

Glider Flying Site Risk Assessment (USHPA)

Date: 12/26/2024 **Storm Peak Hang Gliding** **Site:** Mt. Werner, Steamboat Springs, CO 80477

Safety Coordinator: Ken Grubbs

Site Manager: Ken Grubbs

- **Try to identify the risks. Look at the site from a spectator, an inexperienced, and experienced pilot point of view**
- **Take your time in analyzing the risks and try to determine the vulnerabilities. Note significant risks under Risk Detail and Risk Assessment.**
- **Collect Risk Mitigation options that mitigate the risk in goal setting or in current application and evaluate them as one plan under Risk Mitigation.**

Risk Identification	Risk Detail & Risk Assessment	Risk Mitigation	Sign Off
<p>Road or Trail Access</p> <ul style="list-style-type: none"> • Are access road conditions appropriate for vehicle traffic • Is/should access be secured by gates or locks • System for maintaining secure entrances • Has there been any incidents during vehicle entry or exit? Are they preventable? • Pedestrian/Vehicle concerns • Is appropriate signage in place • Appropriate emergency vehicle access • 	<p>Access road administered by Steamboat Ski & Resort Corporation (SSRC) in cooperation with the United States Forest Service (USFS), primary use is for ski area management needs. Partnership with Storm Peak Hang Gliding (USFS Special Use Permit HBE343 in conjunction with #MBRTB-2014-004) through above entities creates access for foot launch use. Road gated, locked and secure, useable only by permitted vehicles although foot and bike travel permitted. Permits only issued to SPHA members.</p> <p>Road conflicts with hikers, bicyclists and ski area management workers is primary concern.</p>	<p>Adhere to all posted regulations on the road. These include speed limit (15 mph) and trail crossing warning signs.</p> <p>Display valid permit in vehicle windshield and adhere to rules and guidelines on said permit.</p> <p>Pedestrians always have right of way. Brief all vehicle drivers of road protocols. Emergency vehicle access permitted.</p> <p>No access to launch except with permitted vehicle.</p> <p>Signage not permitted on Ski Area, not required due to restricted access.</p> <p>No road incidents 2022 (or ever).</p>	<p>KLG 12/24</p>
<p>Vehicle Parking Area</p> <ul style="list-style-type: none"> • Can vehicles or personal property be damaged by unanchored fly away gliders • Is/should the parking area be depicted clearly with signage or markings • Adequate separation between parking and setup, launch, landing, and tear down areas. 	<p>Launch area parking and landing area parking well removed and protected from launch and landing areas.</p> <p>Public parking at Whistler Park LZ.</p> <p>Haymaker parking pull-off clear of traffic on Highway 131'</p>	<p>Monitor traffic entering / exiting Haymaker LZ pulloff.</p>	<p>KLG 12/24</p>
<p>Spectator Areas</p> <ul style="list-style-type: none"> • No flight path within 50 feet • Are/Should spectator areas be clearly marked and easy to understand by spectators • Adequate separation between spectator areas and setup area and launching areas 	<p>No designated spectator areas.</p> <p>Mount Werner- Whistler Park LZ is a public use park. Playground located separate from landing area. Common use of portions of landing area for dog walks rugby games, etc.</p>	<p>During public use of playing field area of landing area, divert landing to north portion of LZ (plenty of room open empty field).</p>	<p>KLG 12/24</p>

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<ul style="list-style-type: none"> Is the spectator area enforced Are/Should spectators be allowed in setup areas unescorted 			
<p>Overhead Power Lines, Trees, Towers</p> <ul style="list-style-type: none"> Launch points separation 50 feet - Marked Flight path separation 50 feet Landing zones separation 100 feet – Marked Do these distances need to be modified due to unique conditions of flying site If closer, what methods are used to minimize chance of collision with Power Lines, Trees and Towers 	<p>Lift lines present on Mt Werner- Storm Peak Launch, however launch is extremely large and adequate separation is present.</p> <p>Whistler LZ has trees present but desirable landing location provides adequate separation.</p> <p>Alternate Hay Field LZ has no overhead or aerial obstructions.</p>	<p>Adhere to 50 ft altitude clearance of lift lines at both Mount Werner – Storm Peak Launch and Mount - Werner – Thunderhead Gondola – Heavenly Daze Launch</p>	<p>KLG 12/24</p>
<p>Launch Areas</p> <ul style="list-style-type: none"> Clear 50 feet forward, 30-feet rearward, and 30 degrees either side of take-off direction clear of personnel other than flight operation staff. Ground obstructions that may cause trip and falls Is/Should launch area be clearly marked Site launch information communicated to all pilots before flight activities - method. Are tie downs appropriate and adequate Appropriate launch assistant qualification and equipment guidelines 	<p>Mount Werner - Storm Peak Launch area is extremely large allowing for appropriate clearance to any possible obstructions while simultaneously allowing for launch locations to be adjusted to ideal locations. New Pilot / Guest Pilot not permitted to cross lift lines at launch with less than 100ft clearance.</p> <p>Mount Werner – Thunderhead Gondola – Heavenly Daze Launch, no guest or non-guide pilots allowed. No signage allowed.</p> <p>Launch assistants are not needed on Storm Peak after initial briefing.</p> <p>All non-locals supervised by guide pilot’s rule.</p> <p>No tie downs are required.</p>	<p>See Above</p> <p>Mount Werner – Thunderhead Gondola – Upper Valley View Launch condition identical to Heavenly Daze Launch. (However very rarely used)</p>	<p>KLG 12/24</p>

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<p>Landing Zones</p> <ul style="list-style-type: none"> • Landing zones separation distance 50 feet from ground personnel, vehicles, structures, in use roads, and spectators • Other hazards (trip and falls) • Is/Should spectator area be designated, marked, barriers, and/or signage ' • Are tie downs appropriate and adequate • Ground handling guidelines • Appropriate wind indicators • Livestock 	<p>Spectators are present adjacent to landing areas but are generally confined to recreational and picnic areas. Landing occurs in non-maintained field adjacent and away from these areas.</p> <p>Alternate Haymaker Field LZ has little if any risk due to incredibly large size over 500 acres. LZ is fenced. This field access is locked and vehicle traffic is prohibited by the SPHA.</p> <p>Livestock can be present in Haymaker Field.</p>	<p>Spectators do not recreate or use landing field as it is generally unmaintained for any recreational purposes and thus self-mitigating through non-use.</p> <p>Haymaker Field is non occupied. Large area permits landing well away from annual haying operations. Care is taken to avoid livestock and Sandhill Cranes.</p>	<p>KLG 12/24</p>
<p>Other Area Activities</p> <ul style="list-style-type: none"> • Do other activities use same area: Example (Radio Controlled aircraft, model rocketry, skeet shooting, or kite flying) • How are multi-use activities managed to avoid possible mid-air mishaps 	<p>No other aerial activities present.</p>	<p>Non-issue.</p>	<p>KLG 12/24</p>
<p>FAA Recognition and Communication</p> <ul style="list-style-type: none"> • Do glider flight operations interfere with flight operations of general aviation, commercial aviation, or agricultural aviation aircraft • Is the local FAA office advised in writing of glider flight activities • Are NOTAM's published for this site • Are there conflicts with Terminal Controlled Flight areas (TCA) • General aviation airport's locations and landing pattern conflicts (non-controlled) • Tandem operations in compliance with FAA rules and regulations 	<p>No other aerial activities present.</p>	<p>Non-issue. Airport notified of HG/PG traffic on busy holiday periods. Large distance between flight areas and airport operations.</p> <p>Steamboat Airport uncontrolled. Future ADSb-out use will be encouraged. KLG has ADSb-out in use.</p> <p>Will post flight activity area(s) at Bob Adams Airport.</p> <p>Tandems not allowed.</p>	<p>KLG 12/24</p>

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<ul style="list-style-type: none"> Towing operations in compliance with FAA rules and regulations 			
<p>Organized Events</p> <ul style="list-style-type: none"> Flight Safety Coordinator on site Strictly designated and enforced spectator area Strictly designated vehicle parking area Separation distances between flight operation areas and spectator areas marked and enforced Tie down systems use for organized events Is demonstration equipment or flight simulators at events under direct supervision until disassembled First Aid First Responder resources on site and available 	No organized events planned.	Non-issue. First aid resources available on launch. LZ is proximal to emergency services.	KLG 12/24
<p>Safety Coordinator</p> <ul style="list-style-type: none"> Risk Management Awareness Knows Incident reporting process and follow up Oversees Site management plan for events Obtains Historical data available to use when recommending the modification of site guidelines and rules Procedures to close site due to hazardous conditions or situations Procedures to restrict flight operations to a singular pilot if necessary to avoid potential accidents 	Safety coordinator also updates annual operating plans and necessary permits with the SSRC and USFS. This creates continuity in site needs, protocols and safety.	<p>Yearly renewal of administrative and risk assessment processes. USFS and Steamboat Ski Area (Ski Patrol and Mgmt) periodically updated on prior and present year activity. Last meeting January 2020. Ski Area Exec's and USFS personnel present.</p> <p>No incidents 2022.</p> <p>Yearly Meeting with Steamboat Ski Patrol Director Spring 2024</p>	KLG 12/24
<p>Information Communication</p>	Operating Plan updated yearly.	Club prefers to utilize the USHPA "In the Event of an Emergency" card for initializing	KLG

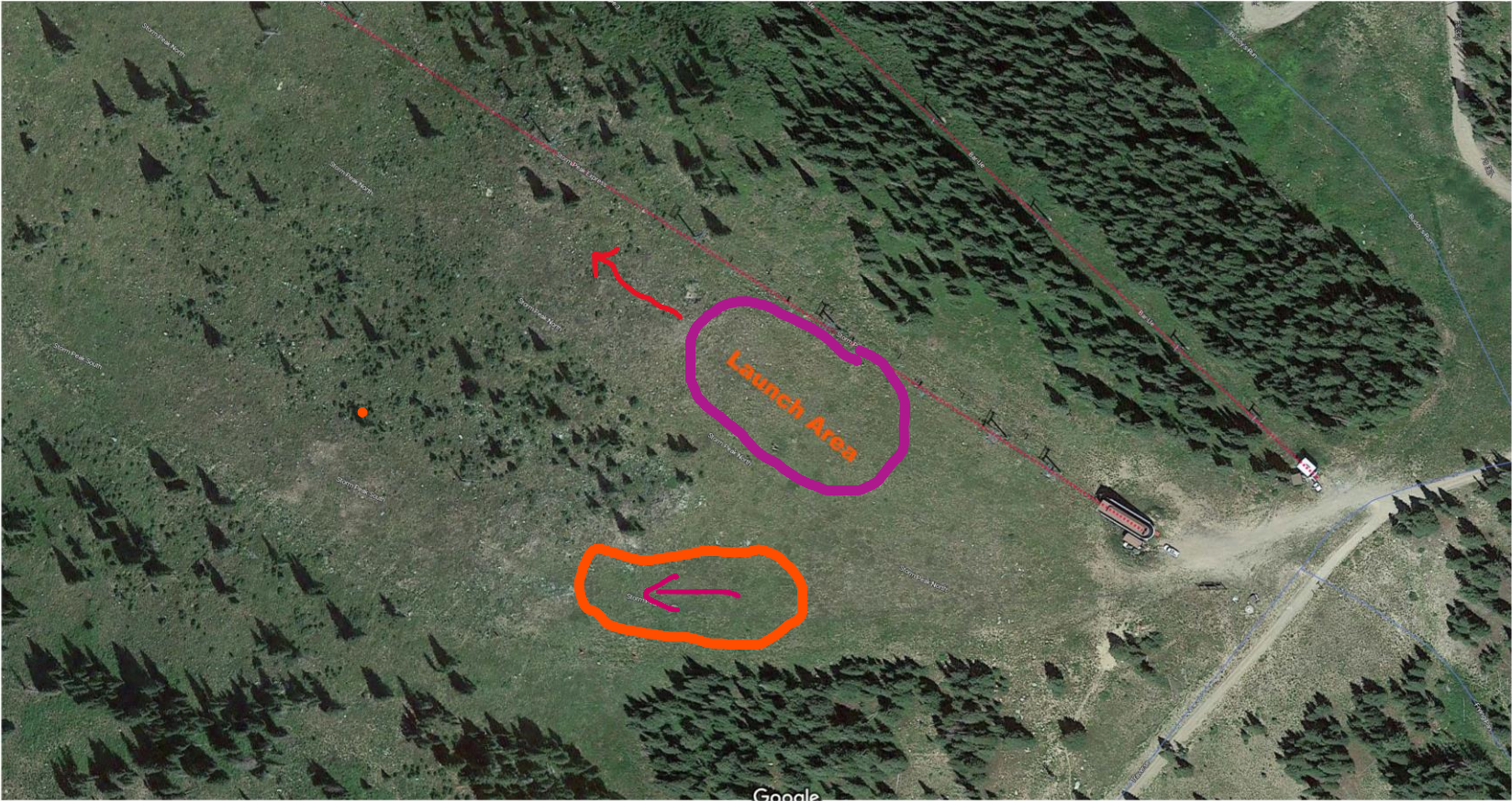
Risk Identification	Risk Detail & Risk Assessment	Risk Mitigation	Sign Off
<ul style="list-style-type: none"> Flying site rules and guidelines are appropriately communicated. Signage clear and understandable to spectators and pilots Management contact information available at site A method available for input and suggestions to the site management team Emergency communications plan 	<p>Yearly club and directors meeting.</p> <p>Club prefers to utilize the USHPA “In the Event of an Emergency” card for initializing any type of emergency response. USHPA has disseminated this card to members thus it creates a known response method across all potential pilots using Mt. Werner, both local and visiting.</p>	<p>any type of emergency response. USHPA has disseminated this card to members thus it creates a known response method across all potential pilots using Mt. Werner, both local and visiting.</p>	<p>12/24</p>
<p>Training and Experience</p> <ul style="list-style-type: none"> USHPA training guidelines followed for training taking place at site Each launch and landing zone appropriately rated for pilot proficiency level and special skills required. System for verifying pilot ratings, special skills. System for managing access by pilots holding appropriate ratings and special skills for site. How does the site management team encourage and enable appropriate training and experience 	<p>Mt. Werner is not a training site and appropriate qualifications are outlined in operating guidelines.</p> <p>Access for qualified pilots controlled by a locked gate. Only club members with appropriate qualifications as per operating guidelines have access.</p> <p>Mentoring of all pilots using Mt. Werner is an ongoing practice. No unsupervised flights of non local visitors.</p> <p>Mentoring of P3 , H3 pilots by guide pilots. Non local unsponsored flights prohibited.</p>	<p>Yearly update of operating plan, qualification verification, lessons learned and mentoring has always been, since inception, a corner stone of Storm Peak Hang Gliding.</p> <p>A new / non-member pilots required to perform a walk through of Mount Werner-Whistler LZ.</p>	<p>KLG 12/24</p>
<p>Emergency Action Plan</p> <ul style="list-style-type: none"> Is there an EAP at the flying site clearly posted at launch and landing zones. Has the local emergency responders been notified of flying site location and access What first responder resources are available on scene - ex: first aid kits Does the site management team sponsor First Aid and CPR training annually 	<p>EAP as defined in risk mitigation.</p> <p>All club members are trained first responders of club sponsored first aid training.</p> <p>SSRC summer activities mountain patrol have intimate knowledge of our operations.</p>	<p>Club prefers to utilize the USHPA “In the Event of an Emergency” card for initializing any type of emergency response. USHPA has disseminated this card to members thus it creates a known response method across all potential pilots using Mt. Werner, both local and visiting.</p>	<p>KLG 12/24</p>

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<p>Tandem Flying and Mini Wing</p> <ul style="list-style-type: none"> • System for monitoring and enforcing compliance with USHPA FAA Tandem Exemption at site. • Launch areas free of obstructions to the guideline of 75 feet forward of launch area. • No Commercial Flights Permitted 	<p>No Tandem or Mini Wing flying allowed.</p>	<p>Non-issue.</p>	<p>KLG 12/24</p>
<p>Glider Tie Down Systems</p> <ul style="list-style-type: none"> • In areas where climate or conditions are present that could cause gliders to become loose and inadvertently take uncontrolled flight and cause injury or damage are tie down systems available for use. • Are guidelines for tie down use at site communicated effectively to pilots 	<p>Glider tie downs are not used on Mt. Werner</p>	<p>Non-issue. Gliders are set up in wind shadow if needed.</p>	<p>KLG 12/24</p>
<p>Other Considerations / Local Knowledge</p> <ul style="list-style-type: none"> • Weather • Glide clearance to exit ski area. • Hang Gliding launch conditions on Storm Peak Launch. • Future Website Revision/Upgrade • Site Guide Improvement 	<p>Changing weather conditions in high mountain environment.</p> <p>Maintaining glide (especially paragliders) to clear the top of the Thunderhead Gondola.</p> <p>Hang Glider launches at a flat slope high altitude Mount Werner – Storm Peak Launch</p> <p>Website needs Clearer Descriptions of Site and Accesibility.</p>	<p>Awareness, discussion and education of high mountain weather and how it affects flying decisions at launch and throughout flight.</p> <p>Discussion at launch with new / non-member pilots about primary objective in flight plan to clear topographic obstacles (with no ski area landing allowed) to easily make the primary Mount Werner - Whistler LZ. Emphasis on variable glides due to changing weather / lift conditions and headwinds.</p> <p>Emphasis on strong launching skills and care picking launch cycles that are minimum 5 mph and straight into launch.</p> <p>The SPHGA steamboatairforce.org website and site plan contain detailed description of flying conditions and flight operations.</p>	<p>KLG 12/24</p>

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		<p>The Site Guide is an aid to be given to a guest pilot or new member along with the waiver. The SPHGA intends to continually improve the site guide by comparing it to other Chapters Site Guides it deems superior. This will be ongoing.</p>	

Mount Werner – Storm Peak Launch

Google Maps

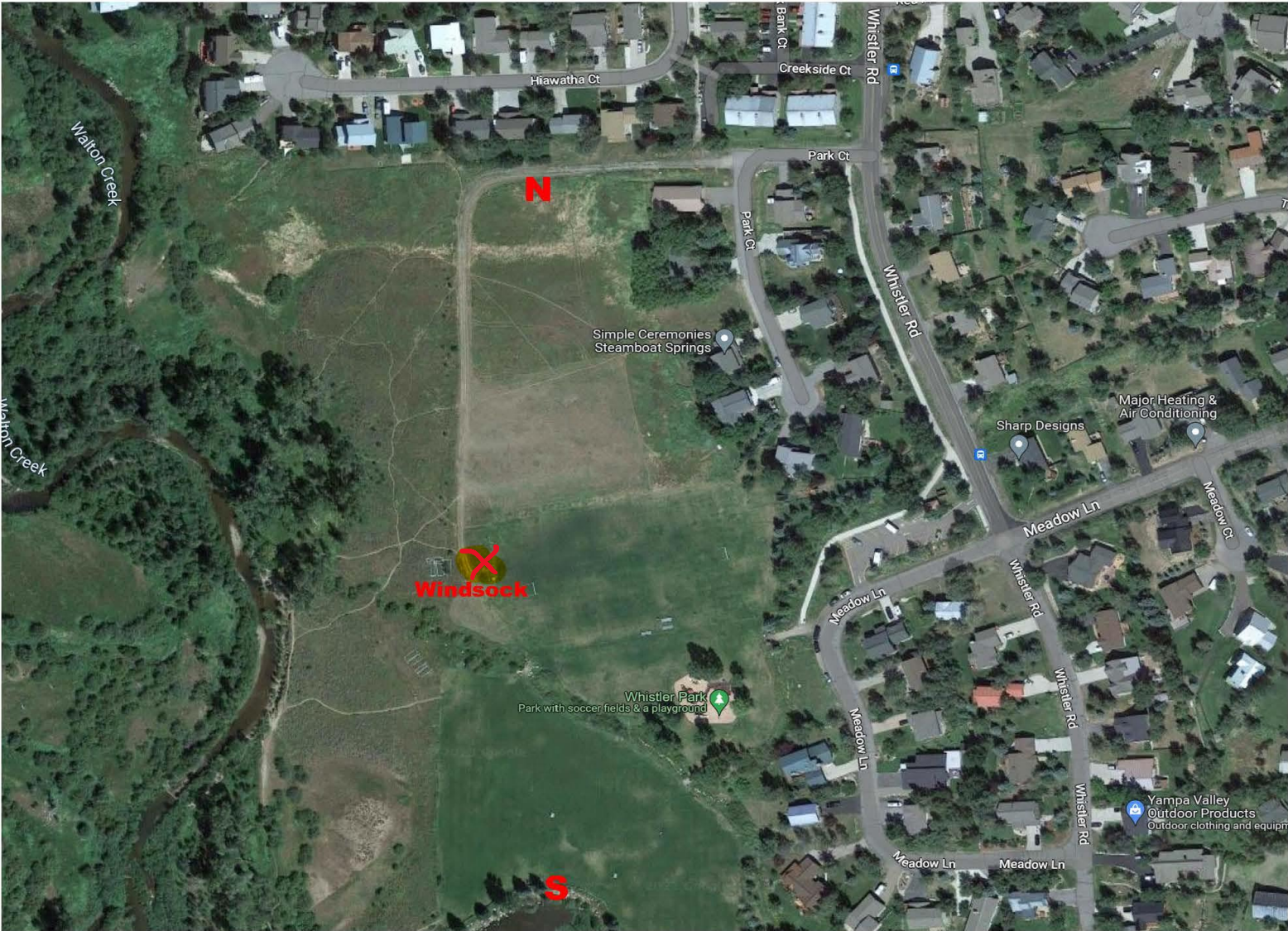


Google

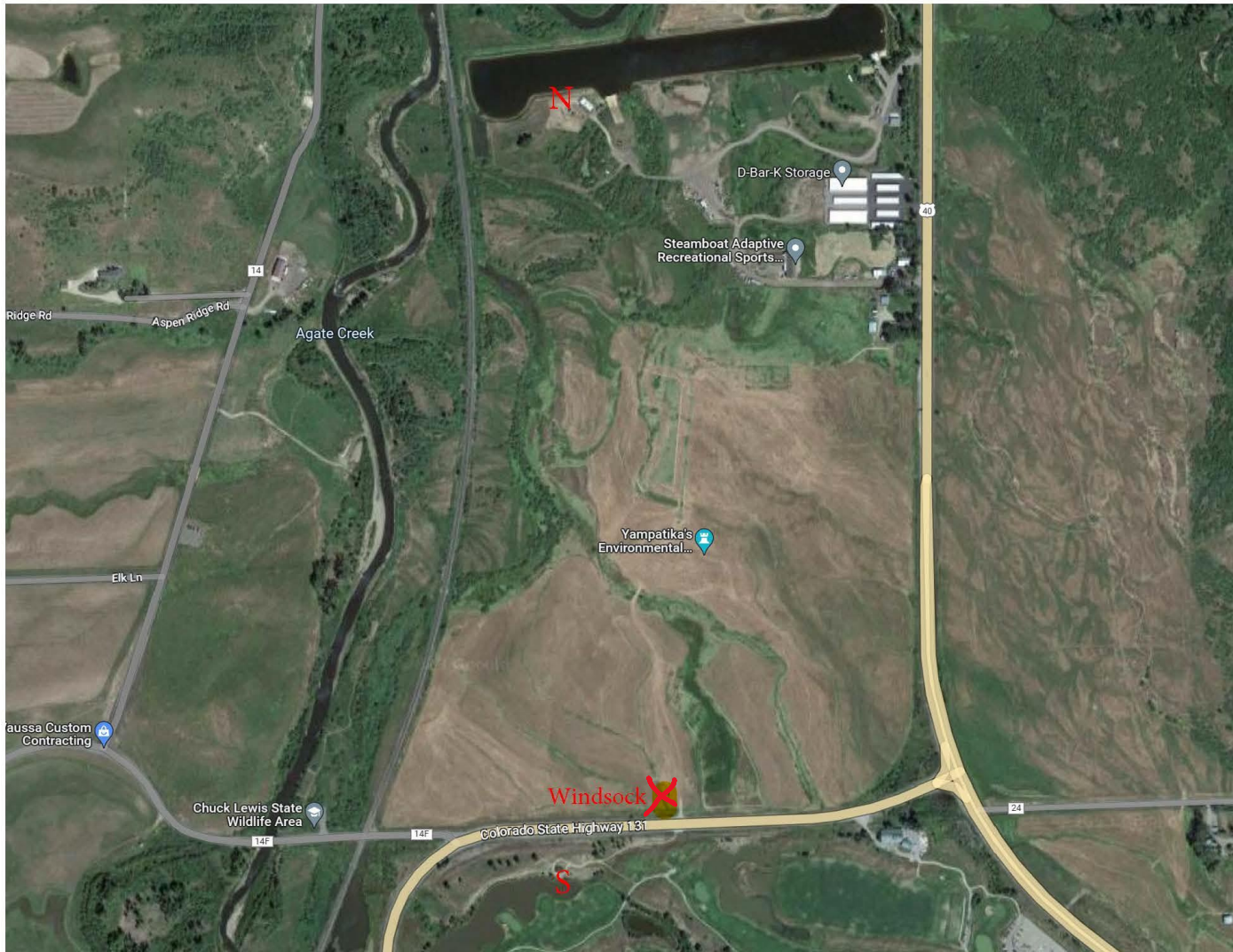
Mount Werner – Thunderhead Gondola- Heavenly Daze Launch



Mount Werner – Whistler Park LZ



Mount Werner – Haymaker LZ



Mount Werner Overall Site Photo

