Canterbury
District Health Board
Te Poari Hauora ō Waitaha

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6 August 2018

[redacted]

[redacted]

[redacted]

RE Official information request CDHB 9896

We refer to your email dated 19 July 2018 requesting the following information under the Official Information Act from Canterbury DHB, regarding the Older Persons Health Community Team relocation from Princess Margaret Hospital Campus to Burwood Hospital Campus and the feasibility study as mentioned in the Canterbury DHB Board Meeting held on 19 July 2018.

1. **Please provide a copy of the feasibility study.**

Please find attached as **Appendix 1** the Burwood Hospital Feasibility Study Report as requested.

We have redacted information in this report under section 9(2)(b)(ii) of the Official Information Act i.e. *"….Would be likely unreasonably to prejudice the commercial position of the person who supplied or who is the subject of the information."*

I trust that this satisfies your interest in this matter.

Please note that this response, or an edited version of this response, may be published on the Canterbury DHB website ten working days after your receipt of this response.

Yours sincerely

Carolyn Gullery
Executive Director
Planning, Funding & Decision Support

OCTA PROJECT MANAGEMENT

Canterbury District Health Board Burwood Buildings

Feasibility Study 2017

Project Number: 655-00
Date: 15 January 2018
Revision: Final

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CONTENTS

1.0 EXECUTIVE SUMMARY

Canterbury District Health Board (CDHB) is considering its property options for the relocation to Burwood Hospital of Community Health teams, which are currently sited at various locations across Christchurch. Two existing buildings on the site have been identified for investigation – the previous Administration Building (now superseded by the new main block) and the first floor of the old Surgical Block.

In addition, CDHB are seeking to construct a new office building on the site of the former Birthing Unit, to accommodate a variety of public-health related, but non-CDHB functions. As a precursor CDHB wish to understand the pros and cons of different procurement models, and to identify the most cost-effective method to deliver a suitable building.

This Study finds that the Administration Building (built 2004) can accommodate the community teams (178 full time and part time staff) in a mix of shared office space and "hot desk" style seating. Strengthening to Importance Level (IL2) is required along with re-levelling in part to attain minimum acceptable standard. Typically the minimum seismic rating for commercial office falls within the range 67% to 75% NBS, to achieve a "consentable" solution.

Ground improvement beneath the building is expensive, and whilst it may mitigate future differential settlement following a major event, it is not pre-requisite to the re-use of the building for office accommodation.

The first floor of the Surgical Block (built 1959) could provide 40% of the community team requirement. It is less spatially efficient and is constrained by the internal brick partitions which for seismic reasons need to be either removed, or strapped and lined with plywood. Removal is not practical given the ground floor is operational with building services between floors and the extent of consequential work required to make good and to meet regulatory upgrade requirements including fire, electrical and asbestos.

The report recommends that the Administration Building become the base for the Community Health teams, and that minimum work be undertaken to make safe the first floor of the Surgical Block. A [redacted] rough order of cost (ROC) has been identified as a basis for briefing and engagement of consultants to undertake further investigation and scoping to better inform estimation of costs, prior to seeking approval for a project budget.

Additionally, commentary on Procurement Methodology recommends that a Design-Build approach is appropriate for simple, regular design buildings. Three project examples are provided where Design Build has delivered cost-effective solutions.

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2.0 BACKGROUND AND CLIENT BRIEF

Introduction

This Feasibility Study has been commissioned by CDHB to consider the following possibilities for further development at Burwood Hospital:

1. Feasibility of retaining the now unoccupied Administration Building, for use as a base for the Community Teams.
2. Feasibility of utilising the first floor of the old Surgical Block, for use as a base for the Community Teams.
3. Assessment of procurement methods (including cost effectiveness) for the construction of a circa 700m^2 office building. This will be located on the site of the existing Birthing Unit building, which is to be demolished and the site remediated.

It has been confirmed by CDHB that the buildings, under consideration as part of this study, are required to meet Importance Level Two (IL2), in accordance with the Building Code Clause A3. The structural assessments conducted previously assumed Importance Level 3 (IL3) for both buildings.

Scope

Octa's scope of work for both the Administration Building and the Surgical Block first floor is;

- To review the quotations obtained by CDHB for different remedial options (ground stabilisation, piling and relevelling of the floor slab).
- Consider alternative options that may exist.
- To review the structural strengthening and repair recommendations provided to-date.
- To consider the condition of the non-structural elements and building systems.
- To assess each building's capacity to accommodate the Community Teams.
- To prepare a rough order of cost to reinstate the building to a functional and fit-for-purpose state.

Octa is also to provide comment on the procurement methods available for a new office building plus the order of cost, along with recent project examples. This building is to be approximately 700 sqm, to accommodate several non-CDHB functions and include library space, flexible-use offices, with shared rooms and amenities.

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Study Methodology Overview

The Study has been organised in three phases of enquiry:

STAGE 1

REVIEW HISTORY

- **Review Background, Existing Facilities**
- **Interview Key Stakeholders (as required)**
- **Understand Current Thinking**
- **Confirm Project Brief**

RESEARCH

Octa review all background, issues, existing facilities and conduct a detail review. Where required, go back and test any findings.

STAGE 2

ANALYSIS

- **Consultation**
- **Define Issues**
- **Test Options**
- **Re-Confirm Outputs with Stakeholders**

TEST OUTPUTS

Octa ongoing consultation with DHB based on the issues and options identified.

STAGE 3

REPORTING

- **Prepare Draft Scope for Discussion**
- **Present Draft Report for DHB review**
- **Incorporate Changes into Report and Finalise**

SCOPE OF INTENT

Octa prepare a Draft Report in consultation with DHB and other stakeholders as required. Any feedback will be reviewed and incorporated as agreed with the DHB. Finalise report.

The findings of the Study are intended to support CDHB decision-making.

The order of cost figures provided should not be relied upon however to establish project budgets for approval. Further investigation, briefing and design is needed to more fully define the scope of work before accurate cost estimates can be prepared by a Quantity Surveyor.

3.0 EXISTING CONDITION

The Hospital was established on the Burwood Sandhills around 1902, to handle infectious diseases such as scarlet fever, tuberculosis and "the plague". Expansion took place in the 1920s and 1930s, along with the establishment of an extensive pine plantation.

Further development occurred during the 1940s, including a pioneering plastic surgery unit. Surgery expanded in the 1960s along with increasing treatment of spinal injury patients. Spinal treatment continued to increase in the 1970s and 1980s, along with a growing focus on Older Persons Health.

Major redevelopment commenced in 2001 with Stage 1 being a new administrative building and main entrance, a new orthopaedic rehabilitation unit, and refurbishment of the spinal unit. Stage 2 (2004 to 2006) comprised four orthopaedic operating theatres, a ward block and a special care unit. The 2009 Master Plan signalled further growth, and design for this was underway when the 2010-2011 earthquakes intervened. Because of the extensive damage in the region a large investment was approved, and the Burwood plans were fast-tracked. This resulted in the new 230 bed and outpatient facility that was commissioned in 2016.

The site has a long history and has been developed in stages over the last 113 years. There is a mix of old and new buildings and associated services infrastructure. Both steam and hot water are reticulated around the site with energy derived from a large, modern wood chip fuelled energy centre. Maintenance repairs are undertaken on an "ad hoc" basis as funds are made available. Whilst there are up to date plans for modern buildings and services, there is limited record of alterations and maintenance work undertaken post-earthquake to the older buildings.

Administration Building

This building (designed by Sheppard & Rout Architects) won a NZIA Award in 2003. It is a single storey, masonry and steel structure. The gross floor area is approximately 706sqm, with net useable of 622sqm, a space efficiency ratio of 88%.

The building has served for 13 years as the main entrance to the Hospital. It accommodated administration offices as well as a cafeteria open to the public. The building is now largely unoccupied, as these functions were relocated following completion of the new building in 2016.

In the 2010/2011 earthquakes the Administration Building suffered differential settlement following ground liquefaction in areas of the site. There is some cosmetic earthquake damage visible through-out, primarily to walls and ceilings, and there is evidence of rainwater ingress through skylights, gutters and downpipes. Windows seals were observed to be poorly fitting.


ADMINIST

The 2017 condition survey provided by Burwood Site Maintenance rates the building as follows:

Classification	Percentage
Good Condition	30
Average Condition	20
Poor Condition	10
Very Poor Condition	40

The CDHB asbestos register (dated 2013) indicates asbestos flat sheeting to be present on the exterior walls (note some areas are covered in stucco) in the north-west corner of the building.

An inspection of the in-ground services tunnels (which run beneath the building) showed these to be robustly constructed with no evidence of liquefaction, and the services infrastructure within the tunnels to be in sound condition.

Surgical Block First Floor

The building (designed by Manson, Seward and Stanton) was constructed in 1959. It is a two level, reinforced concrete building with brick veneer cladding, steel framed windows, with some unreinforced internal brick partitions. The gross floor area is approximately 600sqm and net useable 409sqm, a space efficiency ratio of 68%.

Originally there were operating theatres on the ground floor and these have now been converted to minor procedures not requiring anaesthetics. There is a large plantroom, centrally located on the first floor, serving both the ground and first floors. Radiology has now been relocated and the first floor is unoccupied, but the plant room remains operational.

Post-earthquake redecoration on the ground floor was undertaken as part of the decant plan to make way for construction of the new building. Structural repairs have been identified to improve the rating to 67% NBS at IL3. This would translate to greater than 80% at IL2. The recommended repairs include removal of internal brick partitions, or ply lining of these, along with strengthening of the tank room walls.

The building services appear not to have been upgraded on a consistent basis. Old "bakelite" switches suggest that TPS (thermoplastic sheathed) wiring remains in place with old-style, fused distribution boards. Steam radiators provide the heating.

The CDHB asbestos register (dated 2013) indicates there is asbestos present in the area for refurbishment on the first floor. The Chemsafety report for the ground floor (dated 15 August 2013) identified asbestos in lagging on pipes in the ceiling void (beneath Level 1 floor), and behind radiators. In the roof space plant room, asbestos flat sheeting is noted to be present on the ceilings, western interior walls and soffit areas.

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Given the age (and highly serviced nature of the building) it is probable that asbestos exists in wall and ceiling linings, pipework lagging, or in resilient floor coverings.

The 2017 condition survey provided by Burwood Site Maintenance rates the building as follows:

Classification	**Percentage**
Good Condition	0
Average Condition	0
Poor Condition	50
Very Poor Condition	50

The roof of the building appeared in satisfactory condition, however water tanks in the roof space plant room are free standing and require seismic restraint. The single glazed, metal framed windows were noted to be in a poor state of repair, the sashes poorly fitting in the frames with corrosion evident.

4.0 FUNCTIONAL REQUIREMENTS

The aim is to accommodate Community Health teams currently based at Princess Margaret Hospital, and other Christchurch locations.

The space brief requires accommodation for a mix of permanent and part time employees for both administration and clinical staff. The following table summarises these numbers;

	Full time	Fix Full Time	Part time	Fix Part Time	Casual Part time	**Totals**
Homers	15	2	13	0	2	**32**
Roamers	9		16	2	0	**27**
Zoners	35	2	70	7	5	**119**
Totals	**59**	**4**	**99**	**9**	**7**	**178**
%	33	2	56	5	4	

This shows that 35% of staff are full time, and 65% are part time. Overall there is a requirement to accommodate 178 people.

It is understood that whilst requiring a base to work from, many of the staff are mobile and work predominantly in the community. It is therefore assumed that a mix of shared office and open plan space would fulfil the requirement for a flexible and efficient working environment.

5.0 CAPACITY OF EXISTING SPACES

The capacity of the Administration Building and the Surgical Block (first floor) was evaluated by considering both spaces on the basis of minimal alterations and upgrade. Where practical, consideration was given to the removal of internal partitions to enable more useable and efficient office space.

The first stage evaluation (of capacity) applied rates of 3.7sqm per person to 4.2sqm per person to the net useable space. The higher rate reflects greater area allocation for full-time office-based staff. These are the minimum rates for space standards at feasibility stage (extracted from “New Metric Handbook Planning and Design Data”), and exclude allowances for amenities and circulation.

The appended sketches (Appendix A) illustrate how the office spaces were considered, separating circulation paths and amenities, and noting the removal of walls where this is beneficial. The spreadsheet calculation of capacity is also provided (Appendix A) and this is summarised in the table below.

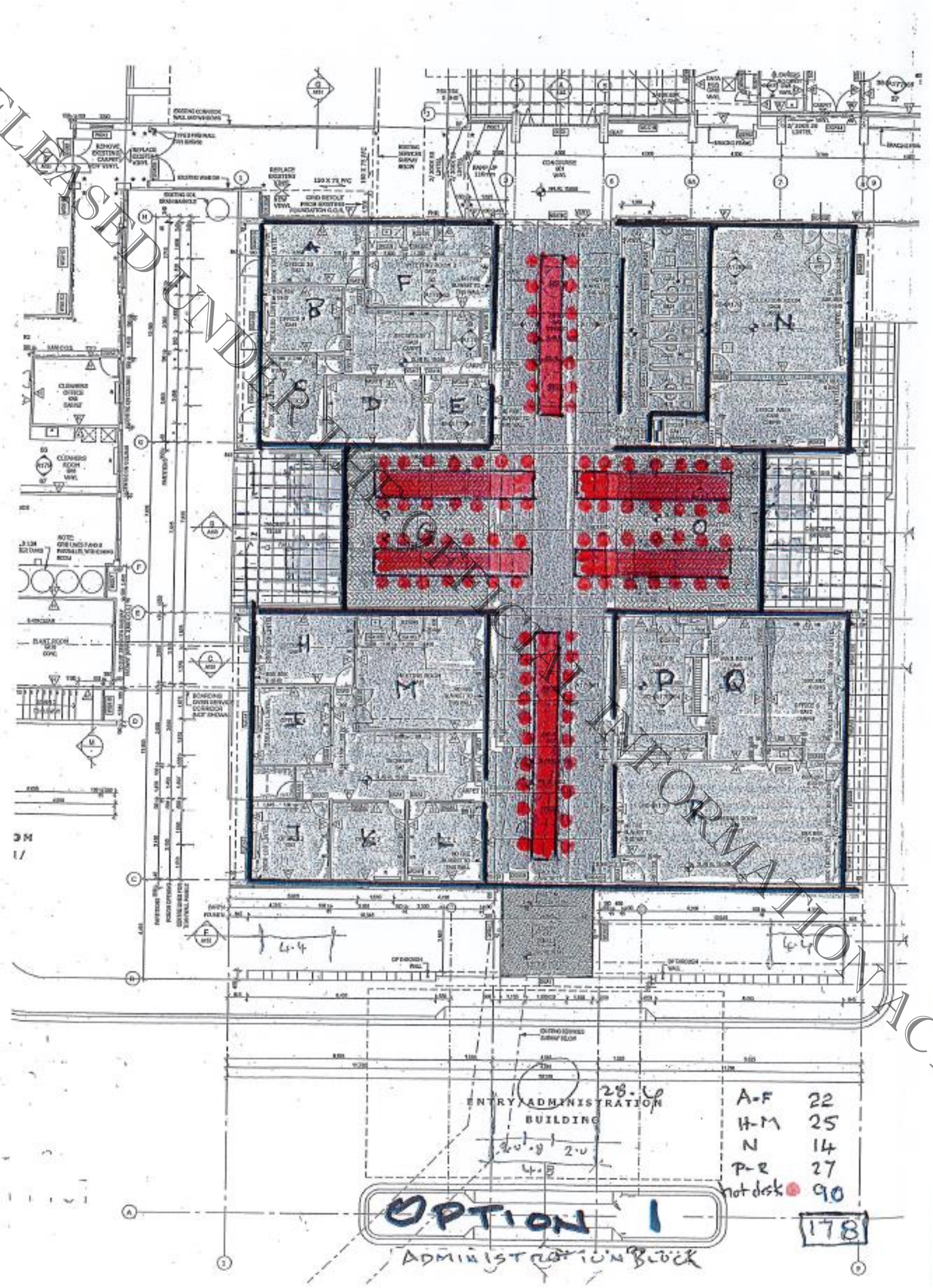
	Surgical Block		**Admin Building**	
Area per person	3.7sqm	4.2sqm	3.7sqm	4.2sqm
Capacity	79	70	120	106

This analysis showed the first floor of the Surgical Block has capacity for 70 to 79 people, and the Administration Building could accommodate 106 to 120 people, whilst maintaining the large central “corridor zone” running north-south, as open space and free of desks.

To make a significant increase to the Surgical Block capacity is difficult, as to “open plan” it would require conversion of the plantroom to useable space. This is considered not practical given that the ground floor remains reliant on building services supplied from the plantroom.

A second stage evaluation of the Administration Building considered two options to expand its capacity. These are shown in Appendix B. Option 1 looked at increasing numbers within the existing corridor space. Option 2 looked at enclosing the two central patio zones to create more space. Option 1 (on the following page) optimises the use of the central zones through use of “hot desk” style seating, and provides a total of 178 seats, 90 being “hot desk” and 88 seats in the shared office space – shown as areas A-F, H-M, N, P-R. Option 2 added a further 16 seats however the cost per seat to do this was estimated around $20,000 and considered prohibitive.

The accommodation requirement (178 seats) can therefore be met by Option 1. This layout was discussed with the building's architect (Sheppard & Rout - Tim Dagg) who confirmed the potential to adapt and re-use the building as proposed. It offers a mix of accommodation for staff, some of whom need flexibility to come and go during the day.



6.0 GROUND CONDITIONS

A geotechnical investigation for Burwood Hospital (completed by Tonkin and Taylor in 2011) identified damage to a number of buildings, thought to be a result of liquefaction of the underlying ground.

The Administration Building suffered differential settlement, this being most pronounced in the south-eastern corner of the building. The floor level survey indicates a maximum 88mm differential settlement occurred in this area.

Interpolation of the geotechnical profile from the cone penetrometer testing (CPT 01 and CPT 05) suggests the following sequence of soils to be present beneath the building:

Soil Description	CPT 01	CPT 05
Medium dense SAND	1.2 to 5.6m	1.2 to 5.6m
Silty SAND or Sandy SILT	5.6 to 6.6m	5.6 to 6.9m
Dense SAND	6.6 to 15.9m	6.9 to 15.9m

Tonkin and Taylor noted no ongoing settlement is expected as a result of the Canterbury Earthquake sequence. Based on the CPT results, the predicted settlements for a 1 in 25 year return period are considered to be small, with a risk of further settlement occurring in future significant seismic events as follows:

- SLS event - settlement is expected to be between 0 to 20mm
- ULS event - settlement is expected to be between 160 to 250mm

CDHB sought indicative costs to:

- Relevel the Administration Building.
- Undertake ground improvement works to mitigate the potential for future liquefaction beneath the Administration Building.

Three responses are summarised below. A fourth (Hiway Geotech) was contacted by Octa as a possible option for ground improvement.

Organisation	Methodology	Rough Order Cost ($)	Comment
Mainmark	Resin Injection	[redacted]	Beneath full footprint of the building including a 2-3m curtain around the perimeter. Ground improvement and slab relevelling undertaken. Requires additional engineering input from a third party.
Brian Perry Civil	Piling (concrete or screw piles)	[redacted]	Jet grouting rejected due to the potential risk of further structural damage during the process. If work is completed on a D&C basis rough order cost increases to [redacted] Otherwise third party engineering input will be required to prepare a design.
Smartlift	Mechanical Jacking	[redacted]	Requires partial removal of existing floor slab to install jacks where relevelling is required. Infill voids beneath slab with low viscosity foamcrete. Does not provide a ground improvement solution.
Hiway Geotechnical			Options discussed, but due to the constraints (available headroom) in the existing building, their equipment was unsuitable for use. Would provide ground improvement only (not relevelling).

Mainmark is the only contractor currently operating in Christchurch with the capability to undertake ground improvement beneath the Administration Building. Their equipment is sufficiently small to get inside, within the 2.7m minimum ceiling height.

The performance of ground improvement beneath existing buildings cannot be guaranteed, however for high value buildings (or heritage structures) it may be an effective mitigation measure. Given the desire to minimise the extent of repairs to the Administration Building it would seem incongruous to invest heavily in the cost of ground improvement.

7.0 ACCOMMODATION STRATEGY

The analysis of the Community Health teams staffing numbers showed there to be 35% full time compared with 65% part time staff. Many of these are mobile and operating in the community, so a mix of shared office space and "hot desk" seating would be appropriate.

Option 1 for the Administration Building has the best potential as flexible use, modern style office space, and can accommodate the 178 full time and part time staff with minimal alteration to the existing partition layout. Where required the building floor should be re-levelled (in-line with MBIE guidelines), strengthened to IL2 and the building fabric repaired. Further work is needed to define the strengthening options, and typically the minimum falls within the range 67% to 75% NBS to achieve a "consentable" solution. The fire system, heating and ventilation should be reinstated to code requirements for the proposed use. We envisage that changing the central zone from public cafeteria to open plan office requires re-assessment of fire egress and ventilation requirements, as well as likely replacement of underfloor heating with wall mounted hot water radiators.

The brick partitions in the Surgical Block are currently assessed as being a life safety risk and need either to be removed or strapped and lined with plywood to prevent collapse in an earthquake. Removal of the partitions would require the existing ceilings to also be removed and replaced with a lightweight suspended ceiling. The low risk method to achieve required strengthening is therefore to strap and line with plywood. Whilst the space would be safe to occupy there would need to be significant further upgrade for it to be an efficient office work environment.

The recommended strategy is to make safe the Surgical Block to IL2 standard (through the ply lining of brick partitions and bracing of plantroom elements), and beyond that to minimise further expenditure. Given its age and condition the first floor should then be "mothballed", however it potentially could be used for short term, back-up "spillover", or non-essential storage of furniture, fittings & equipment.

In summary the recommended Accommodation Strategy is to reinstate the Administration Building so that its maximum capacity can be realised without extending beyond its current footprint, and to limit expenditure on the Surgical Block to the bare minimum.

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8.0 ORDER OF COST

The rough order of cost (ROC) figures below are provided to assist CDHB decision-making, and reflect the Accommodation Strategy outlined above. They should not be relied upon to establish budgets for approval, as further investigation and design is needed to define the scope of work.

1.0	**ADMINISTRATION BUILDING**		Rate	ROC
1.1	Re-level to MBIE Guidelines	assume 20% floor area	s9(2)(b)(ii) of the Act [redacted]	s9(2)(b)(ii) of the Act [redacted]
1.2	Strengthen to IL2, (estimated 67% to 75% NBS, to consentable standard)			
1.3	Skylight & Window repairs			
1.4	Roof, spouting & DP repairs			
1.5	Reconfigure partition layout			
1.6	Reconfigure electrical & data			
1.7	Upgrade heating & ventilation			
1.8	Upgrade fire protection			
1.9	Make good interiors			
		sub-total		
1.10	P&G, margin			
1.11	Contingency – ground & structure			
1.12	Consent Fees			
1.13	Professional Fees – PM, Arch, StrucE, ServE			
		sub-total		
1.14	FF&E – allow s9(2)(b)(ii) of the Act [redacted] per person			
		Admin Total		
2.0	**SURGICAL BLOCK**			
2.1	Ply line brick partitions & brace plant			s9(2)(b)(ii) of the Act [redacted]
2.2	P&G, margin			
2.3	Contingency – regulatory			
2.4	Consent Fees			
2.5	Professional Fees – PM, StrucE			
		Surgical Total		
3.0	**COMBINED ROC TOTAL**	**Excl GST**		

9.0 NEXT STEPS

It is proposed that the upgrade recommended herein to the Administration Building and the Surgical Block be progressed as one work package. The next steps are to;

- Engage the Project Manager.
- Appoint the design consultant team.
- Undertake detailed investigations, including intrusive investigations for potential asbestos.
- Prepare a preliminary scope of work and budget.
- Seek approval to undertake detailed design.
- Prepare documentation for tender and building consent.
- Prepare budget cost estimate for review and approval.

This phase will define the scope of work and cost estimate for approval, ahead of lodging for building consent and seeking construction tenders.

10.0 PROCUREMENT METHODOLOGIES

The following project procurement methodologies are in regular use;

a. **Traditional Design, Tender, Construct**
This option involves the preparation of a detailed design by a multidisciplinary team which is then issued to the market for pricing, and constructed by the successful contractor.

CDHB sought estimates on this basis from a Quantity Surveyor, assuming a lightweight NZS 3604 style construction of slab on grade, but consider this option to be unaffordable.

b. **Design and Build**
With this option the principal develops a concept design brief and performance specification, outlining the requirements of the building(s) which is then issued to the market for pricing by design-build contractors. For some situations the principal may engage a designer to prepare a concept plan, and there is then an option for the designer to be novated to the contractor to complete the design.

Advantages	Disadvantages
• Either a Lump Sum or Guaranteed Maximum Price (GMP) can be obtained, with costs well defined from the outset of the project. • More opportunity to fast track the programme by overlapping design with construction.	• Documentation issued at tender stage needs to be at concept level with outline specification to ensure a minimum standard for design and construction. • A pricing schedule is recommended to allow ease of

• Improved design and construction coordination. • Opportunity for contractor to bring innovation to the design and build. • Single point of responsibility as contractor is responsible for design and construction. • Reduces risk to the client (e.g. design errors and/or omissions, programme, budget) • Reduces the potential for disputes between parties which need to be managed by the client.	comparison between tender submissions. • As the contractor carries more risk under this procurement model, this may be factored into the tendered sum, reducing potential cost savings opportunities to the client. • Client has less involvement and ownership of the design which is procured through the contractor.

c. **Early Contractor Involvement (ECI)**

This methodology refers to the engagement of a contractor during the early stages of project development to work with the client and consultants to assist with the planning and buildability.

Advantages	**Disadvantages**
• Option to involve Contractor with a Pre-Construction Agreement only, or for involvement throughout the project delivery. • Contractor incentivisation through staged engagement. • The ability to create a partnering relationship between the delivery team (designers/contractors etc) early in the process that can increase transparency and reduce risk. • Reduces tender costs as Contractor chosen on basis of fixed P&G and Margin. • Improved risk identification and value engineering at early stages. • Efficient designing and planning in a cost effective, more efficient and less adversarial environment. • Reduced construction costs due to better decision making during the design stage.	• Early engagement with main contractor may reduce the competitiveness of subcontracted tendered costs if main contractor has preferred suppliers • ECI may not be possible due to tender regulations enforced by the principal.

There are different circumstances where each of the above methodologies may be appropriate. Market conditions recently have had a major influence on availability of designers and constructors, and some clients prefer to secure their contractor up front in order to assure delivery of their project. Other factors to be considered are the level of project complexity, the availability of skilled resources, and the programme pressure driven by commercial imperatives. Ideally, the competitive tendering of 100% complete design documentation is best able to minimise risk and deliver the most cost effective solution.

The Canterbury earthquakes has had a significant impact on the NZ Building Code, in regard to seismic loading and structural ductility, and the design of foundations. These factors increase with the geotech conditions of the site and the importance level allocated to the building.

Prior to the earthquakes in 2010 most new commercial buildings were delivered through the traditional design-tender-build approach. Post-earthquake the design consultants quickly became stretched and due to the volume of work their ability to deliver designs for local authority consenting declined markedly. The construction industry responded, and with government support, promoted the greater use of standard details and fabrication techniques to ease the consenting process. Standard designs and details have become prevalent and consequently there has been an increased trend toward design-build as an alternative delivery method.

For simple, regular designs (with repetitive detailing) there is evidence that Design-Build can provide a more cost effective result, more quickly than the traditional process. To some extent this has been aided by more pre-approval for standard designs and products becoming available as well as prefabrication of components such as walls, flooring, joinery and bathroom pods. The following table provides build rates for three design-build projects.

	Design Build Project 1		Design Build Project 2	Design Build Project 3
Description	s9(2)(b)(ii) of the Act [redacted]			
Status				
Floor Area (sqm)				
Fees				
Construction				
Total (excl GST)				
Build Rate ($psm)				

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Project 1 and Project 2 are both recent accommodation buildings and include bathrooms and kitchens. The build rates range [redacted], a spread of 8%. The cost of bathrooms and kitchens was then deleted for Project 1, to give an adjusted rate of [redacted] psm appropriate for an open plan office building.

Project 3 was completed 5 years ago and was delivered at the time for a very low build rate. It was designed and built soon after the earthquakes as a temporary demountable co-working office, with shared amenities. The exterior is clad in “colorsteel”, interior walls are ply lined, and the foundation is simply timber piles on shallow foundation pads, designed to enable the building to be deconstructed in sections and removed from site. It is unlikely that a build rate of [redacted] psm could be achieved nowadays, given the changes to the building code and the higher, current day building costs.

The figures do indicate however that for a simple open plan office and basic specification, a build rate of less than [redacted] psm (excl GST) should be possible using the Design Build approach. Going to the market with an outline specification and request for design-build proposals is needed to validate this. Once received the development proposals can be evaluated and a decision taken to proceed with one, or alternatively it may be beneficial to narrow it down to 2 or 3 developers and ask each of them to provide more detail and accurate costings prior to selecting a preferred option to negotiate with.

11.0 CONCLUSION

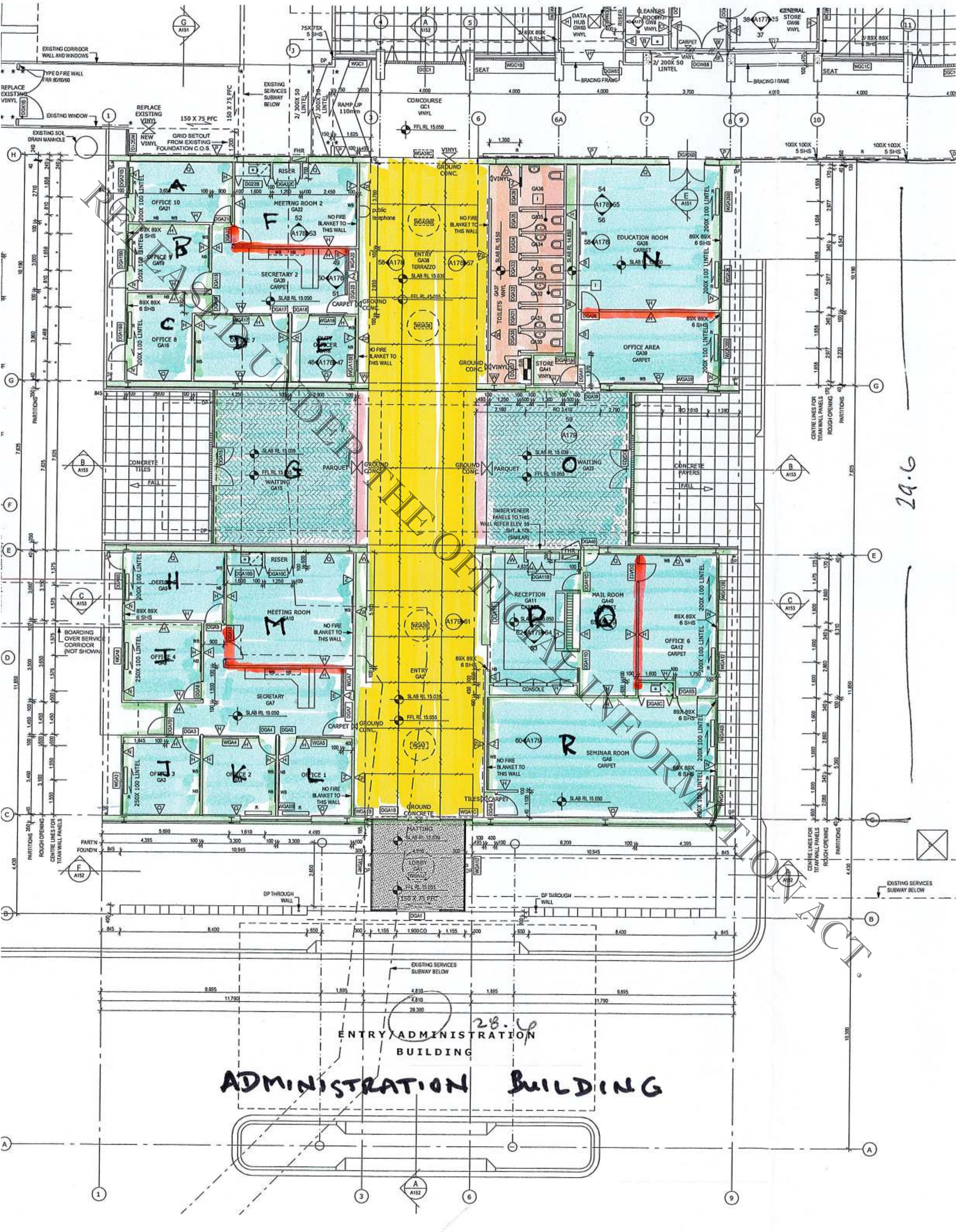
This report recommends that the Administration Building become the future base for CDHB’s Community Health teams. Parts of the building should be re-levelled to within acceptable tolerances, and the structure should be strengthened to IL2 to ensure life safety standards are met. Ground improvement beneath the whole building is not recommended. Whilst it may assist mitigate damage in a major future event, the cost is high and there is no guarantee of its effectiveness.

The first floor of the Surgical Block requires much more work to provide the same efficiency and amenity as the Administration Building. There is high risk around the level of regulatory up-grade, particularly in regard to removal of brick partitions, asbestos and electrical upgrade. It is recommended that minimum work be committed to make the building safe.

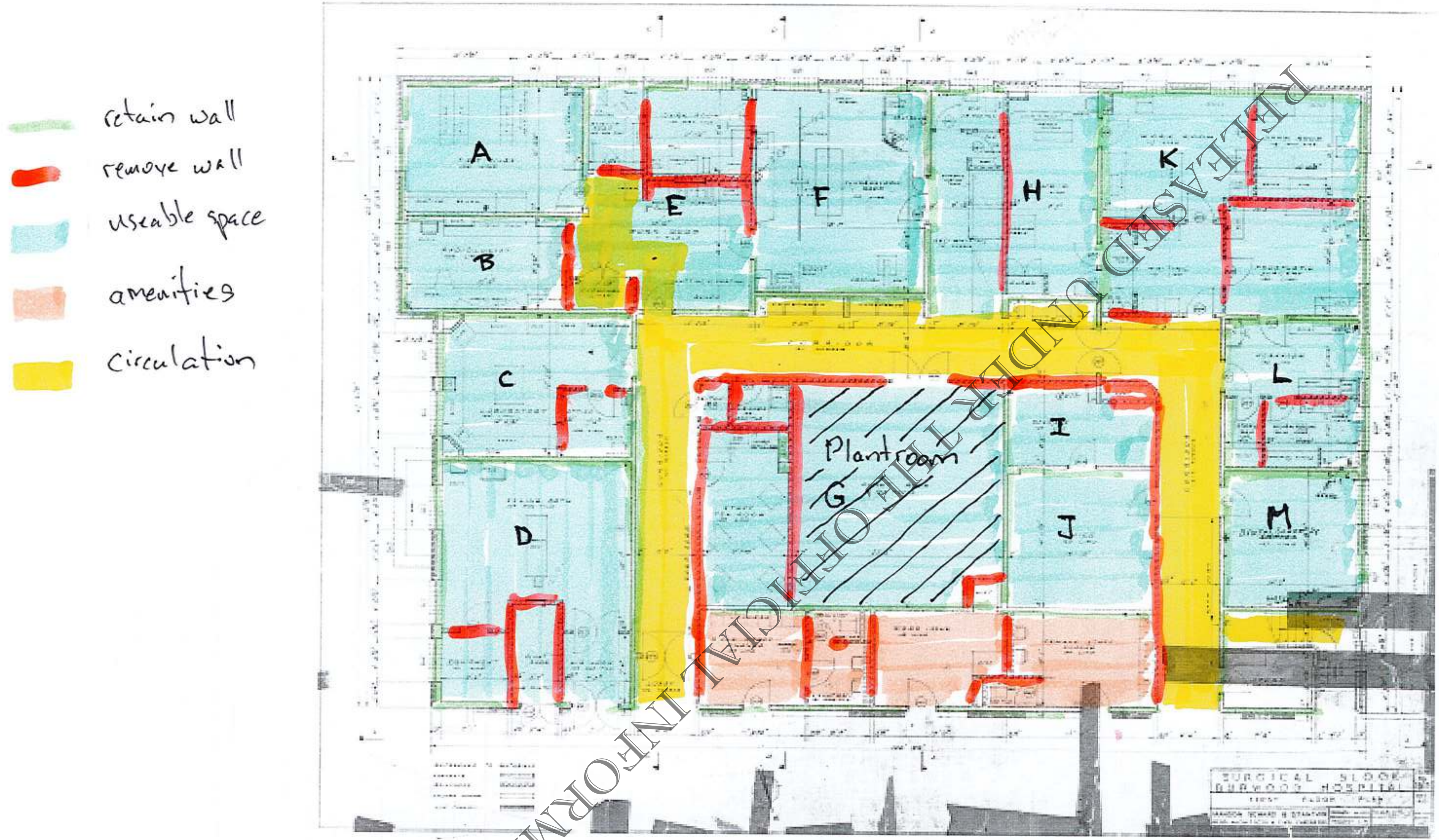
The Rough Order of Cost (ROC) of [redacted] includes for work to both buildings as described above. It provides a basis for briefing and engagement of consultants to undertake further investigation and scoping to better inform estimation of costs, prior to seeking approval for a Project Budget.

The evaluation of Procurement Methodologies relates to the procurement of a new, single-storey, “co-working” office building. Three example projects suggest the Design-Build approach can deliver time and cost benefits where there is low complexity and a simple design solution is sought. It concludes that a build rate of [redacted] per sqm (excl GST) is feasible on an accessible site, prepared for a lightweight structure.

12.0 APPENDIX A – Space Analyses



CONCOURSE GC1 VINYL
OFFICE 10 GA21
MEETING ROOM 2 GA22
SECRETARY 2 GA20 CARPET
OFFICE 9 GA19
OFFICE 8 GA18
OFFICE 7
OFFICER
ENTRY GA38 TERRAZZO
TOILETS GA37 VINYL
STORE GA41 VINYL
EDUCATION ROOM GA26 CARPET
OFFICE AREA GA39 CARPET
CONCRETE TILES
WAITING GA15
PARQUET
WAITING GA23
CONCRETE PAVERS
RISER
MEETING ROOM GA10
OFFICE 4
SECRETARY GA7
OFFICE 3 GA3
OFFICE 2
OFFICE 1
ENTRY GA2
RECEPTION GA11
MAIL ROOM GA40
OFFICE 6 GA12 CARPET
SEMINAR ROOM GA8 CARPET
LOBBY GA1
A B C D E F G H I J K L M N O P Q R
29.6
28.6
ENTRY/ADMINISTRATION BUILDING
ADMINISTRATION BUILDING



~~Figure 2-~~4: Surgical Block – Original First Floor Plan

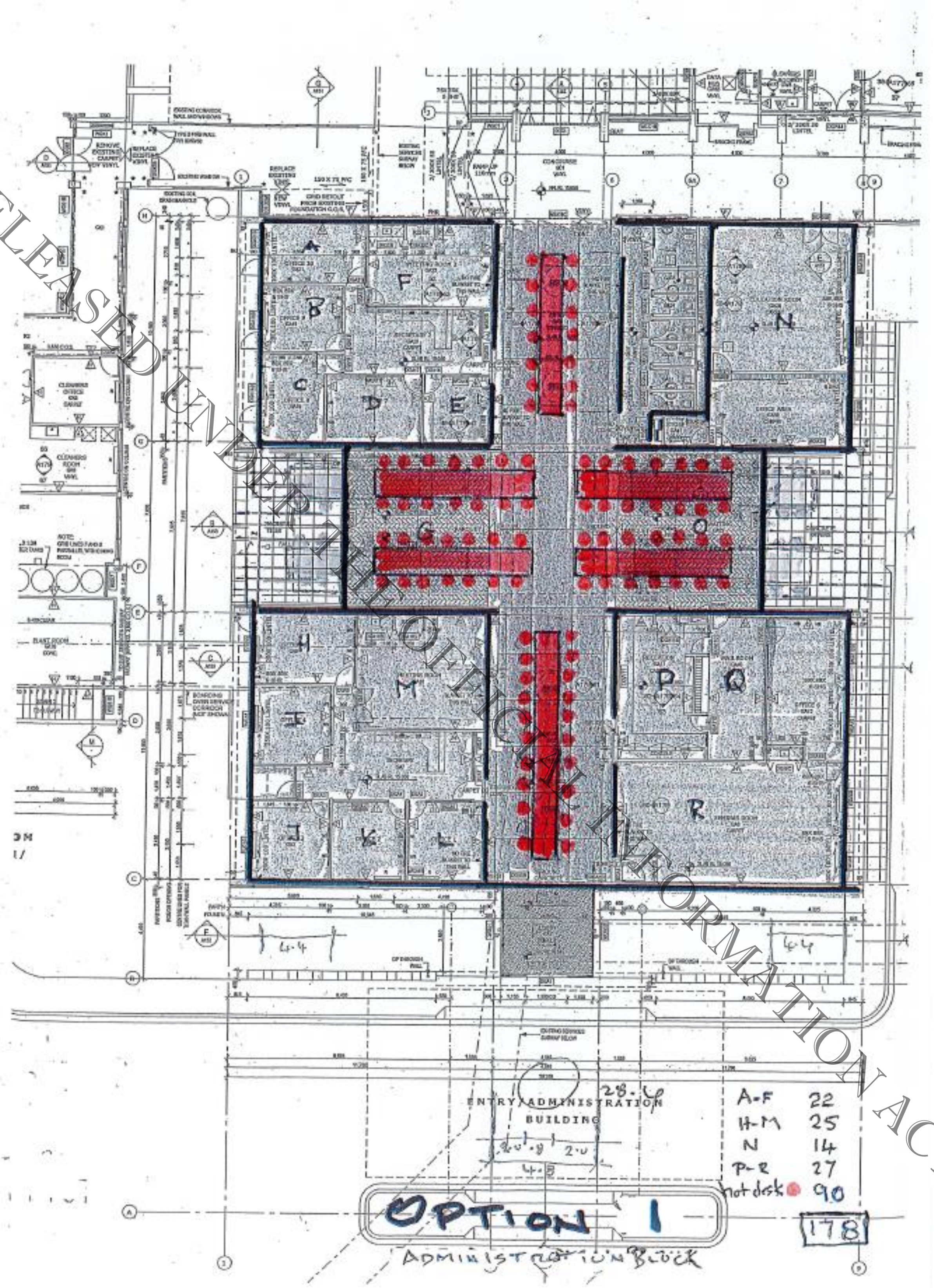
Surgical Block - First Floor

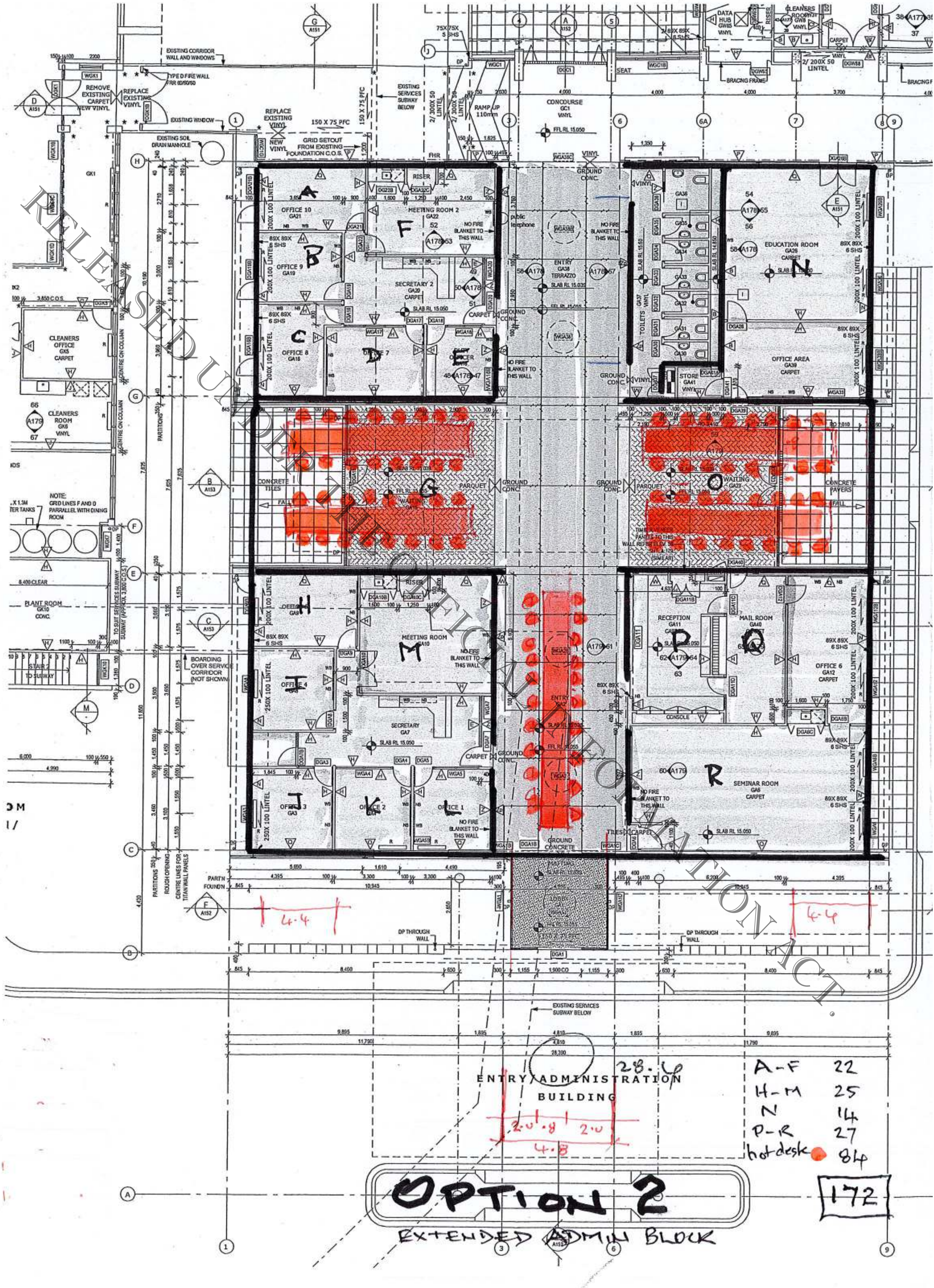
Space	w	b	Area	People *Rate 3.7*	*Rate 4.2*
A	5.3	3.9	20.7	6	5
B	5.0	2.7	13.5	4	3
C	5.6	4.4	24.6	7	6
D	5.6	5.3	29.7	8	7
E	3.0	6.6	19.8	5	5
F	5.2	6.2	32.2	9	8
G	9.0	7.0	0.0	0	0
H	5.5	5.0	27.5	7	7
I	4.4	2.6	11.4	3	3
J	4.4	4.2	18.5	5	4
K	8.0	6.6	52.8	14	13
L	4.2	4.8	20.2	5	5
M	4.2	5.2	21.8	6	5
Total Useable			292.8	79	70
Circulation	37.0	2.0	74.0		
Amenities	14.0	3.0	42.0		
Net floor area			408.8		
GFA (rough)	30	20	600.0		

Administration Block

Space	w	b	Area	People *Rate 3.7*	*Rate 4.2*
A	4.6	2.7	12.4	3	3
B	3.6	3.0	10.8	3	3
C	2.8	3.9	10.9	3	3
D	4.2	2.9	12.2	3	3
E	2.8	2.9	8.1	2	2
F	5.4	6.4	34.6	9	8
G	6.8	6.2	42.2	11	10
H	4.2	3.0	12.6	3	3
I	3.3	3.3	10.9	3	3
J	3.3	3.3	10.9	3	3
K	3.2	3.3	10.6	3	3
L	3.2	3.3	10.6	3	3
M	5.5	8.0	44.0	12	10
N	6.2	9.6	59.5	16	14
O	6.2	6.8	42.2	11	10
P	3.4	6.2	21.1	6	5
Q	6.0	6.2	37.2	10	9
R	10.0	5.4	54.0	15	13
Total Useable			444.6	120	106
Circulation	29.0	5.0	145.0		
Amenities	9.6	3.4	32.6		
Net floor area			622.3		
GFA (rough)	29	26.0	754.0		
	-3.6	6.6	-23.8		
	-3.6	6.6	-23.8		
			706.5		

13.0 APPENDIX B – Administration Block Options


A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
ENTRY/ADMINISTRATION
BUILDING
A-F 22
H-M 25
N 14
P-R 27
hot desk 90
OPTION 1
178
ADMINISTRATION BLOCK



ENTRY/ADMINISTRATION
BUILDING
OPTION 2
EXTENDED ADMIN BLOCK
172
A-F 22
H-M 25
N 14
P-R 27
hot desk 84
28.4
2.0 .8 2.0
4.8
4.4
4.4
CONCOURSE
GC1
VINYL
RAMP UP
110mm
EXISTING CORRIDOR WALL AND WINDOWS
REMOVE EXISTING CARPET NEW VINYL
REPLACE EXISTING VINYL
REPLACE EXISTING VINYL
NEW VINYL
GRID SETOUT FROM EXISTING FOUNDATION C.O.S.
EXISTING SERVICES SUBWAY BELOW
OFFICE 10
GA21
MEETING ROOM 2
GA22
OFFICE 9
GA19
SECRETARY 2
GA20
CARPET
OFFICE 8
GA18
OFFICE 7
RISER
ENTRY
GA38
TERRAZZO
TOILETS
GA37
VINYL
STORE
GA41
VINYL
EDUCATION ROOM
GA26
CARPET
OFFICE AREA
GA39
CARPET
CLEANERS OFFICE
GX5
CARPET
CLEANERS ROOM
GX6
VINYL
PARQUET
CONCRETE TILES
CONCRETE PAVERS
WAITING
GA23
GROUND CONC.
PLANT ROOM
GX10
CONC.
STAIR 2
TO SUBWAY
MEETING ROOM
GA5
OFFICE 4
GA4
SECRETARY
GA7
SLAB RL 15.050
OFFICE 3
GA3
OFFICE 2
OFFICE 1
RECEPTION
GA11
MAIL ROOM
GA40
OFFICE 6
GA12
CARPET
CONSOLE
SEMINAR ROOM
GA8
CARPET
NO FIRE BLANKET TO THIS WALL
GROUND CONCRETE
LOBBY
EXISTING SERVICES SUBWAY BELOW
DP THROUGH WALL
NOTE: GRID LINES F AND D PARRALLEL WITH DINING ROOM
BOARDING OVER SERVICE CORRIDOR (NOT SHOWN)
A B C D E F G H I J K L M N O P Q R