

SCENARIO to the PRACTICE EXAMINATION

All the characters, locations and incidents contained in this Paper are fictitious. The projects, if based on live events, have been amended to conceal specific identity.

© This paper is the copyright of APEAS (Architects' Professional Examination Authority in Scotland Ltd.) and the contents may not be reproduced in any form

SCENARIO

The following information describes the hypothetical architectural practice for which you, the candidate, 'work' as an architectural assistant with two and a quarter years of professional experience. It sets out the structure of the firm and something of its philosophy, the people involved and the financial framework within which they are operating. It includes scenario information on various projects which may be the subject of questions in the written Examination Paper.

THE PRACTICE

GFY Architects
Geddes House
1 Union Street
CITYBURGH
CB1 9RW
United Kingdom
Tel: 004 523 0079
Fax: 004 523 7863
gfy@cityburgh.co.uk
www.gfyarchitects.co.uk

THE PARTNERSHIP

Miriam Gorst DA, RIBA, FRIAS is 63 years old. She trained at the Westcoasts University School of Architecture and was a RIBA Bronze medallist as a student. She is a past President of the Cityburgh Institute of Architects. She promotes conservation and green issues and has gained a reputation as a good designer and as an expert witness.

John Young B.Arch, RIAS, LLM is 47 years old and joined the Partnership in 2004. He trained at the Westcoasts University School of Architecture and has recently accepted an External Examiner role for the undergraduate course. He has a keen interest in the legal context of architectural practice and successfully completed a 3-year degree course in construction law at the University of Cityburgh receiving a LLM award in 2012.

Paul Moore BArch Dip (Arch) ARIAS

Paul is 39 years old and has only recently been made a partner/member. He trained at Cityburgh Art College. Before joining GFY Paul worked for a large commercial practice in Cityburgh. It was not just his design and management ability that made Paul attractive to GFY but also his contacts in the commercial development industry. Some of these contacts have resulted in new work for the practice. Paul has bought into the practice by taking out a business loan. The share in ownership of the LLP is now shared equally between the three partners

Background:

The Practice has now been in business for 31 years. Having been a partnership GFY was reconstituted as a Limited Liability Partnership (LLP) in 2003.

Up until very recently Miriam Gorst was still committed to the practice. However, a recent long term illness has meant that she has had to change to working on a part time basis. She has announced her intention to retire in June 2018, much earlier than she had wished. She is chairperson of the LLP. John Young and Miriam Gorst realise that a succession is very much an issue but Miriam's announcement has

brought this to the fore. It looks as if John will take on the role of chairman when Miriam leaves. There is also the issue about how Miriam will get her money out of the business and various options are being considered

Under the current agreement this split is:

- Miriam Gorst 33.3%
- John Young 33.3%
- Paul Moore 33.3%

The full list of staff currently working at GFY Architects is shown below.

Staff	Position
Miriam Gorst	Partner
John Young	Partner
Paul Moore BArch Dip (Arch) ARIAS	Partner
Jill Kahn ARIAS, RIBA, Llb	Associate
Peter Sikorsky Dip Arch RIBA	Associate
Zainab Rashid. BArch.Dip.(Arch) ARIAS	Associate
Cormac McCarthy	Technologist
Helen Goldie	Technologist
Kakay Lim Dip.(Arch) ARIAS	Architect
Candidate BArch Dip Arch	Architectural Assistant
Hazel Jones BArch Dip Arch	Architect
Patrick O'Connell BArch Dip Arch	Graduate
Helena Chadwick	Graduate
Scott Muir	Technologist
Roberta Smith BA	PA Secretary to Partners
Melanie McKean	Secretary
Hubert Reed	Part time book keeper

Policy:

The practice has historically been structured around the particular strengths of the partners. They have decided still to describe themselves as partners though, under the provisions of the LLP legislation, they are formally described as Members of the LLP.

The office has a diverse workload across both private and public sectors. Gorst handles larger commercial, education and industrial developments and leads on conservation work. Mixed-use urban design based projects were normally carried out by John Young. Young has also built strongly on the varied workload he brought to the practice and has firmly established the office within Design & Build procurement, with a number of large contractor / developer clients.

Paul was made a new partner due to the amount of work he was bringing into the practice, his design talent and his ability to run large commercial projects. Paul's design talents were exemplified by a design award in 2014: 'Best Small Project', from Cityburgh Architectural Association for a large house extension (£100,000) for his brother-in-law.

Jill, Peter and Zainab have taken an increased role within GFY and have impressed Miriam and John with their varied skills. Jill is bringing work into the practice and Peter is instrumental in running projects and the office IT System. Zainab is proving to be a very talented designer.

The practice secures many small-scale domestic projects. Although these are beneficial in regards to workload, and in the recent financial downturn a vital aspect of the practice's cash flow, it is found to be increasingly difficult to generate any profit from them and they divert staff from larger, potentially more lucrative jobs. Both Paul and Jill have been more successful in bringing in a good proportion of these small projects over the last year. In addition to Paul's success in achieving a design award for his house extension, Jill's £500,000 new house for the CEO of Cityburgh Developments has won a prestigious housing award by the National Housebuilder's Association.

The practice was successful in securing a place on the framework to undertake Cityburgh's design work for projects above £500,000. This framework was won in conjunction with Green and Green (M&E) and Trevor Maillot (Structural) who will be appointed as sub-consultants. The framework tender process started two years ago and the fees agreed reflect the fact that we were still in recession. There is a scale of fees depending on the type and size of the project. A separate project manager will be appointed meaning that our role as Contract Administrator is not required.

The practice has a set procedure in place to systematically review electronic Public Procurement notices on a weekly basis. The practice has been successful in obtaining some work through this process.

An internal programme of CPD events is arranged for all staff whilst individuals are asked to attend external courses/seminars, disseminating the information to the rest of the office at internal sessions on their return. Paul Moore is responsible for the management of the practice CPD programme.

Staff training is tailored to enhance the office skill base and recorded in individual personal development plans. Training plans are discussed and agreed with the partners at annual reviews, with all members of staff maintaining individual CPD/training record sheets.

John Young has assumed the position of practice Health & Safety Officer and is keen to ensure that health & safety is taken seriously within GFY Architects. The practice was the subject of an HSE Construction Inspector's visit in 2009 and as a result of that John has established an in-house CDM review panel.

John has undertaken update training and Association for Project Safety (APS) accreditation and is now a qualified to be the Principal Designer for the practice – should we wish to offer this service. The practice is registered with the Contractor's Health and Safety Assessment Scheme (CHAS) which is one of the approved SSIP Schemes (Safety Schemes in Procurement). The practice also has strong links with some of its former CDM Coordinator consultants that the practice worked with previously on large projects, and have agreed that they can work as sub-consultants to GFY if required – should GFY be unable to resource the Principal Designer role.

The practice is a member of the local chapter Practice Information Service. For an annual subscription this entitles the practice access to a solicitor for advice on appointments and contracts as well as regular updates on practice management, contract law and new legislation.

The practice operates a quality management system and gained formal BS ISO 9001:2000 accreditation in 2007. Re-accreditation under the ISO 9001:2008 standard was successfully achieved in 2015. The practice has also just gained accreditation for ISO 14000 Environmental Management. Two members of staff; Paul and Jill have recently become Certified Passivhaus Consultants having successfully completed the examination.

The office uses current appointment documents whenever possible. The practice also works with the new RIBA plan of work introduced in 2013. The Scottish Conditions of Appointment of an Architect (SCA/2014 April 2015 revision) is preferred or the Small Project Version (ASP/2005 April 2015 revision) for simple low value projects. The use of standard appointment documents for Design and Build projects, (Scottish Conditions of Appointment of an Architect - Design & Build Contractor Client DBC201 or Scottish Conditions of Appointment of an Architect - Design and Build Client Version DBE2015) are preferred and are used when a bespoke agreement is not requested. The RIBA Standard Form of Agreement RIBA Agreements 2010 (2012 revision - RIBA Plan of Work 2013 compatible versions) is also relevant, depending on client or site location.

The practice holds professional indemnity insurance to £5,000,000 for each and every claim since clients frequently require cover at this level. The policy excess figure is £20,000.

The practice has a recently updated website. This has been masterminded by Jill Kahn who has the responsibility of keeping the website up to date. The revamp of the website forced the practice to think very carefully about how they want to be perceived within the market and what indeed their business strategy should be. The current identity of the practice, agreed by the partners, is a strong commercial practice with a strong design ethos.

Premises:

GFY rent 3,000 sq. ft. of office premises in a 1970's office building at £20 per sq. ft. A rent review was carried out 10 years ago, the annual service charge is £9,000 with rates at £18,000 per annum and heating and lighting at £6,000 per annum. The premises are subject to a full repair and maintenance lease and the practice budget is £8,000 per annum for repairs. The partners have decided to continue their short term recurring lease with their landlord, especially as the practice is starting to grow again.

Computers:

GFY has a fully integrated computer network with a workstation for each member of staff. Peter Sikorsky has been IT Manager for 5 years. The file server has an automatic back-up system and the system can be accessed by the partners and associates remotely. They use an industry standard package for word processing, spreadsheets, database and E-mail, and they have an industry standard 2D and 3D CAD package which is used both for 3-D visualisation and production work with rendering packages for presentation work.

The practice has implemented BIM for just over three years. All workstations have been updated for the use of Revit. Even though the practice has been doing Revit for nearly three years on a variety of projects, a member of practice staff has yet to perform the role of BIM Coordinator on a project. The practice has only ever really taken projects to BIM Level 1.

Administration:

Miriam is responsible for financial management and John for resource management and office job running systems. It has still to be decided how Miriam's role as financial manager will be replaced although Paul has shown an interest. John remains interested in current thinking about key performance indicators and hopes to find time to explore whether GFY's systems can be developed to respond to such issues. Paul's role in the practice is primarily to win work and to run major projects.

The PA/Practice Secretary, Roberta Smith handles the day-to-day administrative load for the practice with input from part-time bookkeeper, Hubert Reed. In addition, the Practice Secretary who has been trained in a variety of computing programmes provides efficient financial control and management reports in respect of the status of the practice.

The office has a 35-hour working week and a 1575-hour working year, allowing for all holidays and a provision for lost time. Holidays total 30 working days per annum, including statutory days. A flexitime arrangement was introduced following representations by several members of staff.

Staff:

The office salary structure was last reviewed two years ago. With Paul being made up to a partner, Peter and Zainab have been promoted to associates.

Salaries are starting to increase at a normal rate as opposed to the inflationary rises in the last few years. This has allowed the practice to better reward staff based on performance.

This year has seen the employment of Scott Muir, a technologist with good technical skills and working knowledge of Revit. Part-time bookkeeper Hubert Reed reduced his commitment to the office to 1 day per week.

PERSONNEL

Staff	Annual salary	Position	Cost to the office Per hour
Miriam Gorst	£60,000 (notional salary)	Partner	£76
John Young	£60,000 (notional salary)	Partner	£76
Paul Moore BArch Dip (Arch) ARIAS	£60,000 (notional salary)	Partner	£76
Jill Kahn ARIAS, RIBA, Lib	£41,000	Associate	£53
Peter Sikorsky Dip Arch RIBA	£36,100	Associate	£46
Zainab Rashid. BArch.Dip.(Arch) ARIAS	£36,100	Associate	£46
Cormac McCarthy	£28,000	Technologist	£36
Helen Goldie	£27,350	Technologist	£35
Kakay Lim Dip.(Arch) ARIAS	£31,350	Architect	£40
Candidate BArch Dip Arch	£24,000	Architectural Assistant	£31
Hazel Jones BArch Dip Arch	£27,000	Architect	£35
Patrick O'Connell BArch Dip Arch	£23,000	Graduate	£30
Helena Chadwick	£23,000	Graduate	£30
Scott Muir	£22,000	Technologist	£28
Roberta Smith BA	£24,750	PA Secretary to Partners	
Melanie McKean	£20,000	Secretary	
Hubert Reed	£6,000	Part time book keeper	

The cost to the office hourly rate in the table above is calculated as the share of salary and overhead costs for the office as a whole attributable to each technical member (including partners). It excludes any provision for profit.

The office uses the rate of 18 pence per £100 of salary when charging clients on a time basis.

Financial Summary:

Although the practice experienced a downturn in turn over and profitability after the recession in 2008 things are changing and the practice has returned to a semblance of normality. Workload has increased but fees are still at a low level.

In 2016-2017 profits increased again to 26% due to a slight rise in fee levels. Turnover increased to £1,450,222.

The partners/members are not as optimistic in their financial forecast for 2017/18 projecting a turnover of £1,300,000. Profit levels are forecast to be reasonably stable at 22-25%. Cash reserves have remained static. However, the value of bad debts having to be written off from the balance sheet has tailed off during the last 12 months. Cash flow has improved greatly. The partners are now happy that reserves are just above the target 3 month turnover margin, and are comfortable that the cash balance is substantial enough to cover cash flow without reliance on bank finance.

GFY operate a separate bank account to hold moneys required for VAT and tax. A monthly amount is directed to this account to pay for corporation tax and the VAT element paid on invoices is transferred to this account to ensure that the money is always there to make the quarterly VAT payments to HMRC.

In light of a number of recent project issues the GFY partners are now diligent in ensuring that separate accounts are created when clients' money is being held and managed by the practice.

CONSULTANTS/ADVISERS

LEGAL

DUN, TRIPP and FORSYTH,
Contact:

Solicitors, 70 Albert Road, CITYBURGH, CB2 8OA
Mr Brett Forsyth, Milt LLB.

FINANCIAL

MONTROSE Ltd, Accountants,
Contact:

3 Albert Close, CITYBURGH, CB2 7AA.
Mr Virus Susendrah CA. (The financial year runs
from 1st September to 31 August).

BANK

BURGHDALE BANK PLC,
Contact:

92 Chambers Street, CITYBURGH, CB1 3PN.
Ms Irene McSplash (Senior Manager).

INSURANCE.

EASTERN ASSURANCE PLC,
Contact:

46 The Square, CITYBURGH, CB1 2EM.
Mr Sean Gordon

For professional consultation the following firms have been regularly used. Other Consultants for Building Services, Landscape, Fire Engineering etc. are engaged as necessary depending on the nature and source of each job.

QUANTITY SURVEYORS

MANNARS SURVEYORS,
Contact:

14 Chambers Court, CITYBURGH, CB1 XA.
Mr Rod Mannars LLB ARICS. Mannars are an old
firm with a good reputation and some bright
younger staff.

CONSTRUCTION COST CONSULTANTS

GLM (West) Ltd,
Contact:

20 UPPER TOWN, WESTBURGH W1 2UP
Geom. Le Mesurier, FRICS, ACI Arb, APS.

STRUCTURAL ENGINEERS

TREVOR MAILLOT BSc Eng. MStrucE, 14 BRADE STREET, CITYBURGH, CB4
7TS.

Contact:

Mr Maillot. A small firm established in 1990.

ENVIRONMENTAL ENGINEERS

GREEN & GREEN,
Contact:

127 Brade Place, CB4 BTZ.
Mr George Green BSc MIMech MIEE.
An experienced firm with a keen awareness of
building sustainability

Specific Background to Questions

QUESTION 1

Not necessary

QUESTION 2

Scenario	Concept Dwelling Unit
Client:	Factory Builders Ltd
Design Team:	Architect, Principal Designer and Lead Consultant: GFY
Engineers:	Trevor Maillot & Partners
Services Engineer:	Green & Green
Project Value:	£0.35M including factory set-up and design fees for prototype
Fee Agreement for Architect:	Not Yet Agreed

Background: This project is in the Stage 0, Strategic Definition phase.

The project is to provide a fully co-ordinated and working prototype of a low cost, eco-friendly, flatted dwelling for key workers all over the UK. This type of construction is becoming more prevalent in the construction industry using DfMA (Design for Manufacture and Assembly) techniques.

The prototype will be manufactured off site and will function as a “showhome” for our client who intends to use it to promote the product to Housing Associations and Co-operatives and private social housing providers as a low cost, environmentally friendly and programme efficient alternative to traditional housing.

It is intended that this will be a one bedroom apartment prototype that if successful will be extended to offer a range of units that could be mixed together such as studio flats and larger family type accommodation.

Their business plan is to produce and assemble in excess of 1000 units in the first 5 years.

QUESTION 3

Scenario

A rehabilitation project to take a Victorian warehouse building and create a new arts centre with performance space, studios, exhibition space, café and library. The troubled project has over-run by 6 months and the client, having put off several high profile events which were pre-booked, is desperate to move into the building and is prepared to do so before the contractor is actually finished.

Contract:	SBCC Standard Building Contract with Quantities (Nov 2011)
Contract Value:	£7.6m
Construction period:	15 months
Client:	Cityburgh Arts Collective
Contractor:	Heritage Construction
Structural Engineer:	Trevor Maillot
Quantity Surveyor:	Mannars Surveyors

QUESTION 4

Scenario

Appointment:	November 2014 (SCA 2014)
Project:	One-off new house for private client
Client:	Mr & Mrs W. Walker
Fee:	6% of construction cost
GFY Project Team:	John Young, Partner responsible, Candidate
QS:	None
Structural:	Trevor Maillot
Original Contractor:	Wall Construction Ltd
Original Contract:	MWD/Scot (2011)
	Date of Commencement: 10.10.16
	Date for Completion: 13.03.17

QUESTION 4 (cont.)

Replacement Contractor: Tormund Joinery Services

Replacement Contract: MW/Scot (2011)
Date of Commencement: 11.09.17
Date for Completion: 8.12.17

Likely Final Build Cost: £384,000

Project Status: The new house is now 2-3 weeks from Practical Completion

Background: Following an unresolved contractual dispute, the original Contractor withdrew from the site and never returned, causing 9 months delay while a replacement Contractor was selected and appointed.

GFY were involved in detailed assessment & scheduling of the outstanding, incomplete works, creating a Scope of Works and inviting tenders from seven potential Contractors. A replacement Contractor was appointed, Tormund Joinery Services, owned by Mrs Walker's Brother.

GFY have issued an invoice for their additional services in finding the replacement Contractor.

QUESTION 5

Scenario

Project: New build passivhaus

Client: Mr and Mrs Hastie

Contract sum: £410,000

Contract: SBC/Q/Scot Standard Building Contract with Quantities (2011 Edition)

Stage: 3 months into 8 month building contract

Design team: Architect (CA), Structural Engineer, Q.S

Main contractor: Burly Builders Ltd

QUESTION 5 (cont.)

Timber Kit Supplier:	Supakit (Pre-fabricated super insulated wall and roof panels made off-site)
Windows:	Manufactured in Germany and supplied to site for fitting by Burly Builders

QUESTION 6

Scenario

Project 1:	Hampton House, Orchard Field Conservation area, Cityburgh
Appointment:	Scottish Conditions of Appointment for an Architect SCA/2014 to end of Stage 6
Client:	Mr & Mrs Hampton
Contractor:	OneStopBuilders
Contract:	SBCC Scottish Building Contract 2011 Minor Works Contract
Project Value:	£880,000
Project 2:	Bamford House, Orchard Field Conservation area, Cityburgh
Appointment:	Scottish Conditions of Appointment for an Architect SCA/2014 to end of Stage 4
Client:	Mr Bamford
Contractor:	OneStopBuilders
Contract:	Not known to GFY
Project Value:	£700,000

QUESTION 7

Scenario

Project:	Hotel refurbishment and new extension. The original building is a country house hotel which is listed grade B including some fine Georgian interiors.
Employer/ Original Client:	Private client, Crailing Hotels Ltd
Project Manager:	Johnstone, Johnson & Johnston
Structural Engineer:	Trevor Maillot Engineers

QUESTION 7 (cont.)

Services Engineer:	Green & Green Engineers
Contractor:	Eckford Design & Build Ltd
Contract:	Design and Build Contract for use in Scotland, DB/Scot (2011 Edition). The contract was not amended to assign responsibility to the contractor for the design prepared under the Employer's Requirements.
Architect's Appointment:	Scottish Conditions of Appointment of an Architect – Design and Build Contractor Client Version DBC/2015; Stages 4, 5 and 6 to Contractor (previously Client Version DBE/2015 Stages 1, 2 and 3 plus collateral warranty to the original client for services performed for the contractor

Background

Crailing Hotels engaged GFY to act as architects for the development of one of their flagship country house hotels. The original hotel was bought by Crailing five years ago with a view to expansion. GFY have been continuously involved over the past few years working on Stage 2 concept studies to test the viability of both the economic development and the ability to substantially extend the hotel's sixteen rooms to a total of thirty-two. This involved careful negotiation with the local authority planning department and utility services. Planning consent was eventually awarded after contract signing.

As a commercial client with a sound knowledge in hotel development throughout the country, Crailing Hotels are regarded by GFY as a client who know how to run a successful hotel chain with detailed knowledge of the hotel construction industry. Therefore, it was no surprise that a Project Manager was engaged to run the project on behalf of Crailing and that the development was rooted in a design and build procurement strategy. Accordingly, GFY were appointed under a standard Design and Build appointment to the contractor at Stage 4.

The project has started on site after being awarded a Stage 1 Building Warrant for substructure, drainage and utility services for the extension. GFY, with the support of a full design team, have recently submitted the Stage 2 Building Warrant application to the local authority for the refurbishment works to the existing hotel, superstructure, interior fit-out and services for the extension and refurbishment.

QUESTION 8

Scenario

Project:	Two new office buildings in Northern Ireland and North East England to replicate building GFY has already built for client in Cityburgh.
Client:	Green Petrochemicals. An international company in the oil and gas sector.

QUESTION 8 (cont.)

Costs:	Each building will be approximately £20m
Appointment:	RIAS SCA for original building
Contract:	Global Reach have a framework contract with Green Petrochemicals and project will be procured on a design and build basis.
Background:	<p>GFY delivered a similar building in Cityburgh. This award winning building is really liked by the Chief Executive Officer (CEO) for Green Petrochemicals and he wants this to be a new 'brand' for their new offices around the world.</p> <p>CEO wants two very similar buildings. GFY will be employed by Green Petrochemicals' framework contractor; Global Reach, who have their own in-house architects and structural engineers. Original building was designed and delivered using a Level One BIM model.</p>

QUESTION 9

Scenario

Project:	"CityBurgher" Drive Thru Unit, Cityburgh Retail Park
Client:	Burgher Burgher Ltd
Stage:	On site
Design Team:	Architect (CA), Structural Engineer, Services Engineer, No QS
Contract Sum:	£571,000.51
Contractor:	Big Mac Construction Ltd
Contract:	Minor Works Building Contract with Contractor's Design MWD/SCOT 2013 Edition
Comment:	<p>Architect (CA) carrying out the role of QS on the project.</p> <p>Payment period agreed as 21 days from the due date.</p>

QUESTION 10

Background

BCDS-	Bigville Construction Design Services
Location -	Bigville City; 40 miles from Cityburgh
Business information -	Commercial, multi-disciplinary practice made up of 180 Architects, Structural, Civil, M&E engineers and QS. Business model: Privately owned company. 6 Directors. Profit last FY £4.6m. Turnover last FY of £100k per staff head (Architects only).
BCDS client base -	Private developers; local authorities, housing associations, private clients.
BCDS recent projects -	Large housing developments; large leisure facilities; new build schools; new build hotel developments.