

## Cape Elizabeth School Department

January 20, 2011

To: Pauline Aportria, Business Manager

From: Greg Marles, Director of Facilities

**RE: CEHS Bleachers** 

I have looked into the following options regarding the repairs and/or replacement of our existing bleacher system at CEHS. The State of Maine has adopted the International Buildings Code 2003 which goes into effect December, 2010 and regulates all phases of construction which includes bleachers. The Town of Cape Elizabeth is operating under the standards this year. The Town does not have requirements for the updating of replacement of the existing bleachers other than the requirements of the State of Maine Building Code.

I have also been in contact with Daniel Robbins, of Harriman regarding any requirements the State may have with the adoption of the Buildings Code (IBC 2003) and CEHS bleachers. Daniel has spoken to Richard McCarthy with the State Fire Marshall's Office regarding our issues. The topics were the following:

- Where maintenance and general repairs are required, the SFMO allows for such work without mandating full bleacher replacement.
- However, the bleachers remain non-code compliant, and the School District will remain at risk for complaints from the public for both life and accessibility deficiencies. The magnitude of the complaint will be considered and the appropriate measures will be taken at that time by the SFMO.
- There are no additional code changes that would require mandatory replacement of existing non-code compliant bleachers.

Our problem exists when the bleachers are not being extended fully causing a structural issue. The frame work for the model 100 Hussey Seating bleachers requires the bleachers to be fully extended and locked into position when in use. The original design of the bleachers frame only becomes fully supportive when completely extended allowing the bleacher deck to become part of the supporting structure.

The cost range to provide the repairs to our existing bleacher could range \$8,000.00 to \$9,000.00 based on information from Robert H Lord Company. These repairs do not address the missing bleacher guides, which allow for the bleachers to be pushed back in the closed position correctly. These guides keep the bleacher in alignment when being closed. The existing guides over the years have become damaged and were removed as Hussey Seating no longer manufactures the guides.

The existing bleachers guides do not affect the structural integrity of the existing bleachers, but it does cause issues with the locking mechanisms that lock the bleacher in

the extended position. When the bleachers are being closed, they can go off center due to the missing guides causing locking system to bend. This locking system prevents the rows from moving when they are fully extended. The bleacher movement can cause a safety concern for personal injury when people are walking up and down by allowing for movement of the steps and seats. Additionally, with the movement of the bleachers create pinch points throughout the bleachers. Since the guides are no longer available and to have custom guides constructed are very cost prohibitive; this will be a continual problem for the bleachers when it comes to locking into position.

I have researched the replacement cost of our existing bleachers and what effect it could have on our High School. The State Fire Marshall's Office had a conversation with Harriman on December 20, 2006 regarding this type of bleachers at South Portland High School which are the same model and vintage as ours.

Replacing our existing Hussey Seating would allow us to become compliant with ADA and Life Safety 101. The new systems used by Hussey Seating are modular in design giving us flexibility in the future. The estimated cost for replacement bleachers is \$142,000.00. The system we worked out would also allow for CEHS and Capers to be placed in the bleacher system at no additional cost then bleachers without wording.

The replacement cost breakdown:

Demolition of existing bleacher system	\$10,000.00
Installation of new bleacher system	\$120,000.00
CAD services	\$2,000.00
Electrical (drive motors)	\$10,000.00
	\$142,000.00

It would be my recommendation that the existing bleachers be replaced, as we do not have a way to address the locking mechanism and the missing guides, as the guides are no longer being manufactured. We will have continual problems with the locking mechanism without having guides keep the alignment correct when being closed. Personal injury is also a concern with the locking mechanism, allowing the bleachers to slide during use.

Respectfully,