E 607

Building R.1,

11/13 c

CEG/GES/R.1.

September 11th, 1962.

Mr. K. Choate.
S.W.O.,
Tadley.

Dear Mr. Choate,

Building R.18. Rutherford Laboratory.

The Director has obtained the approval of the Chairman of the Institute for Phase I of the scheme for extensions to the above building i.e. the 3 bay extension for the Industrial Chemists Laboratory, Lavatory and Locker Room, and Mr. Miller will be issuing an I.T.P. for this at a cost of £9,000 excluding fees, in the near future.

I have noted, and agree, the points made in your letter ref. AH/MH dated 31.8.62, with the following comments. Now that an I.T.P. for Phase I will be placed with you more than one month ahead of the date quoted in your letter, will you please take all feasible steps to bring forward the Contract start date (1.11.62)quoted) for Phase I so that there is the best possible chance of meeting or anticipating the completion date of 31st March, 1963. If Phase 2 is approved in time, I would like to see a better target date for this than 30.9.63.

I wish to take this opportunity of expressing my appreciation of the efforts made to provide us so quickly with schemes, token estimates and Banda copies of sketches, to enable the case to be made to the Chairman and the G.P.C. for these extensions.

Yours sincerely,

G. E. SIMMONDS.

c.c. Mr. G. Dixon. SWO.
Mr. P. Bowles.
Mr. J. A. Goode.
Mr. A. Miller.

Dr. T. G. Pickavance.
Building R.1.

R.18. Extension.

Herewith notes supporting the case for an extension to Building R.18, to accommodate the Industrial Chemists as you requested.

I trust that this will provide all the information you need.

p.p. G. E. SIMMONDS.

Building R.1.
September 3rd, 1962.

c.c. Dr. J. A. V. Willis.
Mr. P. Bowles.

Building R.18.

Notes on Phase I Extension.

The industrial chemists are engaged on the chemical control of the water treatment plants, related corrosion problems and miscellaneous chemical work.

They are at present, responsible for:

13 Cooling Tower Systems.
32 Demineralised Water Systems.
17 Ion exchange columns operated as 10 water treatment plants.

The number of Cooling Towers will decrease as the centralised water cooling scheme for Buildings R.1, R.2 and R.8 (NI/GP/61/21 - RLBC/P50) now being installed, comes into use.

This will however, be offset by the provision of a demin. cooling water system for Building R.25 Heavy Lab.

The industrial chemists engaged on this work (A.E.R.E. staff, part of Industrial Chemistry Division - R. H. Burns) need laboratory space at the Rutherford Laboratory because:

(i) It eliminates the difficulty of transporting samples (1500 routine tests per month).

(ii) For efficient and close liaison it is virtually essential that the section is close to the plant and personnel that it serves. The work of the section involves, as well as an analytical service, practical advice and assistance; often a compromise is necessary between chemical and mechanical considerations. It is essential that they are on site in order to assist with the problems being dealt with, especially with the water treatment plants. There has been a very pronounced increase in collaboration and requests for service and advice since the section took up residence in the parasitic area, and it is very obvious that both sides have benefited from the move.

The space in the Parasitic Area occupied by the Industrial Chemists must be released by April '63 to enable the parasitic area to be made ready for experiments. The extension to the Parasitic Area (NI/GP/61/25 - RLBC/P52) is programmed for completion on 31.3.63 and the installation of a dense shielding wall, beam transport power supplies and other ancillary work must be put in hand then for the area to be ready for experiments concurrently with the expected availability of a beam in NIMROD.

Repeated attempts have been made since October '61 to find an acceptable alternative laboratory site.

RLBC/P66 Oct. '61.	proposed using part of R.25, new office and lab. block. Rejectcd because space need by others and no trade waste drain in the area.
RLBC/P75. Dec. '61.	proposed extension to R.18 included provision for transport officer, safety officer, toilets, etc. Rejected because two storey - P.L.A. radiation.
RLBC/P75 revised Jan. '62.	Extension of R.18 for industrial chemists and toilets, only - rejected because too expensive.
RLBC/P84. May '62.	proposed extension to R.9. Electronics workshop moved from R.18 to R.9 extension, space freed used for industrial chemists and others covered by P.75 above. Rejected because considered a single storey extension of R.9 would not make adequate use of ground space.
July '62.	Proposed that industrial chemists occupy part of R.8. (Mezzanine floor development), rejected as unsuitable.

The current proposal (NI/GP/62/31) is for an extension of Building R.18. Phase I of this proposal covers the industrial chemists laboratory, a lavatory and locker room and a corridor, which can be self sufficient but could be further extended to cover the full requirements described in this paper.

The S.W.O. have given an estimated cost of £9,000 to building Phase I. This cost would cover completing it should approval not be given to the larger scheme, and includes services, sinks, partitioning in lab. Benches considered as furniture and in line with current practice are excluded.

The internal area of the Phase I extension is:

	Sq. ft.
Industrial chemists	915
Male lavatory & locker room.	420
Corridor.	185
Total:	1520

Approx. £6 per sq. foot.

S.W.O. will add Phase I to an existing Chivers contract to avoid delay in tendering. An early start on this work is essential to meet target date.

The male lavatory and locker room is adequate to cope with full scheme. Should, however, Phase I only be built, the provision of these facilities in R.18 will fill a need since there is no lavatory accommodation in R.18 at present. Lavatory has 3 - W.C.'s, 4 - Urinals, 5 wash basins. The number of W.C.'s and wash basins could be reduced to 2 and 3 respectively with provision for extension later, similarly the number of lockers could be reduced by removing the centre row but effect on cost would be very marginal.

G. E. SIMMONDS.

September 3rd, 1962.

Ha. Bowles
E604

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R.18. Extension - Further Notes.

Further information on costs since my note dated 3.9.62.

	Phase I.	Phase 2.	Phase I & 2 built together.
Cost of Building.	£	£	£
Arch. & M & E.	7,200	29,800	36,500
External services.	1,800	3,200	5,000
Total cost	9,000	33,000	41,500
Internal area sq.ft.	1,520	5,700	7,220
Cost per sq.ft. excluding external services.	£4.15.0.	£5.2.6.	£5.1.0.

Total cost of Phase I at £9,000 excludes fees which at 15% = £1,350.

Cost of Phase I and 2 built together is £500 less than separate cost of these because provision has to be made for completing East end of Phase I as an external wall.

I have raised the difference in building costs £4.15s.0d. against £5.2.6. per sq. ft. for Phase I and 2 respectively with S.W.O. They could offer no explanation "off the cuff" but said that the figure of £9,000 (£7,200 + £1,800) for Phase I had been re-checked and confirmed.

G. E. SIMMONDS.

September 5th, 1962.