

SQUAW VALLEY USA

Project Description – Siberia Lift Replacement Project

Introduction

Squaw Valley USA (Squaw) is located within Placer County on private lands 42 miles west of Reno in the Sierra Nevada mountain range. Squaw maintains 177 formal ski trails and 30 lifts across 6 peaks on approximately 4,000 acres. Built in 1985, the existing Siberia High-Speed quad chairlift was one of the first detachable chairlifts to be built in North America. The lift machinery has reached the end of its usable lifespan and needs to be replaced. For this reason, Squaw is proposing to replace the Siberia lift in-place with a new high-speed, detachable chairlift. In order to improve the recreational experience, the lift is proposed to be replaced with a six-passenger chair.

Project Purpose

The Siberia chairlift is used primarily by Intermediate and Advanced level skiers. The terrain served by Siberia includes The Palisades and is some of the most iconic terrain at the resort. The lift is very popular and sees high use by both the Intermediate and Advanced level skiers. The existing lift is a high-speed quad, with the potential to be operated at up to 3,000 people per hour capacity. However, when operated at speeds to achieve this capacity, loading efficiencies decrease significantly, so the lift is often operated at slower speeds to compensate - thereby reducing the effective capacity and increasing the ride time. This project proposes to replace the existing lift with a high-speed detachable six-passenger chairlift, operating at 2,400 people per hour, which would functionally shorten the ride time because the lift could always be operated at higher speed, and provide an easier loading process that would further reduce lift slow-downs and stoppages. The upgrade would improve the experience of the lift.

Additionally, the Siberia lift (like all the upper lifts at Squaw) is susceptible to wind closures due to the frequent high winds that are experienced. Six-passenger lifts can safely operate in higher winds than quads, due to the significantly higher weight of each individual chair. The heavier chairs are more stable in high winds, which will allow for the lift to be operated at higher wind speeds - resulting in more days open.

Project Overview

The existing Siberia chairlift is a detachable quad chairlift that operates at an hourly capacity of up to 3,000 skiers per hour. The existing lift is approximately 3,800 feet long. The entire alignment of the lift, as well as both top and bottom terminals, are located on Squaw Valley Ski Corporation private lands.

Squaw is proposing to replace the existing Siberia detachable quad chairlift with a new detachable six-passenger chairlift operating at an hourly capacity of 2,400 skiers per hour.

The proposed 600 skiers per hour decrease in capacity for Siberia would combine with decreases in resort-wide hourly capacity caused by the lift removal and replacement projects included in the 2012 Annual Work List projects and the 2012 Capital Projects package. In combination, the 2011 Annual Work List projects and 2012 Capital Projects replaced eight chairlifts having an aggregate hourly

capacity of 11,800 skiers per hour with three chairlifts having an aggregate hourly capacity of 7,200 skiers per hour. These two past projects combined with the 2015 Siberia Lift replacement project would replace nine chairlifts having an aggregate hourly capacity of 14,800 skiers per hour with four chairlifts having an aggregate hourly capacity of 9,600 skiers per hour. Lift projects since 2011 have diminished uphill capacity by 5,200 skiers per hour.

Project Description

Removal of Existing Lift

For removal of the existing Siberia terminal structures, construction equipment would utilize existing work roads to access the top and bottom terminals of the lift. The top and bottom steel terminal structures would be removed from the site by truck. Concrete footings at both terminal stations would require demolition and removal to make way for the new terminal footings, which would be located in about the same place. The earthen unload ramp at the existing lift's top terminal location, would be stockpiled on site and reused for the unload ramp of the new lift. Additionally, the existing cantilevered concrete unload area platform will remain in place.

All 14 of the existing towers will be removed, but it is anticipated that up to nine of the existing tower foundations could be reused - dependent on final engineering and foundation testing. If necessary, and where existing work roads do not exist, construction access for removal of intermediate line towers would be by ATV (i.e., for transporting cutting torches and tools). Line towers and tower cross arms would be removed from the site by helicopter, or by crane and truck where existing road access is possible. Abandoned concrete tower footings would be left in place. Intermediate tower footings extend just above the ground and little or no backfilling would be required.

Excavated material would be stabilized in accordance with the measures contained in a project SWPPP (see EQ plans for BMP's). Excess material would be utilized for new terminals to make for a balanced project. Disturbed areas would be revegetated immediately following construction activities. Equipment storage would be in a previously disturbed areas and stabilized after construction activities.

Installation of New Lift

As a six-passenger chairlift, the new Siberia lift would have a wider gauge than the existing quad chairlift. The existing lift has a clearance of 16 feet on either side of the centerline, for a total of 32 feet width. The new lift would have an additional 3.5 feet of clearance on either side, for a total of 39 feet width. As a result, the cleared lift line corridor would need to be widened by about seven total feet. A tree survey of the requisite lift line clearing has not been completed, but based on a field inspection, it is estimated that approximately 33 trees would need to be removed and up to five trees would need to be limbed for safety and clear zone reasons.

The new lower loading terminal of the proposed lift would be located in the same location as the existing terminal, at approximately 7,762 feet in elevation, and excavation, grading, and staging would disturb a previously-disturbed area estimated at 0.13 acres. The new top terminal would be located in the same location as the existing terminal, at approximately 8,678 feet in elevation, and excavation and grading would disturb an area estimated at less than 0.10 acres. The amount of grading at each terminal would be minimized to the extent that is practical.

Based on preliminary engineering by the lift manufacturer, the lift is proposed to have 14 towers. As discussed above, it is anticipated that up to nine of the existing tower foundations could be reused -

dependent on final engineering and foundation testing. The remaining five would be new towers and foundations in different locations. Each new tower footing would require approximately 600 square feet of ground disturbance.

Construction equipment for lift installation would access the top and bottom terminals and some of the towers for the proposed lift via existing work roads. Excavation equipment (e.g., track-hoe excavator to dig foundation holes) would access each additional new tower location over undisturbed ground along the lift line, and care would be taken to minimize disturbance to the surface soil mantle and vegetation. Where necessary, tower footing holes could be dug by hand. Excavated material would be stored onsite and used for backfill, blended with surrounding ground contours and/or utilized for terminal stations to make for a balanced project. Excavated material would be stabilized in accordance with the measures contained in the project SWPPP, final Construction Documents, and BMP plans.

Concrete for tower and terminal footings would be hauled in by truck, or flown in and poured by helicopter where access does not exist. Towers and cross arms would be transported and set by helicopter or by crane and truck where access is possible. Terminal components would be transported to the site by truck, although it may be preferable in certain cases to transport some components by helicopter.

An existing disturbed open area around High Camp is proposed to be used for staging of the towers during construction and installation. This location is preferable to the base area (the other option) because it is closer to the project site and would have less disruption to activities in the village.

For the stabilization of exposed soils following the completion of lift tower installation, terminal foundation work and construction, and utility line installation, an approved seed mix would be spread and covered with mulch. Detailed specifications for vegetation management guidelines would be detailed in the SWPPP and the BMP and Revegetation plan that will be part of the EQ plan submittal.

New Lift Drive Equipment

The new Siberia lift would be driven by an electric motor for primary operations and a diesel auxiliary motor for operation in the event of a power failure. The lift would also be equipped with a diesel evacuation motor that would be used in the event of a mechanical failure. All proposed new diesel motors would meet California Air Resources Board standards and the lowest emissions standards set forth by EPA for diesel motors. The hours of operation for the diesel motors would not exceed 30 hours per year, including operation for maintenance and occasional interruptions of electrical power.

Project Components Common to all Construction Activities

The following project components are common to all construction activities proposed for Placer County review as part of Squaw's Siberia Lift Replacement Project:

- BMPs would be installed and maintained prior to, during, and after construction activities.
- Disturbed areas would be revegetated immediately following construction activities (see BMP and Revegetation plan).
- Final Construction Documents will be prepared that address all mitigations.
- Equipment storage would be in a previously disturbed area and stabilized after construction activities.

- Squaw will complete a SWPPP and follow protocols outlined within the document for project activities.
- All vehicles will be fueled in the Squaw parking lot and/or upper vehicle maintenance building.
- Prior to grading, where practical, existing topsoil resources will be removed, either by machine or by hand, and stockpiled in an area where soils storage will not cause a long-term resource impact. Also piles will be covered for wind erosion protection.
- Subsequent to approved grading activities, cleared topsoil will be re-spread on the disturbed site, mulched, and re-seeded.
- Where ground disturbance occurs, areas will be revegetated and mulch or matting will be applied.
- Temporary erosion control measures will be utilized on disturbed sites to minimize the potential for soil erosion during construction. Soil-disturbing activities will be avoided during periods of heavy rain or wet soils.
- Erosion control blankets (e.g., coir or jute netting) may be required to aid in vegetation establishment within the project areas on slopes greater than 10 percent, or heavy mulch comprised of organic materials will be used.
- Re-seeding efforts related to the Siberia Lift Replacement Project will utilize a native or naturalized seed-mix favoring cold tolerant plants to improve establishment and survival in the alpine climate.