Federal Aviation Administration – William J. Hughes Technical Center

National Airport Pavement Test Facility (NAPTF)

Contract No: 692M15-20-D-00004

ARA TO 005 Structural Airport Pavement NDT and Evaluation

5.1.1.2 CC9 NDT Data Collection (Task 4.1.1.2)

CC9 NDT Survey Notes

Device: GPR – Cart

Survey: Weekly Trafficking 20210802

Date: 08/05/2021

Operators: Christopher Mazzotta

Folder Name: 20210805 GPR Cart CC9 Weekly Raw Data

File Format: DZT

**General Notes**

* Data collected along the ten (10) Standard Transverse Test Lines at Stations.
* Cart is aligned with white transverse line and direction of travel is from Offset -26.66 ft. to +26.66 ft. (North to South).
* Survey starts and stops with the antenna centered on the yellow longitudinal edge of test area lines.
* Data collected with 900 MHz and 2.6 GHz ground-coupled antennas.
* Calibration of DMI performed before data collection with each antenna and value recorded.

**Settings**

Parameter 900 MHz Antenna 2.6 GHz Antenna

Transmit Rate 100 KHz 100 KHz

Samples/Scan 512 512

Bits/Sample 16 16

Range 15 ns 8 ns

Dielectric 4.00 (default) 4.00 (default)

Rate (Scans/Second) 100 (default) 100 (default)

Scans/Unit 30 scans/ft. 90 scans/ft.

Gain Points 3 2

Vertical Low Pass – LPIIR 2500 MHz 0

Vertical High Pass – HPIIR 225 MHz 10 MHz

Vertical Low Pass – LPFIR 0 5000 MHz

Vertical High Pass – HPFIR 0 400 MHz

**DMI Calibration**

Distance 900 MHz Antenna 2.6 GHz Antenna

10.00 ft. -496.80 -497.00

**Data Collection File Numbers**

Location 900 MHz Antenna 2.6 GHz Antenna

Station 0+15 LFS-1 050 040

Station 0+30 LFS-1 051 041

Station 0+75 LFS-2 052 042

Station 0+90 LFS-2 053 043

Station 1+35 LFC-3 054 044

Station 1+50 LFC-3 055 045

Station 1+95 LFC-4 056 046

Station 2+10 LFC-4 057 047

Station 2+55 LFC-5 058 048

Station 2+70 LFC-5 059 049

**Survey Notes**

* Pavement layers are distinctly visible in SIR-3000 real time visualization (example: In Section 1, the pavement layer interfaces are clearly visible at a depths between 12.5” and 15”).