

UNCLASSIFIED - FOUO

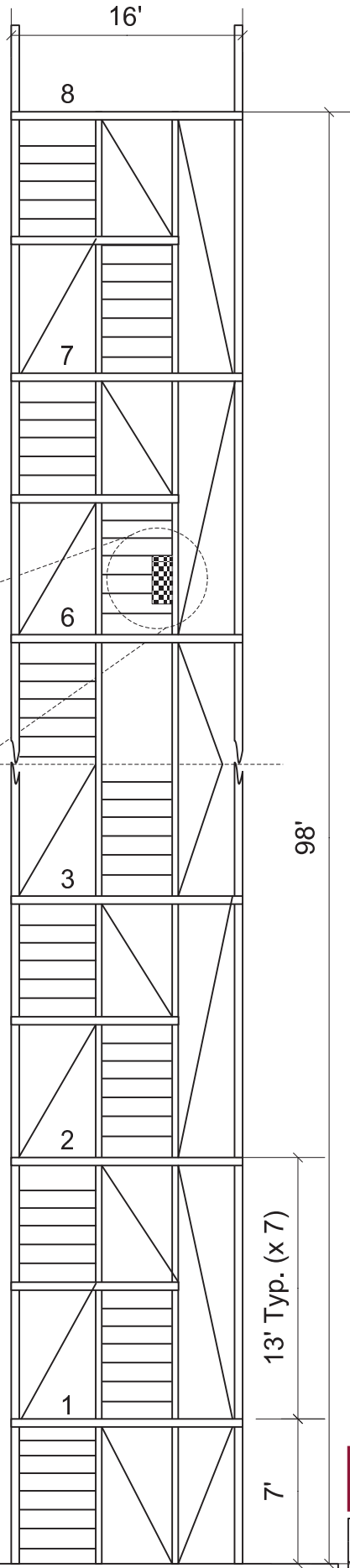
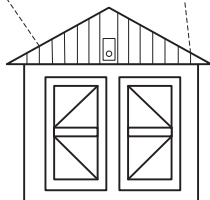
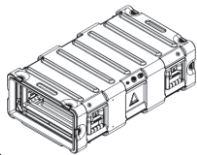
Tower platform elevation estimates.

- 1 = 7'
- 2 = 20'
- 3 = 33'
- 4 = 46'
- 5 = 59'
- 6 = 72'
- 7 = 85'
- 8 = 98'

V6 eNodeB

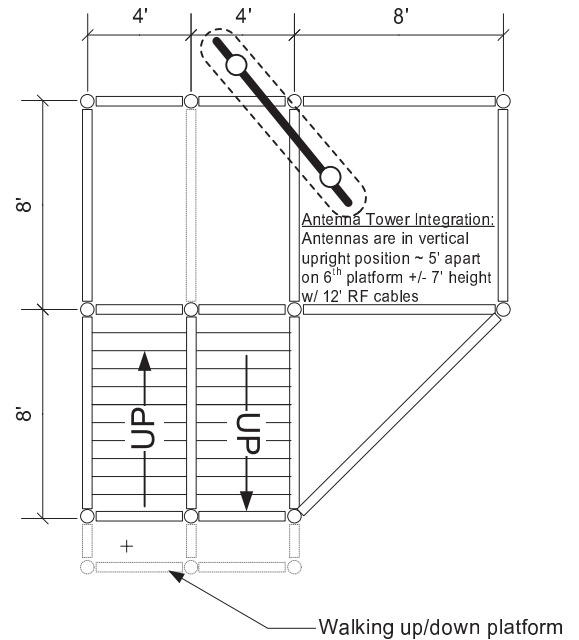
V6 eNodeB

120VAC UPS and DC Power Supply



Tower (Front view)

Tower – (Top View) w/antenna detail



v6 e-NodeB integration requirements:

- Antennas required to be at 75' from ground.
- Antennas include:
 - (2) DB583E-SN - 5.1dBi 30° omni 698-790 MHz 400W max antenna
 - (1) Trimble 57860-20 GPS antenna kit
- Omni antennas to use 12 foot 7/16" M-M Low loss Ultraflex CA- 400UF cable
- v6 e-NodeB will use a DC lightning arrestor and grounded to tower
- V6 e-NodeB will require (2) pairs of fiber, SM type is preferred
- v6 e-NodeB power supply will be housed in the shed at the base of the tower.
- The Evolved Packet Core (EPC) server will be housed remotely. Candidate location is the data center
- eNodeB will operate on Band 17 (740MHz DN / 710 MHz UP) 10 MHz channels @ 16dBW (max).

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TITLE

Phase 1: GD Broadband 4G LTE eNodeB Range 1 Tower Integration Details

Revision notes since last update:

Location/height of eNodeB changed due to physical limitations on the tower |

Antennas will use longer cables to allow high variability if needed.

Rev.

0.1

DRAWN BY

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Sheet

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3/25/2014

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