RADIO TOWER TEST PLANS

1. DEVICE NAMING COORDINATION

1.1. The System Integrator shall coordinate with the TMC/ROC to identify the device names for each device.

1.2. The System Integrator shall then send a request to TOTS to identify the network name, IP address, and any pertinent configuration information.

2. EXPLANATION – STANDALONE (SALT) TESTING

2.1. The System Integrator shall work with the DEVICE VENDOR (if required by the testing form) and complete the NDOT specified SALT tests (non-network) on each unit of equipment after installation.

2.2. Conduct SALT testing on each unit of equipment as outlined on the NDOT provided testing form.

2.3. The System Integrator shall coordinate through the Resident Engineer and the Construction Crew to have an appropriate NDOT representative present for the onsite inspection.

2.4. The System Integrator shall submit the DEVICE vendor commissioning documents with the SALT testing to the Engineer for review and approval.

2.5. Supply a bucket truck and operator, or suitable equivalent equipment necessary to carry out procedures as required by the testing documents, at no direct payment.

RADIO TOWER SALT PROCEDURE

TEST #	SALT TEST PROCEDURE	EXPECTED RESULT	PASS / FAIL
Radio Tower Name:		**IP Address:**	**GPS:**
TOTS Network Name:		**Associated Cabinet Name:**	
Purpose and General Verification			
System Integrator: *This SALT tests the proper construction of a fully furnished and operable Radio Tower. The system integrator will use necessary equipment to perform this test. Using the manufacture's guidelines and other reference material, the integrator will be able to verify the Radio Tower is fully furnished and operable.* ***General Verification****: For each test below, complete the Radio Tower SALT Matrix, circling the "Pass" or "Fail" in the appropriate cell. Only indicate a "Pass" on this form if the entire matrix column related to the tested function passes for EACH Radio Tower being tested.*			
Radio Tower Information			
1.	Verify proper documentation from the regulating authorities for the proposed site has been received. For example: • US Forest Service or Bureau of Land Management • Planning commission (local jurisdiction) • Stamped structural plan sets (tower and foundation)	Proper documentation has been delivered to appropriate NDOT personnel.	Pass / Fail
Structure Verification			
2.	Verify Radio Tower meets internal and external dimensions and features.	Radio Tower meets specified internal and external dimensions and features as specified on the plans.	Pass / Fail
3.	Verify all labeling is accurate and conforms to the current NDOT Std. Plan.	All labeling conforms to the current NDOT Std. Plan.	Pass / Fail
4.	Using a meter, verify the building is properly bonded to earth ground.	Meter reading of 5 Ohms or less.	Pass / Fail
5.	Verify building is bonded to external ground system.	Building is bonded to external ground system.	Pass / Fail
6.	Verify all exothermic weld bonds are properly welded.	Exothermic weld bonds are verified for proper adhesion.	Pass / Fail
7.	Verify the installation of bolts in the required and expected locations.	Bolts are installed in the proper locations.	Pass / Fail
8.	Verify all bolts are torqued to manufacturer's recommendations.	All bolts are torqued to manufacturer's recommendations.	Pass / Fail
Equipment Verification			

TEST #	SALT TEST PROCEDURE	EXPECTED RESULT	PASS / FAIL
9.	Verify the installation of safety climb equipment which includes but is not limited to a safety climb cable, safety climb cage, and safety climb ladder.	The safety climb equipment, as specified in the plans, is installed and is functionally safe for use.	Pass / Fail
10.	Verify the additional ordered items specified in the plans are mounted correctly.	The additional ordered items are mounted correctly.	Pass / Fail
11.	Verify the additional ordered items specified in the plans are functional.	The additional ordered items are functional.	Pass / Fail

Signatures

DATE	**AGENCY/FIRM**	**PERFORMED BY** (Print Name) (Integrator)	**INTL**	**AGENCY/FIRM**	**WITNESSED BY** (Print Name) (NDOT)	**INTL**

Integrator Signature	
NDOT RE Signature	
NDOT TOTS Signature	

3. **EXPLANATION - SUBSYSTEM (SST) TESTING**

3.1. ***DOES NOT APPLY TO THIS SYSTEM AS IT DOES NOT CONNECT INTO THE NETWORK OR BACK TO THE TMC/ROC***