

TRIWAVE SYSTEMS

July 21, 2019

Dr. Craig Scratchley
Dr. Andrew Rawicz
School of Engineering Science
Simon Fraser University
Burnaby, British Columbia
V5A 1S6

RE: ENSC 405W/440 Project Proposal for Arkriveia Beacon

Dear Dr. Scratchley and Dr. Rawicz,

The following document contains the Project Proposal for the Arkriveia Beacon - The Indoor Location Rescue System created by TRIWAVE SYSTEMS. The Arkriveia Beacon focuses on locating personnel trapped in buildings during small scale disasters such as fires and low magnitude earthquakes. This is achieved by incorporating a combination of advanced Ultra-wideband radio modules and microcontrollers to create a dependable indoor positioning system using trilateration methods. We believe our system allows search and rescue operator to safely and reliably locate victims during an emergency or disaster. Therefore, lowering the search and rescue time and increasing the chances of rescue and survival for trapped victims.

In the attached project proposal an overview of the proposed solution is presented. Current market and competitions as well as project budgets and funding are examined. Furthermore, analysis of costs, benefits and potential risks of the Arkivia Beacon product are performed. In addition, an overview of the timeline planned for this project and a brief introduction to the project team members will be provided.

TRIWAVE SYSTEMS is composed of five dedicated and talented senior engineering students. The members include Keith Leung, Jeffrey Yeung, Scott Checko, Ryne Watterson, and Jerry Liu. Coming from various engineering backgrounds with a diverse set of skills and experiences, we believe that our product will truly provide a layer of safety and reliability to search and rescue operations.

Thank you for taking the time to review our project proposal document. If there are any further questions or comments, please direct them to our Chief Communications Officer Jeffrey Yeung at zjyeung@sfu.ca

Sincerely,
Jerry Liu
Chief Executive Officer



Enclosed: Project Proposal for the Arkriveia Beacon