

TAMC Culvert Data Collection Pilot Project Equipment Suggestions

Though not required, the following equipment recommendations will allow agencies to collect culvert data accurately at minimal cost:

- Tablet or laptop
- GPS (if not built in) that outputs NMEA-0183
 - The three options below have proved to work well:
 - [GlobalSat BU-353-54 USB corded](#) (\$26 on Amazon)
 - [GlobalSat ND 105C micro-USB](#) (\$29 on Amazon)
 - [GlobalSat BT-821C Bluetooth](#) (\$45 on Amazon)
- Windows 10 tablet
 - The Center for Technology & Training has been testing the MobileDemand xTablet T1600 Ruggedized tablet. It runs the Roadsoft Laptop Data Collector program well and has a number of features well suited for this project:
 - Windows 10 Pro
 - Intel i5 processor
 - 4' Drop MIL-STD-810G, IP65 Sealed
 - Built-in GPS
 - Built-in camera
 - Sunlight viewable, shatter-proof screen
 - Attached stylus, handle, and flexible rear hand strap
 - Docking station available
 - On-screen keyboard or Bluetooth keyboard
 - www.ruggedtabletpc.com
 - Contact Amy Garman, MobileDemand North Region Inside Sales, at 1-319-739-3219 or agarman@mobiledemand.com
 - ***Mention that this will be for the Michigan TAMC Culvert Pilot Project and Amy will offer a discount***
- Flash drive
- Safety equipment
 - It is up to the agency to determine what PPE is required. As a minimum, we recommend a Class 2 safety vest and an amber roof-top strobe as workers will be working in the right of way.



- Laser distance measure for measuring culvert length (should be capable of measure approximately 150')
The following option (or a similar device) would work well:
 - [Bosch GLM 50c](#) (\$119 on Amazon)
- Laser auto level and grade rod for measuring depth of cover
The following option (or a similar device) would work well:
 - [Bosch GLL 55](#) (\$129 on Amazon)
- Metal detector
- Probe rod/shovel
- Tape measure
- Flashlight
- Magnet for determining if metal culvert is galvanized or aluminum
- Waders

