

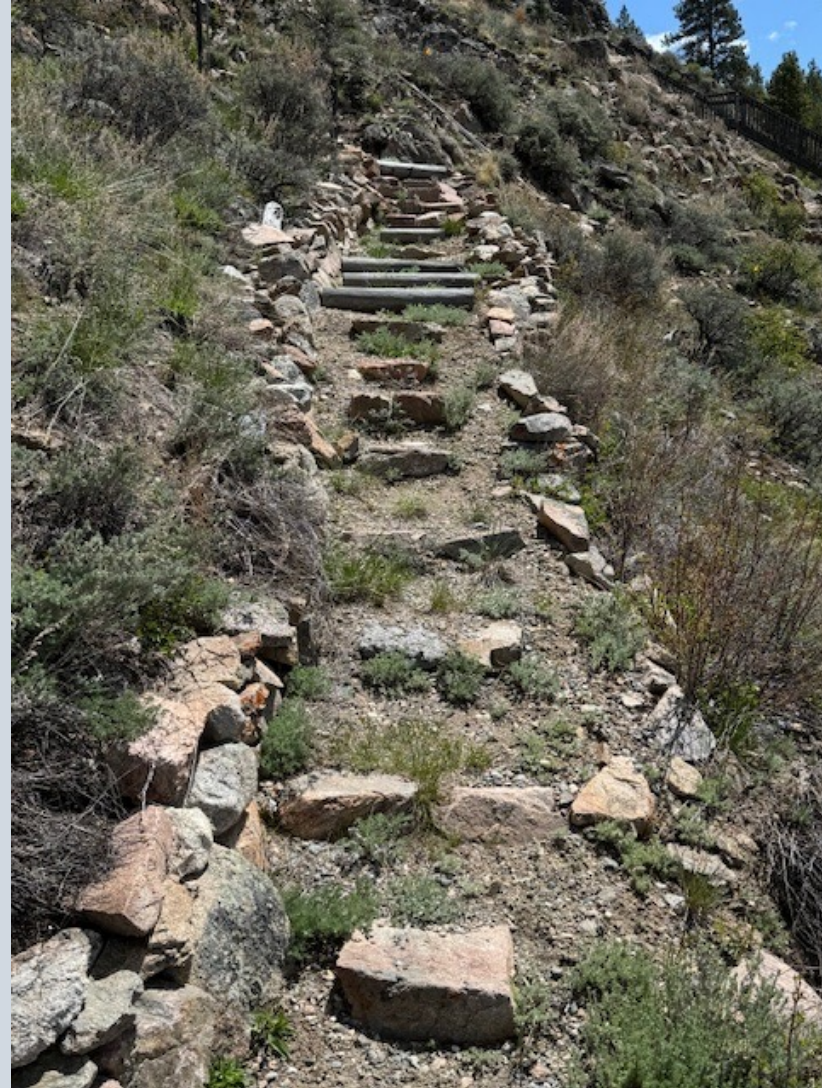
Plowshay Inclined Elevator

1532 Grand Ave

Current State



Current State





Project Team



Grand Environmental Services, Geoff Elliott (*Grand Lake, CO*)



Hill Hiker, Bill MacLachlan (*Orono, MN*)



Hodapp Custom Homes Inc., Randy Hodapp (*Grand Lake, CO*)



Power to the People Electric, Tim Moreland (*Tabernash, CO*)

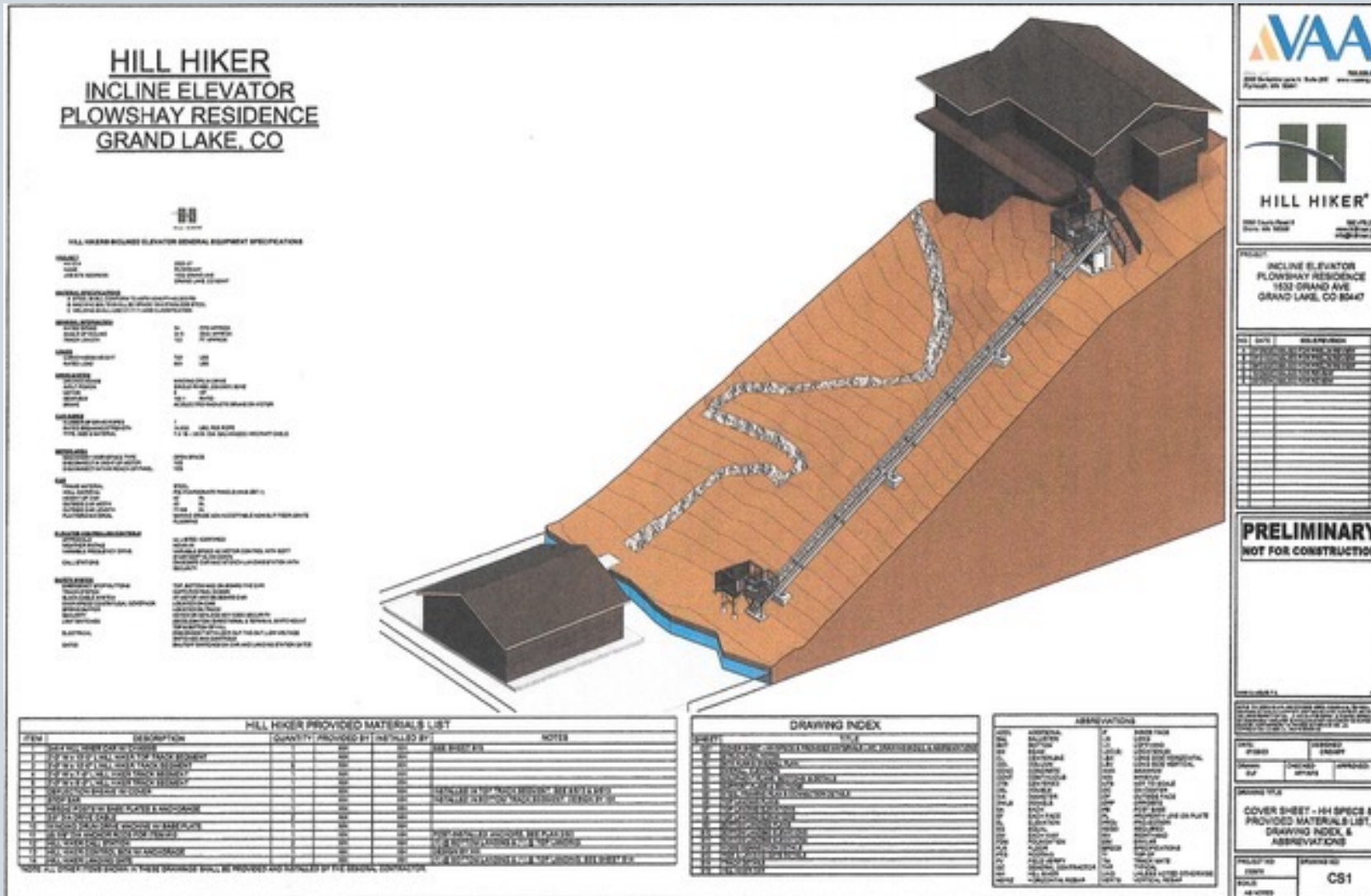


VAA Engineering, Aaron Fortunato (*Plymouth, MN*)

Grand Ave: Neighbor's Solution to Hill



Engineering Diagram

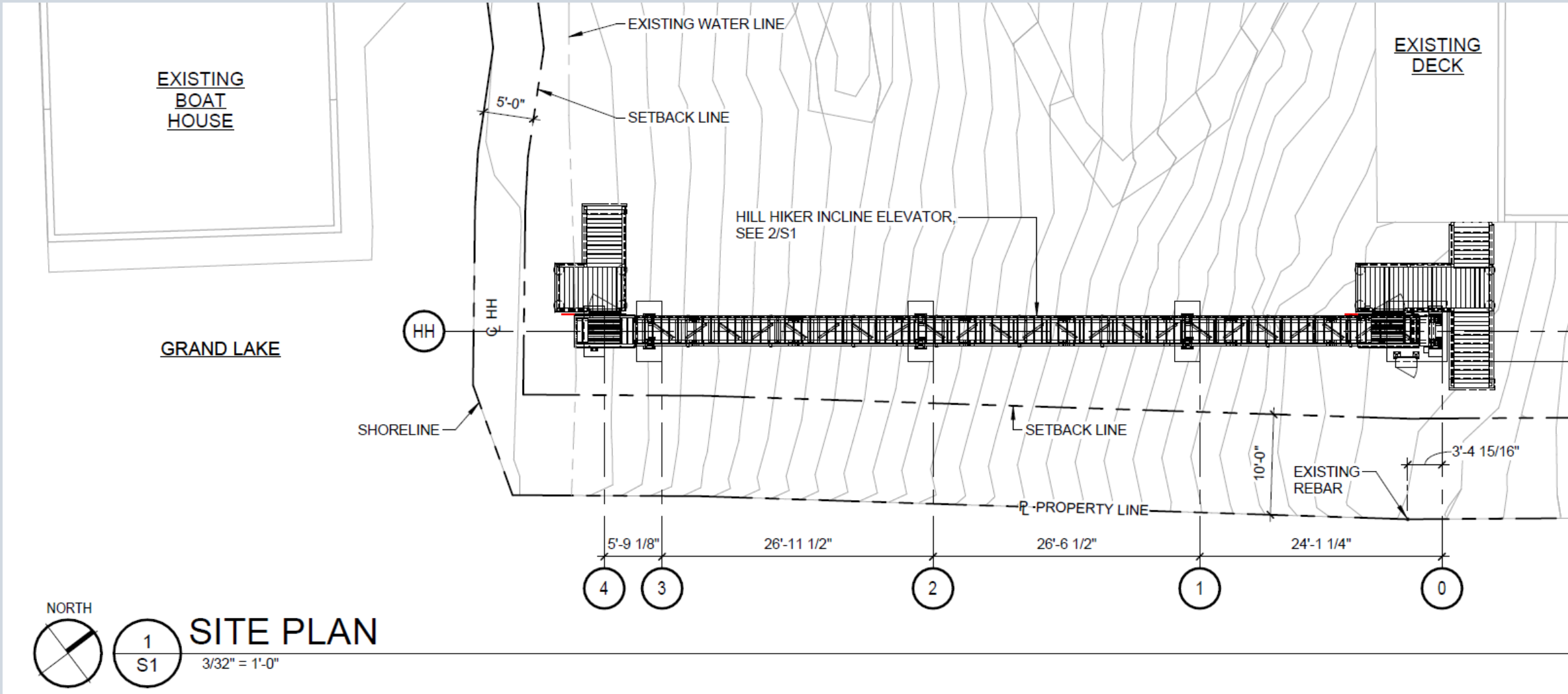


Example of Hill Hiker[®] Inclined Elevator



Appendix

Vertical View



FAQ

- What type of railings were being installed, size, shape, color?
 - *The materials will be a brown shade of Trex and then solid, transparent polycarbonate on the tram loading side for safety (so hands don't get caught). The gate will be framed to match the car. The railings will primarily use 10ft long steel beams that will be welded and bolted together. The specifics of which are outlined in the attached stamped engineering plans.*
- How is it powered?
 - *It has an electric motor which powers a winding drum drive.*
- Did you remove the stairs at the top and bottom or are there still steps or a ramp?
 - *There are 5 steps at the top and 7 steps at the bottom. The 5 steps at the top are so the loading deck itself is low profile and not sticking up like a rollercoaster. Hill Hiker advised this approach as hitting the deck perfectly may not be possible and would require the entire structure to go much higher. Down by the lake lowering the platform would require a hole and sump pump. We wish to keep the footprint of the entire project as small as possible. The cabin itself was built in the 30s and requires stairs to access it. The goal of this design is to prevent falls by making the climb and descent to the lake MUCH easier than the existing path. However, we believe we can procure a removable ramp that could be used on these stairs and stored in the boat house until the need arose.*
- What is the slope of the railings going to be?
 - *The slope of the rail is approximately 34.5 degrees.*
- What is the exact distance of the rail?
 - *The length of the rail is approximately 103 feet in length.*