

Gershman Beach Stair History – Design and construction by Webb Builders, Inc.

July 2001 – First set of stairs built to beach since the previous Gucki Malaly stairs washed away. This set had a multi-level landing on 4x4 posts into concrete and a long base stair to the beach.



August 2006 – Repairs to stairs needed due to severe cliff erosion exposing most of the posts.

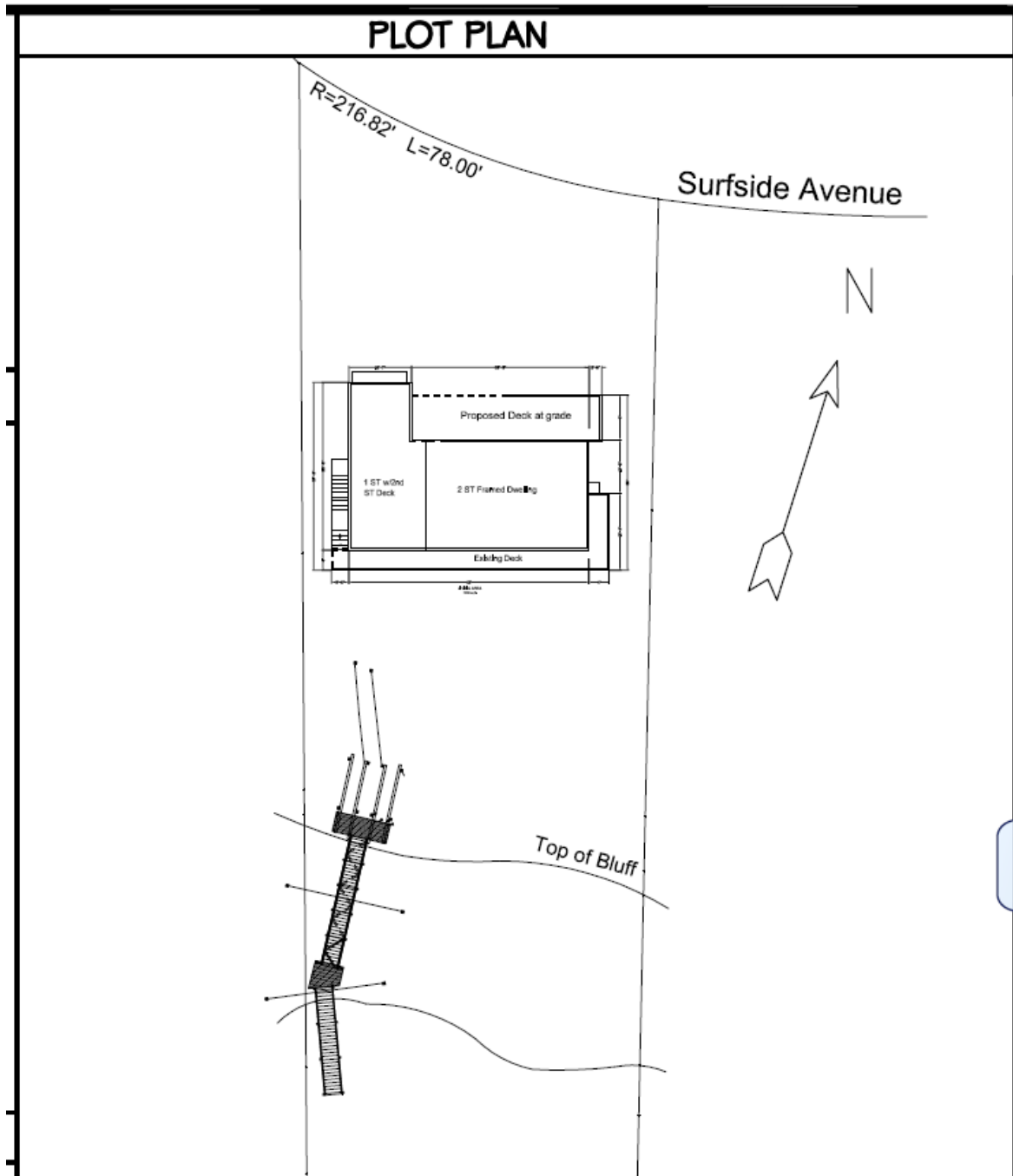




June 2007 – Continued erosion yielded an upper stair structure (top platform, upper stair set, mid-landing and mid-stair set) that was no longer supportable via posts into the cliff.



The solution was to construct a single stair set which extended from a new upper platform to a modified lower landing. The upper platform was built on a buried foundation consisting of (4) 18' Greenheart grade beams, anchored with (8) 5' Greenheart posts. The two central grade-beams were further anchored via buried cable to and addition (2) 5' Greenheart posts 10' north. The following plan shows the design:



The 2007 construction photos follow. Note that the grade-beams were already buried.







April 2010 - A monsoon rain event and resulting mud slide caused the destruction of the mid-point landing which in turn caused the upper stair to fall and rotate back to the cliff.



The upper platform was severely cantilevered but the grade-beam on posts design kept it in place.



July 2010 – The grade-beams were exposed, and disconnected from their posts, allowing the crew to winch the entire structure 8' to the north. Note the tie-back cables extending from the dirt.





Following relocation of the upper platform, the mid-landing had to be rebuilt and a new, longer (40'), steel reinforced stair set needed to be hoisted into place once the old stair set was removed.







Much of the newly rebuilt and relocated structure was reinforced with steel, including the upper platform grade-beam to post connections.





October 2012 – Hurricane Sandy took the original (2001) lower stair-set out to sea and left the mid level landing precariously standing.





June 2013 – The solution was to build a wrap-around stair from the mid-landing to the beach. This design created an extremely solid platform with a stair which no longer impeded high-tide beach travel by extending southerly.





October 2014 – The 5' deep base posts weren't in danger of beach erosion but the users of the beach stairs wished to eliminate the bounciness of the 40' stair set, so an additional support was extended up from the toe of the cliff.





April 2015 – Mud slide from the cliff does not affect the base structure, however it does mean that the upper platform is beginning to cantilever from the cliff edge.



January 2024 – A winter storm caused the SE post to break off (probably because a large floating tree got caught in there) and then undermine enough of the other posts to tip the structure to the east.



February 2024 – The structure was jacked up and the corner post was repaired.



April 2024 – Major mud slide, taking 4' off the property above, came down and significantly damaged the platform and stair structure. As a result, the upper platform was left hanging off the edge of the cliff to the point where the whole structure is unsafe.



