February 24, 2016

Dr. Qiquan Qiao Graduate Coordinator and Associate Professor Electrical Engineering and Computer Science J Lohr College of Engineering South Dakota State University Brookings, SD 57006

RE: Letter of Collaboration for SDBOR R&D Collaboration Grant Program

Dear Dr. Qiao,

It is with great enthusiasm and interest that we support and collaborate on your SDBOR R&D Collaboration Grant Program proposal titled "Center for Precision Agriculture Sensing Systems (C-PASS)". The research that you propose is extremely timely and relevant to Raven Industries. We believe that the proposed center has the potential to significantly improve the efficiency of precision agriculture; the anticipated results will also support on-going R&D efforts for Raven Industries.

Our mission is "to help farmers feed the world". We do this by providing world-class machine controls systems that accurately and efficiently assist growers' needs. The Collaboration Grant on C-PASS among Raven Industries, South Dakota State University (SDSU), South Dakota School of Mines & Technology (SDSMT) and the University of South Dakota (USD) will allow us to make substantive progress in the precision agriculture industry with mutual interest. We understand the importance and agricultural impact of this collaborative effort. This project will help contribute to agronomic management decisions that can not only have a positive impact on yields (helping farmers feed the world), but also allowing for more efficient use of chemicals and machinery.

Raven is willing to be an industry partner for this collaborative project. Areas in which Raven may be involved are prototype support, testing of sensor probes, wireless networks and systems, and new remote sensing technologies. Once the proposed critical elements of the project are successfully demonstrated, Raven will be interested in further collaboration with university technology transfer offices about possible licensing and commercialization opportunities. Currently, Raven and SDSU have formed a Master Services Agreement. Raven is also interested in continuing to support and collaborate with C-PASS. We will research and investigate other joint proposal opportunities with C-PASS along with involvement from other agencies including Small Business Innovation Research (SBIR), Small Business Technology Transfer (STTR) Programs, NSF Partnerships for Innovation, and NSF Industry-University Cooperative Research Centers (I/UCRC).

I look forward to collaborating with you and your team on all phases of your proposed research in precision agriculture. I expect that our collaboration may include discussions, site visits, student internships, joint proposals and license agreements. I hope this project will lead to a successful long-term partnership between Raven and C-PASS. I wish you success in this SDBOR grant submission.

Sincerely

Shane Swedlund

Engineering Manager - BDC

Raven Industries - Applied Technology

605.212.6800 / shane.swedlund@ravenind.com