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**From:** White, John  
**Sent:** Wednesday, July 29, 2009 10:41 AM  
**To:** Phelps, Don (Consultant); Abbott, Eldon (Consultant); Everett, Susan  
**Cc:** Laird, Linea  
**Subject:** Tunnel cross-section, constructability, TBM size

Hi there,

Just wanted convey a word of caution over the language we use in staff meetings to describe our challenges related to tunnel diameter and TBM size. I hope that we (and the entire WSDOT management team) are on the same page as to the need to come up with the best possible cross-section configuration options that maintain a tunnel outer diameter no greater than 54' - 55'. As we proceed towards reporting out on this issue in August and making decisions related to the RFP work, it is critical that we all maintain this goal of keeping it as small as possible while maintaining design criteria that WSDOT (and FHWA) can ultimately live with. As I described to Susan Everett yesterday, a cross-section with 11' lanes and one wider shoulder (maybe 6' rather than 8') may be more attractive than the 3-12-12-3 option that has gotten quite a bit of attention, so make sure we get as complete a menu as possible in terms of options that keep the tunnel diameter within our perceived maximum limits.

As far as statements in meetings, it sounds like there are a number of things being said subsequent to our last meeting with Herrenknecht that are better left unsaid at this point, as they add drama that we'd rather avoid. While there is a legitimate concern over the bounds of utilizing existing technology within our specific geologic conditions, making subjective statements that repeat one manufacturer's concerns is probably not a good approach, because they trickle through the organization and become bigger and more dramatic rumors. There are many reasons why we need to control the size of this tunnel, Herrenknecht's cautionary statements represent one of those.

John