

Outreach & Public Engagement from Jodrell Bank Centre for Astrophysics

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Jodrell Bank Centre for Astrophysics

- Part of the University of Manchester's School of Physics & Astronomy
 - The largest university physics department in the UK (250 new physics UG's each year)
- 25 astrophysics lecturers
- 170 staff/students split across 3 sites:
 - The Alan Turing Building, Manchester
 - Sackville St Building in Manchester
 - Jodrell Bank Observatory in Cheshire
- Wide-ranging research from planets to the Big Bang
- Jodrell Bank Observatory is seen as iconic for astronomy in the eyes of the UK public



A huge range of outreach activities

- We work closely with Observatory Visitor Centre
- **Public events**
 - Many public talks inc. Lovell lecture series
 - Star parties & sidewalk astronomy
 - Innovative public events & exhibitions
- **Schools programme**
 - Inflatable planetarium
 - Workshops
 - Remote-controlled 6.4-m radio telescope
 - Work experience programme
- **New media**
 - Podcast – www.jodcast.net
 - Website e.g. “Night Sky This Month”
 - Twitter: 240,000 followers for @jodrellbank
- **Old Media**
 - Press releases
 - TV programmes

Star parties & sidewalk astronomy

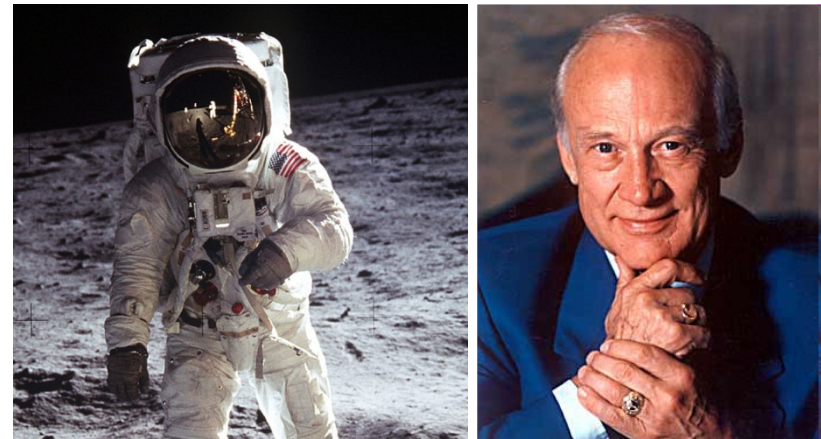
- Regular Star Parties at Jodrell Bank for 200 people
- Observing using our own telescopes (inc H α during day) and help from local amateur astronomical societies



Apollo 40 – Moonbounce

- Public event for 200 people at Jodrell Bank to celebrate 40th anniversary of Moon landings
- Winners of a national competition (Metro newspaper and UK Government science campaign) bounced their voices off the Moon, catching the echoes with the Lovell Telescope
- Moonbounced special messages from Buzz Aldrin & Stephen Hawking.
- Featured on Sky TV News & BBC NW Tonight

Moonbounce competition winners

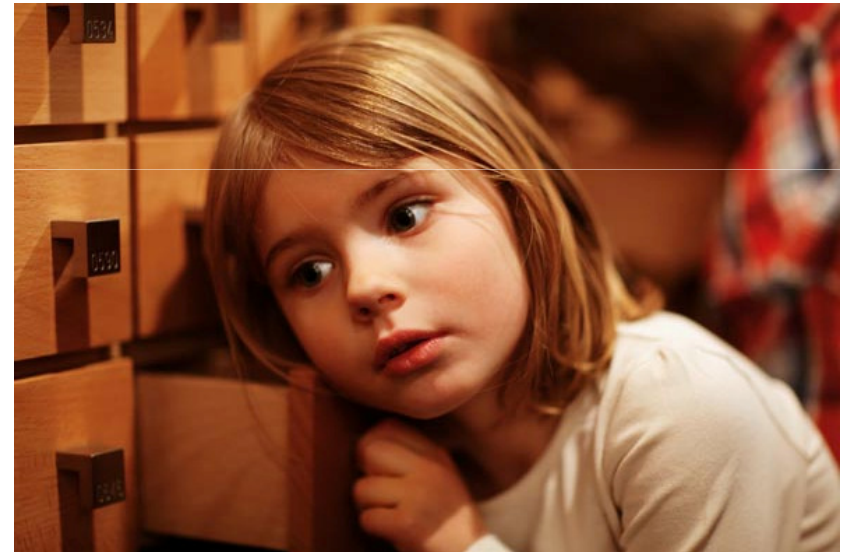
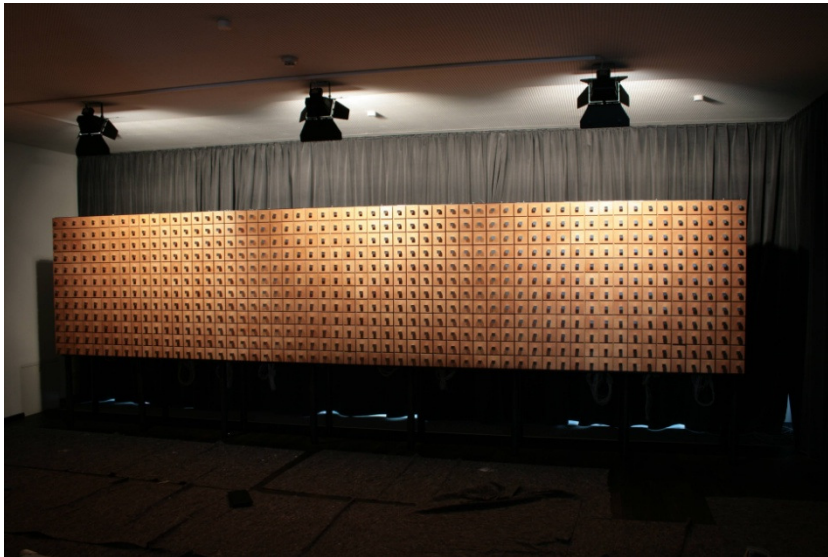


“A small step for some of us and unknown progress for all the rest of us.”

Polyphon at Linz09

European Capital of Culture

- The sounds of 672 pulsars, each inside a drawer, exhibited since Sep 2009



- Still on display in Linz, Austria

Wonder :

A Scientific Oratorio



MANCHESTER
1824

Jodrell Bank Observatory

- Major new oratorio inspired by our scientific understanding of the Universe
- Performed by the BBC Philharmonic Orchestra, BBC Singers & Salford Choral Society
- 700 in audience, 190 performers, 250 school students in science/music workshops, telescopes outside venue for observations
- Featured on BBC NW Tonight & broadcast on Radio 3

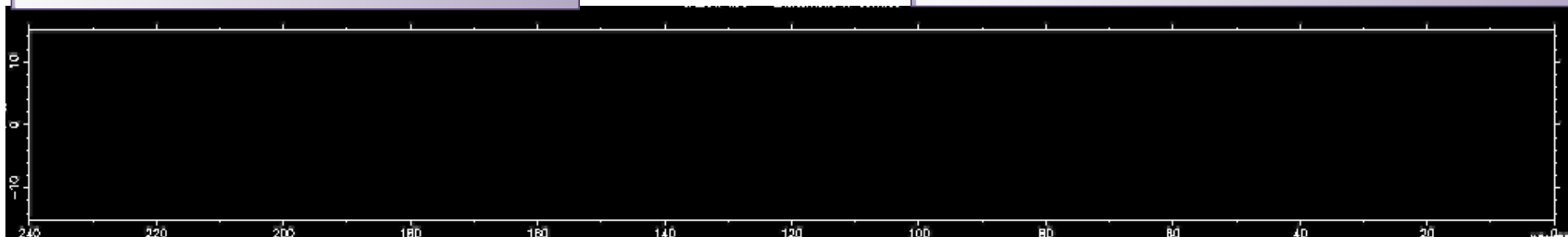


Excitement of Science

- Schools project involving 1400 students UK-wide
- Students used the Jodrell Bank 6.4m telescope over the web to map the radio sky, then analysed optical supernovae observations
- Concluded with an event for students & teachers at the Royal Institution, London



Schools' radio map of the Milky Way :



New media - Podcast

- “The Jodcast” – <http://www.jodcast.net>
- Twice-monthly since Jan 2006
- ~ 3,000 listeners
- Run by PhD students, one current staff member (me!), one retired staff member, several ex staff & students
- News, interviews, ask an astronomer, what’s visible in the night sky etc

TV & Other Old Media

- Regular press releases leading to newspaper/magazine coverage
- Features on BBC Local TV News (~600,000 viewers)
- Features on wide range of TV programmes e.g. Invisible Worlds, Country Watch, Ingenious
- Jan 2011: BBC Stargazing Live – Three consecutive nights of live broadcasts on national BBC 2 from Jodrell Bank



Forthcoming events for 2011...

- “The Jodrell Sessions”:
First of a planned annual series of music festivals – bands + science engagement
- Weekend film festivals
- Large-scale projection events

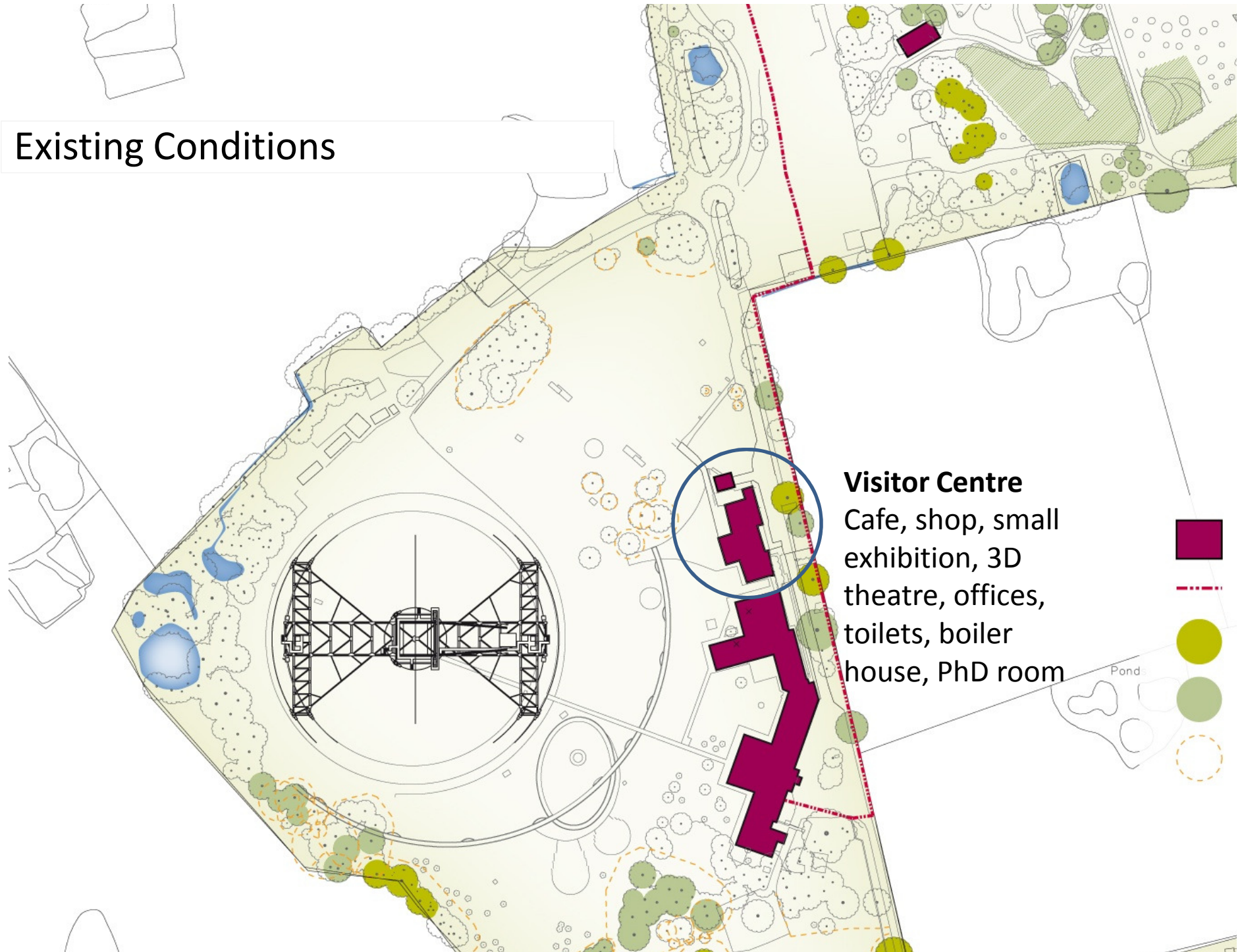
Jodrell Bank Discovery Centre

- Original Visitor Centre dating from late 1960's
 - At peak 150,000 visitors per year
- Much of old centre demolished in 2003
- Small interim centre attracted 85,000 visitors per year
- Project to develop a new science discovery centre
 - Apr 2007 : awarded £100k by STFC to fund pilot programme of events & temporary space
 - May 2010 : awarded £3m (regional development agency, European Regional Development Fund) + University funding
 - Sep 2010 : Construction of new centre began



Sir Bernard Lovell “breaks the ground” in Sep 2010

Existing Conditions

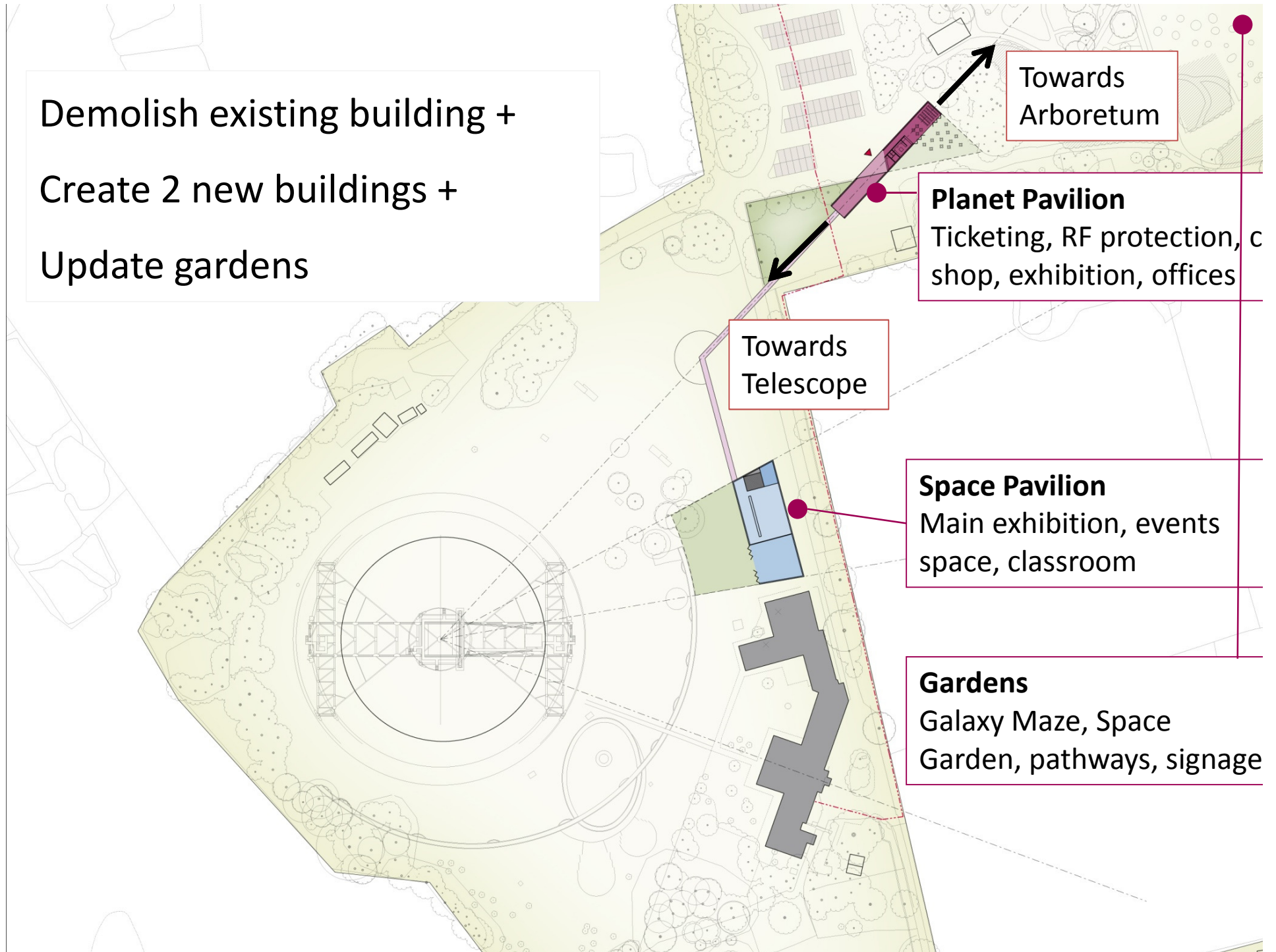


Visitor Centre
Cafe, shop, small exhibition, 3D theatre, offices, toilets, boiler house, PhD room



Pond

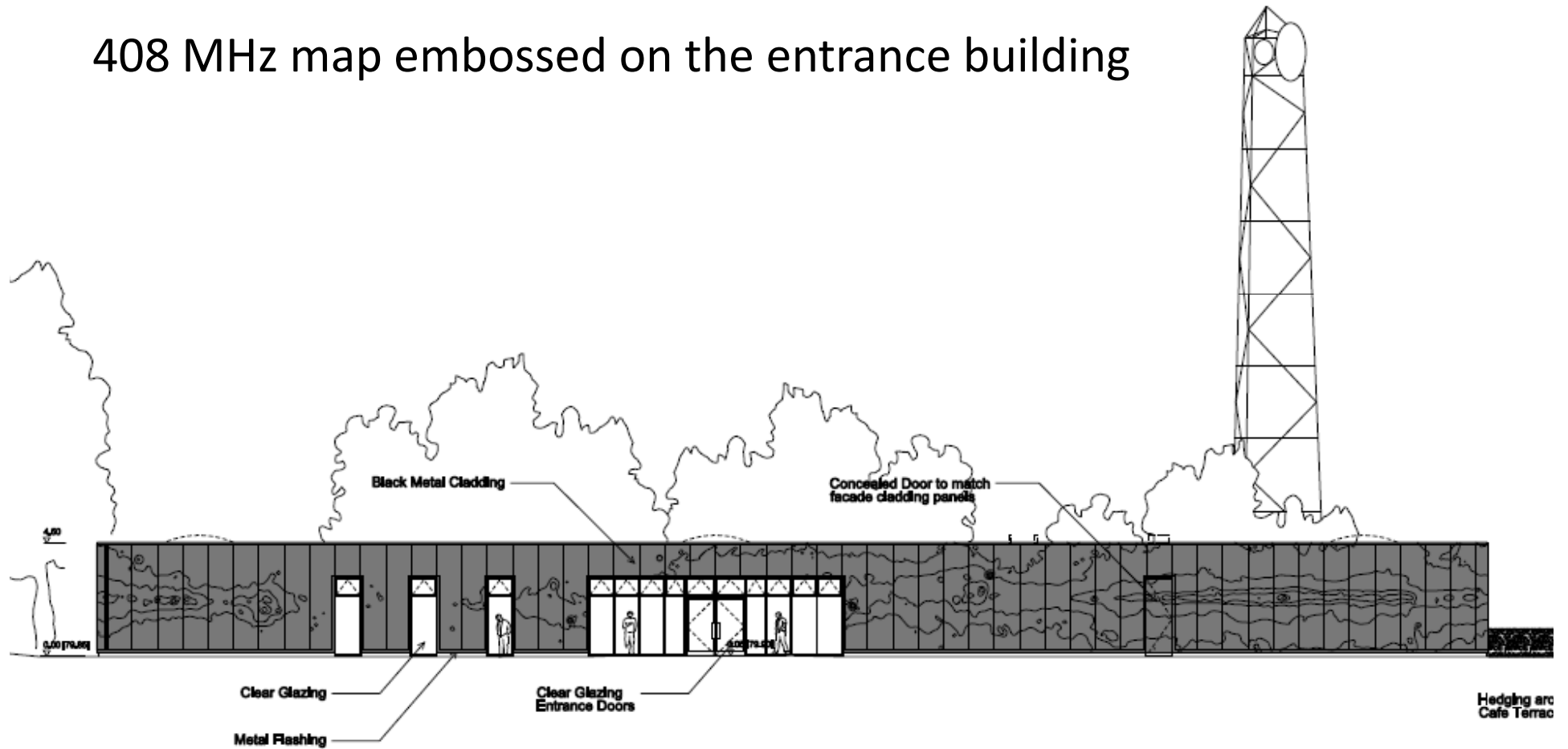
Demolish existing building +
Create 2 new buildings +
Update gardens



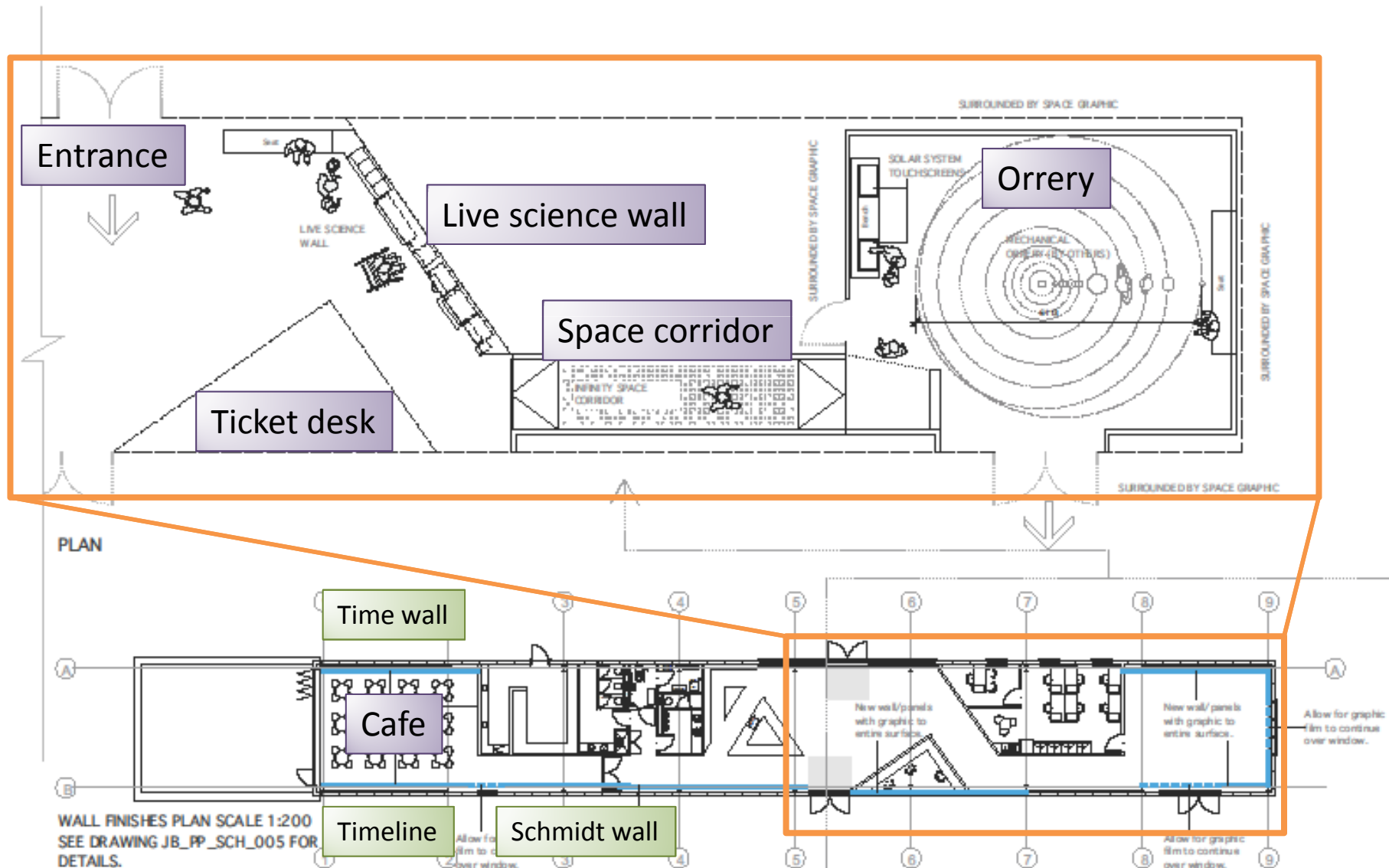


Radio sky

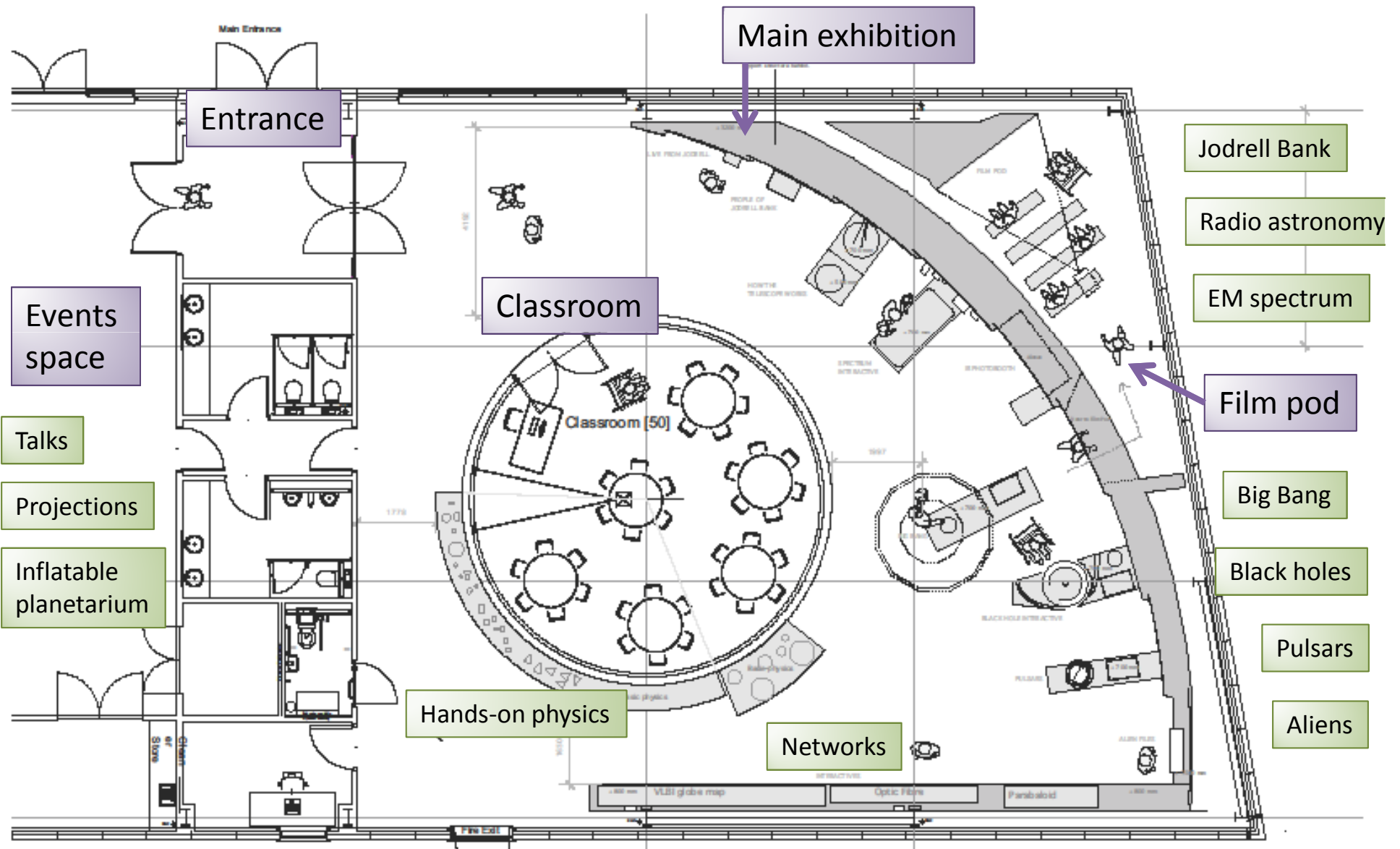
408 MHz map embossed on the entrance building



Planet Pavilion



Space Pavilion



Construction well under way

15th Oct 2010 :
Demolition of old centre, site
of new Space Pavilion



18th Oct 2010 :
Steelwork for new Planet
Pavilion



12th Nov 2010 :
Roofing being installed on
new Planet Pavilion





Looking forward to some nice cake and a cup of tea
when the new centre opens in Summer 2011





Apollo 40 – Moonbounce

- Also Moon-bounced specially recorded messages from Buzz Aldrin and Stephen Hawking



“The Moon landings were a giant step for Mankind's spread into space.”

<http://www.jodrellbank.manchester.ac.uk/news/2009/moonbounce/>

Archaeo-astronomy

- Special IYA meeting of Prehistoric Society and Royal Astronomical Society at Jodrell Bank
- Day of activities and public talks by international speakers including:
 - Clive Ruggles – Ancient Astronomy in the Pacific
 - Ivan Sprajc – Aztec & Mayan Astronomy
 - Mike Edmunds – The Antikythera Mechanism
 - Juan Antonio Belmonte – Egyptian Astronomy
 - Mike Parker-Pearson – Stonehenge



Proud winner of Best Antikythera Model



Mike Parker-Pearson discussing the latest on Stonehenge

BBC Big Screen

- BBC Big Screen in Manchester City Centre showed 4 astronomy videos (including the IYA trailer) for two weeks in Oct 2009 (60,000 passers-by each day)



