## Exhibit 2



February 7, 2018

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Beaverton Planning Commission
Commissioner Kim Overhage, Chair
Commissioner Jennifer Nye, Vice Chair
Commissioner Scott Winter
Commissioner Terry Lawler
Commissioner Kaitlin North
Commissioner Adam Matar
Commissioner Gerry Uba

**Planning Division** 

Re: Verizon Whitford Wireless Facility at 7400 SW Scholls Ferry Road

At the January 24, 2018 hearing, the public hearing was continued and the record was reopened for Verizon to provide additional evidence on the following issues:

• With respect to the variance to reduce the southern setback to 44 feet, 10 inches, the commissioners' concern that, in the event of an extreme event that would cause the tower to break, that a portion of the tower would fall beyond the southern property line. The record indicates that the tower is engineered with a breakpoint at 40 feet.

To address that concern, Verizon submits Exhibit 15, which is a written analysis of the proposed tower design from Adrian McJunkin, a registered professional engineer and president of the engineering firm, Western Utility/Telecom, Inc.

Mr. McJunkin explains the assumptions for his analysis and provides expert insight on the likelihood of tower failure or of any portion of the tower ever striking the ground. His professional conclusion on p. 2 is that the structural failure of a monopole would rarely involve any portion striking the ground. He states that it is "highly unlikely that a 'structural failure' would include anything more than a visible bending, or warping, of the base or pole section."

 There was also a concern expressed that, in the event of a catastrophic event, reducing the setback to 44 feet 10 inches could result in a portion of the tower striking a tree on the subject property which could fall across the undeveloped right of way and onto the nearest neighbor's home.

As Exhibit 15, the engineering analysis, confirms, the possibility of any portion of the tower actually breaking off and falling is extremely unlikely. To further address this concern, Verizon notes that the record reflects that the undeveloped right of way adds 60 feet to the proposed 44 foot 10 inch setback, resulting in a separation of more than 100 feet from the neighbor's property line. As additional evidence, Verizon submits Exhibit 16, a tree survey that provides measurements of the height of the trees on the subject property to the south. The trees were measured by MD7's construction manager John Witt, using the Lecia Geo System tool on January 31, 2018. The trees that were measured are mapped on Sheet L1 of the revised drawings, submitted here as Exhibit 17. The tallest tree measured in this vicinity is 50 feet tall and the average tree height of the southern trees was between 40-45 feet, which would not reach the neighboring property if they were to fall.

 There was also an issue of whether a variance for the setback could be granted if the applicant did not consider other locations, where the setback variance would not be needed.

While the code does not require that the applicant submit evidence of the alternative locations considered as a part of the wireless facilities approval criteria, to further address the variance criterion that the special conditions and circumstances do not result from the actions of the applicant and such conditions and circumstances do not merely constitute financial hardship or inconvenience, Verizon submits Exhibit 18, which explains the alternate locations that were considered and why they were not pursued. As Exhibit 18 demonstrates, the other properties considered also had setback issues or were not available for lease by the owners for other reasons.

Also noted in Exhibit 18 is the fact that this property was selected and the application was filed when the property was still part of unincorporated Washington County, whose regulations would have included the undeveloped right of way in the setback calculations, further negating the claim that a setback challenged property was selected because for economic reasons.

- Another issue addressed by Exhibit 18 is the concern from the Commission that the major adjustment might not be needed because an additional tower could supply the coverage and capacity that would be lost by reducing the proposed tower height from 100 to 80 feet. Other locations were sought for this tower and also had setback challenges. Exhibit 18 demonstrates that there are not preferred or plentiful alternative sites in this residential search ring area for this tower. The same would be true for a second tower.
- There was a concern expressed at the January hearing about whether the collocation space on the 100 foot tower would be usable by another carrier. The code requires that the tower be designed for one additional antenna array. As the tower elevation page of the drawings indicates, the antenna height of the second array would be placed at 84 feet, which is still above the 80 foot tree line. There was also testimony at the January 24th hearing, that other carriers use equipment and frequencies that can travel greater distances and penetrate clutter, like tree tops, more effectively than those used another carrier.

Thank you for this opportunity to supplement the record to provide additional evidence on some areas of concern,

Sincerely,

Kim Allen, Wireless Policy Group, LLC Representative for Verizon Wireless