



SARASOTA COUNTY FIRE DEPARTMENT

TWO-WAY COMMUNICATION ENHANCEMENT SYSTEMS



DAS / BDA

B21 (1 of 4)

THE FOLLOWING CHECKLIST IS INTENDED TO ASSIST YOU IN THE PREPARATION OF YOUR DRAWINGS. THIS CHECK SHEET IDENTIFIES THE MINIMUM REQUIREMENT FOR THE INITIAL PLAN REVIEW WITH SARASOTA COUNTY FIRE PREVENTION. THIS CHECK LIST IN NO WAY DETAILS ALL OF THE REQUIREMENTS THAT MAY BE NECESSARY FOR A COMPLETE CODE COMPLIANT SYSTEM. PLEASE COMPLETE AND CHECK OFF EACH ITEM AND INCLUDE IT WITH YOUR PERMIT APPLICATION FOR REVIEW. PARTIAL APPLICATIONS WILL BE RETURNED AND SUBJECT TO A \$50.00 PLAN REVIEW FEE.

AS PER THE FLORIDA FIRE PREVENTION CODE NFPA 1- 11.10.1 TWO-WAY RADIO COMMUNICATION ENHANCEMENT SYSTEMS. IN ALL NEW AND EXISTING BUILDINGS, MINIMUM RADIO SIGNAL STRENGTH FOR FIRE DEPARTMENT COMMUNICATIONS SHALL BE MAINTAINED AT A LEVEL DETERMINED BY THE AHJ.

ENGINEER & CONTRACTOR QUALIFICATIONS:

- 1 **ENGINEER:** THE SYSTEM DESIGNER SHALL BE COMPLETED BY A FLORIDA LICENSED PROFESSIONAL ENGINEER. ALL DESIGN DOCUMENTS SHALL BE SIGNED AND SEALED.
- CONTRACTOR:** THE LEAD INSTALLATION PERSONNEL AND PERSONNEL CONDUCTING RADIO SYSTEM TEST SHALL BE QUALIFIED TO PERFORM SUCH WORK AND HOLD A CURRENT (FCC GENERAL LICENSE) AND LOW VOLTAGE LICENSE AS REQUIRED BY THE SCOPE OF WORK BEING PERFORMED.

MINIMUM REQUIREMENTS

“DRAWING SHALL SHOW YOUR SCOPE OF WORK ONLY - ALL UNRELATED WORK SHALL BE REMOVED FROM THE DRAWINGS”

- 2 ALL DRAWINGS, SPECIFICATIONS, REPORTS OR DOCUMENTS PREPARED SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED DESIGN PROFESSIONAL.
- 3 THE BUILDING IS (NEW) _____ OR (EXISTING) _____ PLEASE IDENTIFY ON THE DRAWINGS.

INITIAL & FINAL SURVEY TEST

- 4 A PRELIMINARY SITE SURVEY TEST SHALL BE COMPLETED TO DETERMINE THE AVAILABLE SIGNAL STRENGTH. EXCEPTION: WHEN A RADIO ENHANCEMENT SYSTEM IS BEING PROVIDED AND WILL BE SHOWN ON THE RADIO COMMUNICATION ENHANCEMENT DRAWING, A FINAL RADIO SIGNAL TEST SHALL BE PROVIDED PRIOR TO FINAL FIRE INSPECTION AND ALL DRAWINGS UPDATED.

THE SURVEY TESTING SHALL BE IN ACCORDANCE TO NFPA 72-14.4.10.3. WITH A GRID IS OVERLAID ONTO A FLOOR AREA TO PROVIDE 20 GRID CELLS. WITH A MINIMUM GRID CELL DIMENSION OF 20FT X AND A MAXIMUM GRID DIMENSION OF 80FT. WILL SUFFICE TO ENCOMPASS THE ENTIRE FLOOR AREA.

NEW BUILDING

- (A) THE INITIAL CONSTRUCTION DRAWINGS SHALL INCLUDE A RADIO COMMUNICATION ENHANCEMENT DRAWING OR STATEMENT ON THE LIFE SAFETY DRAWINGS THAT IDENTIFIES THE REQUIREMENTS FOR RADIO COMMUNICATION ENHANCEMENT SYSTEM TESTING FOR (A) CRITICAL AREAS AND (B) NON-CRITICAL AREAS. THE FINAL DRAWING WILL BE APPROVED AND USED AS THE MINIMUM DESIGN REQUIREMENTS FOR OBTAINING A FIRE INSTALLATION PERMIT.
- (B) IF A RADIO SYSTEM IS REQUIRED BASED UPON THE INITIAL SURVEY TEST AND, OR COMPLETENESS TEST, THE INSTALLING CONTRACTOR SHALL USE THE APPROVED COMMUNICATION DRAWINGS STATED ABOVE THAT HAVE BEEN REVIEWED AND APPROVED DURING CONSTRUCTION PERMITTING TO DESIGN AND ENGINEER THE SYSTEM.
- (C) THE DRAWINGS SHALL IDENTIFY THE SIGNAL TEST RESULTS FOR ALL AREAS OF THE BUILDING.
- (D) A SEPARATE FIRE RADIO COMMUNICATION REVIEW AND PERMIT ARE REQUIRED OF THE INSTALLING COMPANY.
- (E) A FINAL RADIO SIGNAL TEST REPORT SHALL BE PROVIDED PRIOR TO FINAL FIRE INSPECTION AND ALL DRAWINGS UPDATED.

EXISTING BUILDING

- (A) IF A RADIO SYSTEM IS REQUIRED BASED UPON THE INITIAL SURVEY TEST, THE ENGINEER SHALL SUBMIT A COMPLETE SET OF DRAWINGS THAT IDENTIFIES ALL (A) CRITICAL AREAS AND (B) NON-CRITICAL AREAS. THE FINAL DRAWING WILL BE APPROVED AND USED AS THE MINIMUM DESIGN REQUIREMENTS FOR OBTAINING A FIRE INSTALLATION PERMIT.
- (B) THE DRAWINGS SHALL IDENTIFY THE SIGNAL TEST RESULTS FOR THE BUILDING.
- (C) A SEPARATE FIRE RADIO COMMUNICATION REVIEW AND PERMIT ARE REQUIRED OF THE INSTALLING COMPANY.
- (D) A FINAL RADIO SIGNAL TEST REPORT SHALL BE PROVIDED PRIOR TO FINAL FIRE INSPECTION AND ALL DRAWINGS UPDATED.

NOTE: WE HAVE PROVIDED A PRELIMINARY LIST OF AREAS DEEMED CRITICAL IN THIS CHECK SHEET. FIRE PLAN REVIEW WILL VERIFY THE PRELIMINARY DRAWINGS AT CONSTRUCTION PLAN REVIEW FOR VERIFICATION OF CRITICAL AND NON-CRITICAL AREAS.

DRAWINGS:

- 5 THREE (3) SETS OF DRAWINGS MINIMUM ALONG WITH THE REQUIRED SPECIFICATIONS, CALCULATIONS. PLANS SHALL BE SUBMITTED IN ACCORDANCE WITH APPROPRIATE PLANS CHECKLIST AS LISTED HERE PLEASE INCLUDE APPROPRIATE PLANS CHECKLIST WITH A MAXIMUM SHEET SIZE 30" X 42".
- 6 PROJECT NAME, ADDRESS, CITY AND STATE SHALL BE SHOWN ON EACH DRAWING.
- 7 CONTRACTOR NAME, ADDRESS, CITY, STATE AND LICENSE NUMBER SHALL BE SHOWN ON EACH DRAWING.
- 8 SCOPE OF WORK, NOTES.
- 9 SCALE – A GRAPHIC REPRESENTATION OF THE SCALE USED ON ALL PLANS.
- 10 NORTH ARROW - MUST APPEAR ON EVERY SHEET SHOWING A PORTION OF THE SITE.
- 11 A KEY PLAN SHALL BE REQUIRED AS NEEDED.
- 12 DATE - THE DATE OF THE PLANS ALONG WITH ANY SUBSEQUENT REVISIONS MUST BE NOTED.
- 13 SHEET NUMBER - EACH SHEET MUST SHOW THE SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS INCLUDED, AS WELL AS CLEARLY LABELED MATCH LINES TO SHOW WHERE OTHER SHEETS MATCH OR ADJOIN TO EACH OTHER.
- 14 COMPLETE, CURRENT MANUFACTURER'S SPECIFICATION AND INSTALLATION SHEETS ARE ATTACHED FOR ALL CONTROL UNITS, COMPONENTS, APPLIANCES, DEVICES, MODULES AND RELAYS LISTED ON LEGEND.
- 15 IS THE SYSTEM CAPABLE OF UPGRADE, TO ALLOW FOR INSTANCES WHERE THE JURISDICTION CHANGES OR ADDS SYSTEM FREQUENCIES, IN ORDER TO MAINTAIN RADIO SYSTEM COVERAGE AS ORIGINALLY DESIGNED, IN ACCORDANCE WITH NFPA 72: 24.5.2.4.2.

DESIGN

- 16 ALL SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENTLY ADOPTED FLORIDA FIRE PREVENTION CODE, NFPA 1221, NFPA 72, NEC 70, AND ALL REFERENCED CODES AND STANDARDS CURRENTLY ADOPTED.
- 17 A PRELIMINARY SITE SURVEY TEST SHALL BE COMPLETED TO MAKE A DETERMINE THE AVAILABLE SIGNAL STRENGTH.
- 18 THE DRAWINGS SHALL IDENTIFY ALL ROOMS & SPACES BY NAME AND THEIR USE.
- 19 IF THERE IS A FIRE COMMAND ROOM, IS THERE A DEDICATED MONITORING PANEL PROVIDED IN THE FIRE COMMAND CENTER TO ANNUNCIATE THE STATUS OF ALL SIGNAL BOOSTER LOCATIONS, AS PER NFPA 72: 24.5.2.6.2? THE MONITORING PANEL SHALL PROVIDE VISUAL AND LABELED INDICATION OF THE FOLLOWING FOR EACH SIGNAL BOOSTER: (1) NORMAL AC POWER (2) SIGNAL BOOSTER TROUBLE (3) LOSS OF NORMAL AC POWER (4) FAILURE OF BATTERY CHARGER (5) LOW-BATTERY CAPACITY.
- 20 **RADIO COVERAGE THROUGHOUT THE BUILDING** - THE BUILDING SHALL HAVE A MINIMUM OF:
 - (A) **CRITICAL AREAS RADIO COVERAGE 99%:**
ALL CRITICAL AREAS SUCH AS THE FIRE COMMAND CENTER(S), THE FIRE PUMP ROOM(S), EXIT STAIRS, EXIT PASSAGEWAYS, ELEVATOR, ELEVATOR LOBBIES, STANDPIPE CABINETS, SPRINKLER SECTIONAL VALVE LOCATIONS, AND OTHER AREAS DEEMED CRITICAL BY THE AUTHORITY HAVING JURISDICTION SHALL HAVE A MINIMUM OF 99% FLOOR AREA RADIO COVERAGE IN ACCORDANCE WITH NFPA 72: 24.5.2.2.1.
 - (B) **NON-CRITICAL AREAS RADIO COVERAGE 90%:**
SHALL HAVE A MINIMUM OF 90% FLOOR AREA RADIO COVERAGE IN ACCORDANCE WITH NFPA 72: 24.5.2.2.2 STATED ON PLANS.
- 21 A MINIMUM **INBOUND SIGNAL STRENGTH** OF -95 DBM, OR OTHER SIGNAL STRENGTH AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION SHOWN THROUGHOUT THE COVERAGE AREA IN ACCORDANCE WITH NFPA 72: 24.5.2.3.1 STATED ON PLANS.
- 22 A MINIMUM **OUTBOUND SIGNAL STRENGTH** OF -95 DBM AT THE DONOR SITE, OR OTHER SIGNAL STRENGTH AS REQUIRED BY THE AUTHORITY HAVING JURISDICTION, SHALL BE PROVIDED FROM THE COVERAGE AREA IN ACCORDANCE WITH NFPA 72: 24.5.2.3.2 STATED ON PLANS.
- 23 IS THE RADIO ENHANCEMENT SYSTEM EQUIPPED WITH AN FCC COMPLIANT CLASS "B" SIGNAL BOOSTER (BI-DIRECTIONAL AMPLIFIER / DISTRIBUTED ANTENNA SYSTEM) OR SYSTEMS OTHERWISE APPROVED.
- 24 ARE ALL COMPONENTS PROPERLY ENCLOSED; SUCH AS REPEATERS, TRANSMITTERS, RECEIVERS, SIGNAL BOOSTER COMPONENTS, AND BATTERY SYSTEM COMPONENTS IN A NEMA 4- OR 4X-TYPE ENCLOSURE(S), AS PER NFPA 72: 24.5.2.5.2.
- 25 ARE THE RADIO ENHANCEMENT SYSTEM AND ALL ACTIVE CONTROLS LOCATED IN A PLACE THAT MEETS ALL ENVIRONMENTAL REQUIREMENTS WITH REGARDS TO HEATING, VENTILATION, COOLING, AND HUMIDITY REQUIREMENTS OF THE MANUFACTURER SPECIFICATIONS.
- 26 ARE THE RADIO ENHANCEMENT SYSTEM AND ALL ACTIVE CONTROLS LOCATED IN AN AREA FREE FROM HAZARDS.
- 27 IF A SIGNAL BOOSTER HAS BEEN INSTALLED, IS IT FCC CERTIFICATED AND COMPATIBLE WITH BOTH ANALOG AND DIGITAL, AS PER NFPA 72: 24.5.2.5.4.
- 28 ALL WIRING SHALL BE INSTALLED AT THE SAME OR GREATER LEVEL OF SURVIVABILITY, PATHWAY AND CLASS AS THE FIRE ALARM SYSTEM. SEE NFPA 1221 CHAPTER 9.6 & 5.10 AND NFPA 72 CHAPTER 24.5.2.
- 29 ALL EQUIPMENT SHALL BE UL LISTED IN ACCORDANCE WITH ITS INTENDED USE.
- 30 **DBPR DIVISION OF ELEVATOR SAFETY:** THE INSTALLING CONTRACTOR SHALL SUBMIT A LETTER TO DBPR FOR APPROVAL ALLOWING FOR PENETRATIONS INTO THE ELEVATOR SHAFT. PLEASE CONTACT THE FIRE MARSHAL FOR LOCAL APPROVAL LETTER.

MONITORING SIGNALS

- 31 DOES THE INTEGRITY OF THE CIRCUIT MONITORING SIGNAL BOOSTER(S) AND POWER SUPPLY COMPLY WITH NFPA 72: 10.6.9 AND SECTION 12.6.
- 32 SIGNAL BOOSTER AND POWER SUPPLIES SHALL INCLUDE THE FOLLOWING MONITORING SIGNALS:
- FIRE ALARM SYSTEM MONITORING:** SHALL INCLUDE AUTOMATIC SUPERVISORY AND TROUBLE SIGNALS BOOSTER(S) AND POWER SUPPLY(IES) THAT ARE ANNUNCIATED BY THE FIRE ALARM SYSTEM AND COMPLY WITH THE FOLLOWING:
- (1) THE INTEGRITY OF THE CIRCUIT MONITORING SIGNAL BOOSTER(S) AND POWER SUPPLY(IES) SHALL COMPLY WITH NFPA 72 & 1221
- (2) SYSTEM AND SIGNAL BOOSTER SUPERVISORY SIGNALS SHALL INCLUDE THE FOLLOWING:
- (A) ANTENNA MALFUNCTION.
 (B) SIGNAL BOOSTER FAILURE.
 (C) LOW-BATTERY CAPACITY INDICATION WHEN 70 PERCENT OF THE 12-HOUR OPERATING CAPACITY HAS BEEN DEPLETED.
- (3) POWER SUPPLY SIGNALS SHALL INCLUDE THE FOLLOWING FOR EACH SIGNAL BOOSTER:
- (A) LOSS OF NORMAL AC POWER.
 (B) FAILURE OF BATTERY CHARGER.
- DEDICATED PANEL MONITORING:** A DEDICATED MONITORING PANEL SHALL BE PROVIDED WITHIN THE FIRE COMMAND CENTER. THE MONITORING PANEL SHALL PROVIDE VISUAL AND LABELED INDICATION OF THE FOLLOWING FOR EACH SIGNAL BOOSTER:
- (A) NORMAL AC POWER
 (B) SIGNAL BOOSTER TROUBLE
 (C) LOSS OF NORMAL AC POWER
 (D) FAILURE OF BATTERY CHARGER
 (E) LOW-BATTERY CAPACITY
- 33 IF A DONOR ANTENNA EXISTS, IS THERE ISOLATION BETWEEN THE DONOR ANTENNA AND ALL INSIDE ANTENNAS AT A MINIMUM OF 15 DB ABOVE THE SIGNAL BOOSTER GAIN UNDER ALL OPERATING CONDITIONS, AS PER NFPA 72: 24.5.2.3.3.
- 34 ARE THERE NO PERMANENT EXTERNAL FILTERS AND ATTACHMENTS, AS PER NFPA 72: 24.5.2.5.3.
- 35 ARE ALL EXTERIOR ANTENNAS DIRECTIONAL, HIGH GAIN, VERTICAL POLARIZED AND SPECIFIED FOR THE OPERATING FREQUENCIES? (YAGI OR CORNER REFLECTOR-TYPE ANTENNAS ARE RECOMMENDED.)
- 36 ARE ALL ANTENNAS PROTECTED FROM LIGHTING STRIKES IN ACCORDANCE WITH NFPA 72: 26.6.2.3.3.
- 37 IS THERE A GRID SYSTEM OVERLAYING ALL FLOORS IN ORDER TO IDENTIFY AREAS OF DEFICIENCIES WHILE TESTING?

POWER SUPPLY & BOOSTER

- 38 ARE THE PRIMARY SOURCE SUPPLIED FROM A DEDICATED TWENTY (20) AMPERE BRANCH CIRCUIT.
- 39 IS THERE AT LEAST TWO INDEPENDENT AND RELIABLE POWER SUPPLIES PROVIDED FOR ALL REPEATER, TRANSMITTER, RECEIVER, AND SIGNAL BOOSTER COMPONENTS, ONE PRIMARY AND ONE SECONDARY AS PER NFPA 72: 5.2.5.5.
- 40 ALL CONTROL PANELS MUST BE CONNECTED TO A DEDICATED CIRCUIT BREAKER MARKED "RADIO ENHANCEMENT CONTROL CIRCUIT", AS PER NFPA 72: 10.5.5.2.1?
- 41 ARE THE BACKUP BATTERIES THE SAME SIZE AS THOSE REQUIRED ON THE APPROVED PLAN AND MARKED WITH THE DATE OF INSTALLATION, AS PER NFPA 72: 24.5.2.5.5.1?
- 42 THE SECONDARY POWER SOURCE SHALL CONSIST OF ONE OF THE FOLLOWING:
- (A) A STORAGE BATTERY DEDICATED TO THE SYSTEM WITH AT LEAST 12 HOURS OF 100 PERCENT SYSTEM OPERATION CAPACITY AND ARRANGED IN ACCORDANCE WITH 10.6.10.
- (B) AN AUTOMATIC-STARTING, ENGINE-DRIVEN GENERATOR SERVING THE DEDICATED BRANCH CIRCUIT OR THE SYSTEM WITH AT LEAST 12 HOURS OF 100 PERCENT SYSTEM OPERATION CAPACITY AND STORAGE BATTERIES DEDICATED TO THE SYSTEM WITH AT LEAST 2 HOURS OF 100 PERCENT SYSTEM OPERATION CAPACITY AND ARRANGED IN ACCORDANCE WITH 10.6.11.3.
- 43 I HAVE INCLUDED THIS CHECK SHEET AS PART OF MY SUBMITTAL FOR A FIRE INSTALLATION PERMIT.

FINAL TEST

- 44 A SECOND TEST SHALL BE COMPLETED AT FINAL THAT IDENTIFIES THE BUILDING HAS MET THE MINIMUM REQUIREMENTS OF THE BUILDING SIGNAL STRENGTH FOR BOTH (A) CRITICAL AREAS (B) NON CRITICAL AREAS.
- 45 A COMPLETED TEST REPORT SHALL BE SUBMITTED PRIOR TO FINAL INSPECTION TO THE AHJ.
- 46 PLACARD: THE C.R.C.C. SIGN SHALL BE POSTED NEXT TO THE BDA/DAS/FACP UPON FINAL SYSTEM TEST AS DIRECTED BY THE AHJ.
- 47 FINAL APPROVAL SUBJECT TO FIELD INSPECTION, CORRECTIONS MAY BE REQUIRED FOR CODE COMPLIANCE.
- 48 YOUR COMMENTS: _____



SARASOTA COUNTY FIRE DEPARTMENT

TWO-WAY COMMUNICATION ENHANCEMENT SYSTEMS



DAS / BDA

B24 (4 of 4)

RADIO FREQUENCY EQUIREMENTS

Sarasota County Public Safety Communications operates a Motorola 800 MHZ P25 phase 1 trunked radio system. We have 9 tower sites providing county wide coverage utilizing a simulcast configuration. The system has 17 trunked channels transmitting between 850.000 –860.000 MHZ and receiving between 805-815 MHZ.

The Motorola radio system uses a digital control channel that typically will be assigned to channel 1. The system may periodically rotate the control channel between channel 1, 2, 3 or 4.

When a radio signal coverage test is conducted, the active control channel will need to be the test frequency used to determine the signal levels. The control channel continuously transmits data 24/7

If a radio communications enhancement system is required to achieve the minimum signal levels, the design and equipment will need to cover the full range of 850.000 – 860.000 MHZ as we also operate on direct, simplex and national mutual aid channels.

The P25 trunked radio system control channel frequencies are as follows.

- **CH 1.** TX 851.3875 / RX 806.3875
- **CH 2.** TX 851.6875 / RX 806.6875
- **CH 3.** TX 851.7625 / RX 806.7625
- **CH 4.** TX 851.7875 / RX 806.7875

SARASOTA COUNTY OPERATIONAL FREQUENCY: 800 MHZ PUBLIC SAFETY & 45 MHZ OFFSET - LOCAL
700 MHZ FOR FEDERAL MUTUAL AID.

[HTTPS://WWW.RADIOREFERENCE.COM/APPS/DB/?SID=272](https://www.radioreference.com/apps/db/?sid=272)

NOTE: WE HAVE 4 CHANNELS THAT ARE USED BUT ONLY THE STRONGEST CHANNEL IS ACTIVE THAT DAY.



SARASOTA COUNTY FIRE DEPARTMENT



B25 (1 OF 1)

CERTIFICATE OF RADIO COVERAGE COMPLIANCE SIGN (POST THIS DOCUMENT IN COMMAND ROOM)

PROJECT NAME: _____

PROJECT ADDRESS: _____

INSTALLATION CONTRATOR: _____

TEST DATE: _____ TEST TIME: _____

(TESTING FOR COMPLIANCE AND CERTIFICATION SHALL BE PERFORMED AFTER CONSTRUCTION AND INTERIOR FINISHING WORK IS COMPLETE)

I AM THE RESPONSIBLE PERSON IN CHARGE AND I CERTIFY THE OCCUPANCY IDENTIFIED ABOVE WAS TESTED FOR SARASOTA COUNTY P25 TRUNKED SYSTEM FREQUENCIES FOR PUBLIC SAFETY RADIO RF COVERAGE LEVELS AND MEETS THE MINIMUM REQUIREMENTS SET FORTH BY NFPA 72 & NFPA 1221 AS PER ADOPTED EDITION AT TIME OF INSTALLATION.

I FURTHER CERTIFY THAT THE BUILDING WAS TESTED IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN NFPA 72, 1221 AND TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE RADIO RF COVERAGE LEVELS FOR THIS OCCUPANCY MEET OR EXCEED THOSE REQUIRED BY NFPA 72 & NFPA 1221 AS PER ADOPTED EDITION AT TIME OF INSTALLATION AND PERMITTING.

DESIGN PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE ENGINEERING DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF FLORIDA.

NAME: _____

COMPANY _____

ENGINEER LICENSE NUMBER: _____

EXPIRATION DATE: _____

FCC GROL LICENSE PROFESSIONAL:

I HEREBY CERTIFY THAT ALL INITIAL AND FINAL TESTING DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND I AM DULY LICENSED BY THE FEDERAL COMMUNICATIONS COMMISSION IN THE UNITED STATES AND MEET ALL RULES AND REGULATIONS OF THE STATE OF FLORIDA,

NAME: _____

COMPANY _____

FCC GROL LICENSE NUMBER: _____

EXPIRATION DATE: _____

SIGNATURE FCC LICENSE HOLDER

DATE

OWNER OR AGENT OF SITE:

NAME: _____

DATE: _____



DAS / BDA INSPECTION

C10 (1 of 1)



REQUIRE A MINIMUM 24-HOUR NOTICE

CONSTRUCTION SCHEDULING: 941-861-5127

INSPECTION PROCEDURES

AT TIME OF INSPECTION YOU WILL BE REQUIRED TO PROVIDE THE FOLLOWING TO CONDUCT THE INSPECTION AND FOR FINAL APPROVAL

PLEASE CHECK OFF EACH ITEM PRIOR TO CALLING FOR YOUR INSPECTION:

- NO INSPECTION WILL BE DONE UNLESS A MINIMUM OF 2 SETS OF INSPECTION & MAINTENANCE FORMS AND APPROVED SET OF JOB SITE PLANS ARE ON SITE!
- ANNUAL (12 MONTH) MAINTENANCE & INSPECTION CONTRACT SHALL BE PROVIDED AT TIME OF INSPECTION
- A FINAL COMPLETE TEST REPORT SHALL BE PROVIDED WITH ALL AREAS MEETING MINIMUM RADIO STRENGTH
- THE LICENSE (FCC G.R.O.L.) TECHNICIAN SHALL BE ON SITE FOR ALL RADIO TESTING**
- ANY BDA / DAS EQUIPMENT THAT REQUIRES A KEY FOR ACCESS SHALL BE PROVIDED AND LOCATED IN THE KNOX BOX
- DAS/BDA SYSTEM SHALL BE MONITORED BY THE FIRE ALARM SYSTEM AND COMPLY WITH THE FOLLOWING SIGNALS PER NFPA 72 & 1221
 1. SYSTEM AND SIGNAL BOOSTER SUPERVISORY SIGNALS SHALL INCLUDE THE FOLLOWING:
 - (D) ANTENNA MALFUNCTION.
 - (E) SIGNAL BOOSTER FAILURE.
 - (F) LOW-BATTERY CAPACITY INDICATION WHEN 70 PERCENT OF THE 12-HOUR OPERATING CAPACITY HAS BEEN DEPLETED.
 2. POWER SUPPLY SIGNALS SHALL INCLUDE THE FOLLOWING FOR EACH SIGNAL BOOSTER:
 - (A) LOSS OF NORMAL AC POWER.
 - (B) FAILURE OF BATTERY CHARGER.
- DEDICATED PANEL MONITORING:** A DEDICATED MONITORING PANEL SHALL BE PROVIDED WITHIN THE FIRE COMMAND CENTER. THE MONITORING PANEL SHALL PROVIDE VISUAL AND LABELED INDICATION OF THE FOLLOWING FOR EACH SIGNAL BOOSTER:
 - (A) NORMAL AC POWER
 - (B) SIGNAL BOOSTER TROUBLE
 - (C) LOSS OF NORMAL AC POWER
 - (D) FAILURE OF BATTERY CHARGER
 - (E) LOW-BATTERY CAPACITY
- BATTERY BACKUP OR AUTOMATIC STARTING GENERATOR FUNCTIONAL TEST (12 HOURS MINIMUM BACKUP)
- PLACARD: THE **C.R.C.C SIGN** SHALL BE POSTED NEXT THE FACP / BDA INDICATING THE DATE OF THE FINAL SYSTEM TEST

NOTE:

PERMIT FEE COVERS ONE TEST AND ONE FINAL INSPECTION. ANY ADDITIONAL PARTIAL OR RE-INSPECTIONS WILL HAVE A \$75 FEE PER INSPECTION PAYABLE IN ADVANCE.