

14th October, 1959

NI (GP) (59) 41

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

GENERAL PURPOSES COMMITTEE

PREPARATORY WORK FOR FUTURE EXTENSION OF EXPERIMENTAL AREA

1. It is now quite clear that, for NIMROD to be used to its full potential, additional Experimental areas will be required. Such extensions should be shielded from the present Experimental area so that major experiments can be erected in one area while the machine is serving experiments in the other.
2. At the appropriate time, the case for the major extensions will be put to the General Purposes Committee but it is highly desirable to make early provision for the future beam exit from the Magnet room. This can be done by constructing a tunnel through an existing aperture in the wall of the Magnet room, below the proposed level of the earth mounding, to a point where the new Experimental area would be located. If a decision to do this work is taken now, it can be completed most economically and without any material disturbance to the programme.
3. If the work is deferred until all the earth mounding is completed, the cost of construction will be considerably greater, as tunnelling in newly banked earth is extremely difficult and costly; the earth cannot be moved by a dull-dozer to make way for a tunnel as this would mean disturbing the earth mounding, with consequent effects on the Magnet levelling.
4. In view of this, it is proposed to construct a reinforced concrete tunnel now, completely devoid of mechanical services and shielding, - these can be provided later, as necessary. The cost of such a tunnel, with heavy floor to take future shielding and quadrupole assemblies, would be less than £10,000.
5. In view of the extreme urgency, authority is requested to proceed immediately with the constructional work, the actual cost being reported at the next meeting of the General Purposes Committee.

T. G. PICKAVANCE

