

University of Cambridge  
Department of Architecture  
University of Cambridge  
Scroope Terrace  
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**Report of the Exploratory Board to the MPhil (B) in Environmental Design in  
Architecture, Proposed Part Two; 14 December 2007  
Confirmed by the RIBA Education Committee 17 September 2008**

The Board members were as follows:

Dr Robert Felix – Chair  
Mr David McClean  
Ms Roz Barr

Stephanie Beasley-Suffolk (RIBA) attended as Secretary.

David Gloster, RIBA Director of Education, attended the visit as an observer

**1. Recommendations**

At its meeting on 17 September 2008 the RIBA Education Committee confirmed:

**Candidate Course Status for Exemption from Part Two of the RIBA  
Examinations for the MPhil (B) in Environmental Design in  
Architecture.**

The designation ‘Candidate Course for Validation’ implies that the proposals for the course are judged to have the potential to meet RIBA criteria, if implemented as anticipated. It is not, however, equivalent to Validation, which can only be granted once the standards of the work produced have been assessed and found satisfactory.

The first cohort is due to be enrolled in autumn 2008. The first cohort will graduate in summer 2010.

The Board thanks the School for its openness and the opportunity to discuss and develop their ideals, proposals and aspirations beyond what was already outlined in the documentation that was current at the time of the visit. The Board understood at the time of the visit that many of the finer details of the programme’s intended operation were still being finalised. Much of the School’s vision for the programme and practical details of its operation were articulated in discussion with the Head of School and staff. The Board believed that this additional information might usefully be articulated in any future documentation to be submitted to the New Courses and Course Changes Group.

**2. Background**

The former Part Two Diploma in Architecture at Cambridge was closed in 2003, with the final cohort graduating in 2005. The School of Architecture is now seeking to re-establish a Part Two, based on an existing MPhil in Environmental Design in Architecture, which has been running for twenty years. The establishment of the B route has been facilitated by its being a development of an existing course.

There have already been instances of graduates of the existing programme entering Part Two programmes and graduating successfully, both at Cambridge and at other schools. The School wishes ultimately to offer the award as an M.Arch, which may take several years to be approved through the system. The label of masters represents the ambition of the course. There are examples of similar Cambridge masters in engineering, law and medicine. As it has a strong professional component the university has accepted that it is not an M.A.

During the planning of the programme and its passage through the University of Cambridge internal validation procedures, representatives of the School discussed their proposals with the New Courses and Course Changes Group.

### **3. Documentation**

The Board thanks the School for the course documentation, which was succinct and to the point. The Board commented that the documentation provided a clear outline of what they intend to do. This was supplemented by the staff's openness and enthusiasm.

### **4. Course details**

#### *4.1 Structure and content*

The proposed Part Two course is based largely on the existing M.Phil in Environmental Design, which has been running for twenty years. As presently constituted, the M.Phil is purely research-led and holds no professional content. The present course will continue to exist, with the non-professionally validated route known as the 'A' route and the intended Part Two as the 'B' route.

The establishment of the programme is intended to capitalise on and enhance the School's research expertise in sustainable design and construction. The course actively exploits the considerable expertise and renown of the Martin Centre, in the field of environmental design. The School told the Exploratory Board that the existing MPhil had been the first year of the former Diploma (Part Two) course. It already encompassed a significant proportion of the Part Two criteria, including an appreciable design component, and this was the origin of the idea to develop it into a validated Part Two route. The proposed new route will incorporate changes intended to ensure that the new course meets the RIBA/ARB criteria for Part Two, the most significant of which is the design element. The programme is essentially research based, married to practice, in keeping with the Cambridge ethos.

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The staff consider this to be an exciting development for the School, not only in enabling Cambridge to provide a complete suite of professional programmes once more, complementing and enhancing research activities, but the presence in the School of more experienced students operating at a higher level of ability will also be of benefit to undergraduate students. Students at undergraduate level will also benefit from the embedded links to practice and the knowledge that practice and learning can complement each other. It is anticipated that practices will also benefit from the input of the graduates putting into practice what they have learned at the School. In turn, it is hoped that the interaction with practice will strengthen and inform leading-edge

research. The School is aware of the fact that there is a great deal of expertise in practice which is never published and believed the engagement between practice and School could be very productive and positive. It is hoped that research partnerships may develop in time.

Students will be awarded Part Two on the basis of :

- A Design Thesis, which is intended to be part-written (up to a maximum of 15000 words), part-drawn drawn from Design Research.
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Both A and B routes will share all teaching, learning and assessment through the first two terms of the first academic year. These are organised around eight 2 day, themed conferences. The conferences will comprise lectures by staff, invited speakers from related departments and external speakers. This will be followed by workshops, exercises, assessment and feedback.

Students will undertake group projects in the first term, followed by work on an individual basis in the second. A range of projects will be available, but students are also free to make their own suggestions.

The two academic terms are intended to give students the opportunity to meet the Technology & Environment, Cultural Context and Communication criteria for Part Two. In the second academic term, students will be expected to submit their Design Thesis project proposal. The School is confident that design accounts for more at least 50% of the programme. As well as being the main vehicle for the delivery of the design requirements at Part Two, the research-led nature of the Design Thesis is also in keeping with the University requirement for a high level of research at masters level. The thesis will be developed during the 9 month placement period, with students returning for four formal recall events to check progress. Students return to the Department for the Easter Term of the second academic year, which is devoted to the completion of the Design Thesis. The research interests of the students are highly significant in the admissions procedures and fundamental to the course and direction of study the students will take. It is anticipated that students will come to Cambridge already having formed some idea of the themes they wish to pursue, which will be probed at interview. The School will also try to match the students to practices before

enrolment so that they can be in contact with the practice while developing their design thesis.

The Case Study can be either descriptive or analytical. The Board was interested to explore whether the Case Study would be in the same area as the thesis design and thus complement each other.

Architecture and Engineering have been running a combined engineering and architecture design studio for third year students, which has been very successful. The module has also been taken by the M.Phil (A) students and it is proposed that the M.Phil (B) students join them in the first instance, although this may not necessarily continue. The module involves intensive, integrated design and will form the core of the first term design work. The Board understood that the finer details of this had not yet been worked out at the time of the visit. The School will forward updated documentation to the NCCCG when appropriate.

It is intended that the Management, Practice and Law components of the criteria will be delivered and met through the students' practice placements and through content delivered in the recall events.

There are formal mechanisms for the setting of projects, involving student, supervisor and practice. The undergraduate model, involving co-operation between College and studio, is considered good preparation for this.

It is anticipated that thesis review days such as those at undergraduate level, involving the whole cohort, might be helpful, allowing an exchange of material, feedback from others students and acting as an incentive. In the fullness of time, with a full complement of students, they may also involve other architects and professionals from cognate disciplines.

#### 4.2 *Practice placements*

In the programme documentation, the School anticipates that a minimum of 20 approved practices will be available to take up to 15 students. Practices were invited to register an interest in the placement scheme at an exploratory meeting in December 2006. The School reported that interest had been tremendous and it had been necessary to cap the number of registered practices at 30. Each practice will take a maximum of two students. This will be overseen by a placement co-ordinator. At the time of the visit it was anticipated that this would be a fixed-term, part time post with that of the current Part Three co-ordinator.. The Board would welcome further proposals about how this might operate.

The School is searching for practices with known expertise. At the time of the visit it was anticipated that approval of the practices would be based on their having a "practice Quality Assurance Framework, a proven interest in Environmental Design and Sustainable Construction and an adequate flow of work in sufficient variety to provide the full experience required." The Board would welcome the opportunity to see a sample of this when appropriate; for example a practice might submit a paradigmatic example.

The current documentation states that the practices will interview placement candidates at their own discretion. The Department will direct suitable candidates towards practices which support the particular research interests of the students.

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Students will be full employees, 80% FTE of the practice in which they are placed and will work for four days a week.

The School intends to visit practices and hold a summer practice seminar in order to provide thorough briefing. The University of Cambridge also has a Placement Learning Policy to which the School and practices will be expected to adhere. At the time of the visit a draft mentoring agreement, intended to ensure consistency, was in place. The School reported that much work remained to be done in this area, but that practices were taking it very seriously. It was anticipated that mentors would be chosen according to the students' project themes. The Board would welcome concrete proposals at the appropriate time when these have been developed.

The contracts include a stipulation that practices must cover certain areas of the criteria. In addition to the practice mentor, supervisors will also monitor students' placements. Students' work will be checked at the four recall events. Practice mentors may also be involved in crits. The School is aware of the need for supervisors and mentors to develop good working relationships. The Board believed it would be necessary to have a contingency plan in the event of a breakdown of the relationship, involving, if appropriate, moves either within the practice or to another practice.

As course structure and delivery are heavily dependant upon work in practice, the Board wished to explore the possible effects of economic recession. The School reported that it had been obliged by the University to undertake a risk analysis. At present the arrangements with the practices are for fixed term posts and the School believed that students' employment is insulated against serious fluctuations in the economy. However, as the course is dependent upon practice input, the Board believed that the School needed to develop a strategy for sustaining it during periods of economic downturn where the willingness of practice to employ students may be less.

#### *4.3 Assessment*

Supervisors and mentors will check the work to assure themselves of provenance and authorship. There are a number of graded studio exercises through the year. Each piece of work is assessed, including that undertaken with the engineering students and forms 50% of the assessed work, with the Design Thesis accounting for the remaining 50%. Placement work is purely intended as practice experience. Design work undertaken during the placement does not count towards the 50% design component and will not be assessed. The Board commented that this should be made explicit in the course documentation. Work will be reviewed on the second day of each of the eight 'conferences' in the first year. Work in practice is not formally assessed in design terms, but is all accounted for and considered both by the supervisor and the staff member responsible for management, practice and law against the relevant criteria. PEDR records will also be checked. Students will be interviewed in the fourth recall period. The Board thought that this was a good personal touch which did not come through in the documents.

The pass mark is 60% which is calculated using the average mark of four components. Cambridge permits no condonement or compensation and it is not possible to retake. The School believed that the level of supervision ensures that problems are invariably identified early on. Potentially, a student may not be permitted to submit for examination if they are not at a sufficient standard. If there is a marginal fail on a piece of work, an oral examination may be undertaken to determine whether a student should pass.

The School proposed to appoint at least one registered Architect as an External Examiner. The Examiner will be appointed on a three-year rotation to moderate the internal examination and to ensure that all successful candidates have met the Part Two criteria.

#### 4.4 *Admissions*

The School wishes to enrol students who are capable of straddling both the design discipline and research discipline. Applicants to the M.Phil (B) route must have a recognised Part One qualification either at First Class or 2.1 level or equivalent. Those applying without a prescribed Part One qualification will be required to take the ARB Prescribed Examination before being admitted. Offers will be made on the basis of an interview. Students must also be accepted by a College and have a placement at a practice approved by the Department of Architecture.

The School intends to admit 15 into each year. At any one time there will be 15 students in the School and 15 in practice. Students will live in their respective Colleges during the terms in residence and elsewhere during their practice placements.

It is not compulsory for entrants to have taken their first year out before embarking on the course, although it is considered desirable. The School is aware that graduates who have not done so will need to complete 24 months in practice post-Part Two before being eligible for Part Three.

## 5. **Resources**

### 5.1 *Physical Resources*

The School has invested heavily in resources in recent years. The last full Visiting Board to the Cambridge School of Architecture (February 2005) conducted a thorough review of all resources, including studios, library, workshops and IT provision. The Board's findings and observations are recorded in full in the Visiting Board report. At the time of the 2005 Visit, the School's activities were spread across three sites, but plans to consolidate the School onto two sites were advanced. The long-term plan (as at February 2005) was to co-locate all the School's activities (teaching and research) onto one site.

The mid-term monitoring visit took place on 22 June 2007. At the mid-term visit it was noted that:

“The refurbishment of Scroope Terrace is ongoing, but almost complete. At the time of the visit the studios were nearly finished and it was anticipated that all would be finished by October 2007. When the building works are complete, all staff and students will be housed on one site. All students now have desk space and the new studios are greatly appreciated. The refurbishment has now released space in the Terrace, which will be allocated to research. The basement is being refurbished for the new MPhil (B) which eventually will change its name to M.Arch (subject to Privy Council approval).

“There are now model-making facilities in the workshop. There is also a virtual computer room provided by the CITRIX system which allows the students laptops to be used as terminals, giving access to all software any where in the building.”

The Exploratory Board noted that about 95% of students have their own laptops. The School runs in-house IT course including Microstation, Radiance, ESPR and

EcoTect. All students now have electronic portfolios from the first year. The Board advises the School to encourage students to use the full range of means of representation.

The Exploratory Board also noted that the School has extended the Library. This also includes a slide library which is gradually being digitised. The Board noted that the periodicals collection is a strength.

### 5.2 *Staffing*

The School is confident that sufficient numbers of staff are available to support the B route. There are presently 14 members of staff, the majority connected with the M Phil (A) route who will also teach B route students for the identical sessions. The Professor of Architecture, who has experience of teaching diploma students, will be in charge of the studio aspect of the B route. The School believes there is a lot of design strength in the current teaching staff and is confident that it can provide a breadth and depth of design experience. A new appointment has been made specifically to lead on management, practice and law. The School currently has an excellent staff:student ratio (at the time of the visit calculated at 1:10).

The Board was pleased to note that there was evidence of emerging collaborations in the discussion with staff.

## 6. **Commentary on criteria coverage**

The Board believed that associated practices will or may work in a prescribed way. In many respects, practices will perform like ateliers in a traditional course. The need to ensure parity of opportunity, experience and assessment is paramount. The Board was interested in ascertaining the mechanism for ensuring that all students are given the opportunity to meet the criteria, the assessment of this and the mechanism for ensuring parity.

The Board noted that each piece of work is assessed and can be graded individually. The School should be mindful of overall profile of the students which should demonstrate strengths as well as the criteria.

### 6.1 *Design*

As it is a Part Two course students should be able to have the opportunity to demonstrate through design that they can integrate all the criteria. From the generic expressions used, the mapping document appeared to indicate that design criteria would be met. However, the Board identified a mismatch between what the Board would normally see as a design portfolio and what the School is demonstrating.

The Board recommends that the School demonstrate how it anticipates that the students can meet Design criteria and how they will be given the opportunity to do so. The Board is concerned that the Design Thesis might preclude students from being able to do this. At present there is no vehicle either in the documentation or the discussion that accepts that this is available. The Board would encourage the School to consider a diverse range of design challenges, complementary to the rigour of the proposed research programmes.

The Board concurs with the School's view that the presence of Part Two students in the School will have a beneficial effect on the work of Part One students. The Board notes that the reflective culture of the proposed Part Two course and Part Two students' work may be affected by the fact that first and second years will not be in

residence in the School at the same time and therefore will have little opportunity to see each other's work.

The Board believed that the creativity of design thinking needs to be developed.

#### 6.2 *Technology and Environment*

The School demonstrated in the elements it proposes that that students will consider, such as the integration of structure and environmental science. The Board believed that the School's strength lies at the strategic level. The Board considered that research is good at analysing the strategies of a case study but from the data available there did not appear to be any move to synthesise a new or original piece of work drawing conclusions from the data. The Board identified possible issues with construction and draws the School's attention to the Part Two criteria which require that students demonstrate "ability to:

- Devise structural and constructional strategies for a complex building or group of buildings, employing integrative knowledge of;
  - structural theories
  - construction techniques and processes
  - the physical properties and characteristics of building materials and components and the environmental impact of specification choices
  - the provision of building services".

Students must have the opportunity to display how they have met these outcomes.

#### 6.3 *Cultural context*

Students need to be made aware and given the opportunity to be aware of what cultural context means and the opportunity to demonstrate outcomes. The Board considered that field trips, if not already planned, might from a useful enhancement to the curricular offer.

#### 6.4 *Communication*

The Board considered that there would be little issue with the written aspects the course. However, they were concerned that the underpinning of the design development by sketches, models and other means to show process and the development of design may be difficult to demonstrate. The School is asked to bear in mind that evidence of design development will need to be provided in the portfolios.

While noting the quality of workshop and IT facilities provided, the Board would like further information about how the School envisages that communications criteria will be covered and met during the course. The Board notes that many Part Two level skills are acquired during two full years in an academic setting and that Cambridge students will be away from the School for nine months.

#### 6.5 *Management, Practice and law*

The Board considered that the current administration of the programme is admirable and commends the School's success in engaging practices. However, the Board advises that the School may need to do more as the course unfolds.

The Board would like more detailed criteria for selection as an associated practice. The procedures that assure the quality of this will be of critical importance. The School needs to make explicit its processes for quality assuring the practices it partners, due to their instrumental role in the course delivery plan.

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The Exploratory Board did not see any formal input into the management, practice and law elements. The School must make sure that the students are aware of the requirements regarding management, practice and law and must be given opportunities to meet the criteria and that they must demonstrate compliance within the academic portfolio.

At the time of the visit the Board could see no mechanism for maintenance of standards while students are in practice. Students' roles will need to be protected in order to ensure that the needs of the practice do not take precedence over students' academic needs. The Board commented that monitoring year out students in any institution is a major task, even when it does not form a formal component of the academic programme. The Board considered that resource for in-practice monitoring does not appear to have been considered. Since the discontinuation of the former Part Two course, there is no current mechanism for the monitoring of fourth-year students on which the present course leaders could draw and the School has no current experience.

The Board noted that the practitioners are taking on an academic role and that the practices have an academic obligation of which they will need to be aware, particularly if a student has not had a year out. The fact that students are also employees may complicate this. The Board suggests that the School will need to use its practice briefing sessions and supervisor visits to emphasise to the practice its academic obligations.

Students' nine months in practice will need to be carefully monitored. The Board believed that the currently anticipated number of recall days may not be sufficient during this period. At present students would have no real means of articulation if they are not receiving the necessary quality of experience. This emphasises the importance of named personnel and good communication between school, student and practice. The Board suggests it may be wise to give students guarantees of continuity. This may be provided under the University's Placement Learning Policy.

The Board believed that it is not possible for the School to guarantee what they presume will be delivered in the practice according to the mapping. The Board notes that the School is taking a risk that students' experience of time in practice may be different from that anticipated. At the monitoring visit the School would have to demonstrate the robustness of the monitoring system designed to ensure that students receive appropriate experience.

The programme specification states that practice mentors should be conversant with contemporary higher education. The Board would like further information about how this is to be established. The Board emphasises that office mentors will need to have knowledge of the validation criteria, university course structures, modern teaching skills and values, diversity issues and other aspects of contemporary higher education. The School needs to assure itself that this can be implemented and is sustainable.

Although this is marketed as a full-time course, the Board believed that it is, effectively, part-time. The Board believed that the School has not appreciated the potential student workload caused by [not] working full-time while having also to produce an essay, practice case study and design thesis. The Board was concerned in particular about whether students had sufficient time in which to research and develop the Design Thesis.

The Board noted that students may not all enter practice at the same work stage. The Board would like further information on possible ramifications for students if their schedule of academic work slips, particularly given the rigidity of the assessment framework at Cambridge.

The Board would like further information on how the School proposes to address pastoral issues.

## 7. Future action

As is standard practice with Candidate Courses, a monitoring visit will take place at the end of the first year of operation of the course. This visit will be carried out by one member of the present Board. The monitoring visit will be particularly important as it concerns a new course and a new approach.

- 7.1 The School should submit a full suite of documentation as possible, such as would be provided for a full validation visit.
- 7.2 In recommending Candidate Course Status, the Board is confirming that the course has the potential to fulfil the criteria if implemented as anticipated. The School is invited to forward the additional documentation that was provided on the day of the Exploratory Board, any further additional or revised documentation to future meetings of NCCCG.
- 7.3 The Board notes, and the School is aware, that ultimately the programme will be validated under the revised validation criteria. The Board draws the School's attention to the fact that new criteria will focus on the European directive. The Board will formally request that when the new criteria are adopted, the School forwards the NCCCG the course documentation once more.
- 7.4 The Board advises the School to reconsider the mapping and criteria and make sure it is up to date and in line with current thinking.
- 7.5 The School's approach to some criteria, which are often considered difficult, is commendable. However, their intentions with regard to others appear less explicit and compartmentalised, which may make integration more difficult. The Board considered that the case study might prove a useful vehicle for criteria compliance, particularly if students approach it in a reflective way, enabling them to take ownership of the criteria and identify where they believe they have been met.
- 7.6 The School is asked to be mindful of the standard of work in the projects must be post-Part One standard.
- 7.7 At the monitoring visit, the Board would like to meet students, staff (including supervisors), mentors and representatives of practices. The Board will wish to see evidence of, and discuss what has actually been achieved in the first year of operation.
- 7.8 The Board was told that the recall day would serve as the quality assurance checks for the quality and appropriateness of the practice experience that the students were receiving. The Board member undertaking a future monitoring visit will wish to explore in more detail how this will work as it was not

entirely clear to the present Board. The Board would expect the course documentation, as it develops, to articulate and support this more clearly. Before any monitoring visit, the School will be asked to submit the most up to date versions of all course documentation.

The Board commends the School for its courage and innovation in seeking to establish such a course. The School is proposing a unique model of education and the Board would be interested to know if it proposes monitoring its development as a research theme in itself.

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Both A and B routes will share all teaching, learning and assessment through the first two terms of the first academic year. These are organised around eight 2 day, themed conferences. The conferences will comprise lectures by staff, invited speakers from related departments and external speakers. This will be followed by workshops, exercises, assessment and feedback.

Students will undertake group projects in the first term, followed by work on an individual basis in the second. A range of projects will be available, but students are also free to make their own suggestions.

The two academic terms are intended to give students the opportunity to meet the Technology & Environment, Cultural Context and Communication criteria for Part Two. In the second academic term, students will be expected to submit their Design Thesis project proposal. The School is confident that design accounts for more at least 50% of the programme. As well as being the main vehicle for the delivery of the design requirements at Part Two, the research-led nature of the Design Thesis is also in keeping with the University requirement for a high level of research at masters level. The thesis will be developed during the 9 month placement period, with students returning for four formal recall events to check progress. Students return to the Department for the Easter Term of the second academic year, which is devoted to the completion of the Design Thesis. The research interests of the students are highly significant in the admissions procedures and fundamental to the course and direction of study the students will take. It is anticipated that students will come to Cambridge already having formed some idea of the themes they wish to pursue, which will be probed at interview. The School will also try to match the students to practices before

enrolment so that they can be in contact with the practice while developing their design thesis.

The Case Study can be either descriptive or analytical. The Board was interested to explore whether the Case Study would be in the same area as the thesis design and thus complement each other.

Architecture and Engineering have been running a combined engineering and architecture design studio for third year students, which has been very successful. The module has also been taken by the M.Phil (A) students and it is proposed that the M.Phil (B) students join them in the first instance, although this may not necessarily continue. The module involves intensive, integrated design and will form the core of the first term design work. The Board understood that the finer details of this had not yet been worked out at the time of the visit. The School will forward updated documentation to the NCCCG when appropriate.

It is intended that the Management, Practice and Law components of the criteria will be delivered and met through the students' practice placements and through content delivered in the recall events.

There are formal mechanisms for the setting of projects, involving student, supervisor and practice. The undergraduate model, involving co-operation between College and studio, is considered good preparation for this.

It is anticipated that thesis review days such as those at undergraduate level, involving the whole cohort, might be helpful, allowing an exchange of material, feedback from others students and acting as an incentive. In the fullness of time, with a full complement of students, they may also involve other architects and professionals from cognate disciplines.

#### 4.2 *Practice placements*

In the programme documentation, the School anticipates that a minimum of 20 approved practices will be available to take up to 15 students. Practices were invited to register an interest in the placement scheme at an exploratory meeting in December 2006. The School reported that interest had been tremendous and it had been necessary to cap the number of registered practices at 30. Each practice will take a maximum of two students. This will be overseen by a placement co-ordinator. At the time of the visit it was anticipated that this would be a fixed-term, part time post with that of the current Part Three co-ordinator.. The Board would welcome further proposals about how this might operate.

The School is searching for practices with known expertise. At the time of the visit it was anticipated that approval of the practices would be based on their having a "practice Quality Assurance Framework, a proven interest in Environmental Design and Sustainable Construction and an adequate flow of work in sufficient variety to provide the full experience required." The Board would welcome the opportunity to see a sample of this when appropriate; for example a practice might submit a paradigmatic example.

The current documentation states that the practices will interview placement candidates at their own discretion. The Department will direct suitable candidates towards practices which support the particular research interests of the students.

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Students will be full employees, 80% FTE of the practice in which they are placed and will work for four days a week.

The School intends to visit practices and hold a summer practice seminar in order to provide thorough briefing. The University of Cambridge also has a Placement Learning Policy to which the School and practices will be expected to adhere. At the time of the visit a draft mentoring agreement, intended to ensure consistency, was in place. The School reported that much work remained to be done in this area, but that practices were taking it very seriously. It was anticipated that mentors would be chosen according to the students' project themes. The Board would welcome concrete proposals at the appropriate time when these have been developed.

The contracts include a stipulation that practices must cover certain areas of the criteria. In addition to the practice mentor, supervisors will also monitor students' placements. Students' work will be checked at the four recall events. Practice mentors may also be involved in crits. The School is aware of the need for supervisors and mentors to develop good working relationships. The Board believed it would be necessary to have a contingency plan in the event of a breakdown of the relationship, involving, if appropriate, moves either within the practice or to another practice.

As course structure and delivery are heavily dependant upon work in practice, the Board wished to explore the possible effects of economic recession. The School reported that it had been obliged by the University to undertake a risk analysis. At present the arrangements with the practices are for fixed term posts and the School believed that students' employment is insulated against serious fluctuations in the economy. However, as the course is dependent upon practice input, the Board believed that the School needed to develop a strategy for sustaining it during periods of economic downturn where the willingness of practice to employ students may be less.

#### *4.3 Assessment*

Supervisors and mentors will check the work to assure themselves of provenance and authorship. There are a number of graded studio exercises through the year. Each piece of work is assessed, including that undertaken with the engineering students and forms 50% of the assessed work, with the Design Thesis accounting for the remaining 50%. Placement work is purely intended as practice experience. Design work undertaken during the placement does not count towards the 50% design component and will not be assessed. The Board commented that this should be made explicit in the course documentation. Work will be reviewed on the second day of each of the eight 'conferences' in the first year. Work in practice is not formally assessed in design terms, but is all accounted for and considered both by the supervisor and the staff member responsible for management, practice and law against the relevant criteria. PEDR records will also be checked. Students will be interviewed in the fourth recall period. The Board thought that this was a good personal touch which did not come through in the documents.

The pass mark is 60% which is calculated using the average mark of four components. Cambridge permits no condonement or compensation and it is not possible to retake. The School believed that the level of supervision ensures that problems are invariably identified early on. Potentially, a student may not be permitted to submit for examination if they are not at a sufficient standard. If there is a marginal fail on a piece of work, an oral examination may be undertaken to determine whether a student should pass.

The School proposed to appoint at least one registered Architect as an External Examiner. The Examiner will be appointed on a three-year rotation to moderate the internal examination and to ensure that all successful candidates have met the Part Two criteria.

#### 4.4 *Admissions*

The School wishes to enrol students who are capable of straddling both the design discipline and research discipline. Applicants to the M.Phil (B) route must have a recognised Part One qualification either at First Class or 2.1 level or equivalent. Those applying without a prescribed Part One qualification will be required to take the ARB Prescribed Examination before being admitted. Offers will be made on the basis of an interview. Students must also be accepted by a College and have a placement at a practice approved by the Department of Architecture.

The School intends to admit 15 into each year. At any one time there will be 15 students in the School and 15 in practice. Students will live in their respective Colleges during the terms in residence and elsewhere during their practice placements.

It is not compulsory for entrants to have taken their first year out before embarking on the course, although it is considered desirable. The School is aware that graduates who have not done so will need to complete 24 months in practice post-Part Two before being eligible for Part Three.

## 5. **Resources**

### 5.1 *Physical Resources*

The School has invested heavily in resources in recent years. The last full Visiting Board to the Cambridge School of Architecture (February 2005) conducted a thorough review of all resources, including studios, library, workshops and IT provision. The Board's findings and observations are recorded in full in the Visiting Board report. At the time of the 2005 Visit, the School's activities were spread across three sites, but plans to consolidate the School onto two sites were advanced. The long-term plan (as at February 2005) was to co-locate all the School's activities (teaching and research) onto one site.

The mid-term monitoring visit took place on 22 June 2007. At the mid-term visit it was noted that:

“The refurbishment of Scroope Terrace is ongoing, but almost complete. At the time of the visit the studios were nearly finished and it was anticipated that all would be finished by October 2007. When the building works are complete, all staff and students will be housed on one site. All students now have desk space and the new studios are greatly appreciated. The refurbishment has now released space in the Terrace, which will be allocated to research. The basement is being refurbished for the new MPhil (B) which eventually will change its name to M.Arch (subject to Privy Council approval).

“There are now model-making facilities in the workshop. There is also a virtual computer room provided by the CITRIX system which allows the students laptops to be used as terminals, giving access to all software any where in the building.”

The Exploratory Board noted that about 95% of students have their own laptops. The School runs in-house IT course including Microstation, Radiance, ESPR and

EcoTect. All students now have electronic portfolios from the first year. The Board advises the School to encourage students to use the full range of means of representation.

The Exploratory Board also noted that the School has extended the Library. This also includes a slide library which is gradually being digitised. The Board noted that the periodicals collection is a strength.

### 5.2 *Staffing*

The School is confident that sufficient numbers of staff are available to support the B route. There are presently 14 members of staff, the majority connected with the M Phil (A) route who will also teach B route students for the identical sessions. The Professor of Architecture, who has experience of teaching diploma students, will be in charge of the studio aspect of the B route. The School believes there is a lot of design strength in the current teaching staff and is confident that it can provide a breadth and depth of design experience. A new appointment has been made specifically to lead on management, practice and law. The School currently has an excellent staff:student ratio (at the time of the visit calculated at 1:10).

The Board was pleased to note that there was evidence of emerging collaborations in the discussion with staff.

## 6. **Commentary on criteria coverage**

The Board believed that associated practices will or may work in a prescribed way. In many respects, practices will perform like ateliers in a traditional course. The need to ensure parity of opportunity, experience and assessment is paramount. The Board was interested in ascertaining the mechanism for ensuring that all students are given the opportunity to meet the criteria, the assessment of this and the mechanism for ensuring parity.

The Board noted that each piece of work is assessed and can be graded individually. The School should be mindful of overall profile of the students which should demonstrate strengths as well as the criteria.

### 6.1 *Design*

As it is a Part Two course students should be able to have the opportunity to demonstrate through design that they can integrate all the criteria. From the generic expressions used, the mapping document appeared to indicate that design criteria would be met. However, the Board identified a mismatch between what the Board would normally see as a design portfolio and what the School is demonstrating.

The Board recommends that the School demonstrate how it anticipates that the students can meet Design criteria and how they will be given the opportunity to do so. The Board is concerned that the Design Thesis might preclude students from being able to do this. At present there is no vehicle either in the documentation or the discussion that accepts that this is available. The Board would encourage the School to consider a diverse range of design challenges, complementary to the rigour of the proposed research programmes.

The Board concurs with the School's view that the presence of Part Two students in the School will have a beneficial effect on the work of Part One students. The Board notes that the reflective culture of the proposed Part Two course and Part Two students' work may be affected by the fact that first and second years will not be in

residence in the School at the same time and therefore will have little opportunity to see each other's work.

The Board believed that the creativity of design thinking needs to be developed.

#### 6.2 *Technology and Environment*

The School demonstrated in the elements it proposes that that students will consider, such as the integration of structure and environmental science. The Board believed that the School's strength lies at the strategic level. The Board considered that research is good at analysing the strategies of a case study but from the data available there did not appear to be any move to synthesise a new or original piece of work drawing conclusions from the data. The Board identified possible issues with construction and draws the School's attention to the Part Two criteria which require that students demonstrate "ability to:

- Devise structural and constructional strategies for a complex building or group of buildings, employing integrative knowledge of;
  - structural theories
  - construction techniques and processes
  - the physical properties and characteristics of building materials and components and the environmental impact of specification choices
  - the provision of building services".

Students must have the opportunity to display how they have met these outcomes.

#### 6.3 *Cultural context*

Students need to be made aware and given the opportunity to be aware of what cultural context means and the opportunity to demonstrate outcomes. The Board considered that field trips, if not already planned, might from a useful enhancement to the curricular offer.

#### 6.4 *Communication*

The Board considered that there would be little issue with the written aspects the course. However, they were concerned that the underpinning of the design development by sketches, models and other means to show process and the development of design may be difficult to demonstrate. The School is asked to bear in mind that evidence of design development will need to be provided in the portfolios.

While noting the quality of workshop and IT facilities provided, the Board would like further information about how the School envisages that communications criteria will be covered and met during the course. The Board notes that many Part Two level skills are acquired during two full years in an academic setting and that Cambridge students will be away from the School for nine months.

#### 6.5 *Management, Practice and law*

The Board considered that the current administration of the programme is admirable and commends the School's success in engaging practices. However, the Board advises that the School may need to do more as the course unfolds.

The Board would like more detailed criteria for selection as an associated practice. The procedures that assure the quality of this will be of critical importance. The School needs to make explicit its processes for quality assuring the practices it partners, due to their instrumental role in the course delivery plan.

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The Exploratory Board did not see any formal input into the management, practice and law elements. The School must make sure that the students are aware of the requirements regarding management, practice and law and must be given opportunities to meet the criteria and that they must demonstrate compliance within the academic portfolio.

At the time of the visit the Board could see no mechanism for maintenance of standards while students are in practice. Students' roles will need to be protected in order to ensure that the needs of the practice do not take precedence over students' academic needs. The Board commented that monitoring year out students in any institution is a major task, even when it does not form a formal component of the academic programme. The Board considered that resource for in-practice monitoring does not appear to have been considered. Since the discontinuation of the former Part Two course, there is no current mechanism for the monitoring of fourth-year students on which the present course leaders could draw and the School has no current experience.

The Board noted that the practitioners are taking on an academic role and that the practices have an academic obligation of which they will need to be aware, particularly if a student has not had a year out. The fact that students are also employees may complicate this. The Board suggests that the School will need to use its practice briefing sessions and supervisor visits to emphasise to the practice its academic obligations.

Students' nine months in practice will need to be carefully monitored. The Board believed that the currently anticipated number of recall days may not be sufficient during this period. At present students would have no real means of articulation if they are not receiving the necessary quality of experience. This emphasises the importance of named personnel and good communication between school, student and practice. The Board suggests it may be wise to give students guarantees of continuity. This may be provided under the University's Placement Learning Policy.

The Board believed that it is not possible for the School to guarantee what they presume will be delivered in the practice according to the mapping. The Board notes that the School is taking a risk that students' experience of time in practice may be different from that anticipated. At the monitoring visit the School would have to demonstrate the robustness of the monitoring system designed to ensure that students receive appropriate experience.

The programme specification states that practice mentors should be conversant with contemporary higher education. The Board would like further information about how this is to be established. The Board emphasises that office mentors will need to have knowledge of the validation criteria, university course structures, modern teaching skills and values, diversity issues and other aspects of contemporary higher education. The School needs to assure itself that this can be implemented and is sustainable.

Although this is marketed as a full-time course, the Board believed that it is, effectively, part-time. The Board believed that the School has not appreciated the potential student workload caused by [not] working full-time while having also to produce an essay, practice case study and design thesis. The Board was concerned in particular about whether students had sufficient time in which to research and develop the Design Thesis.

The Board noted that students may not all enter practice at the same work stage. The Board would like further information on possible ramifications for students if their schedule of academic work slips, particularly given the rigidity of the assessment framework at Cambridge.

The Board would like further information on how the School proposes to address pastoral issues.

## **7. Future action**

As is standard practice with Candidate Courses, a monitoring visit will take place at the end of the first year of operation of the course. This visit will be carried out by one member of the present Board. The monitoring visit will be particularly important as it concerns a new course and a new approach.

- 7.1 The School should submit a full suite of documentation as possible, such as would be provided for a full validation visit.
- 7.2 In recommending Candidate Course Status, the Board is confirming that the course has the potential to fulfil the criteria if implemented as anticipated. The School is invited to forward the additional documentation that was provided on the day of the Exploratory Board, any further additional or revised documentation to future meetings of NCCCG.
- 7.3 The Board notes, and the School is aware, that ultimately the programme will be validated under the revised validation criteria. The Board draws the School's attention to the fact that new criteria will focus on the European directive. The Board will formally request that when the new criteria are adopted, the School forwards the NCCCG the course documentation once more.
- 7.4 The Board advises the School to reconsider the mapping and criteria and make sure it is up to date and in line with current thinking.
- 7.5 The School's approach to some criteria, which are often considered difficult, is commendable. However, their intentions with regard to others appear less explicit and compartmentalised, which may make integration more difficult. The Board considered that the case study might prove a useful vehicle for criteria compliance, particularly if students approach it in a reflective way, enabling them to take ownership of the criteria and identify where they believe they have been met.
- 7.6 The School is asked to be mindful of the standard of work in the projects must be post-Part One standard.
- 7.7 At the monitoring visit, the Board would like to meet students, staff (including supervisors), mentors and representatives of practices. The Board will wish to see evidence of, and discuss what has actually been achieved in the first year of operation.
- 7.8 The Board was told that the recall day would serve as the quality assurance checks for the quality and appropriateness of the practice experience that the students were receiving. The Board member undertaking a future monitoring visit will wish to explore in more detail how this will work as it was not

entirely clear to the present Board. The Board would expect the course documentation, as it develops, to articulate and support this more clearly. Before any monitoring visit, the School will be asked to submit the most up to date versions of all course documentation.

The Board commends the School for its courage and innovation in seeking to establish such a course. The School is proposing a unique model of education and the Board would be interested to know if it proposes monitoring its development as a research theme in itself.