

**BLUEWATER DUNES RESTORATION
ADVISORY COMMITTEE**

PRESENTATION TO

THE COUNCIL OF TINY TOWNSHIP

MARCH 12, 2012

2006



January 2012



After

Scope

Bluewater Beach Management Plan (section 4.1) states “Bluewater Beach Park is identified as a community park”.

Bluewater Beach Park should be restored as a natural environment.

- Responsibilities of partners section 7.3.2
 - Township to provide adequate funding to facilitate implementation of the recommended environmental restoration initiatives.
 - Bluewater Dunes Restoration Advisory Committee “BDRAC” will work with Municipality in determining the goals and objectives for Bluewater Beach Park.

History

- Initial Bluewater Beach Management Plan, January 2006 prepared by Meridian Planning Consultants, Planning Partnership and AMEC Earth and Environmental.
- Tiny Township commissioned AMEC to prepare Environmental Restoration Plan.
- BDRAC formed in June 2006.
- AMEC Phase 1 Report October 2006.
- AMEC Phase 2 Report March 2007.

History (continued)

- Five Year Plan 2007 to 2011.
- Grant of \$69K.
- 2006 to 2007 fencing and barrier fencing.
- 2007 - 2008 boardwalk installation (Trew, Nicole & beach).
- Implementation of a new bylaw “Trespassing” approved for implementation 2012.

History (continued)

- Educational signage installed in 2011.
- A new 4 year plan submitted May 2011 to Tiny Council, which was forwarded to Public Works for review (excessive sand buildup on the boardwalks and other recommendations for improvement).

Current Status

- 9 meetings since Nov. 2010 to January 2012, which included onsite meetings to address boardwalk and dune issues/improvements.
- Minimal implementation of the four year plan has occurred to date with exception of volunteer plantings and additional snow fencing Nov. 2011.

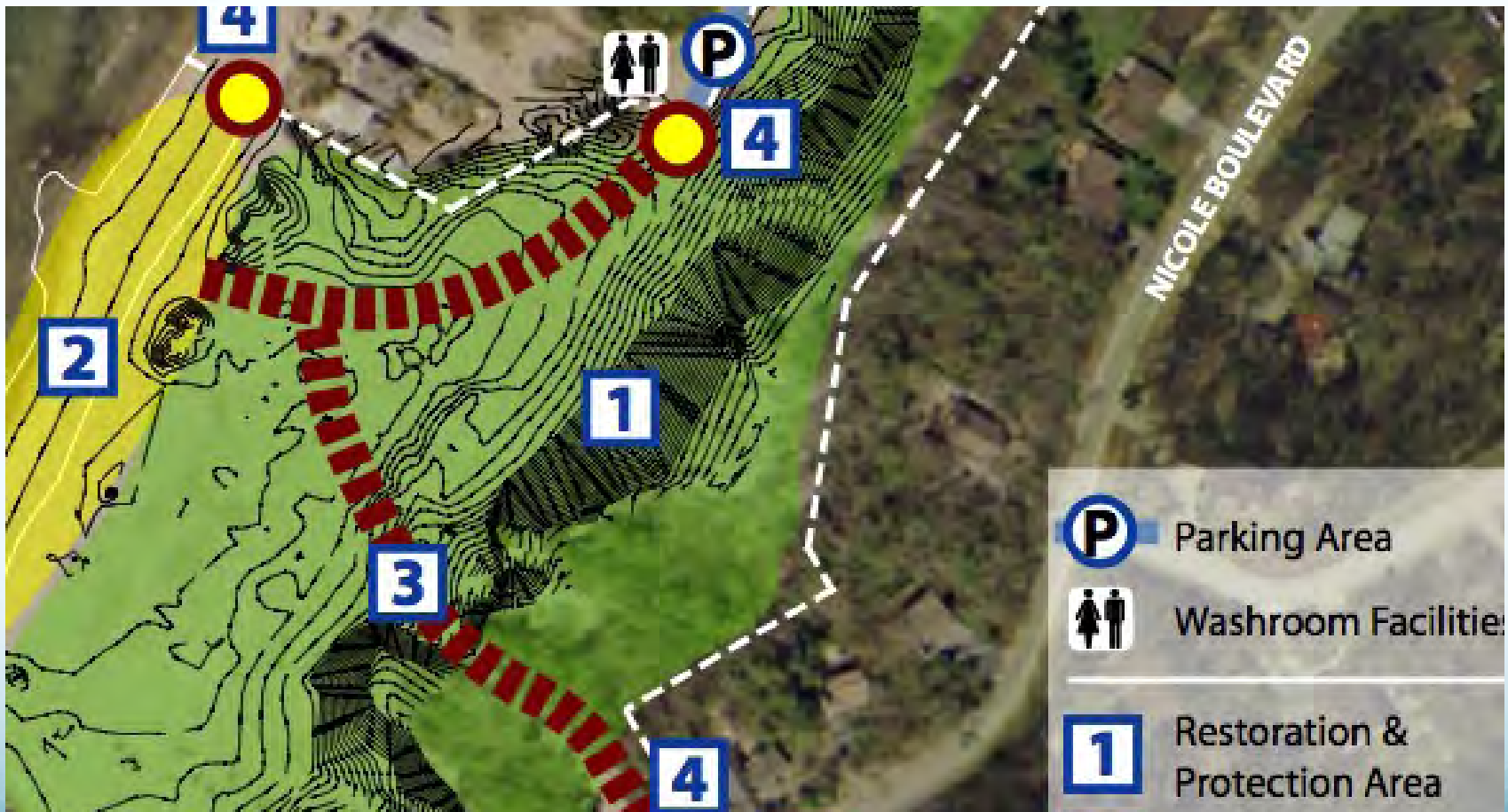
Current Issues

- January 2012 - Public Works provided a cost estimate of \$175K for the essential work required.
- As of February 22, 2012 revision to cost (\$75K to \$125K).
- Council allocated \$35K for the essential work required.
- Budget short fall of \$40K to \$90K.

Current Issues (continued)

- Bluewater Beach Management Plan and AMEC's Bluewater Beach Environmental Restoration Plans Phase 1 & 2 did not allow for a parallel beach boardwalk (limited access only).
- BDRAC never recommended a parallel beach boardwalk.

Bluewater Beach Management Plan 2006 - MAP



Revisions to the Four Year Plan 2011 to 2014

- Removal of main boardwalk (parallel to beach) for reallocation to other Tiny projects.
- Removal of existing snow fencing parallel to beach.
- Install a new fencing system (parallel to beach) as recommended by AMEC in Phase 1 and 2 section 4.1. & figure 6 (slide 13).
- Install a new snow fence system 6 to 10 feet south east from existing boardwalk as per notes of the Nov. 24 2011 site visit.

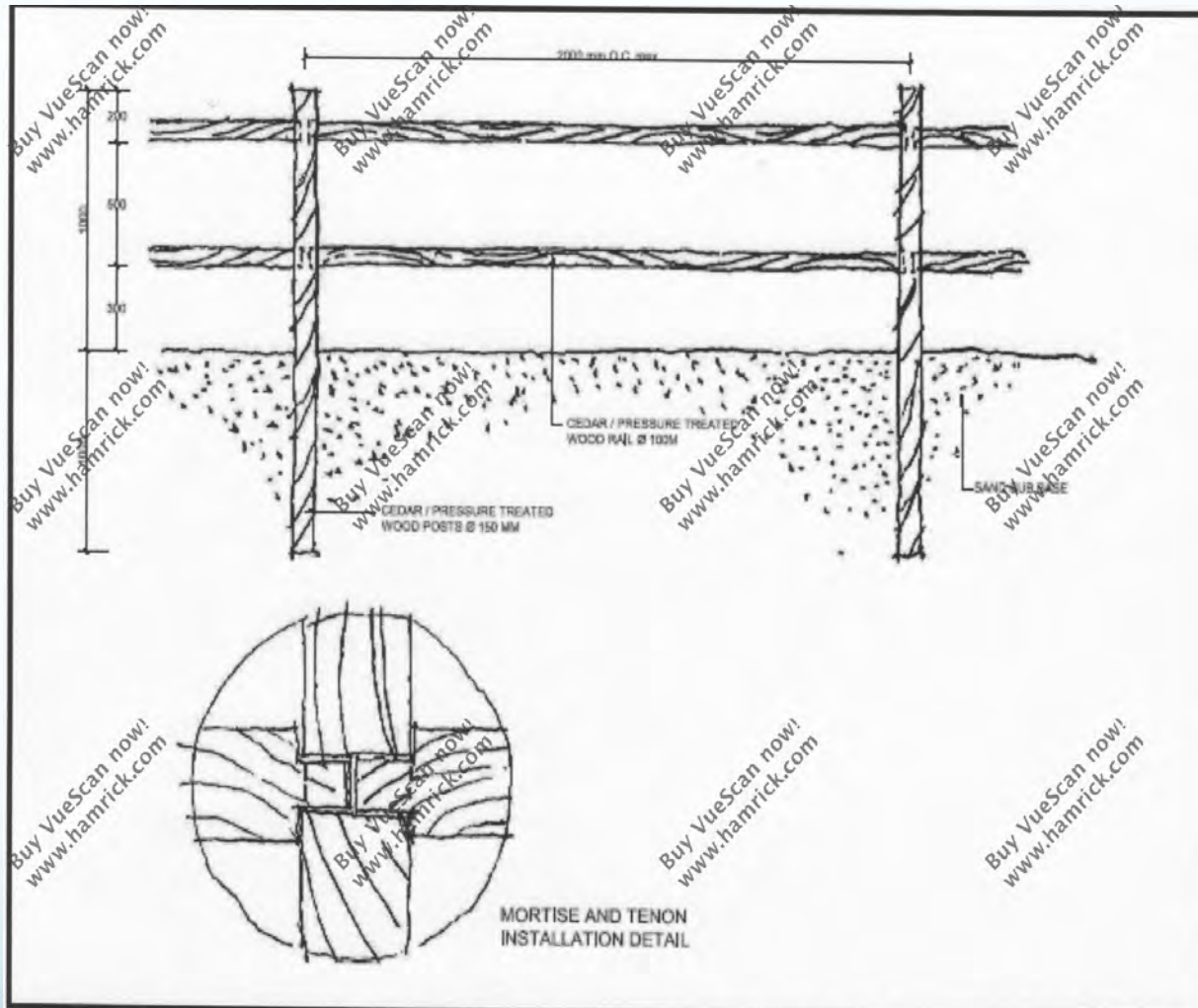


Figure 6. Farm fencing detail between beach and dune system and for the end of Trew Avenue.

Revisions to the Four Year Plan 2011 to 2014 (continued)

- Boardwalks should be raised approximately 0.5 meters above the ground as suggested by AMEC Phase 1 & 2 Section 4.5.1 to avoid sand blow build up.
- Alcoves and benching remove from scope of the project to keep costs manageable.
- Use of machinery (using the track of the removed/replaced boardwalks) will keep costs manageable.
- Minimal impact to the dunes will be experienced.

Revisions to the Four Year Plan 2011 to 2014 (continued)

- Implement back dune and boardwalk corrections at Nicole, as per minutes of Nov. 24, 2011.
- Significant back dune restoration will occur once back boardwalk has been relocated as suggested by BDRAC and subsequently approved by AMEC.
- Changes initiated will:
 - ensure public safety and reduce liability;
 - avoid sand overspill; and
 - reinstate a “Natural Park Setting”.

Revisions to the Four Year Plan 2011 to 2014 (continued)

- 2013 new fencing system (post & board) adjacent to Deanlea.
- 2013 second observation platform (Trew entrance).

Current Dune Status (2009 to 2011)

- Reduced negative human activity.
- Substantial new growth of beach “fore” dunes.
- Vegetation has developed significantly due to replanting of grasses and re-growth of plants, flowers and shrubs.
- Community involvement in transplanting grasses and curtailing invasive species.

Summary

- Due to the lack of adherence to the plans provided by Meridian/AMEC and the exorbitant cost associated in adjusting these deviations, BDRAC requires Council's interaction in addressing these corrections and providing the resources required.
- "Limited Access" (removal of beach boardwalk), which is typical in most dune restoration/protection endeavors will reduce the cost of the project and save a significant amount of ongoing maintenance cost to the Township.

Summary (continued)

- Relocation of the Nicole boardwalk will allow the back dune to stabilize and continue to restore itself while ensuring greater safety to the community.
- Cost savings will be significant to the township as resources will no longer be required to continually remove sand and repair the boardwalks due to sand encroachment.
- Reallocation of excess material to other community projects will decrease Township costs.

WIND BARRIER FENCE 2006





April 2007 South Beach Dune

January 2012 Beach Boardwalk & South Dune



January 2012 North Dune & Beach Boardwalk



February 2012 Beach Boardwalk





April 2011 Beach Boardwalk
Entrance from Nicole

Beach Boardwalk & North Dune 2011



February 2012 Beach Boardwalk & North Dune





February 2012 Beach Boardwalk
& North Dune

A photograph of a wooden boardwalk leading to the ocean. The boardwalk is made of light-colored wood and has a railing on both sides. The path is covered in snow and sand, indicating it has been walked on. The ocean is visible in the background under a clear sky.

February 2012 Beach Boardwalk Trew

May 2011

Back Dune Blowouts 2007



January 2012 – Contained Blowout Area





January 2012 South
Back Dune

Nicole Boardwalk 2007



2007 Nicole Boardwalk



Nicole Boardwalk January 2012



January 2012 Nicole Boardwalk



January 2012 Nicole Boardwalk





January 2012 Nicole Boardwalk

A wooden boardwalk with a railing overlooking a snowy landscape. The boardwalk is made of light-colored wood and has a railing with vertical posts and horizontal rails. The ground is covered in snow, and there are some dry grasses and branches visible. The scene is brightly lit, suggesting a sunny day.

January 2012 Nicole Boardwalk Lookout



January 2012 Lookout

January 2012 Nicole Boardwalk



A wooden boardwalk with railings is built on a sandy dune in a forest. The boardwalk is made of light-colored wooden planks and has a railing made of vertical posts and horizontal rails. The dune is covered in sand, dry leaves, and twigs. In the background, there are trees, some of which are bare, and a large log lies on the dune. The text "January 2012 Nicole Boardwalk" is overlaid in the center of the image in a yellow, serif font. There are also yellow and black striped caution markings on the boardwalk.

January 2012 Nicole Boardwalk



January 2012 Nicole Boardwalk

Hairy Puckoon



Little Bluestream Switchgrass



American Beach Grass



Dune Sandcherry



Path Forward

- Resolution of issues must be decided and acted on immediately, since the condition of the boardwalks and dune restoration are being seriously compromised.
- The BDRAC requests the Council of Tiny Township to allocate necessary resources for the required project corrections as communicated this evening and at previous meetings.
- Will the Council of Tiny Township assist in mandating corrections to the project, as outlined by the BDRAC?