

**HKIA / ARB Professional Assessment 2014  
Paper 1: Statutory Controls in Building Works  
Examiners' Report**

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**STRUCTURE OF PAPER**

Paper 1 is an open-book examination comprising multiple-choice and short-essay questions.

The MC section had 40 multiple-choice questions. Each MC question carries 2 marks. The passing mark was set at 65%.

Candidates needed to answer 1 compulsory short-essay question and 2 out of 3 other short-essay questions. The compulsory question carried 30 marks and the other two questions each carried 15 marks. The passing mark was set at 50%.

Questions on all topics, as detailed in the syllabus of PA Handbook, included:

- (a) Buildings Ordinance
- (b) Submission of plans to the Building Authority
- (c) Other related Ordinances and Codes of Practice

The questions were set to test candidates' knowledge, skills and maturity to handle their day-to-day work as an Architect.

**ASSESSMENT OBSERVATIONS**

**FOR WHOLE PAPER**

359 candidates took Paper 1. 155 candidates (43.30%) passed and 1 candidate was disqualified due to bringing unauthorized materials to the assessment.

**FOR MULTIPLE CHOICE QUESTIONS**

145 candidates passed (40.39%); the mean is 59.8 marks out of 100, and standard deviation 12.6%, is commented on by HKEAA that "both the mean marks and standard deviation show a slight drop compared to last year."

**FOR SHORT-ESSAY QUESTIONS**

117 candidates passed (32.59%). Passing rates of the short-essay questions are as follows:

- Q1 – 47.90% (171 out of 357 candidates)
- Q2 – 47.28% (113 out of 239 candidates)
- Q3 – 54.46% (183 out of 336 candidates)
- Q4 – 11.11% (11 out of 99 candidates)

**Question 1 (Compulsory)**

The compulsory question is set to a similar format as in previous years, focusing on candidates' ability to assess the development potential of an urban site, taking into consideration restrictions as imposed under the 'Outline Zoning Plan,' site conditions, Building (Planning) Regulations and lease conditions. Candidates were also tested on their

familiarity with planning concessions for hotel development, as elaborated under PNAP APP-40, and Sustainable Building Design Guidelines under PNAP APP-152. Unlike previously, the question is worded to cover the broader issues instead of being split into subheadings that would serve as prompters and limit the scope of discussion.

#### *Town Planning*

Most candidate correctly interpreted the restrictions of the Outline Zoning Plan as applicable to the intended *composite* development and identified the need to apply to the Town Planning Board for permission under Section 16 of the Town Planning Ordinance under the conditions mentioned in the question.

#### *Site Conditions and Building (Planning) Regulations*

The majority of candidates correctly applied the regulations to determine site classification. On the issue of service lane provision, results were mixed: many failed to realise the implication of a Class-B site or possible imposition of additional conditions for alignment with existing provision upon lease modification.

#### *Lease Conditions*

Most candidates were aware of the need for lease modification to relax the restrictions on building height and extent of commercial use, to allow for a more intensive development as permitted under the Outline Zoning Plan. However, the skill of presentation varied, with more emphasis on the mechanism of modification than analysis of issues that would have to be addressed in negotiation with Lands Department.

#### *Hotel Development*

Generally, candidates did reasonably well on criteria listed under *PNAP APP-40*, but often failed to relate the proposed hotel development to the Outline Zoning Plan.

#### *Demonstration of Development Potential*

This was the weakest area of candidates' performance across the board. There was a general lack of competence in demonstrating compliance to regulations in ways that would satisfy the Building Authority for the purpose of obtaining building plans approval. Candidates were mostly unable to make reasonable allowance for vehicular access into the building, mechanical plant rooms and other plot-ratio unaccountable facilities in the commercial podium. The same lack of competence was present in their inability to make rough estimates for space allocation in the residential blocks above the podium and presentation of calculations was extremely messy, as a rule. There was almost no cross-referencing to other constraining factors, mainly those under the Outline Zoning Plan, which could be an indication that candidates were unaware of the order of precedence in the application of various statutory development controls.

#### *Sustainable Building Design Guidelines*

While most candidates were familiar with the definitions of continuous projected façade length ( $L_p$ ), permeability ( $P$ ) of buildings, street canyon aspect ratio ( $H/W$ ), etc. very few were able to demonstrate compliance of the intended development by applying assessment criteria to suggested built forms. It was probably due to the fact that few candidates had mastered the skill of working out a basic blocking arrangement within the strict time allowance (see earlier comments under development potential).

### *Tidiness*

General observation on tidiness: not a few answer scripts were very difficult to read. Apart from poor handwriting, the language was difficult to understand and arguments were not always presented in an orderly manner. Use of pencil should be discouraged, as it reduces readability under normal lighting condition, especially when the text is written in a feeble hand.

### **Question 2**

239 candidates attempted this short question. 113 candidates attained 7.5 marks or above, representing a passing rate of 47.28%. Taking 50% of the marks allocated to each sub-question as the passing mark, the passing rate of each sub-question is:

- 2(a) Feasibility study issues for erection of a new annex block to an existing elderly home – 48.54%
- 2(b) Suggestion of professionals and specialists for the feasibility study – 54.39%
- 2(c) Statutory submission strategy for modification of the existing home building – 61.92%

The Marker assessed the answers on the basis of the candidates' general knowledge of statutory constraints and procedures in an extension project as well as how the project is to be implemented.

General observations are highlighted below:

- a. The front part of the question mentions the NGO's intention to erect a new multi-storey annex block within the garden area of an existing elderly home situated at a site zoned "Green Belt". Sub-question 2(a) requests the candidates to advise the issues relating to land grant and statutory control to be covered in the feasibility study. Perhaps most candidates were distracted by the 2 words: "Green Belt" and "land grant" or most candidates have no experience in the carrying out of feasibility studies, as a result, most answers to 2(a) contain detailed discussions on town planning application and lease modification procedures, only a few answers describe issues relating to other essential control, such as EVA, licensing requirements, 24-m rule, traffic impact, Building (Panning) Regulations, tree felling etc.
- b. Sub-question 2(b) requests the candidates to suggest the engagement of other professionals and specialists to address issues relating to land grant and statutory control. It is strange to note from some of the answer scripts that although town planning and land issues are mentioned in the answer to sub-question 2(a), suggestion to engage a town planner or an estate surveyor is not even covered in the answer to 2(b). Sub-question 2(b) also requests the candidate to describe the duties of these professionals and specialists in the feasibility study, quite a number of answers only mention the professionals of the discipline without description of their studies.
- c. For sub-question 2(c), most answers are able to demonstrate the candidates' understanding of the mechanism of MWCS and prescriptive approval / consent procedures. The passing rate of this sub-question is over 60%. It is interesting that over 38% of the answers to this sub-question got zero mark on grounds of no answer being put in this sub-question. Some of the candidates have acquired high marks in 2(a) and/or 2(b)

but zero mark in 2(c). This phenomenon is very likely due to poor time management of the candidates.

Candidates are strongly advised:

- a. To carefully read the questions, to understand the question contents and to take note of the total marks assigned to each question before starting to answer.
- b. To allocate adequate time for each question.

### **Question 3**

This question intends to test the knowledge of the candidates on the Minor Works control system which has been fully implemented since December 2010. The question is relatively simple and straight forward and any candidate who has generally read through the Building (Minor Works) Regulations and the relevant Practice Notes would have no difficulty in achieving a pass or even high marks.

336 out of 355 candidates sitting this Paper attempted this question and 183 candidates achieved 7.5 (out of 15) marks or more, representing a pass rate of 54.46%, a relatively good passing rate. The highest score was “14” and the lowest was “0”.

The reasons for those who failed in this question can be simply categorized into the following:

1. Those who scored between 4 to 7 marks probably had not read through the relevant materials adequately; and
2. Those who scored between “0” and “3.5” probably either had spent too much time answering the other two questions, or had little clue on the remaining two questions from which they had to choose one to answer.

### **Question 4**

99 candidates attempted this question and the passing rate is 11.11%

The question was set based on a hypothetical foundation contract. Candidates were asked to draw a programme for the foundation contract and complete the calculation sheet for combination of TCPs for the site supervision plan of the foundation works. The unpopularity and low passing rate of the question show that most candidates are unfamiliar with these topics.

Few candidates were aware of the need and the time involved to apply for consent to commence works, notify the Building Authority of the commencement, and submit Form BA14 upon completion. Even fewer candidates knew that the consent to commence pile cap works would not be given until the completion of piling works has been acknowledged. Only those very top candidates could point out the need of witness of test pile installation and loading test by representatives of the Buildings Department some time during the foundation construction.

Part (b) and part (c) of the question on the requirements of TCP resources for site supervision plan were supposed to be easier because working samples have already been

provided in the Code of Practice for Site Supervision. It is surprising and disappointing that most candidates cannot even complete the calculation sheet in a similar format to the samples.

The answers to this question call for hands-on experiences of the Hong Kong statutory building control process. The best way for candidates to improve performances on this subject is to expose themselves as much as possible to real-life building projects, and pay attention to the details of Buildings Department's administration requirements on the process.

### **RECOMMENDATIONS TO CANDIDATES**

- (a) Attend the lecture series, seminars, conferences and workshops arranged by HKIA and other tertiary institutes or professional institutes. Be familiar with the materials and topics covered.
- (b) Get on-job experience in particular areas of interest.
- (c) If the candidates do not have on-job exposures as mentioned in (b) above, reading or discussion on what other colleagues have done would help.
- (d) Keep abreast of the times ---- through reading, and use of audio, video or internet resources.

Paper 1 Subject Panel Chair

**HKIA / ARB Professional Assessment 2014**  
**Paper 2: Building Contracts, Professional Practice, Professional Conduct,**  
**Conditions of Agreements and Scale of Charges**  
**Examiners' Report**

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## **STRUCTURE OF PAPER**

Paper 2 is an open-book examination comprising multiple-choice and short-essay questions.

The MC section had 80 multiple-choice questions. Each MC question carries 1 mark. The passing mark was set at 65%.

Candidates needed to answer 1 compulsory short-essay question for Part A Professional Practice, Code of Professional Conducts and Conditions of Agreement and 2 out of 3 short-essay questions for Part B Building Contract. Question for Part A carried 15 marks while questions for Part B Building Contract each carried 15 marks. The passing mark was set at 50%.

## **ASSESSMENT OBSERVATIONS**

### **FOR WHOLE PAPER**

305 candidates took Paper 2. 208 candidates (68.87%) passed and 3 candidates were disqualified due to bringing unauthorized materials to the assessment.

### **FOR MULTIPLE CHOICE QUESTIONS**

237 candidates passed (77.70%); the mean is 68.3 marks out of 100, and standard deviation 10.1%, is commented on by HKEAA that "both the mean marks and standard deviation show a slight drop compared to last year."

### **FOR SHORT-ESSAY QUESTIONS**

209 candidates passed (68.52%). Passing rates of the short-essay questions are as follows:

- SQ Part A - Q1 – 27.21% (83 out of 305 candidates)
- SQ Part B - Q2 – 61.17% (63 out of 103 candidates)
- SQ Part B - Q3 – 71.79% (201 out of 280 candidates)
- SQ Part B - Q4 – 66.82% (141 out of 211 candidates)

### **Part A Question 1**

- Just a few candidates can answer with explanatory clearly and precisely. Majority of the candidates explained with long and clumsy sentences which often do not get the main point.
- Candidates usually strong at straight forwards questions which could easily refer to the books, but weak at questions which provide situation and required analysis.

#### **1a. Condition of Engagement**

- Majority of the candidates weak at understanding how Architect charge for services, and

on which basis.

- Most of them aware of the copyright matters, although some fail to point out the key words.
- Some of the candidates can get the key words for scoring but fail to explain the reason behind.

#### 1b. Professional Conduct

- Majority of the candidates can understand the principal of HKIA code of professional conduct in a straight forwards question (Question 1b(a)), yet, less candidates can fully explain in the same way when it come to a question in a situation (Question 1b(b)) .

#### 1c. Corruption Prevention

- Majority of the candidates can get the answers for the corruption prevention by answering the key words.

### **Part B Question 2**

Many candidates do not have "clear understanding" of the duty and therefore action required for each party involved in a Contract. Referring to the answer for question 2, the assessor had the following observations:

- 1) Candidates are confused between direct contractor and NSC. Direct contractor is not paid through the main contractor.
- 2) As Gas Company is a Utility Undertaker, some candidates are referring to Clause 6.4 of the Contract which is not relevant to (2a).
- 3) Many candidates do not know original Payment Certificate is issued to main contractor, and not the Employer.
- 4) The main contractor shall present/submit original Payment Certificate to the Employer to apply for payment. The term "show" is not correct.

A few candidates use flow chart or diagram. In short questions, they should answer in sentences and not other graphical means.

### **Part B Question 3**

Majority of candidates grasped the answers sought by the question.

#### **Part B Question 4**

1. Some answers are based on common sense instead of knowledge/understanding of the standard form of contract
2. Although the questions are pretty straight forward, there are some really bad answers.
3. There are some answers which mention that EOT and L&E should be agreed before the carrying out of the works, which are wrong, but at the same time elaborate on the importance of the timing of the submission of Notice of Delay and Notice of claim. It seems like they do not understand the question but are just copying the answer.
4. There should be sufficient time for the candidates to answer properly. However, there are quite a lot of incomplete answers i.e. answer to part 1 of the question only.

#### **RECOMMENDATIONS TO CANDIDATES**

- (a) Candidates are advised to fully understand the rationale behind the contract terms for fully utilize the knowledge acquired at works as Architect in future.
- (b) Lack of relevant experience on contract / condition on engagement of the majority of candidates was noticed as from their answers.

Paper 2 Subject Panel Chair



## **STRUCTURE OF PAPER**

Paper 3 was an open-book examination comprising multiple-choice questions only. The paper consists of 60 multiple-choice questions. The passing mark is set at 65%.

This was the third year in which three assessments were carried out for Paper 3 in March, June and September respectively. The paper for each of the 3 assessments was set in a similar format and structure covering a variety of topics.

Questions covered various aspects of building structures, including general structural principles, different structural forms and systems, foundation systems, excavation and lateral support systems, load paths and force diagrams, practice and construction, and a case study. Diagrams were included as appropriate for better understanding of the questions.

## **ASSESSMENT OBSERVATIONS**

The passing rates for the three assessments were 69.06%, 57.63% and 45.31%, which were similar to the overall passing rates in PA2013.

The “mean mark” for the three assessments this year was 68.2%, 64.8% and 62.82% respectively, which is very close to passing mark of 65%, with a “standard deviation” ranging from 10.10% to 12.81%. This indicates that the average candidates’ performance was generally up to the required standard, except for the 3<sup>rd</sup> quarter assessment which the candidates had a slightly lower general performance. A reasonable “standard deviation” indicates that the assessment had generated a broad range of marks, and was fair, and effective in differentiating the abilities and depths of knowledge of the candidates.

It was observed that there was a pattern of declining passing rates and “mean mark” from the 1<sup>st</sup> to 3<sup>rd</sup> quarter assessment, probably because the candidates in the 2<sup>nd</sup> and 3<sup>rd</sup> quarter assessment were the less able candidates who re-attempt after failing the preceding assessment.

It was also observed from the results that the candidates had shown weaknesses in certain areas, including the less common and less conventional structural systems (such as suspension structures, trusses, etc), and construction and practice (such as material properties, real-life application of structural systems, etc). It was also observed that the results and general performance on the questions on the basic structural principles and concepts (such as load path, simple bending moment diagrams, structural beams and floors, etc) were also not satisfactory.

## **RECOMMENDATIONS TO CANDIDATES**

On top of the studying the recommended reading list, the candidates are also encouraged to gain more knowledge and exposure by the following means:-

- (a) Candidates are recommended to attend the Professional Assessment Seminar / Lecture Series organized by HKIA, not only for the Professional Assessment but also to broaden their knowledge.
- (b) Candidates are encouraged to get more on-job experience, guidance from office supervisors and seniors, and learn through better communication / coordination with structural engineers at work.
- (c) Sharing of knowledge and experience with fellow colleagues and graduates is also encouraged, and should be helpful if job exposure is limited.

Paper 3 Subject Panel Chair

**HKIA / ARB Professional Assessment 2014**  
**Paper 4 – Building Services and Environmental Controls**  
**Examiners' Report**

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**STRUCTURE OF PAPER**

Paper 4 followed the same format as used previously: an 'open-book' assessment test with 60 multiple-choice questions. Passing mark was set at 65%.

Questions were worded in clear and straightforward language and answers involving combination choices were used with discretion and restraint. Test topics were as detailed in the syllabus, viz. basic principles, sustainable design and environmental issues, HVAC, fire services, plumbing and drainage, electrical services, acoustics and miscellaneous aspects, with emphases as described below:

1. Aspects of different disciplines in building services, both fundamental and pertaining to real-life applications, that a practising architect is expected to know;
2. Issues concerning hygiene, human comfort and acoustics;
3. Matters related to sustainable design and environmental issues that have gained attention in recent years.

Candidates were also tested on knowledge spanning across the building services disciplines, energy conservation and sustainable building design. Essentially, questions were designed to test candidates' knowledge, skills and maturity in handling day-to-day situations as an architect.

As in previous years, a significant portion of the paper was based on questions asked before. The intention of reusing past questions was to encourage candidates to study those familiar topics in greater depth, so as to enrich their knowledge in the respective fields.

**ASSESSMENT OBSERVATIONS**

This was the third year in which Paper 4 was offered three times, in March, June and September of the same year. 'Mean marks' were 70.8%, 62.8% and 61.85%, respectively, with corresponding 'standard deviations' at 12.53%, 12.23% and 10.00%. Overall performance was slightly higher than in 2013, possibly because candidates were better prepared. As in previous years, the lecture series was organised with particular focus on environmental issues and the recommended reading list was expanded to include literature on these topics.

As in previous years, candidates were weakest in answering questions on environmental issues. They tended to perform better in book-based questions, such as those on theories, fundamentals and basic knowledge, which they had learned at university or through reading relevant literature, but were generally less competent in answering job-based questions, such as relating to architectural practice and real-life applications.

## **ADVICE TO CANDIDATES**

Broadening of exposure is the key to success. In addition to following relevant literatures and the recommended reading list, candidates would do well to enhance their knowledge in the area by:

- (a) Attending the 'Paper 4' lecture series and related seminars, conferences and workshops organised by the HKIA, and other tertiary institutions and professional bodies;
- (b) Getting on-the-job experience, having closer coordination with building services and environmental consultants;
- (c) Keeping abreast of the times and getting hands-on experience in OTTV, IAQ, BEAM Plus or other environmental assessment systems;
- (d) (d) If on-the-job exposure is not available, as mentioned in (b) and (c) above, reading of documentation on work done by other members of the project team; and
- (e) Taking the initiative to go through specifications, material and equipment submissions, shop drawings, method statements, etc., even though they may be technically within the scope of work of the building services engineer.

Paper 4 Subject Panel Chair

## **STRUCTURE OF PAPER**

Paper 5 was an open-book examination comprising multiple-choice questions only. The paper consists of 60 multiple choice questions. The passing mark is set as 65%. The questions are set at a very similar format and variety in each examination. This is the third year that the paper was set for three assessments in March, June and September.

The contents of the paper include the different trades of construction regarding materials and technology, actual practices including working procedures and detailing as well as law related construction questions such as the Building Ordinance and Regulations, PNAP, Codes of Practices, etc. Questions with diagrams were set so that more than one question can be asked out of it. Generally, the questions are quite straight forward and all based on Hong Kong local practices and experience. A major proportion are new questions set this year.

## **ASSESSMENT OBSERVATIONS**

The respectively passing rates for the three assessments are: 76.43%, 52.73% and 65.63%. The passing rates had been consistent with papers 3 and 4 and improved from previous years. Though new questions have been added to the papers, yet the standard of questions were consistent with the immediate three years.

## **OUTLOOK FOR COMING YEAR 2015**

Despite the increase in the passing rates, the panel will still maintain its standard of setting questions and insist on preparing new questions for the year 2015. However, more focus is given to the lectures for explaining clearly the scope of examination.

## **RECOMMENDATIONS TO CANDIDATES**

1. Study the materials and technology in terms of the various building trades.
2. Look at building control on construction and updates with the PNAP.
3. Study detail construction drawings of various components at the candidates' office or through local references.
4. Learn the procedure of construction for various trades.
5. Read about the specification of materials.
6. Attend all lectures given by the panel.

Paper 5 Subject Panel Chair

**1. THE QUESTION**

The test case is a Creativity Precinct cum residential development in a flat site within an old urban residential district. 36 existing tenement houses in 4 rows currently occupy half of the site, 4 of which are specifically designated for preservation. The candidate is requested to retain another 8 tenement houses to a total of 12 houses to suit the proposed layout.

The task is to produce a preliminary master layout plan of the Creativity Precinct and the residential development. The Creativity Precinct includes a visitor centre, a covered arena for performance and exhibition, and artists' studios and workshops that are to be accommodated in the preserved tenement houses. The residential development includes 3 residential blocks, a club house, and an outdoor swimming pool. A prototype of residential block is given for the candidates to develop the site layout.

Other brief requirements include provision of 440 car parking spaces and 2 loading / unloading bays, easy accessibility of the visitor centre and covered arena from the public streets and connection to the preserved tenement houses by covered walkways, segregation of the residential development from the creativity precinct for security and privacy purposes, provision of a landscaped open area of at least 1,000m<sup>2</sup> for the residents' enjoyment, and connection of the residential blocks to the club house and swimming pool.

It is specified that the design shall comply with the building separation, street setbacks and green coverage requirements in accordance with the Sustainable Building Design (SBD) Guidelines (PNAP APP-152).

The candidates are expected to demonstrate their competence in coming up with a sensible site arrangement that generally meets the statutory requirements and the design brief.

**2. ANSWER SCRIPTS**

Given the generous site area, a considerable number of layout variations are possible. The panel observes a wide range of design approach in response to the design brief and the site.

The panel is generally satisfied with the performance standard this year. The majority of the candidates managed to satisfy the requirements of preserving the tenement houses set out in the brief.

This is the third Site Design paper in a row, in which the SBD requirements are incorporated. Most candidates were able to demonstrate a fair understanding of the SBD requirements.

However, despite the reminders in the lectures in previous years, there were still a few cases of grossly under-development with respect to the permitted maximum domestic floor area given in the brief, which was unacceptable.

### **3. KEY INDICATORS**

The preliminary master layout plan of each answer script was carefully scrutinised by the assessment panel, which did not look for perfect design solutions and absolute compliance with the regulations, but a sensible approach and reasonable execution of site planning with a general understanding of the statutory requirements.

The following key indicators are specific to the Paper this year, revealing the competence of the candidates in their sensibility, level of technical knowledge, understanding of statutory control, and skill of implementation:

- (a) General compliance with development parameters – maximising development potential, compliance with building height limit and SBD requirements.
- (b) General compliance with the brief – preservation of the existing tenement houses, provision of landscaped open area, a covered arena, covered walkway connections, car parking spaces, and loading / unloading bays as required.
- (c) General compliance with major statutory requirements – prescribed windows, EVA, ingress / egress points, etc.
- (d) Sensibility in disposition of blocking to exploit views to the landscaped open area and to avoid major overlooking.
- (e) Sensibility in the arranging vehicular and pedestrian circulation, demonstrated by public access to the Creativity Precinct, arrangement of internal roads and pedestrian paths, car park, drop off, and loading / unloading provisions, and access to each residential block.
- (f) Sensibility in the provision of open space, which could be conveniently enjoyed by the residents but appropriately segregated from the internal roads and car park.
- (g) Sensibility in functional relationship among different components in the brief, e.g. grouping of visitor centre, covered arena and artists' studios and workshops, and demarcation from the residential development.

### **4. WEAKNESSES**

The following major weaknesses are observed :

- (a) Non-compliance with SBD requirements
  - Linking individual blocks together or separating individual buildings by less than 15m so that the Projected Façade Length (LP) exceeds 60m.
  - Ignoring the preserved tenement houses when considering the LP.
  - Provision of above ground carpark building.

- (b) Non-compliance with prescribed window requirements
  - Non fulfilling the prescribed window requirements between residential block and adjacent building, sometimes due to the compliance of the SBD requirements, or preservation of tenement houses.
  - Blocks abutting right on the common boundary on the southwest of the Site.
- (c) Disposition not sensible
  - Residential blocks seriously overlooking each other.
  - Non-user-friendly / unusable/ non-accessible leftover space between blocks.
  - Low-rise buildings (tenement houses, visitor centre, club house, etc.) seriously blocking the view of the low storeys of the residential blocks.
- (d) Non-compliance with brief requirements
  - Visitor centre and covered arena being too remote from the public streets.
  - Lack of segregation of the residential development from the creativity precinct (e.g. adjoining the private club house to the visitor centre, locating the residential block right next to the covered arena).
  - Substandard provisions of landscaped open area.
  - Missing covered walkways.
  - Covered walkways seriously interrupted by internal roads.
  - Missing or grossly insufficient car parking spaces.
- (e) Internal road planning not sensible
  - Grossly over-provided internal roads leading to fragmented open space and excessive pedestrian crossings.
  - Under-provision of internal roads leading to inadequate drop off and loading / unloading provisions for each block.
  - Car parking spaces and loading / unloading bays directly accessible from roundabouts, or even external roads.
  - Vehicular access not complying with XYZ points. (e.g. provision of additional ingress/egress points beyond the permitted location.)
- (f) Non-compliance with EVA requirements
  - Substandard hammerheads and turning circles for fire engines.
  - Inadequate coverage of building facades.
  - Substandard EVA width.
  - Excessive internal roads as EVA where the buildings can easily reached from the public roads.
- (g) Failure to maximise development potential
  - Number of residential blocks and/or number of storeys less than required in the Brief.



### **The Paper**

This year's Paper aims to examine the candidates' competence in the integration of a series of existing historic verandah buildings into an Aged Care Complex. The question is to test our candidates' sensitivity of conservation as well as planning of elderly care home with community center functions.

The design brief mainly requires a Residential Care Home for the Elderly consisting of 40 residential suites and supporting facilities, as well as a Community Centre for the Elderly with activity hall, restaurant and other ancillary facilities.

For simplicity sake, provision of loading/unloading space and vehicular parking are not required within the site. Site vehicular access is also not required.

Submission requirements are limited to layout plans and sections. 3-dimensional illustrations and calculations are not required.

### **The Answer Scripts**

Although the design brief for "conservation" has not been a familiar subject for examination for the past few years, the Subject Panel agrees that it is becoming more common in Hong Kong for projects involving conservation and conversion of existing buildings and integration with community facilities.

The subject accommodation for an elderly home and community center, however, is a building type that candidates should be broadly in touch with in Hong Kong. It should show their understanding of domestic use and assembly facilities planning.

### **Key Indicators**

The detailed layout of each paper was scrutinized carefully jointly by the assessment panel. The Panel was not looking for brilliant architectural design, but a sensible design solution that could meet the design brief, respect the existing historic building and appropriate conservation strategies, and in general compliance with the buildings regulations.

The Panel had made the assessment based on the following key indicators that can reveal the competence of the candidates in their design sensibility, level of technical knowledge and skill of implementation:

- a) General compliance with development parameters – mainly building height and in particular under the licensing requirements;
- b) General compliance with major statutory requirements – including prescribed windows,

fire escape and EVA;

- c) Sensibility in the usage and conservation of the existing historic buildings;
- d) Response to the site conditions for living spaces and communal spaces disposition;
- e) Response to the site conditions for assembly functions design;
- f) Sensibility in arrangement of segregated main entrances on ground floor;
- g) Sensibility of structural extension above the existing historic buildings;
- h) Sensibility in the design of structural system, floor-to-floor height and disposition of building services spaces.

### **The Weaknesses**

The major weaknesses observed this year include:-

- a) Conservation of historic buildings
  - Poor integration of programme into conserved building. In some cases, candidates avoided assigning basic programme into the existing building.
- b) Design and planning
  - Inappropriate common circulation or communal spaces arrangement.
  - Poor consideration of ground floor domestic units.
  - Poor treatment of segregated entrances for elderly home and community center.
- c) Building structure
  - Poor consideration of structural implications in adding extensions above the existing conserved building.
  - Poor consideration in providing long span structures or column free spaces for assembly hall.
- d) Scale and proportion
  - Inappropriate scale – lifts, stairs, corridors were sometimes grossly oversized or undersized.
- e) Statutory compliance
  - Prescribed window requirements to service lane were often ignored.
  - Ignoring the height restriction of elderly home to be below 24m.
- f) Others
  - Poor documentation. Use of part plan is not recommended.
  - Poor clarity and cleanliness of drawings.

Paper 7 Subject Panel Chair

## **STRUCTURE OF PAPER**

Candidate has to provide a one-page synopsis and go on to complete a 20+20-page report. The Professional Assessment Handbook details the topics requirement and report format. The passing mark is set at 50%.

## **ASSESSMENT OBSERVATIONS**

177 out of 228 candidates passed the Paper this year. The passing rate is 77.63%. 13 candidates received zero mark due to plagiarism and will not be allowed to take PA2015 – Paper 8.

The main issue with this paper continues to be for the increasing numbers of candidates to find suitable projects to study. Starting from next year, the same project may be studied without lapse, but it is required that the special topic has to be different. It is generally agreed that the case study remains a useful tool through which graduates can learn about the essential elements of project administration, even though the projects they are handling in the office may not give them sufficient exposure to the entire range of practical issues. Passing rates are usually high and it is not seen as a major source of anxiety for candidates.

## **RECOMMENDATIONS TO CANDIDATES**

Carefully study and analyze available information on the project and talk to the project team for a thorough understanding, then write the report in your own words to cover what has been learned. High emphasis is put on candidate's own appraisal of the various issues and problems relating to the project. Special topic study gives candidates opportunity to research in depth a topic of interest. Candidate may continue to use previous reports as format and contents template but have to refrain from copying multiple sentences and paragraphs, which will be readily detected by the plagiarism software.

Paper 8 Subject Panel Chair

**HKIA/ARB Professional Assessment 2014**  
**Paper 9 Professional Interview**  
**Examiners' Report**

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**STRUCTURE OF PAPER**

This paper is a 30-minute interview conducted primarily in English and each candidate is interviewed by a panel consists of three interviewers. This is the third year that the new policy on using Cantonese for technical terms and for supplementary purpose with the permission of the Chairperson of the Panel of Interviewers is implemented.

This is also the third year to test candidates on their Case Study reports in the Professional Interview. Interviewers reminded the candidates that their case study report is also used as a referencing material in the interview. Candidates may choose projects not handled by themselves and Interviewers are reminded to cross reference with the candidates' logbooks.

Interviewers are advised to make sure the candidates have digested the followings in doing their Case Study reports:

- a) Statutory Control
- b) Cost Control
- c) Time Control
- d) Safety
- e) Quality Control
- f) Design Quality Control
- a) Building Contracts

Candidates' professional maturity and adequacy of the practical experience as recorded in the Logbook are assessed by the interviewers. Questions may cover topics related to Buildings Ordinance, Building Regulations, other related ordinances and Codes of Practice, construction knowledge, Building Contract and Contract Administration and Professional Ethics. Candidates' confidence in answering questions is also looked for by interviewers.

**ASSESSMENT OBSERVATIONS**

123 out of a total of 170 candidates (72.35%) passed the paper in the March 2015 attempt (for PA2014), which is slightly lower than the attempt in March 2014 (74.03%).

From the report of Interviewers on failed candidates, most candidates were lacking knowledge in Building Contract and Buildings Ordinance and failed to demonstrate to the interviewers their competency to work as an Architect. The candidates were also lacking confidence and general knowledge; and were not well prepared for the Interview. The weaknesses may be due to their lack of practical experience in local projects.

**RECOMMENDATIONS TO CANDIDATES**

1. To reinforce his/her understanding of a project selected for case study, a candidate is recommended to instead of just reporting to his/her advisor what have been done during the period of review, discuss regularly with the advisor of what he/she has

observed in the case study and to consult the advisor the rationale behind certain solutions to various problems.

2. As reflected in the summary, main reasons of failure of some candidates in the examination are due to the lack of practical construction and contract administration experience, which may be a result of the reducing number of local projects. Candidates are advised to look at their job exposure in particular the chance of getting in touch of local projects before they commit or engage to the practice during their internship period.

Paper 9 Subject Panel Chair