



The University of
Nottingham

University of Nottingham Progress on Theme C5 - Field Experiments

Jeremy Colls
Mike Steven
Karon Smith
Marta Ortega
Maria Ortega

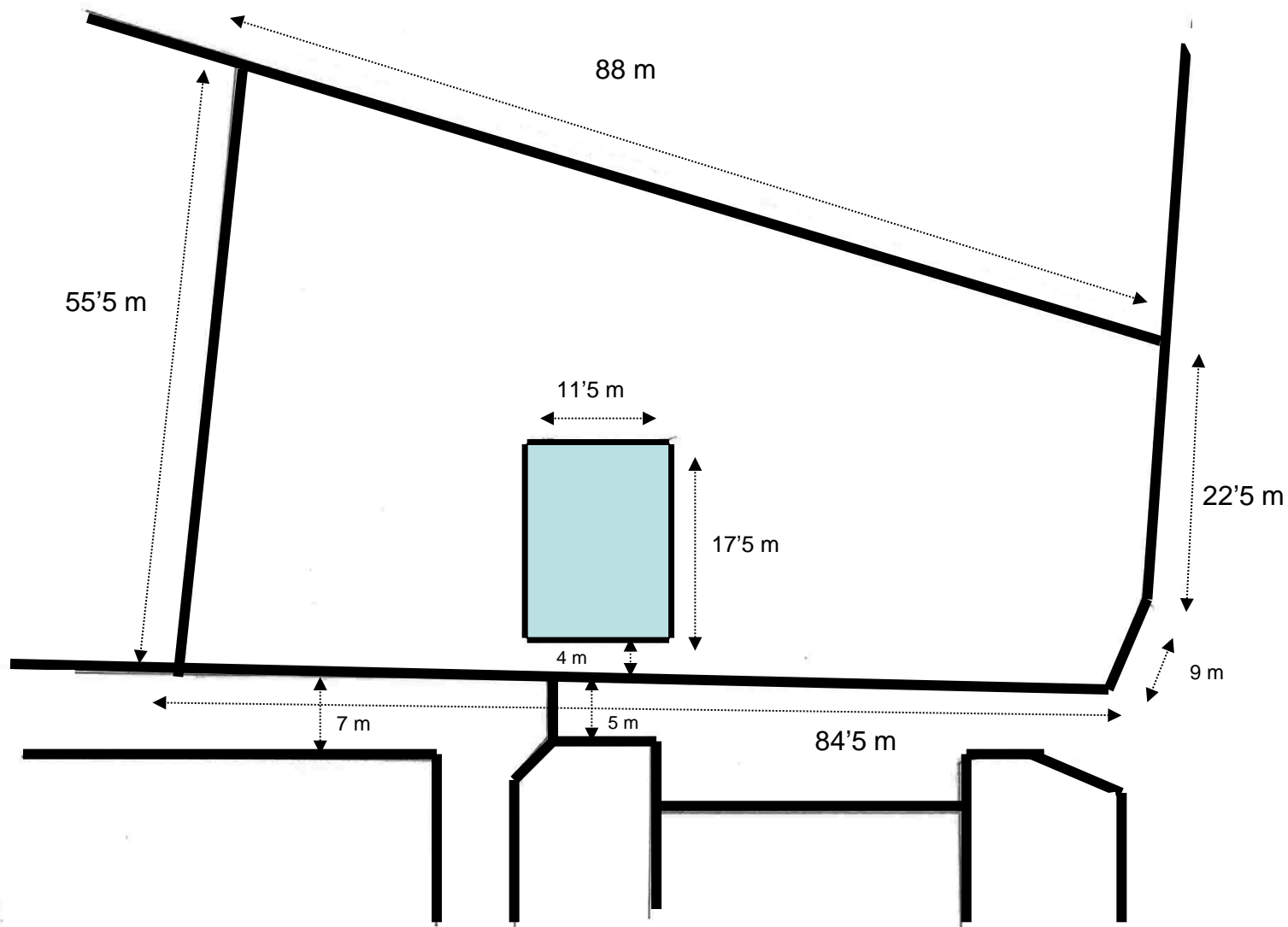
UKCCSC
Edinburgh
March 2006

Project Objective

- To investigate the responses of terrestrial ecosystems to simulated leaks from geosequestered CO_2

ASGARD - Artificial Soil Gassing and Response Detection

- Major additional funding for soil gas injection from SRIF3 award
- Instead of pot experiments (UKCCSC), will do full ground injection
- UKCCSC experiments will be carried out at the ASGARD field site.



1 : 500

BGS Involvement

- BGS have been actively involved in designing and characterising the ASGARD site.
- Ongoing EU NoE "CO2GeoNet"

The ASGARD site - 9th March



Planned Treatments

North

Crop 1 1	Crop 1 2	Crop 1 3	Crop 1 4	Test
Crop 1 5	Crop 1 6	Crop 1 7	Crop 1 8	Test
Crop 2 1	Crop 2 2	Crop 2 3	Crop 2 4	Test
Crop 2 5	Crop 2 6	Crop 2 7	Crop 2 8	Test
Grass 1	Grass 2	Grass 3	Grass 4	Test
Grass 5	Grass 6	Grass 7	Grass 8	Test

2006 Schedule

- March
 - gas injection system ordered (BOC)
 - Field site designed and characterised, cultivation started
- April
 - Gas injection system installed
 - Barley and linseed planted in addition to existing grass
- May - Sept
 - Gassing and field measurements of soil, plant and atmospheric parameters for grass, barley, linseed
- > Sept
 - Continued gassing and measurements on grass
 - Analysis of Season 1 results