

APEAS LTD

ARCHITECTS' PROFESSIONAL EXAMINATION AUTHORITY IN SCOTLAND Ltd.

2020/21

THE EXAMINATION IN PROFESSIONAL PRACTICE & MANAGEMENT: PART 3

PRACTICE PAPER

QUESTIONS for CANDIDATES

All 8 questions should be attempted

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START OF PAPER

QUESTION 1

Write up to 200 words on each of the following questions: 1.1 to 1.4.

- 1.1. a) What is the purpose of Permitted Development Rights?
- b) In what circumstances might Permitted Development Rights be prevented or restricted?
- c) How would you check if proposals met Permitted Development criteria?
- d) What provisions exist for a client to obtain formal confirmation that their proposals are acceptable under Permitted Development?

(Up to 200 words in total for a, b, c. and d.)

- 1.2. Why is the principle of acting honestly and with integrity such an important aspect of architectural practice?
- 1.3. When would an architect be asked to sign a Collateral Warranty Agreement? What is the purpose of step-in rights within a Collateral Warranty? Give an example of where and how these could be applied.
- 1.4. My neighbour's architect daughter has recently been made redundant and has decided to set up on her own as an architect. She is unsure whether to be a sole trader or a limited company. Which would you recommend? Please list the pros and cons of each option.

In answering questions 1.1 to 1.4, candidates should not simply copy and paste information from the internet. Answers should be given in your own words – copy and paste may be considered by examiners as plagiarism.

QUESTION 2

Email from Paul Moore (Partner, GFY Architects) to Candidate

Subject: **New Maintenance Aircraft Hangar – Tender for Architectural Services**

Date: **24.11.20**

From: pmoore@gfy-arch.co.uk

To: candidate@gfy-arch.co.uk

Dear Candidate

We have been trying to diversify our project base and have been in discussion with a major national building contractor specialising in the development of airport infrastructure. Although we are in turbulent times, investment is still a priority for some regional airports.

Contractor Volar-Haut Ltd has invited us to take part in their design and build tender for a new aircraft maintenance hangar in the Midlands.

Architecturally, the building is fundamentally simple (i.e. a big shed), but clearly there is a significant amount of design co-ordination required as the design requires complex maintenance bays, offices, lifting cranes and larger hangar doors. The details matter in such a large building as a mistake repeated many times carries significant liability risks.

The client, Flying High Airports Ltd, has issued Design Proposals with their design and build tender prepared by their in-house design team who are retained by the client to review the project development undertaken by the contractor and their design team. The client's design has achieved planning permission at RIBA Stage 3.

Volar-Haut Ltd contractor has asked us to act as their Design Lead and act as Principal Designer.

Volar-Haut Ltd will obtain their subcontractor supply chain on an individual procurement package basis. The packages under our area of responsibility are listed in the attached Schedule of Procurement Packages (Architect).

Our architectural and CDM duties will run from Stage 4 through to Stage 6. Volar-Haut Ltd has estimated the building will require 20 months to build. During Stage 5,

Volar-Haut Ltd requires our attendance at project and technical meetings and to inspect the works to ensure compliance.

Applicable Key Dates

Tender Issued	22 nd November 2020
Tender Return Date	22 nd January 2021
Tender Award	April 2021
Handover	March 2023

This programme clearly puts everyone under a bit of pressure. Based on the dates supplied with four months appearing less than the time we need to develop the design and obtain in advance all the approvals.

I require your input on the following items to allow us to complete our architectural proposal for Volar-Haut Ltd:

- 1** Develop an early start strategy to allow the contractor to start on site four months after project award.
- 2** Prepare an architectural design delivery programme (RIBA Stages 4 to 6 inclusive) for inclusion with our tender, sufficiently detailed to allow us to confidently develop the design to the user's requirements, allow the contractor to plan the procurement in elemental packages and to allow us to calculate our fee (see below). Refer to the Schedule of Procurement Packages (Architect) for a list of the packages.
- 3** From the delivery programme you have prepared, show the level of resource we need on the project and calculate the fee we should be charging in terms of GFY's Lead Designer and Principal Designer roles. In doing so, advise how many, and what grade of staff, you think we will require. Suggest as many from the office complement you think will be necessary. If you believe we require additional staff or expertise, then please let me know, with your reasons.
- 4** What other considerations should we be thinking about? Please provide a short list of the issues you think we should discuss when we meet later.

Thanks.

Paul Moore
Partner
GFY Architects

Schedule of Procurement Packages (Architect)

<u>VH Package</u>	<u>Description</u>
1.0	Substructure - Architecture
1.1	Setting-Out - grid
1.2	Services pop-ups
2.0	Superstructure - Architecture
2.1	General Arrangement Plans
2.2	General Arrangement Elevations
2.3	General Arrangement Sections
3.0	External Walls
3.1	Setting Out
3.2	Brickwork basecourse
3.3	Composite cladding
3.4	Louvres
4.0	Roof
4.1	Setting Out
4.2	Outlets and down-drops
4.3	Permanent Access and Safety Equipment
5.0	Openings
5.1	Hangar Doors
5.2	External Personnel and Equipment Doors
5.3	Windows
5.4	Internal Doors
5.5	Ironmongery

6.0	Access
6.1	Lift
6.2	Stairs
6.3	Balustrades & Barriers
7.0	Internal Walls
7.1	Setting Out
7.2	Masonry
7.3	Metal Stud and Screens
8.0	Finishes
8.1	Floor finishes
8.2	Wall finishes
8.3	Ceiling finishes
8.4	Joinery & trim
9.0	Builder's work
9.1	BWIS
9.2	Sealants
9.3	Fire Stopping & Fire Protection
10.0	Fittings Furniture & Equipment - Architecture
10.1	Signage
10.2	Fittings
10.3	Furnishings
10.4	Architectural metalwork
10.5	IPS & Sanitaryware
11.0	External Works
11.1	Setting Out
11.2	Hard Landscaping
11.3	Soft Landscaping

QUESTION 3

Email from Jill Kahn (Partner, GFY Architects) to Candidate

Subject: **Client: Brett Forsyth**

Date: **24/11/20**

From: jkahn@gfy-arch.co.uk

To: candidate@gfy-arch.co.uk

Dear Candidate

I've just returned from a difficult site progress meeting. As you know, we are due to reach practical completion two weeks from now and I was fully expecting to be discussing hand over procedures. The contractor, however, dropped the following two bombshells:

- 1 The kitchen installation will require an additional two weeks beyond the contract completion date. This is because the bespoke kitchen units are still in transit and will not be in the country for another two weeks. Thereafter a further two weeks will be required for installation.
- 2 The delivery of all internal pass doors (24nr) has also been delayed. They are all special high-pressure laminate and are being made to order. The contractor's supplier has confirmed that delivery is now guaranteed in three weeks' time. To mitigate further delay, the contractor will increase the number of joiners on site and will be able to fit all doors by the time the kitchen is completed.

With no kitchen and no internal doors, it is now clear that completion will be delayed.

As you can imagine, the client was exceptionally disappointed by this and was immediately concerned about the financial implications – increased costs for temporary accommodation (he will have to take a minimum 1 month rent extension) and associated abortive removal charges. The client raised the issue of contract damages to cover this and stated that the stipulated figure of £1,500 per week for liquidated damages is unlikely to cover true costs.

At the end of the meeting, the contractor took me aside and said that his margin in this job is exceptionally tight and that paying damages will significantly impact on his bottom line.

On returning to the office, I found the attached email from the contractor claiming an extension of time sitting in my inbox.

The timescales are all getting a bit tight. Please assess the contractor's email against the contractual protocols on practical completion and claims for additional time and money and get back to me on the following points:

- 1 How should we address the contractor's extension of time notice in terms of the contractual provisions?
- 2 Do you think the contractor is due an extension of time? Please state the reasoning behind your decision.
- 3 How should we address the contractor's claim for additional prelims in terms of the contractual provisions?
- 4 Do you think the contractor is due a loss and expense award? Please state the reasoning behind your decision.
- 5 The client is naturally looking for our advice on the situation and the contractor's claim will not go down well. Based on your assessment of the claim, please set out the points that we need to cover. Bear in mind that the client is one of the senior partners in Dun, Tripp and Forsyth, so we will need to be very clear on this.

To give you further information to make your assessment, I have looked through my job diary:

- 1 The client took an additional three weeks beyond the contractor's programme date for sign off on the kitchen specification. The placement of the kitchen order was therefore delayed, although at the time the contractor said this would probably be OK. The kitchen installation was covered by expenditure of a provisional sum.
- 2 The door installation. This is as per the original contract documentation. No variations to the drawings or specification.

Thanks.

Jill Kahn
Partner
GFY Architects

Email from Bill Smith, Director, A1 Contractor to Jill Kahn, Partner, GFY Architects

Subject: **Extension of Time - Client: Brett Forsyth**

Date: **24/11/20**

From: director@contractor.co.uk

To: jkahn@gfy-arch.co.uk

Dear Jill

Following this morning's site progress meeting we hereby give notice of our claim for extension of time.

We have estimated that it will take us an additional 2 weeks to complete the project from the contract completion date and would be grateful if you could issue your formal extension of time accordingly.

As stated with our tender submission, our prelim costs are £2,600 per week. Our total additional prelim costs will therefore equate to £5,200. Please make provision for payment within the remaining monthly valuations and related interim certificates.

Thank you.

Bill Smith
Director
A1 Contractor

QUESTION 4

Email from John Young (Partner, GFY Architects) to Candidate

Subject: **Which procurement?**
Date: **24/11/20**
From: jyoung@gfy-arch.co.uk
To: candidate@gfy-arch.co.uk

Dear Candidate

I understand that you have been enjoying the process of working through past exam questions in your study group. I believe that a couple of them were on procurement. Because of this, I thought the following issue I have would be a good challenge for you and your team.

We have a client, MRM, which is a large advertising and graphic company with over seventy-five staff. They have just been advised that their lease on their current office building, which is due for renewal at Christmas 2021, will not be renewed. This is because the property developer has decided to reconfigure the two listed townhouses into residential properties. This allows only twelve months before they have to move out of their current building. MRM has come to GYF because of the high-quality fit-out we have just done in our own offices.

They have found a Grade B listed warehouse building that was externally refurbished a couple years ago for another office client, but the deal fell through. It would still need a lot of internal alterations to make it suitable as an office. There are minimal structural alterations.

My questions to you is simple; what form of procurement route would you propose? I would like to see your summary of the main issues and the process and analysis that you went through to make your choice.

As part of this analysis, I would like to see your proposed programme that looks at RIBA design stages, tender process, approval periods and statutory approvals. Our initial advice to the client is that the construction works would take at least five months. The project value is around £1.5million excluding VAT and fees. The client has insisted that this budget should not be exceeded and that the project should be tendered.

Thanks.

John Young
Partner
GFY Architects

QUESTION 5

Email from Peter Sikorsky (Partner, GFY Architects) to Candidate

Subject: **Mr John Marshall: New House.**

Date: **24/11/20**

From: psikorsky@gfy-arch.co.uk

To: candidate@gfy-arch.co.uk

Dear Candidate

2042: ONE-OFF NEW HOUSE FOR MR JOHN MARSHALL.

I had a chat with Mr Marshall last week and he seems keen to appoint us as architects for a spectacular new house on his site at Milltannoch Farm, because of our good reputation for design skills. This is a great opportunity for us. The only thing holding him back is that he seems to have heard numerous rumours about GFY projects finishing late, over budget and with some poor build quality. We must do all we can to convince him otherwise.

To help me, please can you give me some bullet-pointed notes on best standard practice and processes, right through from work stages 0 to 7, which we, as Project Architects, will use to:

- a) Achieve delivery of the finished building on time.
- b) Complete the project within budget.
- c) Ensure that the build quality is of an acceptable standard.

I will need this by first thing on Thursday morning.

Thanks.

Peter Sikorsky
Partner
GFY Architects

QUESTION 6

Email from Peter Sikorsky (Partner, GFY Architects) to Candidate

Subject: **University of Cityburgh: New Build Lab**

Date: **25/11/20**

From: psikorsky@gfy-arch.co.uk

To: candidate@gfy-arch.co.uk

Dear Candidate

I am delighted that we have now been novated over to the Contractor for the detailed design and construction stage of the Lab project for the University.

However, the project is not without its challenges. As you know, and because of the size of the site and the complexities associated with working on a brown field site combined with the complex services running through the site, the engineer was acting as Principal Designer for the project up to now. However, as the engineer DM Smith has very recently terminated its appointment with the University, we now need a new Principal Designer for the remainder of the works.

I've met with the Managing Director of AB Bowen, the firm of engineers that has taken over from DM Smith and, so far, they seem to be very good. Unfortunately, however, they do not want to carry out the Principal Designer role.

The University knows that we have this skill and experience, so they have asked us to provide this service going forward on the project. Given the longstanding relationship we have with the University, I wouldn't want to let them down.

I also met with the Contractor last week, and he was asking me to arrange a meeting with him and his team to run through their site logistics and health and safety provisions on site, including the Construction Phase Plan. He also mentioned about getting a process in place for us reviewing and approving their method statements and risk assessments.

John Young (Partner) is on annual leave at the minute, but I know you have been working closely with him on the CDM/Principal Designer side of the business.

Please prepare a bullet point memo that sets out the following:

- 1 Should we take this role on, given the complex engineering and services issues or should we ask Trevor Maillot if they can assist? Please also provide me with your analysis on how you have made your decision.
- 2 If do we do take on this role, what do we need to consider in taking on this role, given another consultant has been involved before us?
- 3 If we do take on this role, what are the tasks that we need to carry out going forward to perform this role?
- 4 What should we do with regards to the contractor's request to meet with him and his team to run through their various health and safety requirements as I've noted above?

I need to make a proposal to the University by the end of the week in terms of how we will carry out this role within our fee and resources currently agreed for this project. If you can set out the above and any other important points you think I need to consider that would be great.

Thanks.

Peter Sikorsky
Partner
GFY Architects

QUESTION 7

Email from Jill Kahn (Partner, GFY Architects) to Candidate

Subject: **Jones' House Extension**

Date: **25/11/20**

From: jkahn@gfy-arch.co.uk

To: candidate@gfy-arch.co.uk

Dear Candidate

I've just had Henry on the phone there, and I'm fed up. As you know, the family has been away on an 8-week cruise to avoid the building works and he specifically left us in charge to inspect this project on a weekly basis. After returning from his cruise and having looked at the construction drawings, Henry tells me that the DPM installed is the wrong gauge (600 instead of the specified 2000!). He knows that because he can see it printed on the excess membrane evident around the concrete slab pour.

Also, the tie down straps for the timber kit specified by the engineer to anchor the kit to the base structure are missing and should be self-evident as there are no finishes yet, even though the kit is complete and the installer is off site. Honestly, I think we sometimes walk round sites wearing a blindfold!

I need to understand what our responsibilities are in relation to site inspections, specifically on this project. Henry holds us responsible for these mistakes and not only expects us to supervise the works but expects us to fix them! Can you outline our actual obligations in relation to site inspections please?

Without delving into the specifics of the rectification works, what process /methodology should we follow in relation to rectifying the defects, and what are the potential consequences?

How do we better demonstrate best practice and consistency across the office?

Thanks.

Jill Kahn
Partner
GFY Architects

QUESTION 8

Email from Client to Paul Moore, Partner, GFY Architects

Subject: **Design Team Non-Performance: Middle Tree Meadow Hotel**

Date: **24.11.20**

From: claudia@daisywayhotels.com

To: pmoore@gfy-arch.co.uk

CC: solicitors@deweycheetham&howe.co.uk

Dear Paul

Leisure Extension

I am very sorry to have to write this email, but following the Stage 1 pre-start meeting last week I reported back to my Board of Directors who expressed in no uncertain terms that the performance of your design team has been nothing short of shocking.

To be four months late on the issue of the Stage 1 warrant package, and consequently production information package, and then to be told there will be a further two months' delay in applying for the Stage 2 warrant, has exposed us to a potential claim by Aztec Builders, and has seriously jeopardized the relationship with the hotel's operator, who was relying on the extension being ready for a spring opening.

The Board's view was to terminate GFY and GFY's design team's appointment under the terms of section 9 of the contract of appointment. However, I have persuaded them that the root cause of the delay is the specific performance of your structural engineer Smith Consultancy and not yourselves. Accordingly, I ask that you terminate their appointment immediately and suggest you appoint the firm we used on our last project, Acier et Béton SARL on the same terms as Smith's.

I require your response within five working days, or we shall begin termination proceedings.

Kindest regards

Claudia Bootes-Sur
Daisy Way Hotels

Email from Paul Moore (Partner, GFY Architects) to Candidate

Subject: **Design Team Performance**

Date: **25.11.20**

From: pmoore@gfy-arch.co.uk

To: candidate@gfy-arch.co.uk

Dear Candidate

[2012] Middle Tree Meadow Hotel Leisure Facility Extension

I refer you to the attached email sent by our client for the hotel leisure facility extension. This project has been causing us a great deal of concern all year.

We should bear in mind the client did consent to the appointment of the engineer. I am aware that the Smith Consultancy were three months late in their warrant and construction packages, but from the project file I see we were desultory in chasing them for the information, and at no point did we receive notice from them that the information would be issued late.

I also understand we took a month longer than planned to issue the General Arrangement drawings following late client changes.

Furthermore, the issue of the tanking design caused further delay and was compounded by Smith Consultancy only designing and holding the liability for the water-retaining pool construction only, leaving the general building tanking design and liability to ourselves.

Smith Consultancy has invoiced us for the Stage 1 work. My intention is to pay this, but only once we have been paid. Our invoice is not yet due to be released until next month.

This is a good commission and I do not wish to lose it.

Given that you have been heavily involved in this project, please provide me with a brief set of notes reviewing the following issues in order that I can prepare a response.

- 1 Who carries the liability on the engineering design?
- 2 Where do we stand in relation to our professional codes of conduct towards Smith Consultancy in terms of terminating their appointment and actions we may decide to take?

- 3 Can we change structural engineer now and if so, what are the considerations?
- 4 What do we think of taking on Acier et Béton SARL on the same appointment terms and what are the issues?
- 5 There was confusion over the responsibility for the pool waterproofing and general building tanking. In the end we took responsibility for the general building tanking specification using an established manufacturer. Can we now pass this responsibility to Acier et Béton SARL, are there consequences?
- 6 What of the outstanding payment due for Smith Consultancy if their appointment is terminated, does this need to be honoured, or can we withhold this?

Thanks.

Paul Moore
Partner
GFY Architects

END OF PAPER