

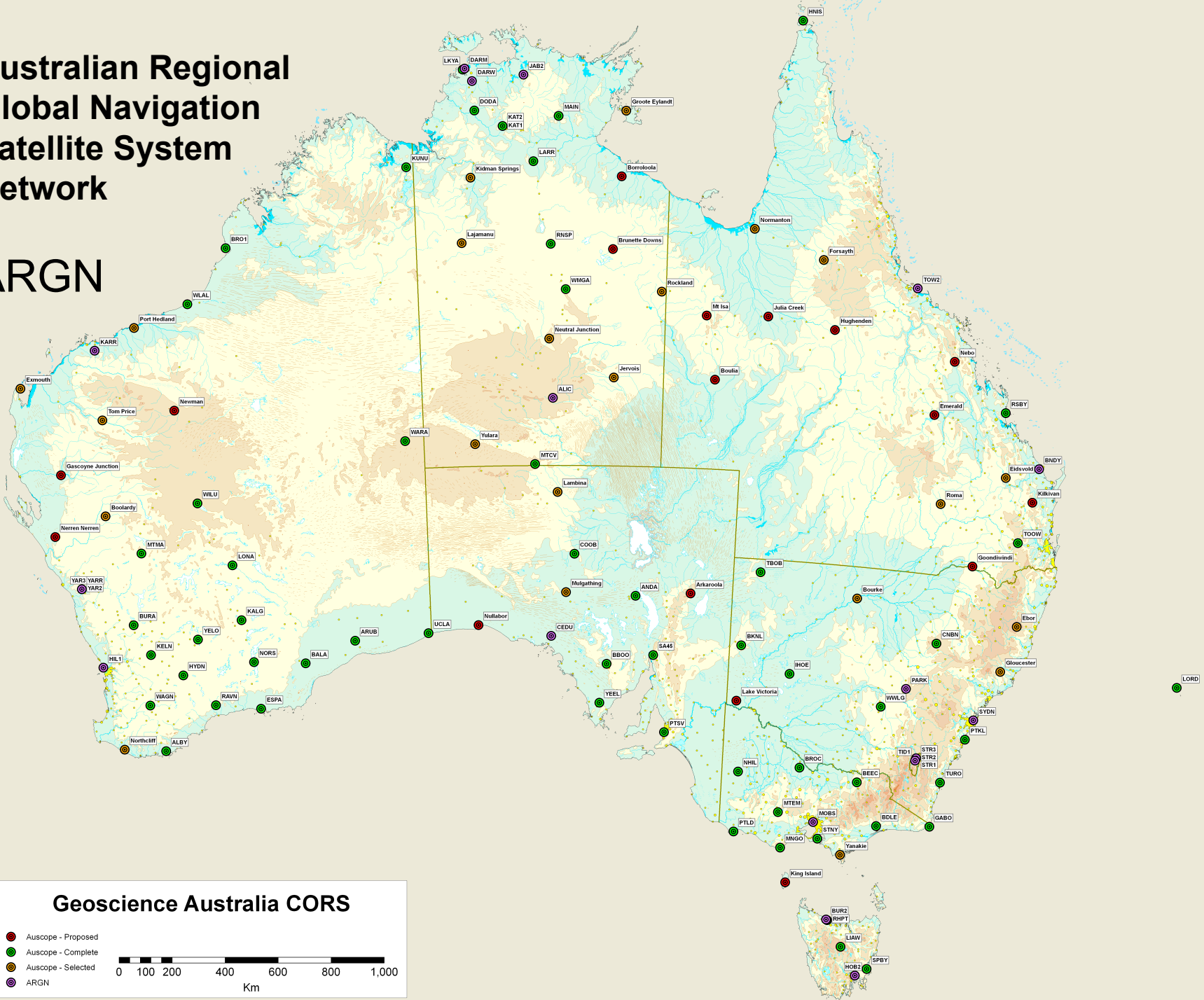
# Dual-frequency GPS at MRO

- Collaboration with GA
- On track but running slow
- Site at MRO (almost) selected
- Technical solution for RFI suppression (RFoF)

JR 9/5/2012

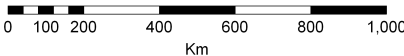
# Australian Regional Global Navigation Satellite System Network

## ARGN



### Geoscience Australia CORS

- Auscope - Proposed
- Auscope - Complete
- Auscope - Selected
- ARGN





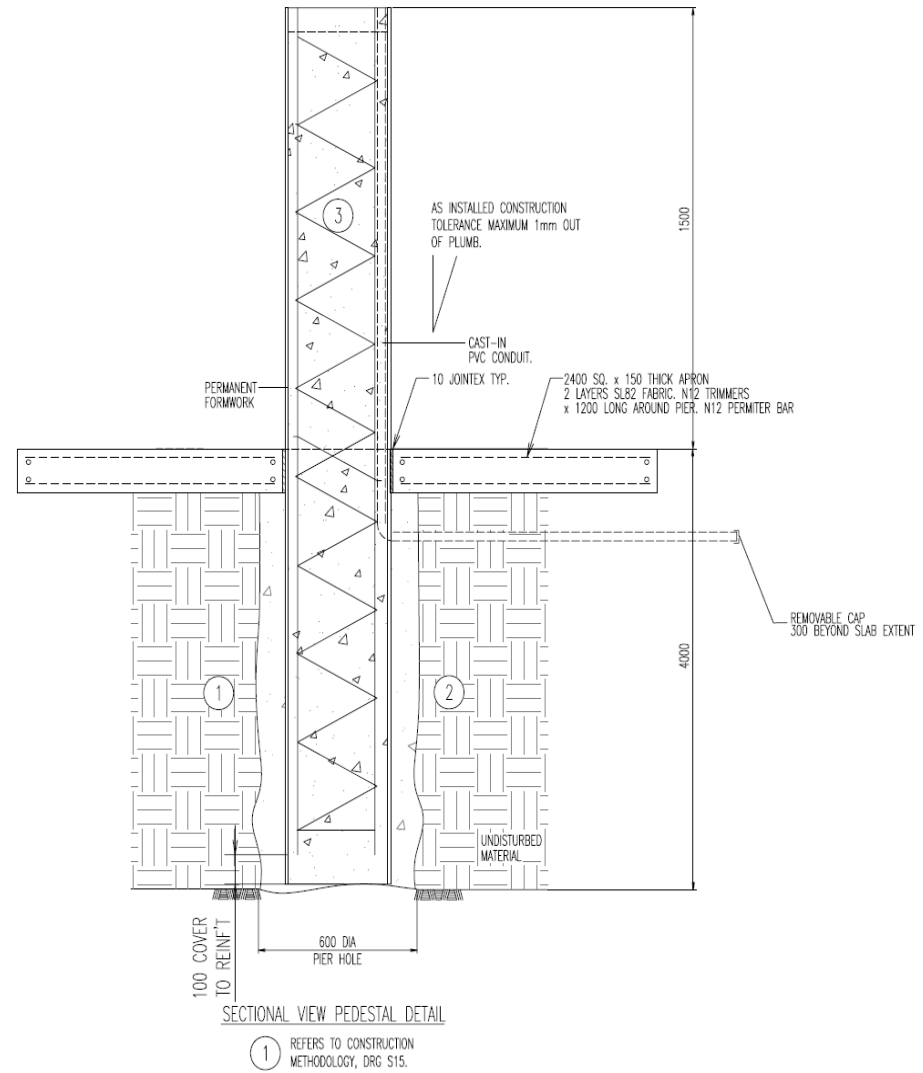






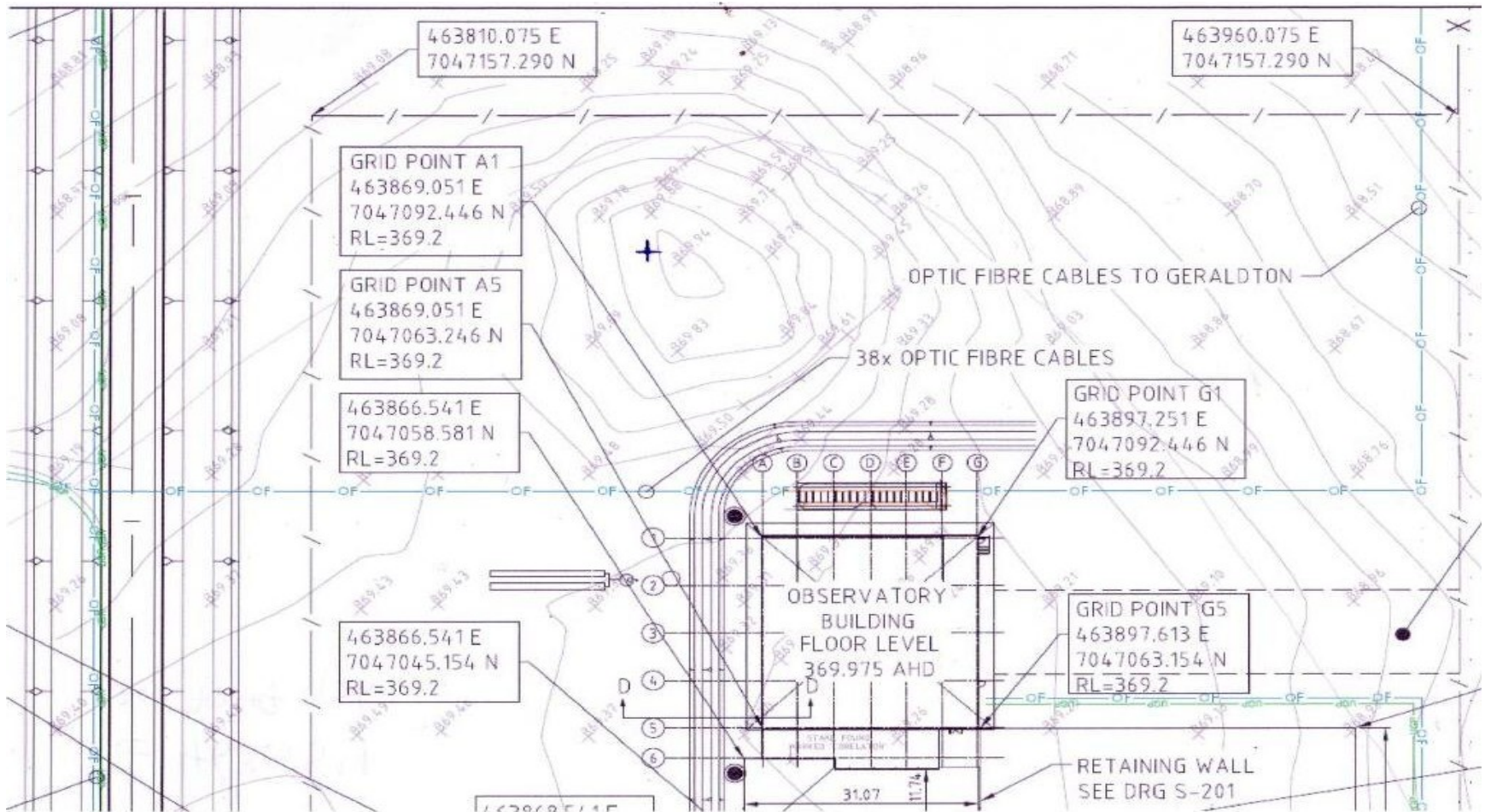
**Ashtech**

Monument  
requires a fair  
bit of  
excavation and  
concrete



ALL CONCRETE GRADE  
N25 TYPICAL U.N.O.

# X marks the spot









# Installation at MRO

- Monument located within ~tens of metres of central building
- Will use RF-over-fibre to get through the RFI shielding
- Aiming to get this done in 2012



# SST requirement

- What are the SST requirements?
- Do coorections need to be included in the ASKAP data pipeline?
- How near to real-time are TEC estimates needed?

Probably important to understand these better at some stage.

# Access to GPS data

- We would have unfettered access to raw data from MRO station but this may not be useful without calibration
- Proprietary s/w ('Bernese') ~\$15k/licence
- IPS already doing this. LUNASKA project has been talking to them re: access to real-time calibrated data from ARGN network. Status?



# IGS/GNSS Network

INTERNATIONAL GPS SERVICE (IGS) NETWORK



# Current options

- IGS network archive & maps of VTEC available ~days in retard (see map of station locations)
- Australian IPS “FoF2” data from ionosondes available ~1 hour in retard.
- IPS GPS data not yet readily available, but ‘coming soon’?
- Other options being explored to get near-real time access to IPS GPS data