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### **Topsoil Volume Calculation & Determination**

The post construction topsoil volume was calculated using a computer aided design (CAD) software, which compared the surface of the pre-construction stockpile area, to the volumetric area of the stockpile once the topsoil had been placed. A breakdown of the survey process and calculation is as follows:

- Topo survey was conducted of the proposed topsoil stockpile area prior to construction as part of the site design process
- Topsoil was stripped from the disturbance area and stockpiled at the current location
- Topo survey was subsequently conducted at the topsoil stockpile using survey grade GPS equipment, gathering the toe position around the entire pile, as well as incremental elevation and position data across the entirety of the pile
- The surveyed perimeter of the topsoil stockpile was then processed using CAD software to create a 3D surface of the existing ground to determine the original surface area under the stockpile
- The survey data was further processed to create a 3D rendering of the stockpile, to include the variable height of the pile. A comparison report was completed using CAD software between the original grade surface and the 3D topsoil pile, to determine the calculated volume of 10,690 cubic yards