Danlaw Inc.
41131 Vincenti CT
Novi, MI 48375

Ref.

Form 442 Confirmation Number: EL777995
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Narrative statement for Question 7

a) The license application is for the testing of automotive and Road Side CV2X radio and application performance testing. This testing will be performed in 2 parts.
    a. A PlugFest event to be held in June of 2021 where multiple manufactures of equipment will come together to test performance and interoperability. This testing will be Performed at, and around, the Danlaw facility located at 41131 Vincenti CT, Novi, MI
    b. Ongoing testing over the coming years to support the development of connected vehicle devices and applications. This testing includes work for clients such as the automotive OEMS, Tier 1 suppliers, local Departments of Transportation and the United States Department of Transportation.

    The on-vehicle equipment consists of a computing device that contains a CV2X radio transceiver module, a microprocessor, and GNSS receiver. The device is installed in a vehicle such that it broadcasts the vehicles position, heading, plus other relevant data in a broadcast fashion. The same device, also receives similar signals from other, surrounding vehicles, plus signals from Roadside mounted devices, processes these signals, and determines if there are any immediate safety concerns that should be brought to the attention of the driver.

    The Roadside equipment, consists of a computing device that contains a CV2X radio transceiver module, a microprocessor, and GNSS receiver broadcasts a digital map of the intersection at which it is located along with the status of an associated traffic signal. The Roadside device is also capable of broadcasting other useful messages as define in the SAE standard J2735. Although the Roadside equipment is generally designed to be permanently installed, for this application the Roadside units will be located on temporary, movable structures and activated only when active testing is taking place. These will not be located on public roadways.

b) The specific objectives to meet are:
    a. To show that the Danlaw on-vehicle and roadside devices are interoperable with competitive devices in the marketplace.
    b. To show that the CV2X technology is suitable for use in safety critical automotive applications.

c) Danlaw is the leading supplier of V2X equipment and test services. Our work is essential to the progression of both the underlying radio technology and the applications that use them. This work continues the work started on DSRC and is intended to show that the alternative CV2X technology is at least reliable for use in safety applications. This work also expands the number of applications that are available to use the technology. Danlaw's customers include the USDOT, State and County DoTs, and automotive OEMs.