Drinfel'd's Lemma

This diagram more-or-less commutes. Why?

(In the largest context within which it commutes, that of KTG's, the key is Drinfel'd's mystery lemma. So in some sense, the task is to remove the mystery from that lemma.)

Q. There is clearly a map

$$R \mathbb{B}_n \longrightarrow R \mathbb{W}_n.$$ Is there also a map going the other way? ("R" means "reduced", in the sense of Habegger-Lin).