

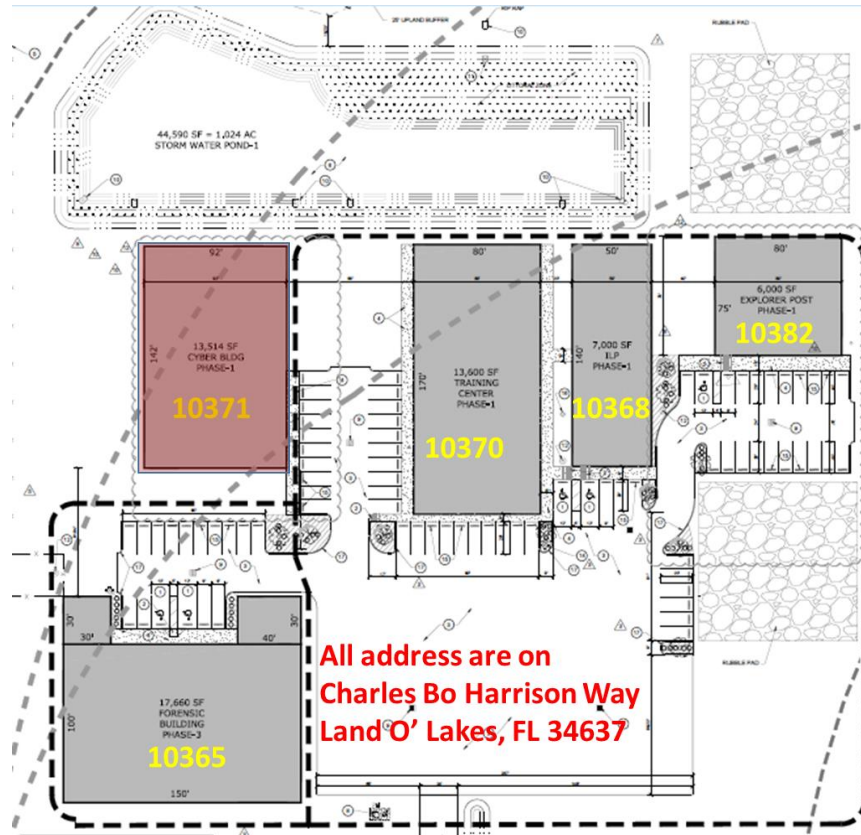
Attachment A

Faraday Chamber for the FIRST Cybersecurity/SAR Building

SCOPE OF WORK

The primary scope of work for the FIRST project is the successful delivery, installation, and configuration of a Faraday chamber for the FIRST Cybersecurity/SAR building at the Pasco Sheriff's Office (PSO) including as outlined below. Chamber to be installed in area of building where indicated in Attachment B.

Building/Site Overview



1.0 FARADAY CHAMBER REQUIREMENTS

The proposed system will provide attenuation as follows:

Magnetic Field – 20 dB at 1 KHz rising to 100 dB at 200 KHz

Electric Field – 100 dB from 200 KHz to 50 MHz

Planewave Field – 100 dB from 50 MHz to 10 GHz

Ability to block 2G, 3G, 4G, 5G, LTE, Bluetooth 1/2/3, WiFi 2.4Ghz, WiFi 5Ghz, SatNav, GPS, RFID (HF), RFID (Active), RFID (UHF).

The proposed system shall consist of the following:

Test Room – approximately 10' W x 10' L x 8' H

Vestibule – approximately 3' W x 3' L x 8' H (a section contained within corner of test room)

The shielded chamber will have the following specifications:

- Completely enclosed chamber; please quote chamber with top half copper mesh as alternate (see images provided below as examples for reference only).
- Polyvinyl and masonite underlayment used as an isolating barrier
- 1/8" vinyl filler tile installed between floor flat channel
- Two (2) RF shielded personnel doors with clear opening 3 ft. x 7 ft., Type RCM-154.
- With heavy duty interlock switch. Doors shall be equipped with three heavy duty hinges and a three-point latching system. RF doors will include interlock system of Red & Green lights, and 4-wire filter. *Electrical wiring can be performed by PSO given requirements and specifications are coordinated in advance by VENDOR.*
- RF air vents (12 in. x 12 in.) as required. Any air vent(s) and return(s) shall provide for same shielded protections as the rest of the chamber to include but not limited to all Bluetooth frequencies high & low, all WIFI, and cellular frequencies. *Mechanical work/ducting to the chamber can be provided by PSO given requirements and specifications are coordinated in advance by VENDOR.*
- One (1) 3/8" Ø brass ground stud used as a single point ground
- Four (4) dual (2-wire) 30 ampere power filters, 110V, 60 Hz service
- Four (4) 10/100/1000 Base-T Ethernet GigaFoil convertor (CAT6)
- Three (3) LED lights (2- Main Room, 1 – Vestibule)
- Structural members installed at RF ceiling framing members to enable enclosure to be a free-standing unit
- Engineering drawings, Bill of Materials, and Installation drawings shall be furnished
- RF attenuation test performed at completion of the installation of basic RF enclosure. A test will be performed in accordance with MIL-STD-285 and at the frequencies of 1 GHz and 10 GHz and a Test Report issued

Fully enclosed example:



Copper mesh example:

