

*Chefornak, Alaska

High Priority Project (HPP) Boardwalk -
Presentation by Jonathan Lewis



Chefnak, Alaska
Population: about 500.

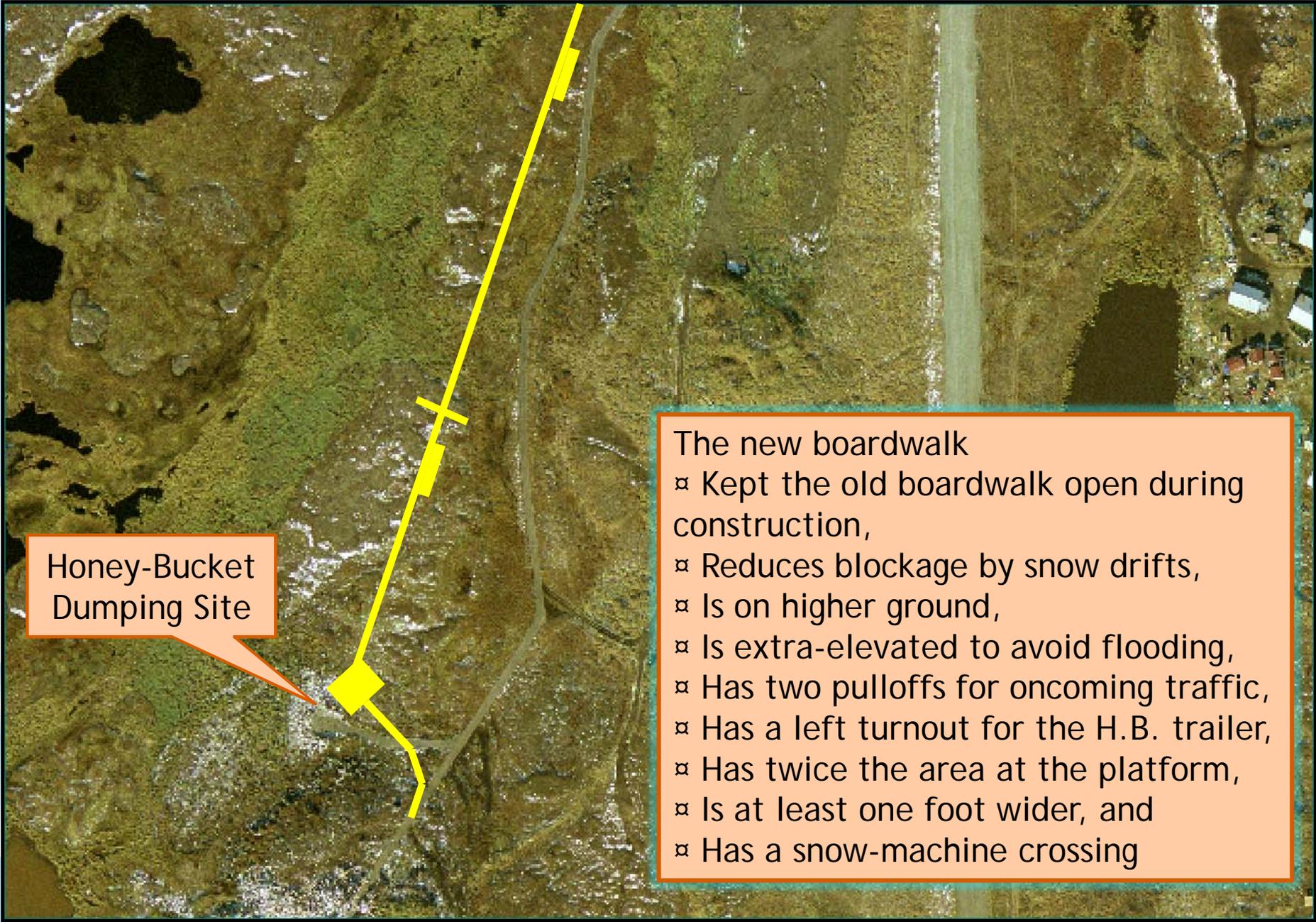
Photo taken 4/21/2015.
Our new airport was
under construction; it was
completed shortly after
the photo was taken.



New Boardwalk

Honey-Bucket Dumping Site

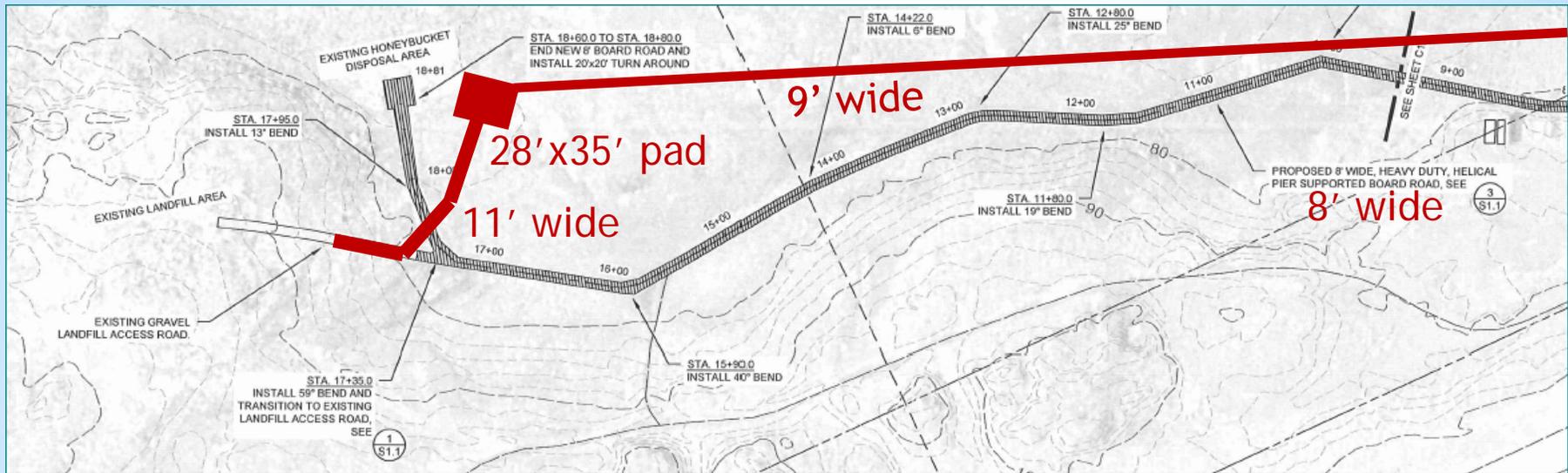
Chefnak



Honey-Bucket
Dumping Site

The new boardwalk

- ✧ Kept the old boardwalk open during construction,
- ✧ Reduces blockage by snow drifts,
- ✧ Is on higher ground,
- ✧ Is extra-elevated to avoid flooding,
- ✧ Has two pulloffs for oncoming traffic,
- ✧ Has a left turnout for the H.B. trailer,
- ✧ Has twice the area at the platform,
- ✧ Is at least one foot wider, and
- ✧ Has a snow-machine crossing



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My first concern: Drifting snow historically blocked the path.





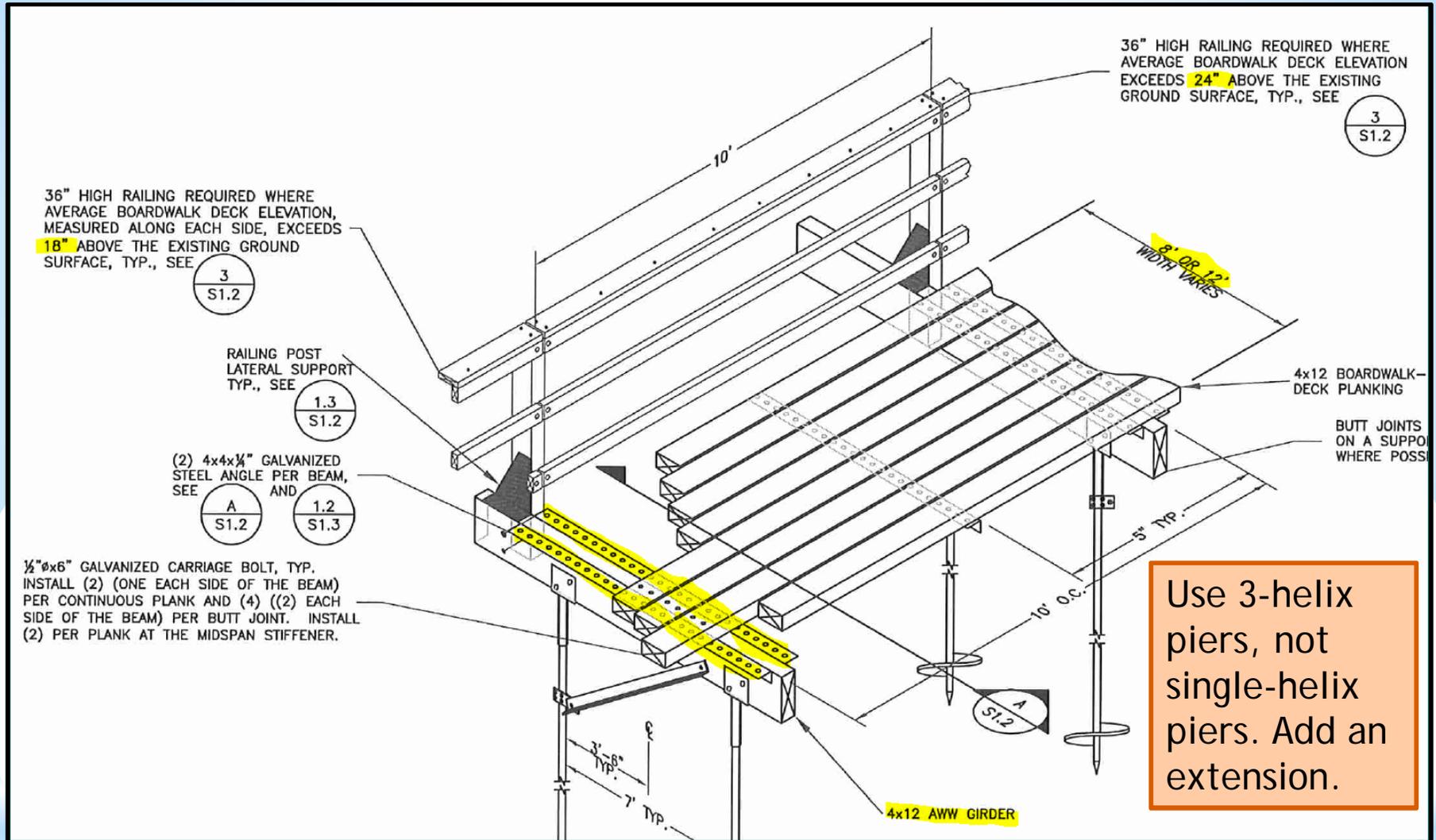
The old boardwalk follows the toe of the slope and is very wet.











The plans were poorly done: conflicting info about the railing, the width; and the lack of constructability. Nobody wanted to crawl into a 15-inch work space under the deck to drill the holes and put nuts on the deck bolts while on their back on the wet, old honey-bucket path. We and the BIA changed the design.





These are the Magnum helical piers that arrived by barge. The custom trailers with 6-ply tires allowed us to shorten the trailer to carry short, heavy loads.



The hydraulic controls for the bucket's thumb on the City's Hitachi 300 excavator didn't work so would could not use our auger motor on the big excavator, yet. We decided to bring in a Bobcat mini-excavator on the last barge as a just-in-case.



We used deck boards as mats to get across the soft ground. The softer the ground, the closer the boards were placed.

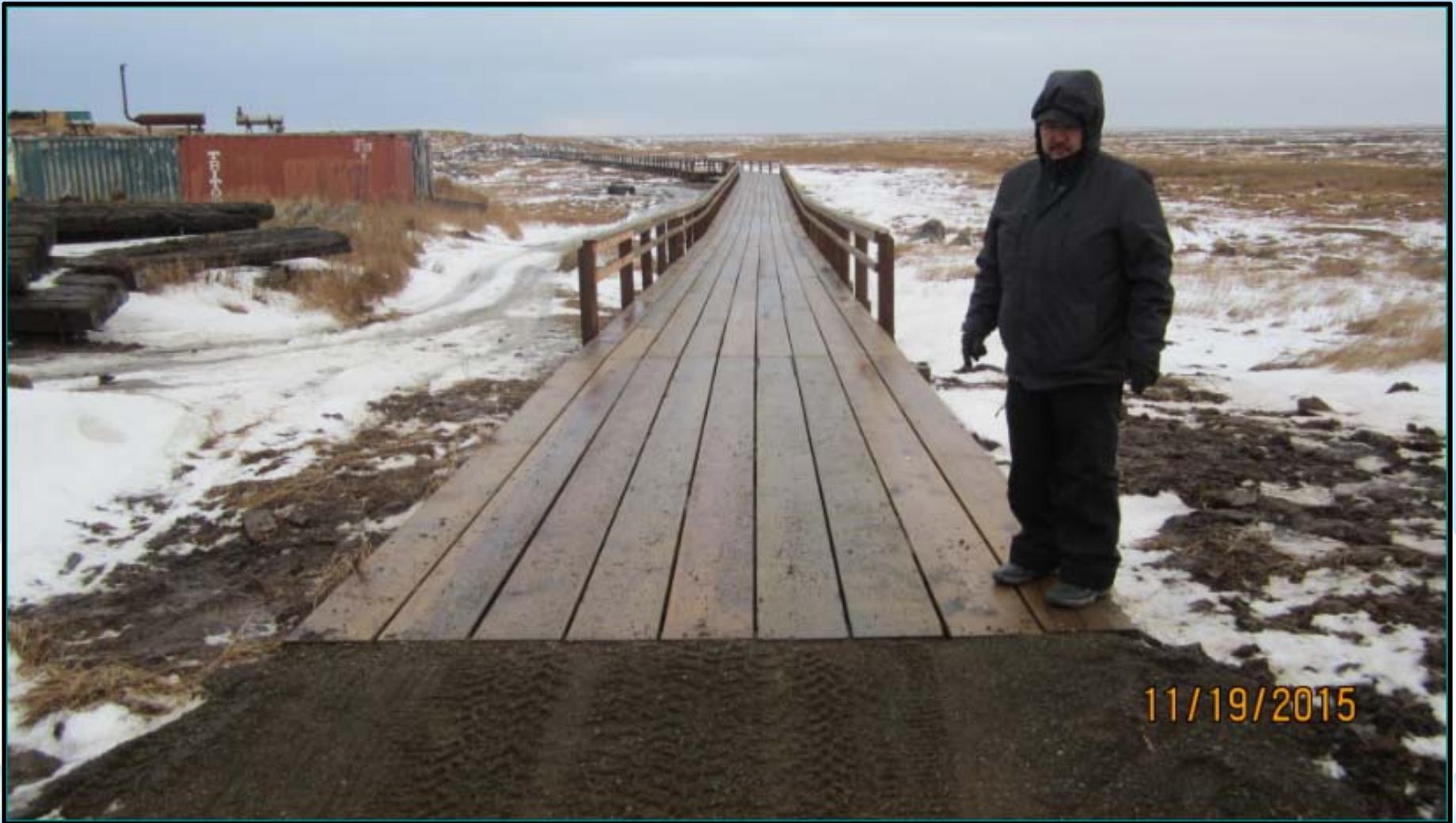


This shows the old boardwalk plus the new boardwalk that is under construction. We used the already-ordered 4x12 crossbeams as wide nailers on the 6x6 beams. This is about the same time we decided to make the deck 9 feet wide instead of 8'.



The new boardwalk with its handrails is straighter than the old boardwalk in blue.





This was the start of the project. It is 9 feet wide, instead of the designed 8 feet.



This is the reason we decided to use a 9-foot width, instead of the designed 8-foot width. It is also the reason we decided to add two pullouts for other traffic.



This is one of the two pullouts that we added to create a 13-foot wide section that will help the other ATVs when the honey-bucket trailer is on the boardwalk. This will help keep ATVs from having to back up several hundred feet in the fog.

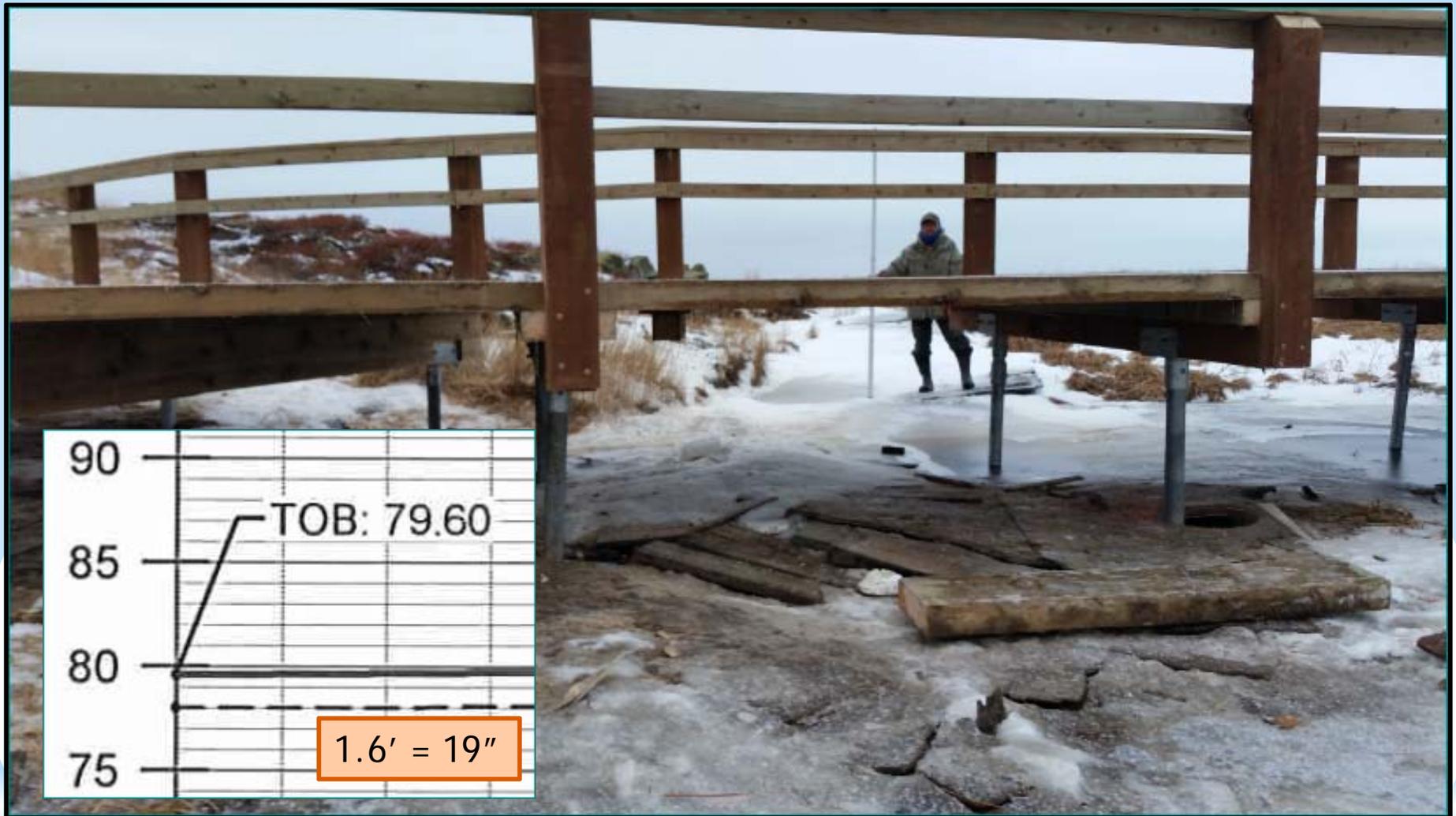




We made an 11-foot wide section just before the 28x35 platform to help our honey-bucket trailer have a little more turning room after the trailer is dumped.

This exit towards the trash dump is 11 feet wide.





Tom is holding the measuring rod at the middle of the old boardwalk. A frozen puddle is visible to the left of the rod. The height difference is 44", not 19". We love our new boardwalk. Our thanks go to the BIA for the funding and for listening to our concerns about the snow drifts, the seasonal flooding, and our desire to build the boardwalk from the top of the deck instead of from under the deck.