January 5th, 2024

To Whom It May Concern:

GSSI hired CAE Integration to design and build the core test fixtures and processes for our latest concrete GPR product, Flex NX. Although CAE Integration had extensive previous knowledge of our products and processes, Flex NX presented all kinds of new challenges since it was based on an entirely new technology platform. This meant new PCB's, all new hardware, all new software, and no history with regards to test procedures. On top of that, Flex NX was developed in iterative fashion, which meant constantly changing requirements, form factors and interfaces.

CAE Integration handled all the chaos with no problems, and they exceeded our expectations. They worked directly with our software and hardware teams to design and build the physical test fixtures that quickly and efficiently exercised all PCB's, radar functions and electrical interfaces. They knew where and when tests would be required and provided a true turnkey solution.

Some examples of their work included a multiple channel survey wheel encoder test module, a new test process utilizing MATLAB code which interfaced with our hardware to test antenna functionality, an electro-mechanical test cradle to test a complicated multi interface PCB with automated output, a mid-process sub-assembly test fixture for measure and tracking low power lasers to ensure FDA compliance, a custom fixture to measure sound output of a speaker component, a test track for encoder distance testing and a custom solution to increase burn-in test efficiency.

I highly recommend CAE Integration for any manufacturing, test, fixture development or quality engineering needs. Their broad background and strong technical abilities were a perfect fit for what we needed.

Sincerely,

Matt Harris

**Director of Product Design** 

