

## POSSIBLE SITES FOR JOINT LASER PROJECT

1. The basis of the proposed collaboration is to site the Joint Laboratory on the Rutherford Laboratory side of the Harwell site, in such a way that free access is allowed to all users until classification problems arise, but to permit quick and easy change-over to bring the laboratory inside the Harwell site if need presents itself. It is hoped to permit personnel access to the Harwell site through the building in normal working hours in both cases.
2. As fixed points in the plan we must accept that Fermi Avenue is the main traffic artery for Rutherford Laboratory, the Reactor site, MRC, NRPB and Harwell goods deliveries, and that the bus park has been sited to be a reasonable centre for both R.L. and Harwell, and should not be shifted (though when the A34 is relieved of long-distance traffic, Library Avenue might be closed and all buses depart from a widened Fermi Avenue).
3. The laboratory should have room for expansion to perhaps double its initial size, but major developments e.g. along a laser compression route to fusion power, would almost certainly call for complete replanning. It should also, so far as possible, avoid vibration sources; the most serious ones are heavy goods traffic along Fermi Avenue, and the once-per-three second Nimrod pulse. The latter is believed to be the more serious, and perhaps measurements should be initiated. So far as possible, the laboratory should be close to R.L. to allow easy access to their workshops, library and canteen since some workers may not have Harwell passes, while, equally, easy access to Harwell Library and canteen should be assured for those people holding Harwell passes. Services to be supplied include work centre terminals for both the R.L. and the Harwell computer.
4. No suitable site exists west of the Atlas Laboratory. The options open therefore cluster round the narrow triangle of land bounded by Fermi Avenue, Library Avenue and the bus park. The sketch plans marks four possibilities. Scheme A shows fence lines appropriate to an unclassified building (Sites denoted a, b, c, d): and Scheme B fence lines appropriate to a classified building (Sites denoted A, B, C, D).
5. AERE's strong preference is to avoid encroaching onto the green triangle between Fermi Avenue and Library Avenue until this is entirely inevitable. Nevertheless we give below a crude analysis of some of the factors distinguishing between site costs and convenience. This determines for example that site C offers no advantage over site D initially and that the expansion space is equally available to both.

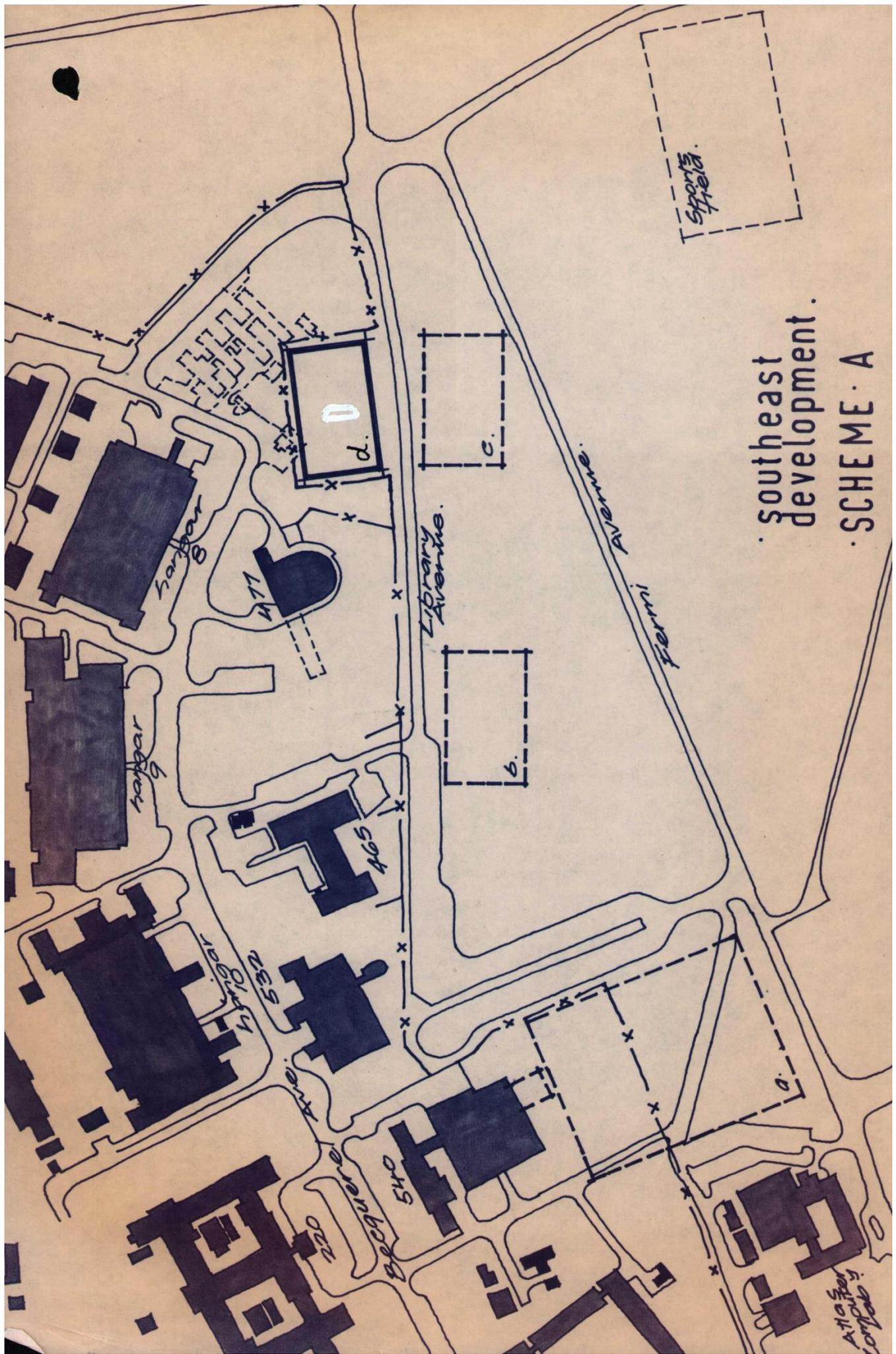
	<u>A,a</u>	<u>B,b</u>	<u>C,c</u>	<u>D,d</u>
Services to laboratory	Good	Good	Poor	Medium
Diversion of services	Cheap	Cheap	Cheap	Cheap
Road works	Small	B large b small	C large c small	Small
Expansion space	V bad	Good	Good	Good
Distance* to RL Library	400m	800m	1100m	1100m
Distance* to AERE Lib.	400m	100m	200m	200m

\*Assuming personnel holding Harwell passes can enter and leave Harwell site at the building.

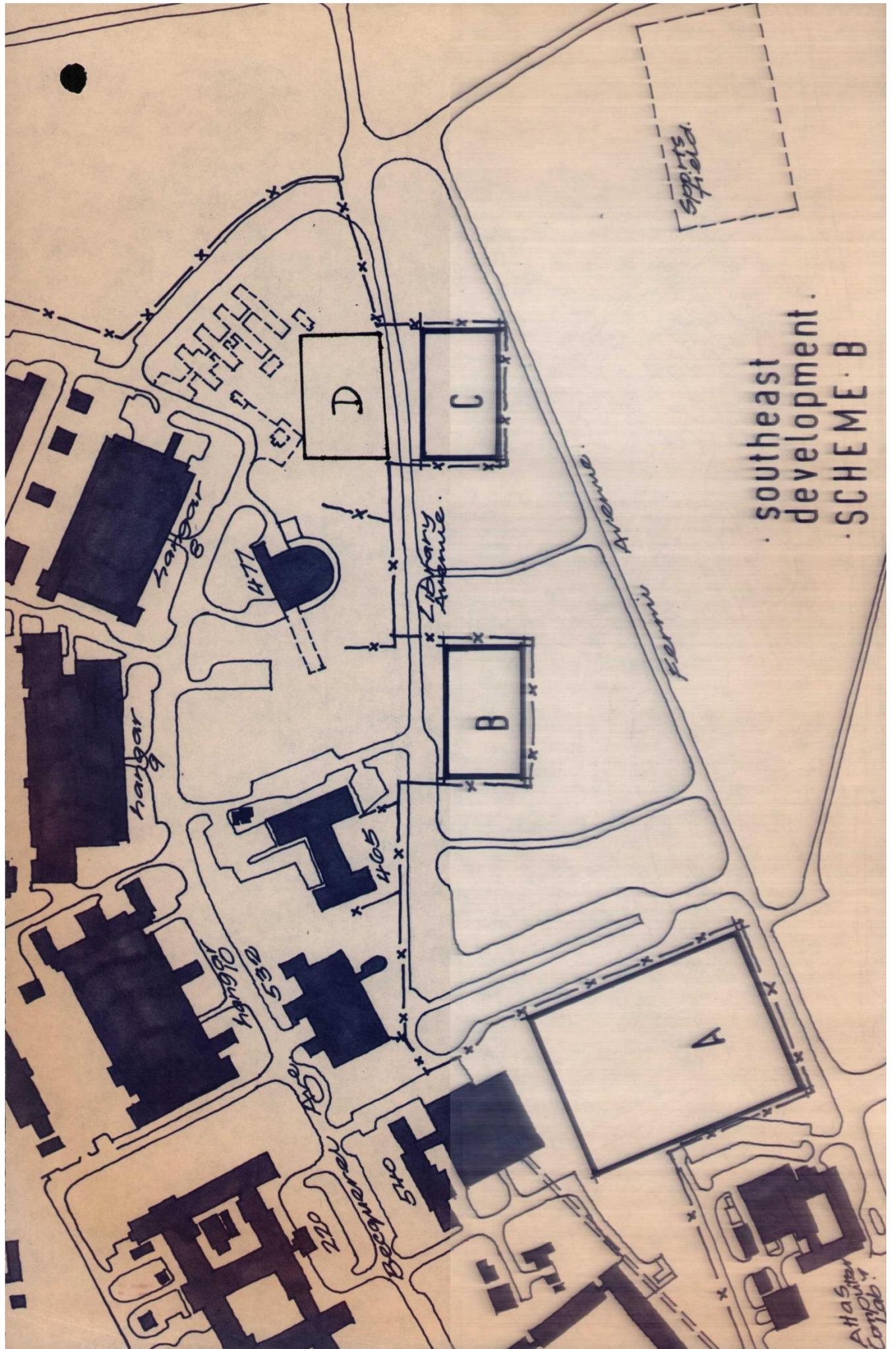
6. It is not impossible to use site A if office and small laboratory accommodation can be found in the Atlas building. Without this the use of site A will be restrictive; with it expansion on the scale foreseen for the next eight to ten years can be accommodated.

7. The Harwell intention is to develop the area adjacent to site D as a physics/mathematics complex and our preference is for that site.

W M Lomer  
17 April 1975



southeast development.  
SCHEME · A



southeast development.  
SCHEME B