Southampton City Council

Springwell School

Special Educational Needs Expansion

Option Appraisal Report 05/05/15







This report, including assumptions and caveats, should be read as a whole so that no part may be taken out of context. Neither the whole nor any part of this report or any reference to it may be included in any published document, circular or statement in any way without written approval of CAPITA Property and Infrastructure Ltd. Any further report on this subject should be the subject of consultation with the author.

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Project Springwell School

Location One Guildhall Square

Above Bar Street Southampton SO14 7FP

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Date 05 May 2015

Prepared by C.Williams Signature C.Williams

Checked by Vanessa Orekan

Signature v. Orekan

Authorised by E.Ellert Signature E.Ellert





Appendices

A Procurement	Report
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Client Brief

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С	Accommodation Schedule

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1.0 Introduction

- 1.1 This option appraisal study was commissioned by Southampton City Council Education team to investigate the options for expanding Springwell Special Educational Needs School in Southampton.
- 1.2 The study has been carried out by Capita Southampton on behalf of the Southampton City Council client.
- 1.3 The option appraisal study covers aspects of RIBA stage A and B (New Plan of Work Stage 1 Preparation and Brief). Further detailed feasibility will be required for taking proposals forward to RIBA stage C (New Plan of
- 1.4 Work Stage 2 Concept Design).
- 1.5 General Inclusions and Omissions

The scope of works for this option appraisal study was identified within the resource plan accompanying the fee proposal.

- 1.6 Investigations not requested within this study that could influence the proposals and could have an unknown cost element are (this list is not exclusive):
 - Geotechnical investigations
 - · Drainage survey and flood risk assessment
 - Topographical and tree survey
 - Acoustic survey
 - Further feedback from planners and Sport England
 - Investigation into ownership constraints, easements and covenants
 - Ecological consultations
 - BREEAM pre-assessment
 - Thermal modelling

2.0 Client Brief

- 2.1 The client brief has been appended to this report. To summarise the client brief:
- 2.1.1 The main drivers for this brief are the predicted need for increasing school places for primary age children (4-11 year olds) with special educational needs within Southampton. The current demand at Springwell School exceeds capacity, and there is a predicted need to increase the school incrementally by 2 classes per year up until 2021, totalling 16 additional classrooms and additional supporting areas.
- 2.2 Short Term plan 2016 (phase 01):
- 2.2.1 Provision of 6 additional classroom and associated hygiene facilities by 2016 to accommodate 8 children per class.
- 2.2.2 Additional accommodation associated with the 6 classrooms is to be agreed during the option appraisal phase. This may include a shared area, staff room, reception/sick bay, soft play and sensory room.
- 2.2.3 This could be provided either on the current Springwell site or as a new build.
- 2.3 Longer Term Plan 2017 (phase 02):
- 2.3.1 To provide a total of 16 new classrooms, each accommodating 8 children.
- 2.4 An accommodation schedule has been developed based on Building Bulletin 101. The school is currently consulting on this, which will be developed as part of the feasibility study. The draft accommodation schedule has been appended to this report.





3.0 Design Team

- 3.1 Capita have developed a series of options in conjunction with the school and Southampton City Council Client Representative. Southampton City Council Development Control and Sport England have also been consulted on the general development of options and the school's preferred option.
- 3.2 The Capita design team has comprised:
 - Project Manager
 - Architect
 - Structural Engineer
 - Landscape Architect
 - Civil Engineer
 - Drainage Engineer
 - Mechanical Engineer
 - Electrical Engineer
 - Quantity Surveyor
 - Valuer
- 3.3 There will be a need to appoint further specialist consultants as the project progresses.

4.0 Programme

4.2.

- 4.1 Due to the short timescales stipulated by the client, a strategy for procurement exemption and cabinet approvals needs to be developed by the client, to ensure the timescales listed below are achievable.
- 4.2 A series of key dates have also been drafted out which will be developed into a master programme during feasibility stage:

.1	Phase 01		
	RIBA Stage A	Option Appraisal for all Phases	April '15
İ	RIBA Stage B	Feasibility for 6 classroom block	April to May '15
	RIBA Stage C	Outline Design	June '15
	RIBA Stage D	Detailed Design and Planning Application	July '15
ĺ	RIBA Stage E	Technical Information	July to September '15
	RIBA Stage F	Production/Construction Information	September to October '15
	RIBA Stage G	Tender Documents	July '15
	RIBA Stage H	Negotiated Tender	August '15
	RIBA Stage J	Mobilisation	September to October '15
ĺ	RIBA Stage K	Construction	October '15 to July '16

4.2.2	Phase 02		
	RIBA Stage A	Option Appraisal for all Phases	April '15
	RIBA Stage B	Feasibility for remaining school	May to June '15
	RIBA Stage C	Outline Design	July to August '15
	RIBA Stage D	Detailed Design and Planning Application	September '15
	RIBA Stage E	Technical Information	October to December '15
	RIBA Stage F	Production/Construction Information	January to March '16
	RIBA Stage G	Tender Documents	November '15
	RIBA Stage H	Negotiated Tender	December to January '16
	RIBA Stage J	Mobilisation	February to March '16
	RIBA Stage K	Construction	April '16 to July '17
	RIBA Stage L	Landscape Completion/Post Practical Completion	August to December '17





5.0 Risks

- 5.1 A risk workshop will be carried out during the feasibility phase of the project. There are a number of key risks associated with the project which include:
 - · Tight timescales not being achieved
 - Procurement risks
 - · Costs and client budget
 - Planning and statutory approvals
 - · Technical issues such as approval from Southern Water
 - · Client change of brief

6.0 Site Selection

- 6.1 The first stage of the option appraisal was to identify potential sites for a new build school. This initial assessment identified two potential sites:
 - · Area of land adjacent to Springwell School
 - Old Eastpoint Centre site
- 6.2 The Old Eastpoint Centre site was concluded as not being viable due to:
 - The site is currently leased to a private company with an option to buy. They have now abandoned the building and Southampton City Council with the assistance of Capita are in the process of re-acquiring the building. Therefore these timescales do not fit in with the client requirement of a September 2016 and 2017 completion date.
 - The building is not suitable for refurbishment into a special needs school as the building is arranged on a
 multiple levels, is larger than required, with no one area lending itself easily to demolition, the classrooms
 would be located on the upper floors which is not ideal for primary aged children with special needs. The
 building would have to be stripped back to its original superstructure as the cladding, roofing et al is in very
 poor condition and is likely to contain significant amounts of asbestos.
- 6.3 The land adjacent to Springwell was agreed to be the most viable due to:
 - The adjacency to the existing school, enabling the two buildings to operate as one Key Stage One building, and the other a Key Stage Two building.
 - The land is within the ownership of Southampton City Council Education Department.
 - The location provides an education 'cluster' comprising primary school and Sure Start Centre.
- 6.4 The main issues identified as part of the option appraisal associated with the Springwell site are:
 - Planning issues associated with building on open space and former sports fields, and likely objections from members of the public.
 - Ground conditions associated with an infilled gravel pit and high water table.
- 6.5 After the selection of the site a number of different configurations were looked at which included extending the existing school, and building a separate school building, detailed in the report as options A-E.
- 6.6 Subsequent to developing these options the client then requested that Capita develop a proposal to provide Early Years provision. On initial assessment, this could be located to the front of the existing school building, and should be treated as a discrete project, although developed with thought to the actual school expansion. This will form part of a separate feasibility study, and timescales will need to be agreed with the client.





7.0 Springwell School Site

The existing site at Springwell Special Educational Needs School, which will be expanded to accommodate the predicted increase in school places.



Existing Springwell School site and adjacent football pitch. (Site boundary in red.) Scale 1:2500



View to south towards two classroom block, the existing school and playground.



View to north west towards the nature trail and tree boundary.



View to south west towards the school and play area.



View from the car par towards the main entrance of the school.





8.0 Old Eastpoint Centre Site

The Old Eastpoint Centre site that was concluded as not being viable for the new school.



Existing Old Eastpoint Centre site and adjacent leisure land. (Corporate portfolio land in yellow, leisure land in green.) Scale 1:2500



View towards the vacant Eastpoint School. (Image capture: Oct 2008; source: Google 2015)



View towards the vacant East Southampton Day Centre. (Image capture: Oct 2008; source: Google 2015)



View in the woodland area.

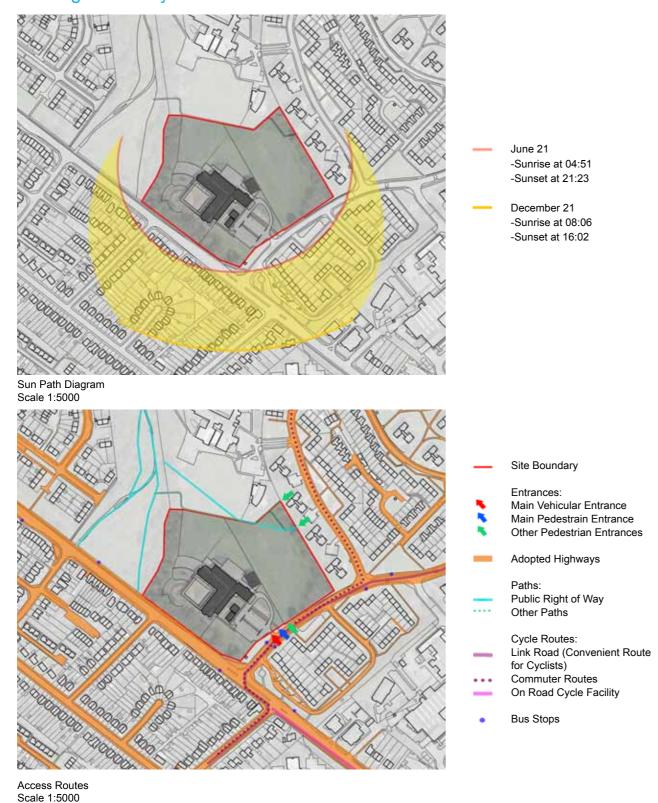


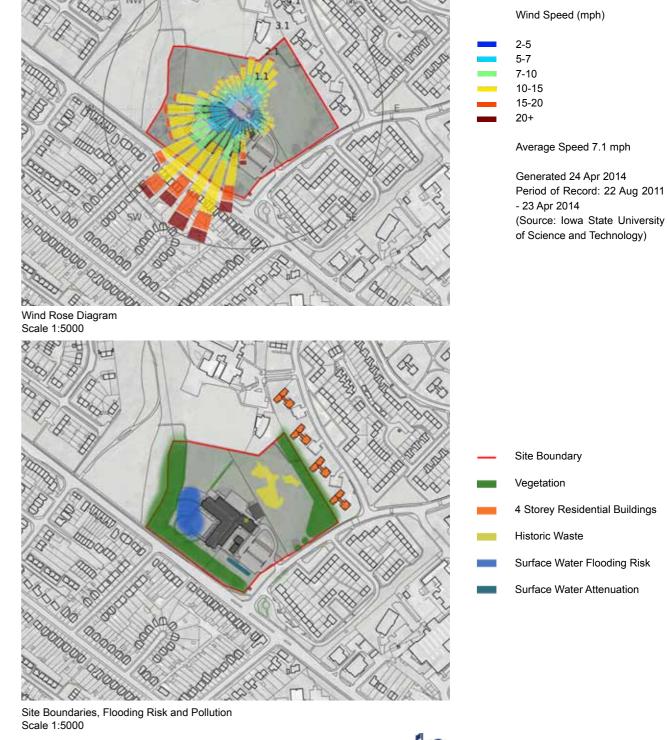
View from Bursledon Road towards the new Eastpoint Centre and land allocated for energy centre.





9.0 Existing Site Analysis









10.0 Existing Springwell School









11.0 Southampton City Council's Preferred Option E

- 11.1 After development of a series of options and following consultation with the school, the preferred option is to develop option 'E'.
- 11.2 However, the highest risk in terms of this option is gaining planning and Sport England Approval. Sport England are a statutory consultee as the playing field has not been in use as a playing field within the last 5 years. Capita have consulted on behalf of the client early in the design process in an attempt to gain Sport England's support for the proposal.

	Option E	
Option Appraisal Parameters	Phase 1	Phase 2
Pedestrian access	4	4
Staff car parking	4	4
Construction access	4	2
Parent drop off	4	4
Community presence	4	4
Retention of existing landscape features	4	3
Surface water drainage	3	3
Foul water drainage	3	3
Ventilation and overheating	3	3
Incoming services	3	3
Foundations	2	2
Site levels	4	4
Planning issues	1	1
Acoustics	3	3
Subtotal	46	43
Total		89

Эρ	tion Scoring Matrix Legend		
5	Relatively minor issues to resolve		
4	Provides a good solution to issues		
3	Issues can be overcome with reason	onable tech	nical/design soultion
2	Issues can be overcome with cost	y technical/	design solution
1	Issues may not be surmountable		
	Gas Pipe		Broadband
	Water Pipe		Existing Surface Water Attenuation
••	Electrical Supply		Surface Water Flooding Risk
•••	Telecommunications Cable		Historic Waste
••	Telecommunications Cable BT Underground Distribution Plant		Historic Waste Close Tree Line
••			Thotono Tradio
••	BT Underground Distribution Plant		Close Tree Line









Option E Phase 1 Scale 1:2500

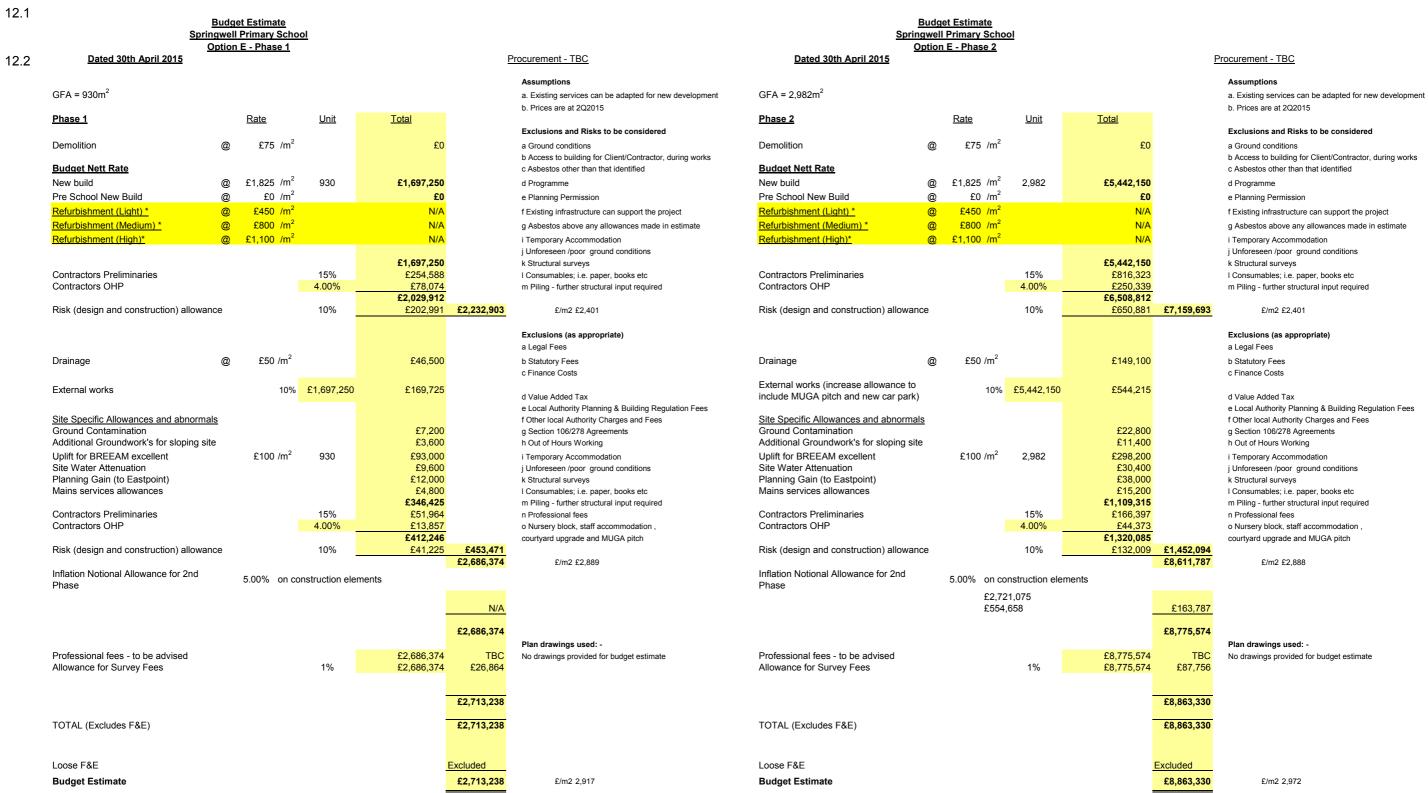




Option E Phase 2 Scale 1:2500



12.0 Costs and Procurement







12.0 Costs and Procurement

- 12.1 A full procurement report is available in the appendices, which will require client sign off. Procurement will need to be addressed again during feasibility due to the risk that the client will not gain exemption to both phases 01 and 02, which will affect the timescales shown on the key dates programme.
- 12.2 It is recommended that the same contractor completes both phase 01 and 02 to achieve one point of responsibility and liability.
- 12.3 As programme is the key driver for the procurement method the prime cost contract offers the best programme and most realistic chance of achieving practical completion by July 2016 for phase 1.
 Phase 2 completion for July 2017 should be sufficient for a traditional procurement approach.
- 12.4 In order to give the best chance of achieving the programme the design and procurement works need to be commissioned immediately for both phases.
- 12.5 Key dates based on a prime cost procurement listed below for phase one:
- 12.6 Reimbursement / prime cost route
 Design complete: October 2015
 Tender documentation complete: July 2015
 Tender return: August 2015

Tender report: September 2015
Order placed: September 2015
Start on site: October 2015
Practical completion: July 2016

12.7 Under the Cost Reimbursement Option D we have assumed that the preliminaries will be approved by SCC legal department without any bespoke contract amendments that could cause delay.





13.0 Consultation with SCC Planners

- 13.1 A meeting with Development Control has taken place, where option E was presented. A formal pre-application advice procedure will be followed, and an application made on completion of the option appraisal. The main items discussed during the meeting included:
- 13.2 We agreed that we would apply for pre-application advice, so that planning can provide formal feedback, as well as continuing with informal consultations.
- 13.3 Development Control will contact and organise consultations with tree officers, ecology, archaeology, highways etc, rather than Capita approaching the officers directly.
- 13.4 Development Control will contact Capita regarding consultations with Sport England, as Sport England consultations need to be coordinated with planning.
- 13.5 It is council policy to retain open space, however other sites around the city have built on open space. This needs to be balanced with council's policy for improvement to education.
- 13.6 The two schools adjacent to the football pitch don't use it. The primary school has their own facilities and Springwell due to the nature of the children who attend don't need a formal full size football pitch. This helps the case for building on it, and should be included in our pre-app information.
- 13.7 The council would usually expect as part of their open spaces policy for replacement open space elsewhere. It was discussed whether improvements to existing open space could count towards this it's a justification elsewhere in the city.
- 13.8 We talked briefly about old Eastpoint Centre site and confirmed that it is not suitable for refurbishment into a special needs school, and talked generally around whether replacement open space could be located there.
- 13.9 There is currently a requirement to achieve BREEAM excellent on the building, which will increase costs.
- 13.10 There could be a possibility of creating a hybrid application for the first and second phase full planning application on the first phase and outline on the second phase, whilst the second phase is being developed. RP will confirm.
- 13.11 Capita to check site size, as planning may need to consult with the Environment Agency.

14.0 Consultation with Sport England

- 14.1 Capita Valuations and Estates team have opened negotiations with Sport England.
- 14.2 Sport England do not believe the playing field is exempt due to non-use (5 year rule). They therefore consider that they will be consulted as a Statutory Consultee as part of any planning application process and that they only exception that can be applied is in accordance with the Playing Field policy, E1-E5. Upon consideration of policies E1 to E5 the best approach will be either E1 or E4.
- 14.3 In terms of options:
- 14.4 E1 exception will require a detailed playing field assessment of the catchment area, identifying existing and future needs against provision. We need to discuss whether we recommend this approach. Initial thoughts are that there is probably a shortfall in quality facilities in this locality, given that there are only 2 smallish Primary Schools in the immediate catchment area, and that community/amateur sports groups probably travel elsewhere for facilities.
- 14.5 E4 consideration needs to be given on how his is addressed and the cost of this. Whilst we are aware of a site being available, the actual replacement facility and who manages are key questions. Any new MUGA or similar would be remote from Springwell and will need to be managed. As SCC do not have this resource, a third party will need to be identified, if Springwell do not want this responsibility. A service contract arrangement will be required with a procurement exercise. There is risk that no-one would want to manage a MUGA which is 'remote' from any other facility. Additionally the identified site has a 1950's secondary school on it, so demolition costs are another factor.
- 14.6 The playing field is actually within the demise of Thornhill Primary School, who had it laid out as sports pitches each year until 2011/2012, when they decided they did not want address dog walkers issues. So, it would appear the field has been in active for 4 years. It is technically within the 'ownership' of Thornhill Primary. Southampton City Council Education team will need to approve the field for Springwell and notify Thornhill Primary accordingly.





15.0 Development of Options A to D

15.1 Options A to D were developed and then the school and client consulted on them. Following this consultation option E was developed and agreed by Southampton City Council that this is the option that should move forward to feasibility stage. The following pages summarise Options A to D.

16.0 Option A

	Option A	
Option Appraisal Parameters	Phase 1	Phase 2
Pedestrian access	3	4
Staff car parking	3	4
Construction access	4	4
Parent drop off	2	4
Community presence	2	4
Retention of existing landscape features	4	3
Surface water drainage	3	2
Foul water drainage	3	2
Ventilation and overheating	3	3
Incoming services	3	3
Foundations	3	2
Site levels	4	3
Planning issues	1	1
Acoustics	3	3
Subtotal	41	42
Total		83

Op	tion Scoring Matrix Legend		
5	Relatively minor issues to resolve		
4	Provides a good solution to issues		
3	Issues can be overcome with reason	onable tech	nnical/design soultion
2	Issues can be overcome with costly	y technical	design solution
1	Issues may not be surmountable		
	Gas Pipe	_	Broadband
	•		Broadband
	Water Pipe		Existing Surface Water Attenuation
•••	Electrical Supply		Surface Water Flooding Risk
•••	Telecommunications Cable		Historic Waste
	BT Underground Distribution Plant		Close Tree Line
	Burried High Voltage Cable		Public Right of Way
	Electric Substation		









Option A Phase 1 Scale 1:2500





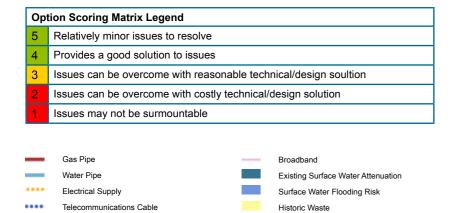
Option A Phase 2 Scale 1:2500



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17.0 Option B

	Option B	
Option Appraisal Parameters	Phase 1	Phase 2
Pedestrian access	3	3
Staff car parking	3	4
Construction access	2	2
Parent drop off	2	2
Community presence	2	3
Retention of existing landscape features	3	2
Surface water drainage	2	1
Foul water drainage	2	2
Ventilation and overheating	3	3
Incoming services	2	3
Foundations	2	2
Site levels	3	2
Planning issues	4	4
Acoustics	3	3
Subtotal	36	36
Total	7	'2



Public Right of Way









Option B Phase 1 Scale 1:2500





Option B Phase 2 Scale 1:2500





18.0 Option C

	Option C	
Option Appraisal Parameters	Phase 1	Phase 2
Pedestrian access	3	4
Staff car parking	3	4
Construction access	2	4
Parent drop off	2	4
Community presence	2	4
Retention of existing landscape features	3	3
Surface water drainage	2	2
Foul water drainage	2	3
Ventilation and overheating	3	3
Incoming services	2	3
Foundations	2	2
Site levels	3	3
Planning issues	4	1
Acoustics	3	3
Subtotal	36	43
Total		79

5	Relatively minor issues to resolve
4	Provides a good solution to issues
3	Issues can be overcome with reasonable technical/design soultion
2	Issues can be overcome with costly technical/design solution
1	Issues may not be surmountable

Water Pipe

Electrical Supply

Telecommunications Cable

BT Underground Distribution Plant

Burried High Voltage Cable

Electric Substation

Broadband
Existing Surface Water Attenuation
Surface Water Flooding Risk
Historic Waste
Close Tree Line
Public Right of Way









Option C Phase 1 Scale 1:2500





Option C Phase 2 Scale 1:2500





19.0 Option D

	Option D	Option D		
Option Appraisal Parameters	Phase 1	Phase 2		
Pedestrian access	3	3		
Staff car parking	3	4		
Construction access	4	4		
Parent drop off	2	3		
Community presence	2	3		
Retention of existing landscape features	2	3		
Surface water drainage	3	3		
Foul water drainage	3	2		
Ventilation and overheating	3	3		
Incoming services	2	3		
Foundations	2	2		
Site levels	3	3		
Planning issues	2	1		
Acoustics	3	3		
Subtotal	37	40		
Total		77		

Opt	Option Scoring Matrix Legend					
5	Relatively minor issues to resolve					
4	Provides a good solution to issues					
3	Issues can be overcome with reasonable technical/design soultion					
2	Issues can be overcome with costly technical/design solution					
1	Issues may not be surmountable					
	Gas Pipe Broadband					

Water Pipe

Electrical Supply

Telecommunications Cable

BT Underground Distribution Plar

Burried High Voltage Cable

Electric Substation

Broadband
Existing Surface Water Attenuation
Surface Water Flooding Risk
Historic Waste
Close Tree Line
Public Right of Way









Option D Phase 1 Scale 1:2500





Option D Phase 2 Scale 1:2500



20.0 Structural Engineer

- 20.1 Sub-Structure:
- 20.2 The foundation designs will be effected by any number of the following items identified on site:
- 20.3 1. The new building is currently sited adjacent to the rear of the existing two classroom modular building and retaining wall / embankments. As such, any new foundations may be required to be taken further down to avoid undermining any existing footings or overloading the retaining wall itself.
- 20.4 2. Mature trees along the site boundary. An existing site investigation report has noted high plastic clays on the site which, in accordance with NHBC guidelines, may require deepening of the foundations to account for heave of the clay soils.
- 20.5 3. Historic Site Use. There is a potential that areas of the North playing field were used as both a Gravel pit and also for waste infill. As such, significant depths of contaminated made ground may be present. These may require in-situ remediation measures and either deep traditional foundations or possibly the use of a piled foundation solution incorporating reinforced concrete ground beams.
- 20.6 Super-Structure:
- 20.7 There are no significant issues considered at this stage. However it should be noted that with the proposed Phase 1 and Phase 2 works packages, access to the rear of the new Phase 2 buildings will be limited for site traffic due to the existing site levels. Access to the North of the site is likely to be through a single route North of the completed Phase 1 building.

21.0 Mechanical Engineer

- 21.1 Design Standards:
 - British Standards & Codes of Practice
 - Building Regulations Latest Editions
 - BRFFAN
 - Capita Standard Specification for Mechanical Engineering
 - Institute of Plumbing Plumbing Engineering Services Design Guide
 - DfE Building Bulletins
 - Gas Safe Installation Regulations
 - B&ES Standard Specifications/Technical Notes
 - Chartered Institution of Building Services Engineers Guides and Technical Memoranda
 - Water Regulations
- 21.2 Incoming Utility Services:
- 21.3 Mains Water Supply
- 21.4 A new mains water metered connection shall be provided from within Hinkler Road to a new water meter at the site boundary. The new incoming main shall be sized to serve the domestic water services for the new school building.
- 21.5 Natural Gas Supply
- 21.6 A new mains gas metered connection shall be provided from within Hinkler Road to a new gas meter at the site boundary. The new incoming main shall be sized to serve the new LTHW heating/hot water systems and new catering equipment within the new school building.
- 21.7 LTHW Heating
- 21.8 Design Conditions:
- 21.9 External 4 oC

Internal 16 - 21 oC (depending on room type)

- 21.10 Space Heating
- 21.11 Space heating shall be provided from a piped distributed Low Temperature Hot water (LTHW) heating system. LTHW shall be generated by a set of floor standing/wall hung, gas-fired condensing boilers, located in a ground floor plant room. The Phase 1 building shall be considered to be served via a temporary boiler plant, until the new Plant Room located within Phase 2 is complete.





21.0 Mechanical Engineer

- 21.12 The low temperature hot water (LTHW) system shall be supplied with water at 80/60 oC.
- 21.13 LTHW will be distributed as follows:-
 - Variable temperature circuit shall serve radiators, radiant panels and underfloor heating.
 - Constant temperature circuit shall serve air handling plant.
 - Constant temperature circuit shall serve HWS calorifier(s)/plate heat exchangers.
- 21.14 The variable temperature circuits shall be complete with inverter driven pump sets to maintain constant system head against the action of the thermostatic control.
- 21.15 The underfloor heating VT circuit shall serve localised pumped manifolds located at various locations throughout the new building. The individual underfloor heating coils serving specific rooms shall be controlled via two port control valves to facilitate specific room temperature control.
- 21.16 Heat Emitters
- 21.17 Space heating shall generally be by steel panel wall fixed radiators or ceiling mounted radiant panels with the exception of large open spaces which shall be considered for heating via an underfloor system. Radiators shall be reduced surface temperature style.
- 21.18 Services Installation
- 21.19 The mechanical services and distribution shall be arranged to allow a phased connection of the buildings.
- 21.20 Gas
- 21.21 The new incoming gas main shall enter the building via the new Plant Room. Within the new school building natural gas shall be distributed from the Plant Room to serve the new Kitchen Area.
- 21.22 The natural gas supply serving the new Kitchen Area shall be complete with gas shut-off solenoid valve; the service shall also be interlocked with the ventilation plant via a gas safe panel and field controls.
- 21.23 Flue
- 21.24 Provision shall be made for an external flue twin wall stainless steel shall be utilised.
- 21.25 Boiler Room Ventilation
- 21.26 Provision of high and low level natural ventilation louvres shall to be provided.

- 21.27 Domestic Water Services
- 21.28 Cold Water
- 21.29 The domestic cold water services shall be mains fed. The new incoming cold water main shall enter the building via the new Plant Room.
- 21.30 Centralised cold water storage shall be provided and be linked to an automatically controlled variable speed booster set with duty, assist and standby pumps.
- 21.31 Within the new school building the boosted cold water system shall be distributed at high level from the Plant Room to serve all appliances throughout the new building
- 21.32 Hot Water
- 21.33 Hot water shall be generated via centralised high efficiency condensing direct gas fired water heater(s) or via indirect calorifier(s) heated from the main boiler plant.
- 21.34 The hot water system shall be supplied via the boosted cold water service. Hot water return circulation shall be provided, and outlets for children use and for the disabled shall be provide with thermostatic blending valves (temperature adjusted).
- 21.35 All sanitary ware shall be installed with shut-off valves and the common toilet areas shall be provided with water leak protection in accordance with BREEAM requirements.
- 21.36 The new hot water systems shall comply with H & S guidelines to control legionellosis, particularly HSE L8.
- 21.37 Ventilation Services
- 21.38 Natural Ventilation
- 21.39 The classrooms and larger spaces shall generally be naturally ventilated via manually openable windows and proprietary ventilation terminals located within the external façade and flat roof. This combination shall utilise openable windows within the summer/warmer months and external façade terminals during the winter/colder months. This combined ventilation strategy shall be utilised to provide fresh air ventilation, purge ventilation and control of summertime temperatures.
 - These systems shall be controlled through individual room based controllers; each controller shall incorporate both temperature and air quality sensors.
- 21.40 Mechanical Ventilation
- 21.41 WC/wet areas shall be provided with ventilation systems to satisfy the requirements of the Building Regulations and it is proposed to provide time clock controlled continuous ventilation.





21.0 Mechanical Engineer

- 21.42 The WC/Wet areas shall be provided with a dedicated centralised supply and extract plant with high efficiency heat recovery.
- 21.43 Kitchen Ventilation
- 21.44 A stainless steel kitchen canopy with supply air incorporated shall be provided. Dedicated supply and extract fans shall be installed to serve the specific Kitchen ventilation requirements.
- 21.45 Above Ground Drainage
- 21.46 A single stack system of sanitary pipework shall be installed to serve all appliances and items of mechanical plant requiring a foul water connection to drain.
- 21.47 A floor gully shall be supplied within the Plant Room for condensate disposal, leakage and wash down.
- 21.48 Automatic Controls
- 21.49 The BMS controls system for the new building shall be a fully integrated automatic controls system able to undertake various and comprehensive operational / monitoring functions in order to meet with the requirements of the school, statutory requirements and to provide an energy efficient building. The system shall be capable of raising fault alarms from all plant/equipment.
- 21.50 LTHW Heating
- 21.51 School heating shall be controlled via Optimum Start Control (OSC) with early 'off' facility.
- 21.52 Frost protection to be incorporated for building 'out of hours' protection.
- 21.53 Weather compensation shall be provided to reduce energy consumption.
- 21.54 Underfloor heating shall be individually controlled room by room. Circulation pumps will be provided with inverter drives to reduce energy usage.
- 21.55 Domestic Hot Water.
- 21.56 Effective control of the calorifiers shall be achieved via 3 port motorised valve on the primary circuit to the plate heater exchanger or via in built controls on the direct gas fired water heater.
- 21.57 Metering Strategy
- 21.58 Gas shall be metered utilising secondary check meters for the Plant Room and Kitchen. Water shall be metered utilising secondary check meters for the Plant Room and Kitchen The various VT and CT circuits shall be complete with heat meters.

21.59 Additional sub metering shall be supplied to comply with Part L2A and BREEAM requirements.

Ventilation

- 21.60 Toilet accommodation fans shall be controlled via presence sensors (PIR) and time control.
- 21.61 The kitchen ventilation shall be manually switched and interlocked with the gas service via solenoid valve and gas safe control system.
- 21.62

Washroom Water Proximity Shut-Off Valves

- 21.63 Washroom Areas shall be provided with proximity shut off valves, controlled via occupancy sensor and solenoid valve.
- 21.64

Hydrotherapy Pool

- 21.65 The Hydrotherapy Pool shall be supplied complete with a dedicated plant room/area.
- 21.66 The pool shall be constructed complete with:
- 21.67 Wall inlets
 - Bottom outlets
 - Drainage channel
 - Circulation pipework
 - Balance tank
 - Vacuum system

The plant room shall accommodate:

- 21.68 Water treatment plant
 - Filtration plant
 - Circulation pumps
 - Plate heat exchangers
 - Chemical dosing
 - Controls systems





22.0 Drainage Engineer

- 22.1 Site Conditions Pertaining to Drainage. Areas of the school site are known to suffer from regular surface water flooding, resulting in saturated boggy ground conditions and free standing water.
- 22.2 Subject to receipt of the commissioned ground investigation reports, the site identified for development under option E is believed to be outside of these ground conditions.
- 22.3 Anecdotal evidence suggests that the adverse ground conditions are caused by water running off of the playing fields and the area of adjacent woodland, where the water causes the nature trail, woodland, and lower areas of the site to be adversely affected.
- 22.4 To prevent this water causing nuisance to the proposed development, the building and its surroundings shall be constructed so as not to interdict existing flood paths, or to reduce in volume, areas of the existing site used to store flood water above ground.
- 22.5 Soils investigation reports previously conducted on the site identify that the site's high ground water levels and poor soil permeability is unsuited to the use of soakaways. These same findings are anticipated for the area of the site proposed for development.
- 22.6 Surface Water Drainage Subject to receipt of the necessary consents from Southern Water, it is proposed that surface water from the school buildings are arranged to discharge to the public surface water sewer within Hinkler Road.
- 22.7 As with the existing school, it is proposed that surface water from both phases I and II will be attenuated via the construction of below ground surface water storage cells installed under phase I, complete with a control device sized to achieve the required discharge rate granted by Southern Water.
- 22.8 It is proposed that a petrol interceptor be installed under phase I to serve the carpark and access roads, in order to prevent hydro-carbons (petrol, diesel, engine oil) from vehicles contaminating the site's surface water run-off.
- 22.9 It should be noted that Southern Water classify surface water as being rainwater collected from roofs only, therefore surface water originating from soft and hard landscaping, carparks, playgrounds, and Multi-use games areas cannot be discharged to Southern Waters Sewers without expressed consent from Southern Water. Until this consent is received, the project remains at risk as we have no alternative means of disposing of surface water originating from these areas.
- 22.10 Subject to the findings of the BREEAM assessment, to assist in achieving an "Excellent BREEAM rating" an option remains for a system of rain water harvesting being employed to collect a small percentage of the surface water from the roof of the building for the flushing of WCs, urinals and for the controlled irrigation of landscaping.
- 22.11 Subject to the receipt of the appropriate consents to discharge from Southern Water, it is proposed that

- 22.12 surface water collected by the MUGA be attenuated within the MUGA's sub-base construction, and arranged to drain at an attenuated rate into the public sewer.
- 22.13 Foul Water Drainage
 - Subject to the receipt of the necessary consents from Southern Water, it is proposed that a new duty/ standby pumping station and chamber be installed under phase I to serve both phases of the proposed school. This pumping station will be arranged to discharge foul water via a dedicated pumping main to the public foul water sewer.
- 22.14 To minimise the risk of the drains serving the kitchen becoming obstructed by grease and fats, a below ground grease trap is proposed to serve the new school kitchens
- 22.15 To permit the construction of phase II, the existing 80mm MDPE pumping main serving the existing school's foul water pumping station will require local diversion away from the foot print of the proposed building.
- 22.16 Risks:
- 22.17 Requests for consents have yet to be submitted to Southern Water for foul and surface water connections into the public sewers. Until a favourable consent is granted the provision of suitable drainage to site cannot be assured.
- 22.18 A request for consent has yet to be submitted to Southern Water for the discharge of surface water arising from soft and hard landscaping, carparks, playgrounds, and Multi-use games areas. Until this consent is received the project is at risk of not being able to dispose of large volumes of surface water drainage.





23.0 Electrical Engineer

- 23.1 Main Electrical Supply
- 23.2 The existing incoming power supply is fused at 200A. A load monitor was connected on the main supply between the 19th and 23rd January 15 and the highest average current readings were as follows.
- 23.3 L1 79A
 - L2 97A
 - L3 86A
- 23.4 There is enough power to supply the new Phase 1 teaching block from the existing power supply. When the detailed design is carried out for Phase 2 an analysis will have to be carried to determine whether there is enough power available to supply Phase 2, this will be dependent on the Phase 2 the power requirements.
- 23.5 Data Fibre Optic Cable
- 23.6 Springwell School is connected to the SCC school network via a connection to Thornhill Primary School using a fibre optic cable crossing the playing field in a duct between the 2 schools. The exact position of this cable and duct needs to be identified as it may affect the building of Phase 1 but will definitely affect the building of Phase 2. It would better, if possible, terminate the cable in the new school and then connect the new and old schools together using a new cable. This will mean down time for Springwell school whilst this work is being carried out.





24.0 Conclusions

	Option A		Option B		Option C		Option D		Option E	
Option Appraisal Parameters	Phase 1	Phase 2								
Pedestrian access	3	4	3	3	3	4	3	3	4	4
Staff car parking	3	4	3	4	3	4	3	4	4	4
Construction access	4	4	2	2	2	4	4	4	4	2
Parent drop off	2	4	2	2	2	4	2	3	4	4
Community presence	2	4	2	3	2	4	2	3	4	4
Retention of existing landscape features	4	3	3	2	3	3	2	3	4	3
Surface water drainage	3	2	2	1	2	2	3	3	3	3
Foul water drainage	3	2	2	2	2	3	3	2	3	3
Ventilation and overheating	3	3	3	3	3	3	3	3	3	3
Incoming services	3	3	2	3	2	3	2	3	3	3
Foundations	3	2	2	2	2	2	2	2	2	2
Site levels	4	3	3	2	3	3	3	3	4	4
Planning issues	1	1	4	4	4	1	2	1	1	1
Acoustics	3	3	3	3	3	3	3	3	3	3
Subtotal	41	42	36	36	36	43	37	40	46	43
Total	8	33	7	72	-	79	1	77	:	89

Ор	Option Scoring Matrix Legend					
5	Relatively minor issues to resolve					
4	Provides a good solution to issues					
3	Issues can be overcome with reasonable technical/design soultion					
2	Issues can be overcome with costly technical/design solution					
1	Issues may not be surmountable					





















SPRINGWELL SCHOOL EXPANSION

PROCUREMENT REPORT

FOR SOUTHAMPTON CITY COUNCIL

April 2015

CAPITA SYMONDS

Document Control

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Prepared By:	Paul Hodder		April 2015		
Checked:					
Approved:	Harry Maitland		April 2015		

Revision Record

Rev	Date	Ву	Summary	Checked	Approved

This report, including assumptions and caveats, should be read as a whole so that no part may be taken out of context. Neither the whole nor any part of this report or any reference to it may be included in any published document, circular or statement in any way without written approval of CAPITA SYMONDS. Any Cabinet or further report on this subject should be the subject of consultation with the author in accordance with normal procedures.

INDEX

- 1 Introduction
- 2 Programme
- 3 Procurement
- 4 Conclusion
- 5 Recommendation and Instruction to Proceed

1.0 <u>Introduction</u>

- 1.1 The purpose of this report is to inform the Client, Southampton City Council, on the procurement options available to expand Springwell School to provide 16 new classrooms including associated facilities.
- 1.2 The SCC brief is to appraise the potential to expand the school which requires a phased approach to deliver a minimum 6 new classrooms and associated facilities by September 2016 and a total of 16 new classrooms by September 2017.

2.0 **Programme**

- 2.1 The objective is to achieve a phased opening in September 2016 and September 2017 for the new school academic year. The works are not yet fully scoped and will depend on cost and budget available.
- 2.2 In order for the building to be ready for the new academic school year, practical completion will be required in July 2016 and July 2017 for the school to have sufficient time to be trained and fit the classrooms out.
- 2.3 Phase 1 start on site date with an approximate 10 month site programme would therefore need to start on site by October 2015. Phase 2 start on site date with an approximate 16 month site programme would need to start on site by April 2016.
- 2.4 Phase 1 start date cannot be achieved by SCC's normal procurement process, therefore alternative procurement routes are examined below with time being the critical element to the procurement route recommendation.
- 2.5 The alternative methods to traditional procurement have focussed on fast tracking procurement methods.
- 2.6 The critical path of the programme will vary with the potential procurement options and degree of fast tracking between design, procurement and construction.

Achieving the earliest start on site will give the earliest completion date and the following pre contract activities are critical path activities whichever procurement route is adopted:

- Production of design drawings and specification
- Preparation of tender documentation including preliminaries and pricing documents

April 2015 iv

3.0 **Procurement Route**

- 3.1 The programme is the highest priority and the scope of works will be adjusted to achieve the best result within the budget and time constraints. The procurement options have been reviewed to achieve September 2016 for phase 1.
- 3.2 There are a number of options including:-
 - A Design and tender traditional procurement
 - B Design and Build
 - C Remeasurement or approximate / provisional works contract
 - D Prime Cost reimbursement contract with early appointment of contractor
- 3.3 Option A Design and tender traditional procurement

Cost - This offers the greatest degree of cost certainty prior to entering into the construction contract, however the costs are not known for certain until the tenders are returned and this will leave little scope to alter the scope of works without significant programme delay should the cost exceed the budget.

Programme – This method is the slowest pre contract and overall programme as there is no overlap between design and procurement of the Contractor. Therefore practical completion by July 2016 would not be achieved using traditional procurement.

Quality – The completion of the design early in the process and use of traditional management processes allows the workmanship and specification to be clearly defined and understood and should produce a good degree of certainty of the standard of quality.

Risk – Due to the critical nature of the timescale for this project, if a traditional procurement route was chosen then the client would need to investigate a contingency plan for providing temporary accommodation until the phase 1 construction works are complete.

3.4 Option B – Design and Build

Cost – As with traditional procurement route design and build offers cost certainty by having an agreed lump sum contract at commencement of the works. Variations from the brief post contract however can be expensive and difficult to arrange due to not having a full pricing document which would be prepared under traditional procurement.

Programme – This route enables an earlier commencement on site by allowing some overlap with design and construction. Depending on how far the employers requirements are taken the client would have to commit to a concept design early in order for sufficient overlap to save time pre contract. This option would still struggle to meet the programme due to the requirement of agreeing the contract sum and accepting the contractor's proposals before commencing on time.

Quality – The complexity of the works would need expertise which the Contractor could benefit the project with buildability experience during design. The client however has little involvement in design development which may be compromised by the contractor with the quality of their contractor proposals.

Risk – This route means the contractor takes single point responsibility on design and construction, however the contractor taking the risk may compromise either the price or the quality of the building.

3.5 Option C – Remeasurement or approximate / provisional works contract.

Cost – The scope of the works would not be fully known at time of tender and Contractor appointment and provisional sums, approximate quantities and the like would be used as a tender pricing document. The contract sum set at contractor appointment would be used as a target and the scope of the works adjusted during the course of the contract to suit the budget available as costs are firmed up.

Programme – The scope of the works would need to be determined as far as possible for pricing (based on stage D design) on a fixed rate basis to obtain any greater cost certainty advantage over a pure reimbursement contract. There would still therefore need to be a design period and a procurement period though the production of pre contract design and pricing information would be part complete at time of entering into the contract which would give some fast tracking of design, procurement and works on site. There are not significant fast tracking benefits from this method and the reduction in the programme would not be as significant as the prime cost contract.

Quality - The later completion of parts of the design should not affect the quality of workmanship and may allow more time to review specification and have Contractor input into products available, however certainty of quality standard achievable within budget would not be achieved until later in the process.

Risk – The risks of discovery are still present in this method, particularly for elements that have not been fully designed and specified though there is more degree of certainty of cost at point of entering into contract than a prime cost contract. However in an improving Contractors market the tendering contractors will be reluctant to take risks and this may reflect in a higher tender return and less value for money than a prime cost contract.

April 2015

3.6 Prime Cost reimbursement contract (JCT) with early appointment of Contractor

Cost – Preliminaries and mark ups are priced in competition based on the scope of works known at time of tender. The works are instructed during the course of the contract and the mechanism for reimbursement is a combination of buying work packages from the sub contract market on an open book basis with the selected Contractor and professional team working together and direct labour material and plant costs both with tendered mark ups.

There is a reduced potential for mistakes in this system as the Contractor is more likely to understand the scope of the works and interfaces between the packages are reviewed and due allowances made. The intention would be to scope the works and make Prime Cost Sum Allowances for Sub Contract Packages together with mark up percentages on direct labour materials and plant. The team will work together to obtain best value from the sub contract market throughout the contract. Post contract design team and in particular QS input would be quite extensive under this system and there would be a case for a part time site based QS to record and agree the Contractors records and costs.

Programme – There would still need to be a competitive tender process based on preliminaries and mark up percentages on actual costs however this would be fairly quick with minimal tender documentation required. The procurement process to appoint a Main Contractor can fast track with the design. The design can then fast track with the procurement of the works packages and the construction works on site to optimise programme delivery. This type of contract is often used on completion contracts when a Contractor has become insolvent.

Quality – The later completion of parts of the design should not affect the quality of workmanship and may allow more time to review specification and have Contractor input into products available, however certainty of quality standard achievable within budget would not be achieved until later in the process.

Risk - The risks of discovery are still present in this method, particularly for elements that have not been fully designed and specified. The works need to be fully scoped at tender stage in order to mitigate the risk that the Contractor may ask for additional preliminaries or extension of time due to increased scope.

There is also a risk that the Contractor may exaggerate the resource required to complete the works however this can be mitigated by tendered using lump sum packages for major work elements, monitoring and recording works on site by a part time site QS presence.

These are the only cost risks and in an improving Contractors market the end price may be better by using a low risk contract for the Contractors.

This contract is not a standard SCC contract and there will not be appropriate contract amendments for this form of contract. We would recommend that a JCT standard form of contract without amendments is used as this is recognised as a fair contract and will encourage good tenders. Should SCC want to prepare contract amendments particular to this contract then this may take longer than the normal 3 week period for approval of preliminaries.

4.0 Conclusion

- 4.1 As programme is the key driver for the procurement method the prime cost contract offers the best programme and most realistic chance of achieving practical completion by July 2016 for phase 1.
 Phase 2 completion for July 2017 should be sufficient for a traditional procurement approach.
- 4.2 In order to give the best chance of achieving the programme the design and procurement works need to be commissioned immediately for both phases.
- 4.3 Key dates based on a prime cost procurement listed below for phase 1:

Reimbursement / prime cost route

Design complete: October 2015

Tender documentation complete: July 2015

Tender return: August 2015

Tender report: September 2015

Order placed: September 2015

Start on site: October 2015

Practical completion: July 2015

NB Under the Cost Reimbursement Option D we have assumed that the preliminaries will be approved by SCC legal department without any bespoke contract amendments that could cause delay.

We have used a similar approach using the prime cost procurement method for the Oaklands Swimming Pool refurbishment project.

5.0 Recommendation and Instruction to Proceed

- 5.1 The best value would be achieved by the prime cost form of contract which offers the fastest programme for phase 1.
- 5.2 Design and procurement works should be commissioned immediately in order to achieve fastest programme albeit that this may be abortive should the scheme not receive approval to proceed at cabinet.
- 5.3 The city council will require obtaining an exemption to phase 1 for carrying out this procurement route as this does not fall in the 2015 procurement rules.

5.4	<u>Instruction</u>	to Proceed	for Phase 1

Option 1:	Traditional	
Option 2:	Design and Build	
Option 3:	Re-measurement Contract	
Option 4:	Prime Cost Reimbursement (Recommended)	
Instruction to	o Proceed for Phase 2	
Option 1:	Traditional (Recommended)	
Option 2:	Design and Build	
Option 3:	Re-measurement Contract	

Prime Cost Reimbursement

5.5

Option 4:

The Corporate Authority for entering into this is given by the following Cabinet/Council minutes.
Signed
Printed
On behalf of Southampton City Council
Date







Springwell Primary Special Educational Needs School Expansion

Client Brief - Supporting Information 10 April 2015



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1. Introduction

1.1 Background:

This document supports the Client Initial Outline Brief Document.

1.2 Property Title and Address:

Springwell LD School Hinkler Road Southampton

1.3 Project Name:

Primary Special Educational Needs School Expansion

1.4 Budget Holder

Education - Southampton City Council

1.5 Client Project Manager

Maureen Read - Southampton City Council

1.6 Budget Provision

The budget is to be confirmed by the client, and will be refined as the project progresses.

1.7 Introduction

The main drivers for this brief are the predicted need for increasing school places for primary age children (4-11 year olds) with special educational needs within Southampton. The current demand at Springwell School exceeds capacity, and there is a predicted need to increase the school incrementally by 2 classes per year up until 2021, totalling 16 additional classrooms and additional supporting areas.



2. Project Objectives and Critical Timescales

The project objectives include:

2.1 Short Term plan 2016

- 2.1.1 Provision of 6 additional classroom and associated hygiene facilities by 2016 to accommodate 8 children per class.
- 2.1.2 Additional accommodation associated with the 6 classrooms is to be agreed during the option appraisal phase. This may include a shared area, staff room, reception/sick bay, soft play and sensory room.
- 2.1.3 This could be provided either on the current Springwell site as a new build.

2.2 Longer Term Plan 2017

- 2.2.1 To provide a total of 16 new classrooms, each accommodating 8 children.
- 2.3 To provide associated supporting facilities to create a new build school for Year R and Key Longer Term Plan 2017
- 2.3.1 To provide a total of 16 new classrooms, each accommodating 8 children.
- 2.3.2 To provide associated supporting facilities to create a new build school for Year R and Key Stage One Children.
- 2.3.3 The additional 6 classroom accommodation previously provided could be incorporated into the Special Educational Need's school provision, either as teaching or support spaces. This should be developed on either the existing Springwell site, or the adjacent football pitch.

2.4 Loss of Open Space

- 2.4.1 The area of wooded land to the east of the East Point Centre should be used to negotiate the loss of open space if the football pitch is to be built upon.
- 2.4.2 This area of land is currently within Southampton City Council's Leisure portfolio. Therefore SCC Education will open dialogue with Leisure to ensure they are in agreement with the proposals.

2.5 Contingency Plan

2.5.1 Southampton City Council should also be addressing a contingency plan if the provision of a new build 6 classroom block, or new build school within the above timescales proves to be unviable. This should be addressed concurrently to developing the above design.

2.6 September 2015 Provision

2.6.1 Southampton City Council will be addressing the need to provide accommodation for the anticipated September 2015 intake, as a separate exercise.



3. Project Design Brief

- 3.1 The new building and school grounds should be designed to comply in the first instance with Building Bulletin 102 Designing for Disabled Children and Children with Special Educational Needs and achieve statutory compliance.
- 3.2 The accommodation and design should be developed through consultation with key stakeholders, such as:
 - Southampton City Council Client Representative
 - Springwell School
 - Capita Design Team, including specialist consultants
 - Southampton City Council Development Control
 - Sport England
 - Southampton City Council Building Control
- 3.3 The new design will require a high need for safety and security. The support spaces need to include sensory rooms, soft play, hydrotherapy and specialist changing areas.
 - The generic designation in BB102 that represents a best fit for the needs of the school children is: Range B Pupils' needs cover a wide range, including moderate or severe learning difficulties, speech, language and communication needs, and ASD. No children have profound and multiple learning difficulties. Some pupils are ambulant, some more active or have behaviour needs but others may have minor physical disabilities. Some may have severe sensory impairment. Support spaces include sensory rooms, soft play, and therapy bases such as speech and language therapy or sensory support. A few children use mobility aids
- 3.4 At the outset of the project a Design Quality Indicator Workshop should be held, by an independent facilitator to help develop the detailed brief.
- 3.5 The Design Quality Indicator (DQI) is a process that enables every aspect of design quality to be assessed at each stage of the construction process, from inception to post occupancy analysis.
- 3.6 DQI empowers stakeholders to be actively involved, through structured workshops and online tools, with construction and design professionals, to set targets against which to review design quality. The workshops are professionally mediated by an accredited DQI Facilitator.
- 3.7 DQI focuses the design and construction team on the needs of the end user as it:
 - creates a sense of ownership by engaging users throughout the process;
 - enables feedback and learning for future projects;
 - generates a simple graphic profile that indicates the strengths and weaknesses of a design or existing building;
 - provides an agenda for briefing and design reviews;
 - provides benchmarking information in the form of Facilitator's Reports.



4. The Project Plan

4.1 Development of Accommodation Schedule and Brief

- 4.1.1 Develop accommodation brief based on BB102, and with input from key stakeholders such as the school, Southampton City Council, Development Control and Sport England
- 4.1.2 Hold DQI workshop to inform the project brief and accommodation schedule.

4.2 Investigate Potential Sites for a New School

- 4.2.1 Identify potential sites for new school, and assess key risks associated with each site
- 4.2.2 Carry out option appraisal on selected site or sites detailed below

4.3 Programme

- 4.3.1 An initial assessment of programme should be carried out for the short term solution and for delivering a complete new school. This should be provided at the outset of the project, and be accompanied by associated risks. This should be updated as the project progresses
- 4.3.2 A detailed master programme should then be developed, including the short term and longer term plan for school delivery. Southampton City Council will provide dates and timescales for items such as cabinet approvals, funding applications etc.

4.4 Development of Option Appraisal

An option appraisal should be carried out that assesses the selected site or sites, in conjunction with providing the additional 6 classroom accommodation for 2016. The option appraisal should include:

- Options on master plan for site, including a single storey and two storey option
- Options showing short term provision and phasing
- Procurement options
- Risks
- Investigation into exemption from procurement procedures for short term provision
- Budget assessment of costs
- Input from key members of the design team and stakeholders

4.5 Provision of Short Term Solution – 6 Classrooms

- 4.5.1 Due to the critical timescales for delivery of the short term option of 6 classrooms, a detailed feasibility study should be commenced into the provision of the 6 classroom accommodation whilst the option appraisal is being completed.
- 4.5.2 The project should then be progressed to PSCON 11-16, for RIBA Stage delivery C-L.

4.6 Provision of New School

Following the option appraisal, the scheme for the new school should then be progressed to a detailed feasibility study. After the feasibility has been completed the scheme should be progressed to PSCON 11-16, for RIBA Stage C-L delivery.



5. The Design Team and Surveys/Investigations

5.1 Core Design Team

- 5.1.1 The property consultant team will be Capita, One Guildhall Square, Southampton.
- 5.1.2 The disciplines making up the core design team will comprise:
 - Project manager
 - Architects
 - Structural engineers
 - Civil Engineers
 - Landscape architects
 - Drainage engineers
 - Quantity Surveyors
 - Mechanical Engineers
 - Electrical Engineers
 - Thermal modellers
- 5.1.3 The above consultants will be involved at the appropriate stages of the project. For example, at the option appraisal stage it will be necessary only to involve a selection of the above consultants

5.2 Specialist Consultants

- 5.2.1 The requirement for specialist consultants will be assessed as the project progresses, and may include:
 - Arboriculturists
 - Acoustic Engineers
 - Fire Engineers
 - Breeam assessors
 - Ecologists
 - Traffic consultants
- 5.2.2 The Valuation and Estates team will also need to be involved during the site selection stage and provide input into land ownership, easement and covenant issues.
- 5.2.3 An independent DQI Facilitator should also be appointed by Southampton City Council to facilitate a DQI workshop during the start of the project.

5.3 Surveys/Investigations

- 5.3.1 The existing information on the selected sites should be reviewed and the need for additional surveys and investigations identified. Additional surveys should be commissioned at an appropriate early stage, and may include:
 - Acoustic survey
 - Topographical survey
 - · Ground investigations
 - Tree survey



- Ecology surveys Flood risk assessments
- 5.3.2 The need for the above surveys and further surveys/investigation is to be assessed as the project progresses.



6. Additional Information

Following a meeting at Springwell Primary School 26th March 2015, the following items were identified and need to be considered further when developing the brief during option appraisal and feasibility stages:

- The school suggested that the new school could be for Year R and Key Stage 1 intake;
- The new design will need to address parking issues, in terms of parents dropping off and collecting their children, coaches, staff parking etc.;
- There are significant surface water drainage issues and flooding on the current Springwell site;
- Landownership needs to be addressed, for examples easements and covenants and rights of way on existing football pitches and areas of land generally;
- There is a high ratio of staff to children, the school have suggested a ratio of 1:1;
- The school have highlighted that the arrangement of hygiene rooms and WCs work well in the existing school.
- Use of current hall is at its maximum during lunchtime, if the school expands they would need to
 introduce double sitting of lunches would mean extending lunchtime sessions, and compressing
 times when the hall can be used for other activities. Children are also collected from the school
 hall, so if the school was increased in capacity the hall would struggle to accommodate all
 children during collection times.
- If the school is to expand additional staff space is required, as the school already exceeds capacity in terms of staff.
- There are poor acoustics in the existing classroom building to the east of the school.



Capita Property and Infrastructure Ltd

One Guildhall Square Above Bar Street Southampton Hampshire SO14 7FP





Springwell Expansion Accommodation Schedule



Date: 02.04.2015 Revision: 01 Issue date:

RANGE				В	
F.E.				*	
PUPIL PLACES				128	
TYPE OF SPACE	BB102 Notes	Area	No.	Total	Further notes
		(m²)	of	area	
			rooms	(m²)	
CLASSROOM/BASES	1				
reception		65	2	130	
KS1 KS2		60	14	840	
PRACTICAL SPACES	2				
art/science/D&T		29	1	29	
food tech		29	1	29	
MUSIC/MOVEMENT/DRAMA	3				
music drama/group room		69	1	69	
LEARNING RESOURCE SPACES					
small group room	4	12	8	96	
library	5	23	1	23	
ICT (class/resource)		23	1	23	
SEN resource base	6	35	1	35	
HALLS & DINING	7				
hall		115	1	115	
dining		143	1	143	
MEDICAL, THERAPY & OTHER SUPPORT					
medical/school nurse's room	8	15	1	15	as 2FE (B)
physiotherapy		30	1	30	as 1.5 FE (D)
therapy/specialist support	9	15	1	15	as 2FE (B)
sensory room/studio	10	24	1	24	as 2FE (B)
hydrotherapy	11	85	1	85	as 1.5 FE (D)
social skill/'home' base	12	46	1	46	ratio increased as FE (A)
soft play	12	24	1	24	as 2FE (B)
calming room		10	1	10	as 2FE (B)
parents' room		15	1	15	as 2FE (B)
STAFF AREAS		13	_	15	as ZFE (D)
reception/admin		23	1	23	
head teacher		15	1	15	as 2FE (B)
deputy		10	1	10	dS ZFE (D)
premises manager		10	1	10	
-		29	1	29	
meeting/ training room					277 (7)
visiting professionals' office		15	1	15	as 2FE (B)
staff room		69 30	1	69	
staff preparation room		29	1	29	
STORAGE		_	4.6	40	
coats & bags		3	16	48	
mobility equipment (bays)		5	16	70	as 2FE (B)
classroom resources		4	16	56	as 2FE (B)
art/science/D&T resources		4	1	4	as 2FE (B)
food tech resources		3	1	3	as 2FE (B)
drama/music store		8	1	8	as 2FE (B)
library store		4	1	4	as 2FE (B)
ICT store		4	1	4	as 2FE (B)
SEN resource base store		4	1	4	as 2FE (B)
PE store		12	1	12	
furniture	13	14	1	14	
extended/community use		8	1	8	as 2FE (B)
social skills base		2	2	4	ratio increased as FE (A)
medical/communication aids/equipment		5	1	5	as 2FE (B)
therapy store		4	1	4	as 2FE (B)

				ı	
oxygen cylinders					
pool store (chemicals)		6	1	6	as 1.5 FE (D)
visiting professionals' store		2	1	2	as 2FE (B)
meeting/training store		2	1	2	as 2FE (B)
equipment store		6	1	6	
admin store	14	4	1	4	as 2FE (B)
central teaching resources		23	1	23	
premises store		9	1	9	as 2FE (B)
cleaner's store		2	3	6	as 2FE (B)
general stores	15	10	1	10	as 2FE (B)
external store (PE/play equipment)		12	1	12	
external store (maintenance)		10	1	10	as 2FE (B)
TOTAL NET AREA				2334	
TOILETS AND CHANGING					
pupil toilets	16	8	16	128	
pupil hygiene	17	15	8	136	
laundry		6	1	6	
pupil changing - hall	18	16	3	48	
pupil changing - pool	19	30	2	60	as 1.5 FE (D)
staff toilets	13	4	7	28	us 1.5 (b)
disabled toilets	20	4	3	12	
staff change and lockers	20	15	3	45	
staff change - hall		4	3	12	
staff change - pool		4	3	12	as 1.5 FE (D)
KITCHEN		-	3	12	83 1.3 12 (0)
kitchen		58	1	58	
servery		12	1	12	
kitchen office		6	1	6	255 (0)
kitchen food store		6	1	6	as 2FE (B)
kitchen refuse store		6	1	6	as 2FE (B)
		2	1	2	as 2FE (B)
kitchen cleaner				4	as 2FE (B)
kitchen toilet change OTHER		4	1	4	as 2FE (B)
		90	1	0.0	
plant		86	1	86	
pool plant		20	1	20	as 1.5 FE (D)
file server		4	1	4	
circulation % GA	21		25%	766	
partitions % GA			4%	121	
TOTAL NON-NET AREA				1578	
		1			
TOTAL GROSS AREA				3912	

Range types:

Range A

Pupils have behaviour, emotional and social difficulties as their main SEN. (Typically there are more boys than girls.) Pupils are mostly ambulant, very active, rarely have physical disabilities but need more personal space for their behaviour needs. There may be outreach programmes with local schools or links with a local pupil referral unit. There is a high need for storage for safety, security and to minimise distractions in class, but items of equipment are less bulky than at other special schools.

Range B

Pupils' needs cover a wide range, including moderate or severe learning difficulties, speech, language and communication needs, and ASD. No children have profound and multiple learning difficulties. Some pupils are ambulant, some are active or have behaviour needs but others may have minor physical disabilities. Some may have severe sensory impairment. Support spaces include sensory rooms. soft play (primary), and therapy bases such as speech and language therapy or sensory support, but no hydrotherapy. A few children use mobility aids.

Range D⁴

Pupils' needs cover a wide range, including moderate or severe learning difficulties, speech, language and communication needs, and severe ASD. More than 50 per cent have profound and multiple learning difficulties. Some pupils are ambulant and active, some may have behaviour needs but others (more than 50 per cent) have significant physical disabilities. Most of the children have sensory impairments and many have multiple disabilities. Support spaces include sensory rooms, soft play (mainly primary), hydrotherapy, physiotherapy and specialist changing rooms. The areas allow for the use and storage of mobility equipment.

4. For schools with less than 50 per cent of pupils with profound and multiple learning difficulties or significant physical difficulties (range C), schedules would be similar to those shown for range D but with marginally less area overall.

BB102 Primary schedule notes Notes:

- 1. Groups up to 8. Direct access to external area ideally, safety and security issues need careful consideration.
- 2. Could take place in zoned area of classroom if big enough but consider hygiene and safety.
- 3. Possible use for breakfast/after-school clubs, maybe sliding folding doors to hall. Range A school use dining room for music/drama.
- 4. One between two classrooms, average size shown.
- 5. Separate library or combined with ICT resource below.
- 6. Timetabled for extra support to small groups e.g. children with PMLD or ASD.
- 7. Sliding folding doors between gives flexibility.
- 8. Second room as nurse's room needed if high % PMLD.
- 9. Depends on children's needs, e.g. speech and language base, VI/HI support.
- 10. One large or two small spaces.
- 11. 24m2 pool with 2–2.5m wide surround.
- 12. Two small spaces or one large space e.g. to simulate family living room or for nurture group room, can be used in conjunction with food tech.
- 13. Tables and chairs to clear hall.
- 14. Stationery and secure records.
- 15. Bulk items.
- 16. Ratio of boys to girls to be considered, especially in type A. May need to be larger if community use.
- 17. Size depends on layout chosen.
- 18. Ratio of boys to girls to be considered especially in type A. May need to be larger if community use.
- 19. Including showers, toilets and lockers.
- 20. Additional toilets may be required to meet Building Regulations ADM, depending on layout.
- 21. Includes reception area and secure lobby.

Springwell Expansion Accommodation Schedule





Date: 21.04.2015 Revision: 02 Issue date:

RANGE				В	
F.E.				*	
PUPIL PLACES				48	
TYPE OF SPACE	BB102 Notes	Area	No.	Total	Further notes
		(m²)	of	area	
			rooms	(m²)	
CLASSROOM/BASES	1				
KS1 KS2		60	6	360	
HALLS AND DINING					
Dining/activity space		120	1	120	divided to 2 classrooms - phase 02
MEDICAL, THERAPY & OTHER SUPPORT					
sensory room/studio	10	24	1	24	as 2FE (B)
soft play		24	1	24	as 2FE (B)
STAFF AREAS					
reception/admin		20	1	20	
staff room		28	1	28	
STORAGE					
coats & bags		2	7	14	
classroom resources		4	7	28	as 2FE (B)
medical/communication aids/equipment		5	1	5	as 2FE (B)
equipment store		5	1	5	
cleaner's store		2	1	2	as 2FE (B)
TOTAL NET AREA				630	
TOILETS AND CHANGING					
pupil toilets	16	8	6	48	
pupil hygiene	17	15	1	15	
laundry		6	1	6	
staff toilets		4	3	12	
OTHER					
plant		32	1	32	
file server		4	1	4	
circulation % GA	21		25%	158	
partitions % GA			4%	25	
TOTAL NON-NET AREA				300	
TOTAL GROSS AREA				930	

Range types:

Range A

Pupils have behaviour, emotional and social difficulties as their main SEN. (Typically there are more boys than girls.) Pupils are mostly ambulant, very active, rarely have physical disabilities but need more personal space for their behaviour needs. There may be outreach programmes with local schools or links with a local pupil referral unit. There is a high need for storage for safety, security and to minimise distractions in class, but items of equipment are less bulky than at other special schools.

Range B

Pupils' needs cover a wide range, including moderate or severe learning difficulties, speech, language and communication needs, and ASD. No children have profound and multiple learning difficulties. Some pupils are ambulant, some are active or have behaviour needs but others may have minor physical disabilities. Some may have severe sensory impairment.

Support spaces include sensory rooms, soft play (primary), and therapy bases such as speech and language therapy or sensory support, but no hydrotherapy. A few children use mobility aids.

${\rm Range}\; {\rm D}^4$

Pupils' needs cover a wide range, including moderate or severe learning difficulties, speech, language and communication needs, and severe ASD. More than 50 per cent have profound and multiple learning difficulties. Some pupils are ambulant and active. some may have behaviour needs but others (more than 50 per cent) have significant physical disabilities. Most of the children have sensory impairments and many have multiple disabilities. Support spaces include sensory rooms, soft play (mainly primary), hydrotherapy, physiotherapy and specialist changing rooms. The areas allow for the use and storage of mobility equipment.

4. For schools with less than 50 per cent of pupils with profound and multiple learning difficulties or significant physical difficulties (range C), schedules would be similar to those shown for range D but with marginally less area overall.

BB102 Primary schedule notes Notes:

- 1. Groups up to 8. Direct access to external area ideally, safety and security issues need careful consideration.
- 2. Could take place in zoned area of classroom if big enough but consider hygiene and safety.
- 3. Possible use for breakfast/after-school clubs, maybe sliding folding doors to hall. Range A school use dining room for music/drama.
- 4. One between two classrooms, average size shown.
- 5. Separate library or combined with ICT resource below.
- 6. Timetabled for extra support to small groups e.g. children with PMLD or ASD.
- Sliding folding doors between gives flexibility.
- 8. Second room as nurse's room needed if high % PMLD.
- 9. Depends on children's needs, e.g. speech and language base, VI/HI support.
- 10. One large or two small spaces.
- 11. 24m2 pool with 2–2.5m wide surround.
- 12. Two small spaces or one large space e.g. to simulate family living room or for nurture group room, can be used in conjunction with food tech.
- 13. Tables and chairs to clear hall.
- 14. Stationery and secure records.
- 15. Bulk items
- 16. Ratio of boys to girls to be considered, especially in type A. May need to be larger if community use.
- 17. Size depends on layout chosen.
- 18. Ratio of boys to girls to be considered especially in type A. May need to be larger if community use.
- 19. Including showers, toilets and lockers.
- 20. Additional toilets may be required to meet Building Regulations ADM, depending on layout.
- 21. Includes reception area and secure lobby.