%*	2,080	2,400	1,920

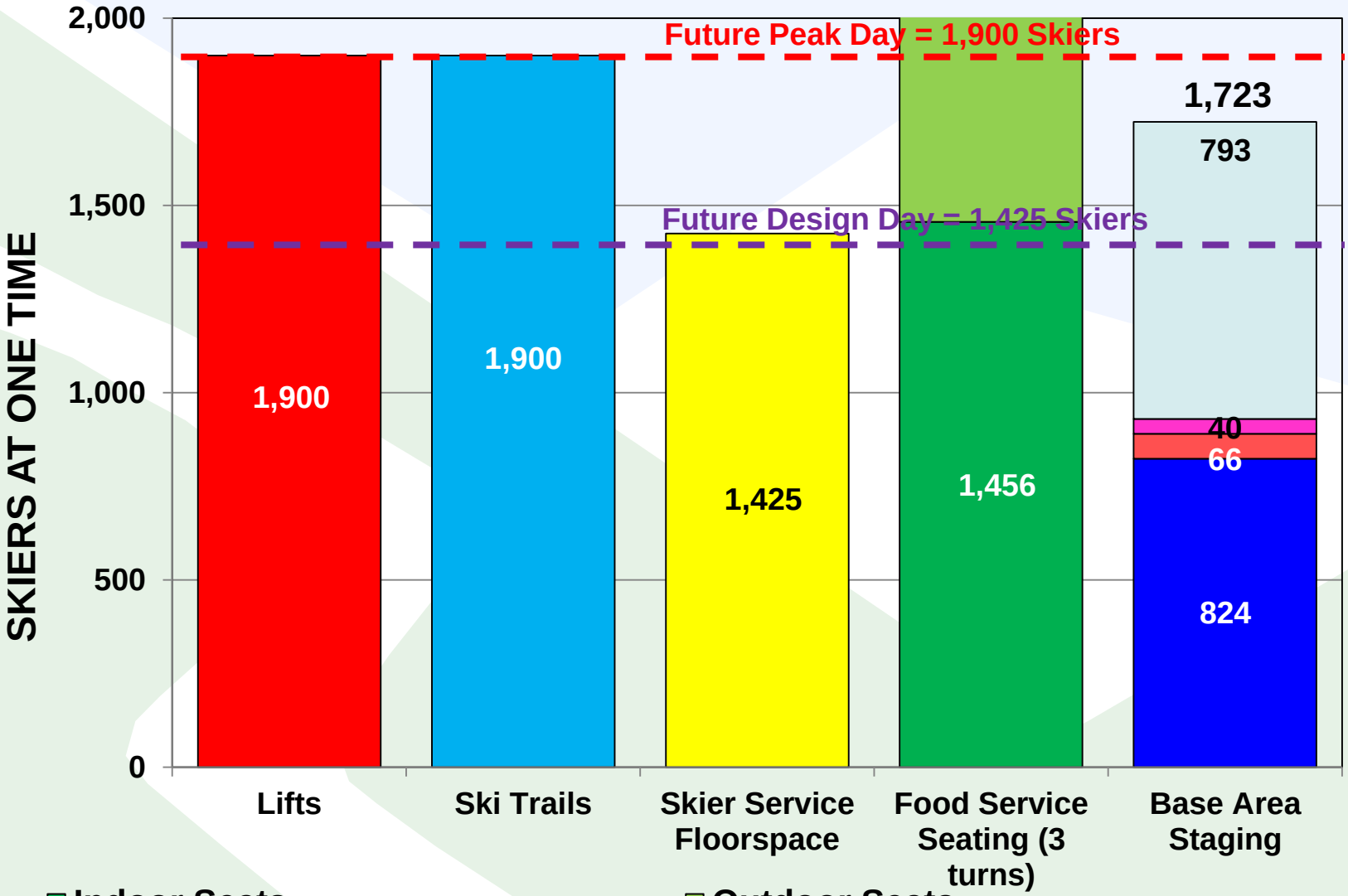
PROPOSED ACCESS ANALYSIS - A, B, C & D

CONCEPT A, B & C	On Future Peak Day (1,900 skiers)	
	Number of Visitors	**Number of Skiers**
Tahoe Donner		
Within SWD		
From Pillows (Walking)	50	40
From Parking (Walking)	1,029	824
Charter Bus, Private Drop Off from surrounding homes (8%)	82	66
Subtotal Within SWD	**1,161**	**930**
Outside SWD		
From Parking (Arrive by Shuttle)	992	793
Total Tahoe Donner	**2,153**	**1,723**

- Note: Concept A, B & C does not currently meet the required number of skiers. Approx. additional 75 stalls required.

CONCEPT D	On Future Peak Day (1,900 skiers)	
	Number of Visitors	**Number of Skiers**
Tahoe Donner		
Within SWD		
From Pillows (Walking)	40	30
From Parking (Walking)	2,400	1,920
Charter Bus, Private Drop Off from surrounding homes (8%)	192	154
Subtotal Within SWD	**2,632**	**2,104**

PROPOSED FACILITIES BALANCE (CONCEPTS A, B & C)



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