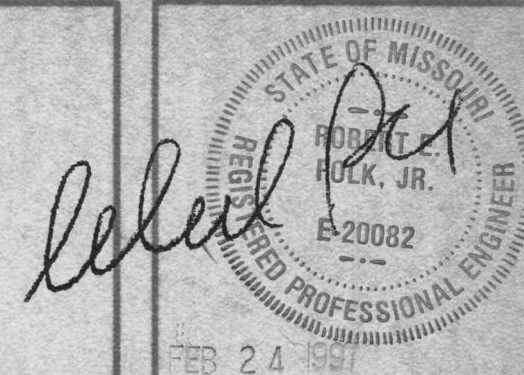


AT&T WIRELESS PCS, INC.



3.3 FIELD QUALITY CONTROL

A. FIELD TESTS

USE THE "FALL-OFF-POTENTIAL" METHOD AS DESCRIBED IN THE LITERATURE ACCOMPANYING BIDDLE BRAND EARTH RESISTANCE METER, 1 OHM OR LESS TO GROUND. THIS WORK TO BE PERFORMED BY OTHERS.

TOWER INSTALLATION

A. CONTRACTOR SHALL OFF LOAD AND ERECT A TOWER AS SPECIFIED ON THE DRAWINGS. INSTALL NINE (9) COAX CABLE LINES, NINE (9) ANTENNAS, GROUND KITS, INTERIOR AND EXTERIOR COAX CONNECTORS, JUMPERS, LABEL LINES (TOP & BOTTOM), WEATHERPROOFING OF ALL EXTERIOR COAX CONNECTIONS, GROUND THE TOWER TO THE EGR, PROVIDE AND INSTALL GRIP STRUT AND ASSOCIATED TRAPEZOID HANGERS, SWEEP ALL COAX AND ANTENNAS AS PER AT&T WIRELESS SERVICES SPECIFICATIONS.

B. ANTENNAS WILL BE MOUNTED AS SPECIFIED ON THE DRAWINGS AND ANTENNA SYSTEM CONFIGURATION SHEET. ANTENNA AZIMUTHS ARE 60° - 180° - 300°.

TELECOMMUNICATIONS WIRING COMPONENTS (COAXIAL ANTENNA CABLE)

PART 1 - GENERAL

A. ALL MATERIALS, PRODUCTS OR PROCEDURES INCORPORATED INTO WORK SHALL BE NEW AND OF STANDARD COMMERCIAL QUALITY.

B. CERTAIN MATERIALS AND PRODUCTS WILL BE SUPPLIED BY THE OWNER (REFER TO PART 1 OF THE RFP CONTRACT FOR THE LIST OF OWNER EQUIPMENT, MATERIALS AND SUPPLIES FOR THESE ITEMS) THE FURNISHED CONTRACTOR IS RESPONSIBLE FOR PICK-UP AND DELIVERY TO SITE ALL OWNER FURNISHED MATERIALS.

C. ALL OTHER MATERIALS AND PRODUCTS SHOWN IN THE SPECIFICATIONS SKETCHES, DRAWINGS, GENERAL CONTRACT DOCUMENTS, ADDENDUMS, AMENDMENTS AND/OR INSTRUCTION SHALL BE SUPPLIED BY THE CONTRACTOR.

PART 2 - MATERIALS

A. ANTENNAS:

1. INSTALLATION OF ANTENNAS AND ASSOCIATED MOUNTING HARDWARE PER MANUFACTURER'S RECOMMENDED STANDARDS OF PRACTICE.

B. COAXIAL CABLE:

1. INSTALL COAXIAL CABLE AND TERMINATIONS BETWEEN ANTENNAS AND PAD MOUNTED ELECTRONIC EQUIPMENT PER MANUFACTURERS RECOMMENDED STANDARDS OF PRACTICE. WEATHERPROOF ALL CONNECTORS BETWEEN THE ANTENNA AND ELECTRONIC EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. TERMINATE ALL COAXIAL CABLE ONE (1) FOOT (.3048M) IN EXCESS OF EQUIPMENT LOCATION UNLESS OTHERWISE STATED.

ANTENNA AND COAXIAL CABLE GROUNDING

A. THE OMNI OR DIRECTIONAL ANTENNA COAXIAL CABLES ARE TO HAVE AS A MINIMUM OF THREE (3) GROUND KITS INSTALLED. ONE (1) AT THE ANTENNA JUMPER CONNECTION WITH GROUND KITS CONNECTED TO THE TOWER ASSEMBLY WITH TWO HOE LUGS, ONE (1) AT THE LAST VERTICAL TO HORIZONTAL TRANSITION PRIOR TO THE EQUIPMENT LOCATION, ONE (1) AT OUTSIDE OF EQUIPMENT BUILDING. (IF TOWER IS HIGHER THAN 200 FT. REFER TO CONSTRUCTION DOCUMENTS ANTENNA AND COAXIAL CABLE REQUIREMENT).

B. ALL EXTERIOR #6 GREEN GROUND WIRE 'DAISY CHAIN' CONNECTIONS ARE TO BE WEATHER SEALED WITH ANDREWS CONNECTOR/SPLICE WEATHERPROOFING KIT TYPE #221213 OR EQUAL.

C. ALL COAXIAL CABLE GROUNDING KITS ARE TO BE INSTALLED ON STRAIGHT RUNS (NOT WITHIN BENDS) OF COAXIAL CABLE PRIOR TO ANY DOWNWARD SWEEPS.

COAXIAL CABLE IDENTIFICATION

A. TO PROVIDE EASY IDENTIFICATION AND UNIFORM MARKING OF ANTENNA CABLES, THE FOLLOWING SHALL APPLY:

1. LOCATION: MARKINGS SHALL BE MADE BY USE OF 3 METER COLORED, 1 INCH WIDE TAPE AFFIXED AT FOUR PLACES (IF THE COAX RUN EXCEEDS 15 FEET, THEN STEP C APPLIES) ON THE COAX CABLE RUN AS FOLLOWS:

a. FIRST LOCATION IS AT THE END OF THE COAX NEAREST THE ANTENNA (WHERE THE COAXIAL CABLE AND JUMPER ARE CONNECTED).

b. SECOND, AT THE BASE OF THE TOWER STRUCTURE.

c. THIRD, AT A POINT OUTSIDE THE EQUIPMENT BUILDING PRIOR ENTERING THE EQUIPMENT BUILDING.

d. FOURTH, INSIDE THE EQUIPMENT BUILDING, AT A POINT ON THE COAXIAL CABLE APPROXIMATELY 10 INCHES (254MM) FROM THE WAVEGUIDE ENTRY PORT.

B. COLOR CODE COAXIAL CABLES AS SHOWN ON PLANS. (WHEN APPLICABLE).

TESTING

RF SWEEP SECTION FOR SPECIFICATIONS SECTION FOR CONSTRUCTION DRAWINGS: PROVIDE FOUR (4) COPIES OF THE ANTENNA AND COAX SWEEP TEST RESULTS TO AT&T. SWEEP TESTS SHALL BE PERFORMED AS PER THE "AT&T TELECOM ANTENNA AND COAX FIELD TEST PROCEDURE."

REVISIONS

NO.	DATE	DESCRIPTIONS

AT&T WIRELESS PCS, INC. SPECIFICATIONS

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TITLE:
SPECIFICATIONS

DATE: 2-18-1996

DRAFTED: M. Roth

PROJECT NO.: 297000

SHEET:
SPEC-4