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Resort «Sopka Petrovskaya» is designed for family holidays and business travel.



Ski complex «Sopka Petrovskaya»

The site is located in the center of the town Petropavlovsk-Kamchatskiy and covers a small mountain ridge, located between the creek of Avacha Bay and Halaktyrskoe Lake.

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The main advantages of a resort:

- better transport accessibility in relation to the town Petropavlovsk-Kamchatskiy;
- the possibility to use the services of the resort any time, including a business trip in Petropavlovsk-Kamchatskiy;
- the presence of comfortable conditions of accommodation in hotels of different price range (not only on the area, but also in town);
- various dining and entertainment infrastructure;
- the possibility of wide use of urban infrastructure.

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The master plan of resort «Sopka Petrovskaya» involves the modernization of existing system of pistes and lifts of operating base «Edelweiss» and the expansion of the ski arena on the south and the west. The existing base «Krasnaya Sopka» is taken into account during developing this master plan, but its modernization and / or extension is not stipulated. A significant zone of capital construction on a flat plateau on the top of Petrovskaya hill is an important part of the master plan.

This construction will provide the operation of the ski arena, located on the adjacent mountain

slopes, as well as will be able to become one of the main sightseeing attractions of the town Petropavlovsk-Kamchatskiy and basic urban recreational and tourist center. The main idea of the concept of this site is to create a town mountain resort, which will become a center of focusing a wide range of recreational facilities for residents and visitors of the town. There is also a good opportunity to create a residential district at the top of Petrovskaya hill, which could become the most prestigious and wishful residential district of the town.



SOPKA PETROVSKAYA
S K I C O M P L E X

THE MAIN RESORT OBJECTS:

- the service center;
- processing buildings;
- parking for cars, bus stop;
- 2 hotel complexes;
- 2 lifts;
- lighting and snowmaking system for pistes;
- objects of engineering infrastructure.

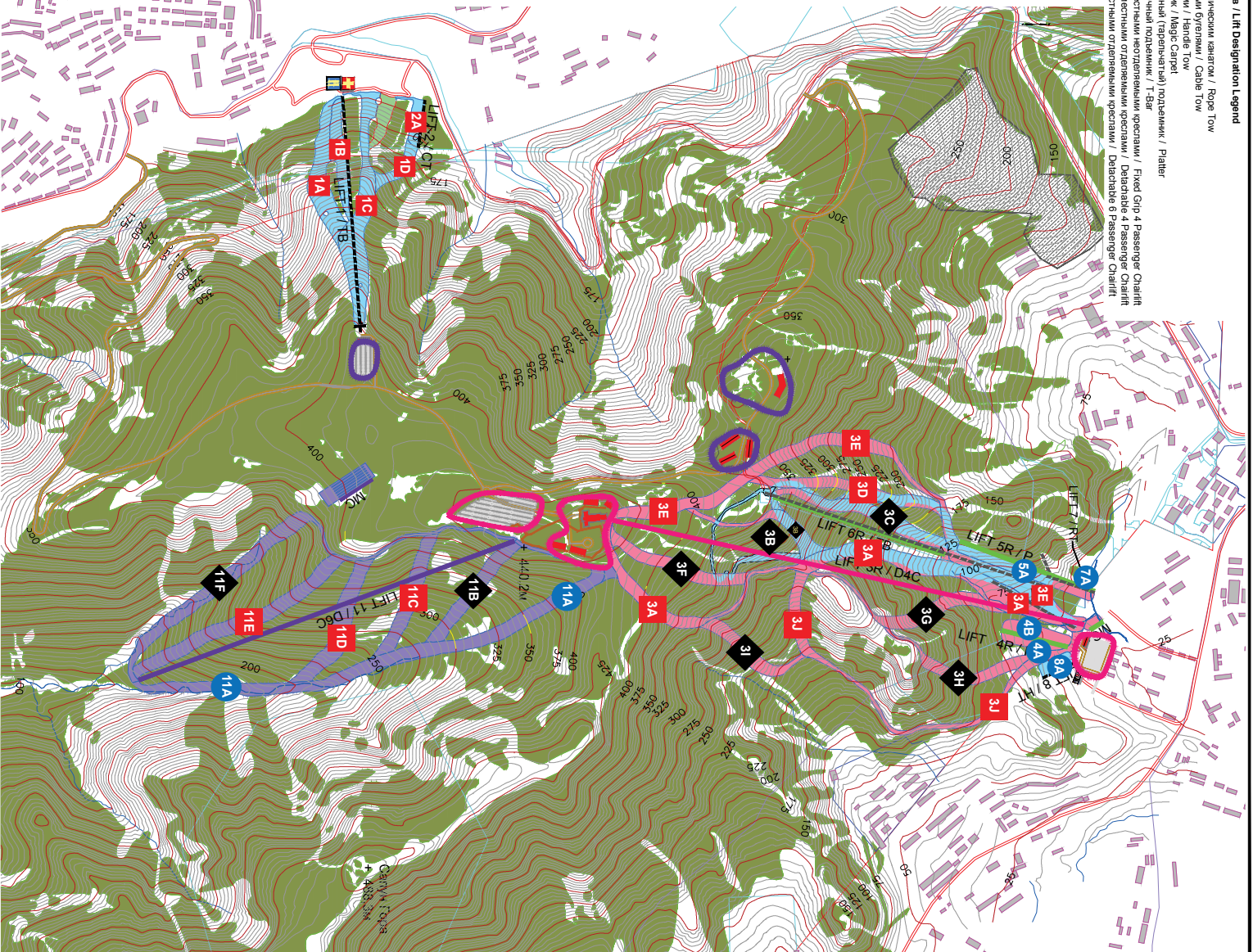
Обозначения подъемников / Lift Designation Legend

- RT - лыжерюксор с неметаллическими канатами / Rope Tow
- CT - лыжерюксор со стальными канатами / Cable Tow
- HT - конвейерный подъемник / Handle Tow
- MC - конвейерный подъемник / Magic Carpet
- P - односекционный буксирочный (параллельный) подъемник / Parallel P - single section chairlift
- TB - двухсекционный буксирочный (параллельный) подъемник / T-Bar
- AC - подъемник с черпачными неогледевыми гребнями / Fixed Grip 4 Passenger Chairlift
- DAC - подъемник с черпачными неогледевыми гребнями / Detachable 4 Passenger Chairlift
- DSC - подъемник с черпачными неогледевыми гребнями / Detachable 6 Passenger Chairlift



SOPKA PETROVSKAYA

SKI COMPLEX



УСЛОВНЫЕ ОБОЗНАЧЕНИЯ / LEGEND

- Уровень трудности трасс / Ski Trail Ability Level
- Простые / Easy
- Более трудные / More Difficult
- Самые трудные / Most Difficult
- Подъемники этапа 1 / Phase 1 Lifts
- Трассы этапа 1 / Phase 1 Trails
- Подъемники этапа 2 / Phase 2 Lifts
- Трассы этапа 2 / Phase 2 Trails
- Подъемники лесной школы "Эдельвейс" / Edelweiss Ski School Lifts
- Существующие трассы / Existing Trails
- Существующие подъемники - подпадают под ст. 1 / Existing Lifts to be Removed

Горизонтальное масштабное: 1:5000
 Вертикальное масштабное: 1:1000
 Дата: 03.2011 г.



КАМЧАТКА

СТАДЫИ СТРОИТЕЛЬСТВА - ПЕТРОВСКАЯ СОПКА / PETROVSKAYA SOPKA - DEVELOPMENT PHASING PLAN

MP4-2

PISTES SPECIFICATION

LIFT DESIGNATION LEGEND	№ PISTE	SKIERS LEVEL	TOP HEIGHT, M	BOTTOM HEIGHT, M	ELEVATION, M	HORIZON. LENGTH, M	LENGTH ON SLOPE, M	AVERAGE STEEPNESS, %	MAX STEEPNESS, %	AVERAGE WIDTH, M	HORIZON SQUARE, HE	PISTES SQUARE, HE	SKIERS STRENGTH, PEOPLE/HE	CAPACITY, PEOPLE.
Lift 3R	DETACHABLE 4 PASSENGER CHAIRLIFT													
	3A	3	435	50	385	2 025	2 061	19%	35%	43	8,62	8,77	60	530
partly	3B	6	400	260	140	535	553	26%	61%	30	1,63	0,84	23	20
partly	3C	6	370	120	250	670	715	37%	62%	45	3,00	1,60	23	40
partly	3D	4	375	175	200	670	699	30%	45%	40	2,71	1,42	60	80
	3E	3	435	50	385	2 100	2 135	18%	39%	43	8,93	9,08	60	540
	3F	6	435	300	135	515	532	26%	52%	46	2,35	2,43	23	50
	3G	6	270	80	190	720	745	26%	59%	36	2,56	2,65	23	60
	3H	6	230	60	170	590	614	29%	57%	32	1,91	1,99	23	40
	3I	6	310	170	140	440	462	32%	54%	40	1,78	1,87	23	40
	3J	3	270	35	235	1 560	1 578	15%	38%	23	3,55	3,59	60	220
Total lift 3R	10						10 094					34,24		1 620
Lift 11	DETACHABLE 6 PASSENGER CHAIRLIFT													
	11A	2	435	135	300	2 110	2 131	14%	24%	39	8,19	8,27	75	620
	11B	6	435	285	150	470	493	32%	58%	48	2,26	2,37	23	50
	11C	5	405	260	145	480	501	30%	46%	49	2,35	2,45	45	110
	11D	5	380	205	175	505	534	35%	49%	60	3,04	3,22	45	140
	11E	3	435	140	295	1 530	1 558	19%	33%	33	5,06	5,15	60	310
	11F	6	375	135	240	1 090	1 116	22%	52%	40	4,38	4,48	23	100
Total lift 11	6						6 333					25,94		1 330
All lifts	16						16,4 KM					60,18		2950



LIFTS SPECIFICATION

Phsases	1	2	TOTAL
LIFT DESIGNATION LEGEND	3R	11	
Lift type	D4C	D6C	
Top elevation, m	438	440	
Bottom elevation, m	36	135	
Total elevation, m	402	305	707
Horizontal Distance, m	1 725	1 440	
Slope Distance, m	1 771	1 472	3243
Average Slope, %	23%	21%	22%
Rated capacity, people/hour	2 400	3 200	5600
(V.T.M.) thousand m/hour	965	854	1819
Speed, m/s	5,0	5,0	
Time trip, min	5,90	4,91	
Operating, hour/day	7,0	7,0	7,0
(V.T.M.) demand/day	3 352	3 272	
Loading eff., %	90%	80%	
Access Reduction, %	11%	0%	
Lift system SCC, people	1 200	1 420	2620



PISTES TYPES



SLALOM

Slope, suitable for training and competitions in slalom is located between elevations 365 and 180 meters (piste 3D - red). Vertical elevation of 185 meters is located within the range 180 - 220 meters, set in the FIS regulations for slalom. The average slope is 35%, while the maximum - 45%, which is within the established rules of FIS. At the finish there is rather smooth and wide stop area.

TUMBLING

The slope for acrobatics is located eastward of the middle of piste 3H (black). In accordance with the drawing of the slope for FIS acrobatics total length of the slope can vary from 149 to 154 meters (depending on the steepness of slope acceleration) at exact defined total elevation of 50 meters. Elevation of selected slope at the site Petrovskaya Hill is 68 meters, which allows varying the exact placement of the finished construction in shown range 160-92 m.

A significant amount of earthworks will be required in order to give the slope required profile in accordance with the rules of FIS.



SNOWPARKS

Two places for snowparks of various categories of difficulty are identified. On piste 11A (blue) will be located a snowpark for beginners, the piste 11E (red) well suits for high difficulty snowpark.





PISTES FOR RUNNING SKI AND BIATHLON

At the top of Petrovskaya hill, along the ridge, pistes for flat land skiing are planned. There is an opportunity to lay more than 50 kilometers of high-quality pistes for flat land skiing on the flat plateau on the top of Petrovskaya.

A shooting range for biathlon can be integrated into this pistes' system. This construction should be located far away from major public pistes and housing areas and private parking and area for mounting-dismounting will be needed.

PATHS FOR SNOWSHOEING

Snowshoeing paths are mostly on summer hiking paths, and provide inexpensive and having a low impact on the environment type of winter recreation, available for guests of all ages and levels of physical drill. Paths for snowshoeing overlap with pistes for flat land



skiing as less as possible, but can be located in one area.

TUBING

The slope for tubing has the south-eastern exposure and will have a warm, sunny microclimate, in contrast to the northern slopes hanging to the base «Edelweiss». The surrounding forest creates a natural environment with beautiful views. Buildings for the sale of tickets, related services and equipment storage may be located in the sports center building or in a specially constructed small building on the top of a slope. Alternatively, these buildings can be integrated into a near block of flats.

A small amount of earthworks will be needed to create a steeper part for the acceleration at the beginning of the slope and the flat area for stopping at the bottom.



It is planned that the area of town resort becomes a popular place for summer vacations of residents of Petropavlovsk-Kamchatskiy and visitors of the region. Town on top of a hill has to become a center of mountain bikes, open air concerts and other types of recreation. There is a possibility to build the summer toboggan on a flat slope to the north of the resort center. Shops and restaurants of the town, located along the lively pedestrian streets and squares will attract visitors in summer time.

3R lift will continue to operate during the summer months for mountain biking (downhill race) on the northern slopes. Pedestrian hiking paths, summer toboggan, other roads are not compatible with mountain bike trails for safety

PLAN OF RESORT SUMMER USING

reasons, and therefore the zone of mountain biking should be separated from other types of summer recreational activities.

Motocross mountain bikes will be used in the southern part of the resort and they will not require lifts operating. Trails for motocross mountain bikes include descents and ascents less steep than the trails for downhill mountain biking.

Developed network of trails with cover is planned at the top of the hill and along a flat ridge.

In the standard width of 3 meters, these trails should be wider in places where they are overlapped with the winter trails for flat land skiing, considering that the width of the ski pistes for skating stride should be 6 meters.

Hiking trails without covering are also planned in the park and along the ridge in areas with steeper descents and ascents. Creating a network of summer trails on Petrovskaya hill offers a unique opportunity to walk in a natural environment within the big town. The system of trails will connect residential areas on Petrovskaya hill with recreational facilities and services that provide an opportunity to travel throughout the resort on foot or by bike, without using the car.



FINANCIAL-ECONOMIC ACTIVITY OF THE PROJECT SKI COMPLEX «PETROVSKAYA HILL»

Total cost of the project, billion rubles	7,4
Net present value (NPV), million rubles	6 280
Internal rate of return (IRR)	37,9 %
Discounted payback period, year	6,4
Borrowed current assets share in initial investments	50 %
Borrowed current assets share in total investments (including the replacement of basic means)	43,4 %
WACC	16,51 %
Number of employees	271