

A CASE STUDY OF A CHURCH & COMMERCIAL DEVELOPER
JOINT VENTURE PROJECT IN HONG KONG

by

Stephen Wai-Kit Chung

Bachelor of Science in Building Studies
Bachelor of Building
University of Hong Kong
1981, 1982

SUBMITTED TO THE DEPARTMENT OF URBAN STUDIES & PLANNING
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF SCIENCE IN REAL ESTATE DEVELOPMENT AT THE
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SEPTEMBER, 1986

© Stephen Wai-Kit Chung 1986

The Author hereby grants to M.I.T.
permission to reproduce and to distribute publicly copies
of this thesis document in whole or in part.

Signature of the Author _____

Stephen Wai-Kit Chung
Department of Urban Studies & Planning
August 15, 1986.

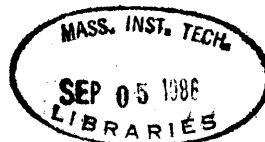
Certified by _____

Gary Hack
Head, Department of Urban Studies & Planning
Thesis Supervisor

Accepted by _____

James McKellar
Chairman

Interdepartmental Degree Program in Real Estate Development



Rotch



Room 14-0551
77 Massachusetts Avenue
Cambridge, MA 02139
Ph: 617.253.2800
Email: docs@mit.edu
<http://libraries.mit.edu/docs>

DISCLAIMER OF QUALITY

Due to the condition of the original material, there are unavoidable flaws in this reproduction. We have made every effort possible to provide you with the best copy available. If you are dissatisfied with this product and find it unusable, please contact Document Services as soon as possible.

Thank you.

The images contained in this document are of the best quality available.

A CASE STUDY OF A CHURCH & COMMERCIAL DEVELOPER

JOINT VENTURE PROJECT IN HONG KONG

by

STEPHEN WAI-KIT CHUNG

Submitted to the Department of Urban Studies & Planning
on August 15, 1986 in partial fulfilment of the
requirements for the Degree of Master of Science in
Real Estate Development

ABSTRACT

This thesis paper studies and examines critically a potential joint venture real estate development project between the Diocesan Church of Hong Kong and a prospective commercial developer in Hong Kong.

Briefly, the Diocese owns a piece of urban land near the Central Business District of Hong Kong and wishes to capitalise on the real estate market in order to generate some funds for its various activities. Hence, it is seeking to strike an agreement in which the Diocese would contribute the land for development while the prospective developer would provide all the project funds. Income generated from the project would be shared according to agreed terms. A team of consultants has already been formed and a development scheme for an office complex has been proposed. Developers are about to be invited to tender for the project.

Hence, this report investigate the proposal from two angles:

- (1) To examine critically the present office proposal and to make improvements upon it.
- (2) To search for and evaluate other development alternatives for the site.

The report concludes that the best possible option is to develop a mixed-use residential and commercial complex, taken into account of the financial returns and risks, the market, the site usages, and the 'play-safe' requirement of the Diocese. The existing office proposal may produce cash flow problems during periods of economic recession hence increasing the possibility of foreclosure.

Thesis Supervisor: Professor Gary Hack

Title: Head, Department of Urban Studies & Planning

TABLE OF CONTENTS

	page
ABSTRACT	2
TABLE OF CONTENTS	3-4
LIST OF ILLUSTRATIONS	5
LIST OF TABLES	6
BIOGRAPHY	7
ACKNOWLEDGMENT	8
SUMMARY	9-10
CHAPTER:	
I. INTRODUCTION	
Existing Site	11
Joint Venture	11
Objectives of the Paper	24
Assumptions	25
Methodology	25
Participants in the Project	26
Hong Kong : A Background	26
II. PRESENT DEVELOPMENT PROPOSAL	
Proposed Design	31
Joint Venture Agreement	38
Financial Arrangement	39
III. IDENTIFICATION AND EXAMINATION OF MAJOR ASPECTS OF PROJECT	
Identification of Major Aspects	45
Examination of the Major Aspects with Reference to the Present Scheme	46

IV. COMPARISONS AND EVALUATIONS	
Choices Available	93
Possible Options	96
Comparisons of Options	97
Financial Evaluations of Options	100
V. RECOMMENDATIONS	
Which Option?	108
Next Best Alternative	109
APPENDICES	110
BIBLIOGRAPHY	166

	page
Aerial photographs of the site and surroundings	12-14
Photographs of the existing buildings	15-20
Topographical map of the site	21
Zoning map of the site	22
Historical development map of Hong Kong	29
Photograph of a scenic view of Hong Kong	30
Chronological order of major events	37
Preservationist's newspaper article	98

LIST OF TABLES

	page
Financial Analysis by Jones Lang Wootton, April 30, 1986.	42-44
Commentary from Jones Lang Wootton	50
Exerpts from "Property Review 1986", Rating and Valuation Department, Hong Kong Government.	51-54
Author's analyses: cash flow, sensitivity, worst and best possible cases	70-92
Table summarising characterisitics of the options	101
Financial comparisons of options	104-107

BIOGRAPHY

The author is a resident from Hong Kong. After having graduated from the University of Hong Kong with a Bachelor of Science in Building Studies (with honors) and a Bachelor of Building in 1981 and 1982 respectively, he worked for a consulting firm and then for the Government of Hong Kong as a quantity surveyor. He passed the professional qualifying examination of the Royal Institution of Chartered Surveyors (U.K.) in 1984 and was elected a full member by the end of 1985.

Hence, with the background and experience gained through years of involvement in the construction industry, the author would like to broaden his interests and real estate development is the next logical and ideal business field to pursue, as one can maintain the relationship with construction while at the same time expand into other spectrums.

ACKNOWLEDGMENT

I would like to express my deep gratitude for the following gentlemen who have given me great support and encouragement, particularly in the provision of data and information, and without whose assistance, this thesis paper would have been less meaningful:

Mr. Sze-Leung Chung
Property Manager for the Diocese of Hong Kong and Macau

Mr. Paul Harris
Partner of Jones Lang Wootton (Real Estate Consultant)

Mr. Peter Churchouse
Research Director of Jones Lang Wootton (Real Estate Consultant)

Mr. Wing-Kwong Lau
Partner of Ng Chun Man and Associates Ltd. (Architectural Consultant)

Mr. Joseph Lee
Associate of Langdon Every and Seah (Quantity Surveying Consultant)

I would also like to express my gratitude to Professor Anthony Walker of the Department of Building, University of Hong Kong, for his generous support in allowing me to use the library and computer facilities of the Faculty when I was in Hong Kong during the month of June.

Lastly, but not least, I wish to thank my advisor, Professor Gary Hack, for his kind and precious guidance in helping me to overcome all the doubts and difficulties, thereby contributing to the completion of the thesis immensely.

Stephen Wai-Kit Chung
August, 1986.

SUMMARY

Brief Background

The Diocesan Church of Hong Kong owns a piece of land which has an area of 79000 sq.ft. near the heart of the Central District in Hong Kong. Several church properties, including the Bishop's House and a hospital, exist there at present. In order to generate a steady income flow for various church activities, the property management section of the Diocese has proposed to set up a joint venture agreement with a private developer to develop the lot (No. 7360). Governmental approvals have been sought and a project consulting team has been assembled. Tenders are about to be invited from selected developers.

Present Scheme

The present design calls for the construction of a 32-storey circular high-rise commercial office tower (660,000 sq.ft.) and low to medium-rise accommodations (114,000 sq.ft.) for the Church and governmental agencies. The prospective developer is to provide all the funds for development and also for the temporary accommodations of the existing church facilities. Income generated from the future office tower will be shared according to agreed terms by the parties.

Critique

To carry out the present scheme may bring disastrous results because:

(1) Insufficient market studies - the original idea was conceived in the late 1970s when the property market was starting to boom. Demand for office space was great. However, with today's changed market conditions, this perception should at least be reviewed. Moreover, some economists and bankers hold that an economic recession is very likely to happen in the next three or four years, particularly in view of growing protectionism from Hong Kong's major trading partners. Should this prediction come true, a sluggish office market will appear just when the proposed project is completed (around 1990).

(2) The circular shape design of the tower - this was influenced by some members of the Town Planning Board, yet the design should be reviewed as efficient use of office space is becoming an important issue to most companies, despite the fact that the circular shape also gives it an

unique and prestigious image. However, it is disputed that the circular form is the only way to achieve that image.

(3) The design is not related to any market analysis.

(4) Environmental issues have not been sufficiently dealt with.

(5) No detailed financial analysis has been performed to study the possible effects of vacancies, rental inflation, expense increases etc. and neither the worst and best possible cases, i.e. downside and upside, of the project are illustrated. Thus, periods where there will be cash flow problems will not be revealed and this is detrimental to both the Diocese and the developer.

Hypothesis and Recommendations

A mixed-use scheme involving both office and residential development provides a better alternative as:

(1) It reduces the impact of a competitive and relatively stagnant office market.

(2) Demand for upper scale yet small-size condominiums/apartments is expected to increase as multinationals increase their investment in the Asian/China region thereby bringing in more management and technical expatriates who are, at present, being mostly accommodated in hotels.

(3) A better response to the environment (usage-wise) is achieved as the site is situated between a residential zone and an office/commercial area.

CHAPTER I

INTRODUCTION

Existing Site

The site is a piece of urban land, designated as Lot No. IL 7360, which has an area of 78,577 sq.ft. on plan and is situated on the edge of the Central Business District of Hong Kong. It has a terraced and sloping terrain and several old Diocesan buildings exist there at present. These include the Bishop House, a primary school, a church, some church residences, the Diocesan Office, and a hospital. Further, the site is surrounded on three sides by existing roads, namely Lower and Upper Albert Roads, and Glenealy Road. To the north are the commercial office buildings while a public botanical garden and the Hong Kong Governor's House are situated to its south and east sides respectively. It was previously zoned for institutional, governmental and community usages and was granted on a lease to the Diocese for 999 years commencing in April, 1850 (Please refer to the attached photographs and maps in Exhibit 1).

Joint Venture

The present development scheme calls for the construction of a 32-storey circular office tower on the lower portion of the site linked by a footbridge to the

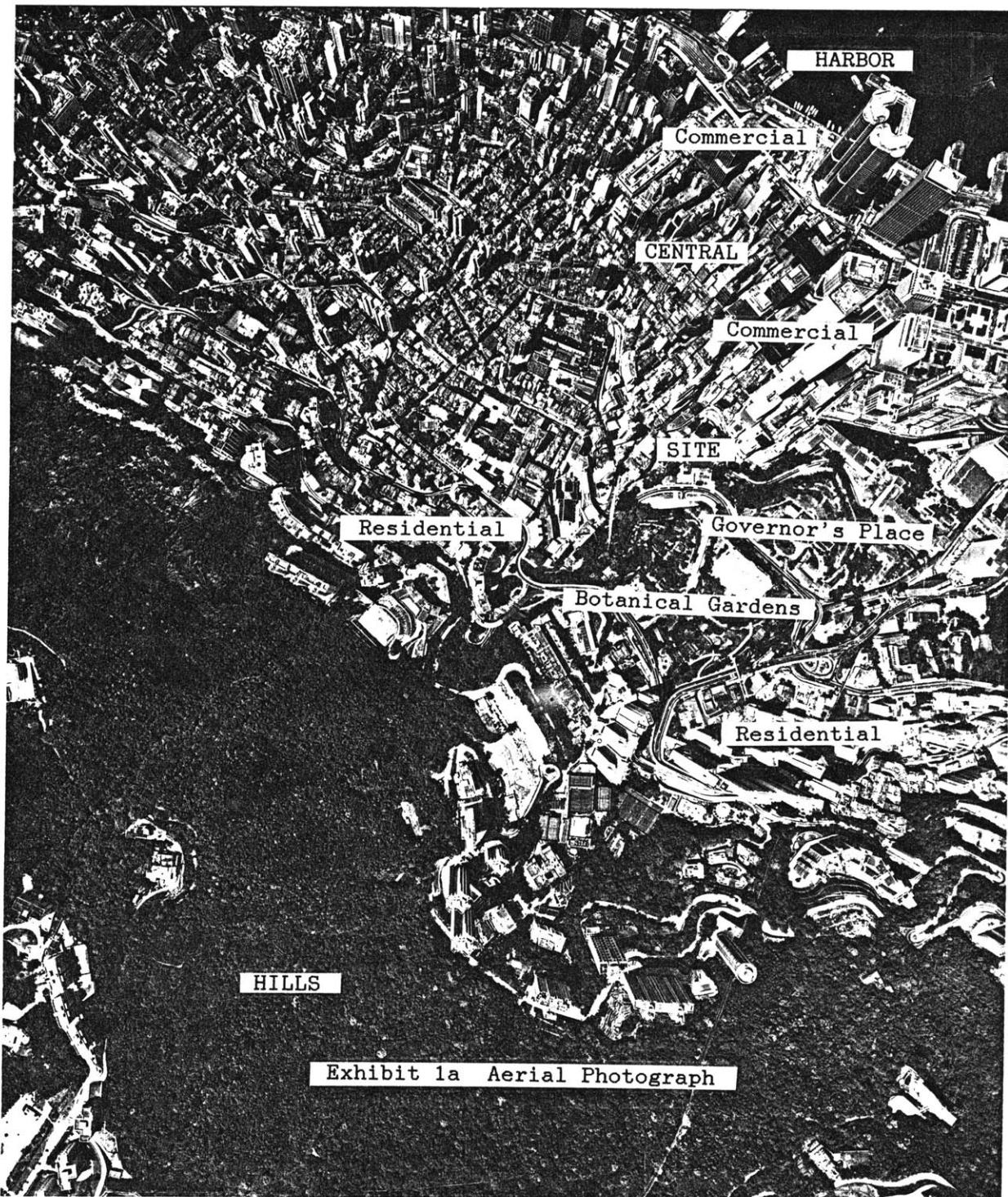
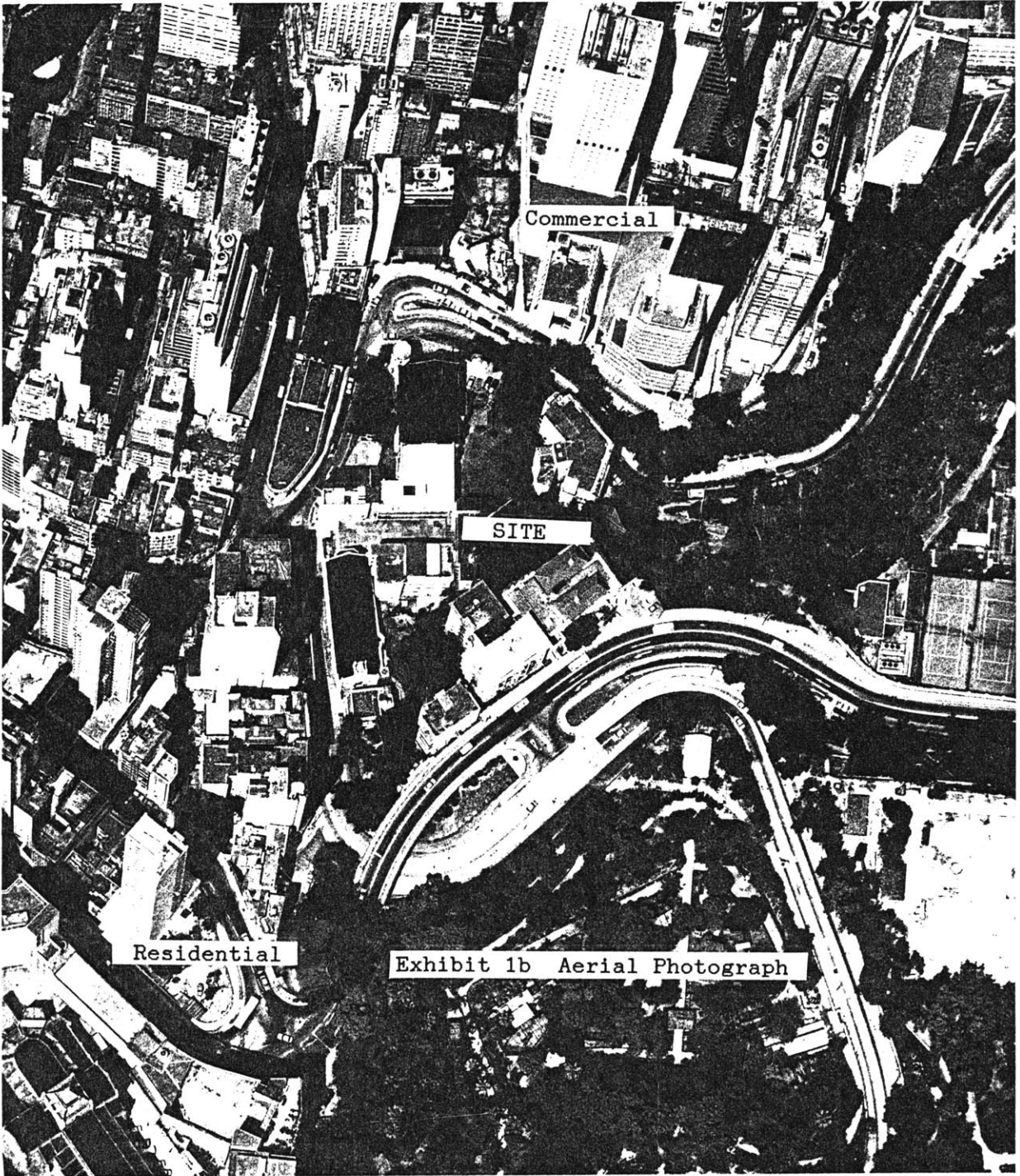


Exhibit 1a Aerial Photograph



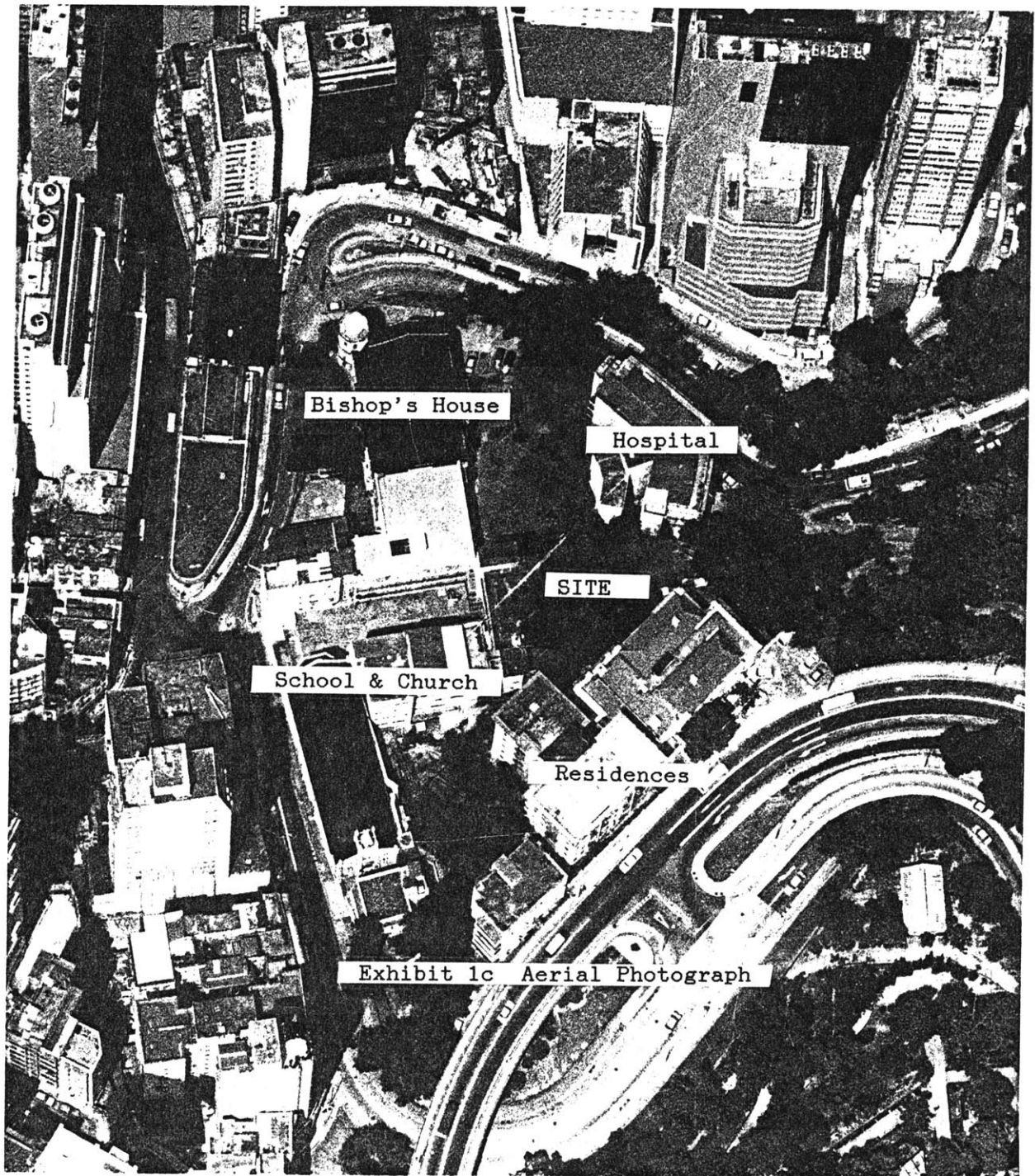


Exhibit 1c Aerial Photograph

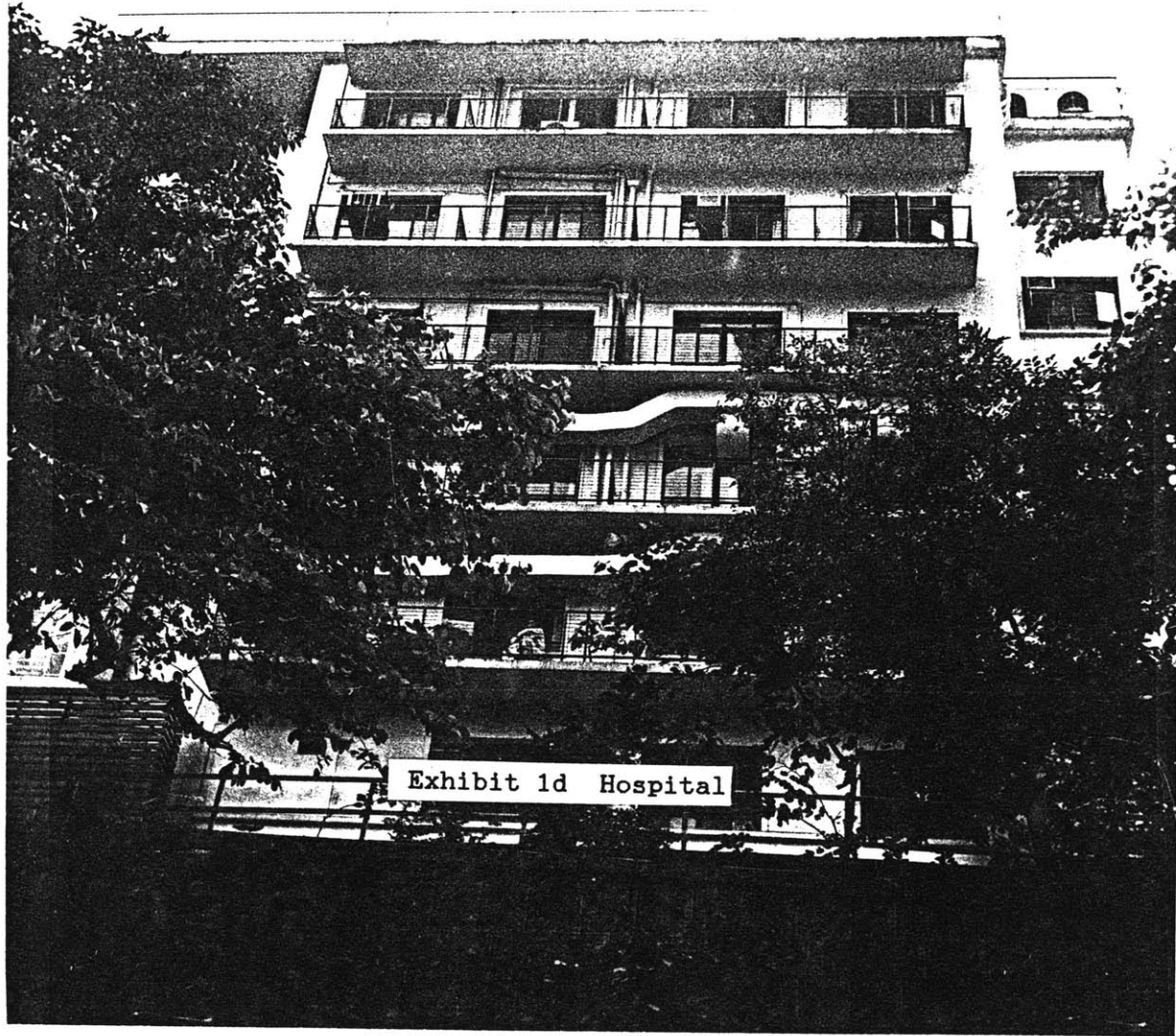




Exhibit 1e Bishop's House

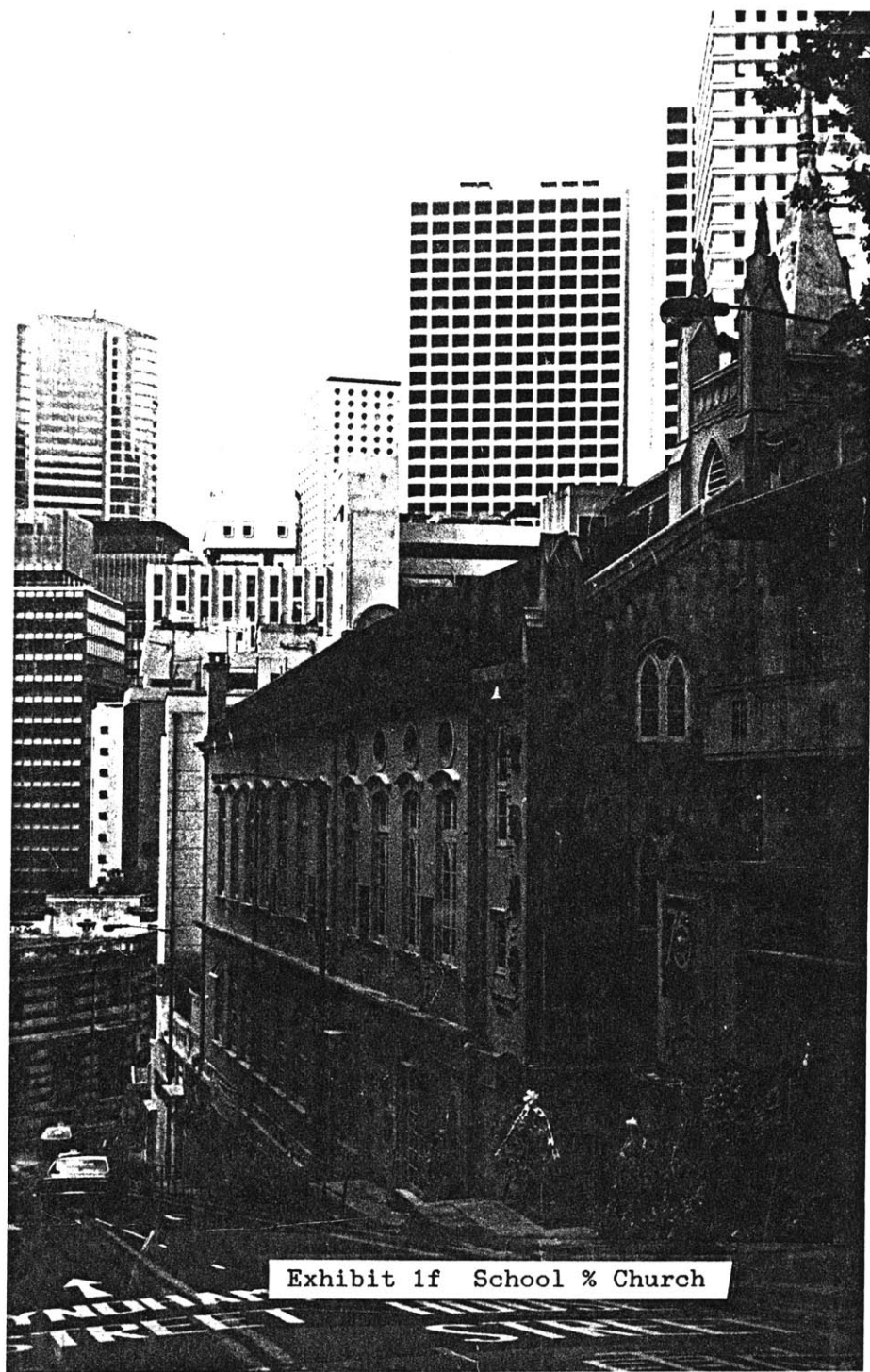


Exhibit 1f School % Church

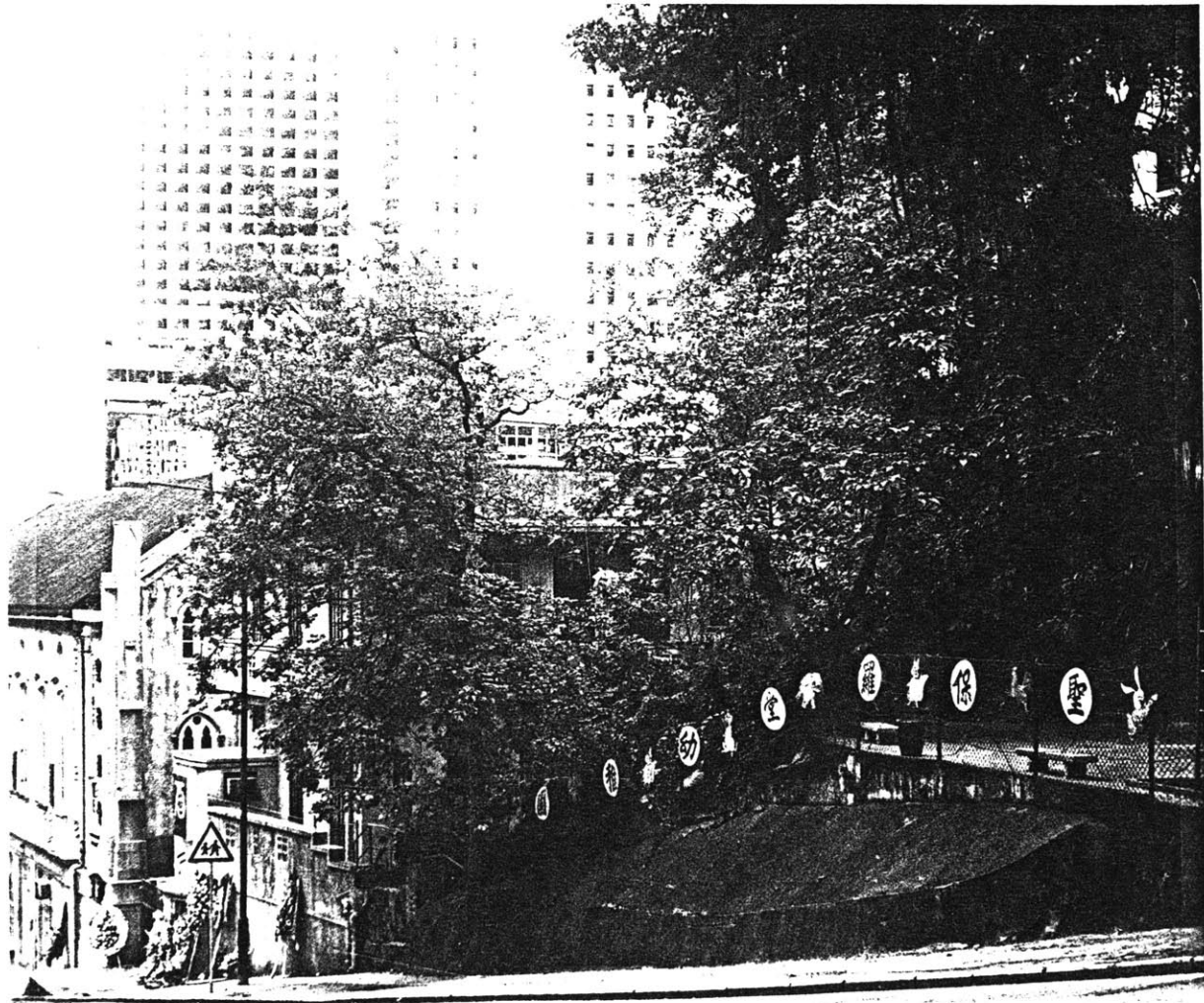


Exhibit 1g School



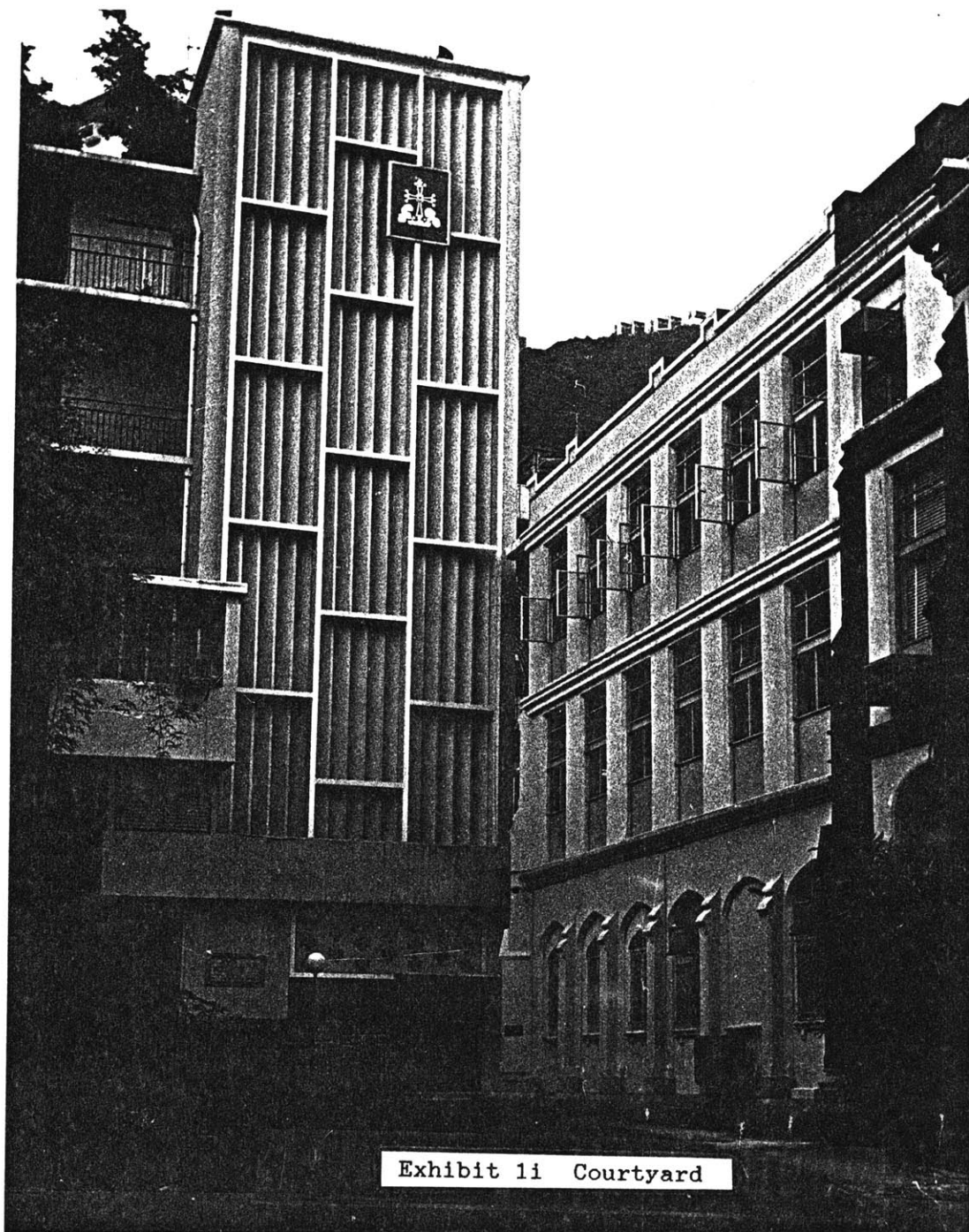


Exhibit 11 Courtyard

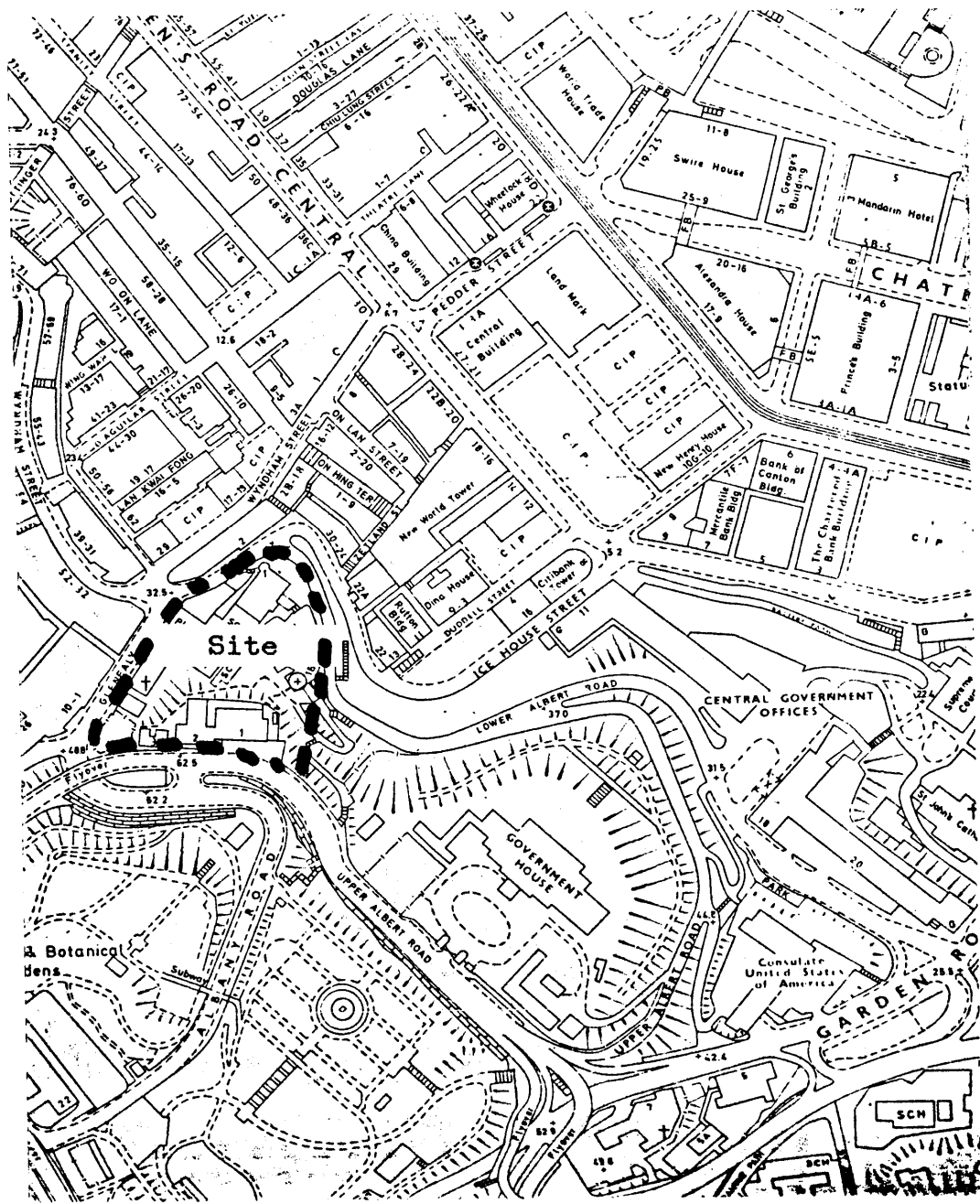
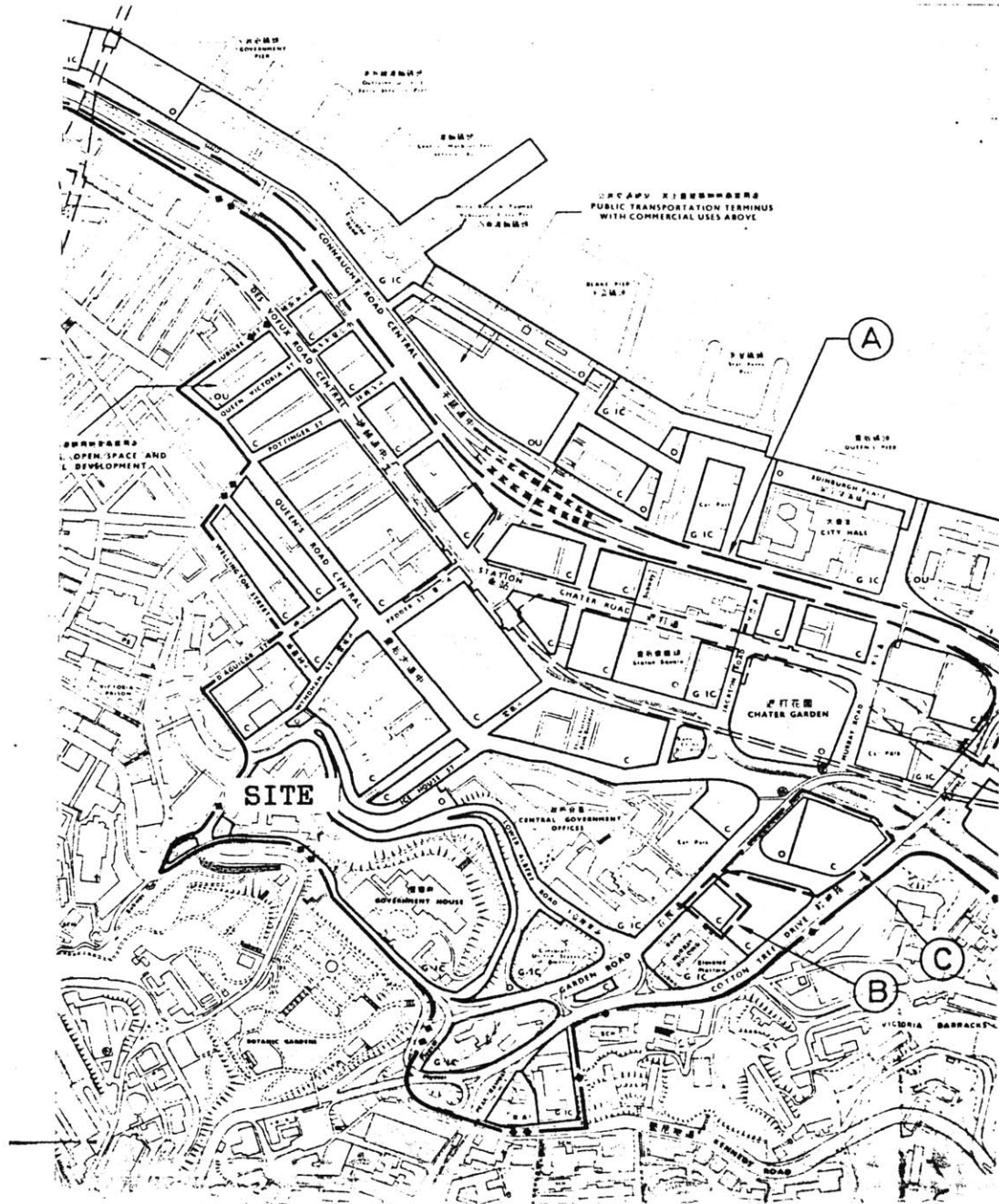


Exhibit 1j Topographical Map



COMMERCIAL	C
RESIDENTIAL (GROUP A)	R(A)
OPEN SPACE	O
GOVERNMENT / INSTITUTION COMMUNITY	G/IC
OTHER SPECIFIED USES	OU

Exhibit 1k Zoning Map Site

upper portion where the re-provided Diocesan facilities will be situated. Basically, the Diocese will contribute the land for development while the prospective developer will provide all the funds including compensations to the Diocese for the temporary loss of usage of the land and the premium for the land lease modifications. Income generated from the office tower will be shared in proportions agreed before hand. Moreover, the Diocese is to receive from the developer guaranteed installment payments irrespective of the rental incomes generated from the office complex during and after construction.

Hence, the Diocese will assume virtually no risks in development and will be able to enjoy a relatively stable flow of income to finance its various activities, unless the developer goes bankrupt leading to a foreclosure. Furthermore, it is done without the Diocese having to give up ownership or sell portions of the site. The developer is simply entitled to share in the profits made from the renting of the office tower for a period of 35 to 40 years, after which the right to possession will be reverted back to the Diocese.

Similar joint ventures have been tried successfully before in Hong Kong, e.g. the Hong Kong Club (a prestigious social club) had three years ago completed an office and club building in the Central District with a well known development company using similar arrangements, although this is the first time that a church organization is seeking

a joint venture partner to develop an office complex of such scale in Hong Kong.

The motives for the Diocese to develop the site are:

(a) The existing buildings on the site are mostly thirty years old or above (the Bishop's House and the church being more than 100 years old), thereby incurring huge maintenance and running costs. This may strain on the Church's fund in future.

(b) Developing the site will not only solve the maintenance problems but will also generate extra income for the Diocese to fund its various charitable activities e.g. administrating non-profit schools, clinics and social welfare agencies.

On top of all, when the idea was initiated by the property management section of the Diocese, Hong Kong was experiencing a boom in the real estate market. Office accomodations were in great demand. Hence the rising market then acted as a catalyst towards the decision to assemble a project team to further investigate the possibility of developing the site through a joint venture agreement.

Details of the design and joint venture agreement can be found in Appendix A1-A4 in the Appendices Section.

Objectives of the Paper

The aims of this thesis report are:

(a) To critically appraise the feasibility of the present scheme proposal; and

(b) To investigate more desirable alternatives to developing

the site.

Assumptions

Two basic assumptions have been made for the purpose of writing the thesis:

(a) The Diocese is now ready to invite tenders from selected prospective developers. Regardless of any future outcome, the thesis is deemed as a report submitted to the Diocese before tenders are invited, so as to provide a "second opinion."

(b) Hence, the author has taken up the role of this consultant who provides the "second opinion."

Methodology

The following sequence is adopted to investigate the feasibility of the present scheme and utilization of the site:

(1) Describe the present development proposal in terms of design, joint venture agreement and financial arrangement - Chapter II.

(2) Identify, examine critically, and improve the major aspects of the present development proposal - Chapter III.

(3) Consider, compare and evaluate other development options - Chapter IV.

(4) Make recommendations as to which is the best possible development alternative - Chapter V.

Participants in the Project

The major participants in the project are listed for reference:

- (a) The Diocesan Church of Hong Kong, or the "Church" or "Diocese" - the owner of the site.
- (b) Jones Lang Wootton - real estate consultant and surveyor.
- (c) Ng Chun Man & Associates Ltd. - architectural and engineering consultant.
- (d) Langdon Every and Seah - quantity surveying and construction costs consultant.
- (e) Debeham Tewson and Tam - surveyor and legal representative in negotiation with the government over lease matters.
- (f) Town Planning Board - development approval board comprising both government and non-government architects and planners.
- (g) District Lands Office - government branch responsible for lease premiums and associated matters.

Hong Kong : A Background

Before going further, a brief description of Hong Kong is considered helpful, if not essential, for those who are not familiar with the place:

Hong Kong is a British Crown Colony created through three concessions of land by the Ching Dynasty of China to the British Empire beginning in 1841. It is situated at the

mouth of the Pearl River of Guangdong Province of China and occupies an economically advantageous location in the Far East. Hence, it has now developed into being an important financial center in the world, after New York and London, with a population of six million people of which almost 99 percent are ethnic Chinese. It comprises the Island of Hong Kong, the Kowloon Peninsula and the New Territories which includes all the other outlying islands, large and small. The total area is around 400 sq. miles and, unlike Singapore which has a smaller but flatter area, is rugged and mountainous.

Hence, the lack of suitable land for development coupled with the thriving economy (which thereby generates a long term high demand for land) has led to high-density development solutions. The cityscape is virtually a composition of numerous skyscrapers, of various usages and quality, and often more than 25 storeys high built on both flat areas and slopes alike. Thus, high-density living is an acceptable way of life and most development projects involve building high-rise structures (so as to maximise the utilization of the land) unless restrictions are imposed by zoning laws or other regulations (Please refer to attached map and photograph in Exhibit 2).

The recent signing of the Sino-British Agreement in 1984 marked the beginning of the end of the colonial era which shall officially cease in mid 1997 after which sovereignty will be handed back to China. The People's

Republic of China (PRC) has however promised to keep the existing capitalistic economy intact and also to give a high degree of autonomy in internal administration to Hong Kong people for fifty years after 1997.

Since the agreement, foreign investment in Hong Kong has been steadily increasing as many multi-national companies are using Hong Kong as a base for future expansion of business into China, despite the fact that some local (Hong Kong) investors are also divesting their capital elsewhere.

Cartography by Survey Division
Lands Department
© Hong Kong Government
Series AR 9/RO Edition 1 1985

RECLAMATION & DEVELOPMENT IN HONG KONG

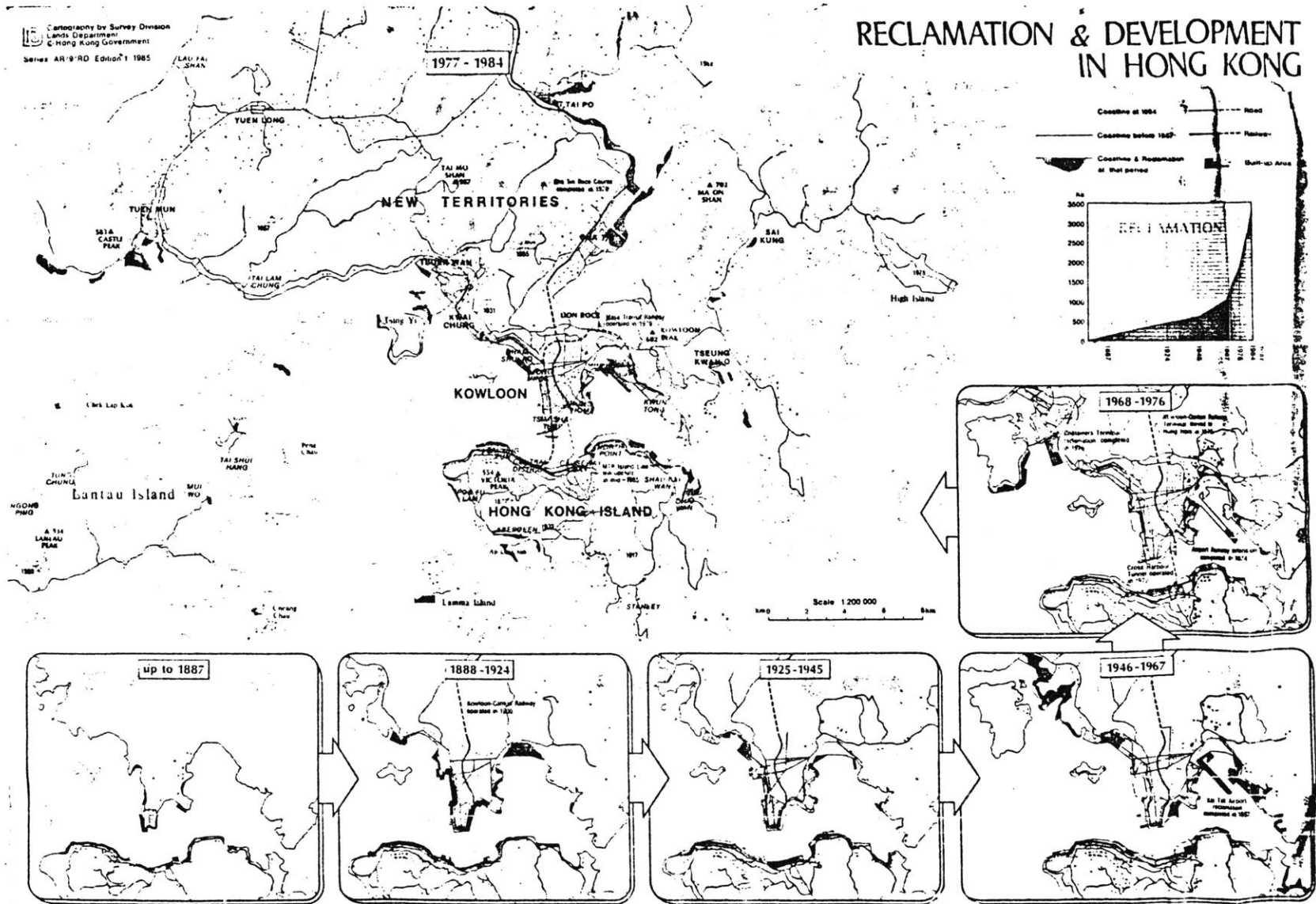


Exhibit 2a Historical Development of Hong Kong



Exhibit 2b A View from the Victoria Peak of Hong Kong

CHAPTER II

PRESENT DEVELOPMENT PROPOSAL

This chapter describes in detail the present scheme proposal in three aspects: design, joint venture agreement and financial arrangement.

Proposed Design

General

The design calls for the construction of a 32-storey circular high-rise office tower (660,000 sq.ft. in total area) and clusters of low to medium-rise church and governmental accommodations (114,000 sq.ft. in total area). Some 300 parking spaces are allowed in the car parking facility to be built along the slope of the site. The site area is around 79000 sq.ft.

The overall quality of construction is high and certainly satisfies the requirements to be included in division Grade A office property of the Valuation and Rating Department's ranking system, as the site is well located and the tower will have air-conditioning systems and other mechanical and electrical installations.

The relevant sketch design, schedules of accommodations and construction specifications are included in Appendix A2-A3 in the Appendices Section for reference.

The Office Tower

The 32-storey high office tower is to be supported by a central circular core of 16 columns which is in turn supported by structural walls at the bottom levels. The diameter on plan is around 170 ft. (i.e. roughly 22,000 sq.ft. per floor on average) and the exterior will be characterised by a aluminium curtain walling system. While reinforced concrete is still a popular method for structural elements, steel frame construction has not been ruled out and the extra cost may be justified by the speedier construction process. Expensive finishes will be applied. Examples are polished granite for the walls and stainless steel cladding for the ceiling. Moreover, sophisticated mechanical and electrical systems are to be installed e.g. Variable Air Volume Ventilation and Building Automation systems to control the temperature and humidity inside the building. The tower is to be built on the lower portion of the site.

All the floors will be used for office purposes except for the bottom levels which are to be used for retailing and carparking. All tenants will access the building from Lower Albert Road. Construction cost for the tower will be around HK\$ 270 million (US\$ 34 million).

Low-Medium Rise Blocks

These low-medium rise clusters of houses, built on the

upper portion of the site, will mainly house the various church amenities and certain governmental entities. A footbridge system links these portions to the 6th and 7th floors of the tower. Beneath them are the ten storeys of the carparking facility which offers 300 parking spaces and is built on the slope. The access points to both the low blocks and carpark are at Upper Albert Road.

The construction quality of these blocks will slightly be less substantial than that used for the tower. Traditional in-situ concreting will be used with infill walls. Less complicated building services systems will be installed. Total construction costs for the blocks, carpark and footbridge are estimated to be around HK\$ 59 million (US\$ 7.5 million).

Landscape

No elaborate landscaping design or plan has been established yet. Nevertheless, an idea of roof gardening has been incorporated for the lower blocks. Moreover, part of the sloping area is expected to be turfed and planted with trees so as to not only provide a 'green' belt but also for reasons of stabilising the surface soils. A budget of HK\$ 3 million (US\$ 0.4 million) is allowed to handle this aspect.

Other Related Design Aspects

Road widening of Upper and Lower Albert Roads is expected, however, no extensive plans exist for the time being. Nevertheless, the extent will be minimal as only a

small budget of HK\$ 700,000 (US\$ 88,000) is allowed.

Moreover, an old unused pedestrian subway system under Lower Albert Road is being investigated to see if it is possible to 'reopen' it, by renovation, so as to facilitate a more efficient vertical circulation of pedestrians, especially the office workers, to and from the lower-level Central District where other businesses and restaurants are. No budget has yet been calculated for this proposal since it is not a direct part of the development being outside the site boundary.

Construction Specifications and Estimation

The specifications calls for quality, particularly in terms of internal finishes and services systems. The quantity surveyor's estimate of HK\$ 390 million (US\$ 49 million) for construction cost, excluding items like consultants' fees, land cost, finance charges, slope stabilisation works etc., is acceptable, with perhaps a 10 percent overestimation. However, some items may have been underestimated e.g. road widening should an extra traffic lane be required, or drainage should the existing systems be found to be inadequate.

Processes of Administrative and Legal Approvals

External

Two governmental approvals have to be obtained before

any development work can proceed:

(a) Approval of the overall development proposal and concept from the Town Planning Board;

(b) Approval and agreement by the District Lands Office to modify the lease on payment of a premium.

It is to be noted here that property development (including development which leads to a higher density) is a socially accepted phenomenon in Hong Kong and there are few "neighborhood groups" which are genuinely anti-development and/or strong enough to post a real threat to development projects. In our case, it is the governmental procedures which present any major external hurdles.

Briefly, both approval processes have consumed years before they were finally granted (from 1978 to 1984) involving many submissions of development plans and virtually hundreds of meetings with the governmental bodies. The main proponents involved in obtaining the approvals and the results are listed as follows:

(a) From the Town Planning Board - the Diocese, Jones Lang Wootton and Ng Chun Man have been involved and a compromise is reached in that the office structure is to be circular in shape. This, according to the Board, will enhance the architectural quality and interest of the environment, as the circular shape will be least 'imposing' on its surroundings as there are no sharp corners. Further, the area lacks circular buildings (Only a handful of 'prominent' circular buildings exist in Hong Kong. The Hopewell Center in Wanchai District which is next to Central District is one

example).

(b) From the District Lands Office - Debeham Tewson and Tam has been the main representative for the Diocese and with the Town Planning Approval, agreement by the office was secured to modify the lease on payment of a premium (HK\$ 19 million) by the Diocese before September, 1986.

A chronological order of major relevant events leading to the present situation is attached for reference in Exhibit 3.

Internal

The time-consuming governmental procedures did not imply that there was full support for the idea within the Diocese. Understandably, by being not too experienced in the commercial world, the Bishop along with most other chaplains expressed doubt over the project and acted with utmost caution, though they never did vote down the project entirely. Nevertheless, their pessimism was expected and this at times was overcome by their enthusiasm in sharing the hope that the development can generate a steady flow of income to finance the church activities.

However, the Diocese anticipated little difficulty in persuading the existing tenants, i.e. the hospital, the primary school etc. to move out as these entities will be compensated sufficiently from part of the HK\$ 103 million that the developer is to provide should the agreement be signed. Moreover, all such properties are under lease and

Exhibit 3

File:thschron

CHRONOLOGICAL ORDER OF MAJOR EVENTS

- 1978 Original idea conceived
- Architect approached
- 1979 Diocese decided to assemble project team
- 1980 First submission to Town Planning Board
- 1981 to Jones Lang Wootton engaged
- 1983 Further re-submissions to Town Planning Board
- Legal consultant approached
- 1984 Final approval obtained from Town Planning Board
- 1985 Lease clauses modified
- 1986 Development tender drafted and approved by the Diocese
- Tendering through Jones Lang Wootton

the jurisdiction to terminate the leases rests with the administration of the Diocese and the Bishop.

Joint Venture Agreement

The agreement has been redrafted several times by Jones Lang Wootton. The final document favors the Diocese and requires the prospective developer to take all the risks while the Diocese simply contributes the land. Main points as follows:

(i) The developer is to provide all the funds for development including consultants' fees and the premium of HK\$ 19 million (US\$ 2.4 million) for the modification of the Crown Lease (all land is owned by the Crown in Hong Kong except for the site of a St. John's Cathedral which is situated on a freehold land.)

(ii) The developer is to guarantee a minimum payment of approximately HK\$ 6 million (US\$ 0.75 million) each year to the Diocese regardless of actual profits from the office tower.

(iii) The developer is to pay around HK\$ 103 million (US\$ 13 million) to the Diocese for the removal compensation and/or temporary relocation of the existing facilities and entities during the construction period.

(iv) The Diocese is to have a say in major construction and maintenance issues. The developer is to lease his part of the office tower from the Diocese and overall ownership rests with the Diocese.

(v) The Diocese can take over possession of the tower should

the developer fail to make the lease payments etc.

(vi) The developer is to propose the profit sharing arrangement in his tender to the Diocese.

(vii) The developer is to provide a non-refundable payment of HK\$ 10 million (US\$ 1.25 million), of the HK\$ 103 million (US\$ 13 million) mentioned earlier, immediately upon signing of the Heads of Agreement.

The document reflects the "no risk-taking" mentality of the Diocese and the wisdom of having such agreement terms is to be discussed later.

A copy of the agreement is available for reference in Appendix A1 in the Appendices Section.

Financial Arrangement

Except for the mentioned HK\$ 103 million and the annual HK\$ 6 million for temporary relocations and annual lease payments respectively, the sharing of annual income is not dictated in the agreement and the tendering developers are to make their own proposals. The principles in the allocation of incomes are given as follows:

(1) An annual payment of HK\$ 6 million (US\$ 0.75 million) or a certain percentage of the net annual income, which shall not be less than HK\$ 6 million (US\$ 0.75 million), will be paid by the developer to the Diocese.

(2) The developer is to propose the rate of return or return necessary for him to recoup his investment, i.e. the number of years the developer needs to recoup his investment.

(3) The developer is to propose an excess profit sharing ratio after sums in (1) and (2) above have been satisfied.

However, given the fact that the developer is to take all the risks and with the present competitive market, it is expected that developers will ask for a larger share of the profits in the early years, say 80 to 90 percent of net income. The time needed for recouping capital may range from ten to fifteen years depending on the developer's perception of the market. After such period, the developer is expected to give the Diocese a larger and more equal share and the ratio may be somewhere around a 50/50 split. This is necessary as a highly disproportionate ratio, say like 25/75 (Diocese/Developer), may simply be rejected by the Diocesan Bishop who, by not being experienced in the business world and yet has the final say on the project, will consider it unreasonable, as such disproportionate ratios will seem (to the Bishop) to put the Diocese on 'unequal' terms and even cause a loss of 'face', despite the fact that the real bargaining power of the Diocese actually depends on how the property developers in general view the proposal and the market.

While a tendering developer may come up with a counter proposal, it is not expected that they will ask for something which deviates a lot from what has just been described. To recover the expended capital quickly is the norm. Moreover, Jones Lang Wootton has worked out that the higher the share the Diocese demands in the early years, the lower its overall return will be in future, as the developer

will then be forced to take up a far larger portion of the returns in later years. Hence, it is to the advantage of the Diocese to permit a quicker return to the developer in the earlier period in order to share more of the greater future potential income.

A financial analysis of Jones Lang Wootton is attached for reference in Exhibit 4.

The results and implications are as follows:

(1) The value of the scheme is valued at HK\$ 1257 million (US\$ 161 million) while the total development cost is HK\$ 824 million (US\$ 106 million). A difference of HK\$ 433 million (US\$ 56 million) is projected.

(2) Rental percentage increase and the starting rent affect the returns to both the Diocese and the developer immensely. For instance, a HK\$ 1 increase in starting rent (from HK\$ 15.50 to 16.50) and a 1 percent increase in rental inflation (from 7 to 8 percent), are sufficient to increase the returns in Year 33 to both parties by some HK\$ 200 to 300 million (US\$ 26 to 38 million).

(3) The Diocese has the bargaining power to ask for a larger share of net incomes in the earlier years, say 30% instead of 10%. However, this will lengthen the time the developer will need to recoup his investment and reduce the years that the Diocese can participate on a 50/50 basis. Hence it seems advisable to let the developer recoup faster so as to increase their interest in the project.

Exhibit 4 Financial Analysis from Jones Lang Wootton

30th. April, 1986.



BISHOP'S HOUSE REDEVELOPMENT

I.L.7360.

DEVELOPMENT ASSUMPTIONS:

Diocese Centre (gfa)	124,230	:	Premium	\$19.00 m	:	Bldg costs low rise	\$43.20 m
Offices (gfa)	664,085	:	Rent Inflation (for period)	8%pa	:	high rise	\$332.55 m
Retail (gfa)	8,665	:	Capitalisation Rate	10%	:	Demo & site formation	\$14.29 m
Carpark (spaces)	300	:	Office rent (psf/pcr)	\$15.50	:	Prof fees	7%
Office efficiency	75%	:	Retail rent (psf/pcr)	\$25.00	:	Devel Profit (on costs)	20%
Retail efficiency	75%	:	Carpark (pcr)	\$1,500	:	Finance	10%
Site Area (sf)	94,206	:	Intl. office rent (psf/pcr)	\$20.29	:	Marketing etc..	\$9.50 m

DEVELOPMENT PROGRAMME:

Negotiation & planning	12 mths :
Demolition & site prep	6 mths :
Construction	24 mths :
Letting up	3 mths :
Total period	45 mths :

DIOCESE SPACE RETAINED:

2 office floors + penthouse	52,461 sf
Low-rise bldg	72,550 sf

DIOCESE CAPITAL ALLOWANCE:

6' fixed rent during devel	6.00 pa
Capital Allowance	103.00

VALUE OF SCHEME (HK\$m)

Office Space (less Diocese 2 floors & Penthouse)	\$92.64
Retail Space	\$1.95
Carparking	\$5.40

	\$99.99
less - voids allowance @ 4%	\$4.00

	\$95.99
Inflation over development period (pa) @ 8%	\$29.67

TOTAL NET INCOME ON COMPLETION (pa) \$125.66

CAPITAL VALUE YP @ 10% \$1,256.6

2. PREMIUM (HK\$)

Premium		\$19.00	
Interest	10%	\$24.11	
Developers Profit	20%	\$8.62	\$51.73

3. DEVELOPMENT COSTS (HK\$)

a. CONSTRUCTION:			
Demolition & site formation		\$14.29	
Low-rise construction	72,550	\$43.20	
High-rise construction + CP	725,211	\$332.55	\$390.04

Prof fees	7%		\$27.30

			\$417.34
b. FINANCE:			
Demolition & site formation	10%	\$3.42	
Construction		\$29.77	
Prof. fees		\$5.21	\$38.40

			\$9.50

			\$465.24
c. MARKETING:			

4. DIODESE CAPITAL ALLOWANCES (HK\$)

Capital Allowance		\$103.00	
Guaranteed Rent during devel.		\$15.00	
Interest	10%	\$43.75	\$161.75

5. TOTAL CAPITAL COST (HK\$)

			\$678.73
Interest on letting up period	10%	\$8.13	
Developers Profit on capital cost @	20%	\$137.37	145.51

TOTAL DEVELOPMENT COST

\$824.24

SENSITIVITY ANALYSIS:



A. LOW ESTIMATION OF RENTAL INCOME DISTRIBUTION - Year 1 net rental income \$15.50
- Rental inflation 8.00% pa

Year	Rental Income (HK\$ pa)	CHARGE 1		CHARGE 2		CHARGE 3		TOTAL DIOCESE RETURN (HK\$ pa)	TOTAL DEVELOPER RETURN (Ton inv)
		Diocese 10%or\$6a (HK\$ a) +Q142	Developer (HK\$ a) +Q148	Diocese 50% (HK\$ a) +R155	Developer (HK\$ a) +R156	Diocese 50% (HK\$ a) +Y159	Developer (HK\$ a) +S159		
1	\$125.66	\$12.57	\$102.20	\$5.45	\$5.45	\$19.01	\$107.25	15%	
3	\$158.30	\$15.83	\$102.20	\$20.13	\$20.13	\$35.96	\$122.23	17%	
6	\$199.41	\$19.94	\$102.20	\$38.63	\$38.63	\$58.58	\$149.85	19%	
9	\$251.19	\$25.12	\$102.20	\$61.94	\$61.94	\$87.06	\$164.14	22%	
12	\$316.43	\$31.64	\$102.20	\$91.30	\$91.30	\$122.94	\$193.49	27%	
15	\$398.61	\$39.86	\$102.20	\$128.28	\$128.28	\$168.14	\$279.47	32%	
18	\$502.14	\$50.21	\$102.20	\$174.86	\$174.86	\$225.08	\$277.06	38%	
21	\$632.55	\$63.26	\$102.20	\$233.55	\$233.55	\$296.61	\$325.75	46%	
24	\$796.83	\$79.68	\$102.20	\$307.48	\$307.48	\$387.16	\$469.67	56%	
27	\$1,003.78	\$100.38	\$102.20	\$400.60	\$400.60	\$500.98	\$592.60	69%	
30	\$1,264.47	\$126.45	\$102.20	\$517.91	\$517.91	\$644.76	\$629.11	85%	
33	\$1,592.87	\$159.29	\$102.20	\$665.69	\$665.69	\$824.98	\$767.89	105%	

LOW ESTIMATION OF RENTAL INCOME DISTRIBUTION - Year 1 net rental income \$15.50
- Rental inflation 7.00% pa

Year	Rental Income (HK\$ pa)	CHARGE 1		CHARGE 2		CHARGE 3		TOTAL DIOCESE RETURN (HK\$ pa)	TOTAL DEVELOPER RETURN (Ton inv)
		Diocese 10%or\$6a (HK\$ a) +Q142	Developer (HK\$ a) +Q148	Diocese 50% (HK\$ a) +R155	Developer (HK\$ a) +R156	Diocese 50% (HK\$ a) +Y159	Developer (HK\$ a) +S159		
1	\$114.37	\$11.44	\$102.20	\$0.37	\$0.37	\$11.81	\$102.56	14%	
3	\$144.07	\$14.01	\$102.20	\$11.95	\$11.95	\$25.96	\$114.15	16%	
6	\$181.49	\$17.16	\$102.20	\$26.14	\$26.14	\$43.30	\$126.34	18%	
9	\$228.63	\$21.03	\$102.20	\$43.52	\$43.52	\$64.55	\$145.72	20%	
12	\$288.00	\$25.76	\$102.20	\$64.81	\$64.81	\$90.57	\$167.01	23%	
15	\$362.80	\$31.56	\$102.20	\$90.90	\$90.90	\$122.45	\$193.10	26%	
18	\$457.02	\$38.66	\$102.20	\$122.85	\$122.85	\$161.51	\$225.35	31%	
21	\$575.72	\$47.36	\$102.20	\$162.00	\$162.00	\$209.36	\$264.20	36%	
24	\$725.24	\$58.01	\$102.20	\$209.96	\$209.96	\$267.97	\$312.16	43%	
27	\$913.59	\$71.07	\$102.20	\$268.71	\$268.71	\$339.78	\$370.90	51%	
30	\$1,150.87	\$87.06	\$102.20	\$340.68	\$340.68	\$427.74	\$442.87	61%	
33	\$1,449.76	\$106.65	\$102.20	\$428.84	\$428.84	\$535.50	\$531.04	73%	

B. HIGH ESTIMATION OF RENTAL INCOME DISTRIBUTION - Year 1 net rental income \$16.50
- Rental inflation 8.00% pa

Year	Rental Income (HK\$ pa)	CHARGE 1		CHARGE 2		CHARGE 3		TOTAL DIOCESE RETURN (HK\$ pa)	TOTAL DEVELOPER RETURN (Ton inv)
		Diocese 10%or\$6a (HK\$ a) +Q142	Developer (HK\$ a) +Q148	Diocese 50% (HK\$ a) +R155	Developer (HK\$ a) +R156	Diocese 50% (HK\$ a) +Y159	Developer (HK\$ a) +S159		
1	\$133.17	\$13.32	\$102.20	\$9.83	\$9.83	\$22.15	\$111.02	15%	
3	\$167.76	\$16.78	\$102.20	\$24.39	\$24.39	\$41.17	\$126.59	17%	
6	\$211.32	\$21.13	\$102.20	\$44.00	\$44.00	\$65.13	\$144.19	20%	
9	\$266.21	\$26.62	\$102.20	\$68.70	\$68.70	\$95.32	\$179.89	23%	
12	\$335.34	\$33.53	\$102.20	\$99.81	\$99.81	\$133.34	\$240.00	28%	
15	\$422.44	\$42.24	\$102.20	\$139.00	\$139.00	\$181.24	\$341.26	33%	
18	\$532.15	\$53.21	\$102.20	\$188.37	\$188.37	\$241.59	\$429.97	40%	
21	\$670.36	\$67.04	\$102.20	\$250.56	\$250.56	\$317.66	\$520.76	48%	
24	\$844.46	\$84.45	\$102.20	\$328.91	\$328.91	\$413.75	\$611.10	59%	
27	\$1,063.77	\$106.38	\$102.20	\$427.60	\$427.60	\$531.98	\$729.79	73%	
30	\$1,340.04	\$134.00	\$102.20	\$551.92	\$551.92	\$685.95	\$851.02	90%	
33	\$1,688.07	\$168.81	\$102.20	\$708.53	\$708.53	\$877.34	\$977.72	111%	

CHAPTER III

IDENTIFICATION AND EXAMINATION OF MAJOR ASPECTS OF PROJECT

This chapter identifies and examines the various aspects of the proposed development joint venture 'package' described in chapter II, and to suggest ways to improve them.

Identification of Major Aspects

The major elements that remain at this stage of tendering and which form the subject of investigation are:

- (1)Market analysis
- (2)Design considerations
- (3)Joint venture agreement
- (4)Financial arrangement

Other factors such as development approvals, lease modifications, site assembly and construction considerations are not important. The first two have been solved while the latter two have never been serious problems because the Diocese owns the land and that construction techniques, labor and material are generally in sufficient supply.

Examination of the Major Aspects
with Reference to the Present Scheme

Market Analysis

Reason for Importance

This is perhaps the most important aspect of the development project, particularly at this time and stage. The idea of building office accommodations was formed at a time when the real estate market was 'hot' and this was eight years ago. With the passage of time, the socio-economical conditions have changed drastically, and this in turn change the demand and supply patterns. Hence, a comprehensive re-evaluation of the market trends is needed. Should it reveal that there is not enough demand to support the office development, the Diocese can still change the nature of the development to suit the new market, or even to postpone the development if projections are convincingly pessimistic.

Critique

There is no comprehensive market analysis and research available to-date from Jones Lang Wootton because they were brought into the scene only after the Diocese had made the decision to build an office complex and also after an application to the Town Planning Board for such a development has been filed. Needless to say, the Diocese was reluctant to change the proposal as more time would be

consumed. Hence, the present office tower development is simply a continuation of the original idea in 1978. Thus, a dangerous situation may arise should the original perception prove to be no longer applicable to today's market conditions.

Nevertheless, the office development option deserves skepticism today as a competitive market and for certain sub-sectors, a sluggish market, exists for office accommodations. An overall vacancy of 11 percent applies to office space and 14 percent exists for all types of office accommodations in Central District (the district the site is located) while 11 percent applies to Grade A office space in Central District.

Of more importance is the forecast that some 807,000 sq.ft. of Grade A office accommodations will be completed in Central District by 1987 and probably more will be finished in the following two years (the proposed project is scheduled to be completed in 1990 in which several major high class office complexes will be completed and put on the market. More notable ones are the Bank of China Building and the third tower of the Exchange Square. The total square footage of these major ones will be around 1.5m sq.ft.) This means that should the market get strong, the extra demand may already have been satisfied by the new completions in 1987 and those thereafter (and also by the 68,000 sq.ft. Grade A office space due in 1986). Should it become weaker, a much keener competition will result and vacancy may be high. There is no published projected data on the net

absorption for years 1987-1990. However, with reference to past patterns, an estimate of 2m sq.ft. seems reasonable. Yet this figure comprises demand for all classes of office space. Hence, assuming that one-half of it is high quality office space, i.e. 1m sq.ft., the total floor area provided by the major office projects as mentioned, without counting in this project, will have already exceeded the demand by 500,000 sq.ft.

Furthermore, the general opinion in the business and banking communities is that a period of no growth, or even economic contraction, will start in three years' time in Hong Kong and will reach the bottom in the 1990-92 period both due to local and global circumstances. Since economic cycles affect the employment growth rate, which in turns affects the demand for office accomodations, an economically depressive period will bring little or no growth in employment, and hence fewer, if any, companies will be thinking of office expansion as there are no 'extra' staff to accomodate. Thus, the office complex may have leasing problems.

Again, if one takes the cyclic pattern of office demand and supply, the absorption rate is expected to be high for years 1986-1988 and will decrease starting 1989 as major developments are completed. Overall, putting the project into the market in 1990 seems a big 'bet' under all these projections of low demand, business recession, and over-supply.

Furthermore, office property being developed in the

Tsimshatsui District in Kowloon Peninsula is expected to attract some of the existing tenants in Central District (Please refer to professional commentary and statistical tables in Exhibit 5).

Improvement

Despite the gloomy picture, the question now seems to be to find ways which will attract existing tenants to our new complex with the assumption that this present proposal is to be built anyway. Hence, in order to secure a steady cash flow income for the Diocese, the development should be targeted towards the multi-national corporations as they are often stable and financially reliable clients willing to enter into long-term tenant agreements. Further, these corporations may find the site attractive, not only because of its proximity to the Central District, but also for its proximity to governmental offices. Hence, to capture the heart of such clients, the office accommodations should be constructed to the highest specifications available (e.g. to the standard of the recently completed Exchange Square Complex or the future Bank of China). Items like speedier elevators, computerised services systems and security controls, better and more flexible telephone and electrical layout etc., though seem to be minute matters, are sometimes the key factors which convince the corporation heads to prefer one place to another. Though construction costs will be raised, however, these are marginal in view of the

The Office Market

With regard to the office market, while demand still appears generally strong, a significant amount of new floor space will enter the market in 1985. This is concentrated in the traditional office district in Central on Hong Kong Island where 208,000 square metres of new Grade A office space will come on stream in 1985. An interesting feature of the office market has been the increasing popularity of the Kowloon area across the harbour which has been traditionally a tourist, hotel and retail area.

Following a flurry of development in the early 1980's, at present, there is very little vacant office space in this area with almost no new supply forecast in the 1985 period. An increase in absorption can therefore be expected in the traditional office areas on Hong Kong Island where the bulk of the new supply is located. In these circumstances, take-up of Grade A accommodation in Central is likely to be greater than the average levels of around 54,000 square metres per year that have been experienced in the recent past. It is forecast that take-up in the Central and Fringe areas of Central could be in the order of 150,000 square metres in 1985. For 1986, only a very small amount of new office space is forecast for the Central area. However, given the likely surplus of office space at the end of 1985 on Hong Kong Island, take-up in 1986 is estimated to be in the order of 110,000 square metres on Hong Kong Island, such that a more balanced supply/demand picture will emerge by 1987.

At the present time, office rents at HK\$97-HK\$108 per square metre per month in Kowloon compare favourably with prevailing rents in Central of around HK\$170 per square metre per month. But while rents in Tsimshatsui can be expected to firm those on Hong Kong Island are likely to remain competitive in the face of major new increases in supply.

Industrial Property

The industrial property market has remained relatively strong throughout the recent so-called recession with the result that there is now some pressure on industrial floor space in certain key areas, particularly around port facilities and container terminals. Industrial prices have fallen, but this has allowed manufacturers to become competitive again. Prices and rents in certain locations have recently been increasing.

Demand for industrial floor space reflects very closely the performance of the U.S.A. economy. In particular, any trends or events in California's "Silicon Valley" have almost immediate effects in the Hong Kong electronics industry.

Exhibit 5a Professional Commentary

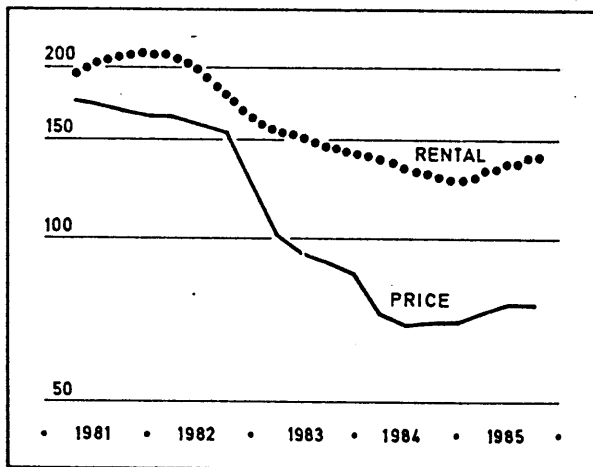
OFFICES

Supply, take-up and vacancy

	('000 m ²)			%*
	Supply	Take-up	Vacancy	
1981	319	203	302	11.0
1982	546	253	573	17.6
1983	591	371	793	20.6
1984	219	449	561	13.8
1985	308	385	484	11.1
1986	[72]			
1987	[183]			

* Vacancy at the end of the year, expressed as a % of total stock.
 [] Forecast.

Rental and price indexes



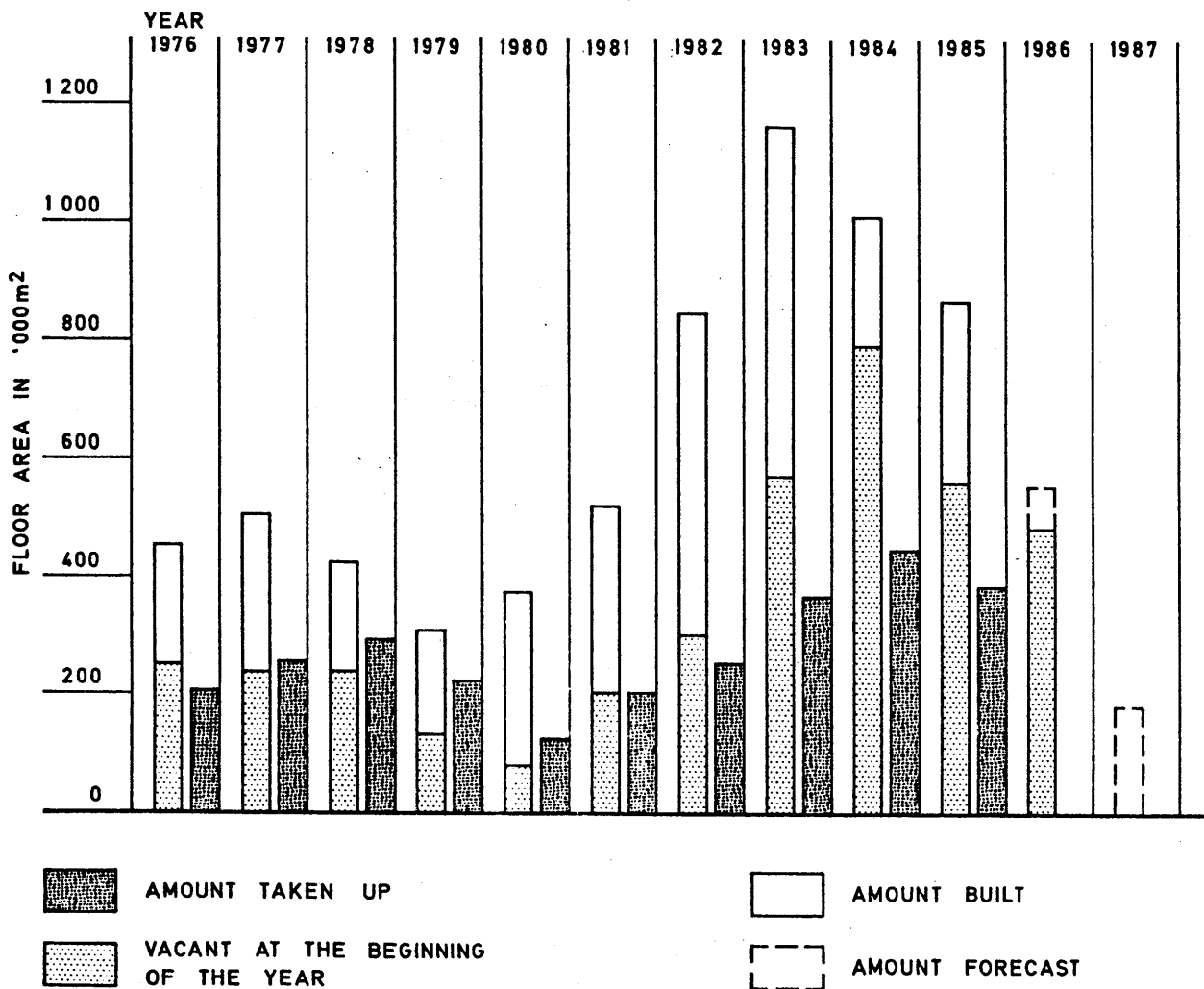
Rental Index - A, B and C grades.
 Price Index - B and C grades only.

The supply of new office space in 1985 at 308 000 m² showed an increase of 41% over the 1984 figure. New grade A space totalled 205 000 m² and of this 163 000 m² was in Central. Although take-up in 1985 was 14% below the record figure for 1984, it exceeded the amount completed during the year by 77 000 m². In consequence, the overall vacancy rate fell from 13.8% at the end of 1984 to 11.1% at the end of 1985. The most significant fall was in Tsim Sha Tsui, where the year-end vacancy rate was only 2.9% compared with 10.9% at the end of 1984. Roughly 32% of the total vacant space was in the grade A sector.

The amount of accommodation forecast for completion in 1986 and 1987 is the lowest for many years, thus further tightening the supply situation. However, the situation should improve in 1988 when several large developments are due for completion.

The office quarterly rental index, which includes all grades of offices, rose by 11% over the year reversing the downward trend over the past three years. The quarterly price index, which excludes grade A accommodation, is based on fewer recorded transactions than the rental index. However, the index for the 4th Quarter 1985 suggests that prices have risen to a larger extent than rents since the end of 1984.

OFFICES — TAKE-UP, SUPPLY AND VACANCY



Notes

The 'Amount Taken Up' is the net increase in occupied floor space over the year.

The 'Amount Built' is the total floor area built. No adjustment has been made for demolitions.

Exhibit 5b Statistical Tables

TABLE 20

OFFICES - STOCK AND VACANCY BY GRADE

	Stock at the end of 1985 (m ²)				Amount vacant at the end of 1985 (m ²)				% vacant			
	A	B	C/D	Total	A	B	C/D	Total	A	B	C/D	Total
West	-	35 000	9 900	44 900	-	20 100	1 300	21 400	-	57.4	13.1	47.7
Sheung Wan	77 600	239 500	295 200	612 300	2 500	32 300	39 700	74 500	3.2	13.5	13.4	12.2
Central	908 200	229 600	154 400	1 292 200	101 000	69 100	10 500	180 600	11.1	30.1	6.8	14.0
Wan Chai	330 100	240 200	171 300	741 600	19 400	28 900	23 800	72 100	5.9	12.0	13.9	9.7
Mid-levels/Pok Fu Lam	-	-	3 900	3 900	-	-	-	-	-	-	-	-
Causeway Bay/Tai Hang	203 500	42 500	29 800	275 800	12 100	6 900	2 500	21 500	5.9	16.2	8.4	7.8
North Point	65 100	26 100	2 800	94 000	1 500	21 100	800	23 400	2.3	80.8	28.6	24.9
Shau Kei Wan	-	11 700	3 400	15 100	-	9 100	-	9 100	-	77.8	-	60.3
Aberdeen	-	500	7 900	8 400	-	-	3 300	3 300	-	-	41.8	39.5
HONG KONG	1 584 500	825 100	678 600	3 088 200	136 500	187 500	81 900	405 900	8.6	22.7	12.1	13.1
Tsim Sha Tsui	459 800	162 100	123 000	744 900	7 300	4 700	9 700	21 700	1.6	2.9	7.9	2.9
Yau Ma Tei	51 700	110 300	60 100	222 100	2 700	3 700	9 500	15 900	5.2	3.4	15.8	7.2
Mong Kok	36 400	37 300	14 900	88 600	-	4 400	1 200	5 600	-	11.8	8.1	6.5
Hung Hom	41 600	1 100	6 200	48 900	500	-	1 600	2 100	1.2	-	25.8	4.3
Ho Man Tin	-	4 500	1 600	6 100	-	-	-	-	-	-	-	-
KOWLOON	589 500	315 300	205 800	1 110 600	10 500	12 800	22 000	45 300	1.8	4.1	10.7	4.1
Cheung Sha Wan	1 900	11 100	22 600	35 600	-	1 000	400	1 400	-	9.0	1.8	3.9
Kowloon Tong	-	2 600	500	3 100	-	-	-	-	-	-	-	-
Kowloon City/Wong Tai Sin	-	13 100	9 000	22 100	-	-	3 000	3 000	-	-	33.3	13.6
Ngau Tau Kok/Kwun Tong	12 500	-	1 800	14 300	-	-	-	-	-	-	-	-
Lei Yue Mun	-	1 800	-	1 800	-	1 800	-	1 800	-	100.0	-	100.0
NEW KOWLOON	14 400	28 600	33 900	76 900	-	2 800	3 400	6 200	-	9.8	10.0	8.1
Kwai Chung/Isuen Wan	36 100	3 600	-	39 700	500	900	-	1 400	1.4	25.0	-	3.5
Tuen Mun	-	6 400	-	6 400	-	5 400	-	5 400	-	84.4	-	84.4
Yuen Long	10 900	14 500	100	25 500	7 400	9 500	100	17 000	67.9	65.5	100.0	66.7
Fanling/Sheung Shui	-	1 100	-	1 100	-	400	-	400	-	36.4	-	36.4
Tai Po	-	5 300	600	5 900	-	2 200	200	2 400	-	41.5	33.3	40.7
Sha Tin	-	21 500	-	21 500	-	-	-	-	-	-	-	-
NEW TERRITORIES	47 000	52 400	700	100 100	7 900	18 400	300	26 600	16.8	35.1	42.9	26.6
OVERALL	2 235 400	1 221 400	919 000	4 375 800	154 900	221 500	107 600	484 000	6.9	18.1	11.7	11.1

OFFICES - FUTURE BY AREA

TABLE 23

(m²)

	(1986)				(1987)			
	A	B	C/D	Total	A	B	C/D	Total
West	-	-	200	200	-	-	-	-
Sheung Wan	7 300	9 800	19 400	36 500	-	11 700	10 100	21 800
Central	6 500	2 100	2 400	11 000	77 100	2 500	-	79 600
Wan Chai	-	-	3 300	3 300	-	-	1 500	1 500
Causeway Bay/Tai Hang	-	1 600	-	1 600	4 900	-	1 700	6 600
North Point	2 500	-	-	2 500	-	8 100	3 000	11 100
HONG KONG	16 300	13 500	25 300	55 100	82 000	22 300	16 300	120 600
Isim Sha Tsui	-	5 300	4 300	9 600	28 900	1 400	-	30 300
Yau Ma Tei	-	-	4 100	4 100	-	6 300	2 300	8 600
Mong Kok	-	-	400	400	-	-	1 100	1 100
KOWLOON	-	5 300	8 800	14 100	28 900	7 700	3 400	40 000
Ngau Tau Kok/Kwun Tong	-	2 800	-	2 800	-	-	-	-
NEW KOWLOON	-	2 800	-	2 800	-	-	-	-
Sha Tin	-	-	-	-	-	11 000	11 500	22 500
NEW TERRITORIES	-	-	-	-	-	11 000	11 500	22 500
OVERALL	16 300	21 600	34 100	72 000	110 900	41 000	31 200	183 100

increased rentals that can be commanded and the type of tenants that can be attracted, particularly since Hong Kong does not have an overwhelming supply of such quality space.

Design Considerations

Reason for Importance

This aspect relates to the market analysis research. The design of the development, or 'product', should respond to the market needs revealed by the market research and capturing that potential demand (or users) depends on how well the final built product suits the requirements of the potential users. Hence, market analysis and design are complimentary to each other.

Critique

To examine the suitability of the present design, it is necessary to view the proposed product from three different angles:

- (1) Aesthetic.
- (2) Environmental.
- (3) Practical Usage.

Aesthetic

While it is appreciated that the circular shape design is unique for the area, the question of visual quality remains debatable. Major criticisms as follows:

- (a) The circular office tower is disproportionately bulky

and too massive visually. It is true that traditionally building design in Hong Kong does not care very much for 'compatibility', however, whether this is a good reason for turning a blind eye on the issue is debatable. Moreover, with the rising standards of living and education, people will want a higher quality of design and the 'social responsibility', which includes aesthetic responsibility, of the parties developing the site will be questioned. To maintain a goodwill among the community, particularly for the Diocese, a more pleasant mass (not necessarily less floor area) needs to be produced. Furthermore, even if an architectural image is to be achieved, it does not follow that it has to be circular. (The architect has indicated that he would have not designed a circular tower were it not required by the Town Planning Board).

(b) The circular plan shape bears little relationship to the attached low to medium-rise church buildings. Even if the circular tower is to be built, a more 'friendly' architectural image is essential. This may be achieved by e.g. setting the tower back along Lower Albert Road and creating a landscaped park area whereby the office workers and nearby residents can enjoy or use as a passageway up to Upper Albert Road.

(c) The employment of glass wall panels for the facade may pose a 'texture' problem for the existing area and seems to be influenced more by the current fashionable trend in using reflective glass rather than architectural rationale. The

claim of a circular reflective glass building having little impact on surroundings because of its featureless characteristic is viewed with suspicion as experience tells that is dependant on how one plans the site, i.e., one cannot simply say a building is invisible because it uses reflective glass for its exterior.

Environmental

The present design poses several potential environmental problems to the area as well:

(a) The reflective glass will increase the temperature in the surrounding as heat is generated when light, which would otherwise be absorbed if the building is not finished in reflective glass system, is deflected from its surfaces, despite the circular shape may reduce the intensity. This implies a warmer street for pedestrians and office workers and possibly higher costs of ventilation and air-conditioning for nearby buildings. There is even the possibility of being legally prosecuted by the adjacent owners, especially since Hong Kong is starting to resemble the advanced countries in terms of the frequency of civil litigation being motioned.

(b) By massing the bulk of the allowed plot ratio (i.e. the Floor Area Ratio of the USA) in one huge building mass, the existing micro-climate of the streets will be changed and certain parts will remain in a constant shadow area. Unhygenic spots may be created.

(c) With the increased pedestrian and concentrated traffic

flow, certain roads and accesses need to be widened. However, this may spoil the tranquility of the adjacent Botanical Gardens with all the added traffic and roadworks.

(d) More energy for air-conditioning/heating will have to be consumed as reflective glass may not be as effective a 'conductive' heat barrier as 6-inch brick or concrete walls.

Practical Usage

Most of the drawbacks under this section derive from the circular shape of the design.

(a) The circular shape makes it harder generally for the tenants to utilise the space.

(b) The irregular layers of the carpark facility may produce inconvenience as some parking spaces fall into odd corners and thus are cramped.

(c) It is doubtful that the future shop areas will have sufficient patronage to ensure their survival (as apart from the office workers who will work there, few ordinary pedestrians need to pass through the place). Moreover, keen competition exists as numerous shopping malls are a short distance away down the district from the site.

(d) The access along Upper Albert Road may present traffic hazards as this road is a busily travelled two-way road.

(e) Maintenance of certain 'left-over' space e.g. the sloping areas between the Diocesan Accommodation and the office tower, requires continuous caring and inspection. This will increase running costs.

Not everyone will deem the design as unpleasant, and some people are highly tolerant of its environmental impacts. However, with its circular shape and certain awkward spaces that the design incorporates, the complex will not be able to attract the amount of tenants it needs in order to survive under keen competition.

Improvement

The assumption to be made here is that while the present design is seen as questionable, there are no other alternatives but to enhance as much as possible the present form.

To solve the problem of visual bulkiness, there are basically two ways:

- (i) To increase the height of the tower.
- (ii) To decrease the diameter of the tower.

However, both solutions present new problems as follows:

(i) The first solution of increasing the height requires resubmission of the proposal to the Town Planning Board as this will exceed the height limitation, which is arbitrarily based on the top level of the water tank on top of a nearby commercial building, the New World Tower. More time will be needed then for further approvals.

(ii) The second solution of reducing the diameter produces a smaller curvature for the exterior walls of the building, thereby increasing the intensity of the interior designing problems of circular offices. Custom-made furniture will be

required or otherwise inches-wide gaps may appear between the furniture and internal surface of the exterior walls. This induces both uneconomical usage of floor space and visual distortions. (The amount of reduced floor area brought about by the reduced diameter, given that the height of the building remains the same, is assumed to be taken up elsewhere in the complex).

Hence, there is little one can do to bring about a significant improvement in terms of architectural design at present. Nevertheless, the option of increasing the height is relatively better than the one to decrease the diameter because less practical problems are created, e.g. by the curvature of the wall. In addition, if one takes a longer view, say fifteen or twenty years from now, one can see the 'possibility' of gradual increase in demand for office space, especially if the China Market, which a lot of people are eyeing at the moment, really flourishes and that Hong Kong becomes an even more important trading center and entreport. To allow for this future probable demand, it is suggested that a stronger than required structure be built, so that should in future the demand for office space be increased substantially, one can simply add on a few more storeys without having to rebuild the foundations again. The extra costs to build a stronger foundation are minimal in view of such a scale of development and the potential benefits. Further, the chance of succeeding in getting a modified approval to build higher will be better as the Town

Planning Board may have a new group of members and overall economic growth may be strong enough to support such claims for higher densities by then. Thus, instead of narrowing the diameter of the tower, the height should be increased to provide a better proportion in future when the potential market is realised.

Joint Venture Agreement

Reason for Importance

Any agreement which is drafted by one party to the other is bound to be biased favourably towards the party which does the drafting. Hence, it is not a surprise if the drafted document produced by Jones Lang Wootton on behalf of the Diocese is found to be favoring the Diocese, particularly when one takes into account of the non risk-taking (or risk-adverse) attitude of the Church administration.

However, it is exactly because of the 'built-in' bias that special care and attention have to be given in producing the terms of the joint venture agreement as:

(a) one can easily become 'over-smart' in producing an agreement proposal which is so biased towards the proposer that it simply drives all the prospective developers away. Even if a few would submit a bid, they are likely to price it higher (i.e. getting a higher profit sharing ratio to compensate for their disadvantaged position) and in turn this will reduce the investment return to the Diocese.

(b) The agreement also dictates the legal and business relationships between the Diocese and the prospective developer. A reasonable balance of responsibilities and rights has to be achieved as while it may be detrimental to the Diocese to grant too much discretion to the developer in project management issues, involving the Diocese in too many day-to-day decisions may also suffocate the chance for an efficient working relationship.

Hence, the joint venture agreement must be a document that will induce a favorable tender from developers by giving them sufficient incentives and control over the project (thereby utilising their expertise). On the other hand, it must also retain certain rights and controls over the developer so that the Diocese will feel comfortable with the agreement.

Critique

The present agreement is understandably in favor of the Diocese. It guarantees a steady income flow for the Diocese and the Diocese will benefit further should profits be made. Moreover, the Diocese has the right to be informed and to participate in making major decisions concerning development, construction standards, and leasing.

Despite the biases, it is a reasonably viable document taking into account the fact that without such biases, the Diocese will not be interested in a joint venture as the administration may not feel comfortable with lesser control

and benefits from the project. The agreement dictates the broad principles and relationships of the parties rather than detail working functions.

Notwithstanding that the present agreement is sufficient for inviting tenders from developers and the common belief that no written agreement, no matter how well it is drafted, will work efficiently without genuine cooperation and trust between the contracting parties, amendments and improvements in the following areas will make it a better document still, if not an ideal one:

(a) Maintenance of property after development completion : while there is a sufficiently detail specification for construction works, the quality of future building management expertise and standards are not mentioned except for a broad statement that both parties are to jointly liaise and maintain. Hence, more stipulation is needed here, especially in:

(i) Percentage of annual rental income to be set aside for building maintenance and refurbishments.

(ii) Schedule of replacements for building services systems and major renovations.

(iii) Responsibilities of each party i.e. which parts of the development are to be jointly maintained and which are the sole responsibility of either party.

(iv) The standards of expertise and maintenance technologies.

Emphasis must be made to say that the level of building maintenance in Hong Kong is relatively low (e.g. when

compared with U.S. buildings). One reason for this is that running costs in Hong Kong are relatively cheap and that a lot of real estate are developed for sale (hence most developers lack a knowledge of sophisticated building maintenance as this responsibility is often shuffled to the buyers.) Nevertheless, as the world fuel resources become scarcer and the local office market competition gets keener, efficient building maintenance and management will increase in importance.

(b) The HK\$ 103 million (US\$ 13 million) payment for temporary accommodations in one lump sum may work to the disadvantage of the Diocese as fewer choices of developers will result since at present only a handful of developers are financially capable to raise a loan of this size to be spent in a short period. Adding to this, the amount is not explained nor a breakdown is given, perhaps due to the Diocese's desire to keep its expenditure private. Yet this may create distrust between the parties.

(c) A lack of clear indication exists as to which party will have the final decision on future matters, or whether joint consensus is required, and the method for resolving disagreement (e.g. arbitration). This is especially important for future contracts with a third party, like the Construction Contractor. Is he to follow the request of the Diocese, the developer or even the architect should there be diversity in instructions?

Improvement

The following improvements can be adopted:

- (1) More detailed clauses should be included, especially in the area of rights and responsibilities. The developer is to have more control of technical matters while the Diocese is to be consulted on leasing and legal issues.
- (2) More thought should be given to the quality of maintenance as nowadays the the big corporations regard an efficiently run building as an important criteria for keeping overheads low for the same quality and class of buildings.
- (3) Reconsider the total amount of HK\$ 103 million required from the developer as it may create an excuse, morally if not legally, for the developer to shift, rightly or wrongly, part of the responsibilities to the Diocese should the project go under. Thus, either a reduced sum or an installment payment plan should be worked out to facilitate the compensation and relocations, temporarily or otherwise, of the church entities.

Financial Arrangement

Reason for Importance

There are two parts to this aspect:

- (a) Raising the required loan from banks;
- (b) Profit-sharing between the Diocese and developer.

Raising the capital is less important here because first, it is the sole responsibility of the prospective

developer to provide the development funds and second, no developer is expected to bid for the project unless he or she has the promised backing of a financial or banking institution.

On the other hand, the profit-sharing structure is vital because first, it affects the return to both the Diocese and developer. Second, different ratios produce different levels of incentives to developers thereby influencing the attractiveness of tenders. Third, the ratio will also indirectly affect a banking institution's decision to lend.

Critique

As said before, there is no fixed formula for the sharing of excess income except for the compensatory payments.

This is a wise decision especially in today's conditions as a greater discretion in profit-sharing proposal by prospective developers will generate more interest among the developers to participate in the tendering procedure.

The only defect here is that no comprehensive mock-up version of a typical bid has been prepared by the real estate consultant, as this may be valuable in monitoring the bidding results and will certainly be useful in future negotiations with developers since the mock version can be used as a guide.

Nevertheless, development cost and sensitivity analyses have been provided by Jones Lang Wootton and while these may be sufficient for getting a general idea of the financial involvement and implications of the project, it will be a much better document if the following improvements are made to the presentation.

Improvement

- (1) More annotations and notes should be given to indicate the sources and/or content of the figures.
- (2) Explanations should be provided to certain figures, especially on how they are derived, e.g., the interest figures, the net income figure etc.
- (3) Sensitivity analysis for other influencing elements such as vacancy, expected debt/equity ratio, maintenance etc. apart from rental appreciation and construction costs.
- (4) A simple cash flow analysis should be provided to see the flow of income and expenses over time. This is particularly vital in seeking out periods where a tight cash flow emerges, thereby increasing the possibility of foreclosure. (It can be argued here that the Diocese is less interested in whether the developer is being foreclosed or not, as the Diocese can take over the developer's part should defaults occur. However, this is seen as a selfish and short-sighted view because a bankrupt developer can no longer afford to pay the Diocese, thereby terminating the source of funds for carrying out the church activities. Secondly, the foreclosure may bring forth complicated legal

uncertainties and it is possible that the Diocese may lose the possession of the foreclosed portion of the property to the creditors. In any event, maintaining an empty tower is costly).

For illustration purpose, a cash flow analysis has been done to demonstrate the income and expense accounts over time and the effects imposed by various degrees of rentals, vacancy etc. (in Exhibit 6). Findings as follows:

(1) Rental inflation has only a narrow margin. A small drop of 3% from the expected 8% to 5% level is enough for a negative Net Present Value to show up in the developer's proforma.

(2) However, both expenses and loan interest have to reach substantial level of increment before they affect the income adversely.

(3) Vacancies, in any period, seem less influential. However, if the vacancy remains low long-term, say 15%, then the Net Present Value for the developer may not be attractive enough to form an agreement.

(4) Nevertheless, negative Net Present Values will show if the rental does not increase favorably (which depends on Hong Kong economy) while expenses inflate more drastically (particularly energy items whose prices are sometimes not related to local conditions but global inflation). The break-even level is when the percentage of expense inflation does not exceed that for rentals by more than half, for instance, when expenses inflate at 15%, rentals have to be

at least increased by 10%.

The above observations are made by isolating the various components and recording their effects on the developer's return. However, in real life, all components act together. Thus, both worst possible and best possible scenerios have also been provided for illustration purposes. The estimated worst and best returns for the developer in terms of Net Present Values (after tax) are a negative HK\$ 167m (-US\$ 21m) and HK\$ 323m (US\$ 41m) respectively.

Exhibit 6a Cash Flow Analysis of Author

File:thscf
 CASH FLOW CHART : LOT NO. 7360 REDEVELOPMENT (OFFICE COMPLEX)

GENERAL INFORMATION:

Income:					
Office Area=(A)	664,085 sq.ft.	Gr.Rent(Mth)=(D)	\$23.00 per sq.ft.	Inflation=(G)	8.00%per annum
Retail Area=(B)	8,665 sq.ft.	Gr.Rent(Mth)=(E)	\$30.00 per sq.ft.		
Carpark=(C)	300 no.	Gr.Rent(Mth)=(F)	\$1,500.00 per no.		
Vacancy:					
1st 5 years=(H)	25.00%	Leasing Yr=(A1)	50.00%		
6-10th year=(I)	10.00%				
After 10th yr=(J)	5.00%				
Expenses:					
Oper(Mth)=(K)	\$2.00 per sq.ft.	Inflation=(N)	8.00%per annum		
Mgt(Mth)=(L)	\$1.00 per sq.ft.				
Tax(Mth)=(M)	\$1.50 per sq.ft.				
Development:					
Construction=(O)	\$390,000,000	Financing=(R)	80%of Const. Cost		
Prof. Fees=(P)?%	\$27,300,000	Interest=(S)	10.00%per annum		
Marketing=(Q)	\$9,500,000	Term=(T)	20 years		
Others:					
Premium=(U)	\$19,000,000	Diocese/Developer Ratio:			
Allowances:					
Capital=(V)	\$103,000,000 in 2 payments (\$10M then rest)	Before 15/Yr=(Y)	10.00%to Diocese		
Minimum Rent=(W)	\$6,000,000 per year to the Diocese	After 15/Yr=(Z)	50.00%to Diocese		
Yrs to recoup=(X)	15 years after completion				

Total development time = 45 months/4 years
 The office tower is assumed to be operational after 3 years of construction.
 Leases are taken to be of 5 years' term.
 The developer is assumed to have usage of the tower for 35 years after completion.
 Replacement costs are included in management rates.
 Lease turnover costs are negligible.
 Corporation tax can be, for simplicity, taken as 17%.
 The Diocese is not taxed because of its non-profit nature.
 All expressed in Hong Kong Currency : HK\$ 7.80 = US\$ 1.00

ITEMS	SUB-ITEMS	1987 -3	1988 -2	1989 -1	1990 0	1991 1	1992 2	1993 3	1994 4
INCOME									
Office	Gross Rent (Grth) Annual Income				\$23.00 \$183,287,460	\$23.00 \$183,287,460	\$24.84 \$183,287,460	\$26.83 \$183,287,460	\$28.97 \$183,287,460
Retail	Gross Rent (Grth) Annual Income				\$30.00 \$3,119,400	\$30.00 \$3,119,400	\$32.40 \$3,119,400	\$34.99 \$3,119,400	\$37.79 \$3,119,400
Carpark	Gross Rent (Grth) Annual Income				\$1,500.00 \$5,400,000	\$1,500.00 \$5,400,000	\$1,620.00 \$5,400,000	\$1,749.60 \$5,400,000	\$1,869.57 \$5,400,000
Total					\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860
Leasivacancy					50.00%	25.00%	25.00%	25.00%	25.00%
Effective Income					\$95,903,430	\$143,855,145	\$143,855,145	\$143,855,145	\$143,855,145
LESS:EXPENSES									
Operating	Rate Annual Payment				\$2.00 \$16,146,000	\$2.00 \$16,146,000	\$2.16 \$17,457,680	\$2.33 \$18,832,694	\$2.52 \$20,339,310
Management	Rate Annual Payment				\$1.00 \$8,073,000	\$1.00 \$8,073,000	\$1.08 \$8,713,840	\$1.17 \$9,416,347	\$1.26 \$10,169,635
Tax	Rate Annual Payment				\$1.50 \$12,109,500	\$1.50 \$12,109,500	\$1.62 \$13,078,260	\$1.75 \$14,124,521	\$1.89 \$15,254,482
Total					\$36,328,500	\$36,328,500	\$39,234,780	\$42,373,562	\$45,763,417
NET OPERATING INCOME					\$59,574,930	\$107,526,645	\$104,620,365	\$101,481,583	\$98,091,698

Developer's Cash Flow:

Premium	\$19,000,000								
Capital Allowance	\$10,000,000	\$93,000,000							
Construction etc.	\$106,700,000	\$106,700,000	\$106,700,000	\$106,700,000					
Share of NOI or Fin. payment to Diocese Debt Service	\$0	\$0	\$6,000,000	\$3,574,930	\$96,773,981	\$94,158,329	\$91,333,424	\$88,282,538	
Total	\$135,700,000	\$199,700,000	\$112,700,000	\$83,125,070	\$60,126,578	\$87,510,926	\$84,686,021	\$81,635,125	
Before Tax: Net Present Value (15%) Internal Rate of Return	\$105,126,622	US\$ Equivalent=	\$13,477,772						
17.15%									
After Tax:17% Net Present Value (15%) Internal Rate of Return	\$135,700,000	\$199,700,000	\$112,700,000	\$83,125,070	\$49,905,059	\$47,734,068	\$45,389,398	\$42,857,154	
\$145,579,179	US\$ Equivalent=	\$18,663,997							
15.51%									

Diocese's Cash Flow:

Capital Allowance	\$10,000,000	\$93,000,000							
Share of NOI or minimum allowance	\$0	\$0	\$6,000,000	\$6,000,000	\$10,752,665	\$10,462,037	\$10,148,158	\$9,809,170	
Total	\$10,000,000	\$93,000,000	\$6,000,000	\$6,000,000	\$10,752,665	\$10,462,037	\$10,148,158	\$9,809,170	
Net Present Value (15%)	\$277,967,039	US\$ Equivalent=	\$35,636,800						

1995 5	1996 6	1997 7	1998 8	1999 9	2000 10	2001 11	2002 12	2003 13	2004 14
\$31.29 \$183,287,460	\$33.79 \$269,309,411	\$36.50 \$269,309,411	\$39.42 \$269,309,411	\$42.57 \$269,309,411	\$45.98 \$269,309,411	\$49.66 \$395,703,879	\$53.63 \$395,703,879	\$57.92 \$395,703,879	\$62.55 \$395,703,879
\$40.81 \$3,119,400	\$44.08 \$4,583,422	\$47.61 \$4,583,422	\$51.41 \$4,583,422	\$55.53 \$4,583,422	\$59.97 \$4,583,422	\$64.77 \$6,734,551	\$69.95 \$6,734,551	\$75.55 \$6,734,551	\$81.59 \$6,734,551
\$2,040.73 \$5,400,000	\$2,203.99 \$7,934,372	\$2,380.31 \$7,934,372	\$2,570.74 \$7,934,372	\$2,776.40 \$7,934,372	\$2,998.51 \$7,934,372	\$3,238.39 \$11,658,195	\$3,497.46 \$11,658,195	\$3,777.26 \$11,658,195	\$4,079.44 \$11,658,195
\$191,806,860 25.00%	\$281,827,205 10.00%	\$281,827,205 10.00%	\$281,827,205 10.00%	\$281,827,205 10.00%	\$281,827,205 10.00%	\$414,096,625 5.00%	\$414,096,625 5.00%	\$414,096,625 5.00%	\$414,096,625 5.00%
\$143,855,145	\$253,644,484	\$253,644,484	\$253,644,484	\$253,644,484	\$253,644,484	\$393,391,793	\$393,391,793	\$393,391,793	\$393,391,793
\$2.72 \$21,966,455	\$2.94 \$23,723,771	\$3.17 \$25,621,673	\$3.43 \$27,671,407	\$3.70 \$29,885,119	\$4.00 \$32,273,929	\$4.32 \$34,858,003	\$4.66 \$37,646,643	\$5.04 \$40,658,375	\$5.44 \$43,911,045
\$1.36 \$10,983,227	\$1.47 \$11,861,886	\$1.59 \$12,810,836	\$1.71 \$13,835,703	\$1.85 \$14,942,560	\$2.00 \$16,137,964	\$2.16 \$17,429,002	\$2.33 \$18,823,322	\$2.52 \$20,329,187	\$2.72 \$21,935,522
\$2.04 \$16,474,841	\$2.20 \$17,792,828	\$2.38 \$19,216,293	\$2.57 \$20,753,555	\$2.78 \$22,413,839	\$3.00 \$24,206,947	\$3.24 \$26,143,502	\$3.50 \$28,234,982	\$3.78 \$30,483,781	\$4.08 \$32,933,284
\$49,424,523	\$53,378,485	\$57,648,764	\$62,260,665	\$67,241,518	\$72,620,840	\$78,430,507	\$84,704,947	\$91,481,343	\$98,799,851
\$94,430,622	\$200,265,999	\$195,995,720	\$191,383,819	\$186,402,966	\$181,023,645	\$314,961,287	\$308,666,846	\$301,910,480	\$294,591,943
\$84,987,560 \$36,647,403	\$180,239,399 \$36,647,403	\$176,396,148 \$36,647,403	\$172,245,437 \$36,647,403	\$167,762,669 \$36,647,403	\$162,921,280 \$36,647,403	\$283,465,158 \$36,647,403	\$277,818,162 \$36,647,403	\$271,719,405 \$36,647,403	\$265,132,749 \$36,647,403
\$48,340,157	\$143,591,996	\$139,748,745	\$135,598,034	\$131,115,267	\$126,273,877	\$246,817,755	\$241,170,759	\$235,072,002	\$228,485,346
\$40,122,330	\$119,181,357	\$115,991,459	\$112,546,369	\$108,825,671	\$104,807,318	\$204,868,737	\$200,171,730	\$195,109,762	\$189,642,837
\$9,443,062	\$20,026,600	\$19,599,572	\$19,138,382	\$18,640,297	\$18,102,364	\$31,496,129	\$30,868,685	\$30,191,045	\$29,489,194
\$9,443,062	\$20,026,600	\$19,599,572	\$19,138,382	\$18,640,297	\$18,102,364	\$31,496,129	\$30,868,685	\$30,191,045	\$29,489,194

2005 15	2006 16	2007 17	2008 18	2009 19	2010 20	2011 21	2012 22	2013 23	2014 24
\$67.56 \$395,703,879	\$72.96 \$581,418,820	\$78.80 \$581,418,820	\$85.10 \$581,418,820	\$91.91 \$581,418,820	\$99.26 \$581,418,820	\$107.20 \$654,294,996	\$115.78 \$654,294,996	\$125.04 \$654,294,996	\$135.04 \$654,294,996
\$88.12 \$6,734,551	\$95.17 \$9,895,264	\$102.78 \$9,895,264	\$111.00 \$9,895,264	\$119.88 \$9,895,264	\$129.47 \$9,895,264	\$139.83 \$14,539,390	\$151.02 \$14,539,390	\$163.10 \$14,539,390	\$176.14 \$14,539,390
\$4,405.79 \$11,658,195	\$4,758.25 \$17,129,713	\$5,138.91 \$17,129,713	\$5,530.03 \$17,129,713	\$5,994.03 \$17,129,713	\$6,473.55 \$17,129,713	\$6,991.44 \$25,169,169	\$7,550.75 \$25,169,169	\$8,154.81 \$25,169,169	\$8,807.20 \$25,169,169
\$114,096,625 5.00%	\$608,443,797 5.00%	\$608,443,797 5.00%	\$608,443,797 5.00%	\$608,443,797 5.00%	\$608,443,797 5.00%	\$694,003,554 5.00%	\$694,003,554 5.00%	\$694,003,554 5.00%	\$694,003,554 5.00%
\$393,391,793	\$578,021,607	\$578,021,607	\$578,021,607	\$578,021,607	\$578,021,607	\$849,303,377	\$849,303,377	\$849,303,377	\$849,303,377
\$5.87 \$47,423,928	\$6.34 \$51,217,843	\$6.85 \$55,315,270	\$7.40 \$59,740,492	\$7.99 \$64,519,731	\$8.63 \$69,681,309	\$9.32 \$75,255,814	\$10.07 \$81,276,279	\$10.87 \$87,778,382	\$11.74 \$94,800,652
\$2.94 \$23,711,964	\$3.17 \$25,608,921	\$3.43 \$27,657,635	\$3.70 \$29,870,246	\$4.00 \$32,259,865	\$4.32 \$34,840,655	\$4.66 \$37,627,907	\$5.03 \$40,638,140	\$5.44 \$43,889,191	\$5.87 \$47,400,326
\$4.41 \$35,567,946	\$4.76 \$38,413,362	\$5.14 \$41,406,432	\$5.55 \$44,805,359	\$5.99 \$48,389,798	\$6.47 \$52,260,962	\$6.99 \$56,441,861	\$7.55 \$60,957,209	\$8.15 \$65,833,786	\$8.81 \$71,100,489
\$106,703,839	\$115,240,146	\$124,459,357	\$134,416,106	\$145,169,394	\$156,782,946	\$169,325,582	\$182,871,628	\$197,501,358	\$213,301,467
\$286,687,955	\$462,781,462	\$453,562,250	\$443,605,501	\$432,852,213	\$421,238,661	\$679,977,795	\$666,431,749	\$651,802,018	\$636,001,910
\$258,019,159 \$36,647,403 \$221,371,756	\$231,390,731 \$36,647,403 \$194,743,328	\$226,781,125 \$36,647,403 \$190,133,722	\$221,802,751 \$36,647,403 \$185,155,348	\$216,426,106 \$36,647,403 \$179,778,704	\$210,619,331 \$36,647,403 \$173,971,928	\$339,988,898 \$36,647,403 \$339,988,898	\$333,215,874 \$36,647,403 \$333,215,874	\$325,901,009 \$36,647,403 \$325,901,009	\$318,000,955 \$36,647,403 \$318,000,955
\$183,738,558	\$161,636,962	\$157,810,989	\$153,678,939	\$149,216,324	\$144,396,700	\$282,190,785	\$276,569,176	\$270,497,838	\$263,940,792
\$28,668,795	\$231,390,731	\$226,781,125	\$221,802,751	\$216,426,106	\$210,619,331	\$339,988,898	\$333,215,874	\$325,901,009	\$318,000,955
\$28,668,795	\$231,390,731	\$226,781,125	\$221,802,751	\$216,426,106	\$210,619,331	\$339,988,898	\$333,215,874	\$325,901,009	\$318,000,955

	2015 25	2016 26	2017 27	2018 28	2019 29	2020 30	2021 31	2022 32	2023 33	2024 34
	\$145.85	\$157.51	\$170.12	\$183.73	\$198.42	\$214.30	\$231.44	\$249.96	\$269.95	\$291.55
	\$654,294,996	\$1,235,239,624	\$1,235,239,624	\$1,235,239,624	\$1,235,239,624	\$1,235,239,624	\$1,844,388,822	\$1,844,388,822	\$1,844,388,822	\$1,844,388,822
	\$190.24	\$205.45	\$221.89	\$239.64	\$258.81	\$279.52	\$301.88	\$326.03	\$352.11	\$380.28
	\$14,539,390	\$21,363,134	\$21,363,134	\$21,363,134	\$21,363,134	\$21,363,134	\$31,389,452	\$31,389,452	\$31,389,452	\$31,389,452
	\$9,511.77	\$10,272.71	\$11,094.53	\$11,982.09	\$12,940.66	\$13,975.91	\$15,093.99	\$16,301.50	\$17,605.62	\$19,014.07
	\$25,169,169	\$36,981,766	\$36,981,766	\$36,981,766	\$36,981,766	\$36,981,766	\$54,338,347	\$54,338,347	\$54,338,347	\$54,338,347
	\$694,003,554	\$1,313,584,523	\$1,313,584,523	\$1,313,584,523	\$1,313,584,523	\$1,313,584,523	\$1,930,086,621	\$1,930,086,621	\$1,930,086,621	\$1,930,086,621
	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
	\$849,303,377	\$1,247,905,297	\$1,247,905,297	\$1,247,905,297	\$1,247,905,297	\$1,247,905,297	\$1,833,582,290	\$1,833,582,290	\$1,833,582,290	\$1,833,582,290
	\$12.68	\$13.70	\$14.79	\$15.98	\$17.25	\$18.63	\$20.13	\$21.74	\$23.47	\$25.35
	\$102,384,704	\$110,575,481	\$119,421,519	\$128,975,240	\$139,293,260	\$150,436,720	\$162,471,638	\$175,469,391	\$189,505,942	\$204,667,497
	\$6.34	\$6.85	\$7.40	\$7.99	\$8.63	\$9.32	\$10.06	\$10.87	\$11.74	\$12.68
	\$51,192,332	\$55,287,740	\$59,710,739	\$64,487,620	\$69,646,630	\$75,218,260	\$81,235,829	\$87,734,695	\$94,753,471	\$102,333,749
	\$9.51	\$10.27	\$11.09	\$11.98	\$12.94	\$13.98	\$15.09	\$16.30	\$17.61	\$19.01
	\$76,788,528	\$82,931,610	\$89,566,139	\$96,731,430	\$104,469,945	\$112,827,540	\$121,853,744	\$131,602,043	\$142,130,207	\$153,500,623
	\$230,365,584	\$248,794,831	\$268,698,418	\$290,194,291	\$313,409,834	\$338,482,621	\$365,561,231	\$394,806,129	\$426,390,620	\$460,501,869
	\$618,937,792	\$999,110,466	\$979,206,879	\$957,711,006	\$934,495,463	\$909,422,676	\$1,468,021,059	\$1,438,776,161	\$1,407,191,670	\$1,373,080,421
	\$309,468,896	\$499,555,233	\$489,603,440	\$478,855,503	\$467,247,731	\$454,711,338	\$734,010,530	\$719,388,080	\$703,595,835	\$686,540,210
	\$309,468,896	\$499,555,233	\$489,603,440	\$478,855,503	\$467,247,731	\$454,711,338	\$734,010,530	\$719,388,080	\$703,595,835	\$686,540,210
	\$256,859,184	\$414,630,843	\$406,370,855	\$397,450,067	\$387,815,617	\$377,410,411	\$609,228,740	\$597,092,107	\$583,984,543	\$569,828,375
	\$309,468,896	\$499,555,233	\$489,603,440	\$478,855,503	\$467,247,731	\$454,711,338	\$734,010,530	\$719,388,080	\$703,595,835	\$686,540,210
	\$309,468,896	\$499,555,233	\$489,603,440	\$478,855,503	\$467,247,731	\$454,711,338	\$734,010,530	\$719,388,080	\$703,595,835	\$686,540,210

2023
36

\$314.87
\$1,044,308,622

\$410.70
\$31,389,402

\$20,538.20
\$54,338,347
\$1,930,086,621

5.00%
\$1,833,582,290

\$27.38
\$221,040,897

\$13.69
\$110,520,449

\$20.54
\$165,780,673
\$497,342,019

\$1,336,240,271

\$668,120,136

\$668,120,136

\$254,539,713

\$668,120,136

\$668,120,136

SENSITIVITY ANALYSIS

Exhibit 6b

Rental Inflation +\$G	Developer		Diocese	
	After tax NPV	After tax IRR	NPV	
	+C111	+C112	+C125	
3.00%	(\$123,107,427)		9.02%	\$155,592,518
3.50%	(\$103,249,410)		9.94%	\$163,325,980
4.00%	(\$82,580,005)		10.72%	\$172,003,530
4.50%	(\$60,501,887)		11.44%	\$181,478,580
5.00%	(\$36,891,852)		12.11%	\$191,830,547
5.50%	(\$11,614,299)		12.74%	\$203,147,122
6.00%	\$15,480,088		13.33%	\$215,525,153
6.50%	\$44,555,811		13.91%	\$229,071,621
7.00%	\$75,794,182		14.46%	\$243,904,724
7.50%	\$109,395,126		14.99%	\$260,155,078
8.00%	\$145,579,179		15.51%	\$277,967,039
8.50%	\$184,589,701		16.02%	\$297,500,178
9.00%	\$226,695,330		16.51%	\$318,930,904
9.50%	\$272,192,698		17.00%	\$342,454,267
10.00%	\$321,409,444		ERR	\$368,285,950
10.50%	\$374,707,544		ERR	\$396,664,475
11.00%	\$432,487,010		-217.21%	\$427,853,641
11.50%	\$495,189,975		ERR	\$462,145,227
12.00%	\$563,305,220		ERR	\$499,861,973
12.50%	\$637,373,187		-217.84%	\$541,360,886
13.00%	\$717,991,523		-218.06%	\$587,036,892

Expense Inflation +\$N	Developer		Diocese	
	After tax NPV	After tax IRR	NPV	
	+C111	+C112	+C125	
5.00%	\$197,012,442		16.22%	\$299,742,675
5.50%	\$189,909,799		16.12%	\$296,927,410
6.00%	\$182,290,222		16.02%	\$293,830,995
6.50%	\$174,104,710		15.91%	\$290,422,818
7.00%	\$165,298,951		15.79%	\$286,668,793
7.50%	\$155,812,717		15.66%	\$282,530,961
8.00%	\$145,579,179		15.51%	\$277,967,039
8.50%	\$134,524,144		15.36%	\$272,929,918
9.00%	\$122,565,207		15.18%	\$267,367,105
9.50%	\$109,610,793		14.99%	\$261,220,097
10.00%	\$95,559,100		14.77%	\$254,423,682
10.50%	\$80,296,909		14.53%	\$246,905,165
11.00%	\$63,698,253		14.25%	\$238,583,491
11.50%	\$45,622,943		13.93%	\$229,368,282
12.00%	\$25,914,906		13.56%	\$219,158,751
12.50%	\$3,557,312		13.08%	\$208,209,734
13.00%	(\$23,031,639)		12.42%	\$197,015,737
13.50%	(\$56,062,844)		11.30%	\$186,378,603
14.00%	(\$96,354,927)		ERR	\$176,446,292
14.50%	(\$146,121,779)		ERR	\$168,003,441

Interest

+\$S	Developer		Diocese	
	After tax NPV +C111	After tax IRR +C112	NPV +C125	IRR
7.00%	\$171,314,840		\$277,967,039	15.98%
8.00%	\$162,992,471		\$277,967,039	15.83%
9.00%	\$154,407,930		\$277,967,039	15.67%
10.00%	\$145,579,179		\$277,967,039	15.51%
11.00%	\$136,524,093		\$277,967,039	15.35%
12.00%	\$127,260,224		\$277,967,039	15.18%
13.00%	\$117,804,604		\$277,967,039	15.01%
14.00%	\$108,173,589		\$277,967,039	14.84%
15.00%	\$98,382,743		\$277,967,039	14.67%
16.00%	\$88,446,752		\$277,967,039	14.50%
17.00%	\$78,379,369		\$277,967,039	14.32%
18.00%	\$68,193,392		\$277,967,039	14.15%

Vacancy 1-5 yrs

+\$H	Developer		Diocese	
	After tax NPV +C111	After tax IRR +C112	NPV +C125	IRR
15.00%	\$176,487,249		\$281,643,220	16.14%
17.00%	\$170,305,635		\$280,907,984	16.01%
19.00%	\$164,124,021		\$280,172,748	15.88%
21.00%	\$157,942,407		\$279,437,512	15.76%
23.00%	\$151,760,793		\$278,702,275	15.63%
25.00%	\$145,579,179		\$277,967,039	15.51%
27.00%	\$139,397,565		\$277,231,803	15.39%
29.00%	\$133,215,951		\$276,496,567	15.27%
31.00%	\$127,034,337		\$275,761,331	15.15%
33.00%	\$120,852,723		\$275,026,095	15.04%
35.00%	\$114,671,109		\$274,290,858	14.92%
37.00%	\$108,489,495		\$273,555,622	14.81%
39.00%	\$102,307,881		\$272,820,386	14.70%

Vacancy 6-10 yrs

+\$I	Developer		Diocese	
	After tax NPV +C111	After tax IRR +C112	NPV +C125	IRR
10.00%	\$145,579,179		\$277,967,039	15.51%
12.00%	\$140,649,388		\$277,429,938	15.43%
14.00%	\$135,719,598		\$276,892,836	15.34%
16.00%	\$130,789,808		\$276,355,734	15.25%
18.00%	\$125,860,018		\$275,818,633	15.17%
20.00%	\$120,930,227		\$275,281,531	15.08%
22.00%	\$116,000,437		\$274,744,430	14.99%
24.00%	\$111,070,647		\$274,207,328	14.91%
26.00%	\$106,140,856		\$273,670,226	14.82%
28.00%	\$101,211,066		\$273,133,125	14.73%
30.00%	\$96,281,276		\$272,596,023	14.65%
32.00%	\$91,351,486		\$272,058,922	14.56%
34.00%	\$86,421,695		\$271,521,820	14.48%
36.00%	\$81,491,905		\$270,984,718	14.39%
38.00%	\$76,562,115		\$270,447,617	14.31%
40.00%	\$71,632,325		\$269,910,515	14.22%

Vacancy aft 10 yr

	Developer		Diocese	
	After tax NPV	After tax IRR	NPV	
+\$J	+C111	+C112	+C125	
	5.00%	\$145,579,179	15.51%	\$277,967,039
	7.00%	\$136,525,493	15.39%	\$273,771,135
	9.00%	\$127,471,806	15.26%	\$269,575,231
	11.00%	\$118,418,120	15.12%	\$265,379,327
	13.00%	\$109,364,434	14.99%	\$261,183,422
	15.00%	\$100,310,748	14.85%	\$256,987,518
	17.00%	\$91,257,062	14.70%	\$252,791,614
	19.00%	\$82,203,376	14.56%	\$248,595,710
	21.00%	\$73,149,690	14.41%	\$244,399,806
	23.00%	\$64,096,003	14.25%	\$240,203,901
	25.00%	\$55,042,317	14.09%	\$236,007,997
	27.00%	\$45,988,631	13.93%	\$231,812,093
	29.00%	\$36,934,945	13.76%	\$227,616,189
	31.00%	\$27,881,259	13.58%	\$223,420,284
	33.00%	\$18,827,573	13.40%	\$219,224,380
	35.00%	\$9,773,887	13.21%	\$215,028,476
	37.00%	\$720,201	13.02%	\$210,832,572
	39.00%	(\$8,333,486)	12.81%	\$206,636,668

Developer's NPV After Tax		Expense Inflation							
+C111		6.00%	8.00%	10.00%	12.00%	14.00%	16.00%	18.00%	20.00%
Rental Inflation	3.00%	(\$85,911,065)	(\$123,107,427)	(\$189,779,398)	(\$309,999,868)	(\$505,340,394)	(\$808,227,553)	(\$1,211,107,023)	(\$1,731,578,126)
	4.00%	(\$45,868,961)	(\$82,580,005)	(\$139,708,806)	(\$250,302,960)	(\$439,647,120)	(\$738,706,824)	(\$1,141,107,023)	(\$1,661,607,193)
	5.00%	(\$180,808)	(\$36,891,852)	(\$88,036,757)	(\$185,902,571)	(\$365,781,944)	(\$659,324,465)	(\$1,062,227,553)	(\$1,582,706,824)
	6.00%	\$52,191,131	\$15,480,088	(\$34,539,990)	(\$117,017,116)	(\$283,574,915)	(\$569,226,512)	(\$855,911,065)	(\$1,258,961,065)
	7.00%	\$112,505,225	\$75,794,182	\$25,774,103	(\$46,398,630)	(\$193,519,158)	(\$466,205,064)	(\$740,000,000)	(\$1,135,000,000)
	8.00%	\$182,290,222	\$145,579,179	\$95,559,100	\$25,914,906	(\$96,354,927)	(\$351,027,756)	(\$600,000,000)	(\$850,000,000)
	9.00%	\$263,406,373	\$226,695,330	\$176,675,252	\$107,031,057	\$2,047,336	(\$222,727,448)	(\$400,000,000)	(\$550,000,000)
	10.00%	\$358,120,487	\$321,409,444	\$271,389,365	\$201,745,171	\$102,798,712	(\$83,797,631)	(\$100,000,000)	(\$150,000,000)
	11.00%	\$469,198,054	\$432,487,010	\$382,466,932	\$312,822,737	\$213,876,279	\$57,076,677	(\$100,000,000)	(\$150,000,000)
	12.00%	\$600,016,263	\$563,305,220	\$513,285,142	\$443,640,947	\$344,694,488	\$200,558,803	(\$100,000,000)	(\$150,000,000)
	13.00%	\$754,702,566	\$717,991,523	\$667,971,444	\$598,327,250	\$499,380,791	\$356,231,246	(\$100,000,000)	(\$150,000,000)
	14.00%	\$938,304,434	\$901,593,390	\$851,573,312	\$781,929,117	\$682,982,659	\$539,833,114	(\$100,000,000)	(\$150,000,000)
	15.00%	\$1,156,997,200	\$1,120,286,157	\$1,070,266,078	\$1,000,621,884	\$901,675,425	\$758,525,880	(\$100,000,000)	(\$150,000,000)
	16.00%	\$1,418,338,315	\$1,381,627,271	\$1,331,607,193	\$1,261,962,998	\$1,163,016,540	\$1,019,866,995	(\$100,000,000)	(\$150,000,000)
	17.00%	\$1,731,578,126	\$1,694,867,083	\$1,644,847,005	\$1,575,202,810	\$1,476,256,351	\$1,333,106,807	(\$100,000,000)	(\$150,000,000)

Developer's NPV After Tax		Vacancy after 10 years						
+C111		5.00%	6.00%	7.00%	8.00%	9.00%	10.00%	
Vacancy 6-10 yr	7.00%	\$152,973,864	\$148,447,021	\$143,920,178	\$139,393,335	\$134,866,492	\$130,339,649	
	8.00%	\$150,508,969	\$145,982,126	\$141,455,283	\$136,928,440	\$132,401,597	\$127,874,754	
	9.00%	\$148,044,074	\$143,517,231	\$138,990,388	\$134,463,545	\$129,936,702	\$125,409,858	
	10.00%	\$145,579,179	\$141,052,336	\$136,525,493	\$131,998,649	\$127,471,806	\$122,944,963	
	11.00%	\$143,114,284	\$138,587,440	\$134,060,597	\$129,533,754	\$125,006,911	\$120,480,068	
	12.00%	\$140,649,388	\$136,122,545	\$131,595,702	\$127,068,859	\$122,542,016	\$118,015,173	
	13.00%	\$138,184,493	\$133,657,650	\$129,130,807	\$124,603,964	\$120,077,121	\$115,550,278	
	14.00%	\$135,719,598	\$131,192,755	\$126,665,912	\$122,139,069	\$117,612,226	\$113,085,383	
	15.00%	\$133,254,703	\$128,727,860	\$124,201,017	\$119,674,174	\$115,147,331	\$110,620,488	
	16.00%	\$130,789,808	\$126,262,965	\$121,736,122	\$117,209,279	\$112,682,436	\$108,155,593	
	17.00%	\$128,324,913	\$123,798,070	\$119,271,227	\$114,744,384	\$110,217,540	\$105,690,697	
	18.00%	\$125,860,018	\$121,333,175	\$116,806,331	\$112,279,488	\$107,752,645	\$103,225,802	
	19.00%	\$123,395,122	\$118,868,279	\$114,341,436	\$109,814,593	\$105,287,750	\$100,760,907	
	20.00%	\$120,930,227	\$116,403,384	\$111,876,541	\$107,349,698	\$102,822,855	\$98,296,012	
	21.00%	\$118,465,332	\$113,938,489	\$109,411,646	\$104,884,803	\$100,357,960	\$95,831,117	
	22.00%	\$116,000,437	\$111,473,594	\$106,946,751	\$102,419,908	\$97,893,065	\$93,366,222	
	23.00%	\$113,535,542	\$109,008,699	\$104,481,856	\$99,955,013	\$95,428,170	\$90,901,327	
	24.00%	\$111,070,647	\$106,543,804	\$102,016,961	\$97,490,118	\$92,963,274	\$88,436,431	
	25.00%	\$108,605,752	\$104,078,909	\$99,552,065	\$95,025,222	\$90,498,379	\$85,971,536	

18.00%	20.00%	22.00%	24.00%	26.00%
(\$1,269,281,950)	(\$1,973,139,161)	(\$3,050,505,668)	(\$4,704,692,622)	(\$7,251,298,204)
(\$1,198,375,234)	(\$1,900,930,485)	(\$2,977,779,773)	(\$4,631,645,871)	(\$7,177,995,853)
(\$1,116,483,486)	(\$1,817,618,224)	(\$2,893,146,694)	(\$4,546,815,686)	(\$7,092,761,959)
(\$1,021,129,478)	(\$1,720,670,889)	(\$2,794,954,314)	(\$4,447,697,451)	(\$6,993,289,374)
(\$911,767,374)	(\$1,607,599,029)	(\$2,680,310,327)	(\$4,331,400,886)	(\$6,876,682,935)
(\$786,016,687)	(\$1,474,947,613)	(\$2,545,780,123)	(\$4,195,605,301)	(\$6,739,360,987)
(\$640,279,907)	(\$1,321,589,208)	(\$2,386,893,163)	(\$4,035,069,628)	(\$6,577,465,689)
(\$475,749,478)	(\$1,143,111,020)	(\$2,200,218,630)	(\$3,845,505,846)	(\$6,386,126,604)
(\$290,133,032)	(\$934,545,154)	(\$1,981,420,162)	(\$3,619,298,992)	(\$6,158,417,401)
(\$88,901,672)	(\$695,500,498)	(\$1,724,498,507)	(\$3,352,888,965)	(\$5,887,363,509)
\$116,971,665	(\$424,512,423)	(\$1,422,524,260)	(\$3,036,729,693)	(\$5,561,796,947)
\$325,366,220	(\$128,653,869)	(\$1,071,557,124)	(\$2,662,659,486)	(\$5,177,032,558)
\$548,162,765	\$176,654,784	(\$672,306,782)	(\$2,221,242,473)	(\$4,715,512,016)
\$809,503,880	\$485,141,500	(\$232,897,798)	(\$1,702,302,362)	(\$4,165,687,625)
\$1,122,743,692	\$809,576,580	\$220,331,214	(\$1,108,513,195)	(\$3,515,096,862)

11.00%	12.00%	13.00%	14.00%	15.00%
\$125,812,806	\$121,285,963	\$116,759,120	\$112,232,276	\$107,705,433
\$123,347,911	\$118,821,067	\$114,294,224	\$109,767,381	\$105,240,538
\$120,883,015	\$116,356,172	\$111,829,329	\$107,302,486	\$102,775,643
\$118,418,120	\$113,891,277	\$109,364,434	\$104,837,591	\$100,310,748
\$115,953,225	\$111,426,382	\$106,899,539	\$102,372,696	\$97,845,853
\$113,488,330	\$108,961,487	\$104,434,644	\$99,907,801	\$95,380,958
\$111,023,435	\$106,496,592	\$101,969,749	\$97,442,906	\$92,916,063
\$108,558,540	\$104,031,697	\$99,504,854	\$94,978,011	\$90,451,167
\$106,093,645	\$101,566,802	\$97,039,958	\$92,513,115	\$87,986,272
\$103,628,749	\$99,101,906	\$94,575,063	\$90,048,220	\$85,521,377
\$101,163,854	\$96,637,011	\$92,110,168	\$87,583,325	\$83,056,482
\$98,698,959	\$94,172,116	\$89,645,273	\$85,118,430	\$80,591,587
\$96,234,064	\$91,707,221	\$87,180,378	\$82,653,535	\$78,126,692
\$93,769,169	\$89,242,326	\$84,715,483	\$80,188,640	\$75,661,797
\$91,304,274	\$86,777,431	\$82,250,588	\$77,723,745	\$73,196,901
\$88,839,379	\$84,312,536	\$79,785,692	\$75,258,849	\$70,732,006
\$86,374,483	\$81,847,640	\$77,320,797	\$72,793,954	\$68,267,111
\$83,909,588	\$79,382,745	\$74,855,902	\$70,329,059	\$65,802,216
\$81,444,693	\$76,917,850	\$72,391,007	\$67,864,164	\$63,337,321

Exhibit 6c Worst Possible Case

File:thscfms
CASH FLOW CHART : LOT NO. 7360 REDEVELOPMENT (OFFICE COMPLEX)

GENERAL INFORMATION:

WORST POSSIBLE CASE

Incomes:					
Office Area=(A)	664,085 sq.ft.	Gr.Rent(Mth)=(D)	\$23.00 per sq.ft.	Inflation=(G)	5.00%per annum
Retail Area=(B)	8,665 sq.ft.	Gr.Rent(Mth)=(E)	\$30.00 per sq.ft.		
Carpark=(C)	300 no.	Gr.Rent(Mth)=(F)	\$1,500.00 per no.		
Vacancy:					
1st 5 years=(H)	30.00%%	Leasing Yr=(A1)	50.00%		
6-10th year=(I)	20.00%%				
After 10th yr=(J)	10.00%%				
Expenses:					
Oper(Mth)=(K)	\$2.00 per sq.ft.	Inflation=(N)	10.00%per annum		
Mgt(Mth)=(L)	\$1.00 per sq.ft.				
Tax(Mth)=(M)	\$1.50 per sq.ft.				
Development:					
Construction=(O)	\$390,000,000	Financing=(R)	80%of Const. Cost		
Prof. Fees=(P)7%	\$27,300,000	Interest=(S)	13.00%per annum		
Marketing=(Q)	\$9,500,000	Term=(T)	20 years		
Others:					
Premium=(U)	\$19,000,000	Diocese/Developer Ratio:			
Allowances:					
Capital=(V)	\$103,000,000 in 2 payments (\$10M then rest)	Before 15/Yr=(Y)	10.00%to Diocese		
Minimum Rent=(W)	\$6,000,000 per year to the Diocese	After 15/Yr=(Z)	50.00%to Diocese		
Yrs to recoup=(X)	15 years after completion				

Total development time = 45 months/4 years
The office tower is assumed to be operational after 3 years of construction.
Leases are taken to be of 5 years' term.
The developer is assumed to have usage of the tower for 35 years after completion.
Replacement costs are included in management rates.
Lease turnover costs are negligible.
Corporation tax can be, for simplicity, taken as 17%.
The Diocese is not taxed because of its non-profit nature.
All expressed in Hong Kong Currency : HK\$ 7.80 = US\$ 1.00

ITEMS	SUB-ITEMS	1987 -3	1988 -2	1989 -1	1990 0	1991 1	1992 2	1993 3	1994 4
INCOME									
Office	Gross Rent Grth Annual Income			\$23.00	\$23.00	\$24.15	\$25.36	\$26.63	
				\$183,287,460	\$183,287,460	\$183,287,460	\$183,287,460	\$183,287,460	\$183,287,460
Retail	Gross Rent Grth Annual Income			\$30.00	\$30.00	\$31.50	\$33.08	\$34.73	
				\$3,119,400	\$3,119,400	\$3,119,400	\$3,119,400	\$3,119,400	\$3,119,400
Carpark	Gross Rent Grth Annual Income			\$1,500.00	\$1,500.00	\$1,575.00	\$1,653.75	\$1,736.44	
				\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000
Total				\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860
Leasvacancy				50.00%	30.00%	30.00%	30.00%	30.00%	30.00%
Effective Income				\$95,903,430	\$134,264,802	\$134,264,802	\$134,264,802	\$134,264,802	\$134,264,802
LESS:EXPENSES									
Operating	Rate Annual Payment			\$2.00	\$2.00	\$2.20	\$2.42	\$2.66	
				\$16,146,000	\$16,146,000	\$17,760,600	\$19,536,660	\$21,490,326	
Management	Rate Annual Payment			\$1.00	\$1.00	\$1.10	\$1.21	\$1.33	
				\$8,073,000	\$8,073,000	\$8,880,300	\$9,768,330	\$10,745,163	
Tax	Rate Annual Payment			\$1.50	\$1.50	\$1.65	\$1.82	\$2.00	
				\$12,109,500	\$12,109,500	\$13,320,450	\$14,652,495	\$16,117,745	
Total				\$36,328,500	\$36,328,500	\$39,961,350	\$43,957,485	\$48,353,234	
NET OPERATING INCOME				\$59,574,930	\$97,936,302	\$94,303,452	\$90,307,317	\$85,911,569	

Developer's Cash Flow:

Premium	\$19,000,000								
Capital Allowance	\$10,000,000	\$93,000,000							
Construction etc.	\$106,700,000	\$106,700,000	\$106,700,000	\$106,700,000					
Share of NOI or Min. payment to Diocese Debt Service	\$0	\$0	\$6,000,000	\$3,574,930	\$8,142,672	\$4,873,107	\$1,276,585	\$77,320,412	
Total	\$135,700,000	\$199,700,000	\$112,700,000	\$113,125,070	\$43,728,290	\$40,468,725	\$36,862,203	\$32,906,030	
Before Tax: Net Present Value (15%) Internal Rate of Return	\$161,622,374 US\$ Equivalent= 9.34%		\$20,720,817						
After Tax:17% Net Present Value (15%) Internal Rate of Return	\$135,700,000 US\$ Equivalent= 7.64%	\$199,700,000	\$112,700,000	\$113,125,070	\$36,294,481	\$33,580,742	\$30,595,629	\$27,312,005	

Diocese's Cash Flow:

Capital Allowance	\$10,000,000	\$93,000,000							
Share of NOI or minimum allowance	\$0	\$0	\$6,000,000	\$6,000,000	\$9,793,630	\$9,430,345	\$9,030,732	\$8,591,157	
Total	\$10,000,000	\$93,000,000	\$6,000,000	\$6,000,000	\$9,793,630	\$9,430,345	\$9,030,732	\$8,591,157	
Net Present Value (15%)	\$158,789,790 US\$ Equivalent=		\$20,357,665						

1995 5	1996 6	1997 7	1998 8	1999 9	2000 10	2001 11	2002 12	2003 13	2004 14
\$27.96 \$183,287,460	\$29.38 \$233,926,406	\$30.82 \$233,926,406	\$32.36 \$233,926,406	\$33.98 \$233,926,406	\$35.68 \$233,926,406	\$37.46 \$298,555,959	\$39.24 \$298,555,959	\$41.30 \$298,555,959	\$43.57 \$298,555,959
\$36.47 \$3,119,400	\$38.29 \$3,981,233	\$40.20 \$3,981,233	\$42.21 \$3,981,233	\$44.32 \$3,981,233	\$46.54 \$3,981,233	\$48.87 \$5,081,174	\$51.31 \$5,081,174	\$53.88 \$5,081,174	\$56.57 \$5,081,174
\$1,823.26 \$5,400,000	\$1,914.42 \$6,891,920	\$2,010.14 \$6,891,920	\$2,110.65 \$6,891,920	\$2,216.18 \$6,891,920	\$2,326.99 \$6,891,920	\$2,443.34 \$8,796,031	\$2,565.51 \$8,796,031	\$2,693.78 \$8,796,031	\$2,828.47 \$8,796,031
\$191,806,860 30.00%	\$244,799,559 20.00%	\$244,799,559 20.00%	\$244,799,559 20.00%	\$244,799,559 20.00%	\$244,799,559 20.00%	\$312,433,164 10.00%	\$312,433,164 10.00%	\$312,433,164 10.00%	\$312,433,164 10.00%
\$134,264,802	\$195,839,647	\$195,839,647	\$195,839,647	\$195,839,647	\$195,839,647	\$281,189,847	\$281,189,847	\$281,189,847	\$281,189,847
\$2.93 \$23,639,359	\$3.22 \$26,003,294	\$3.54 \$28,603,624	\$3.90 \$31,463,986	\$4.29 \$34,610,385	\$4.72 \$38,071,423	\$5.19 \$41,878,566	\$5.71 \$46,066,422	\$6.28 \$50,673,065	\$6.90 \$55,740,371
\$1.46 \$11,819,679	\$1.61 \$13,001,647	\$1.77 \$14,301,812	\$1.95 \$15,731,993	\$2.14 \$17,305,192	\$2.36 \$19,035,712	\$2.59 \$20,939,283	\$2.85 \$23,033,211	\$3.14 \$25,336,532	\$3.45 \$27,870,186
\$2.20 \$17,729,519	\$2.42 \$19,502,471	\$2.66 \$21,452,718	\$2.92 \$23,597,990	\$3.22 \$25,967,789	\$3.54 \$28,553,568	\$3.89 \$31,408,924	\$4.28 \$34,549,817	\$4.71 \$38,004,798	\$5.18 \$41,805,278
\$53,188,557	\$58,507,413	\$64,388,154	\$70,793,969	\$77,873,366	\$85,660,703	\$94,225,773	\$103,649,450	\$114,014,395	\$125,415,835
\$81,076,245	\$137,332,235	\$131,481,493	\$125,045,678	\$117,966,281	\$110,178,944	\$106,963,074	\$177,540,397	\$167,175,452	\$155,774,012
\$72,968,621	\$123,599,011	\$118,333,344	\$112,541,110	\$106,169,653	\$99,161,050	\$168,266,767	\$159,786,357	\$150,457,907	\$140,196,611
\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382
\$28,554,239	\$79,184,629	\$73,918,962	\$68,126,728	\$61,755,271	\$54,746,668	\$123,852,385	\$115,371,975	\$106,043,525	\$95,782,229
\$23,700,018	\$65,723,242	\$61,352,739	\$56,545,184	\$51,256,875	\$45,439,734	\$102,797,479	\$95,788,740	\$88,016,126	\$79,499,250
\$8,107,625	\$13,733,223	\$13,148,149	\$12,504,568	\$11,796,628	\$11,017,894	\$18,696,307	\$17,754,040	\$16,717,545	\$15,577,401
\$8,107,625	\$13,733,223	\$13,148,149	\$12,504,568	\$11,796,628	\$11,017,894	\$18,696,307	\$17,754,040	\$16,717,545	\$15,577,401

	2005 15	2006 16	2007 17	2008 18	2009 19	2010 20	2011 21	2012 22	2013 23	2014 24
	\$48.54 \$298,555,959	\$47.82 \$381,041,466	\$50.21 \$381,041,466	\$52.72 \$381,041,466	\$55.35 \$381,041,466	\$58.12 \$381,041,466	\$61.03 \$486,316,197	\$64.08 \$486,316,197	\$67.28 \$486,316,197	\$70.65 \$486,316,197
	\$59.40 \$5,081,174	\$62.37 \$6,485,009	\$65.49 \$6,485,009	\$68.76 \$6,485,009	\$72.20 \$6,485,009	\$75.81 \$6,485,009	\$79.60 \$8,276,697	\$83.58 \$8,276,697	\$87.76 \$8,276,697	\$92.15 \$8,276,697
	\$2,969.90 \$8,796,031	\$3,118.39 \$11,226,212	\$3,274.31 \$11,226,212	\$3,438.03 \$11,226,212	\$3,609.93 \$11,226,212	\$3,790.43 \$11,226,212	\$3,979.95 \$14,327,808	\$4,178.94 \$14,327,808	\$4,387.89 \$14,327,808	\$4,607.29 \$14,327,808
	\$312,433,164	\$398,752,686	\$398,752,686	\$398,752,686	\$398,752,686	\$398,752,686	\$508,920,701	\$508,920,701	\$508,920,701	\$508,920,701
	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
	\$281,189,847	\$358,877,418	\$358,877,418	\$358,877,418	\$358,877,418	\$358,877,418	\$458,028,631	\$458,028,631	\$458,028,631	\$458,028,631
	\$7.59 \$61,314,408	\$8.35 \$67,445,849	\$9.19 \$74,190,434	\$10.11 \$81,609,477	\$11.12 \$89,770,425	\$12.23 \$98,747,467	\$13.45 \$108,622,214	\$14.80 \$119,494,436	\$16.28 \$131,432,879	\$17.91 \$144,576,167
	\$3.80 \$30,657,204	\$4.18 \$33,722,924	\$4.59 \$37,095,217	\$5.05 \$40,804,739	\$5.56 \$44,885,212	\$6.12 \$49,373,734	\$6.73 \$54,311,107	\$7.40 \$59,742,218	\$8.14 \$65,716,440	\$8.95 \$72,288,084
	\$5.70 \$45,985,806	\$6.27 \$50,584,387	\$6.89 \$55,642,825	\$7.58 \$61,207,108	\$8.34 \$67,327,819	\$9.17 \$74,060,601	\$10.09 \$81,466,661	\$11.10 \$89,613,327	\$12.21 \$98,574,659	\$13.43 \$108,432,125
	\$137,957,418	\$151,753,160	\$166,928,476	\$183,621,324	\$201,983,456	\$222,181,802	\$244,399,982	\$268,839,980	\$295,723,978	\$325,296,376
	\$143,232,429	\$207,124,258	\$191,948,941	\$175,256,094	\$156,893,962	\$136,695,616	\$213,628,649	\$189,188,651	\$162,304,653	\$132,732,255
	\$128,909,186	\$103,562,129	\$95,974,471	\$87,628,047	\$78,446,981	\$68,347,808	\$106,814,325	\$94,594,326	\$81,152,327	\$66,366,128
	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382	\$44,414,382				
	\$84,494,804	\$59,147,747	\$51,560,089	\$43,213,665	\$34,032,599	\$23,933,426	\$106,814,325	\$94,594,326	\$81,152,327	\$66,366,128
	\$70,130,687	\$49,092,630	\$42,794,874	\$35,867,342	\$28,247,057	\$19,864,744	\$88,685,890	\$78,513,290	\$67,356,431	\$55,083,886
	\$14,323,243	\$103,562,129	\$95,974,471	\$87,628,047	\$78,446,981	\$68,347,808	\$106,814,325	\$94,594,326	\$81,152,327	\$66,366,128
	\$14,323,243	\$103,562,129	\$95,974,471	\$87,628,047	\$78,446,981	\$68,347,808	\$106,814,325	\$94,594,326	\$81,152,327	\$66,366,128

	2015 25	2016 26	2017 27	2018 28	2019 29	2020 30	2021 31	2022 32	2023 33	2024 34
	\$74.18 \$486,316,197	\$77.89 \$620,676,396	\$81.78 \$620,676,396	\$85.87 \$620,676,396	\$90.16 \$620,676,396	\$94.67 \$620,676,396	\$99.40 \$792,157,840	\$104.37 \$792,157,840	\$109.59 \$792,157,840	\$115.07 \$792,157,840
	\$96.75 \$8,276,697	\$101.59 \$10,563,396	\$106.67 \$10,563,396	\$112.00 \$10,563,396	\$117.60 \$10,563,396	\$123.48 \$10,563,396	\$129.66 \$13,481,867	\$136.14 \$13,481,867	\$142.95 \$13,481,867	\$150.10 \$13,481,867
	\$4,837.65 \$14,327,808	\$5,079.53 \$18,286,317	\$5,333.51 \$18,286,317	\$5,600.18 \$18,286,317	\$5,880.19 \$18,286,317	\$6,174.20 \$18,286,317	\$6,482.91 \$23,338,489	\$6,807.06 \$23,338,489	\$7,147.41 \$23,338,489	\$7,504.78 \$23,338,489
	\$508,920,701 10.00%	\$649,526,108 10.00%	\$649,526,108 10.00%	\$649,526,108 10.00%	\$649,526,108 10.00%	\$649,526,108 10.00%	\$828,978,196 10.00%	\$828,978,196 10.00%	\$828,978,196 10.00%	\$828,978,196 10.00%
	\$488,028,631	\$584,573,497	\$584,573,497	\$584,573,497	\$584,573,497	\$584,573,497	\$746,080,376	\$746,080,376	\$746,080,376	\$746,080,376
	\$19.70 \$159,033,784	\$21.67 \$174,537,162	\$23.84 \$192,430,878	\$26.22 \$211,673,966	\$28.84 \$232,841,363	\$31.73 \$256,125,499	\$34.90 \$281,738,049	\$38.39 \$309,911,854	\$42.23 \$340,903,039	\$46.45 \$374,993,343
	\$9.85 \$79,516,892	\$10.83 \$87,468,581	\$11.92 \$96,215,439	\$13.11 \$105,836,983	\$14.42 \$116,420,681	\$15.86 \$128,062,750	\$17.45 \$140,869,025	\$19.19 \$154,955,927	\$21.11 \$170,451,520	\$23.23 \$187,496,672
	\$14.77 \$119,275,338	\$16.25 \$131,202,872	\$17.88 \$144,323,159	\$19.66 \$158,733,473	\$21.63 \$174,631,022	\$23.79 \$192,094,124	\$26.17 \$211,303,537	\$28.79 \$232,433,890	\$31.67 \$255,677,279	\$34.84 \$281,245,007
	\$337,826,014	\$393,608,615	\$432,969,476	\$476,266,424	\$523,893,066	\$576,282,373	\$633,910,610	\$697,301,671	\$767,031,838	\$843,735,022
	\$100,202,618	\$190,964,882	\$151,604,021	\$108,307,073	\$60,680,431	\$8,291,124	\$112,169,766	\$48,778,705	\$30,951,462	\$97,654,646
	\$80,101,309	\$95,482,441	\$75,802,010	\$54,153,537	\$30,340,215	\$2,291,124	\$56,084,883	\$24,389,353	\$26,951,462	\$103,654,646
	\$80,101,309	\$95,482,441	\$75,802,010	\$54,153,537	\$30,340,215	\$2,291,124	\$56,084,883	\$24,389,353	\$26,951,462	\$103,654,646
	\$41,584,086	\$79,250,426	\$62,915,669	\$44,947,435	\$25,182,379	\$1,901,633	\$46,550,453	\$20,243,163	\$26,951,462	\$103,654,646
	\$80,101,309	\$95,482,441	\$75,802,010	\$54,153,537	\$30,340,215	\$6,000,000	\$56,084,883	\$24,389,353	\$6,000,000	\$6,000,000
	\$80,101,309	\$95,482,441	\$75,802,010	\$54,153,537	\$30,340,215	\$6,000,000	\$56,084,883	\$24,389,353	\$6,000,000	\$6,000,000

2025
36

\$120.83
\$792,157,840

\$157.60
\$13,481,867

\$7,880.02
\$23,338,489
\$828,978,196
10.00%
\$746,080,376

\$51.10
\$412,492,678

\$25.55
\$206,246,339

\$38.32
\$309,369,308
\$928,108,523
\$182,028,148

①188,028,148

①188,028,148

①188,028,148

\$6,000,000

\$6,000,000

Exhibit 6d Best Possible Case

File:thscfs
CASH FLOW CHART : LOT NO. 7360 REDEVELOPMENT (OFFICE COMPLEX)

GENERAL INFORMATION:

BEST POSSIBLE CASE

Income:					
Office Area=(AD)	664,085 sq.ft.	Gr.Rent(Mth)=(D)	\$23.00 per sq.ft.	Inflation=(G)	10.00%per annum
Retail Area=(B)	8,665 sq.ft.	Gr.Rent(Mth)=(E)	\$30.00 per sq.ft.		
Carpark=(CC)	300 no.	Gr.Rent(Mth)=(F)	\$1,500.00 per no.		
Vacancy:					
1st 5 years=(HD)	25.00%	Leasing Yr=(A1)	50.00%		
6-10th year=(I)	12.00%				
After 10th yr=(J)	7.00%				
Expenses:					
Oper(Mth)=(K)	\$2.00 per sq.ft.	Inflation=(N)	7.00%per annum		
Mgt(Mth)=(L)	\$1.00 per sq.ft.				
Tax(Mth)=(M)	\$1.50 per sq.ft.				
Development:					
Construction=(O)	\$390,000,000	Financing=(R)	80%of Const. Cost		
Prof. Fees=(P)??	\$27,300,000	Interest=(S)	10.00%per annum		
Marketing=(Q)	\$9,500,000	Term=(T)	20 years		
Others:					
Premium=(U)	\$19,000,000	Diocese/Developer Ratio:			
Allowances:					
Capital=(V)	\$103,000,000 in 2 payments (\$10M then rest)	Before 15/Yr=(Y)	10.00%to Diocese		
Minimum Rent=(W)	\$6,000,000 per year to the Diocese	After 15/Yr=(Z)	50.00%to Diocese		
Yrs to recoup=(H)	15 years after completion				

Total development time = 45 months/4 years
The office tower is assumed to be operational after 3 years of construction.
Leases are taken to be of 5 years' term.
The developer is assumed to have usage of the tower for 35 years after completion.
Replacement costs are included in management rates.
Lease turnover costs are negligible.
Corporation tax can be, for simplicity, taken as 17%.
The Diocese is not taxed because of its non-profit nature.
All expressed in Hong Kong Currency : HK\$ 7.80 = US\$ 1.00

ITEMS	SUB-ITEMS	1987 -3	1988 -2	1989 -1	1990 0	1991 1	1992 2	1993 3	1994 4
INCOME									
Office	Gross Rent Gwth Annual Income			\$23.00	\$23.00	\$25.30	\$27.83	\$30.61	
				\$183,287,460	\$183,287,460	\$183,287,460	\$183,287,460	\$183,287,460	\$183,287,460
Retail	Gross Rent Gwth Annual Income			\$30.00	\$30.00	\$33.00	\$36.30	\$39.93	
				\$3,119,400	\$3,119,400	\$3,119,400	\$3,119,400	\$3,119,400	\$3,119,400
Carpark	Gross Rent Gwth Annual Income			\$1,500.00	\$1,500.00	\$1,650.00	\$1,815.00	\$1,996.50	
				\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000	\$5,400,000
Total				\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860	\$191,806,860
Less:vacancy				50.00%	25.00%	25.00%	25.00%	25.00%	25.00%
Effective Income				\$95,903,430	\$143,855,145	\$143,855,145	\$143,855,145	\$143,855,145	\$143,855,145
LESS:EXPENSES									
Operating	Rate Annual Payment			\$2.00	\$2.00	\$2.14	\$2.29	\$2.45	
				\$16,146,000	\$16,146,000	\$17,276,220	\$18,485,555	\$19,779,544	
Management	Rate Annual Payment			\$1.00	\$1.00	\$1.07	\$1.14	\$1.23	
				\$8,073,000	\$8,073,000	\$8,638,110	\$9,242,778	\$9,889,772	
Tax	Rate Annual Payment			\$1.50	\$1.50	\$1.61	\$1.72	\$1.84	
				\$12,109,500	\$12,109,500	\$12,957,165	\$13,864,167	\$14,834,658	
Total				\$36,328,500	\$36,328,500	\$38,871,495	\$41,592,500	\$44,503,975	
NET OPERATING INCOME				\$59,574,930	\$107,526,645	\$104,983,650	\$102,262,645	\$99,351,170	

Developer's Cash Flow:

Premium		\$19,000,000							
Capital Allowance		\$10,000,000	\$93,000,000						
Construction etc.		\$106,700,000	\$106,700,000	\$106,700,000	\$106,700,000				
Share of NOI or Min. payment to Diocese Debt Service		\$0	\$0	\$6,000,000	\$53,574,930	\$6,773,981	\$4,465,265	\$2,036,381	\$9,416,053
Total		\$135,700,000	\$199,700,000	\$112,700,000	\$53,125,070	\$60,126,578	\$57,637,882	\$55,368,978	\$52,768,650
Before Tax:									
Net Present Value (15%) Internal Rate of Return		\$245,196,289	US\$ Equivalent= 19.10%	\$31,435,422					
After Tax:17%									
Net Present Value (15%) Internal Rate of Return		\$135,700,000	\$199,700,000	\$112,700,000	\$53,125,070	\$49,905,059	\$48,005,442	\$45,972,852	\$43,797,980

Diocese's Cash Flow:

Capital Allowance		\$10,000,000	\$93,000,000						
Share of NOI or minimum allowance		\$0	\$0	\$6,000,000	\$6,000,000	\$10,752,665	\$10,498,365	\$10,226,265	\$9,935,117
Total		\$10,000,000	\$93,000,000	\$6,000,000	\$6,000,000	\$10,752,665	\$10,498,365	\$10,226,265	\$9,935,117
Net Present Value (15%)		\$370,350,531	US\$ Equivalent=	\$47,480,837					

1995 5	1996 6	1997 7	1998 8	1999 9	2000 10	2001 11	2002 12	2003 13	2004 14
\$33.67 \$183,287,460	\$37.04 \$295,186,287	\$40.75 \$295,186,287	\$44.82 \$295,186,287	\$49.30 \$295,186,287	\$54.23 \$295,186,287	\$59.66 \$475,400,467	\$65.62 \$475,400,467	\$72.18 \$475,400,467	\$79.40 \$475,400,467
\$43.92 \$3,119,400	\$48.32 \$5,023,825	\$53.15 \$5,023,825	\$58.46 \$5,023,825	\$64.31 \$5,023,825	\$70.74 \$5,023,825	\$77.81 \$8,090,920	\$85.59 \$8,090,920	\$94.15 \$8,090,920	\$103.57 \$8,090,920
\$2,196.15 \$5,400,000	\$2,415.77 \$8,696,754	\$2,657.34 \$8,696,754	\$2,923.08 \$8,696,754	\$3,215.39 \$8,696,754	\$3,536.92 \$8,696,754	\$3,890.61 \$14,006,209	\$4,279.68 \$14,006,209	\$4,707.64 \$14,006,209	\$5,178.41 \$14,006,209
\$191,806,860	\$308,906,866	\$308,906,866	\$308,906,866	\$308,906,866	\$308,906,866	\$497,497,597	\$497,497,597	\$497,497,597	\$497,497,597
25.00%	12.00%	12.00%	12.00%	12.00%	12.00%	7.00%	7.00%	7.00%	7.00%
\$143,885,145	\$271,838,042	\$271,838,042	\$271,838,042	\$271,838,042	\$271,838,042	\$462,672,765	\$462,672,765	\$462,672,765	\$462,672,765
\$2.62 \$21,164,112	\$2.81 \$22,645,600	\$3.00 \$24,230,792	\$3.21 \$25,926,948	\$3.44 \$27,741,834	\$3.68 \$29,683,762	\$3.93 \$31,761,626	\$4.21 \$33,984,940	\$4.50 \$36,363,865	\$4.82 \$38,909,357
\$1.31 \$10,582,056	\$1.40 \$11,322,800	\$1.50 \$12,115,396	\$1.61 \$12,963,474	\$1.72 \$13,870,917	\$1.84 \$14,841,881	\$1.97 \$15,880,813	\$2.10 \$16,992,470	\$2.25 \$18,181,943	\$2.41 \$19,454,679
\$1.97 \$15,873,084	\$2.10 \$16,984,200	\$2.25 \$18,173,094	\$2.41 \$19,443,211	\$2.59 \$20,806,376	\$2.76 \$22,262,822	\$2.95 \$23,821,219	\$3.16 \$25,488,705	\$3.38 \$27,272,914	\$3.61 \$29,182,018
\$47,619,253	\$80,952,601	\$54,519,283	\$68,335,632	\$62,419,127	\$66,788,465	\$71,463,658	\$76,466,114	\$81,818,742	\$87,546,054
\$96,235,892	\$220,865,442	\$217,318,760	\$213,502,410	\$209,418,916	\$205,049,577	\$391,209,107	\$386,206,651	\$380,854,023	\$375,126,711
\$86,612,303	\$198,796,897	\$195,586,884	\$192,152,169	\$188,477,024	\$184,544,619	\$332,088,196	\$347,585,986	\$342,768,621	\$337,614,040
\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403
\$49,964,900	\$162,149,495	\$158,939,481	\$155,504,766	\$151,829,621	\$147,897,216	\$315,440,793	\$310,938,583	\$306,121,218	\$300,966,637
\$41,470,867	\$134,584,080	\$131,919,769	\$129,068,956	\$126,018,585	\$122,754,669	\$261,815,889	\$258,079,024	\$254,080,611	\$249,802,309
\$9,623,589	\$22,088,544	\$21,731,876	\$21,350,241	\$20,941,892	\$20,504,988	\$39,120,911	\$38,620,665	\$38,085,402	\$37,512,671
\$9,623,589	\$22,088,544	\$21,731,876	\$21,350,241	\$20,941,892	\$20,504,988	\$39,120,911	\$38,620,665	\$38,085,402	\$37,512,671

2005 15	2006 16	2007 17	2008 18	2009 19	2010 20	2011 21	2012 22	2013 23	2014 24
\$87.34 \$475,400,457	\$96.08 \$765,637,207	\$105.68 \$765,637,207	\$116.25 \$765,637,207	\$127.88 \$765,637,207	\$140.67 \$765,637,207	\$154.73 \$1,233,066,378	\$170.21 \$1,233,066,378	\$187.23 \$1,233,066,378	\$205.95 \$1,233,066,378
\$113.92 \$8,090,920	\$125.32 \$13,030,508	\$137.85 \$13,030,508	\$151.63 \$13,030,508	\$166.80 \$13,030,508	\$183.48 \$13,030,508	\$201.82 \$20,985,763	\$222.01 \$20,985,763	\$244.21 \$20,985,763	\$268.63 \$20,985,763
\$5,696.25 \$14,006,209	\$6,265.87 \$22,557,140	\$6,892.46 \$22,557,140	\$7,581.71 \$22,557,140	\$8,339.88 \$22,557,140	\$9,173.86 \$22,557,140	\$10,091.25 \$36,328,500	\$11,100.37 \$36,328,500	\$12,210.41 \$36,328,500	\$13,431.45 \$36,328,500
\$497,497,597 7.00%	\$601,224,855 7.00%	\$601,224,855 7.00%	\$601,224,855 7.00%	\$601,224,855 7.00%	\$601,224,855 7.00%	\$1,290,380,641 7.00%	\$1,290,380,641 7.00%	\$1,290,380,641 7.00%	\$1,290,380,641 7.00%
\$462,672,765	\$745,139,115	\$745,139,115	\$745,139,115	\$745,139,115	\$745,139,115	\$1,200,053,996	\$1,200,053,996	\$1,200,053,996	\$1,200,053,996
\$5.16 \$41,633,012	\$5.52 \$44,547,323	\$5.90 \$47,665,636	\$6.32 \$51,002,230	\$6.76 \$54,572,387	\$7.23 \$58,392,454	\$7.74 \$62,479,925	\$8.28 \$66,853,520	\$8.86 \$71,533,267	\$9.48 \$76,540,595
\$2.58 \$20,816,506	\$2.76 \$22,273,662	\$2.95 \$23,832,818	\$3.16 \$25,501,115	\$3.38 \$27,286,193	\$3.62 \$29,196,227	\$3.87 \$31,239,963	\$4.14 \$33,426,760	\$4.43 \$35,766,633	\$4.74 \$38,270,298
\$3.87 \$31,224,739	\$4.14 \$33,410,492	\$4.43 \$35,749,227	\$4.74 \$38,251,673	\$5.07 \$40,929,290	\$5.42 \$43,794,340	\$5.80 \$46,859,944	\$6.21 \$50,140,140	\$6.65 \$53,649,900	\$7.11 \$57,405,446
\$93,674,278	\$100,231,477	\$107,247,681	\$114,735,018	\$122,787,870	\$131,383,021	\$140,579,832	\$150,420,420	\$160,949,880	\$172,216,539
\$368,998,487	\$644,907,638	\$637,891,434	\$630,384,097	\$622,351,245	\$613,756,094	\$1,059,474,164	\$1,049,633,576	\$1,039,104,146	\$1,027,837,657
\$332,098,639	\$322,453,819	\$318,945,717	\$315,192,048	\$311,175,623	\$306,878,047	\$29,737,082	\$24,816,788	\$19,552,073	\$13,918,828
\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$36,647,403	\$29,737,082	\$24,816,788	\$19,552,073	\$13,918,828
\$295,451,236	\$285,806,416	\$282,298,314	\$278,544,645	\$274,528,220	\$270,230,644	\$29,737,082	\$24,816,788	\$19,552,073	\$13,918,828
\$245,224,526	\$237,219,325	\$234,307,601	\$231,192,056	\$227,858,422	\$224,291,435	\$49,681,778	\$45,597,934	\$41,228,221	\$46,552,628
\$36,899,849	\$322,453,819	\$318,945,717	\$315,192,048	\$311,175,623	\$306,878,047	\$29,737,082	\$24,816,788	\$19,552,073	\$13,918,828
\$36,899,849	\$322,453,819	\$318,945,717	\$315,192,048	\$311,175,623	\$306,878,047	\$29,737,082	\$24,816,788	\$19,552,073	\$13,918,828

	2015 25	2016 26	2017 27	2018 28	2019 29	2020 30	2021 31	2022 32	2023 33	2024 34
	\$226.54 \$1,233,066,378	\$249.20 \$1,985,865,732	\$274.12 \$1,985,865,732	\$301.53 \$1,985,865,732	\$331.68 \$1,985,865,732	\$364.85 \$1,985,865,732	\$401.34 \$3,198,256,620	\$441.47 \$3,198,256,620	\$485.62 \$3,198,256,620	\$534.18 \$3,198,256,620
	\$295.49 \$20,985,763	\$325.04 \$33,797,782	\$357.55 \$33,797,782	\$393.30 \$33,797,782	\$432.63 \$33,797,782	\$475.89 \$33,797,782	\$523.48 \$54,431,665	\$575.83 \$54,431,665	\$633.41 \$54,431,665	\$696.75 \$54,431,665
	\$14,774.60 \$36,328,500	\$16,252.06 \$38,507,412	\$17,877.26 \$38,507,412	\$19,664.99 \$38,507,412	\$21,631.49 \$38,507,412	\$23,794.64 \$38,507,412	\$26,174.10 \$94,226,772	\$28,791.51 \$94,226,772	\$31,670.67 \$94,226,772	\$34,837.73 \$94,226,772
	\$1,290,380,641 7.00%	\$2,078,170,926 7.00%	\$2,078,170,926 7.00%	\$2,078,170,926 7.00%	\$2,078,170,926 7.00%	\$2,078,170,926 7.00%	\$3,346,915,058 7.00%	\$3,346,915,058 7.00%	\$3,346,915,058 7.00%	\$3,346,915,058 7.00%
	\$1,200,053,996	\$1,932,698,961	\$1,932,698,961	\$1,932,698,961	\$1,932,698,961	\$1,932,698,961	\$3,112,631,004	\$3,112,631,004	\$3,112,631,004	\$3,112,631,004
	\$10.14 \$81,898,437	\$10.85 \$87,631,327	\$11.61 \$93,765,520	\$12.43 \$100,329,107	\$13.30 \$107,352,144	\$14.23 \$114,866,794	\$15.22 \$122,907,470	\$16.29 \$131,510,993	\$17.43 \$140,716,762	\$18.65 \$150,566,936
	\$5.07 \$40,949,218	\$5.43 \$43,815,664	\$5.81 \$46,882,760	\$6.21 \$50,164,553	\$6.65 \$53,676,072	\$7.11 \$57,433,397	\$7.61 \$61,453,735	\$8.15 \$65,755,496	\$8.72 \$70,388,381	\$9.33 \$75,283,468
	\$7.61 \$61,423,828	\$8.14 \$65,723,496	\$8.71 \$70,324,140	\$9.32 \$75,246,830	\$9.97 \$80,514,108	\$10.67 \$86,120,096	\$11.42 \$92,180,602	\$12.22 \$98,633,245	\$13.07 \$105,537,572	\$13.99 \$112,925,202
	\$184,271,483	\$197,170,487	\$210,972,421	\$225,740,490	\$241,542,324	\$258,450,287	\$276,541,807	\$295,899,734	\$316,612,715	\$338,775,605
	\$1,015,782,513	\$1,735,528,475	\$1,721,726,540	\$1,706,958,471	\$1,691,156,637	\$1,674,248,674	\$2,836,069,197	\$2,816,731,270	\$2,796,018,289	\$2,773,855,399
	\$307,891,257	\$367,764,237	\$360,863,270	\$353,479,236	\$345,578,318	\$337,124,337	\$1,418,044,598	\$1,408,365,635	\$1,398,009,144	\$1,386,927,699
	\$307,891,257	\$367,764,237	\$360,863,270	\$353,479,236	\$345,578,318	\$337,124,337	\$1,418,044,598	\$1,408,365,635	\$1,398,009,144	\$1,386,927,699
	\$421,549,743	\$720,244,317	\$714,516,514	\$708,387,765	\$701,830,004	\$694,813,200	\$1,176,977,017	\$1,168,943,477	\$1,160,347,590	\$1,151,149,990
	\$307,891,257	\$367,764,237	\$360,863,270	\$353,479,236	\$345,578,318	\$337,124,337	\$1,418,044,598	\$1,408,365,635	\$1,398,009,144	\$1,386,927,699
	\$307,891,257	\$367,764,237	\$360,863,270	\$353,479,236	\$345,578,318	\$337,124,337	\$1,418,044,598	\$1,408,365,635	\$1,398,009,144	\$1,386,927,699

2025
36

\$687.60
\$3,198,256,620

\$766.43
\$54,431,665

\$38,321.50
\$94,226,772
\$3,346,915,058

7.00%

\$19.96
\$161,106,621

\$9.98
\$80,553,311

\$14.97
\$120,629,966
\$362,489,898

\$2,750,141,106

\$1,375,070,553

\$1,375,070,553

\$1,141,308,559

\$1,375,070,553

\$1,375,070,553

CHAPTER IV

COMPARISONS AND EVALUATIONS

This chapter investigates alternative development options and evaluates them according to both qualitative and quantitative criteria.

The procedures adopted in this chapter are:

- (1) To list the various options available including no development.
- (2) To pick out the options which are 'possible' or which are still viable despite certain odds.
- (3) To compare and evaluate the chosen options.

Choices Available

There are in theory several options that the Diocese can choose from:

- (1) To maintain the status quo i.e. not to develop at all.
- (2) To keep to the original thinking of an office complex.
- (3) To propose an alternative scheme:
 - (i) To develop a residential complex.
 - (ii) To develop a hotel complex.
 - (iii) To develop an industrial complex.
 - (iv) To develop a mixed-use complex.
 - (v) To develop a low-density complex.

Maintaining the Status Quo

Although the Diocese will not collapse financially if the project does not take off (perhaps with the consequence of having to get more donations to maintain and renovate the existing properties), a deal of some sort is better than no deal at all. The question is only one of what to develop, when to develop and how much to develop.

The rationale for this view are:

(a) The Diocese is virtually protected from all risks as:

(i) The Diocese will get a guaranteed annual return of HK\$ 6 million (US\$ 0.75 million) regardless of whether a positive income flow has been earned or not.

(ii) It will share in the excess income after the guaranteed payment and the Developer's return portions have been satisfied.

(iii) Except in the worst and unexpected case, e.g. foreclosure by lending institutions etc., it incurs no liability of any sort or assumes any risks.

(b) With the approach of 1997, the year in which the sovereignty of Hong Kong is to be reverted back to the People's republic of China (PRC), the number of years whereby income flow will still be 'certain' is decreasing (roughly 11 years more from 1986). Hence, the sooner the development is completed, the more the 'certain' years will be left, and this is important generally to developers as they perceive a 9 or 10 year period as sufficient to recoup their capital investment. Hence, the more of those years which are before 1997 there are, the better the deal is

perceived (This is a general attitude prevalent among the business community in Hong Kong and individual developers and companies may hold a different opinion. Nevertheless, despite the 'assurances' given by the People's Republic of China (PRC), the Hong Kong business community at large is adopting a 'wait and see' attitude as the historical track record of the PRC in keeping promises is not altogether positive. Moreover, quite a portion of the populace were refugees from mainland China and they had had experience of the 'revolutions' and it is hard for them 'to put fully their minds at ease').

Nevertheless, this remains a possibility should the other options either be too risky to take or have relatively poor returns thereby not justifying the effort and resources to be spent.

To Keep to the Original Office Development

This too remains as a possible option should the alternative 'development' option prove to be less fruitful. (Please refer to Chapter III for details and improvements.)

Seek an Alternative Development Type

In theory, the following alternatives are available:

- (1) A residential complex.
- (2) A hotel complex.
- (3) An industrial Complex.
- (4) A mixed-use complex.

(5) A low-density complex.

However, with respect to the given reality, options (2), (3) and (5) are not viable because:

(i) Hotels - the Diocese does not agree to this option of development as the highly transient activities are not favourably perceived to be compatible with certain church programs, despite this may be a financially sound proposal.

(ii) Industrial - this is definitely impossible as the district zoning forbids such activities. Furthermore, both historically and socially, the area has never been and will not be used for industrial purposes.

(iii) Low density - This option may create a nice environment. However, the obstacle is that the Diocese is not able to put up a single dollar for development. It must rely on a private developer and it is almost definite that no developers will go into all the financial and legal troubles in order to build a low-intensity usage for the site. The return simply is not attractive enough.

Possible Options

Therefore, the possible options for the present case are:

- (1) Maintain the status quo.
- (2) To develop an office complex as suggested.
- (3) To develop a residential complex.
- (4) To develop a mixed-use complex comprising elements of residential and commercial.

Comparisons

No Development

The only major benefit under this option is that the Diocese can spare itself of the technical and managerial hectics involved in a development. Perhaps it will also please those who would love to see all old buildings in Hong Kong being preserved (Please refer to the attached newspaper article written by preservationists in Exhibit 7).

However, apart from that, there is no reason for 'letting the site idle' and the Diocese is faced with a substantial maintenance problem in keeping the existing buildings in shape. Further, it needs to continue the present annual fund-raising exercise to fund its various charity programs. All these require approximately some extra HK\$ 3 million (US\$ 380,000) after regular donations and government grants have been taken into account. It is almost 'sinful' not to make use of the site potential to create further income for the Diocese especially when one considers its desire to expand its scope of work as Hong Kong further develops.

Office Complex

Normally, the return is higher for an office complex than say, for a residential property. However, it follows that the risks are also higher as office demand is affected by general economical and employment trends whereas people

Oldest church building faces demolition in redevelopment



The Bishop's House, which dates back to 1846.

High-rise threat to HK history

EXCLUSIVE by NICHOLAS WAY

TWO of Hongkong's most historic buildings — Bishop's House and St Paul's Church in Central — are earmarked for demolition to make way for a \$400 million high-rise development.

The buildings are part of the Anglican Church complex between Upper and Lower Albert Roads in Central.

Plans for the historic site — Bishop's House itself dates back almost to the foundation of the territory — is likely to cause uproar among conservationists.

Construction of Bishop's House started in 1846 and was completed in 1851.

Sources say the project — comprising 32 floors of office space, 10 floors of car park space, a new church, diocese centre, conference rooms and hostel — could begin early next year and be finished by 1990.

The Anglican Church has yet to give final approval for the project, but it is believed Government approval has been obtained and negotiations are underway with a local developer for a 40-year contract.

Realtor Jones Lang Wootton is also involved, although a company spokesman refused to comment.

Details about the financial arrangements between the church and developer remain unclear.

But it is believed the church will earn some of the rental income from the office space, with the developer taking the lion's share.

To allow the project to get off the ground, it will involve the demolition of the current buildings, including St Paul's Church in Glenealy, Bishop's House which fronts on to Lower Albert Road, Diocese House, a primary school and a hospital.

The site, which will have a plot ratio of 5:1, will have a total gross floor area of about 75,000 sq m.

Most of this will be office space, which should earn about \$150/sq m for this

Comment

PROPERTY developers chasing their next million have in the last few years gobbled up the old Central Post Office, the Hongkong Club, Murray Barracks and the Repulse Bay Hotel.

It may be hard to forgive them their utter disregard for Hongkong's past, but at least their motives were understandable. They were in it for the money.

But now the Anglican Church seems tempted by Mammon. Plans for redeveloping two venerable buildings, one dating back almost to the colony's founding, are well-advanced.

The diocesan authorities must reconsider this scheme. The church represents values which cannot be measured in dollar terms, and this is the wrong time in Hongkong's history for the Anglican community to forget that.

fringe core Central site. Two floors of the office block will be used for the diocese centre.

It is understood the church first examined developing the site several years ago but the plans were shelved when it was decided the project was not feasible.

But now it is planning to realise the potential of this asset — one of the few remaining sites for large-scale development in the area.

The recovery in the office accommodation market in Central must influence its decision.

Hongkong Land, the Central district's biggest landlord, is boasting nearly 100 per

cent occupancy in all its buildings.

Next year this situation should continue until Exchange Square III comes on to the market, although there are more projects due to come on stream by the end of the decade.

In particular, Swire's development at the Victoria Barracks Site I and II will add more than 150,000 sq m of office space.

But after the last property boom and bust, developers are taking a harder look at future office needs and a glut on the market similar to 1983-84 is unlikely.

If the development goes

ahead, it should augur well financially for the Anglican Church. The rentals would reflect fringe Central but still offer quick and easy access to core Central.

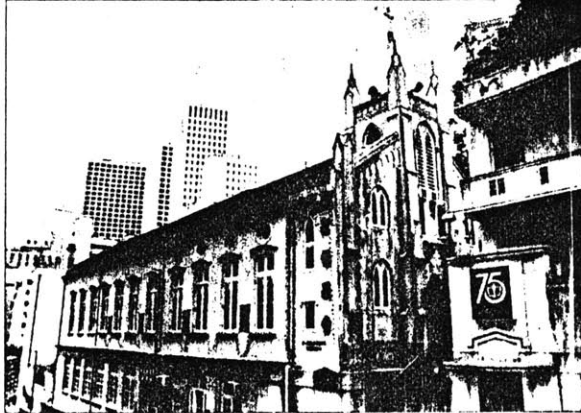
But because of the site's historic associations, controversy is expected.

Bishop's House is almost as old as the Territory. Work on the building was sufficiently advanced in 1847 for it to house the Church of England Anglo-Chinese School, founded by the first Colonial Chaplain, the Reverend Vincent Stanton, to train Chinese clergymen.

In 1851 it was renamed St Paul's College. The rest of the old building was the residence of the Bishop of Hongkong, whose vast diocese extended as far as Yunnan.

Bishop's House was a well-known landmark with its tower, tennis lawns and shrubberies and spacious reception rooms. The house originally had vast bathrooms with Shanghai tubs filled by servants who carried in water heated on fires outside.

The side of the hill west of Glenealy was cut away soon after the turn of the century and a structure was completed in 1911 with St Paul's Church above and school classrooms below.



St Paul's Church... its date with the bulldozers is looming

Exhibit 7 Preservationist's Article

would still have to 'shelter' themselves regardless of whether they are making huge money or not. Thus, this development option brings in the best potential income but also the highest risks. That is, it has a bright side of being able to induce an income much higher than the HK\$ 3 million (US\$ 380,000) but also may give the Diocese a bankrupt developer and a deep-trouble office property.

In addition, the 'commercial' image may not be at all helpful in preserving the image of non-profit making, which is an important consideration to the Diocese.

Residential Complex

This option brings in a smaller but steadier income which may be favorable to the Diocese whose goal is not the making of big profits (with high risks). Moreover, less environmental impact may be possible as seldom would one use centralised ventilation systems (which produce noise) and reflective glass curtain walling for residential properties.

However, the drawbacks are that first, it may be more difficult to attract developers to enter the joint agreement and second, there may be problems in tenant quality control and security as people are expected to enter and leave the place almost 24 hours each day, whereas such problems are more manageable in office complexes. Nevertheless, there are ways to prevent such problems happening or getting out of control. For example, one can make long-term lease agreements with the major business institutions to accomodate their expatriate staff, particularly those who

are to be assigned to Hong Kong for a short period, thus avoiding the expensive hotel budgets while also saving the companies much trouble in seeking other forms of temporary accommodations as these are not common in Hong Kong.

Mixed-use Complex

The good point about this option is that it can take advantage of the higher rents from the office should the market be strong while at the same time it reduces the impact of a sluggish office market by hedging in some steady income-producing residential apartments.

Thus, it is better than simply building condominiums while being less risky than owning an immense office property. Moreover, assuming that the floor area ratio is to remain the same and that the two portions are roughly equal, then lower structures can be designed and a more responsive planning in usage terms will be achieved, if say, the upper portion of the site is to house the residences while the office sector is to be built in the lower portion.

A table summarising the characteristics of each option is attached for reference in Exhibit 8.

Financial Evaluations of Options

The following financial calculations are performed to compare in a quantitative manner the various options. The purpose is not to provide an accurate prediction of cash flow for each option but only to obtain a general indication

Exhibit 8

File:thscomp

TABLE SUMMARISING CHARACTERISTICS OF THE OPTIONS

ITEMS	NO DEVELOPMENT	OFFICE	RESIDENTIAL	MIXED-USE
Financials	Negative	High return	Low return	Modest return
Market risks	None	High	Low	Modest/Hedged
Overall environmental impact	Existing tranquility maintained	Possible adverse effects	Usage compatible	Less adverse, usages compatible
Protest from preservationist	None	Yes	Yes	Yes
Construction problems	None	Probably	Probably	Probably
Further approval from Government	No need	No need	Yes, and probably time-consuming	Yes, but not time-consuming
Additional strain on Diocese administration	Little	Yes	Yes	Yes
Security problems or tenant quality control	Little, as there is nothing much of value now	Little, as office workers leave after dark	Potential tenant quality problems	Fewer potential tenant quality problems
Potential legal complexities	None	Probable	Probable	Probable
'Image' of Diocese	Maintained 'poverty' image	Potential damage	Potential damage	Potential damage

of how each option fares in relation to others.

Assumptions as below:

(1) The pro-formas are in their first 'stabilised' year of operations.

(2) No allocations of income between the Diocese and the developer have been given as it is deemed that the same financial sharing pattern will apply to every option, i.e. the option which provides the highest net income will give both parties the highest returns possible.

(3) All loans have a 20 year term, an annual interest of 10% and constitute 80% of construction cost.

(4) Gross rent figures are used.

(5) The Diocese facility, retail and carpark spaces are deemed to remain the same for each option.

(6) Only construction costs are taken into account. The compensatory allowance from the developer to the Diocese for temporary accommodations etc. are not considered.

Findings

It is clear from the evaluations that the options rank in the following order of decreasing financial viability:

- (1) Mixed-use.
- (2) Office.
- (3) Residential.
- (4) No development.

The mixed-use and office options actually rank very close to one another and the office option should have been very favorable if not for its high vacancy factor.

Residential development, as anticipated, provides a much lower return but is still preferable to maintaining the existing properties, as a negative cash flow would result (as has been going on for quite a few years).

All in all, the mixed-use option seems the best alternative as it is 'safer' being less influenced by economic trends and office growth, and playing safe may be more important for a non-profit entity such as the Diocese. (Please refer to attached Exhibit 9 for details).

Exhibit 9 Financial Comparisons of Options

File:thsmixed

In Hong Kong Currency : HK\$ 7.80 = US\$ 1.00 1st Stabilised Year

MIXED-USE OPTION		INCOME: ANNUAL		\$
(Assume 50% office and 50% residential)				
Office Area=	330,000 sq.ft.			
Residential				
& others=	470,000 sq.ft.			
Const. Cost-off=	\$450.00 per sq.ft.			
Const. Cost-res=	\$370.00 per sq.ft.	Office	\$91,080,000	
Total Cost=	\$322,400,000	Residential	\$59,400,000	
		Retail	\$3,132,000	
		Carpark	\$5,400,000	
Financing=	80.00%	less		
Loan=	\$257,920,000	Vacancy	(\$25,441,920)	
Interest=	10.00%	Eff. Income	\$133,570,080	
Term=	20 years			
Annual Payment=	\$30,295,186	LESS EXPENSES:		
(Debt Service)		Operating	(\$12,088,800)	
Office=	330,000 sq.ft.	Management	(\$7,232,400)	
Rent per month=	\$23.00 per sq.ft.	Government tax	(\$10,848,600)	
(Gross)				
Residential=	330,000 sq.ft.	Net Income	\$103,400,280	
Rent per month=	\$15.00 per sq.ft.			
(Gross)		LESS DEBT SERVICE:		
Retail=	8,700 sq.ft.			
Rent per month=	\$30.00 per sq.ft.			
(Gross)				
Carpark=	300 no.			
Rent per month=	\$1,500.00 per no.	CASH FLOW		
		BEFORE TAX	\$73,105,094	
Overall vacancy	16.00%	US\$ equivalent=	\$9,372,448	
Expenses per month:				
Office				
Operating	\$2.00 per sq.ft.			
Management	\$1.00 per sq.ft.			
Government tax	\$1.50 per sq.ft.			
Residential				
Operating	\$1.00 per sq.ft.			
Management	\$0.80 per sq.ft.			
Government tax	\$1.20 per sq.ft.			

File:thsoff

In Hong Kong Currency : HK\$ 7.80 = US\$ 1.00 1st Stablised Year

OFFICE OPTION		INCOME: ANNUAL	\$
Const. Cost=	\$390,000,000	Office	\$182,160,000
(Taken from Estimate)		Retail	\$3,132,000
		Carpark	\$5,400,000
Financing=	80.00%	less	
Loan=	\$312,000,000	Vacancy	(\$47,673,000)
Interest=	10.00%	Eff. Income	\$143,019,000
Term=	20 years		
Annual Payment=	\$36,647,403	LESS EXPENSES:	
(Debt Service)		Operating	(\$16,048,800)
Office=	660,000 sq.ft.	Management	(\$8,024,400)
Rent per month=	\$23.00 per sq.ft.	Government tax	(\$12,036,600)
(Gross)		Net Income	\$106,909,200
Retail=	8,700 sq.ft.	LESS DEBT SERVICE:	
Rent per month=	\$30.00 per sq.ft.		(\$36,647,403)
(Gross)			
Carpark=	300 no.	CASH FLOW	
Rent per month=	\$1,500.00 per no.	BEFORE TAX	\$70,261,797
Overall vacancy	25.00%	US\$ equivalent=	\$9,007,923
Expenses per month:			
Operating	\$2.00 per sq.ft.		
Management	\$1.00 per sq.ft.		
Government tax	\$1.50 per sq.ft.		

File:thsresi

In Hong Kong Currency : HK\$ 7.80 = US\$ 1.00 1st Stabilised Year

RESIDENTIAL OPTION		INCOME:ANNUAL	\$
Total fl. area=	800,000 sq.ft.		
Const. Cost=	\$370.00 per sq.ft.		
Total Cost=	\$296,000,000	Office	\$118,800,000
		Retail	\$3,132,000
		Carpark	\$5,400,000
Financing=	80.00%	less	
Loan=	\$236,800,000	Vacancy	(\$8,913,240)
Interest=	10.00%	Eff. Income	\$118,418,760
Term=	20 years		
Annual Payment=	\$27,814,439	LESS EXPENSES:	
(Debt Service)		Operating	(\$8,024,400)
Residential=	660,000 sq.ft.	Management	(\$6,419,520)
Rent per month=	\$15.00 per sq.ft.	Government tax	(\$9,629,280)
(Gross)		Net Income	\$94,345,560
Retail=	8,700 sq.ft.	LESS DEBT SERVICE:	
Rent per month=	\$30.00 per sq.ft.		(\$27,814,439)
(Gross)			
Carpark=	300 no.	CASH FLOW	
Rent per month=	\$1,500.00 per no.	BEFORE TAX	\$66,531,121
Overall vacancy	7.00%	US\$ equivalent	\$8,529,631
Expenses per month:			
Operating	\$1.00 per sq.ft.		
Management	\$0.80 per sq.ft.		
Government tax	\$1.20 per sq.ft.		

File:thsnogo

In Hong Kong Currency : HK\$ 7.80 = US\$ 1.00

NO DEVELOPMENT OPTION

INCOME: ANNUAL

\$

Gross Floor Area= approximately
200,000 sq.ft.

Hospital \$240,000

Expenses per month:

EXPENSES:

Operating= \$0.30 per sq.ft.

Operating (\$720,000)

Maintenance and

Management \$0.20 per sq.ft.

Management (\$480,000)

Tax \$0.03 per sq.ft.

Tax (\$72,000)

Income per month:

From Hospital \$20,000.00 for whole unit
(Rented to private physicians)

CASH FLOW (\$1,032,000)

No Debt Service

US\$ equivalent= (\$132,308)

CHAPTER V

RECOMMENDATIONS

Which Option?

The following rates the options according to a set of factors, with the important ones being weighted. The rankings are subjective and are made in conjunction with the assistance of the property management section of the Diocese. The best rating is 10 while the worst is 1:

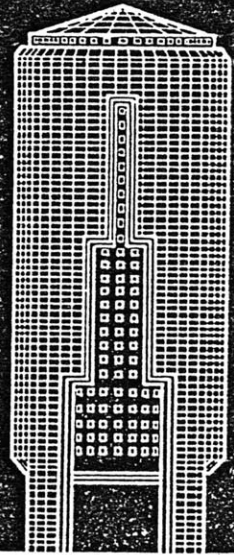
Items(weight)	No Dev.	Office	Resident	Mixed-use
Finance(5)	1*5=5	10*5=50	5*5=25	8*5=40
Market(3)	10*3=30	4*3=12	8*3=24	6*3=18
Environment(2)	8*2=16	3*2=6	6*2=12	7*2=14
Preservation	9	5	6	6
Construction	8	6	6	6
Approval	9	9	4	4
Strain on Diocese(2)	7*2=14	6*2=12	6*2=12	6*2=12
Security	8	7	3	6
Legal complexities	8	7	7	7
'Image' of Diocese	9	3	7	6
Total	116	117	106	119

This table corresponds to the one in chapter IV in the comparisons part. Hence, the overall optimum option to develop is the mixed-use development scheme, with office and no development following immediately behind. However, one must be cautioned that certain bias has been built in the table especially for the no development option. For example, in the factor of environmental impact, no development scores a high mark not because it creates a good environment, only that it does nothing to disturb it negatively by staying put. The point is while the order of ranking reflects the true situation, the 'total' figures certainly do not present an accurate account of the degree of preference for each option.

Next Best Alternative

Should for some reasons the above recommended mixed-use development option cannot be carried out, the office development is the next best substitute. The existing office proposal should then be executed with the the suggested improvements made in chapter III in mind. The problem is how to attract existing tenants in an expected tight market.

APPENDICES



I.L. 7360
REDEVELOPMENT

APRIL 1986

INVITATION TO
DEVELOPMENT
PARTNERS

I.L. 7360
REDEVELOPMENT

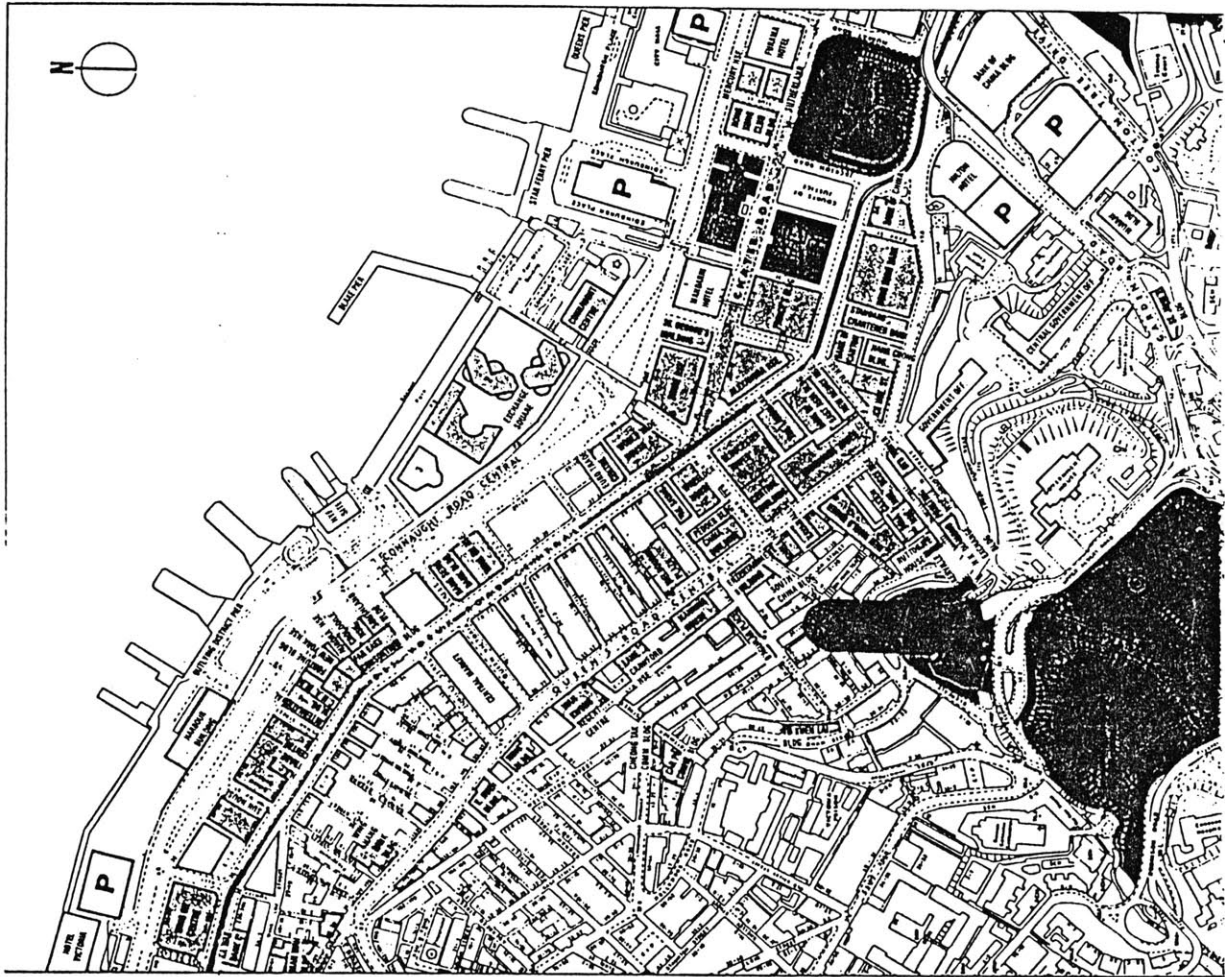
Prepared by:
Jones Lang Wootton
Ng Chun Man & Associates
Langdon Every & Seah

CONTENTS

APPENDIX :	I	DEVELOPER BRIEF	1
	II	ARCHITECTURAL DESIGN	17
	III	TECHNICAL SPECIFICATION	65
	IV	PRELIMINARY COST ESTIMATE	77

A1

DEVELOPER BRIEF



LOCATION PLAN

DEVELOPER BRIEF

1. INTRODUCTION

- 1.1 The Bishop of Victoria, Hong Kong, a body incorporated under ordinance, hereinafter referred to as "The Owner" is the registered owner of IL7360, a large site bounded by Upper Albert Road, Glenealy and Lower Albert Road overlooking Hong Kong's Central District. Under new lease conditions, the site will have an area of approximately 7,300m² (79,000 sq.ft.).
- 1.2 The Owner has sought and obtained a variation to its lease conditions to permit the redevelopment of the site with a 63,000m² (678,132 sq.ft.) commercial office building in the form of a 32-storey circular tower, together with 10,442m² (112,398 sq.ft.) of Owner's facilities and 400m² (4,306 sq.ft.) of Government accommodation (a special day care centre for handicapped children) subject to final acceptance of detailed terms and payment of the assessed premium of HK\$19.0 million. It should be noted that the Lease Variation Conditions relate to a specific outline scheme only and any departure from this will require Town Planning Board's approval.
- 1.3 It is the Owner's intention to proceed with the redevelopment of its site in partnership with a developer selected by competitive bid, hereinafter called "The Developer", who would bear all development costs and risks. The Owner has appointed Jones Lang Wootton to act as its development advisors in this matter.
- 1.4 This document sets out the terms and conditions under which it would be prepared to consider offers from developers to participate in this development opportunity and only bids conforming to these requirements will be considered.
- 1.5 Under the proposed arrangements, the Developer would pay the lease variation premium of HK\$19.0 million and would provide construction finance and expertise to organise and manage the construction of the project in accordance with designs agreed with the Owner. The Developer would also provide certain payments and allowances to the Owner. In return, the Developer would be granted a long term head lease over the commercial portion upon completion which could then be sublet in whole or part for a term of years not exceeding that

of the head lease at prevailing market rents. The net rental income would be apportioned between the partners in such a way as:

- i) To provide the Owner with a minimum share of annual income by way of ground rent subject to a minimum annual amount.
- ii) A return to the developer upon capital expended; and
- iii) Any surplus shared between the parties in a manner to be agreed.

1.6 The Owner will give preference to proposals whereby the commercial accommodation is retained for long term investment and disposed of by way of short term leases provided that the following key concerns can be addressed to the satisfaction of the Owner: -

- i) Full safeguards to ensure that the whole development will be returned to the Owner upon termination of the Head Lease, in good and substantial repair, without encumbrances.
- ii) Satisfactory provisions in the opinion of the Owner for the future management and maintenance of the development, supported by a Deed of Mutual Covenant acceptable to the Owner.
- iii) Provision for the future redevelopment and/or major refurbishment if necessary during the term of the Head Lease.

1.7 It should be noted that the length of the Head Lease interest being offered by the Owner is preferably less than 35 years commencing from the date of occupation Permit for the commercial portion being granted and bids should be submitted on this basis. Alternative bids on Head Lease terms proposed by the Developer may also be made although it should be noted that the Owner's preference is for a shorter rather than longer lease term.

1.8 Details of the development opportunity and the manner of submitting bids are set out in this document. However, the Owner will be under no obligation to proceed with proposals for redevelopment for any reason and will be under no obligation in respect of any proposals submitted. Nothing in this brief is deemed to constitute an offer and furthermore the Owner will be under no obligation to provide any explanation or inform-

DEVELOPER BRIEF

ation relating to any proposal which may be declined, neither will it be responsible for any costs or charges which may be incurred by any party acting as result of this invitation.

- 1.9 Neither Jones Lang Wootton nor the Owner give any warranty implied or otherwise that development approval can be obtained and the information and details contained in this brochure are for guidance only. Developers shall be deemed to have satisfied themselves as to all relevant conditions before making a proposal. Should clarification or further information be required at this stage, all queries should be directed to Jones Lang Wootton in the first instance.

2. THE SITE, PREMIUM AND CROWN LEASE CONDITIONS

- 2.1 The site, comprising IL7360 as modified has an approximate area of 7,300m² (78,577 sq.ft.) or thereabouts. Location and site plans are included in Section II.
- 2.2 The property is held by the Bishop of Victoria, Hong Kong on a 999 year lease commencing April, 1850. Currently, the Crown Lease permits specified residences associated with the Church and parish together with various hospital, welfare and education facilities. Approval from the Town Planning Board and Lands Department has been obtained for the modification of the Crown Lease to permit a specified form of commercial development, detailed in Sub-section 6 and this will be incorporated by the means of a Deed of Variation to the existing lease conditions. This deed will also retain for the Owner the benefit of the unexpired term of the original Crown Lease for a further 863 years.
- 2.3 Details of the proposed modified lease conditions, which are subject to acceptance and payment of premium, are set out in the District Lands Officer's letter of 10th December 1985 and attachments. These may be inspected by prior appointment at the offices of Jones Lang Wootton.
- 2.4 The draft special conditions will permit the development of:-
- i) 63,000m² (678,132 sq.ft.) gross floor area of commercial office accommodation;
 - ii) 10,442m² (112,398 sq.ft.) gross floor area of the Owner's accommodation;
 - iii) 400m² (4,306 sq.ft.) gross floor area for a special day care centre to be provided for Government;
- Together with 300 carparking spaces, all in accordance with outline designs prepared by Ng Chun Man & Associates Architects & Engineers (HK) Ltd. and approved by the Town Planning Board.
- 2.5 The premium assessed by Government for the modification in the lease is HK\$19.0 million. However, attention is drawn to Clause 8 of the District Lands Officer's letter reserving the right to reassess this figure should the documentation not be executed by 10th June, 1986.

DEVELOPER BRIEF

3. TOWN PLANNING

3.1 The property falls within Zone I of the Hong Kong Statutory Outline Zoning plan No. LH4/42F and is zoned for Government/institutional/community use. However, the Town Planning Board on 25th October, 1984 has approved an application for commercial zoning under Section 16 of the Town Planning Ordinance subject to certain requirements incorporated within the proposed special lease conditions.

4. SITUATION

- 4.1 Location and site plans indicating the extent of the site and its position are included in Section II.
- 4.2 At the top of Ice House Street and close to major commercial developments such as New World Tower, Ruttonjee Centre and the Government offices, the site is one of the last remaining opportunities for large scale development under single ownership within the Central district of Hong Kong. Conveniently situated with easy access to both the commercial heart of Central and the prime residential areas of mid-levels, the site occupies a commanding elevated position the development of which is likely to prove attractive to concerns anxious to balance prominence and accessibility with affordable accommodation costs
- 4.3 It is intended that vehicular access to the site, which will have parking for about 300 cars, will be from both Upper and Lower Albert Road, with a third access point proposed from Ice House Street, subject to acceptance of detailed design by the Director of Lands.
- 4.4 Principal pedestrian access to the office tower will be via escalators from Lower Albert Road, although provision could be made to link this direct to Ice House Street or via a subway link to Duddell Street subject to approval by Government. For the Owner's accommodation, access will be primarily from Upper Albert Road.

DEVELOPER BRIEF

5. EXISTING DEVELOPMENT

- 5.1 The site is currently occupied by a number of medium to low rise buildings including The Bishop's House, The Central Hospital, various Church facilities and residential quarters and St. Paul's Church. The Developer will be responsible for demolition of these buildings following vacant possession of the site being given.
- 5.2 Arrangements can be made to inspect the site and existing properties and in their offer, developers will be deemed to have done so. The Owner will accept no liability for any difficulties, delays or additional costs encountered by the Developer in the demolition of these buildings or site formation work once vacant possession has been granted.

6. SCHEME OF DEVELOPMENT

- 6.1 The development scheme, upon which the lease modification and town planning approval has been obtained, is for a 32-storey circular commercial office tower on the lower portion of the site linked by footbridge to a re-provided St. Paul's Church and Diocesan Centre on the Upper Albert Road frontage above a ten level tiered carparking station. Outline drawings of the proposed scheme have been prepared by the architects, Ng Chun Man & Associates, Architects & Engineers (HK) Ltd. and are appended to this brief (Section II) and only proposals conforming to this approved Scheme H Revision I will be considered.
- 6.2 The total gross floor area of the proposed development is 73,842m² (794,835 sq.ft.) of which 10,442m² (112,398 sq.ft.) would be for the Owner's accommodation comprising two floors in the office tower and a separate 6,068m² (65,319 sq.ft.) Diocesan Centre and Church on Upper Albert Road together with 400m² (4,306 sq.ft.) of Government Accommodation. The Owner will also retain an area of 500m² at the top of the office tower to be used for diocesan purposes.
- 6.3 It is intended that the Developer would be responsible for the design development and construction of the office tower and low rise accommodation in accordance with the Technical Specification and parameters to be agreed with the Owner, with the Owner responsible for internal decoration and furnishing of the Owner's accommodation from a lumpsum allowance made available by the Developer.
- 6.4 The Developer would also be responsible for the construction and fitting out of the Government Accommodation in accordance with the technical specification and requirements of Government, who would provide a lump sum for the provision of internal fitting out.
- 6.5 It is intended that the office tower will be constructed and finished to a high quality not less than that of Sunning Plaza in Hysan Avenue and the Owner will have the right to full consultation upon and approval of the overall planning, designs, specifications, external appearance, finishes and the specifications of major items of electrical and mechanical plant and

DEVELOPER BRIEF

equipment. As the Owner will have a long term residual interest in the development, the materials and equipment used shall be selected with due regard to longevity, efficiency in operation and maintenance.

6.6 A Technical Specification is attached as Section III which will form part of the Development Agreement. For the guidance of developers, a preliminary cost estimate has been prepared by Langdon Every & Seah, Quantity Surveyors, based upon the outline scheme and technical specification. This is appended as Section IV.

7. BASIS OF JOINT VENTURE

7.1 Developer's Undertakings

Proposals are now invited for a joint venture partner to participate in the development of this site with a high quality commercial office building and Church and welfare accommodation and carparking. The selected Developer will enter into a development agreement and related documentation and will have the right subject to compliance with the lease conditions to sub-lease surplus commercial accommodation at full market value for terms of years not exceeding that of the headlease. In return, he will be required to organise, co-ordinate, finance and be fully responsible for:-

- i) The prompt payment of the required premium for the Deed of Variation of the Crown Lease to permit commercial development
- ii) Providing funds of HK\$103 million to be paid by the Developer to the Owner during the development period to meet the Owner's costs for temporary and/or permanent residential and office accommodation and related expenses as set out in Section 8.5 including the payment of all rent and expenses, relocation, storage and fitting out costs and Owner's consultants' fees during the term of the development period.
- iii) Securing all necessary consents and permissions for the redevelopment and re-occupation of the site.
- iv) Fully insuring the development work and property during construction and the commercial space after completion.
- v) The engagement of Ng Chun Man & Associates, Architects & Engineers (HK) Ltd. as Architect and Structural Engineer for this development on terms in accordance with the relevant scales of fees of the Hong Kong Institute of Architects and Institute of Structural Engineers (which will be 4% and 1% of the construction cost respectively), together with such other fully qualified and experienced consultants as are required for the preparation of designs, Government submissions, tender documents and construction details which will be subject to the overall approval of the Owner with regard to archi-

DEVELOPER BRIEF

- vi) Demolition of the present buildings on site with certain features of the present Church to be dismantled for subsequent reincorporation in the new Church.
- vii) Compliance with all requirements of Government relating to the development including the formation of the "Green Area" bordering the lot and the construction of the Government Accommodation as detailed in the special lease conditions together with the payment of any penalties or charges imposed by Government in respect thereof.
- viii) Construction of the new buildings, site works, site formation, access roads and services in accordance with designs, specifications and standards agreed with the Owner.
- ix) Completing the redevelopment and received a full occupation permit within 4 years of signing of the Heads of Agreement or 42 months after being granted vacant possession of the site, whichever is the later.
- x) Handing over to the Owner upon completion the agreed amount of permanent accommodation in the commercial tower and carparking spaces in a condition suitable for the commencement of internal tenancy works and fitting out, within the agreed time frame.
- xi) Handing over to the Owner for internal decoration and refurbishing the low rise accommodation completed in accordance with the agreed specifications no later than the date of receipt of the Occupation Permit.
- xii) Maintenance of proper books of account relating to development expenditure and costs which may be inspected upon request by the Owner.
- xiii) In conjunction with the Owner or its appointed agent securing the letting of the commercial space to reputable tenants at market rent on prevailing lease terms, having due regard to maximizing the rental income and preserving the long term investment value of the development and the reputation and standing of the Bishop of Victoria as the ultimate owner of the development.
- xiv) Procuring the engagement upon terms and conditions to be agreed with the Owner of suitably qualified and experienced Building Managers to be responsible for the long term

management and maintenance of the development including the maintenance of proper audited accounts, a copy of which shall annually be given to the Owner.

- xv) Fully complying with all terms of the Head Lease and related documentation.

Furthermore, the Developer will be required to undertake not to assign, or otherwise dispose of his headlease interest in the joint venture and obligations to Owner during the development period. Neither will the Developer be permitted to mortgage, charge or otherwise encumber the land title.

DEVELOPER BRIEF

7.2 Documentation and Vacant Possession

- a) The Owner will require the Developer to enter into a legally binding Heads of Agreement no later than 1st June, 1986 and thereafter to use his best endeavours to procure the completion of all detailed legal documentation as soon as possible. It is envisaged this documentation will comprise:-

Heads of Agreement
Development Agreement
Head Lease Agreement
Model Sub Lease
Management Agreement
Deed of Mutual Covenant

- b) The Owner will require the Developer to meet all legal costs incurred by the Owner in the preparation of this documentation.
- c) The Owner will undertake to join with the Developer in arranging for vacant possession of the site to suit the development programme proposed by the Developer. However, it should be recognised that an appropriate period of notice will be required to arrange for vacant possession particularly in relation to Kei Yan Primary School, the Hong Kong Juvenile Centre and the St. Paul's and S.K.H. Kindergartens. The Diocese recognises the importance of obtaining vacant possession and it is therefore suggested that the final procedure, and timing be the subject of consultation between the Owner and the selected Developer during the post tender negotiation period. However for the purposes of submitting bids, developers may assume this will be at the earliest possible instance in August 1987.

7.3 Permanent Diocesan & Church Accommodation

- a) The Owner's accommodation comprising the low rise block and space within the commercial office tower will be provided by the Developer in accordance with the Technical Specifications and designs to be agreed with the Owner.
- b) The low rise block with an area of 6,068m² will house:-
The reprovided St. Paul's Church and ancillary accommodation.
The Diocesan Centre, hostel accommodation and related facilities.
- c) The Owner's accommodation in the commercial office tower will comprise:-
Two floors with a gross areas of not less than 4,373m² linked by covered footbridge to the Diocesan Centre.
An area of approximately 500m² at the top of the office tower to be used by the Owner for diocesan purposes.
- d) In addition, the Owner will require the right to utilize at no cost 40 carpark spaces on Level 1 of the carpark.
- e) The low rise accommodation will be completed by the Developer and handed over in a state ready for internal decoration and furnishing by the Owner, whilst the accommodation in the office tower will be handed over in a state ready for internal tenancy fitting out works.
- f) The Owner's accommodation is to be handed over ready for the Owner's internal works to commence no later than the date of receipt of the Occupation Permit for the development. Should the Owner be unable to take possession of its accommodation within 42 months of the date of vacant possession being granted, it will require the Developer to compensate it for any additional costs or expenses incurred.

DEVELOPER BRIEF

7.4 Owner's Involvement In the Development

- a) The Owner will have the right to be consulted upon and approve all building plans, detailed designs, specifications and standards for the development and the consultant team which the Developer proposes to engage.
- b) The Owner will require the Developer to contract all works by means of competitive tender except with prior agreement, and will have the right to approve all proposed tenderers and to the award of all contracts associated with the construction of the development, such approval not to be unreasonably withheld.
- c) The Owner will require the Developer to submit regular monthly reports on the progress of design documentation, statutory approvals and construction progress, and will have right to monitor development progress and inspect the works in progress.
To provide it with independent advice in this context, the Owner may appoint its own consultants, such consultants to have reasonable rights of access and information from the Developer and his consultants.
- d) The Owner will require the right to consultation upon and approval of the arrangements for the future management of the property and the Deed of Mutual Covenant.
- e) The Owner will require the right to approve the name of the development and to the granting of any naming or name display rights for the commercial tower.
- f) The Owner will require the right to appoint an independent joint marketing agent to act in conjunction with the Developer, and for all leasing or sales transactions to be at full market value.
- g) The Owner will require satisfactory provision within the Head Lease to cover:-
the consequential rights of the Owner in the event that the Developer cannot fulfil his financial or development responsibilities either during the development period or during the term of his interest;
the possibility of redevelopment and/or major refurbishment during the term of the lease.

7.5 Owner's Retained Consultants

In order to provide it with advice during the development phase and subsequent marketing, and to act on its behalf, the Owner will engage a number of consultants. It is envisaged that this team will comprise:-

- a) Property Consultants
The Owner has appointed Jones Lang Wootton as its property consultants to advise on all real estate matter, evaluate and advise on submitted tenders and negotiate with the selected developer upto the signing of the Heads of Agreement.
- b) Development Consultants
Jones Lang Wootton will continue to act as development consultants during the design and construction period. This role will include general monitoring of progress, standards and performance, with particular attention to the space which will be provided for the Owner, as well as providing general advice in relation to the Owner's interest in the redevelopment.
- c) Interior Designer
The Owner will in due course appoint an architect or interior designer and consultant team to prepare designs for and administer the fitting out of its temporary and permanent accommodation both on and off site.
- d) Legal Advisors
The Owner will retain a firm(s) of legal advisors to deal with all legal matters and the drawing up of all legal documentation in connection with the redevelopment.
- e) Quantity Surveyors/Cost Consultants
A firm of chartered quantity surveyors may be retained to monitor independently development costs and final account, should these be material to the distribution of income from the completed project or of legitimate concern to the Owner.
- f) Marketing Agents
The Owner itself or it will nominate a firm of real estate agents to act as joint leasing and/or marketing agent for the commercial space.

DEVELOPER BRIEF

8. INCOME DISTRIBUTION AND PAYMENTS

8.1 The Owner will require the Developer to provide it with a single non-refundable payment of HK\$10.0 million upon signing of the Heads of Agreement.

8.2 The Owner will levy a fixed ground rent of HK\$6.0 million per annum payable in equal monthly instalments for the duration of the development period from the date of vacant possession being granted, to compensate it for loss of income from existing uses of the site.

8.3 The Owner will levy an annual ground rent for the completed development of an agreed percentage of the net rental income received in each year from the date of Occupation Permit for the office tower, subject to a minimum amount payable to the Owner which will be not less than that paid during the development period.

8.4 The Owner will require the net income above the first share in 8.3 above to be apportioned annually in a manner to be agreed between the parties in due course.

8.5 The Owner will require the Developer to provide a sum of HK\$103 million to be paid upon the signing of the Heads of Agreement to meet the Owner's costs and expenses incurred in relation to the redevelopment; this amount to include the non refundable deposit referred to in-8.1 above. The principal purposes for which these funds will be used are as follows:-

- a) The purchase and/or leasing of residential accommodation for the Bishop of Victoria and other Clergy, comprising approximately 13 apartments of varying size.
- b) The leasing and occupational costs of approximately 25,000 sq ft. of temporary office accommodation for diocesan purposes during the development period, which may be split between Central and Wanchai/Causeway Bay areas.

c) Relocation and removal expenses including the fitting out of temporary office and residential accommodation together with costs associated with obtaining vacant possession of the site.

d) Other incidental expenditure incurred by the Owner as a result of the redevelopment.

DEVELOPER BRIEF

9. FORM OF BIDS AND TENDER PROCEDURE

9.1 Based upon the foregoing, interested developers are now invited to submit their offers for participation in this development opportunity generally in accordance with basis outlined below. Alternative proposals may also be considered but the Developer should at the same time make a proposal along the lines specified.

- a) The minimum percentage share of annual net rental income and the minimum annual amount which the Developer will guarantee to the Owner. (The guaranteed share)
- b) The return either annual or internal rate of return which the Developer will require upon capital expended on the development, together with his proposal for satisfying the Owner as to that amount of expenditure. (The Developer's return)
- c) The percentage(s) of surplus annual net rental income above that necessary to meet the requirements of (a) and (b) above which the Developer will grant to the Owner, together with some mechanism whereby the share to the Owner will increase once the Developer has recouped his capital expenditure with due allowance for financing costs, profit and risk. (The surplus share)
- d) The length of head lease required by the developer. One bid should be based upon the Owner's offered term of 35 years. Alternative bids may also be submitted based upon a lease term proposed by the Developer although it should be noted that unless it reflects a significant enhancement of the Owner's participation, longer lease terms are unlikely to be favoured.

9.2 All information will be treated in strictest confidence. It would be of assistance in evaluating their bids if developers could indicate their assumptions as to estimated rent per sq.ft. of commercial accommodation upon completion and projected rate of rent escalation taken into consideration, (if applicable).

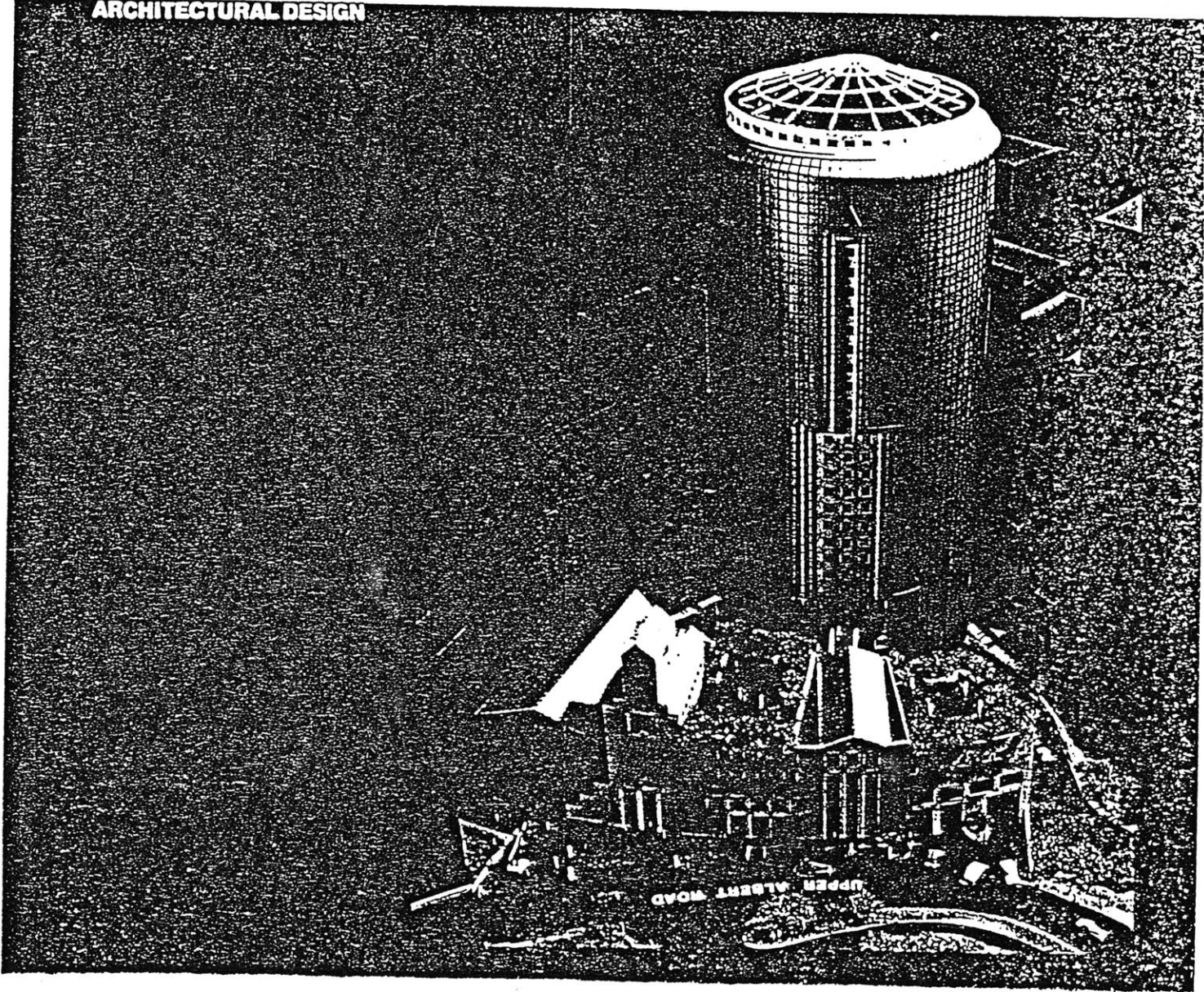
9.3 Four copies of tender proposals together with such other supporting information as developers consider relevant to their proposal should be submitted in a sealed envelope to Jones Lang Wootton, 25th Floor, Exchange Square, Tower I, Central, Hong Kong, marked "I.L. 7360 Redevelopment Tender", no later than the date advised in the covering letter.

9.4 All enquiries concerning this tender should be directed to Jones Lang Wootton.

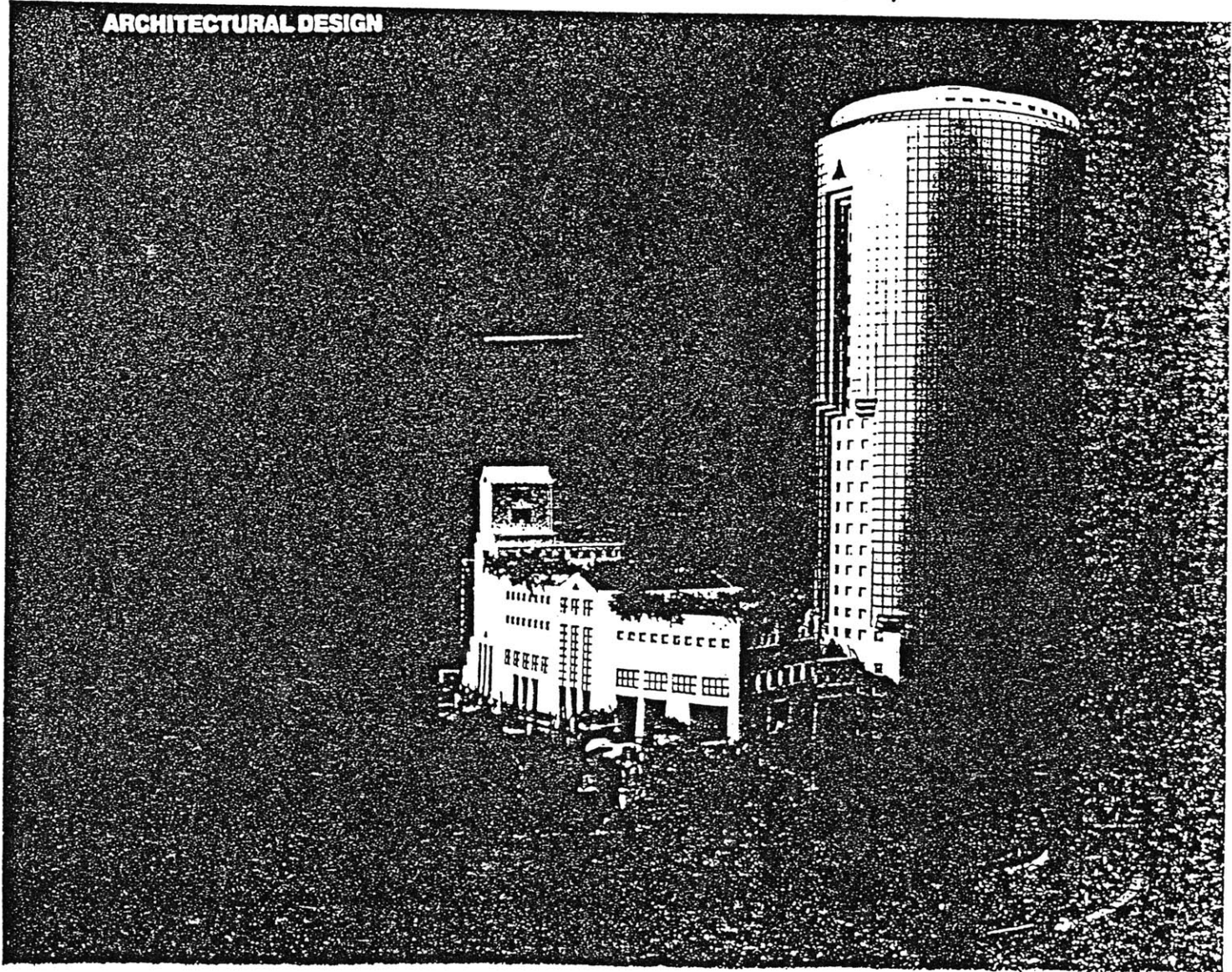
A2

ARCHITECTURAL DESIGN

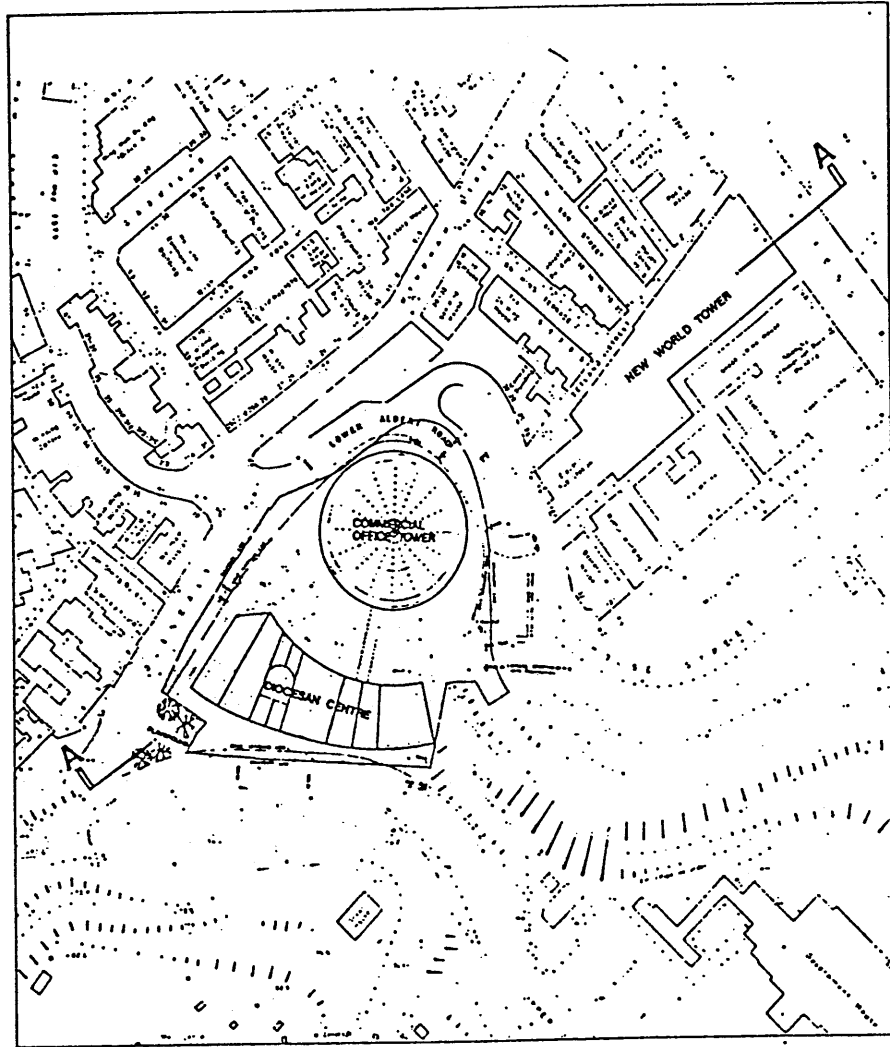
ARCHITECTURAL DESIGN



ARCHITECTURAL DESIGN



BLOCK PLAN

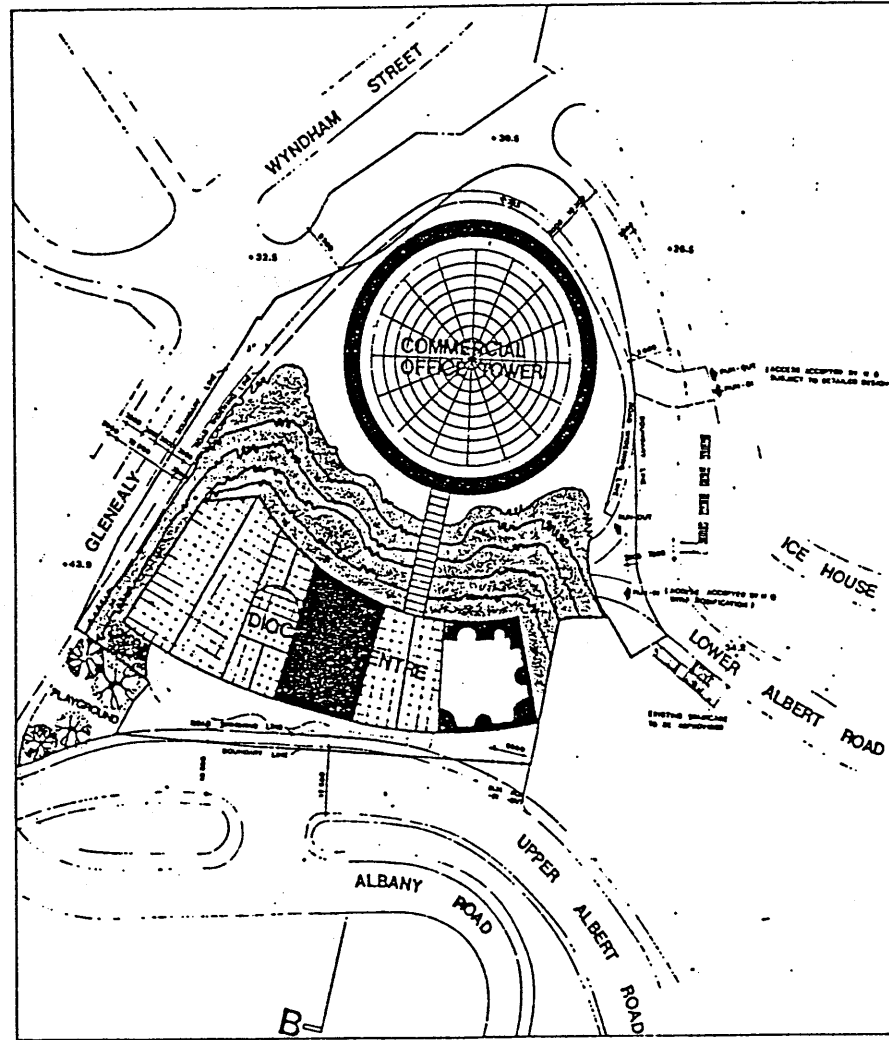


129

40



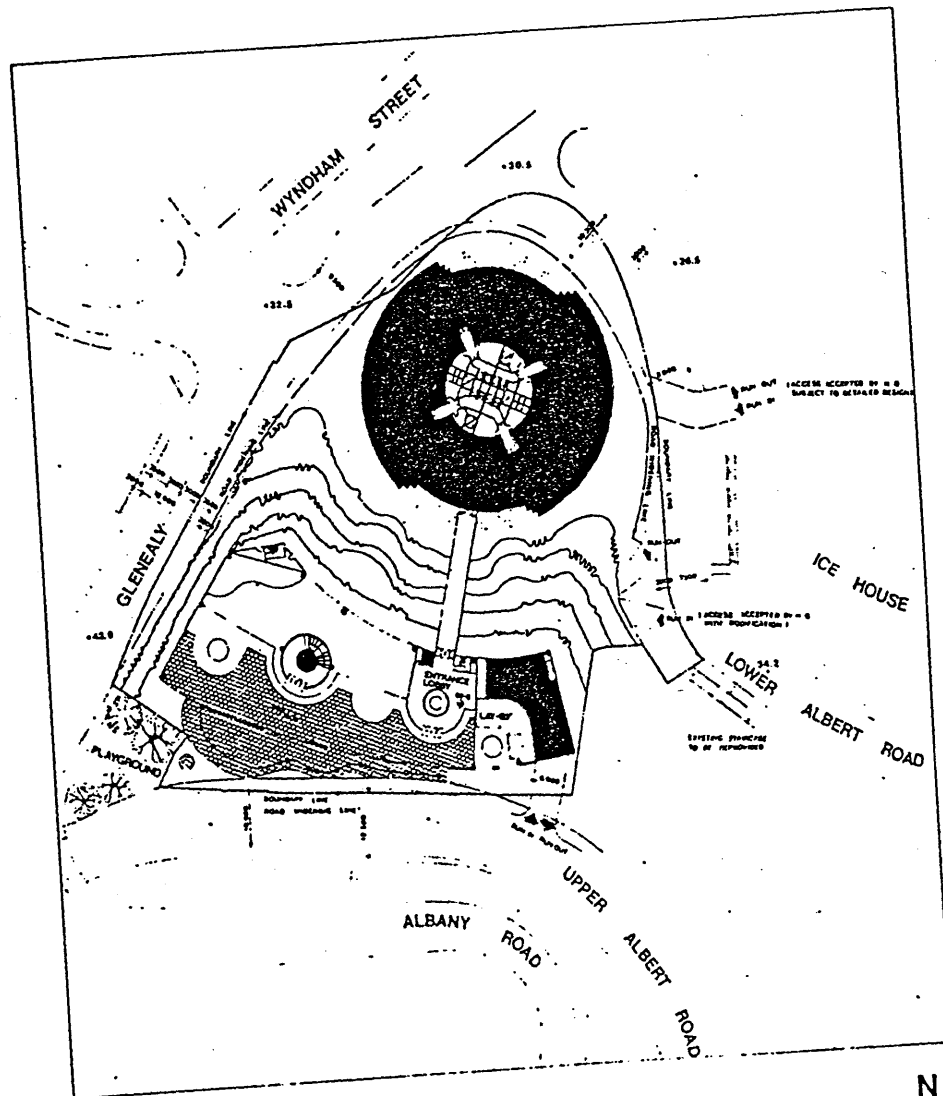
MASTER LAYOUT PLAN



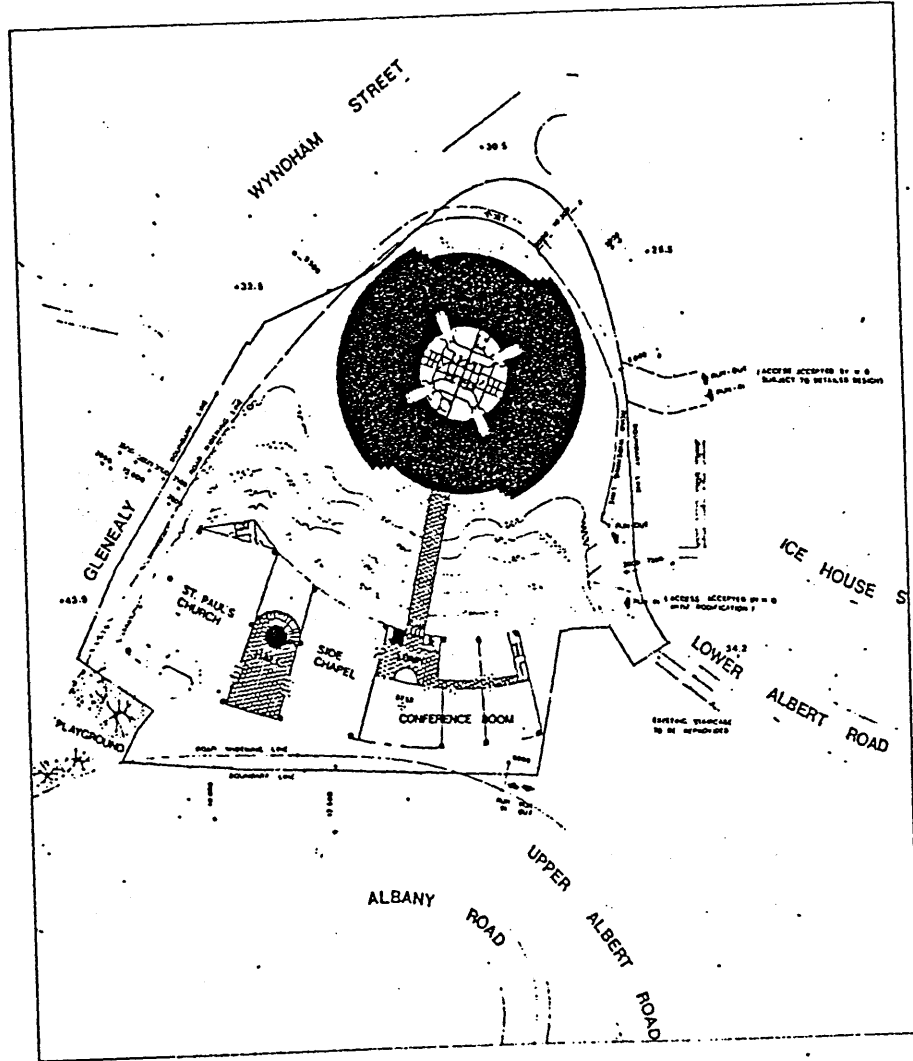
130

240

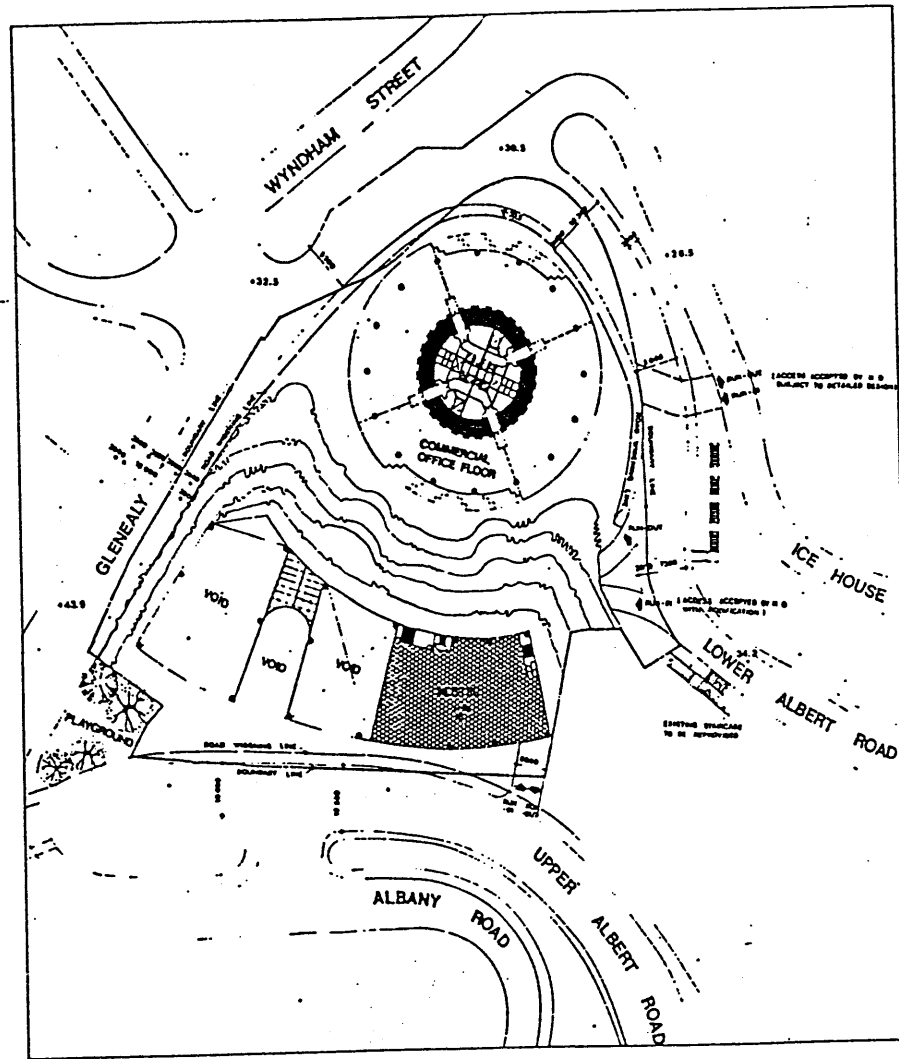
G/F (DIOCESAN CENTRE)



1/F (DIOCESAN CENTRE)

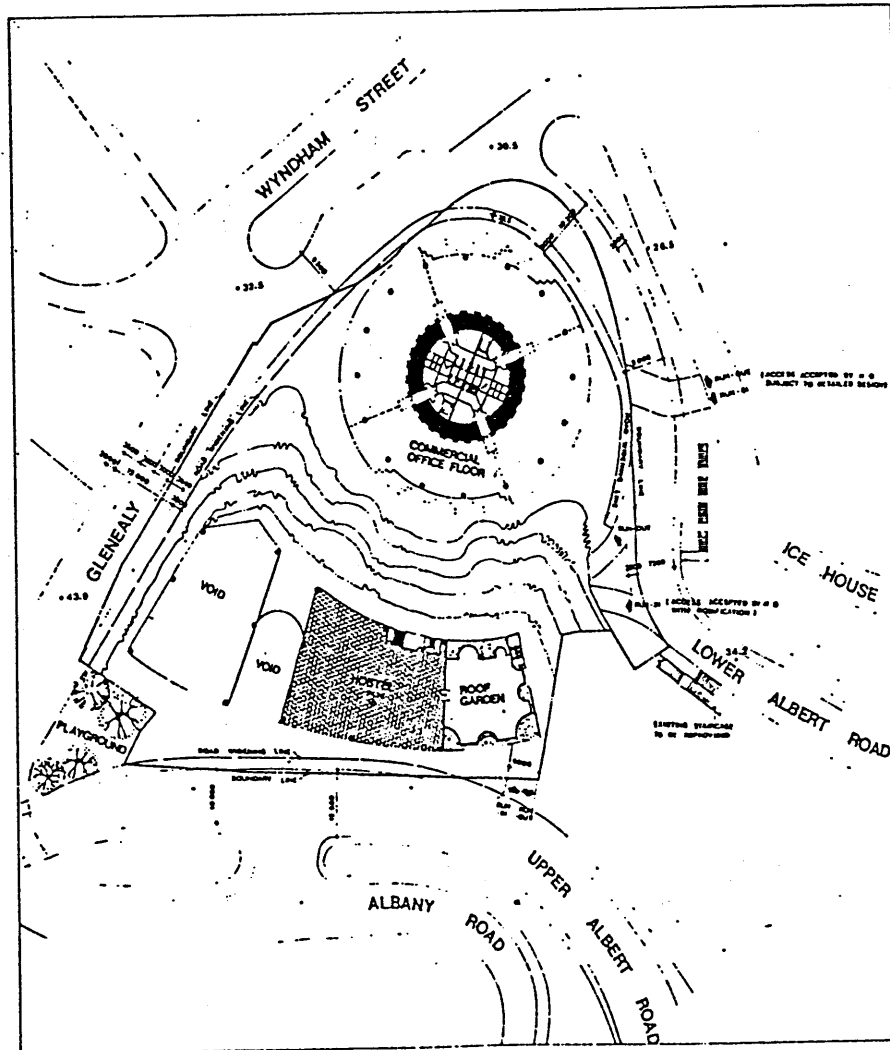


2/F (DIOCESAN CENTRE)



133

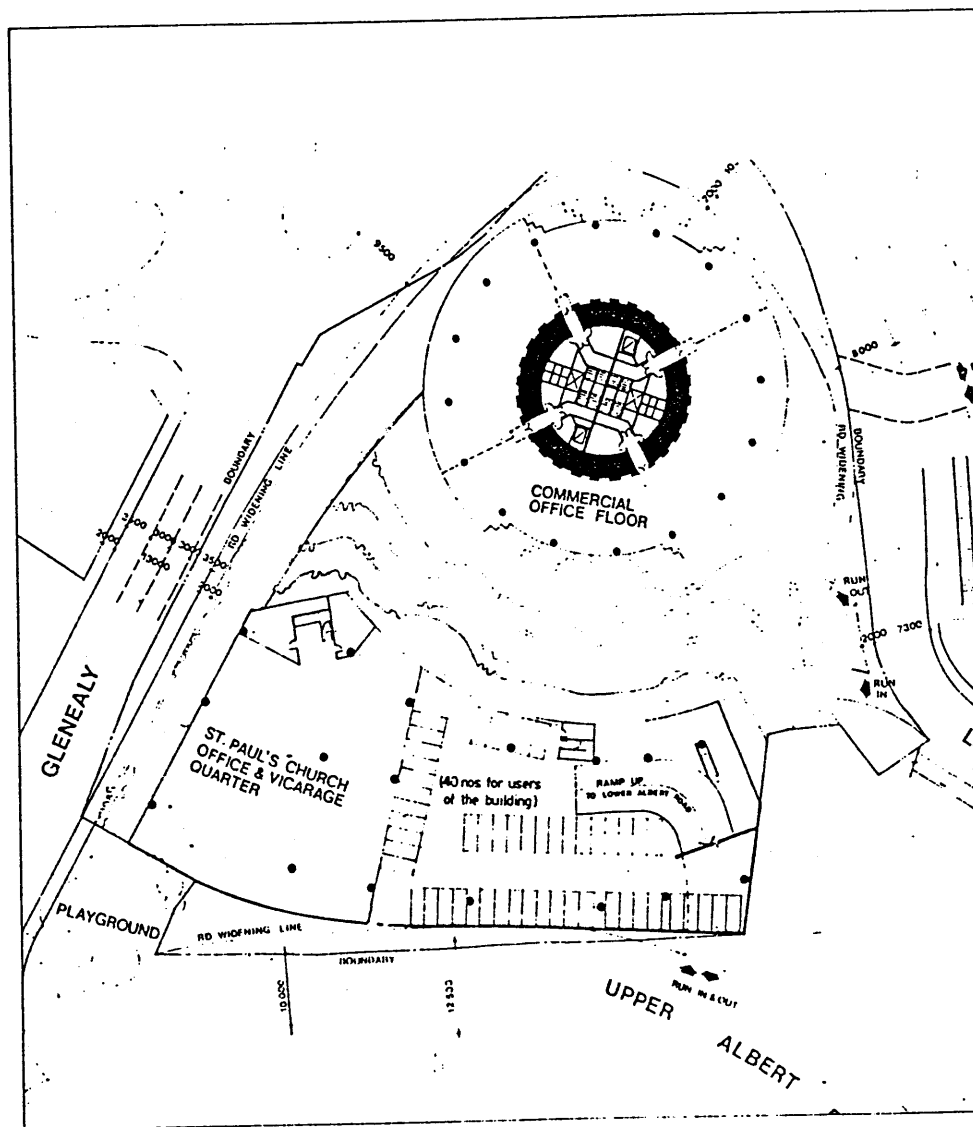
3/F (DIOCESAN CENTRE)



134

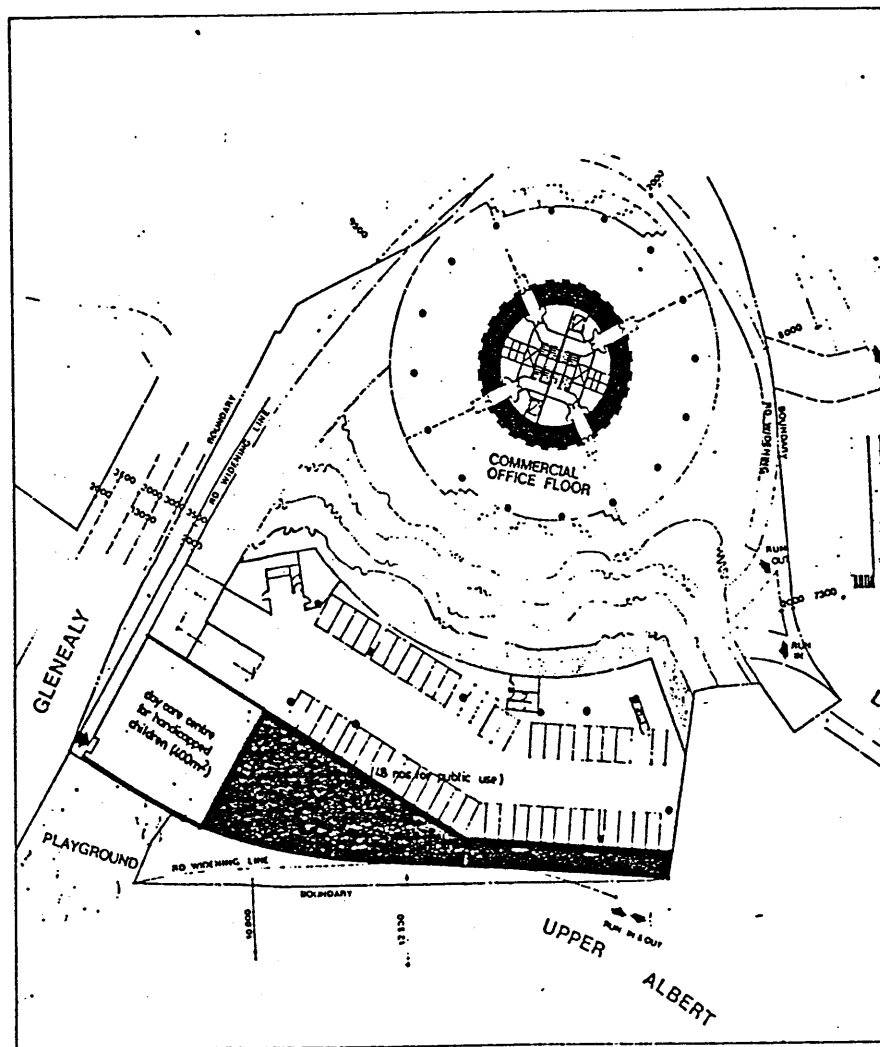
CARPARK 1

135

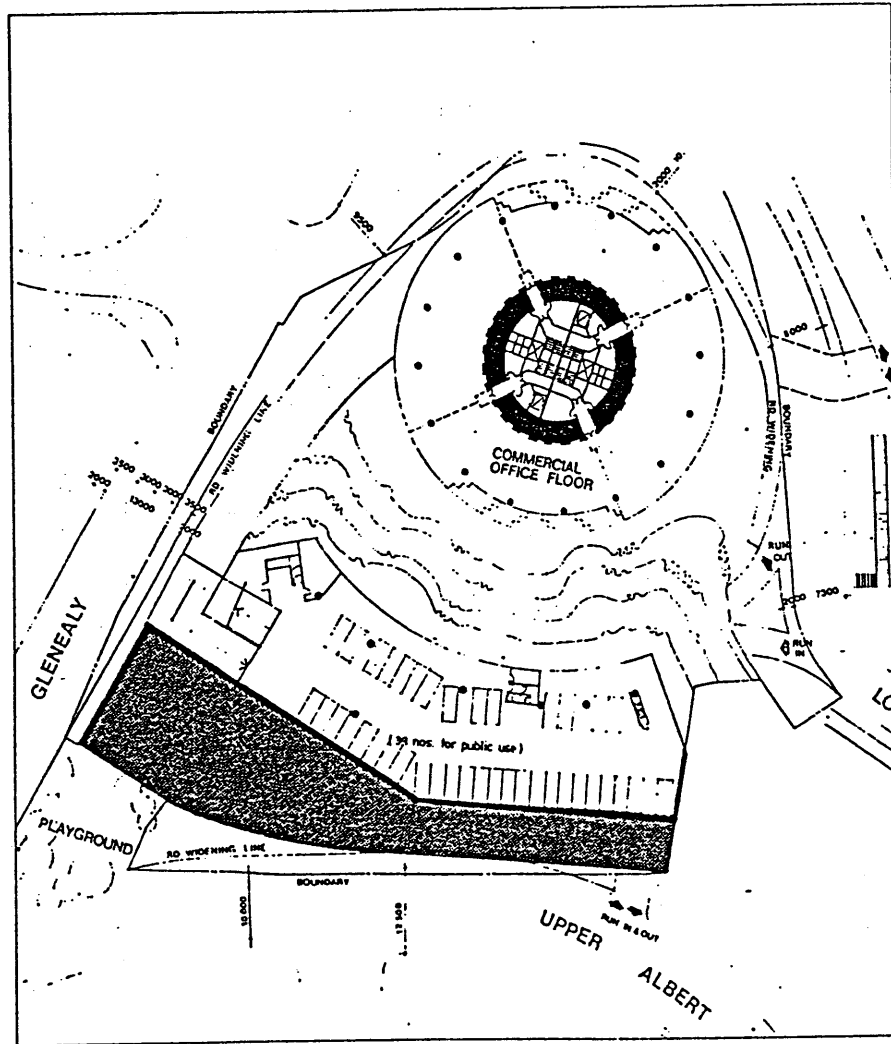


CARPARK 2

136

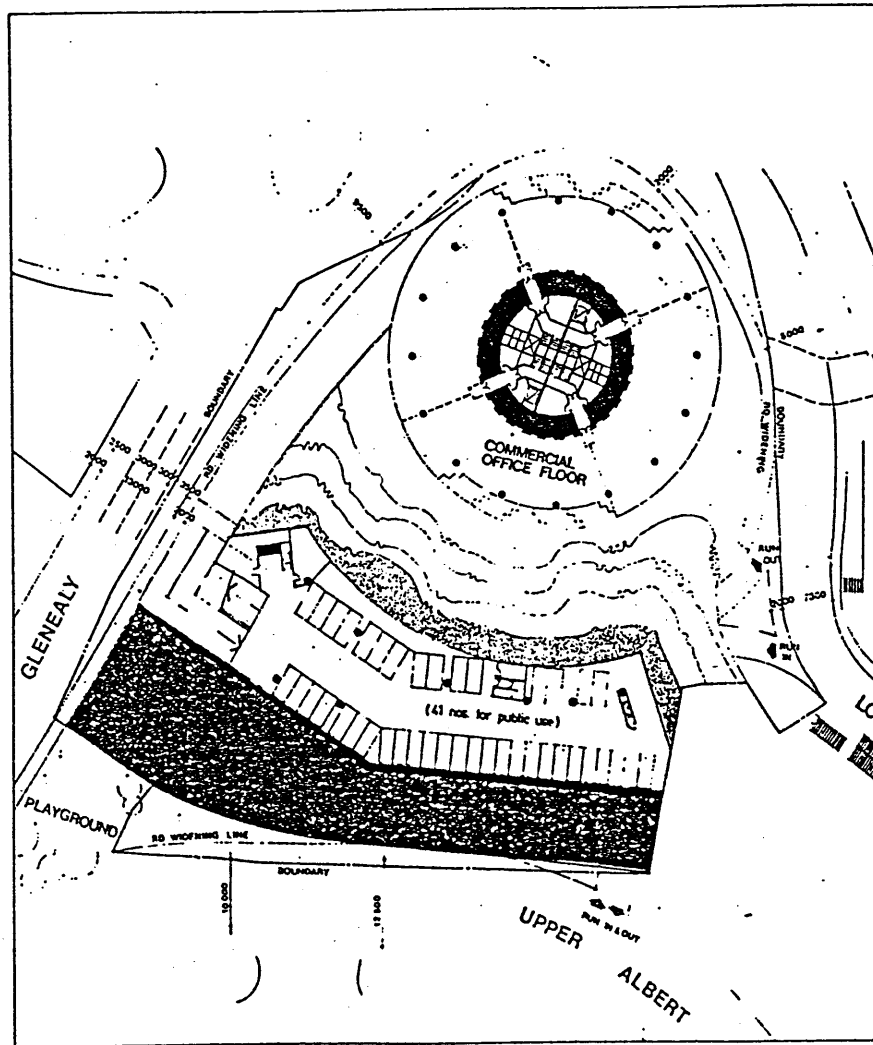


CARPARK 3



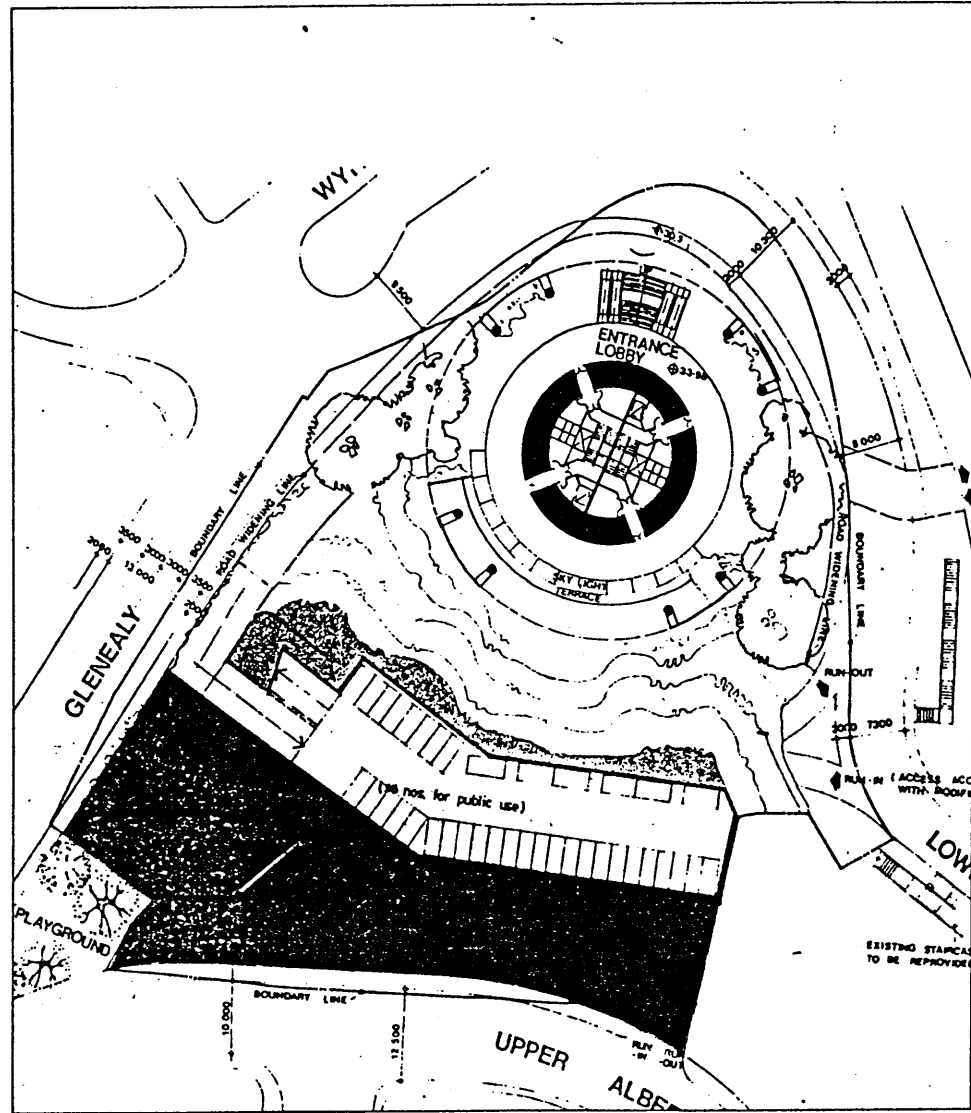
CARPARK 4

138



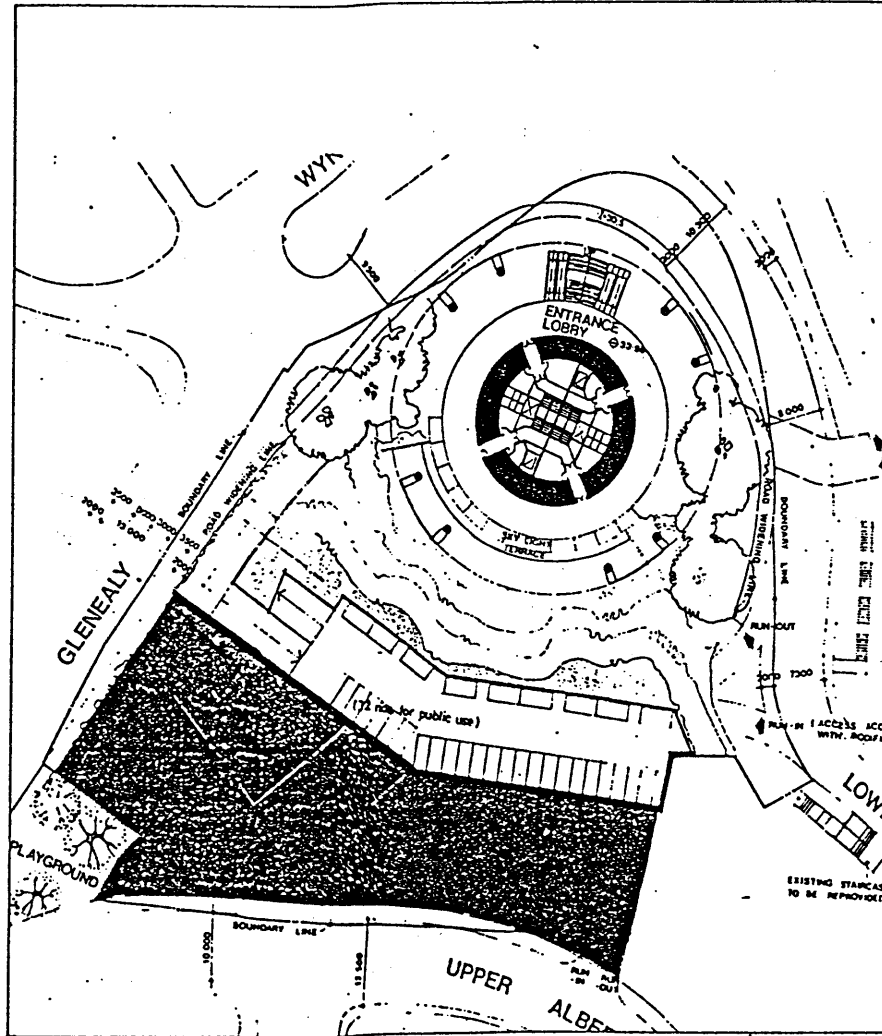
CARPARK 5

139



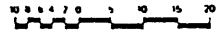
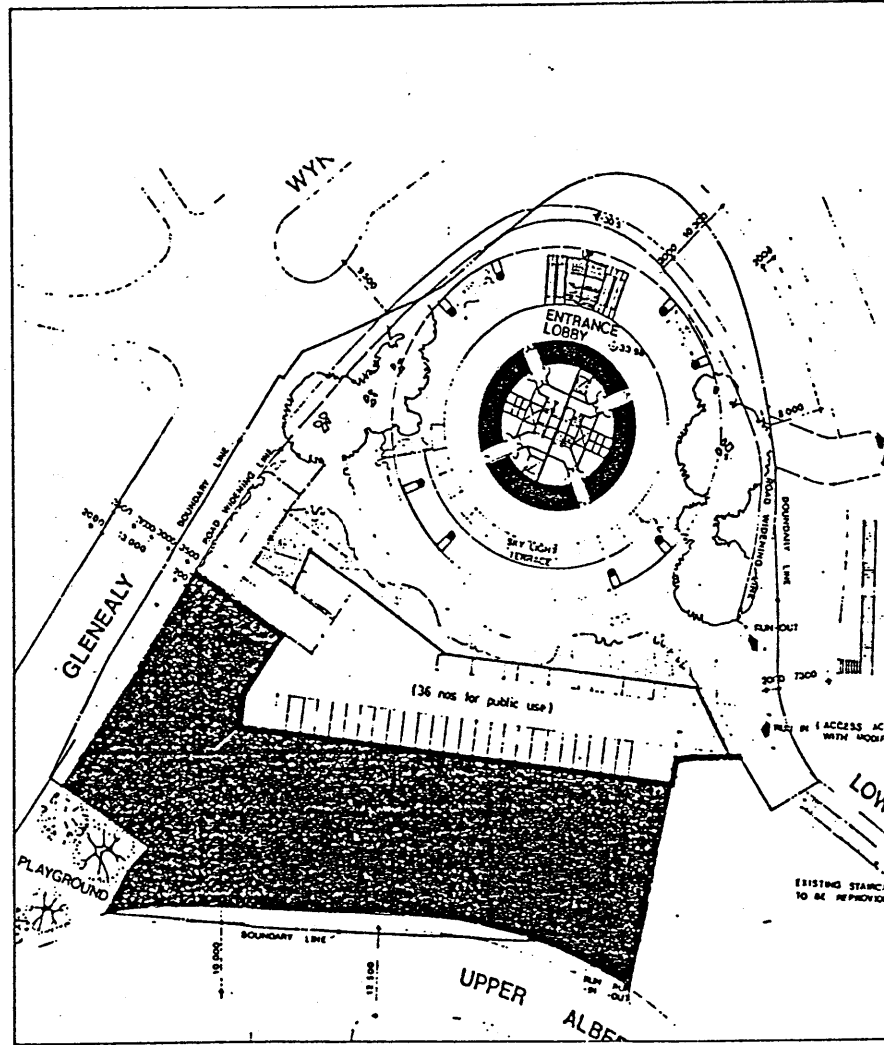
CARPARK 6

140

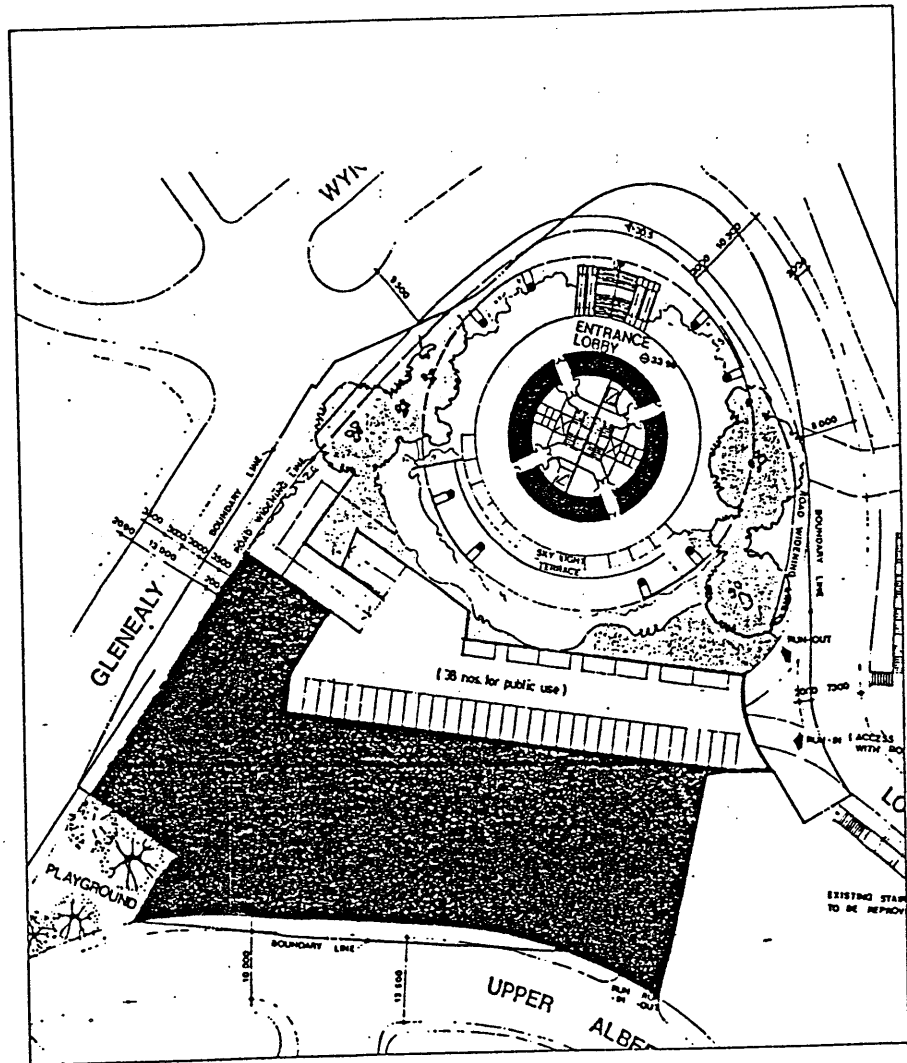


CARPARK 7

141



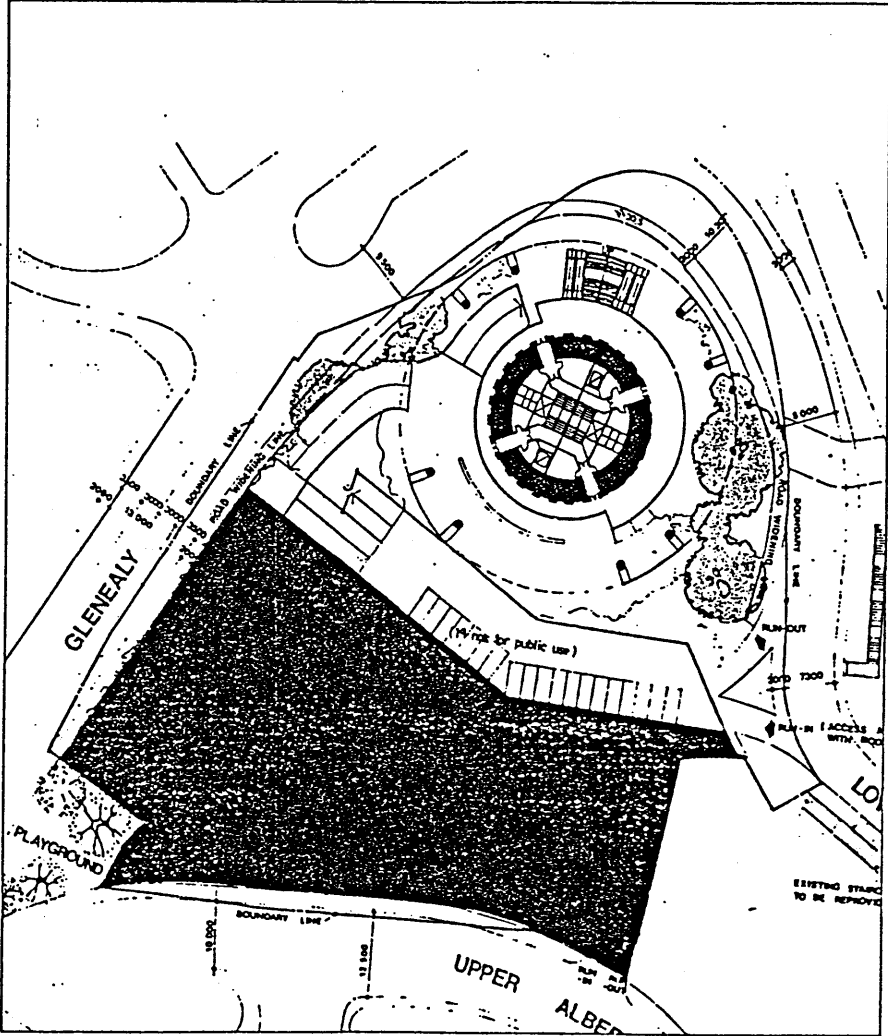
CARPARK 8



142

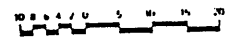
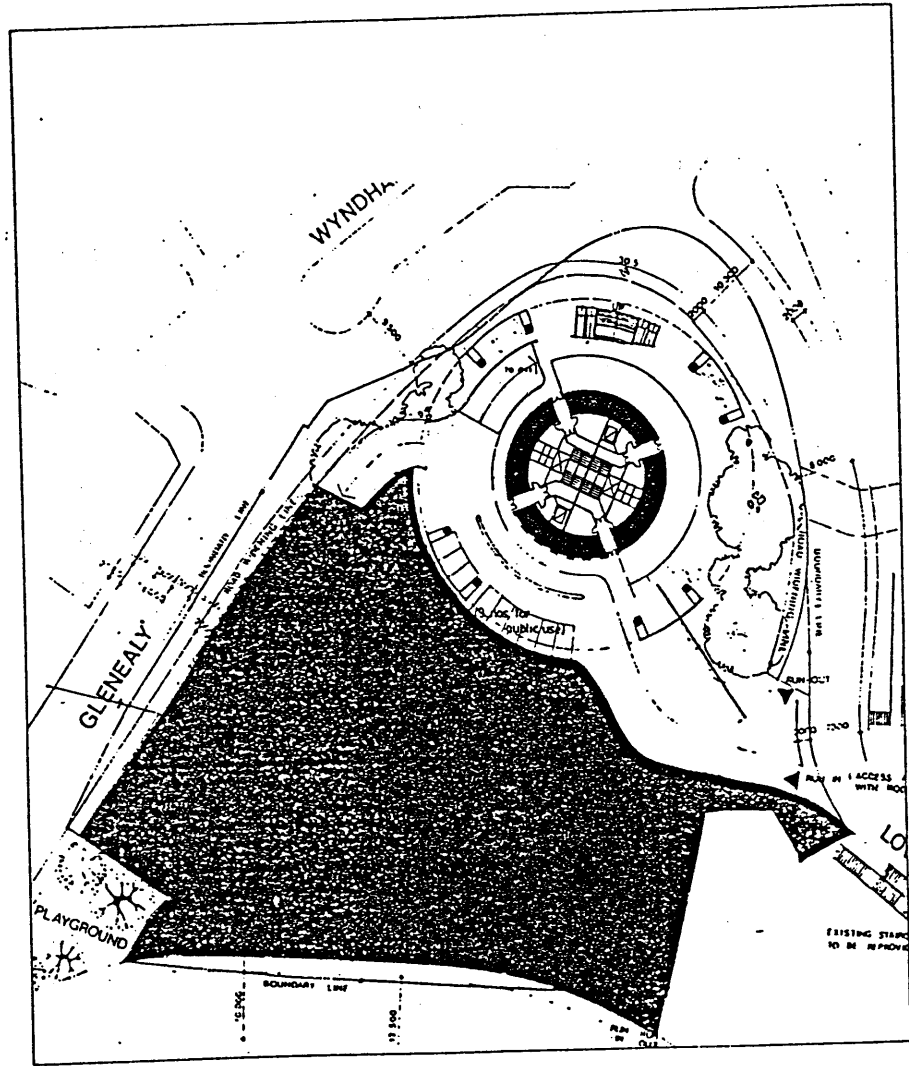
CARPARK 9

143



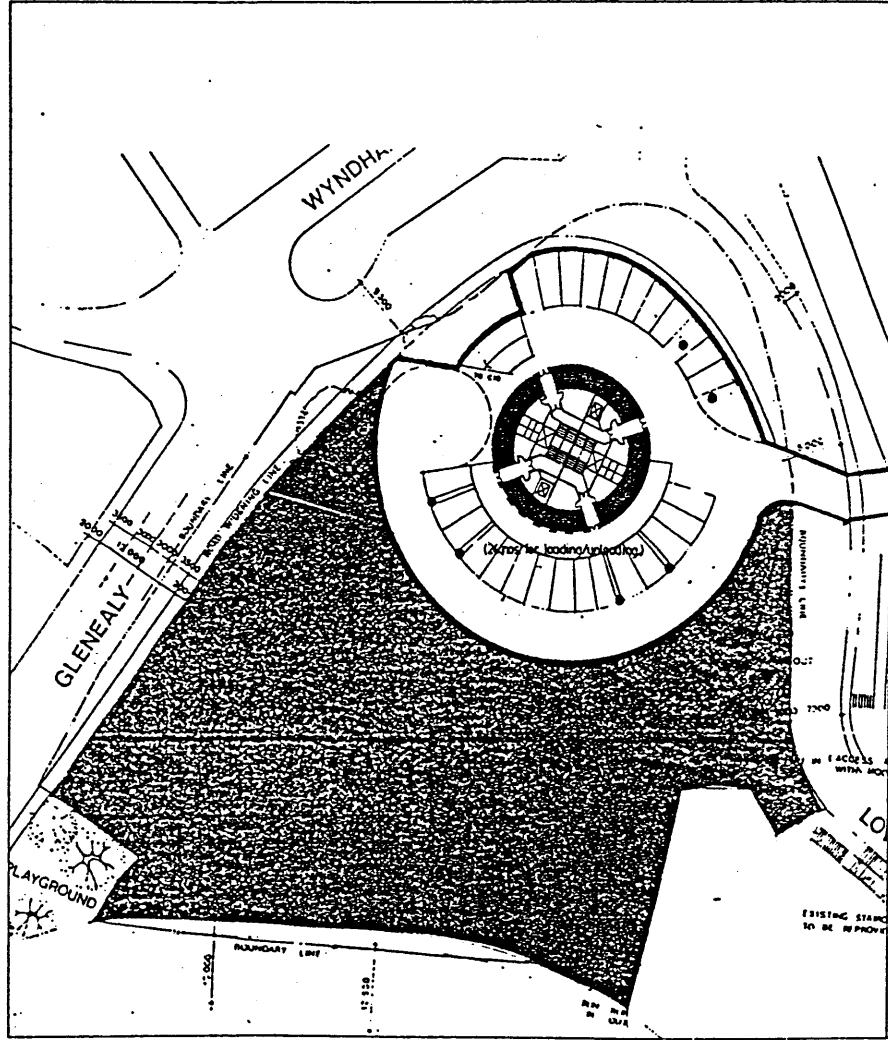
CARPARK 10

144

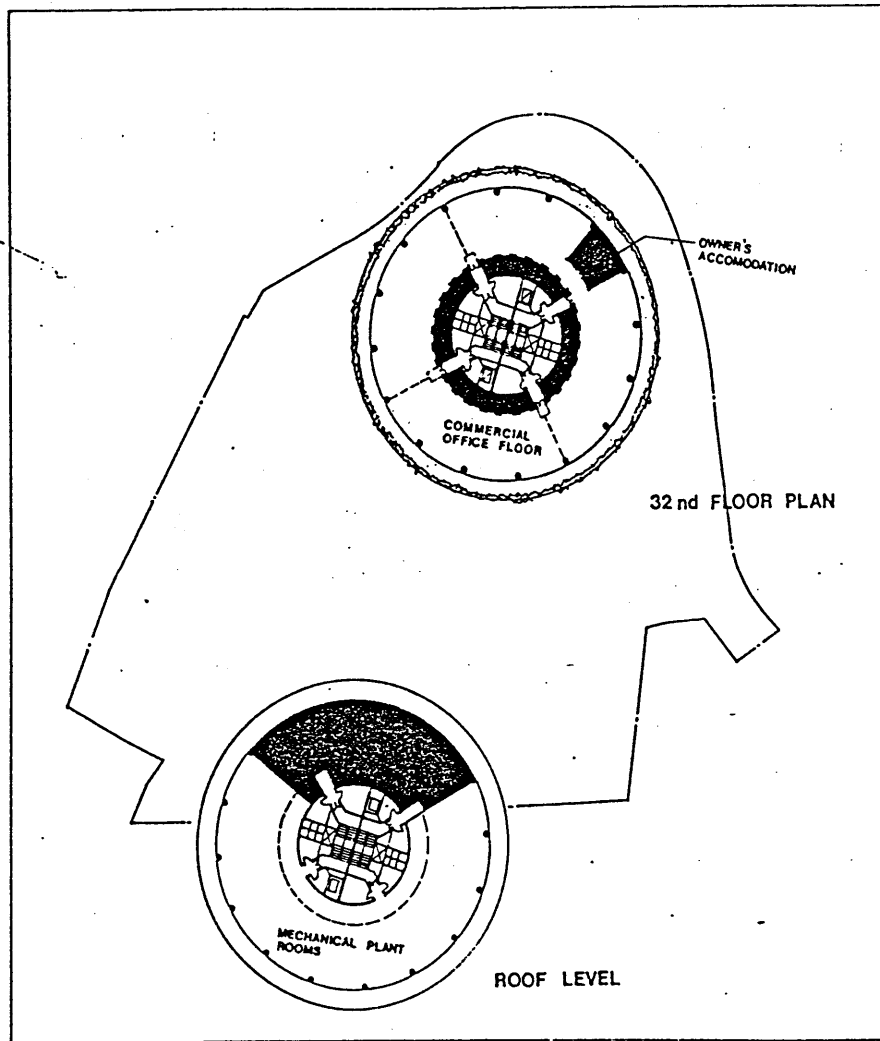


CARPARK 11

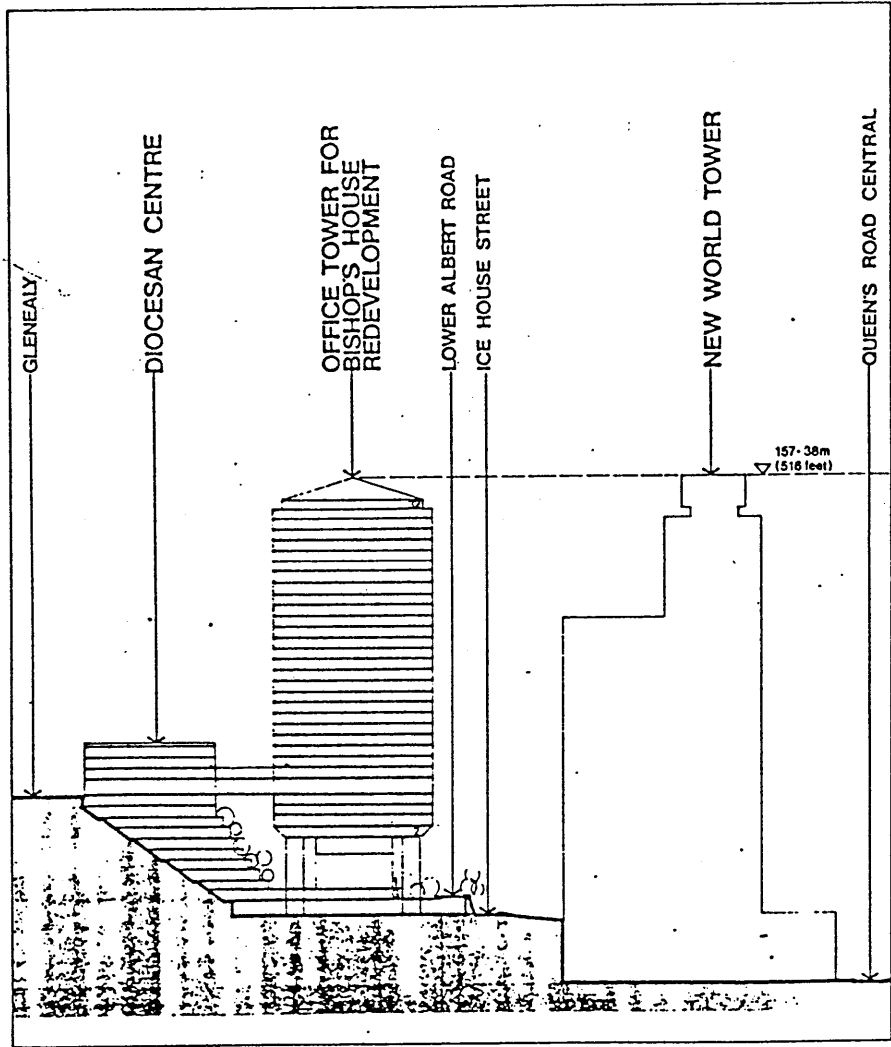
145



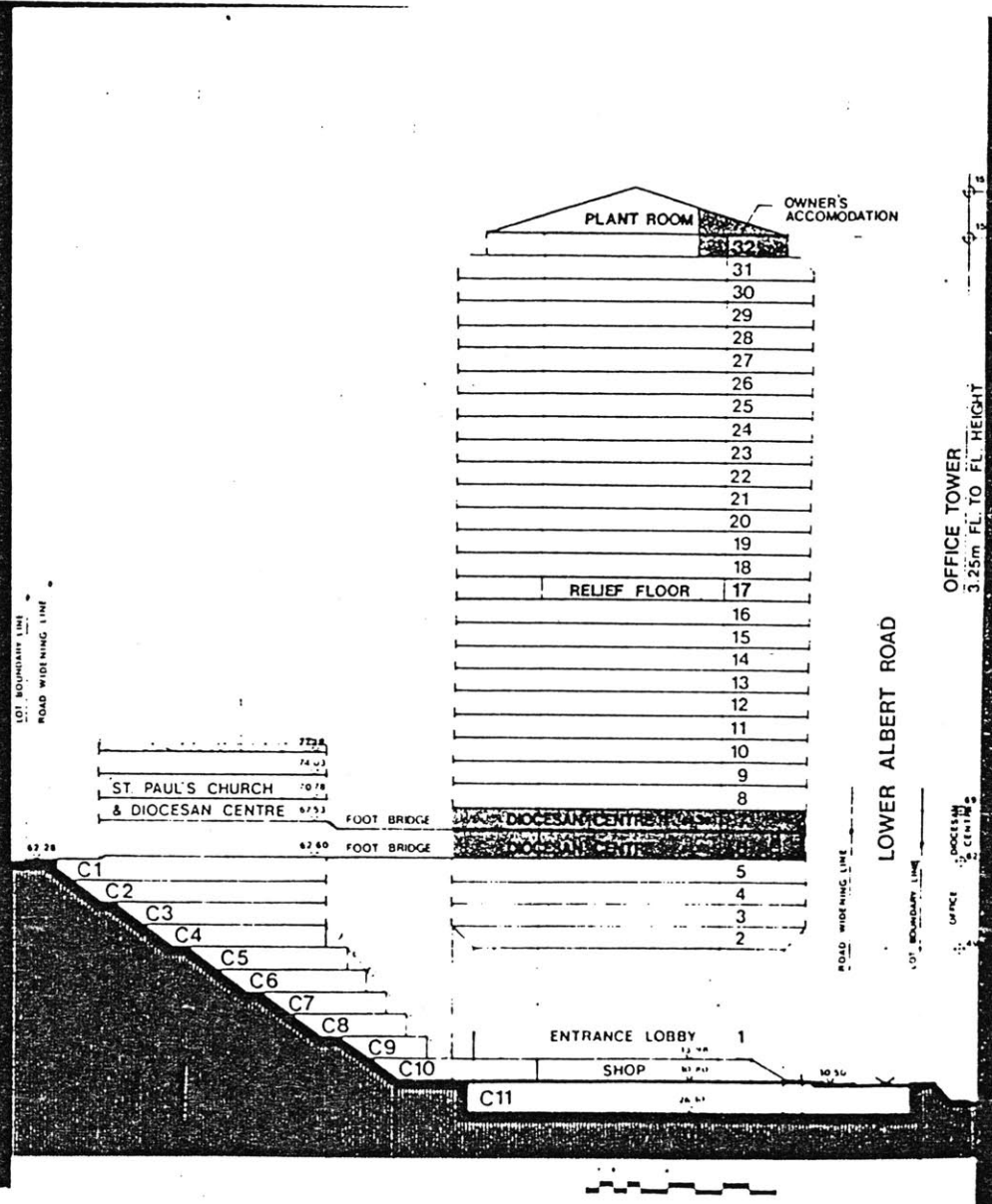
LAYOUT OF 32/F & ROOF



SECTION A-A



SECTION B-B



SCHEDULE OF ACCOMODATION

Redevelopment Proposal on I.L. No. 7360, Hong Kong

1. Site

1.1 Site area (old lot)	= 8,757m ²
1.2 Site area (new lot)	= 7,300m ²
1.3 Height Restriction	= +157.38m P.D.

2. Diocesan Centre/Church Accommodation

2.1 Church/Diocesan Centre at Low Block	= 6,068m ²
2.2 2 storeys Diocesan offices at Commercial Tower (2,186.89 x 2)	= 4,374m ²
2.3 Sub-total G.F.A. for Diocesan Centre/Church Accommodation	= 10,442m ²

3. Office/Commercial Accommodation

3.1 G/F shop area	= 805m ²
3.2 1/F entrance hall	= 962m ²
3.3 28 commercial office storeys (Approx. 2,169.04 x 28)	= 60,733m ²
3.4 Owners Accommodation on 32/F & Roof	= 500m ²
3.5 Sub-total G.F.A. for Commercial Tower	= 63,000m ²

4. Government Accommodation

4.1 Special day care centre for disabled children	= 400m ²
--	---------------------

5. Plot Ratio

5.1 Total G.F.A.	= 10,442 + 63,000 + 400 = 73,842m ²
------------------	---

6. Car Parks

= 300 nos
= 24 nos (loading and unloading)

A3

TECHNICAL SPECIFICATION

TECHNICAL SPECIFICATION

CONTENT

1. Standard of Building Finishes
2. Schedule of Accommodation
3. Schedule of Building Finishes
 - 3.1 External Finishes
 - 3.2 Internal Finishes
4. Particular Performance Specifications
 - 4.1 Aluminium Curtain Window Wall System
 - 4.2 Glazing for Curtain Wall System
 - 4.3 Skylight System
 - 4.4 Structural Supporting Frames
 - 4.5 Stainless Steel Cladding
 - 4.6 Granite
 - 4.7 Carpet
5. Structural & Geotechnical Design
 - 5.1 The Structure
 - 5.2 Site Investigation
 - 5.3 Foundation
 - 5.4 Geotechnical Consideration
6. Building Services Design
 - 6.1 General
 - 6.2 Standard and Statutory Requirements
 - 6.3 HVAC Installation
 - 6.4 Electrical System
 - 6.5 Fire Protection Systems
 - 6.6 Plumbing and Drainage Systems
 - 6.7 Security System
 - 6.8 Building Automation System
 - 6.9 Telephone System
 - 6.10 Vertical Transportation System
7. Specialist Consultants

1. STANDARD OF BUILDING FINISHES

- 1.1 The standard of building finishes and quality of materials and workmanship to be used for this project shall be equivalent to those for the Sunning Plaza at No. 1 Hysan Avenue, Causeway Bay, H.K. or The Alexandra House at No. 16-20 Chater Road, Central, H.K.
- 1.2 The quality of material and workmanship shall be in accordance with the Hong Kong Government General Specification of Material and Workmanship for Construction and Maintenance of Buildings (including alteration work) 1986 Edition (hereby shortened as Hong Kong Government General Specification), unless otherwise specified herein.
- 1.3 The quality of material and workmanship shall be in compliance of all Hong Kong Government By-Laws, Ordinance and Regulations and relevant British Standards where applicable.
- 1.4 The standards and requirements as stated in this Specification may not be altered unless approved by the Bishop of Victoria, H.K. & Macao or his Authorised Agent.
- 1.5 Unless otherwise stated, the word 'approved' shall deem to mean approved by the Bishop.

2. SCHEDULE OF ACCOMMODATION

- 2.1 The permissible gross floor areas of the accommodation for the Church and Diocesan Centre, the office/commercial accommodation and the Government accommodation have been shown in the Schematic Proposal (Scheme H — Revision I).
- 2.2 The schematic proposals of Scheme H (Revision I) are indicative layouts to show the spatial relationship of the main functional elements and the overall building forms and architectural expression. The ancillary functional elements within each of the accommodation will be subject to the Architect's detailed design and functional requirements associated with these spaces.
- 2.3 It should be highlighted that the specific spatial requirements of the various functional elements of the Church Accommodation and the Diocesan Centre have not yet been finalised by the Bishop. The requirements of the Residential Accommodation in particular, will be subject to further detailed planning.

TECHNICAL SPECIFICATION

3. SCHEDULE OF BUILDING FINISHES

3.1 External Finishes

Location	Floor	Wall	Ceiling	Remarks
A. Commercial Office Tower				
(i) Main External Facades	—	A combination of : — natural silver anodised aluminium curtain wall system with silver reflective tempered glass panels. — and — — Natural Granite	—	Mirror finish stainless steel cladding should be used for the external circular columns exposed at the main entrance levels.
(ii) Entrance Lobby at Level + 33.98	Natural Granite	— Mirror finish stainless steel curtain wall with clear tempered/ laminated glass panels. — and — — Natural granite	Mirror finish stainless steel suspended false ceiling	—
B. Diocesan Centre/ Church Accommodation				
(i) Main External Facades	—	A combination of: — natural silver anodised aluminium curtain wall system with silver reflective tempered glass panels — and — — Natural granite	—	The external walls of the St. Paul's Church & the Side Chapel should be of "Pikington Armourplate Planar Structural Glazing System" or other equivalent system supported on tubular steel space frame structures of silvery chrome finish
(ii) Entrance at Level + 62.60	Natural Granite	—	—	—
(iii) Footbridge	—	A combination of: — granite — and — — natural silver anodised aluminium barrel vault skylight system with silver reflective laminated safety glass skylight roof.	—	—

TECHNICAL SPECIFICATION

3.2 Internal Finishes

Location	Floor	Wall	Ceiling	Remarks
A. Commercial Office Tower				
(i) Typical floor office space	PVC tiles on cement sand screeding	Emulsion paint on internal plaster	Acoustical mineral fibre suspended false ceiling	—
(ii) Typical floor lift hall	Polished granite	Polished granite	Acoustical mineral fibre suspended false ceiling	—
(iii) Typical floor service areas	Cement sand screeding	Cement paint on skim coat plaster	Cement paint on skim coat plaster	—
(iv) Staircases	Unglazed mosaic tiles	Unglazed mosaic tile skirting/dado	Cement paint on skim coat plaster	—
(v) Typical floor lavatories/pantry	Ceramic tiles	Ceramic tiles	Metal strip or panel false ceiling	—
(vi) Entrance lobby at Level +33.98	Patterned polished granite	Polished granite & mirror finish stainless steel cladding	Mirror finish stainless steel suspended false ceiling	—
(vii) Shop space	PVC tiles on cement sand screeding	Mirror finished stainless steel and clear tempered glass shop fronts	Acoustical mineral fibre suspended false ceiling	—
(viii) Relief floor & mechanical plant rooms	Cement sand screeding with surface hardener	Cement paint on skim coat plaster	Cement paint on skim coat plaster	Floating floor antivibration construction for entire plant room areas on 300mm R. C. slab
(ix) Owner's Accommodation on 32/F & Roof	Carpet on cement sand screeding	Emulsion paint on internal plaster	Acoustical mineral fibre suspended false ceiling	Entrance from lift lobby to be structural glazing
(x) Roof garden at 32/F	Ceramic tiles of "Littogranite" brand or equal	—	—	—

TECHNICAL SPECIFICATION

	Location	Floor	Wall	Ceiling	Remarks
B. Diocesan Centre/Church Accommodation					
(i)	Entrance hall	Patterned polished granite	Polished granite — and — mirror finish stainless steel cladding	Mirror finish stainless steel suspended false ceiling	Internal & external glazing to be suspended structural tempered glass
(ii)	Entrance lobby	Ditto	Ditto	Ditto	Ditto
(iii)	St. Paul's Church & Side Chapel	Patterned polished granite with carpet at designated areas	Ditto	Skylight system supported on structural space frame structure	Acoustic treatment needed on ceiling & wall to be recommended by Acoustic Consultant
(iv)	St. Paul's Church Office	Carpet	Emulsion paint	Mineral fibre suspended false ceiling	—
(v)	Conference rooms	Ditto	Ditto	Ditto	—
(vi)	Diocesan Centre Office in Commercial Tower	Ditto	Ditto	Ditto	—
(vii)	Vicarage quarters	T & G teak parquet flooring in herringbone pattern	Emulsion paint	Mineral fibre decorative suspended false ceiling or wood furred gypsum board plastered ceiling	Toilets to be finished with marble flooring & walls; Kitchens to be finished with high quality ceramic tiles of Italian origin and prime cost rate of \$120 per m ²
(viii)	Hostel	T & G teak parquet flooring in herringbone pattern	Emulsion paint	Wood furred gypsum board plastered ceiling	Toilets and kitchens to be finished with high quality ceramic tiles floor and walls of Italian origin and prime cost rate of \$120 per m ²
(ix)	Roof garden	Litto-granite ceramic tiles or approved equal	—	—	—
(x)	Daycare centre for handicapped children & Society for the deal	PVC tiles of Japanese origin on cement sand screeding	Emulsion paint	Mineral fibre suspended acoustic ceiling	—
C. Carpark					
(i)	Carpark loading & unloading area	Self finished concrete with non-metallic floor hardener	Cement paint on skim coat plaster	Cement paint on skim coat plaster	Supergrāphics painting for the car park areas
(ii)	Lobbies	Polished granite	Polished granite	Metal strip or panel type suspended false ceiling	—

Note. The Owner requires the stained glass in the existing St. Paul's Church to be retained and relocated for re-use in the new St. Paul's Church/Chapel. The costs of relocation and re-installation shall be borne by the Developer.

TECHNICAL SPECIFICATION

4. PARTICULAR PERFORMANCE SPECIFICATIONS

4.1 Aluminium Curtain Window Wall System

- (i) The window wall shall be custom type aluminium curtain wall system of panel sizes approximately 1.5 m (W) x 1.65 m (D) subject to detail elevational design requirements.
- (ii) The wall system shall consist of glazing panels at the vision and spandrel portions
- (iii) The system shall have slip joint type expansion joints which allow for all extreme thermal movement under local climatic conditions.
- (iv) The system shall have water and air seal construction using wet sealant system. Secondary drainage system with flashing or pressure equalization system or other approved water proofing system shall be incorporated
- (v) The wall system shall be flush-recess type and the facade of the glazing portion shall be flush with the aluminium sections
- (vi) Openable sashes shall be provided on the elevations to meet the requirements of the Building Development Department and Fire Services Department. The window frames should be so designed that the windows are of concealed type and not obvious on the elevation
- (vii) The entire curtain wall system shall be designed to withstand a wind pressure of 600 kg/m² above 100 m building height and 500 kg/m² below 100 m building height and + 8.6 Kpa for fastening anchors at critical areas and for water tightness subject to the effect of water sprinkling at 5l/min/m² for 10 min. under a pressure of 300 kg/m² for all fixed parts and 200 kg/m² for openable parts.
- (viii) The Mullions shall be designed to cater for a permanent gondola system for general cleansing and maintenance of the curtain wall. The Developer's contractor shall be responsible for the design and supply of the whole of the gondola system for serving every part of the development
- (ix) The curtain wall system shall be subject to performance testing for watertightness and lateral deflection as recommended by the Curtain Wall Consultant.
- (x) The curtain wall system manufacturer shall meet with the requirements of the American Aluminium Manufacturers Association (AAMA) or other approved standards
- (xi) The approved curtain wall system manufacturers will be Builders Federal, Nippon Light Metal Co. Ltd, Tajima Metal Works, or other approved by the Bishop

4.2 Glazing for Curtain Wall System

- (i) All glass shall be silver reflective tempered float glass of the qualities specified in B.S. 952, free from bubbles, smoke waves, air holes, scratches and other defects and cut to fit the rebates or approved fixing details with due allowance made for expansion.
- (ii) The glass shall perform based on the following guidelines:
 - Wind Loading and Pressure —
 - 600 kg/m² above 100 m building height
 - 500 kg/m² below 100 m building height
 - Daylight Transmittance —
 - 20% minimum
 - Shading Coefficient —
 - 0.35 maximum
 - Summer U-Value —
 - 5.4 W/m²K maximum
- (iii) The approved glass suppliers will be of "LOF" Brand of U.S.A. origin or other approved equal.

TECHNICAL SPECIFICATION

4.3 Skylight System

- (i) The Scope of Work includes the design, supply and installation of the natural anodised aluminium or stainless steel skylight systems and the supporting structural frames.

Skylight systems are required to the following areas:

- Over the entrance hall leading to the St. Paul's Church and the Side Chapel
- Over the St. Paul's Church and Side Chapel
- The vertical external glazing walls of the St. Paul's Church and the Side Chapel
- On the footbridge linking the Diocesan Centre

- (ii) All skylight units shall be of laminated tempered glass to be proposed by the contractors.

- (iii) The skylight system shall be watertight and be provided with a secondary drainage system for drainage and discharge of possible water leakage.

- (iv) All supporting members of the skylight enclosure system shall not have any harmful permanent deformation and the following deflection when subject to the effect of design wind pressure described below. The skylight enclosure system shall be designed to withstand the following loads normal to the plane of the skylights:

- Live loads: 300 kg applied over horizontal surfaces
- Wind loads: horizontal/inclined/vertical skylights:
 $\pm 500 \text{ kg/m}^2$
- Dead loads on inclined roof skylights: 100 kg/m^2
- Loading combination shall be Wind load + Dead load + $1/2$ Live load uniformly distributed over full span

- (v) The deflection of any framing member, absolute deflection not relative to the supporting structural frame, in a direction normal to the plane of the skylight, shall not exceed $1/240$ of the clear span of the member or 15mm whichever is smaller under the wind loads above mentioned.

- (vi) Laminated safety glass used for the skylight system shall conform to British Standard Specification Code of Practice CP 152:1972 and American National Standards Institute Specification ANS 2.97.1:1972.

Top layer — Silver reflective glass; Bottom layer — Clear tempered glass

Top and bottom glass lights shall be bonded together with interlayer of 60 mm thick clear vinyl interlayer film. Glass edges shall be neatly and clearly factory cut, with corners seamed.

- (vii) A sun screen system shall be provided at the skylight to reduce the solar heat gain.

- (viii) Approved skylight specialist contractor shall be IBG International or Supersky U.S.A. or other approved

4.4 Structural Supporting Frames

- (i) The skylight enclosure systems as stated in 4.3 above shall be supported on steel space frame structure of silver chrome finish and contain a built-in system of catwalks & access ladders for the maintenance of the interiors of the skylight system.

- (ii) The structure shall be a double layer space frame with inner and outer chords having circular sections and spherical nodes designed to cater for fixings at the nodes

- (iii) The structural space frame shall be designed for the following loads and the appropriate combinations of these loads and any other loads required for the structure to perform its function:-

— Wind load —

To satisfy minimum requirements of the Building (Construction) Regulations and a total pressure of not less than 2.5 kN/m^2 acting either inwards or outwards perpendicular to the surface

— Dead loads —

Based on self weights of all elements of construction or B.S. 648

— Imposed loads —

General service loads of 55 kg/m^2 minimum

— Gondola loads

— Fitting loads —

20 kg minimum applied at each node on the lower grid

- (iv) The system shall be designed to cater for thermal movement and deflections of the building structure.

- (v) The maximum deflection of the space frame at any point shall comply with B.S. 449

- (vi) All steel structure shall be corrosion protected. The protective system shall be applied by a specialist contractor

- (vii) The space frame structure shall be designed and constructed by a specialist contractor having at least 10 years relevant experience in the field

TECHNICAL SPECIFICATION

4.5 Stainless Steel Cladding

- (i) All stainless steel cladding shall be of silver mirror finish of uniform colour and tone.
- (ii) All panels shall be flat and when fixed shall form a uniform surface. All panels shall be free from dents, distortion, discoloration and tonal difference. The claddings shall be supported on a backing steel frame.
- (iii) The standard of stainless steel used shall be Stainless Steel Designation issued by American Iron and Steel Institute (AISI).

4.6 Granite

- (i) All granite shall be of first class quality "Italian Grey Silver" of Italian origin or other approved. The quality of the granite shall be equivalent to that used in the old wing of the City Hall, Central, Hong Kong.
- (ii) The granite should be of a good and homogeneous colour without any blotches or markings or discoloration or line or colour of a similar nature. It should be free from vent holes, red streaks, veins and other flaws and defects. The black contents of the granite should not be greater than 6 mm in diameter.
- (iii) The minimum physical properties of the marble for this Supply-Contract shall be as Listed below.

1) Compressive Strength	1905 kg/cm ²
2) Compressive Strength Frozen	1937 kg/cm ²
3) Absorption	5.00
4) Flexural Strength	149 kg/cm ²
5) Shear Strength	58 kg/cm ²
6) Coefficient of Thermal Expansion	0.0062 mm/ml/°C
7) Abrasive Hardness	1.10 mm
8) Weight	2650 kg/m ³
- (iv) All granite paving and wall covering shall be done in the pattern according to the Architect's design.

4.7 Carpet

- (i) Carpet used shall be Heuga Martred FR or similar approved, which is a heavy duty, non woven carpet, 50% acrylic, 25% nylon and 25% viscose homogeneous, fibre bonded needlefelt made with scrim or backing so that wearing characteristics apply to full thickness of material. It should have fire retardant properties.
- (ii) All carpet is to be first quality and from the same dye lot for each colour to be installed.
- (iii) All choice of colours for the Diocesan Accommodation is to be approved by the Bishop.
- (iv) "Dunlop" foam underlay or approved equivalent as recommended by manufacturer.

5. STRUCTURAL & GEOTECHNICAL DESIGN

5.1 The Structure

- (i) The Office Tower
The 32 storey circular office tower is supported by a central circular core with 16 exterior columns. At 2nd floor level a transfer will be provided to convert these 16 columns to 4 pairs of structural column/wall between the 2/F and G/F. The central core will be carried down to cap level thus providing an efficient vertical structural element for the support of both gravity and wind load. The possibility of using structural steel for the construction of the lower superstructure should be thoroughly investigated and its merits from the point of view of shortening the length of the construction period should be fully explored.
- (ii) The Diocesan Centre and Car Park Structure
A conventional beam and column construction can be adopted for this part of the structure with the proposed double level footbridge spanning as a simply supported structure between the Diocesan floors between the Office Tower and the Church Block. In view of the considerable difference in level in the slope behind the car park, it would be impracticable for this structure to be designed against the soil load from the slope. Adequate space should be allowed in the car park levels to accommodate a stable slope without imposing horizontal soil load to the car park structure.

5.2 Site Investigation

- (i) Preliminary site investigation has been carried out in 1981 on this site. The investigation includes 20 drillholes, field permeability test, water table measurement, water absorption test and packer test. A copy of the site investigation report is kept in Ng Chun Man & Associates (H.K.) Ltd's office for inspection by the Developer by prior appointment.
- (ii) A Geotechnical report was prepared by Mott Hay Anderson, Far East on behalf of the Government on the disused air raid tunnels in the locality in 1982. Reference "Network 13, Wyndham Street — May 1982" which may be inspected at the Geotechnical Control Office or Ng Chun Man & Associates (H.K.) Ltd's office.

TECHNICAL SPECIFICATION

5.3 Foundation

- (i) **The Office Tower**
Sound rock exists at a depth varying from 22m to 45m. In view of the heavy loading from the structure, it is preferable to transfer the load directly to sound rock. Preliminary investigation revealed that the soil stratum contains core-stones of significant thickness to cause practical difficulties to traditional piling including large diameter bored piles. Hand-dug caisson would be a feasible solution but the effect of dewatering on adjoining structure/ground must be examined and circumferential grouting might be required as a preventive measure.
- (ii) **The Diocesan Centre and Car Park**
The slope underneath this structure is less bouldery and contains decomposed soil strata varying from 30 to 50 meters in depth. Sound rock exists at a depth generally below 50 meters. Since this structure is relatively light, it is considered that soil caissons may be used. Friction piles may also be considered provided that the building loads can be carried to sufficient depth without imposing additional load that would jeopardise the slope stability.

5.4 Geotechnical Consideration

- (i) The site spans from Upper Albert Road to Lower Albert Road with a difference in level of more than 30 meters. Geotechnical consideration must be given during formation of this site. The effects of formation work on adjoining structure/road must be carefully examined, in particular, the existing flyover in Upper Albert Road and the existing retaining wall between Lower Albert Road and Ice House Street.
- (ii) There is an abandoned pre-war tunnel crossing the site. To ensure long term stability of the development, treatment of the tunnel should be considered.
- (iii) The Developer's attention is drawn to the existence of "Japanese Tunnels" on the southwestern corner of the lot at the slopes behind the existing Vicarage and St. Paul's Church which would require stabilisation. The exact locations of these tunnels are unknown.

6 BUILDING SERVICES DESIGN

6.1 General

- (i) This section outlines the building services provisions for this development.
The M & E engineering systems provided for this development should be selected with the objective of satisfying to the maximum reasonable extent the following basic criteria:
 - * High energy efficiency & energy conservation
 - * High flexibility and reliable operation
 - * Easy accessibility for maintenance
 - * Integration with architectural and structural features.
- (ii) The E & M service provisions consist of the following systems:
 - a. Heating, Ventilation and Air-Conditioning (HVAC)
 - b. Electrical
 - c. Fire Protection
 - d. Plumbing & Drainage
 - e. Security
 - f. Building Automation
 - g. Telephone
 - h. Vertical Transportation
- (iii) Separate E & M installation systems should be provided for the Diocesan Centre and the Commercial Office Tower to cater for independent running of the two accommodations as far as possible and practicable.

6.2 Standard and Statutory Requirements

- (i) All building services works shall comply with the following statutory obligations and regulations together with any amendments made thereto:
 - Fire Services Department (H.K.)
 - Lands and Works Branch (H.K.)
 - Building Development Department (H.K.)
 - The British Codes of Practice and Standards
 - Urban Service Department (H.K.)
 - General Specification of Airconditioning and Refrigeration Installation, Material and Workmanship for the Architectural Office, Public Works Department 1974
 - Supply Rules of Hong Kong Electric Co.
 - C.I.B.S. Code and A.S.H.R.A.E. Standards
 - The latest Wiring Regulation of the Institute of Electrical Engineers (U.K.)
 - Labour Department (H.K.)
 - Water Authority (H.K.)
- (ii) All systems shall be economically justified with due consideration to low running, maintenance and flexibility and standby capacity.
- (iii) In general, all equipment and mechanical plants should be imported from reputable manufacturers who maintain a local service and spares capacity.

TECHNICAL SPECIFICATION

6.3 HVAC Installation

- (i) **Commercial/Office Tower**
Central air conditioning system should be provided for the office/shop spaces. Variable air volume (VAV) or constant air volume (CAV) all air systems should be considered wherever possible and practicable.
- (ii) **Diocesan Centre**
Fan coil and primary system with perimeter heating should be provided.
- (iii) **Ventilation System**
Mechanical ventilation should generally be provided to the carparks, E & M plant rooms and service areas.

6.4 Electrical System

- (i) **H.V. Distribution**
A H. V. distribution network will be supplied from the Hong Kong Electric Co. (HEC). Location for the transformer room will be subject to final agreement with HEC.
- (ii) **L.V. Distribution**
Each functional element will have its own low voltage distribution system.
- (iii) **Essential Supplies**
Emergency lighting as required by the Code of Practice will be provided by battery type lamps maintained or non-maintained.
- (iv) **Lightning Protection**
A lightning protection system will be provided as required by the Code of Practice. The steel structure or reinforce steel bars may be used as the lightning protection conductor and no extra earth tape will be used.
- (v) **Lighting**
Modular lighting integrated with the false ceiling design will be provided for the office. The lighting level provided will be in accordance with C.I.B.S Code for interior lighting. Decorative lighting fittings should be provided for the Church, the Side Chapel, the Vicarage and hostels and associated areas.
- (vi) **Floor Duct**
A floor duct/trunking system will be provided for the office floors of the Commercial Office Tower and the diocesan Offices.

6.5 Fire Protection Systems

- (i) **General**
The fire protection installation for the Church Accommodation and Office Tower should comprise the following systems as required by the Director of Fire Services.
 - a. Wet Sprinkler
 - b. Fire Hydrant and Hosereel
 - c. Fire Detection and Alarm
 - d. Gas Flooding
 - e. Fusible Link Roller Shutters and Portable Extinguishers

In general, the design of fire protection systems will comply with the relevant standards and recommendations of the Fire Offices' Committee (FOC), the Fire Services Department (FSD), the National Fire Protection Association (NFPA) and the requirements of the Client's insurance company where applicable.

6.6 Plumbing and Drainage Systems

- (i) **General**
The plumbing and drainage installations should comprise the following systems:
 - a. Storm and Foul Water Drainage
 - b. Water Supply
 - c. Town Gas
- (ii) **Water Supply System**
The water supply distribution systems should consist of the following provision for the Diocesan Centre:
 - a. Potable water services
 - b. Flushing water services
 - c. Hot water services (for the hostels and Vicarage quarters)

TECHNICAL SPECIFICATION

6.7 Security System

- (i) Separate security system will be provided for more flexible management. It is proposed that the following systems be provided:
 - a. Burglar Alarm
 - b. Exit Control Lock
 - c. Panic Alarm
 - d. CCTV
 - e. Public Address
 - f. CABD
 - g. Doorphone (for the Diocesan Hostel and Vicarage Quarter accommodation only)
- (ii) Burglar Alarm System
All emergency exits and fire exits will be monitored by a Burglar Alarm System and the door status will be relayed back to the central security control room.
- (iii) Exit Control Lock System
The locking device will be employed in parallel with the Burglar Alarm System to lock up all essential fire staircases so that they can be controlled under normal daily operation.
- (iv) Panic Alarm System
This system will be provided for people/staff personnel to raise alarm during panic situation.
Any person needing the help of security personnel will simply activate an alarm button located around his area.
- (v) CCTV System
In parallel with the Burglar Alarm System mentioned above, a CCTV system will be provided to give an overall surveillance of the areas. The CCTV system should be designed to provide an easy means of checking the area for suspects.
- (vi) Public Address System
The system is to provide background music and voice announcement through loudspeakers in the public areas. The sound system in the St. Paul's Church and the Side Chapel of the Diocesan Centre should be specially designed to suit the functions. An acoustic consultant should be appointed to give specialist advice.
- (vii) CABD System (Communal - Antenna Broadcast Distribution)
CABD system consisting of TV/FM signal reception and distribution should be provided.
- (viii) Doorphone System
A doorphone system should be provided in the Diocesan Hostel and Vicarage Quarter for communication between the tenants and visitors at the gate entrances. Remote control mechanism of the entrance gate from apartment flats will also be provided.
A CCTV camera will be provided outside the main entrance gate. Signals from this camera will be fed into CABD system for video reception at TV sets of each apartment flat.

6.8 Building Automation System

- (i) Building automation system should be provided for the Commercial Office Tower.
- (ii) The system should be capable of performing monitoring function and alarm display function for the following E & M services:
 - a. Air side HVAC equipment
 - b. Electrical power plant protection system
 - c. Emergency generating system
 - d. Fire/smoke alarm & detection system
 - e. Pumps & tanks of fire service, plumbing & drainage systems
 - f. Lift & escalator systems
 - g. Security system
 - h. Public area lighting
- (iii) In addition, the system will be required to perform centralized control of the following:
 - a. AHU's, fan coil units & ventilating fans
 - b. Public area lighting
 - c. Lift hoisting system
 - d. Escalator system
 - e. Public address system

6.9 Telephone System

- (i) Telephone System for Diocesan Centre
A private automatic branch exchange (PABX) system should be provided to serve the whole of the Diocesan Centre.
- (ii) Telephone Services for Office/Tower
Conduit and trunking facilities should be provided throughout the building.

6.10 Vertical Transportation System

- (i) Lifts and escalators are to be used to handle the incoming and outgoing traffic in each tower. The main characteristics of the system are to be justified with lift traffic analysis data.
- (ii) The passenger lift interiors are to be finished with polished granite on the floor, a combination of polished granite and mirror finish stainless steel panels on the walls and mirror finish stainless steel on the ceiling.

7. SPECIALIST CONSULTANTS

7.1 Consultants should be appointed by the Developer for the provision of specialist advice to the Architect for the detailed design in the following areas.

- (i) Acoustic Consultant for the Church and the Side Chapel
- (ii) Lighting Consultant for the special lighting effect and the design of special lighting fittings in the Church and the Side Chapel
- (iii) Curtain Walling and Skylight Consultant

A4

PRELIMINARY COST ESTIMATE

PRELIMINARY COST ESTIMATE

PREPARED BY LANGDON EVERY & SEAH

A. SUMMARY OF ESTIMATE

	(HK\$)
1. Demolition of existing buildings	1,500,000
2. Site Formation	11,200,000
3. Office Tower (73,620 m ²)	269,500,000
4. Carparks and Ramps (14,020 m ²)	18,000,000
5. Church and Diocesan Centre in low block (6,470 m ²)	38,400,000
6. Drainage and Connections	1,000,000
7. Footbridge	2,000,000
8. Hard-pavings	1,400,000
9. Landscaping	3,000,000
10. Road widening	700,000
	<hr/>
Sub-total:	346,700,000
11. Preliminaries (5%)	17,300,000
12. Contingencies (7.5%)	26,000,000

Total Construction Cost at
February 1986 price level = HK\$ 390,000,000

.....

13. ASSUMPTIONS:

This estimate assumes that

- (i) No extensive slope stabilisation works would be required;
- (ii) No services diversion are required

14. EXCLUSIONS:

- 14.1 Land cost;
- 14.2 Temporary premises for the Diocesan Centre;
- 14.3 Financing charges;
- 14.4 Fitting-out to the Church and Diocesan Centre;
- 14.5 Professional fees, legal fees, market promotion costs and developer's overheads and
- 14.6 Fluctuation in construction cost from now to the date(s) of tender of the works.
- 14.7 Possible subway under Lower Albert Road

PRELIMINARY COST ESTIMATE

B. ELEMENTAL BREAKDOWN OF ESTIMATED COST OF OFFICE TOWER

Total Gross Floor Area: 73,620 m²

ELEMENT	ELEMENT COST (\$)	ELEMENTAL COST (\$/m ²)
1. FOUNDATIONS AND SUB-STRUCTURE		
1.1 Caissons	20,200,000	274.38
1.2 Caisson-caps	7,600,000	103.24
1.3 Basement	7,100,000	96.44
	<u>(34,900,000)</u>	<u>(474.06)</u>
2. CARCASE		
2.1 Frame and slabs	48,000,000	652.00
2.2 Curtain walls and skylights	56,800,000	771.53
2.3 Walls and partitions	6,100,000	82.86
2.4 Doors and shutters	5,900,000	80.14
2.5 Shopfronts	300,000	4.07
	<u>(117,100,000)</u>	<u>(1,590.60)</u>
3. FINISHINGS		
3.1 Roof finishes	500,000	6.79
3.2 Floor finishes	7,700,000	104.59
3.3 Internal wall finishes	9,500,000	129.04
3.4 External facings	5,400,000	73.35
3.5 Ceiling finishes	4,800,000	65.20
3.6 Sundries	1,800,000	24.45
	<u>(29,700,000)</u>	<u>(403.42)</u>
4. SERVICES		
4.1 Plumbing and drainage	3,800,000	51.62
4.2 Electrical	15,100,000	205.11
4.3 Heating, ventilation and air- conditioning	34,700,000	471.34
4.4 Fire services	3,700,000	50.26
4.5 Lifts and escalators	24,500,000	332.79
4.6 Gondolas	1,000,000	13.58
4.7 Security and miscellaneous	1,000,000	13.58
4.8 Builder's work in connection, profit and attendance	4,000,000	54.33
	<u>(87,800,000)</u>	<u>(1,192.61)</u>
TOTAL:	\$269,500,000	\$3,660.69/m²

Note: The above figures exclude the cost of site formation, external works, preliminaries and contingencies — see the Summary of Estimate for these items.



Jones Lang Wootton 仲量行

International Real Estate Consultants, Surveyors,
Valuers & Auctioneers.

25th Floor, One Exchange Square

Central, Hong Kong

Telephone: 5-217171 Telex: HX74247

BIBLIOGRAPHY

Books

Pyhrr, Stephen A., and Cooper, James R. Real Estate Investment. New York: John Wiley & Sons, 1982.

Lethbridge, David. The Business Environment in Hong Kong. 2nd edition. Hong Kong: Oxford University Press, 1984.

Bristow, Roger. Land-Use Planning in Hong Kong. Hong Kong: Oxford University Press, 1984.

Hong Kong Government Information Services. A Guide to Building Development in Hong Kong. Hong Kong: Government Printer, 1985.

Smith, Kenneth and Keenan, Denis J. English Law. London: Pitman Publishing Ltd., 1975.

Periodicals

"1986 Economic Prospects." Hong Kong Government, 1986.

"The Hong Kong Surveyor." Hong Kong Institute of Surveyors, Volume 2, Issue No. 1, January 1986.

"Hong Kong Economic Journal Monthly" Shun Pao, Issue No. 112, July 1986 (in Chinese).

"Hong Kong Annual Report" Hong Kong Government, 1986.

"Property Review" Hong Kong Government, 1986.

"Planning and Development" Hong Kong Institute of Planners, Volume 2, Issue No. 1, 1986.

"Current Building Cost Information Data" Langdon Every & Seah, 1st Quarter, 1986.

"JLW Property Index" Jones Lang Wootton, April 1986.