Alpha
Consulting Engineers Pte Ltd

PROJECT QUALITY PLAN

PROPOSED ASSET ENHANCEMENT INITIATIVE (AEI) WORKS AT OCEAN FINANCIAL CENTER

For

OCEAN PROPERTIES LLP

Copy No.	1

Prepared By: Koh Yong Huat

Authorised By: Choong Choon Guan

Date: 8 July 2026

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	ACEPL's Project Team Member
3.3	Client/Client's Representative
3.4	Other Consultants - Local - Overseas
3.5	Contractor/Sub-Contractors
3.6	Authorities
4	**PROGRAMME**
4.1	Overall Programme
4.2	Authority Submission Status for M&E Services – 1st Submission - To be completed in due course
4.3	Authority Submission Status for M&E Services (Amendment) – 2nd Submission - To be completed in due course
5	**PROJECT RECORDS**
5.1	List of Internal Files
5.2	Filing of Drawings

TABLE OF CONTENTS

SECTION	DESCRIPTION
6	**INTERFACING**
6.1	Method of Interface
6.2	Internal Design Interface
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 Pre-Consultation and Waiver
8.5	List of Applicable Quality System Procedures
8.6	List of Software Used for Design/Analysis
9	**ENVIRONMENTAL CONSIDERATIONS**
9.1	Sustainable Design Features / Criteria
9.2	Site PPE Requirement
9.3	Site Emergency Preparedness
9.4	Reporting of Environmental Non-conformances
9.5	List of Applicable Environmental Management System Procedures
10	**CLIENT'S REQUIREMENTS**
10.1	List of Output Required by Client
10.2	Specific Procedures Required by Client
11	**LIST OF SUB-JOB**
11.1	List of Sub-Job Numbers

SECTION 1

QUALITY PLAN CONTROL AND DISTRIBUTION

1.1 List of Copy Holders

Copy No.	Copy Holder	Date of Issue
1	6384-PQP	8 July 2026

1.2 Revision Record

Revision	Date of Issue	Section Reference	Page(s)	Remarks
0	8 July 2026	1 to 11	31	+ 2 pgs (Section 4.1 Overall Programme)

SECTION 2

PROJECT INFORMATION

2.1 Project Description

Type of Development	Office Block

Statistics of Development	
Site Area, m²	195,400.00
Nett Floor Area, m²	-
Gross Floor Area, m²	95,992.00
Covered Carpark, m²	-
No. of Covered Carpark Lots	-
No. of Apartments/Houses	-
No. of Beds (for Hospitals)	-
No. of Guestroom (for Hotels)	-
No. of Blocks / No. of Storeys	1 block of 43-storey Office Tower, 5-storey carpark block and 3 basements
Green Mark Category	Platinum
No. of Phases	1

2.2 Project Cost

M&E Services Cost Plan (S$ x 1M)										
Services	EI	ACVI	LEI	FFAI	PSI	SPFI				
Estimate	5.165	5.502	2.700	1.228	1.343	5.165				
Awarded										

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

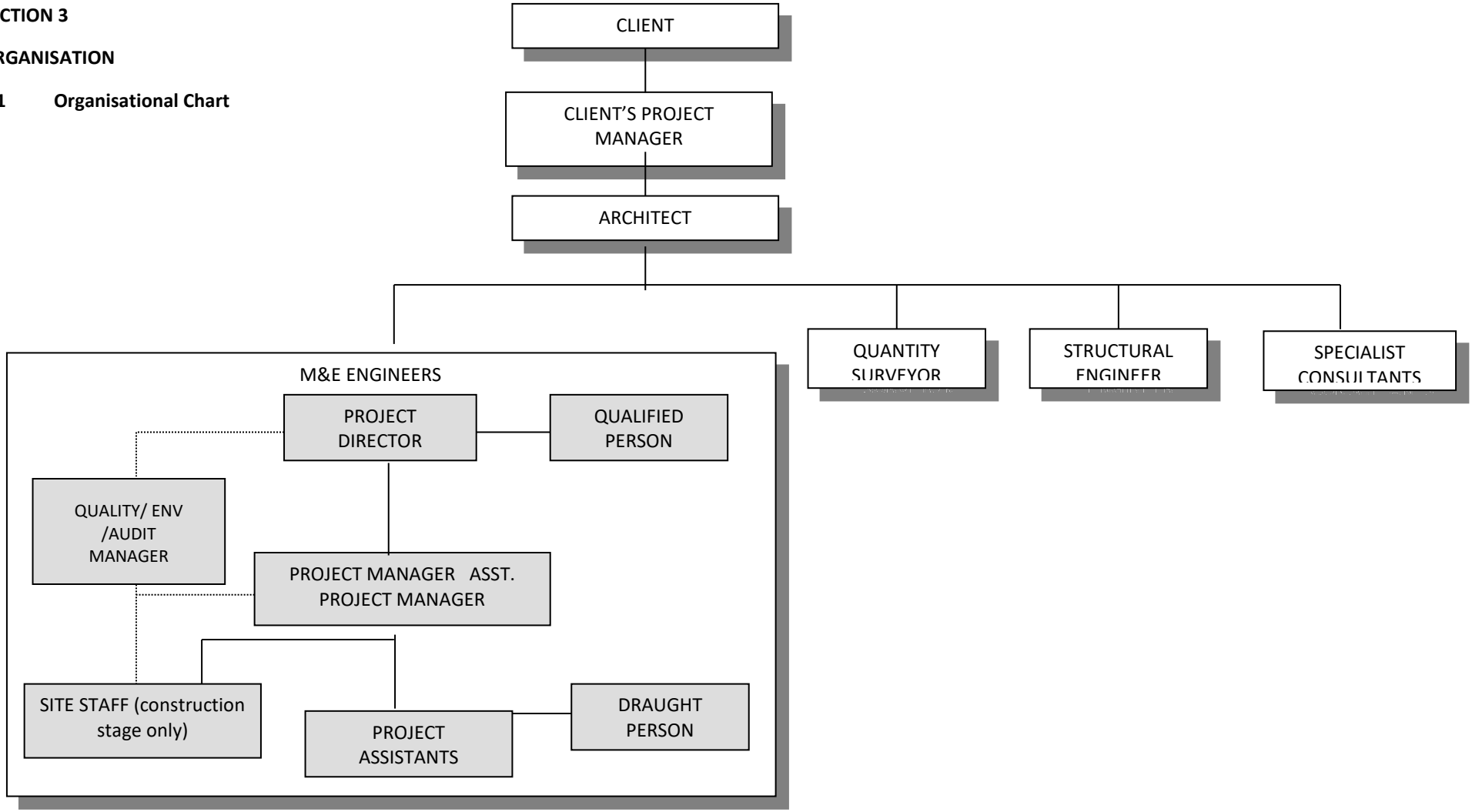
EJECTOR & DIVERTER	✓	SUMP PUMP	✓	FUEL OIL TANK		LIFT & ESCALATOR		PRESSURE VESSEL		HOISTS		FOAM	

(✓*where applicable*)

SECTION 3

ORGANISATION

3.1 Organisational Chart



SECTION 3

ORGANISATION

3.2 ACEPL's Project Team Member

TITLE		NAME
Project Director		Choong Choon Guan (CCG)
Qualified Person	Mechanical	Choong Choon Guan (CCG)
	Electrical	Loh Fook Yuen (LFY)
Project Manager		Koh Yong Huat (KYH)
Assistant Project Manager		Goh Soon Huat (GSH)
Project Assistant (Mech)		Low Qi Fan (LQF)
Project Assistant (Elect)		Tan Loo Yen (TLY)
Draughtsperson		Common Pool
Resident Engineer (M&E)		
Assistant Resident Engineer (M&E)		
Clerk-of-Work (M&E)		

3.3 Client/Client's Representatives

Client:- Ocean Properties LLP

Address:- 1 HarbourFront Avenue
#18-01 Keppel Bay Tower
Singapore 098632

Tel:- 6538 8755

Fax:-

Client's Representatives:- Mr Tan Li Hong

Name of Company	Contact Person	Contact
Ocean Properties LLP	Name: Mr Tan Li Hong Position: Head, Technical and Sustainability Services	Tel: 6803 2694 Fax: - Handphone: 8666 3703 Email: LiHong.Tan@keppel.com
Ocean Properties LLP	Name: Mr Lawrence Teo Position: Senior Manager	Tel: 6803 2649 Fax: - Handphone: 9233 2341 Email: Lawrence.Teo@keppel.com
	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 Company	Contact Person	Contact
Architect DP Architects Pte Ltd	Name: Mr Tan Teng Siew Position: Senior Associate	Tel: 68287851 Fax: - Handphone: -9363 7383 Email: TanTengSiew@dpa.com.sg
Quantity Surveyor Northcroft Lim Consultants Pte Ltd 111 North Bridge Road #20-02 Peninsula Plaza Singapore 179098	Name: Mr Choong Zheng Foung, Nicholas Position: Project Quantity Surveyor	Tel: 6220 7188 Fax: - Handphone: +6017 423 6823 Email: nicholas@northcroft.sg
Structural Engineer RSP Architects Planners & Engineers (Pte) Ltd 79 Robinson Rd, #24-01 CapitaSky, Singapore 068897	Name: Ms Wong Shi Lin Position: C&S Engineer	Tel: - Fax: - Handphone: 8155 7166 Email: 250083@rsp.design
Interior Designer -	Name: - Position: -	Tel: - Fax: - Handphone: - Email: -
Lighting Consultant Light Collab	Name: Annie ENG Position: Design Director	Tel: 6635 7511 Fax: - Handphone: 9068 1395 Email: annie@lightcollab.com
ESD Consultant Building System and Diagnostics Pte Ltd	Name: Erica PHUA (Ms) Position: Senior Sustainability Engineer	Tel: 6560 0702 Fax:- Handphone: 9711 1239 Email: ofcaei_p250443@bsd.com.sg
_____	Name: Position:	Tel: Fax: Handphone: Email:
_____	Name: Position:	Tel: Fax: Handphone: Email:

3.4 Other Consultants (Overseas)

Function / Name of Company	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 Company	Contract *	Contact Person	Contact
Main Contractor		Name: Position:	Tel: Fax: Handphone: Email:
Air Conditioning & Ventilation Installation Sub-Contractor	NSC	Name: Daniel Ngieng (Mr) Position: Project Engineer	Tel: Fax: Handphone: 8731 1499 Email:
Plumbing & Sanitary Installation Sub-Contractor		Name: Position:	Tel: Fax: Handphone: Email:
Electrical Installation Sub-Contractor		Name: Position:	Tel: Fax: Handphone: Email:
Lift Installation Sub-Contractor	NSC	Name: Pilou Aung Position: Project Engineer	Tel: Fax: Handphone: 83283703 Email:
Fire Fighting & Alarm Installation Sub-Contractor		Name: Position:	Tel: Fax: Handphone: Email:
Swimming Pool Filtration Plant Installation Sub-Contractor		Name: Position:	Tel: Fax: Handphone: Email:
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 - To be completed in due course

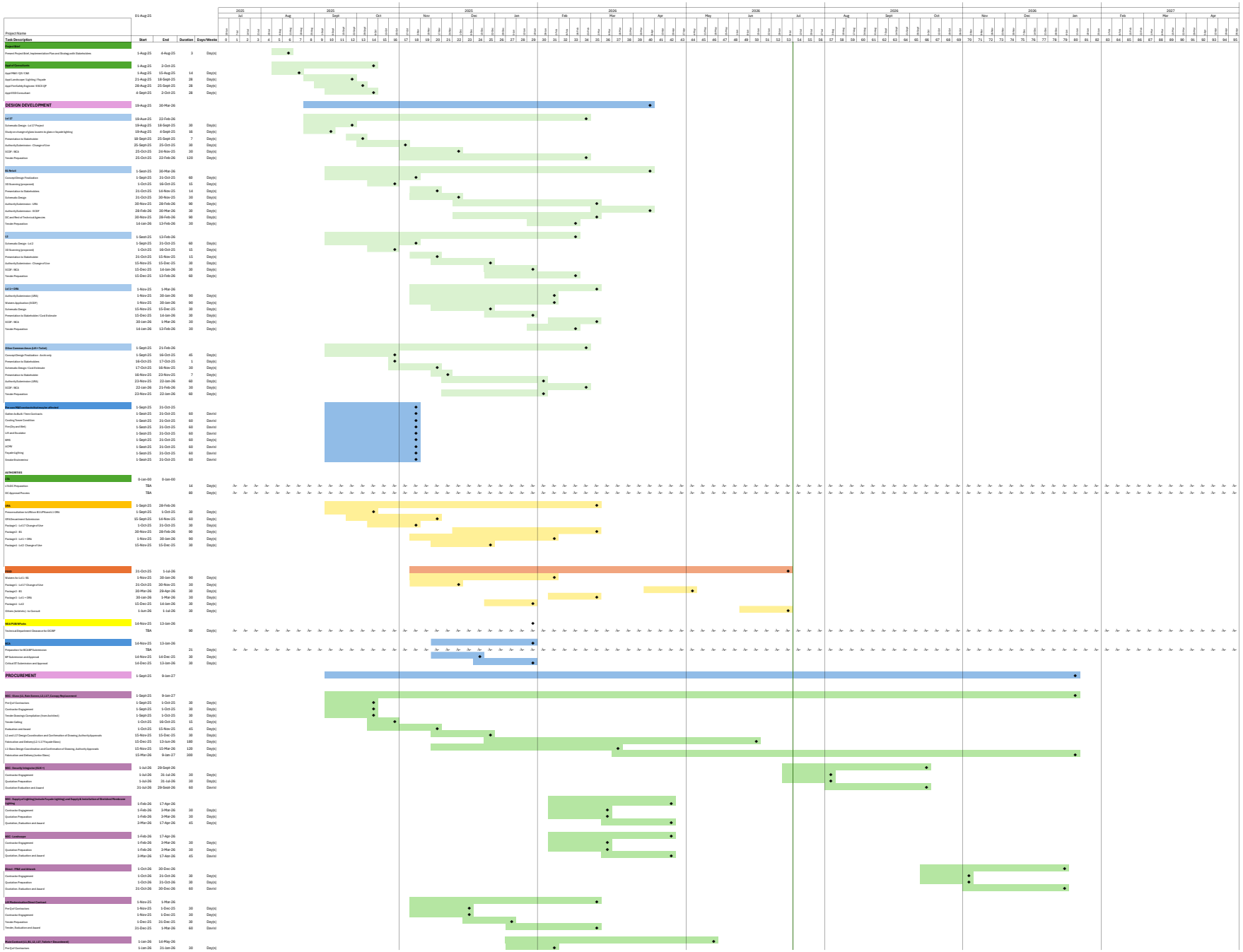
Authorities/Department	Contact Person	Tel/Fax Nos./E-mail
SP PowerGrid:		
(a) Sub-Station		
(b) Diversion		
SP Services:		
(a) Customer Supply		
(b) Installation		
(c) Meter Section		
(d) Road Lighting		
TFCC:		
(a) SCV		
(b) SingTel		
(c) IDA		
BCA:		
(a) Building Plan		
(b) Green Mark		
FSSD:		
(a) Building Plan		
(b) M&E Plan		
PUB (Water Supply) Network Dept:		
(a) Water Conservation		
(b) Plumbing Plan		
(c) Diversion		
(d) NEWater		
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 - Refer to attached Work Programme

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																									

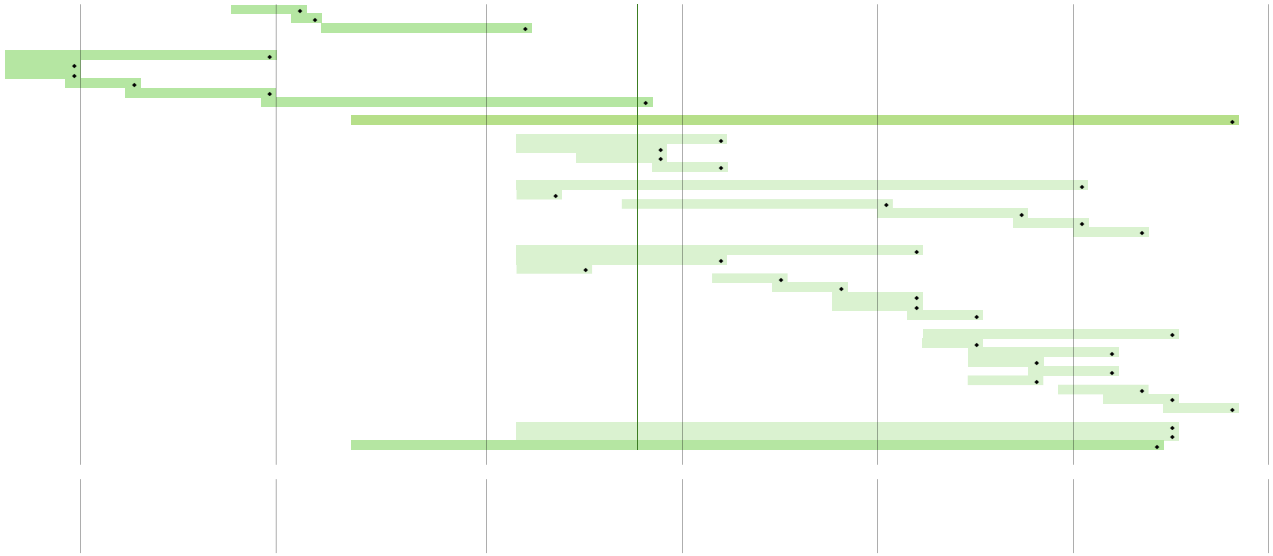

01-Aug-25
Project Name
Task Description
Start
End
Duration
Days/Weeks
2025
2026
2027
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
Project Start
Present Project Brief, Implementation Plan and Strategy with Stakeholders
1-Aug-25
4-Aug-25
3
Day(s)
Appt of Consultants
1-Aug-25
2-Oct-25
Appt M&E / QS / CAS
1-Aug-25
15-Aug-25
14
Day(s)
Appt Landscape+ Lighting / Façade
21-Aug-25
18-Sept-25
28
Day(s)
Appt Fire/Safety Engineer / ESCO/ EP
28-Aug-25
25-Sept-25
28
Day(s)
Appt ESDS Consultant
4-Sept-25
2-Oct-25
28
Day(s)
DESIGN DEVELOPMENT
19-Aug-25
30-Mar-26
Lot 07
19-Aug-25
22-Feb-26
Schematic Design - Lot 07 Project
19-Aug-25
18-Sept-25
30
Day(s)
Study on change of glass louvers to glass + façade lighting
19-Aug-25
4-Sept-25
16
Day(s)
Presentation to Stakeholder
18-Sept-25
25-Sept-25
7
Day(s)
Authority Submission - Change of Use
25-Sept-25
25-Oct-25
30
Day(s)
SCDF / MCA
25-Oct-25
24-Nov-25
30
Day(s)
Tender Preparation
25-Oct-25
22-Feb-26
120
Day(s)
Lot 1 Retail
1-Sept-25
30-Mar-26
Concept Design Finalization
1-Sept-25
31-Oct-25
60
Day(s)
3D Scanning (completed)
1-Oct-25
16-Oct-25
15
Day(s)
Presentation to Stakeholders
31-Oct-25
14-Nov-25
14
Day(s)
Schematic Design
31-Oct-25
30-Nov-25
30
Day(s)
Authority Submission - URA
30-Nov-25
28-Feb-26
90
Day(s)
Authority Submission - SCDF
28-Feb-26
30-Mar-26
30
Day(s)
DC and Rest of Technical Agencies
30-Nov-25
28-Feb-26
90
Day(s)
Tender Preparation
14-Jan-26
13-Feb-26
30
Day(s)
Lot 2
1-Sept-25
13-Feb-26
Schematic Design - Lot 2
1-Sept-25
31-Oct-25
60
Day(s)
3D Scanning (completed)
1-Oct-25
16-Oct-25
15
Day(s)
Presentation to Stakeholder
31-Oct-25
15-Nov-25
15
Day(s)
Authority Submission - Change of Use
15-Nov-25
15-Dec-25
30
Day(s)
SCDF / MCA
15-Dec-25
14-Jan-26
30
Day(s)
Tender Preparation
15-Dec-25
13-Feb-26
60
Day(s)
Lot 1 + ONs
1-Nov-25
1-Mar-26
Authority Submission (URA)
1-Nov-25
30-Jan-26
90
Day(s)
Waters Application (CCDF)
1-Nov-25
30-Jan-26
90
Day(s)
Schematic Design
15-Nov-25
15-Dec-25
30
Day(s)
Presentation to Stakeholders/ Cost Estimate
15-Dec-25
14-Jan-26
30
Day(s)
SCDF / MCA
30-Jan-26
1-Mar-26
30
Day(s)
Tender Preparation
14-Jan-26
13-Feb-26
30
Day(s)
Other Common Areas (Lift + Toilet)
1-Sept-25
21-Feb-26
Concept Design Finalization - Architects
1-Sept-25
16-Oct-25
45
Day(s)
Presentation to Stakeholders
16-Oct-25
17-Oct-25
1
Day(s)
Schematic Design / Cost Estimate
17-Oct-25
16-Nov-25
30
Day(s)
Presentation to Stakeholder
16-Nov-25
23-Nov-25
7
Day(s)
Authority Submission (URA)
23-Nov-25
22-Jan-26
60
Day(s)
SCDF / MCA
22-Jan-26
21-Feb-26
30
Day(s)
Tender Preparation
23-Nov-25
22-Jan-26
60
Day(s)
Key core M&E services to Hub (may be affected)
1-Sept-25
31-Oct-25
Clashes to Build / Save Constraints
1-Sept-25
31-Oct-25
60
David
Cooling Tower Condition
1-Sept-25
31-Oct-25
60
David
Fire Dry and Wet
1-Sept-25
31-Oct-25
60
David
Lift and Escalator
1-Sept-25
31-Oct-25
60
David
BMS
1-Sept-25
31-Oct-25
60
David
ACMV
1-Sept-25
31-Oct-25
60
David
Façade Lighting
1-Sept-25
31-Oct-25
60
David
Smoke Exhaustion
1-Sept-25
31-Oct-25
60
David
AUTHORITIES
EIA
0-Jan-00
0-Jan-00
LTA/DC Preparation
TBA
14
Day(s)
DC (Approval Process
TBA
60
Day(s)
URA
1-Sept-25
28-Feb-26
Presentation/ation to URA on IR 1 (Phase 1 + ON)
1-Sept-25
1-Oct-25
30
Day(s)
ON Development Submission
15-Sept-25
14-Nov-25
60
Day(s)
Package 1 - Lot 07 Change of Use
1-Oct-25
31-Oct-25
30
Day(s)
Package 2 - IR1
30-Nov-25
28-Feb-26
90
Day(s)
Package 3 - Lot 1 + ONs
1-Nov-25
30-Jan-26
90
Day(s)
Package 4 - Lot 2 - Change of Use
15-Nov-25
15-Dec-25
30
Day(s)
BCA
21-Oct-25
1-Jul-26
Waters for Lot 1 / IR1
1-Nov-25
30-Jan-26
90
Day(s)
Package 1 - Lot 07 Change of Use
31-Oct-25
30-Nov-25
30
Day(s)
Package 2 - IR1
30-Mar-26
29-Apr-26
30
Day(s)
Package 3 - Lot 1 + ONs
30-Jan-26
1-Mar-26
30
Day(s)
Package 4 - Lot 2
15-Dec-25
14-Jan-26
30
Day(s)
Others (Activities) - to Consult
1-Jun-26
1-Jul-26
30
Day(s)
SFA/PUB/Whole
14-Nov-25
13-Jan-26
Technical Department Clearance for DC/DP
TBA
90
Day(s)
LTA
14-Nov-25
13-Jan-26
Preparation for DC/DP Submission
TBA
21
Day(s)
IDP Submission and Approval
14-Nov-25
14-Dec-25
30
Day(s)
Critical ST Submission and Approval
14-Dec-25
13-Jan-26
30
Day(s)
PROCUREMENT
1-Sept-25
9-Jan-27
ESC - Demo 2/3, Rain Screen, L2, L17, Canopy Replacement
1-Sept-25
9-Jan-27
Pre Qual Contractors
1-Sept-25
1-Oct-25
30
Day(s)
Contractor Engagement
1-Sept-25
1-Oct-25
30
Day(s)
Tender Drawings Compilation (from Architect)
1-Sept-25
1-Oct-25
30
Day(s)
Tender Calling
1-Oct-25
16-Oct-25
15
Day(s)
Evaluation and Award
1-Oct-25
15-Nov-25
45
Day(s)
L2 and L17 Design Coordination and Confirmation of Drawing, Authority Approvals
15-Nov-25
15-Dec-25
30
Day(s)
Fabrication and Delivery (L2, L17 Façade Glass)
15-Dec-25
13-Jun-26
180
Day(s)
L1 Glass Design Coordination and Confirmation of Drawing, Authority Approvals
15-Nov-25
15-Mar-26
120
Day(s)
Fabrication and Delivery (Junior Glass)
15-Mar-26
9-Jan-27
300
Day(s)
ESC - Security Integration (ECHO)
1-Jul-26
29-Sept-26
Contractor Engagement
1-Jul-26
31-Jul-26
30
Day(s)
Quotation Preparation
1-Jul-26
31-Jul-26
30
Day(s)
Quotation, Evaluation and Award
31-Jul-26
29-Sept-26
60
David
ESC - Supply of Lighting (include Façade Lighting) and Supply & Installation of Shoebox/ Floodcouse Lighting
1-Feb-26
17-Apr-26
Contractor Engagement
1-Feb-26
3-Mar-26
30
Day(s)
Quotation Preparation
1-Feb-26
3-Mar-26
30
Day(s)
Quotation, Evaluation and Award
3-Mar-26
17-Apr-26
45
Day(s)
ESC - Landscape
1-Feb-26
17-Apr-26
Contractor Engagement
1-Feb-26
3-Mar-26
30
Day(s)
Quotation Preparation
1-Feb-26
3-Mar-26
30
Day(s)
Quotation, Evaluation and Award
3-Mar-26
17-Apr-26
45
David
Demo - ITRA and Artwork
1-Oct-26
30-Dec-26
Contractor Engagement
1-Oct-26
31-Oct-26
30
Day(s)
Quotation Preparation
1-Oct-26
31-Oct-26
30
Day(s)
Quotation, Evaluation and Award
31-Oct-26
30-Dec-26
60
David
IBS Modular Lattice Deck Contract
1-Nov-25
1-Mar-26
Pre Qual Contractors
1-Nov-25
1-Dec-25
30
Day(s)
Contractor Engagement
1-Nov-25
1-Dec-25
30
Day(s)
Tender Preparation
1-Dec-25
31-Dec-25
30
Day(s)
Tender, Evaluation and Award
31-Dec-25
1-Mar-26
60
David
Main Contract (L1, B1, L2, L17, Vehicle + Cleaner Access)
1-Jan-26
14-May-26
Pre Qual Contractors
1-Jan-26
31-Jan-26
30
Day(s)

Contractor Engagement	1-Jan-26	31-Jan-26	30	Day(s)
Pre-Con Estimate	31-Jan-26	7-Feb-26	7	Day(s)
Tender, Evaluation, Award	13-Feb-26	14-May-26	90	Day(s)
B1C - Chiller Set Replacement	15-Sept-25	13-Jun-26		
Pre-Con Contractors	15-Sept-25	15-Oct-25	30	Day(s)
Contractor Engagement and FS	15-Sept-25	15-Oct-25	30	Day(s)
Tender Preparation	15-Oct-25	14-Nov-25	30	Day(s)
Tender, Evaluation and Award	14-Nov-25	13-Jan-26	60	Day(s)
Design, Procure, T&C, Delivery	13-Jan-26	12-Jul-26	180	Day(s)
Construction	1-Mar-26	9-Apr-27		
B1 ST	14-May-26	12-Aug-26		
Construction	14-May-26	13-Jul-26	60	Day(s)
Façade Installation	13-Jun-26	13-Jul-26	30	Day(s)
R1 TDP / Handover	13-Jul-26	12-Aug-26	30	Day(s)
B1 Retail	14-Mar-26	27-Jan-27		
B1 Phase 1 - Carpark - Demolition	14-May-26	29-May-26	15	Day(s)
B1 Phase 1 - Carpark - Convert to B1C (Retail)	1-Jul-26	29-Oct-26	120	Day(s)
B1 Phase 2 - Convert Existing Shops to Walkway / Retail	29-Oct-26	28-Dec-26	60	Day(s)
B1 Phase 2C - Convert Rival Walkway to Shops	28-Dec-26	27-Jan-27	30	Day(s)
R1 TDP and Handover	27-Jan-27	26-Feb-27	30	Day(s)
L2	14-Mar-26	10-Nov-26		
L2 Phase 1 - Construct New Chiller Plant	14-May-26	12-Aug-26	90	Day(s)
L2 Phase 1 - Façade Improvement at Existing Cement	14-May-26	13-Jun-26	30	Day(s)
L2 Phase 2 - Testing and Commissioning of New Chiller Plant	12-Aug-26	11-Sept-26	30	Day(s)
L2 Phase 2 - Demolish Old Chiller Plant	11-Sept-26	11-Oct-26	30	Day(s)
L2 Phase 2 - ECFA Out	11-Oct-26	10-Nov-26	30	Day(s)
L2 Phase 2 - Façade Installation	11-Oct-26	10-Nov-26	30	Day(s)
R1 TDP / Handover	10-Nov-26	10-Dec-26	30	Day(s)
L1 + OSL	20-Nov-26	10-Mar-27		
L1 Phase 1 - Hoard Up Lobbypaint Prepwork	20-Nov-26	10-Dec-26	20	Day(s)
L1 Phase 1 - ECWork	10-Dec-26	8-Feb-27	60	Day(s)
L1 Phase 2 - Existing Glass Removal	10-Dec-26	9-Jan-27	30	Day(s)
L1 Phase 2 - Ivanhoe Glass Installation	9-Jan-27	8-Feb-27	30	Day(s)
L1 Phase 2 - Canopy Replacement	10-Dec-26	9-Jan-27	30	Day(s)
L1 Phase 3 - OSL	24-Jan-27	23-Feb-27	30	Day(s)
L1 Phase 3 - Drop Off Glass	8-Feb-27	10-Mar-27	30	Day(s)
R1 TDP / Handover	10-Mar-27	9-Apr-27	30	Day(s)
Other Common Areas (Toilets)	14-Mar-26	10-Mar-27		
Construction (in phases)	14-May-26	10-Mar-27	300	Day(s)
L01 Retail & and Mall (in phases)	1-Mar-26	1-Mar-27	365	Day(s)

NOTES:
CNY 2027 = 7 Feb 2027

Statuses
Not Started
In Process
Blocked
Complete

Zoom Weeks
Day(s)
Week(s)



SECTION 4

PROGRAMME

4.2 Authority Submission Status for M&E Services - 1st Submission - To be completed in due course

Service	Authority	Original Submission		Comments/Resubmission						Approval/
		Scheduled	Actual	Comment	Resubmit	Comment	Resubmit	Comment	Resubmit	Clearance
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									
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 4

PROGRAMME

4.3 Authority Submission Status for M&E Services (Amendments) - 2nd Submission- To be completed in due course

Service	Authority	Original Submission		Comments/Resubmission						Approval/
		Scheduled	Actual	Comment	Resubmit	Comment	Resubmit	Comment	Resubmit	Clearance
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									
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:	

(✓*where applicable*)

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	Common Pool
Incoming Architectural Sketches/Details	Common Pool
Incoming Structural Drawings	Common Pool
M&E Drawings	
- Electrical Installation	
- Lift & Escalator Installation	
- Air Conditioning & Ventilation Installation	
- Fire Fighting & Alarm Installation	
- Plumbing & Sanitary Installation	
- Swimming Pool & Filtration Installation	
Other Drawings	

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

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	I	
b.	Project Administration	-	A	C	I	I	
c.	Project Cost Estimate/Contract Cost	-	A	C	-	C	
2.	**Drawings**						
a.	Outline Design Drgs.	-	A	A	C	-	
b.	Sketch Design Drgs.	-	A	A	C	-	
c.	Final Design Drgs.	-	A	A	C	-	
d.	Shop Drawings	-	I	C	C	-	
e.	As Built Drgs.	-	I	I	I	-	
3.	**Other Document**						
a.	Specification	-	A	I	-	-	
b.	Tender Document	-	A	I	I	I	
c.	Tender Evaluation Report	-	A	I	-	I	
d.	Design Report	-	A	I	-	-	
e.	Progress Report	-	-	-	-	-	
f.	Financial Report	-	-	-	-	-	
g.	Minutes of Meeting	-	I	I	-	-	
h.	Inspection Report	-	I	I	-	-	
i.	Testing & Comm. Report	-	I	I	-	-	
j.	O & M Manual	-	I	I	-	-	

*Note: Applicable only, if the client engaged a Project Manager.

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 Questionnaires			✓		
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 : ACEPL Site Staff

SECTION 8

DESIGN INPUT & METHODOLOGY

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

ITEM	KEPT BY

8.2 List of Applicable Code of Practice and Regulations

Services	Title of Code of Practice/Standard
Electrical Wiring	SS 638 : 2018
Lightning Protection System	SS 555 : 2018
Emergency Voice Communication System	SS 546 : 2009
Air Conditioning & Ventilation Installation	SS 553 : 2016
Lift & Escalator Installation	SS 626 : 2017
Sprinkler System	SS 550 : 2009
Wet Riser System	CP 52 : 2004
Automatic Fire Alarm System	SS 575 : 2012
Sanitary System	SS 645 : 2019
Plumbing System	Code of Practice on Sewerage & Sanitary Works, 2025
Town Gas/LPG Supply System	SS 636 : 2018
Boiler and Steam Supply System	
Mechanical Smoke Control System	

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 Pre-Consultation and Waiver

S/N	Description	Date of Application	Date of Approval	Remarks
1	*Clause number in Code of Practice for (Services) which require clarification or waiver. Consultation Ref No. Waiver Ref. No.			
2	*Clause number in Code of Practice for (Services) which require clarification or waiver. Consultation Ref No. Waiver Ref. No.			
3	*Clause number in Code of Practice for (Services) which require clarification or waiver. Consultation Ref No. Waiver Ref. No.			

*To fill in actual information

8.5 List of Applicable Quality System Procedures

Alpha Consulting Engineers Pte Ltd'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 & Environmental 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	
QE1	Quality & Environmental System Audit	✓
QE2	Feedback Reporting	✓
QE3	Clients Feedback	✓
QE4	Management Review	✓

8.6 List of Software Used For Design/Analysis

DESCRIPTION/ PACKAGE NAME	VERSION	SUPPLIER/ SOURCE	PURPOSE	
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	
Hyena	4.00.1	ACADS-BSG	Fire Sprinkler & Hydrant Analysis	
Dialux	4.11	Freeware	Lighting design	
Lift Traffic	7.18	Elevate	Lift traffic calculation	
Fault Level Calculation	11.11	ETAP	Calculation of fault level and voltage drop	

(✓*where applicable*)

SECTION 9

ENVIRONMENTAL CONSIDERATIONS

9.1 Sustainable Design Features / Criteria

Item	Remarks
Green Mark criteria	Platinum
Green Design Features	To be completed in due course

9.2 Site PPE Requirement

The necessary Personal Protective Equipment (detailed below) shall be provided by the main contractor / Company in accordance to the site EHS requirements prior to the site monitoring.

PPE	✓ where applicable
Safety Helmet	✓
Safety Shoes	✓
Eye Protection	
Ear Protection	
Safety Harness / Belt	
Others:	

9.3 Site Emergency Preparedness

Site staff shall comply with the site emergency preparedness and response procedure, established by the main contractor / owner, which shall include the following details.

Items	✓ where applicable
Evacuation Route	✓
Emergency Exit	✓
Assembly Point	✓
Emergency Contact List / Person	
Alarm system / methods	

SECTION 9

ENVIRONMENTAL CONSIDERATIONS

9.4 Reporting of Environmental Non-conformances

When encountering environmental non-conformances, Site Staff shall be responsible to feedback to the main contractor.

9.5 List of Applicable Environmental management system Procedures

Alpha Consulting Engineers Pte Ltd's Environmental Management System Procedures

Section	Title	✓ where applicable
E1	Aspect / Impact Identification, Risk Assessment & Risk Control	✓
E2	Identifying Legal & Other Requirements	✓
E3	Objectives, Targets & Programmes	✓
E4	Communication	✓
E5	Emergency Preparedness & Response	✓
E6	Monitoring & Measurement	✓
E7	Control of Air & Noise Pollution	✓
E8	Management of Wastes	✓

SECTION 10

CLIENT'S REQUIREMENTS

10.1 List of Output Required by Client:-

Item	* Remarks
M&E Design Report	A
M&E Cost Estimate Report	A
Pre-Qualification of Tenderers	A
Tender Documents	A
Tender Report	A
Payment Valuation for QS	A
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.

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

SECTION 11

LIST OF SUB-JOB

11.1 List of Sub-Job Numbers - None

Sub Job No	Description	Allocation Details