Alpha
Engineering Consultant

PROJECT QUALITY PLAN

PROPOSED CONDOMINIUM DEVELOPMENT COMPRISING 3 to 5 STOREY BUILDINGS WITH BASEMENT CARPARK, SWIMMING POOL AND COMMUNAL FACILITIES ON LOT/S 520, 42-4, 41-3, 38-5 TS20 AT LLOYD ROAD (RIVER VALLEY PLANNING AREA)

For

M/S CRL REALTY PTE LTD

Copy No.	

Prepared By: Chim Heng Leong

Authorised By: Richard Teo

Date: 25 October 2005

TABLE OF CONTENTS

SECTION	DESCRIPTION
-	**TITLE PAGE**
-	**TABLE OF CONTENTS**
1	**QUALITY PLAN CONTROL AND DISTRIBUTION**
1.1	List of Copy Holders
1.2	Revision Record
2	**PROJECT INFORMATION**
2.1	Project Description
2.2	Project Cost
2.3	Scope of Works
3	**ORGANISATION**
3.1	Organisation Chart
3.2	AEC's Project Team Member
3.3	Client/Client's Representative
3.4	Other Consultants
	Local Overseas – Not Used
3.5	Contractor/Sub-Contractors
3.6	Authorities
4	**PROGRAMME**
4.1	Overall Programme – Not Used
4.2	Authority Submission Status for M&E Services – 1st Submission
4.3	Authority Submission Status for M&E Services (Amendment) – 2nd Submission

TABLE OF CONTENTS

SECTION	DESCRIPTION
5	**PROJECT RECORDS**
5.1	List of Internal File
5.2	Filing of Drawings
6	**INTERFACING**
6.1	Method of Interface
6.2	Internal Design Interface – Not Used
6.3	Circulation of Documents to External Parties
7	**WORK AUTHORISATION**
8	**DESIGN INPUT AND METHODOLOGY**
8.1	List of Client's Standards, Reference Documents or Brief
8.2	List of Applicable Code of Practice and Regulations
8.3	List of Design Guide or Handbook Used
8.4	List of Applicable Quality System Procedures
8.5	List of Software Used for Design/Analysis – Not Used
9	**CLIENT'S REQUIREMENTS**
9.1	List of Output Required by Client
9.2	Specific Procedures Required by Client – Not Used
10	**LIST OF SUB-JOB**
10.1	List of Sub-Job Numbers – Not Used

SECTION 1

QUALITY PLAN CONTROL AND DISTRIBUTION

1.1 List of Copy Holders

Copy No.	Copy Holder	Date of Issue
1	1358-PQP File	31 October 2003
2	Chim Heng Leong	31 October 2003

1.2 Revision Record

Revision	Date of Issue	Section Reference	Page(s)	Remarks
0	31 October 2003	1 to 10	26	
1	25 October 2005	1 to 10	26	

SECTION 2

PROJECT INFORMATION

2.1 Project Description

Type of Development	Residential/ Condominium

Statistics of Development	
Site Area, m²	9,202.00
Nett Floor Area, m²	-
Gross Floor Area, m²	13,288.88
Covered Carpark, m²	-
No. of Covered Carpark Lots	104
No. of Apartments/Houses	60 apartment units / 6 town houses
No. of Beds (for Hospitals)	-
No. of Guestroom (for Hotels)	-
No. of Blocks / No. of Storeys	4 / 1 Block of 3 Storeys, 2 Blocks of 5 Storeys c/w 1 Basement, 1 Block of 3 Storeys c/w 1 Basement (Clubhouse)
No. of Phases	2

2.2 Project Cost

M&E Services Cost Plan (S$ x 1M)										
Services	EI	ACVI	LEI	FFAI	PSI	SPFI				
Estimate	1.3	1.23	0.65	0.325	0.888	0.3				
Awarded										

Total Project Construction Cost (S$ x1M)			
	Site Clearance	Piling Works	Main Contract
Estimate	-	-	35
Awarded	-	-	-

Site Clearance shall include earth work, soil improvement, service diversion and termination.

2.3 Scope of Works

2.3.1 Scope of Consultancy Services

Conceptual/Schematic Design	✓
Detailed Design	
Tender Documentation	
Tender Evaluation	
Contract Supervision	✓
M&E Costing	
Submissions to Authority	✓

(✓*where applicable*)

2.3.2 Scope of M&E Services

ELECTRICAL	✓	AIR CONDITIONING	✓	SPRINKLER	✓	SANITARY	✓	SWIMMING POOL	✓
LIFT	✓	MECHANICAL VENTILATION	✓	FIRE ALARM	✓	COLD WATER	✓	STEAM BOILER	
ESCALATOR		MECHANICAL SMOKE EXTRACT		HOSEREEL	✓	HOT WATER	✓	FUEL STORAGE	
PABX		COMPUTER A/C		WET RISER		TOWN GAS	✓		
SECURITY	✓	BST CARPARK EXH	✓	DRY RISER	✓	LPG GAS			
TELELIFT		HEATING				MEDICAL GAS			
DATA COMM.	✓								
FLUSHFLOOR TRUNKING									

(✓*where applicable*)

2.3.3 Submission to Relevant Authorities by Others

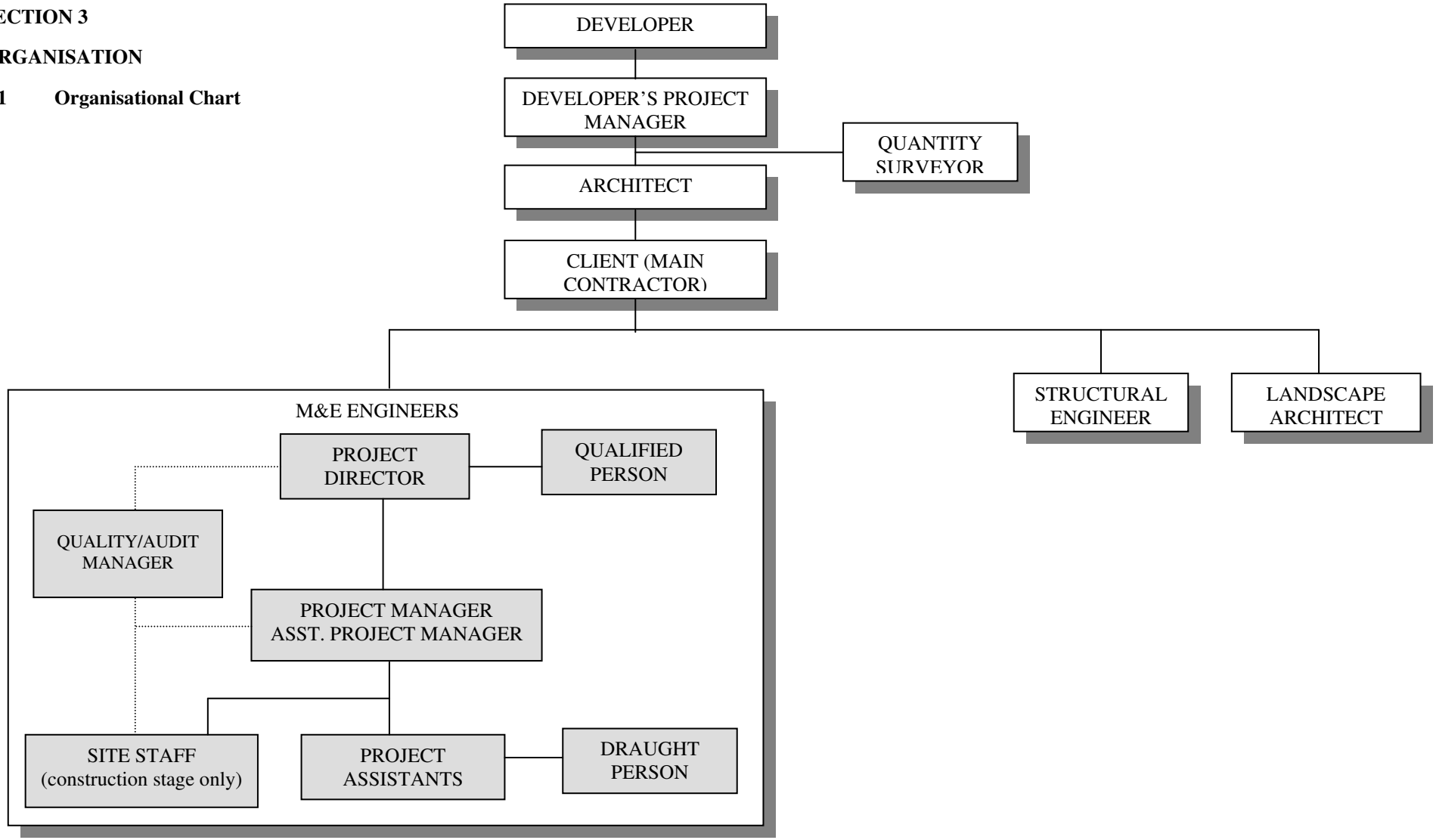
EJECTOR & DIVERTER	✓	SUMP PUMP	✓	FUEL OIL TANK		LIFT & ESCALATOR	✓	PRESSURE VESSEL		HOISTS		FOAM	

(✓*where applicable*)

SECTION 3

ORGANISATION

3.1 Organisational Chart



SECTION 3

ORGANISATION

3.2 AEC's Project Team Member

TITLE		NAME
Project Director		Richard Teo (RT)
Qualified Person	Mechanical	Loh Chew Thong (LCT)
	Electrical	Loh Fook Yuen (LFY)
Project Manager		Chim Heng Leong (CHL)
Assistant Project Manager		Loh Fook Yuen (LFY)
Project Assistant (Mech)		-
Project Assistant (Elect)		Derek Ong (DO)
Draughtsperson		Common Pool
Resident Engineer (M&E)		-
Assistant Resident Engineer (M&E)		-
Clerk-of-Work (M&E)		-

3.3 Client/Client's Representatives

Developer:-	CRL Realty Pte Ltd	Client:-	Nakano Singapore (Pte) Ltd
Address:-	8 Shenton Way, #21-01, Temasek Tower, Singapore 068811	Address:-	1 Coleman Street, #06-02, The Adelphi, Singapore 179803
Tel:-	6820 2188	Tel:-	6333 4933
Fax:-	6820 2208	Fax:-	6338 8568

Client's Representatives:-

Name of Firm	Contact Person	Contact
CRL Realty Pte Ltd	Name: Mr Chong Chong Choo Position: Project Director	Tel: 6826 6662 Fax: 6820 2208 Handphone: - Email: CHONG.ChongChoo@capitaland.com.sg
Nakano Singapore (Pte) Ltd	Name: Mr. Ling Hea Inn Position: Senior Project Manager	Tel: 6333 4933 Fax: 6338 8568 Handphone: 9850 5102 Email: ling@nakano.com.sg
	Name: Position:	Tel: Fax: Handphone: Email:
	Name: Position:	Tel: Fax: Handphone: Email:
	Name: Position:	Tel: Fax: Handphone: Email:

3.4 **Other Consultants** (Local)

Function / Name of Firm	Contact Person	Contact
Architect MKPL Architects	Name: Mr Siew Man Kok Position: Managing Director	Tel: 6223 4633 Fax: 6223 4233 Handphone: - Email: mksiew@mkpl.com.sg
Quantity Surveyor Rider Hunt Levett & Bailey	Name: Mr Ong Choon Beng Position: Executive Quantity Surveyor	Tel: 6339 1500 Fax: 6339 1521 Handphone: - Email: cbong@rhlb.com.sg
Structural Engineer P&T Consultants Pte Ltd	Name: Ms Cheng Li Kiang Position: Associate	Tel: 6439 9072 Fax: 6534 5496 Handphone: - Email: lkcheng@ptcon.com.sg
Landscape Architect Sitetectonix Pte Ltd	Name: Ms Helen Smith Yeo Position: Managing Director	Tel: 6327 4452 Fax: 6327 8042 Handphone: - Email: stx@pacific.net.sg
Lighting Consultant Lighting Planners Associates Inc	Name: Mr Atshushi Itakura Position: Designer	Tel: 6734 3086 Fax: 6734 2786 Handphone: - Email: singapore@lighting.co.jp
_____	Name: Position:	Tel: Fax: Handphone: Email:
_____	Name: Position:	Tel: Fax: Handphone: Email:
_____	Name: Position:	Tel: Fax: Handphone: Email:

3.4 **Other Consultants** (Overseas) – **NOT USED**

Function / Name of Firm	Contact Person	Contact
Architect	Name: Position:	Tel: Fax: Handphone: Email:
M&E Consultant	Name: Position:	Tel: Fax: Handphone: Email:
Quantity Surveyor	Name: Position:	Tel: Fax: Handphone: Email:
Structural Engineer	Name: Position:	Tel: Fax: Handphone: Email:
Interior Designer	Name: Position:	Tel: Fax: Handphone: Email:
Lighting Consultant	Name: Position:	Tel: Fax: Handphone: Email:
Acoustic Consultant	Name: Position:	Tel: Fax: Handphone: Email:
_____	Name: Position:	Tel: Fax: Handphone: Email:

3.5 Contractors/Sub-Contractors

Function / Name of Firm	Contract *	Contact Person	Contact
Main Contractor Nakano Singapore (Pte) Ltd	DC	Name: Mr. Ling Hea Inn Position: Senior Project Manager	Tel: 6333 4933 Fax: 6338 8568 Handphone: 9850 5102 Email: ling@nakano.com.sg
Air Conditioning & Ventilation Installation Sub-Contractor Design Aire Engineering (S) Pte Ltd	DSC	Name: Mr. William Liew Position: Director	Tel: 6746 9611 Fax: 6747 4922 Handphone: 9672 6277 Email: deaire@mbox3.singnet.com.sg
Plumbing & Sanitary Installation Sub-Contractor WTC Engineering Pte Ltd	DSC	Name: Mr Denis Loh Position:	Tel: 6745 9733 Fax: 6745 6806 Handphone: - Email: wtc97@mbox2.singnet.com.sg
Electrical Installation Sub-Contractor Ngee Cheong Contractors Pte Ltd	DSC	Name: Loh Chung Hua Position: Assistant General Manager	Tel: 6293 6830 Fax: 6293 9095 Handphone: 9626 2441 Email: chloh@ngeecheong.com.sg
Lift & Escalator Installation Sub-Contractor Hitachi Elevator Engineering (S) Pte Ltd	DSC	Name: Sunny Chong S K Position: Manager	Tel: 6394 2622 Fax: 6295 3678 Handphone: - Email: sunny.chong@hees.hitachi.com.sg
Fire Fighting & Alarm Installation Sub-Contractor Design Aire Engineering (S) Pte Ltd	DSC	Name: Mr Low H P Position:	Tel: 6746 9611 Fax: 6747 4922 Handphone: - Email: deaire@mbox3.singnet.com.sg
Swimming Pool Filtration Plant Installation Sub-Contractor Men's Pool (Pte) Ltd	DSC	Name: Mr Daren Lim Position:	Tel: 6266 1211 Fax: 6261 4414 Handphone: 9816 3795 Email: menspool@singnet.com.sg
Carpark System Installation Sub-Contractor		Name: Position:	Tel: Fax: Handphone: Email:
_____		Name: Position:	Tel: Fax: Handphone: Email:

** Type of Contract*
- *NSC (Nominated Sub-Contract)*
- *DSC (Domesticated Sub-Contract)*
- *DC (Direct Contract)*
- *NS (Nominated Supplier)*

3.6 Authorities

Authorities/Department	Contact Person	Tel/Fax Nos./E-mail
SP PowerGrid:		
(a) Sub-Station	Mr Chin Yoke Fah	6823 8556
(b) Diversion	Mr Ho Jin Cheng	6290 9103
SP Services:		
(a) Customer Supply	Mr Lim Yew Kiam	6823 8553
(b) Installation		
(c) Meter Section	Mr Tan Hoe Khiang	-
(d) Road Lighting		
TFCC:		
(a) SCV		
(b) SingTel	Mr Lui Kwong Hing	6825 5000
(c) IDA		
BCA:		
(a) Building Plan		
FSSD:		
(a) Building Plan		
(b) M&E Plan		
PUB (Water Supply) Network Dept:		
(a) Water Conservation		
(b) Plumbing Plan		
(c) Diversion		
PUB Water Reclamation (Network) Dept:		
(a) Building Plan/CBPU		
(b) M&E Plan		
(c) Diversion		
City Gas Pte Ltd:		
(a) Planning/Submission		
(b) Installation/Inspection		
PowerGas Pte Ltd		
(a) Diversion		
NEA (Pollution Control)		
(a) Planning/Submission		
(b) Inspection		

SECTION 4

PROGRAMME

4.1 Overall Programme – Not Used

ID	TASK NAME	MONTHS	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
1.	Preliminary Planning																									
2.	Planning Submission																									
3.	Detail Design																									
4.	BP Submission																									
5.	BP Submission (Amendments)																									
6.	Tender Period for Piling																									
7.	Tender Period for Sub-Structure																									
8.	Tender Period for Super-Structure																									
9.	Piling Period																									
10.	Sub-Structure Construction Period																									
11.	Super-Structure Construction Period																									
12.	TOP																									
13.	CSC																									

SECTION 4

PROGRAMME

4.2 Authority Submission Status for M&E Services - 1st Submission

Service	Authority	Original Submission		Comments/Resubmission						Approval/ Clearance
		Scheduled	Actual	Comment	Resubmit	Comment	Resubmit	Comment	Resubmit	
Application for Electricity Supply	SP Services Ltd	-	24/06/03	-	-					28/06/03
Power Supply Substation	SP PowerGrid Ltd	30/03/04	15/12/03	02/01/04	20/05/04					24/05/04
Metering Layout	SP Services Ltd	15/06/04	30/11/04							30/11/04
Sanitary Installation	PUB Water Reclamation (Network) Dept	30/03/04	07/07/04							19/07/04
Domestic Water Supply	PUB (Water Supply) Network Dept	30/04/04	07/10/04	26/10/04	3/2/05					7/3/05
Gas Supply Installation	City Gas Pte Ltd	30/03/04	01/04/04	12/04/04	14/05/04	25/05/04	11/06/04			05/07/04
Air Conditioning & Ventilation Inst.	FSSD	15/12/04	7/7/05							26/7/05
Fire Fighting & Alarm Installation	FSSD	15/12/04	7/7/05							26/7/05
Telephone Installation	TFCC	30/10/04	18/10/04							08/11/04
Broadband Co-axial Cable System (BCS)	Starhub Cable Vision	30/10/04	18/10/04							08/11/04
Fuel Storage	FSSD									
	NEA (Pollution Control)									

SECTION 4

PROGRAMME

4.3 Authority Submission Status for M&E Services (Amendments) - 2nd Submission

Service	Authority	Original Submission		Comments/Resubmission						Approval/ Clearance
		Scheduled	Actual	Comment	Resubmit	Comment	Resubmit	Comment	Resubmit	
Application for Electricity Supply	SP Services Ltd									
Power Supply Substation	SP PowerGrid Ltd									
Metering Layout	SP Services Ltd									
Sanitary Installation	PUB Water Reclamation (Network) Dept									
Domestic Water Supply	PUB (Water Supply) Network Dept									
Gas Supply Installation	City Gas Pte Ltd	28/09/04	29/07/04							16/08/04
Air Conditioning & Ventilation Inst.	FSSD									
Fire Fighting & Alarm Installation	FSSD									
Telephone Installation	TFCC									
Broadband Co-axial Cable System (BCS)	Starhub Cable Vision									
Fuel Storage	FSSD									
	NEA (Pollution Control)									

SECTION 5

PROJECT RECORDS

5.1 List of Internal Files

Standard Files

File Ref:		File Ref:	
- Owner	✓	- Architect	✓
- Authorities	✓	- Other Consultants	✓
- Contractors	✓	- CC	✓
- CF	✓	- PQP/QSP	✓

Project Files to be initiated by PM as and when required

File Ref:		File Ref:		File Ref:	

Files under the old Filing System

File Ref: 1358		File Ref: 1358		File Ref: 1358		File Ref: 1358		File Ref: 1358	
-GC	✓	-CM/SM	✓	-CO/SR/SQ	✓	-E-G	✓	-S-G	✓
-PC	✓	-BD	✓	-SC	✓	-A-G	✓	-SF	✓
-AE	✓	-CC	✓	-EC/MC	✓	-L-G	✓		
-AM	✓	-CF	✓	-DF	✓	-F-G	✓		
-AA	✓	-AI	✓	-PQP	✓	-P-G	✓		

SECTION 5

PROJECT RECORDS

5.2 Filing of Drawings

The following team members shall take charge of filing of drawings, stamping "SUPERSEDED" drawings, etc.

Description	Team Member
Incoming Architectural Floor Plans	Derek Ong
Incoming Architectural Sketches/Details	Derek Ong
Incoming Structural Drawings	Derek Ong
M&E Drawings	
- Electrical Installation	Derek Ong
- Lift & Escalator Installation	Derek Ong
- Air Conditioning & Ventilation Installation	Chim Heng Leong
- Fire Fighting & Alarm Installation	Chim Heng Leong
- Plumbing & Sanitary Installation	Chim Heng Leong
- Swimming Pool & Filtration Installation	Chim Heng Leong
Other Drawings	
- Interior Design	Derek Ong
- Landscape/Waterscape	Derek Ong

SECTION 6

INTERFACING

6.1 Method of Interface

Description	Method of Interface	
Client's Review & Approval	M&E Design Report	
	Pre-planned meeting at fixed intervals	✓
	Telefax, letter and telephone	✓
	Email	✓
Interface With External Design Teams	M&E Design Report	
	Pre-planned meeting at fixed intervals	✓
	Telefax, letter and telephone	✓
	Email	✓
Interface Between Internal Design Teams	Telephone	✓
	Email	✓
	Internal Project Team Meeting	
	Circulation of Information	✓

(✓*where applicable*)

SECTION 6

INTERFACING

6.2 Internal Design Interface – NOT USED

Item No.	Description*	Required From	Required By	Date Required	Remarks

** Information required by INTERNAL DESIGN TEAM MEMBERS*

SECTION 6

INTERFACING

6.3 Circulation of Documents to External Parties

	Code: A - Approval Required C - For Comments I - For Information Only	Client/ Client Rep.	Client's Project Manager	Architect	Structural Engineer	Quantity Surveyor	
1.	**Letters/Fax:**						
a.	Project Design	A	-	C	C	-	
b.	Project Administration	I	-	C	C	C	
c.	Project Cost Estimate/Contract Cost	A	-	I	-	C	
2.	**Drawings**						
a.	Outline Design Drgs.	-	-	-	-	-	
b.	Sketch Design Drgs.	-	-	-	-	-	
c.	Final Design Drgs.	-	-	-	-	-	
d.	Shop Drawings	C	-	A	C	-	
e.	As Built Drgs.	-	-	-	-	-	
3.	**Other Document**						
a.	Specification	A	-	I	-	-	
b.	Tender Document	A	-	C	-	C	
c.	Tender Evaluation Report	-	-	-	-	-	
d.	Design Report	-	-	-	-	-	
e.	Progress Report	-	-	-	-	-	
f.	Financial Report	-	-	-	-	-	
g.	Minutes of Meeting	I	-	I	-	-	
h.	Inspection Report	-	-	-	-	-	
i.	Testing & Comm. Report	-	-	-	-	-	
j.	O & M Manual	-	-	-	-	-	

SECTION 7

WORK AUTHORISATION

Activity \ Authorised Signatories	PD	QP	PM	AE	SS
General Correspondences with Client			✓		
General Correspondences with Other Consultants			✓		
M&E Cost Estimate Report	✓				
M&E Design Report	✓				
Check Prints					
Tender Drawing Approval			✓		
Tender Specification Approval			✓		
List of Tenderers			✓		
Tender Questionaires			✓		
Tender Reports			✓		
Draft Letter of Award					
Review of Contractor's Shop Drawing			✓	✓	
Review of Contractor's Technical Submittal			✓	✓	
Review of Contractor's Sample Submittal			✓	✓	
Contractor's Request for Deviation			✓		
Progress Payment Valuation Form			✓		
Final Account Valuation			✓		
Draft Variation Order			✓		
Engineer/Architect's Instruction/Direction			✓		
Site Instruction/Direction			✓		
Correspondence/Submission to Authorities		✓			

(✓*where authorised*)

Key to abbreviations:-

PD : Project Director
QP : Qualified Person
PM : Project Manager/Assistant Project Manager
AE : Assistant Engineer
SS : AEC Site Staff

SECTION 8

DESIGN INPUT & METHODOLOGY

8.1 List of Client's Standards, Reference Documents or Brief

ITEM	KEPT BY
Tender Documents & Drawings	Derek Ong

8.2 List of Applicable Code of Practice and Regulations

Electrical Wiring	BS	SS	IEE	~~NFPA~~	
Lightning Protection System	~~BS~~	SS			
~~Emergency Voice Communication System~~	~~BS~~	~~SS~~	~~NFPA~~		
Air Conditioning & Ventilation Installation	~~BS~~	~~AS~~	~~NFPA~~	SS	~~MS~~
Lift ~~& Escalator~~ Installation	~~BS~~	SS			
~~Sprinkler System~~	~~BS~~	~~SS~~	~~NFPA~~	~~AS~~	~~LPC~~
~~Wet Riser System~~	~~BS~~	~~SS~~	~~NFPA~~	~~AS~~	~~MS~~
Automatic Fire Alarm System	~~BS~~	SS	~~NFPA~~	~~AS~~	~~MS~~
Sanitary System	~~BS~~	SS	~~NFPA~~	~~AS~~	~~MS~~
Plumbing System	BS	SS	~~NFPA~~	~~AS~~	~~MS~~
Town Gas/~~LPG Supply System~~	~~BS~~	SS	~~NFPA~~	~~AS~~	
~~Boiler and Steam Supply System~~	~~ASME~~	~~BS~~	~~AS~~		
~~Mechanical Smoke Control System~~	~~BS~~	~~NFPA~~	~~AS~~		

(Delete where necessary)

SECTION 8

DESIGN INPUT & METHODOLOGY

8.3 List of Design Guide or Handbook Used

Carrier's Handbook of Air Conditioning System Design

ASHRAE Handbooks

Institute of Plumbing's Plumbing Services Design Guide

8.4 List of Applicable Quality System Procedures

Alpha Engineering Consultant's Quality Management System Procedures

Section	Title	✓ where applicable
M1	Preparation of Consultancy Offer	
M2	Project Commissioning and Service Agreement	
M3	Design Control	
M4	Design Change Control	✓
M5	Tender Process and Evaluation	
M6	Authority Submission	✓
M7	Construction Process Control	✓
M8	Testing and Commissioning	✓
S1	Document Control	✓
S2	Documentation of Quality Management System Procedure	✓
S3	Documentation of Project Quality Plan	✓
S4	Specification Control	
S5	Library Control	
S6	Archive Control	✓
S7	Filing Control	
S8	Drawing Control	✓
S9	Administration Control	
S10	Purchasing Control	
S11	Training Control	
S12	Computer Control	
Q1	Quality System Audit	
Q2	Feedback Reporting	
Q3	Clients Feedback	
Q4	Management Review	

8.5 List of Software Used For Design/Analysis – NOT USED

DESCRIPTION/ PACKAGE NAME	VERSION	SUPPLIER/ SOURCE	PURPOSE	
Calculux	2.30	Philips	Lighting design	
Cophos	3.31	Zumtobel	Lighting design	
Carrier E20-II	3.21	Carrier	Programme for determination of heat load, duct size and its losses, etc.	
Gensize 2	2.1	Onan	Generator sizing	
Lift Traffic	-	Alpha Engineering	Lift traffic calculation	
Econdial	2.5	Merlin Gerlin	Design for low voltage network	
Hyena	4.00.1	ACADS-BSG	Fire Sprinkler & Hydrant Analysis	
Fault Level Calculation	-	Alpha Engineering	Calculation of voltage drop and fault level	

(✓*where applicable*)

SECTION 9

CLIENT'S REQUIREMENTS

9.1 List of Output Required by Client:-

Item	* Remarks
M&E Design Report	C, A
M&E Cost Estimate Report	-
Pre-Qualification of Tenderers	-
Tender Documents	-
Tender Report	-
Payment Valuation for QS	-
Certificates of Supervision for TOP/CSC	Re

** Remarks*

A: for approval C: for comment I: for Information Re: for record

Other purposes and for action: please specify.

9.2 Specific Procedures Required By Client *(If applicable)*

NOT USED

SECTION 10

LIST OF SUB-JOB

10.1 List of Sub-Job Numbers – NOT USED

Sub Job No	Description	Allocation Details