

IN CONFIDENCE

6th July, 1961

NI/GP/61/37

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

Heavy Laboratory and additional office accommodation

Note by the Chairman of the
Rutherford Laboratory Building Committee

In paper NI/GP/60/41 dated 28th September 1960 and in paper NI/GP/61/9 dated 27th January 1961 submissions were made for a Heavy Laboratory and additional office accommodation. On 27th January 1961 Treasury approval was given for the Heavy Laboratory at an estimated cost of £140,000. In paper NI/GP/61/8 the Committee were asked to agree to the re-siting of the Heavy Laboratory adjacent to the proposed office block and this they did with a request that "package deal" tenders be sought. At this stage the Committee also approved the levelling of the site for the two buildings. Paper NI/GP/61/9, referred to above, asked for approval of the additional office block at an estimated cost of £100,000. The Committee approved the building in principle subject to further information on the need for 10,000 sq. ft. but the estimated cost of £100,000 was not approved and the Committee decided that offers should be invited on the basis of a "package deal". Subsequent communication with U.K.A.E.A. London Office gave approval for an expenditure of £89,000. This figure anticipated lower fees and did not include furniture as a great deal of this existed in other temporary offices on site.

1. Following the Committee's request, eight firms were invited to tender against a "package deal" specification and outline drawings which incorporated both the Heavy Laboratory and office block. It was considered that the most economic planning arrangement was to include the domestic facilities for the Heavy Laboratory in the office building. This, of course, simplifies the specification for the Heavy Laboratory but adds to the requirements of the office building.
2. Of the eight firms invited to tender only three submitted prices. The make-up of the total estimate is as follows:-

	<u>Taylor Woodrow</u>	<u>Beecham Buildings</u>	<u>Chivers</u>
1. Inclusive Tender figures for both buildings	£217,300	£159,000	£138,000
2. External Services (by S.W.O.)	£ 15,000	£ 15,000	£ 15,000
3. Contingency Allowance	£ 5,000	£ 5,000	£ 5,000
4. Fees (Provisional Sum Payment at cost)	£ 17,000	£ 17,000	£ 17,000
	<u>£254,300</u>	<u>£196,000</u>	<u>£175,000</u>

42,000
6500

Taylor Woodrow Ltd. generally satisfy the specification and give the best completion date but cannot be recommended on a basis of cost. Chivers Ltd. submitted a tender which does not comply with the specification in respect of functional requirements, planning details, has a deficiency of 900 sq. ft. in floor area and the scheme is aesthetically unsatisfactory.

Beecham Buildings Ltd. have submitted an excellent scheme which is an acceptable interpretation of our requirements. Their completion date is the second best.

3. Preliminary consideration of the two schemes indicates that the minimum amendments to the scheme submitted by Chivers to make it comply with our requirements would make it only marginally different in cost from that submitted by Beecham Buildings and might entail lengthy negotiation. A more detailed reconciliation statement will be prepared during the next two weeks prior to the actual placing of the contract and at this stage the costs of Office Block and Heavy Laboratory will be separately indicated. It is clear however that the Heavy Laboratory will be well within the £140,000 approved by the Treasury and will cost approximately £4. 12. Od. per sq. ft. (exclusive of fees and external services). The Office Block will not be substantially different from the sum approved and will be approximately £4. 12. 6d. per sq. ft. (exclusive of fees and external services). These costs include allowance for dayworks and the contingency allowance. The joint cost of the two buildings including the levelling of the site will be less than the amount previously approved.

Prior approval was given to site clearance and levelling and a total of £11,000 will be expended on this work. Allowing for this amount, the cost of the scheme including Beechams' tender would be £207,000 which compares favourably with the £229,000 previously approved.

4. The anticipated rate of expenditure is

1961/62 - £75,000

1962/63 - £132,000

Adequate funds are available in 1961/62 and provision will be made in the estimate for 1961/63.

5. It is requested that, subject to London Office, U.K.A.E.A. being satisfied with the reconciliation statement being prepared, the Committee approve the placing of the contract for a Heavy Laboratory and Office Block at a cost of £159,000.

Rutherford High Energy Laboratory,
Harwell.

P. BOWLES

CONFIDENTIAL

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

Proposed Heavy Duty Laboratory and Associated Office Block (Package Contract)

We have examined Messrs. Chivers' and Messrs. Beecham's tenders for this building and our first examination shows the following position:- (Figures are to nearest thousand)

	Messrs. Chivers' tender figure with other fixed sums	Messrs. Chivers' tender figure adjusted to enable comparison to be made with Beechams	Messrs. Beechams tender figure with other fixed sums
Heavy Duty Laboratory	67,000	69,000 (roof modifications	73,000
Office Block	56,000	71,000 (extra area, better partitions, better cladding)	72,000
Day Works	<u>15,000</u>	<u>15,000</u>	<u>13,000</u>
Sub Total	138,000	155,000	158,000
Other items (Direct Contracts, Contracts, Spoil Clearances, and Allowances)	<u>31,000</u>	<u>31,000</u>	<u>31,000</u>
TOTAL	<u>169,000</u>	<u>186,000</u>	<u>189,000</u>

We have compared the respective programmes and they are as follows:

	Chivers		Beecham	
	Laboratory Block	Office Block	Laboratory Block	Office Block
Number of weeks required from acceptance to date of submission of working drawings	12	12	8	4
Number of weeks required to handover buildings	52	65	36	55
Number of weeks required to hand over complete works	52	65	40	57

Comparison has also been made on floor areas and cubic contents of the buildings and the position is as follows:-

	Chivers		Beecham	
	Laboratory Block	Office Block	Laboratory Block	Office Block
Total Area inside external walls	16,800	15,485	16,800	17,220
Total Cube inside external walls	478,800	154,860	495,000	161,230
Total Useful Floor Area		11,957		12,910
Total Useful <u>Office</u> Floor Area		9,743		10,120

It will be seen that: i) after adjustment, Beecham's figure is £3,000 higher than Chivers' total

ii) Beecham's programme for completion is better than Chivers' on lab. block by 16 weeks and on office block by 12 weeks.

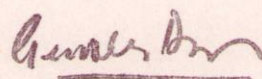
iii) Beecham's programme for building completion is better than Chivers on lab. block by 20 weeks and on office block by 13 weeks.

iv) The scheme submitted by Beecham's is aesthetically more satisfactory than that submitted by Chivers'.

Adjustments have been made on a few fundamental points, and we are of the opinion that when the schemes are investigated further, the margin in favour of Chivers' on price may be even less, or even show Beecham's as being the lowest tenderers. The scheme submitted by Chivers' is scrappy. There are many unresolved points and their presentation is generally unsatisfactory. We are of the opinion that the scheme submitted by Beecham's is a better interpretation of N.I.R.N.S.' requirements. We recommend that Beecham's scheme be accepted subject to detailed checking confirming our first thoughts.

Messrs. Chivers scheme is so sketchy that if their scheme were to be considered, a lot of professional officers' time would be needed in order to bring their scheme into some reasonable shape. A package contract should relieve us of most of the design responsibility.

The framing of the building as shown by Messrs. Beecham's is in concrete and this would result in lower maintenance costs over the years and also the increased cube is brought about by additional height from floor to ceiling part of which is used for accommodation of services which would give much greater flexibility than surface services which seems to be the method of Chivers scheme.



G. W. Dixon.
Chief Architect.

Southern Works Organisation.

19th July, 1961.