Chelsea, QC

Home of the only mountain range in the Ottawa region.

- CBC-FORTUNE-R1

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At the CBC Transmission tower

Location: 400 Dunlop Rd, Chelsea, Quebec J9B 2N3
Type: PoE-powered, with generator backup, high-elevation mountain repeater
Role: City-wide Backbone Repeater
Antenna: Seeed Studio 902–928 MHz 8 dBi
Height: 15 m AGL, on the highest point in the National Capital Region on the roof structure of the tower two floor building.

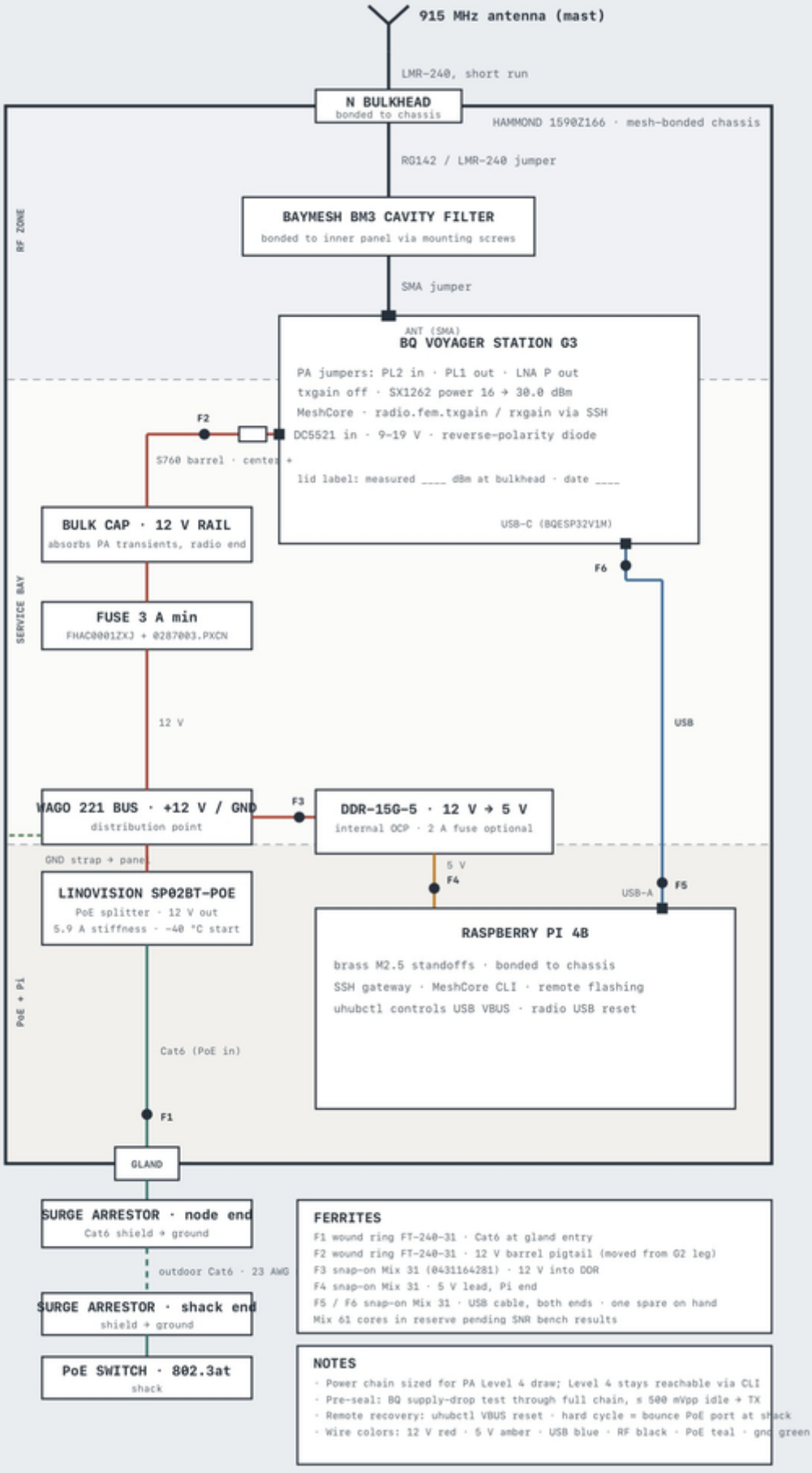
CBC001

Notes:

Hears almost every repeater in the city and carries more traffic than any other node on the mesh
Built entirely from high-end parts to cope with the level of FM broadcast energy at the site
Current build is a Station G3 at 1 W behind a Baymesh filter, PoE powered, with a Raspberry Pi in the enclosure for remote management
The first build used a solar Ikoka; its MCU kept restarting, which we attribute to RF interference at the site

STATION G3 · WIRING DIAGRAM

Camp Fortune (Ryan Tower) · Hammond 1590Z166 · vertical pole mount, RF end up · Aug 2026 · pre-verification draft

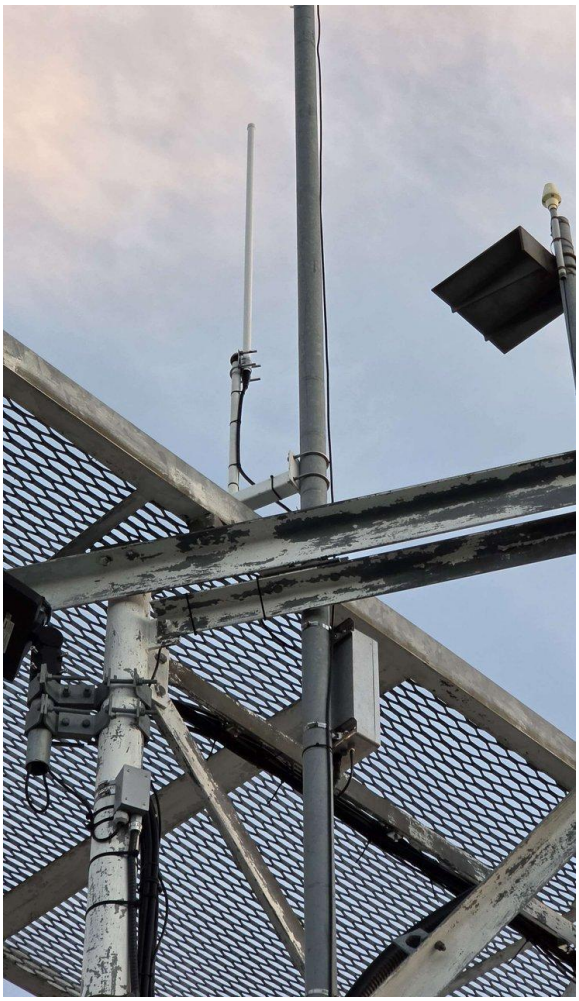


FERRITES

F1 wound ring FT-240-31 · Cat6 at gland entry
F2 wound ring FT-240-31 · 12 V barrel pigtail (moved from G2 leg)
F3 snap-on Mix 31 (0431164281) · 12 V into DDR
F4 snap-on Mix 31 · 5 V lead, Pi end
F5 / F6 snap-on Mix 31 · USB cable, both ends · one spare on hand
Mix 61 cores in reserve pending SNR bench results

NOTES

- Power chain sized for PA Level 4 draw; Level 4 stays reachable via CLI
- Pre-seal: BQ supply-drop test through full chain, ≤ 500 mVpp idle → TX
- Remote recovery: uhubctl VBUS reset · hard cycle = bounce PoE port at shack
- Wire colors: 12 V red · 5 V amber · USB blue · RF black · PoE teal · gnd green



The repeater was built by MrAlderson, and installed on Shawn's test equipment space on the roof, with the help of Tabarnak (the Silo man)

Contact: MrAlderson or Shawn https://meshcore.wiki.gd/books/people/page/shawn