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AbRaz ARKITEK



# PROFESSIONAL GROWTH OF ARCHITECTURE & ENGINEERING FRATERNITIES PROGRAM

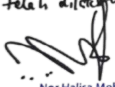
Organized by:



Collaboration with:




Saya mengesahkan bahawa kerja-kerja  
telah dilaksanakan dengan sempurna.



Nor Halisa Mohamad Halli  
Senior Manager  
Delivery Management Office (DMO)  
Malaysia Productivity Corporation (MPC)








## MODULE 1.1: THE INSPECTORS SCOPE OF WORKS

ORGANIZE:



SUPPORTED :



## INTRODUCTION

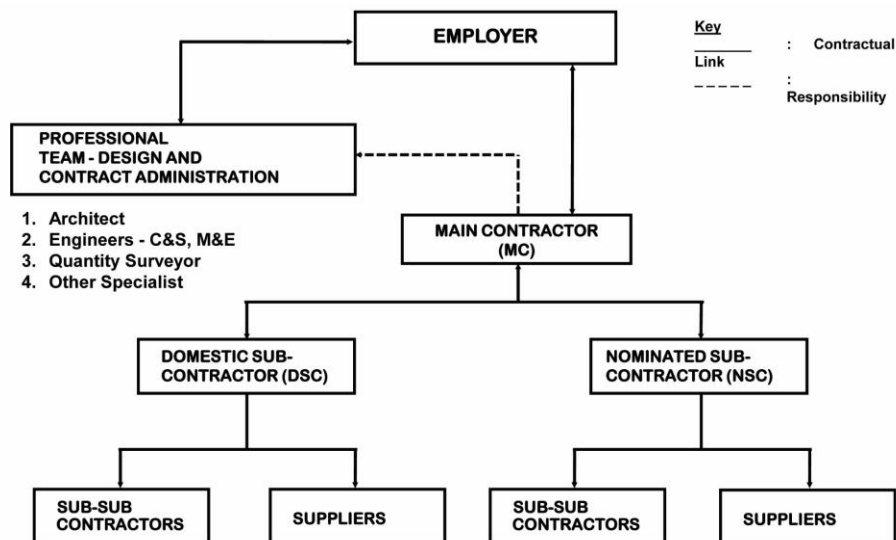
IN ORDER TO PRACTICE AN IOW,

YOU ARE EXPECTED TO KNOW WHAT IS THE BASIC SCOPE OF WORK EXPECTED OF YOU.

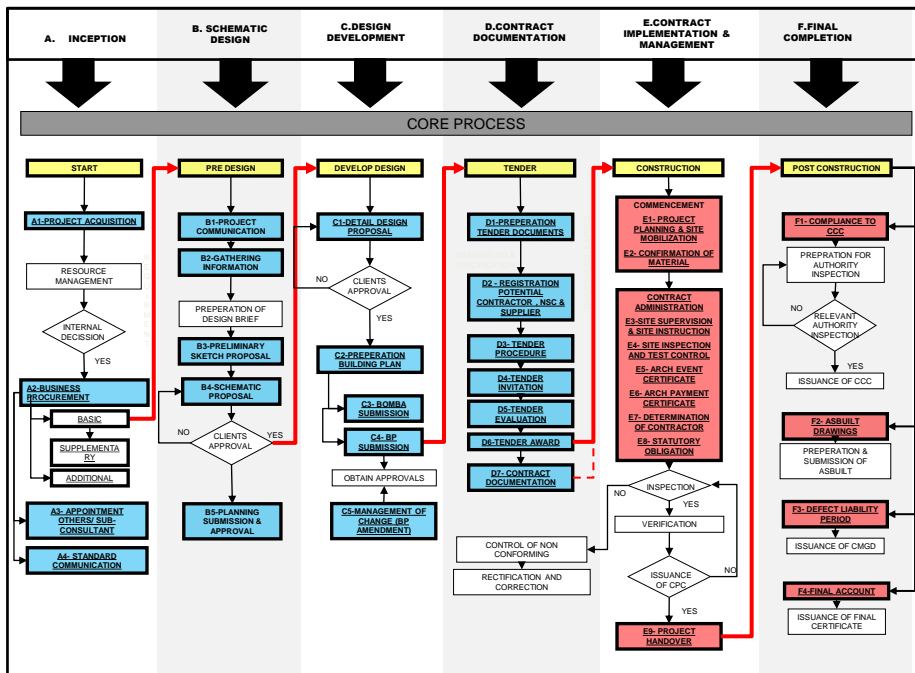
THE SCOPE OF WORKS COVERS 3 STAGES:

- PRE CONSTRUCTION ( UPON EMPLOYED)
- CONSTRUCTION
- POST CONSTRUCTION ( UP TO YOUR EMPLOYMENT)

## UNDERSTAND THE PROJECT TEAM STRUCTURE



## UNDERSTAND YOUR EMPLOYER BUSINESS PROCESS AND WHERE YOU FIT IN



## IOW SCOPE



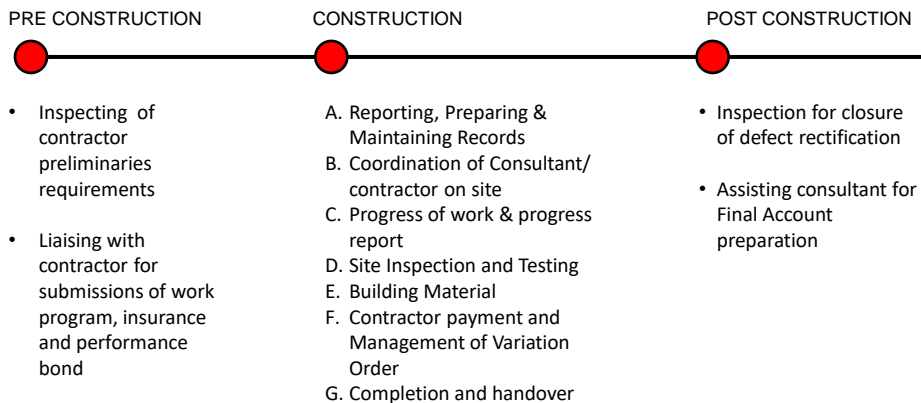
## THE INSPECTOR OF WORKS SCOPE OF WORKS

## BASIC SCOPE OF DUTIES OF A IOW

Scope of Mandatory Experience For IOW	
<b>A. PRE CONSTRUCTION</b>	
i)	Inspecting of contractor preliminaries requirements
ii)	Liaising with contractor for submissions of work program, insurance and performance bond
<b>B.CONSTRUCTION</b>	
<b>B1 Reporting, Preparing &amp; Maintaining Records</b>	
i)	Preparation of Monthly reports
ii)	Preparation/ Maintain Site Dairy
iii)	Filing, Maintain and inspect records at site
iv)	Highlight any discrepancies in documents
v)	Study Drawings and Specification and highlight discrepancies if any
vi)	Checking compliance to PQP, EMP & SHMP on site
<b>B2 Coordination of Consultant/ contractor on site</b>	
i)	Coordination other Consultant dwgs
ii)	Coordination other Consultant works
iii)	In the absence of Safety officer, approving for permit to work
iv)	Coordination of Request for information
<b>B3 Progress of work &amp; progress report</b>	
i)	Checking compliance with Work Program
ii)	Checking of progress report before meeting
iii)	Reporting to SO for any delays and issues on site

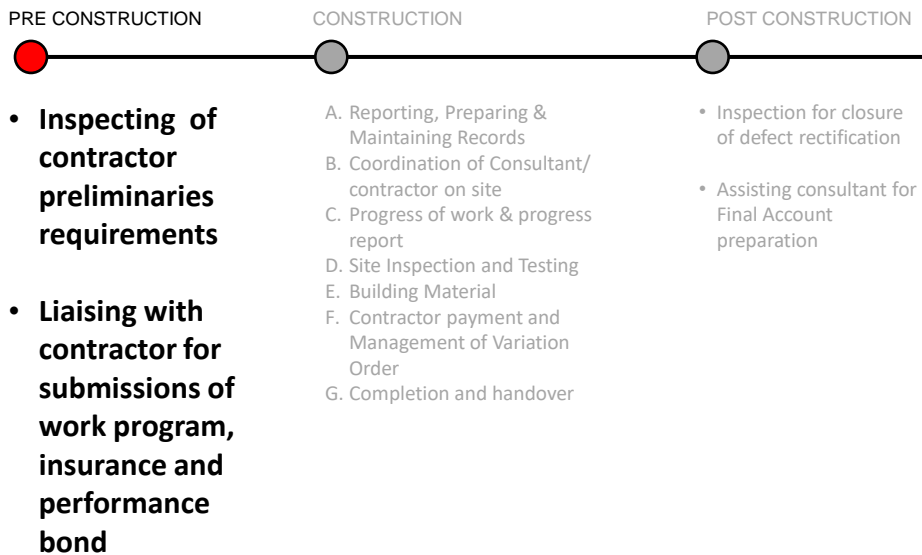
Scope of Mandatory Experience For IOW	
<b>B4 Site Inspection and Testing</b>	
i)	Inspect works for compliance to contract
ii)	Check compliance with legal , bye laws & standards
iii)	Ensuring work compliance to method statement and shop drawings
iv)	Inspection of material and equipment on site
v)	Review Water, Noise, Pollution report
vi)	Inspection of schedule waste facility on site
vii)	Recording for non-compliance
viii)	Instruction for non-compliance
ix)	Proposal for solutions to non-compliance
x)	Sign off Inspection and Test records
xi)	Sign off NCR
<b>B5 Building Material</b>	
i)	Assisting consultant for the Approval of Bdg Materials
ii)	Reject building Materials
<b>B6 Contractor payment and Management of Variation Order</b>	
i)	Measurement for changes VO
ii)	Record for change approval VO
<b>B7 Completion and handover</b>	
i)	Record for completion of work
ii)	Record for completion approval
<b>POST CONSTRUCTION</b>	
i)	Inspection for closure of defect rectification
ii)	Assisting consultant for Final Account preparation

## BASIC SCOPE OF DUTIES OF A IOW



# PRE CONSTRUCTION

## BASIC SCOPE OF DUTIES OF A IOW



## INSPECTING OF CONTRACTOR PRELIMINARIES REQUIREMENTS

Upon being Employed, the IOW role is the eyes and ears of your employer ie the Architect/ Engineer.

- Architect / engineer provides Periodic supervision
- RA/RE/IOW/COW provides standing supervision

Therefore, you are to assist your employer for the initial pre construction requirements such as inspecting for the related preliminaries requirements in contract.

## INSPECTING OF CONTRACTOR PRELIMINARIES REQUIREMENTS

### **Preliminaries Requirement examples:**

- Site Facilities and equipment's as per contract such as site office and equipment's, material storage, toilets
- Other site facilities such as workers quarters, schedule waste space, wash through etc.
- Approval for PQP, SHMP & EMP manuals, Progress report formats and etc

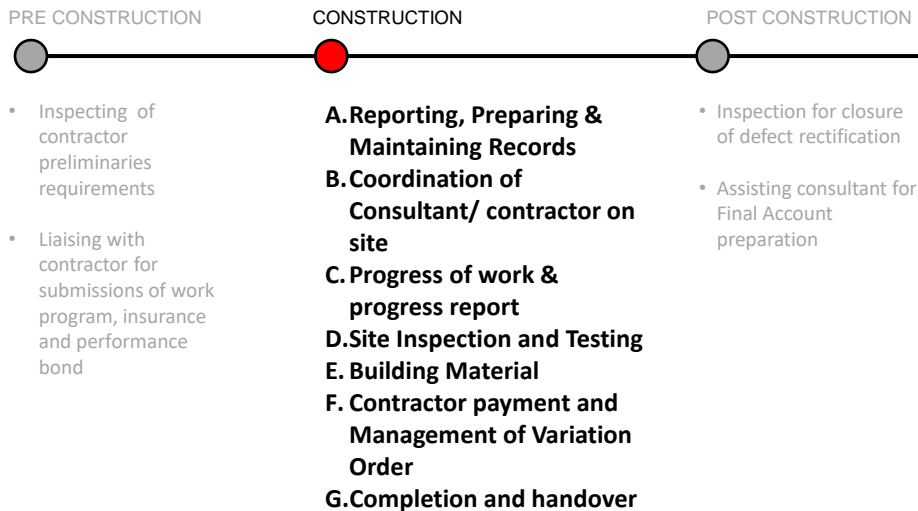
## **LIAISING WITH CONTRACTOR FOR SUBMISSIONS OF WORK PROGRAM, INSURANCE AND PERFORMANCE BOND**

There are few pre requisite item that the contractor will have to submit such as:

1. Work Program
  2. Insurance Copy
  3. Performance Bond Copy
- IOW is expected to liaise with contractor to ensure that their employer obtain this documents before the start of the construction.
  - Other Documents should be ready at site such as propose format for Progress report, PQP, SHMP and EMP report format, Method statement, Approval Forms and other related forms.

# CONSTRUCTION

## BASIC SCOPE OF DUTIES OF A IOW



## REPORTING, PREPARING & MAINTAINING RECORDS

### (i) Reporting, Preparing & Maintaining Records

- Preparation of Monthly reports
- Preparation/ Maintain Site Dairy
- Filing, Maintain and inspect records at site
- Highlight any discrepancies in documents
- Study Drawings and Specification and highlight discrepancies if any
- Checking compliance to PQP, EMP & SHMP on site



## **COORDINATION OF CONSULTANT/ CONTRACTOR ON SITE**

### **(ii) Coordination of Consultant/contractor on site**

- Coordination other Consultant dwgs – Architect & Engineers( C,S,M,E)
- Coordination other Consultant works ( Ensuring that the works are coordinated )
- In the absence of Safety officer, approving for permit to work ( PTW- Night, height, Confine Space)
- Coordination of Request for information.

## **PROGRESS OF WORK & PROGRESS REPORT**

### **(iii) Progress of work & progress report**

- Checking compliance with Work Program
- Checking of progress report before meeting
- Reporting to SO for any delays and issues on site

## **SITE INSPECTION AND TESTING**

### **(iv) Site Inspection and Testing**

- Inspect works for compliance to contract
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- Instruction for non-compliance
- Proposal for solutions to non-compliance
- Sign off Inspection and Test records
- Sign off NCR

## **BUILDING MATERIAL**

### **(v) Building Material**

- Assisting consultant for the Approval of Building Materials
- Accept building materials delivery at site for specs compliance

## **CONTRACTOR PAYMENT AND MANAGEMENT OF VARIATION ORDER**

(vi) Contractor payment and Management of Variation Order

- Measurement for changes VO
- Record for change approval VO

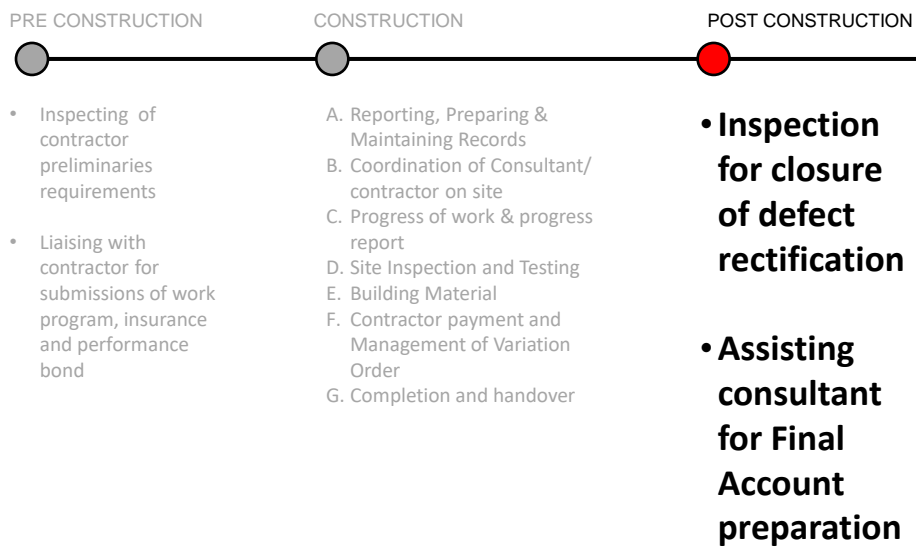
## **COMPLETION AND HANDOVER**

(vii) Completion and handover

- Record for completion of work
- Record for completion approval

# POST CONSTRUCTION

## BASIC SCOPE OF DUTIES OF A IOW



### **INSPECTION FOR CLOSURE OF DEFECT RECTIFICATION**

**Among the duties of IOW during this stage are:**

- **Collating defects list from Owner/Enduser**
- **Ensuring Contractor receive the defect list**
- **Monitoring Contractor rectifies the defects**
- **Informing Contract Administrator for any short falls.**
- **Informing the Contract Administrator that the defects has been completed.**
- **Joint inspection with the contract Administrator to close the defects.**

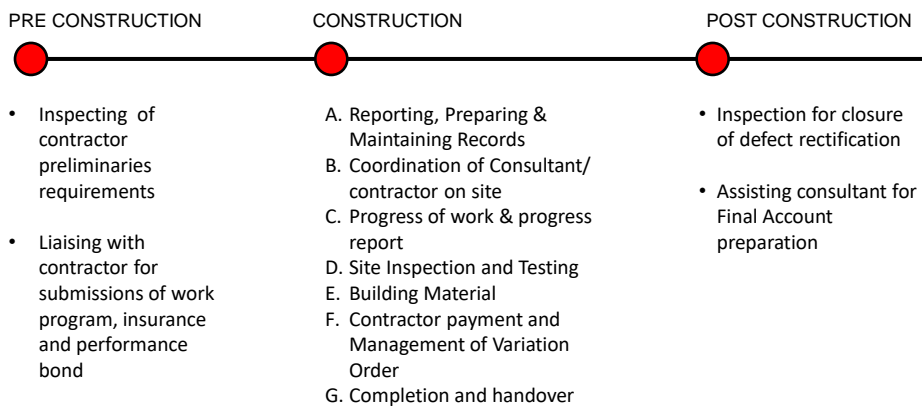
### **ASSISTING CONSULTANT FOR FINAL ACCOUNT PREPARATION**

**Among the duties of IOW during this stage are:**

- **Attending for joint inspection with Consultants and Quantity Surveyor if any**
- **Verifying works done through site records for the preparation of final Accounts.**
- **Assisting Consultant to resolve issues relating to works performed by contractor in respect of quantity and specifications.**

# CONCLUSION

## BASIC SCOPE OF DUTIES OF A IOW






**PSPN**  
Professional Services Production Network

**MODULE 2:  
IOW RESPONSIBILITY  
DURING PRE  
CONSTRUCTION**

ORGANIZE: 

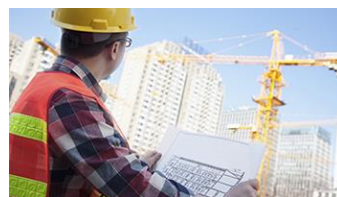
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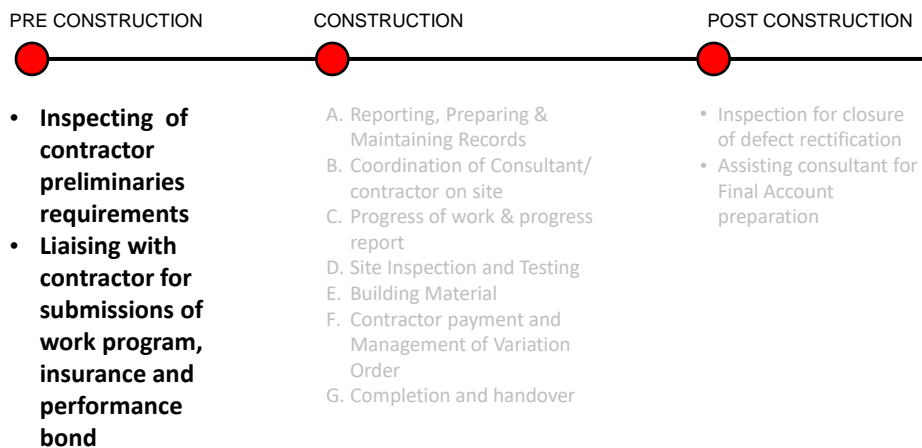
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### BASIC SCOPE OF DUTIES OF A IOW





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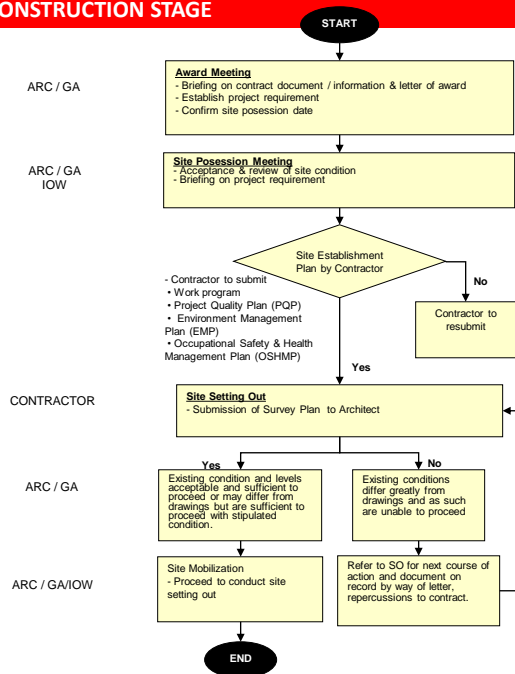
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## PRE CONSTRUCTION STAGE

**It is important to know what is your role during the pre construction stage**



**AWARD MEETING**

## AWARD MEETING AGENDA

The Award meeting is an important meeting that takes place after the client has decided on the contractor that has won the bid.

- The meeting will usually be chaired by client or by his Contract Administrator at his office.
- At the meeting, the Chair person will introduce the parties and congratulate the contractor for winning the bid.
- The letter of award shall be officially forwarded to the contractor containing important information of the agreement between the client and contractor.

## SAMPLE OF LETTER OF AWARD

### 1. Address of letter to the Contractor

Date:

[ABC Construction Co. Ltd.]

[Address]

Dear Sirs,

### 2. Title of Letter

Re : [TITLE OF CONTRACT] — LETTER OF AWARD

We thank you for your Tender submitted on [Date] and the subsequent discussions in connection with the above contract.

I have been duly authorized by the [Name of the Owners' Corporation] (hereafter referred to as the Employer), to award to you the contract for the captioned works.

### 3. Work Details

### 4. Contract Sum

### 5. Commencement and Completion Dates

### 6. Contract Documents

### 7. Contract Conditions

### 8.1 Contractor's obligations

### 8.2 Payment

### 8.3 Injury, damage and insurance

### 9. Ethical Commitment Clauses

### 10. Signature of Letter by Authorize Person

### 11. Acknowledgement of Acceptance by the Contractor

### 12. CC to the relevant departments and consultants



### THING TO CONSIDER DURING SITE POSSESSION MEETING

NO	ITEM	CHECK
<b>INTRODUCTION TO PROJECT TEAM</b>		
1	Project Team Personnel	<ul style="list-style-type: none"> <li>▪ Employer</li> <li>▪ Consultants</li> <li>▪ Contractor</li> <li>▪ Residents Engineer</li> <li>▪ Clerk Of Work</li> <li>▪ Other Project Personnel</li> </ul>
<b>CONTRACT INFORMATION</b>		
2	Project Title:	
3	Acceptance letter	To be provided by main contractor to client
4	Contract Sum	RM _____
5	Contract duration	_____ WEEKS/ _____ YEARS
	Completion Date	
6	Super intending officer	
	Representative arkitek	
	Representative C&S	
	Representative M&E	
	Representative QS	
	Project Manager	
	Others	
7	Performance Bond	RM _____ (5% from contract sum)
8	Advance Payment	RM _____
9	Retention Sum	RM _____ (5% from contract sum)
10	Liquidated Ascertained Damage (LAD)	RM _____ / Day
11	Defect liability period	_____ Month
12	Contractor All risk insurance	not less then RM _____
	Workmen Insurance	not less then RM _____

## SITE POSSESSION

SITE POSSESSION		
13	Site possession date	2 weeks from this date
14	Site access	
15	Site Meeting	Once a month / once every fortnight/ every week
	Location	Site Cabin, or Others
	Requirment	Air-con/Fan/chair, table ,fax machine, camera
16	Costruction drawing	<ul style="list-style-type: none"> <li>▪ 2 sets of construction drawings and document for contractor</li> <li>▪ 1 set of contract drawings and document on site</li> <li>▪ 1 set of construction drawings and document for Site Staff</li> </ul>

## CONTRACT PRELIM REQUIREMENTS

CONTRACT PRELIM REQUIREMENT		
17	Site personel	Contractor to provide project team and site organization chart
18	Temporary Building layout	Contractor to provide temporary building layout to architect for approval and bourn the cost of submission for authority approval.
		Temporary building shall consist of
		- Site cabin
		- Material storage
		- Site staff Office & Contractors site office
		- Mobile Toilet
		- Workers accommodation, canteen, toilets
		- Refuse area & Guard house
		- Wash Through & Silt trap
		- Etc as per contract specified.
19	Project signages	Contractor to prepare signage layout and approval from all consultant to confirm address, logo, project title and all related approval no.
20	Setting Out	Acceptance site boundary, level and existing structure (if any)
21	Temporary Electric,Water, Phone	Contractor to obtain authority approval for separate water meter and electric for their use.
22	Working hours at site	- Refer to contract.
		- Contractor to obtain approval in writing from architect for any outside working hours activities.
23	Site security	Contractor to provide security guard.
24	Control of personel and vehicle entering/ leaving the site	All vehicle and personel to register in visitor site book
25	Site Safety and Health	Contractor to provide safety and health person in charge.
		Contractor to ensure cleanliness of site and conduct meeting at least once in fortnight.
		Contractor to conform to OSHA guidelines
		Contractor to ensure all workers to obtain CIDB green card.
		All safety and health policy to be displayed in site cabin
26	Environment	Maintenance of site: site soil erosion, water ponding problems, drainage, mosquitoes
		Submit for Noise, Water, Air propose testing lab
27	Submit for license plumber and electrician	Submission of CV and registration no

## DAILY RECORD AND CONSTRUCTION APPROVALS

DAILY RECORD AND CONSTRUCTION APPROVAL												
28	Monthly Progress report format	Standard to follow AbRAZ sample as attach <ul style="list-style-type: none"><li>▪ Summary of work Progress</li><li>▪ Site Organization Chart</li><li>▪ Matters requiring attention of Consultants</li><li>▪ A.I / E.I received</li><li>▪ Work Programme</li><li>▪ List of samples and Shop Drawings</li><li>▪ Weather Chart Report</li><li>▪ Summary of Daily Report : Labour Force</li><li>▪ Summary of Daily Report : Machinery</li><li>▪ Fortnightly Forecast</li><li>▪ Site Photographs</li></ul>										
29	Monthly Progress report distribution	Monthly progress report to be printed for: <table><tr><td>a. Client</td><td>4 set Colour</td></tr><tr><td>b. ABRAZ Arkitek</td><td>1 set Colour</td></tr><tr><td>c. Quantity surveyor</td><td>1 set BW</td></tr><tr><td>d. Civil and structure</td><td>1 set BW</td></tr><tr><td>e. Mechanical and Electrical</td><td>1 set BW</td></tr></table> All Contractor's Report to be checked and endorsed by RE / COW	a. Client	4 set Colour	b. ABRAZ Arkitek	1 set Colour	c. Quantity surveyor	1 set BW	d. Civil and structure	1 set BW	e. Mechanical and Electrical	1 set BW
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e. Mechanical and Electrical	1 set BW											
30	Site diary and visitors book	- Site diary format to be printed carbon copy as architects sample format and forward to consultant site staff.  Site Diary shall be kept by consultant site staff at site for record and shall not limited to  Site activity, Material acceptance, Man power, Weather Visitor										

## COMMUNICATION

COMMUNICATION		
31	Architect Instruction (AI / Engineers Instruction (EI)	Contractor to obtain AI/EI before proceeding with any new related cost implied works weathers its omission or addition.
32	Request for information	All issues relating to technical query to be discuss with appointed RA/RE/COW and related consultants and query shall be forwarded through RFI and CC to all.
33	Site Memo	Contractor shall be inform by COW of any non conformance from time to time
34	Site NCR	NCR shall be given when contractor does not comply with stipulated work in contract

## MATERIAL

MATERIAL APPROVAL AND SHOP DRAWING		
35	Sample material and material approval	Contractor to prepare master list of material for consultant approval.
36	Material on site	Contractor to keep all approve sample material at suitable storage cabin. Any material on site is under the supervision of contractor, and contractor is responsible for its safe keeping. Any incident such as theft and defect of material shall be solely be bourn by contractor.
37	Shop drawing	Contractor to provide shop drawing before construction
38	As built drawing / Building Vertically / Settlement	. Submission of as-built drawing for verticality check (every floor for high rise) . Submission of as-built ground beam drawings

## SITE INSPECTION AND TESTING

SITE INSPECTION AND TESTING		
39	Request For Inspection	Contractor to prepare inspection checklist to identify involve consultant and site staff for Verification.
40	Inspection Testing Plan	Contractor prepare ITP for consultant and site staff inspection
41	Standards of checking	Contractor to be familiar with CIDB CIS7 Requirement
42	Issuance of CPC	Shall only be issued when patent defects is de minimis

## EXTENSION OF TIME & METHOD OF PAYMENTS

VARIATIONS AND METHOD OF PAYMENT		
43	Extension of time (EOT)	All EOT shall be submitted to architect 1 month from completion date. It is to the contractor to inform the architect for any short comings.
44	Variation Order omission or addition	All VO shall be submitted and inform to relevant consultant. VO shall be submitted by consultant to client for approval before starting of work.
45	Mode of Payment	Once a month / By percentage , period of honoring certificate
46	Certificate	<ul style="list-style-type: none"> <li>▪ Date : Submission of Claim</li> <li>▪ Date : Site Valuation and Interim Valuation</li> <li>▪ Date : Issuance of Certificate of Payment</li> <li>▪ Duration : Honouring Certificate / Monthly basis</li> </ul>



## SITE POSSESSION/ KICK OFF MEETING

## KICK OFF MEETING

The kick off meeting is an important meeting that takes place after the contractor has been appointed but before work commences on site.

- It is an opportunity to for the project team to meet (perhaps for the first time) and to plan the construction stage.
- The meeting should be minuted so that there is a clear record of the procedures agreed and decisions made.
- These minutes may form part of the contract documents, subject to agreement by both parties.

## KICK OFF MEETING

The Kick off is chaired by the contract administrator and is an opportunity to:

- Make introductions and issue contact details (perhaps a project directory).
- Clarify roles, responsibilities and lines of communication.
- Agree meeting schedules, meeting structures and attendees.
- Hand over outstanding documents (such as [insurance](#) certificates and [bonds](#)) and issue outstanding information (which may including any [variations](#) made since the contract was awarded).
- Issue nomination instructions.
- Discuss the contractor's master programme, including incorporation of works outside of the main contract, inspections, commissioning and testing.
- Discuss the role of the project team members (including site inspectors).
- Agree procedures for monitoring, issuing, receiving and reviewing information (including the information release schedule if there is one, and its relationship with the contractor's master programme). This may include a distribution matrix.
- Agree site access procedures and issues.
- Agree site induction procedures and other health and safety issues.
- Agree procedures for dealing with queries.
- Agree procedures for issuing instructions.
- Hand over contractor's procurement schedule.
- Mobilisation schedule and status.

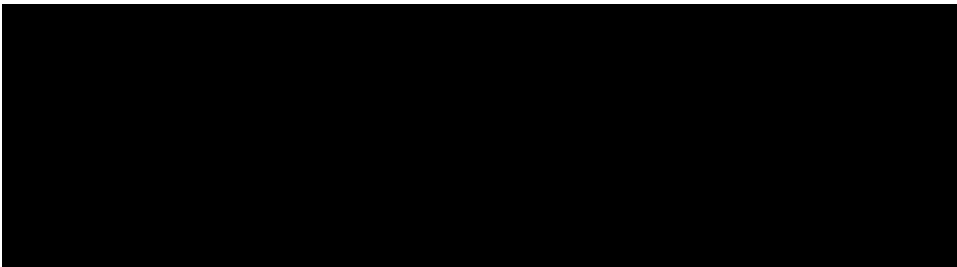
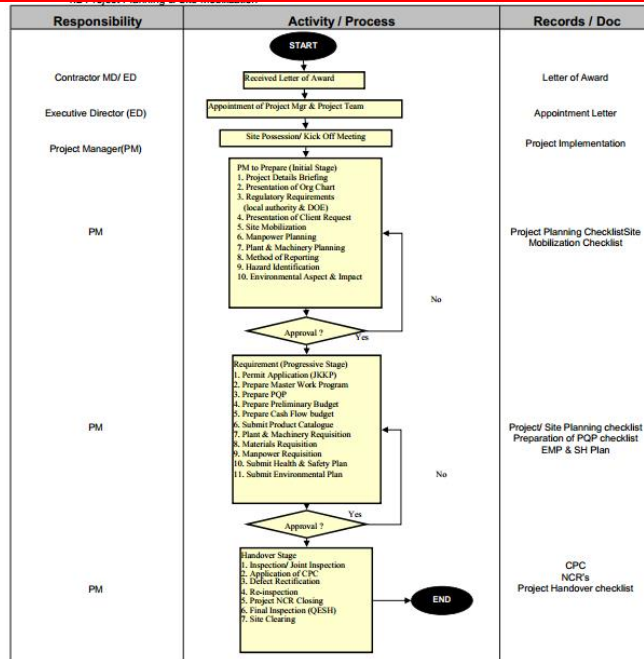


### PLANNING FOR OTHER MEETING

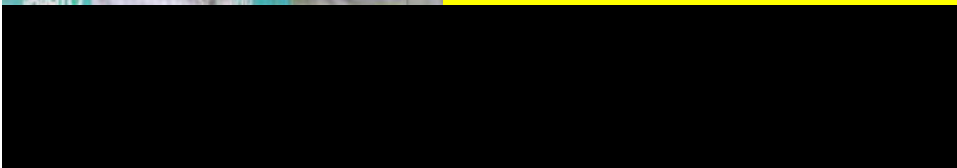
Item	Type of Meeting	Parties involved	Frequency
1.0	Site Meeting	Client Architect Consultants Resident Engineer / C.O.W Main Contractor Sub-contractor (if requested)	Fortnightly
2.0	Sub-contractor meeting	Project Manager Site Head / Site Agent / Site Manager Site Supervisors Sub contractors person in charge	Fortnightly
3.0	Safety Meeting	Safety & Security Officer (if required) Project Manager Site Head / Site Agent / Site Manager Site Supervisors Sub contractors person in charge	Monthly
4.0	Tools Box	Safety & Security Officer (if required) Site Head Site Supervisors Sub contractors person in charge	Weekly



## CONTRACTOR PROJECT PLANNING



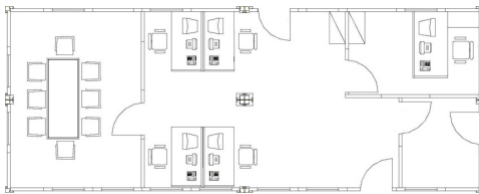
**ESTABLISHING THE SITE  
OFFICE AND IOW WORK  
PLACE**



## THE SITE OFFICE

Site office used for;

- Place that houses the IOW/ COW/ Contractor Site Manager/ Supervisor/ Safety officer
- To store and save the document that related to the construction project.
- A place for site meeting and technical meeting
- Material Storage



## ESTABLISH YOUR SITE OFFICE FILING SYSTEM

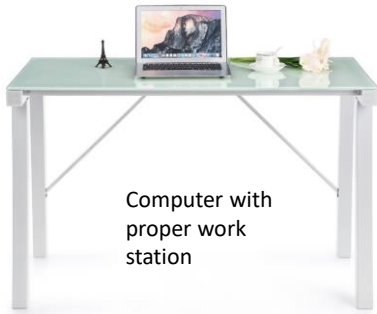


- F0 – General Files
- F1 – Correspondence
- F2 – Architectural / Engineers instruction, Variation order
- F3 – Minutes of meeting , Extension of time
- F4 – Weekly Claim, Arch Certificate
- F5A – Test Result
- F5B – Cube Test
- F5C – Trial Mix
- F6 – Contractor Monthly Progress Claim / Arch Cert
- F7 – Inspection Form
- F8 – Site Diary
- F9 – Defects List / Letter From Purchaser / Quality Assessment
- F10 – Quality, environment, safety and health
- F11A – CCC, CPC, CNC, CMGD
- F12 – As Build Drawing
- F13 – Shop Drawing
- F14 – Request for information
- F15 – Consultant info & document
- F16 – Piling Record
- F17 – Site Memo
- F18 – Specialist / Sub Con. Files
- F19 – Sales & Purchase Plans and furniture layout
- F20 – Site Photo
- F21 – TNC. Record
- F22 - Defects

## WHAT ARE THE NECESSARY TOOL THAT AN IOW NEED?



Pen and paper.



Computer with proper work station



1.The tape measure



3. The level



4. The short rule



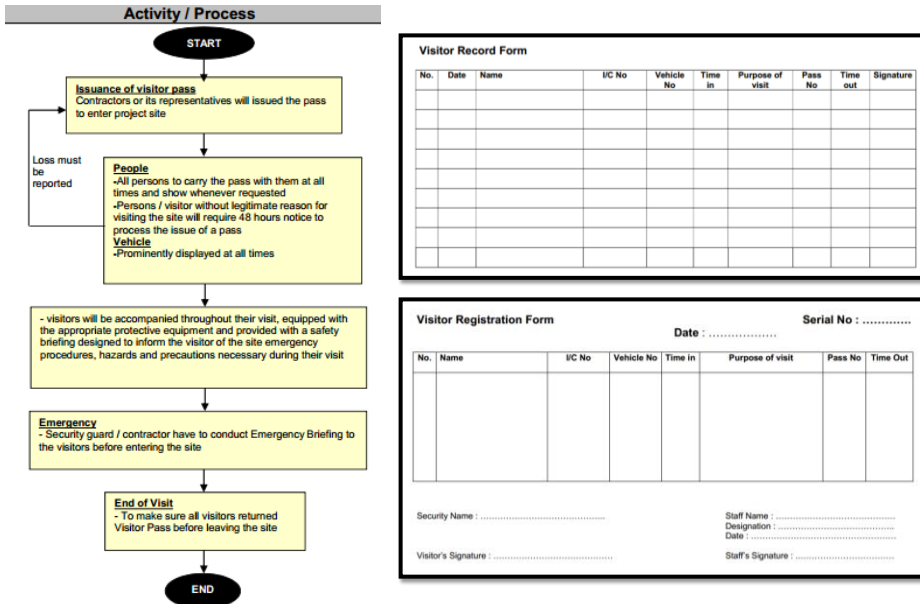
5. The try square

## GOOD PRACTICE: MANAGING THE WORKPLACE CLEANLINESS

### WORKPLACE INSPECTIONS CHECK LIST

SITE		COMPLIANCE ASSESSMENT				
Area	Standard	Y	N	P	Remarks / NCR	
1.0 Site Cabin Housekeeping	Work areas are maintained in tidy and clean condition Lighting levels are adequate for the tasks performed All light bulbs and tubes are working and all lighting covers are adequately clean Furniture/workstation are in good order Samples/ Material/ Heavy items are placed in the lower cabinet/shelf					
	Doors and windows are in good functional condition with locks. Walls, floors and ceiling are in good condition Work areas are free of obstruction, slipping and tripping hazards CS-SD related notices/information/labeling/signage/posters/warning signs are displayed and clearly visible e.g. policy, PPE, etc. Tools, equipment and materials are properly stored when not in use Waste materials stored in appropriate containers and disposed of in a safe manner					
	Pantry and dustbins are kept clean and tidy Storage cupboards are kept clean and tidy Soap, dish cloths and towels are adequately provided Toilets and washing facilities are kept clean and hygienic Toiletries are adequately provided Waste bins are cleaned and emptied regularly					
	Emergency evacuation plan is clearly displayed and up to date Emergency contact numbers are displayed, e.g. on notice board/ posted on the telephone Emergency organization/ communication system is established Staff are aware of the emergency evacuation alarm signals, procedures and plans Emergency plans are practiced regularly					
	Emergency equipment/ resources/ facilities is available and regularly inspected e.g. spill kit, communication equipment Emergency assembly point is identified and signed Portable fire extinguishers: a) Provided adequate/units required in site & cabin b) Inspected and serviced regularly c) Location are visible, unobstructed/readily accessible					
	5.0 Fire Protection	d) Pressure gauge meter on green indicator (oil powder), cylinder with appropriate weight (carbon dioxide), nozzles clean and clear of dirt Smoke detector are functional First Aid box available				
		Locations of first aid kits are labeled, visible, accessible and known to staff First aid box contents is regularly checked, complete and within expiry dates				
		PPE is provided for: a) Head protection b) Foot protection c) Safety Vest Employees is trained in the use, selection and maintenance of PPE PPE is stored correctly, kept in clean and tidy condition PPE is properly use during supervising/testing and commissioning & testing				
	7.0 Personal Protective Equipment (PPE)	Items that are frequently used are within easy reach Step tool or similar device is provided for reaching up higher items Adjustable chairs are provided for workstations with a computer Staff are provided with information on how to optimize their workstation ergonomically				
		8.0 Ergonomics				

## GOOD PRACTICE: MANAGING VISITORS



## GOOD PRACTICE: BRIEFING OF THE VISITOR

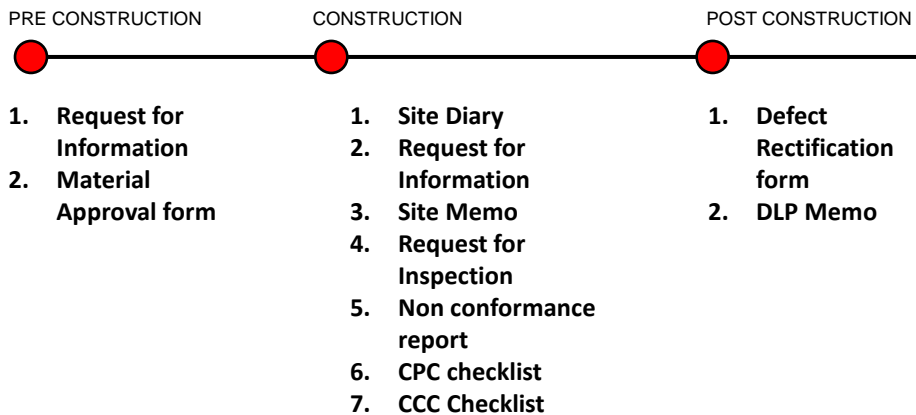
### Emergency Briefing

1. Notify the visitor of any restricted area within the site
2. Briefing on the risk & danger involved with the area of visit & works been carried out and the safety procedures to adhere to, including :
  - a) Not to perform any physical work activities at the area
  - b) Not to lean against any part of barricade
  - c) To follow the provided pathway and not to stray without permission of escorting site personnel
  - d) Not allowing the visitors to touch, handle or operate any tools or equipment at site without permission
3. Provide and enforce the usage of PPE to visitors
4. Conduct briefing on Emergency Response Procedures at site
5. Notify the visitors on No Smoking area
6. Make sure visitors are escorted at all times



## FAMILIARIZING WITH ARCHITECTS FORMS

### EXAMPLE: ARCHITECTS FORMS IN USE



## DOCUMENTING ON SITE : SITE DIARY

**SITE DIARY**

Form No. : \_\_\_\_\_ Effective Date : \_\_\_\_\_  
 TITLE OF PROJECT : \_\_\_\_\_ DATE : \_\_\_\_\_  
 CONTRACTOR : \_\_\_\_\_ COW'S NAME : \_\_\_\_\_

Weather: 

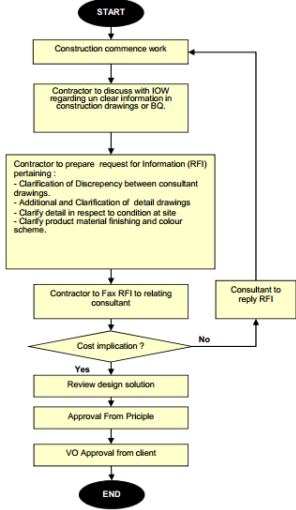
8 am	9 am	10 am	11 am	12 pm	1 pm	2 pm	3 pm	4 pm	5 pm
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ITEM	UNIT	QUANTITY	UNIT PRICE	AMOUNT	DATE	REMARKS
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## HANDLING QUERY WITH REQUEST FOR INFORMATION (RFI)

REQUEST FOR INFORMATION (RFI)			
DATE _____		_____	
RFI FILE NO. _____		_____	
Consultant Address _____			
Attn : _____		_____	
PROJECT _____		_____	
CONTRACT NO. _____		_____	
CONTRACTOR'S REQUEST FOR INFORMATION			
REFERENCE NO. _____			
RFI SUBJECT TITLE: _____			
ISSUE _____		ANSWER _____	
COST IMPACT: <input type="checkbox"/> TIME IMPACT: <input type="checkbox"/>		SPECIAL INSTRUCTION: _____ _____ _____	
REQUEST INSTRUCTED BY SIGNATURE _____ REQUESTED BY _____ DATE REQUEST _____ COMPANY _____		DISTRIBUTION:  1. ARCHITECT <input type="checkbox"/>  2. CLIENT <input type="checkbox"/>  3. CONSULTANT <input type="checkbox"/>  4. CONTRACTOR <input type="checkbox"/>	
CONSULTANT RESPONSE SIGNATURE _____ RESPONSE BY _____ DATE _____ COMPANY _____		Please Tick	
ACKNOWLEDGE BY CLIENT: SIGNATURE _____ PROJECT MANAGER _____ DATE _____		REMARKS: _____ _____ _____	

A **request for information (RFI)** is a formal process used during the Work to obtain an interpretation of the Contract Documents or to obtain additional **information**.



## APPROVALS: MATERIAL APPROVAL FORM

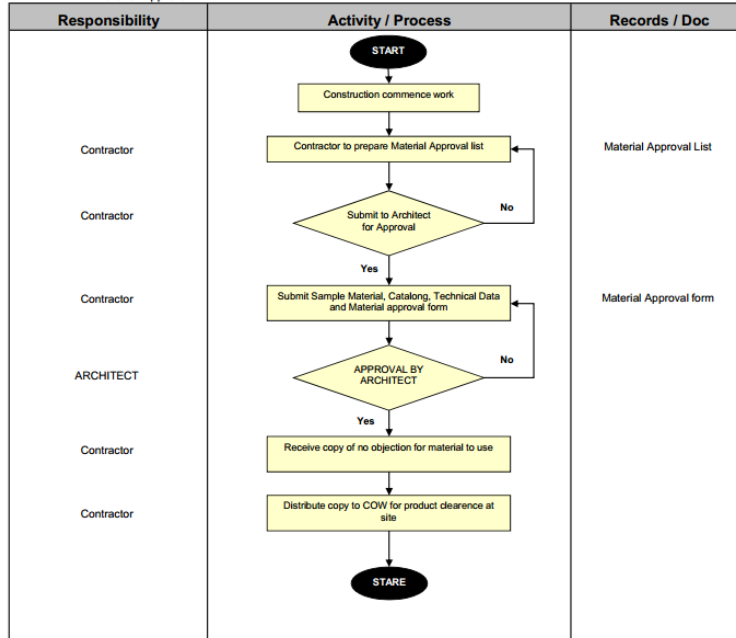
[illegible]

Material Approval list and form must be use by contractor before proceeding to finalize the material for construction.

SAMPLE MATERIAL FORM											
Form No.	:	Effective Date	:								
TRIAL NO	:	DATE	:								
PROJECT	:										
CONTRACTOR	:	REF. NO.	:								
Item covered by the submission		STAGE OF COMPLETION									
Full Description of Item											
<p>Specification and Clause reference:</p> <p>Attached as per (please tick)</p> <table border="1"> <tr> <td>Manufacturer's Drawing</td> <td></td> </tr> <tr> <td>Manufacturer's Literature</td> <td></td> </tr> <tr> <td>Sample</td> <td></td> </tr> <tr> <td>Others (Please Specify)</td> <td></td> </tr> </table>				Manufacturer's Drawing		Manufacturer's Literature		Sample		Others (Please Specify)	
Manufacturer's Drawing											
Manufacturer's Literature											
Sample											
Others (Please Specify)											
Submitted by: _____											
(Signed by contractor)											
The material submitted is APPROVED /DISAPPROVE											
Comment:											
Signed by: _____											
(Sd/-)											
Date: _____											



## APPROVALS: MATERIAL APPROVAL PROCEDURE



## QUALITY CONTROL : INSPECTION TESTING PLAN SAMPLE

**INSPECTION TEST PLAN (ITP)**

NO.	TYPE OF WORK	APPROVAL	INSPECTION STAGE	INSPECTION REQUIRED
1	Site boundary	COW	Before commencing work	Confirm boundary stones
2	Setting out	Architect	Before excavation	Building setbacks, gridline, dimension
3	Excavation of footing	COW	Before placing lean concrete	Depth and size of footing
4	Piling	COW	After piling	Check for dynamic pile test
5	Reinforce and formwork to RC structure	COW	Before concreting	As per detail of engineers checklist, tensile strength
6	Antitermite treatment	COW	After pile cap	To check on antitermite use
7	Concreting to RC structure	COW	During concreting	Workability and test cubes, load test
8	Brickwork/ Frame work	COW	Sample Brick	10 bricks per 1000 pieces
9	Roof trusses	COW	During laying	type of bonding, reinforcement
10	Water proofing works	COW	Before roof covering	Check to size, veracity, bracing and fixing accessories
11	Electrical wiring and conduit	COW	After installation	Check on material and method of installation
12	Plumbing works	COW	After installation	Check on material and method of installation
13	Plastering works	COW	After commencement	Pressure test
14	Finishing works- flooring, wall, ceiling	COW	Before plastering	Check alignment, veracity and area coverage
15	Door and Window	COW	After installation	Base on CIBS CIS 7 requirement
16	Sanitary fitting, Sanitary wares and iron mongeries	COW	After installation	Check model, type and defects
17	Sewage works	COW	After completion	water tightness test
18	External drains	COW	After completion	Check on drain cover, apron, inspection chamber
19	Road works	COW	After completion	check on road surface, water ponding, kerrt road sign, lighting
20	Foot path and turfing	COW	After completion	Inspection as per drawing
21	Fencing	COW	After completion	Check veracity and finishing

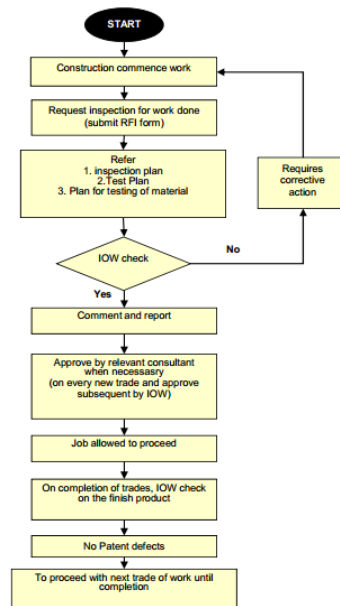
Note: All record to be kept at site at all times

Prepared by,

Name : \_\_\_\_\_  
Title : \_\_\_\_\_

Reviewed by,

Name : \_\_\_\_\_  
Title : \_\_\_\_\_



## INSPECTION FORM : REQUEST FOR INSPECTION FORM

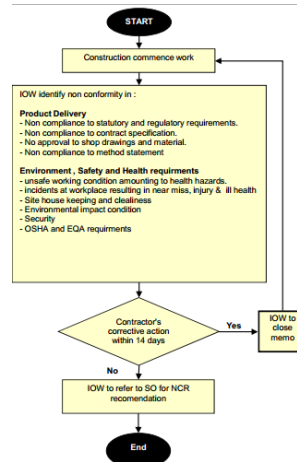
REQUEST FOR INSPECTION FORM		
Form No. :	Effective Date :	
TITLE OF PROJECT :	DATE :	
FROM :	TO COMPANY :	
PERSON IN CHARGE :	PERSON IN CHARGE :	
Please be advised that we have constructed the following works strictly in accordance with the approved drawings and specifications:		
Description of Works	Block/Level	Units/Units
Kindly inspect the above works and permit us to proceed with _____ at the above units/blocks.		
Checked by Clerk of Works and Comments:		CONTRACTOR (Sign & Stamp)
Acknowledge by:		Verified Work Done by:
Contractor	Clerk of Works	
Date : _____	Date : _____	
<b>APPROVAL</b>		
You may proceed with _____ at the above units / block.		
SIGNATURE :		
DESIGNATION :		
DATE :		
<b>ENDORSEMENT</b>		
To the best of knowledge the above work have been done in accordance to the drawings and specifications.		
C/o Project Manager : Consultants	Engineer	Architect

- Request for Inspection form is a formal process used by Contractor after completion of work to be inspected for verification by Architect/ Engineers representative.
- This is important as it marks that the work is completed and check by either RA, RE, IOW or COW to be included for payment.
- Should they find any non compliance, the site representative will issue a memo or NCR for the contractor to rectify such work.

## IOW SITE DIRECTION: SITE MEMO

SITE MEMO	
MEMO NO :	DATE :
PROJECT :	
TO :	
FROM :	
ISSUE :	
DESCRIPTION :	
Yours faithfully,	

- Site memo are tools of communication that can be use by the site representative to communicate a direction or instruction.
- It acts as a notice and can be given in a form of hardcopy or soft copy.

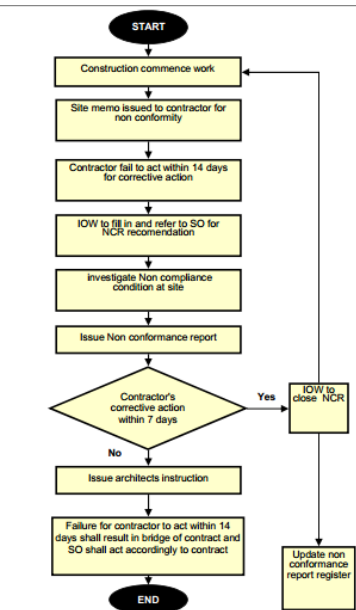


**ISSUE HIGHLIGHTING : NON CONFORMANCE REPORT**

	<b>Form No. :</b>	<b>Eff Date :</b>	
<b>NON-CONFORMANCE REPORT (SITE)</b>			
PROJECT : _____	REF NO : _____		
CONSULTANT : _____	CONTRACT NO : _____		
Non-Conformance description (By C.a.W)			
Item No	Description	Ref Drawing/Rev.0	Location
Signature	Name	Designation	Date
Signature	Name	Designation	Date
	Proposed Correction Date		
Signature	Name	Designation	Date

- A **non-conformance report** documents the details of a **non-conformance** identified in a quality audit or other process review.
- The objective of the **report** is to make an unambiguous, defensible, clear and concise definition of the problem so that corrective action can and will be initiated by management.

## ISSUE LOG: NON CONFORMANCE REPORT REGISTER

[illegible]

## REQUEST FOR METHOD STATEMENT FROM CONTRACTOR

It is also advisable to request from the contractor the method statement for the specific work in order to ensure the works and specification is safe and complies to the contract.

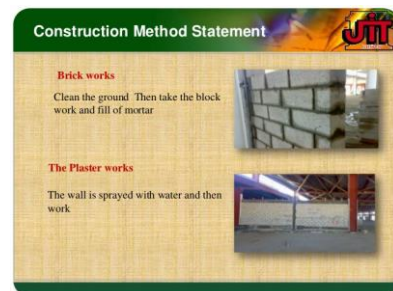
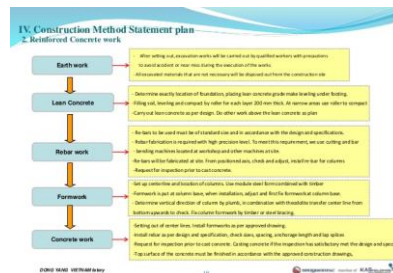
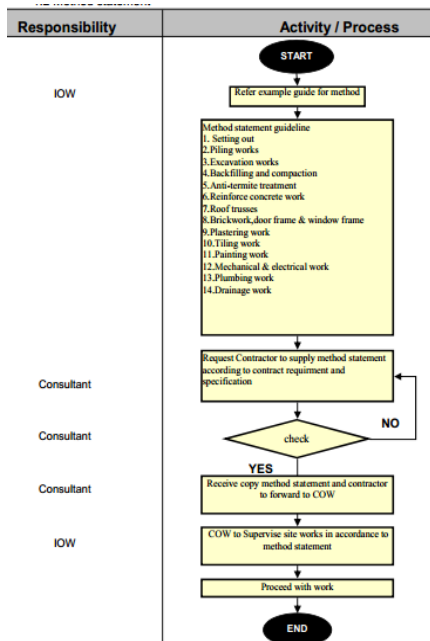
These submitted method statement helps manage the work and ensures that the necessary precautions have been communicated to those involved.



Example of works:

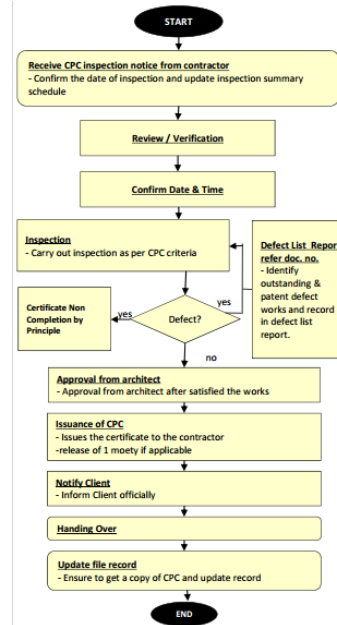
- Setting Out
- Piling Works
- Excavation Works
- Backfilling and Compaction
- Anti-Termite Treatment
- Reinforcement Concrete Work
- Roof Trusses
- Brickwork, Door Frame, & Window Frame
- Plastering Works
- Tiling Works
- Painting Works
- Mechanical & Electrical Works
- Plumbing Work
- Drainage Works

## REQUEST FOR METHOD STATEMENT FROM CONTRACTOR



## COMPLETION: CERTIFICATE PRACTICAL COMPLETION CHECKLIST

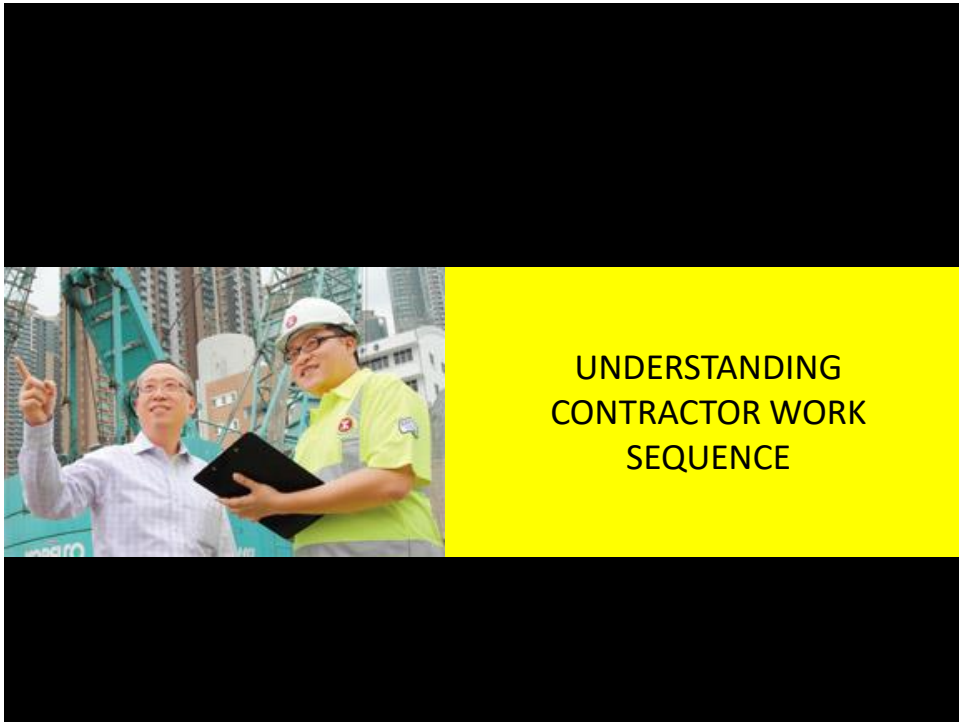
CERTIFICATE PRACTICAL COMPLETION CHECKLIST					
PROJECT NAME :					
MAIN CONTRACTOR :					
CPC DATE :	HAND OVER DATE :				
DEFECTS LIABILITY PERIOD					
DURATION OF DLP		COMMENCE DATE	COMPLETION DATE		
NO	DESCRIPTION	ACTION	REVIEW		COMMENT
			YES	NO	
1	APPLICATION LETTER FROM CONTRACTOR	TO ATTACH	<input type="checkbox"/>	<input type="checkbox"/>	
2	JOINT SITE EVALUATION (CLIENT/CONSULTANT/ CONTRACTOR)	TO ATTACH	<input type="checkbox"/>	<input type="checkbox"/>	
3	CONSULTANT RECOMMENDATION	TO ATTACH	<input type="checkbox"/>	<input type="checkbox"/>	
4	LIST OF OUTSTANDING WORKS	TO ATTACH LIST AND PROGRAM TO BE COMPLETED	<input type="checkbox"/>	<input type="checkbox"/>	
5	LETTER UNDERTAKING TO COMPLETE OUTSTANDING WORK	TO ATTACH	<input type="checkbox"/>	<input type="checkbox"/>	
6	SCHEDULE OF DEFECTS	TO ATTACH	<input type="checkbox"/>	<input type="checkbox"/>	
7	NCR CLOSED	TO CONFIRM	<input type="checkbox"/>	<input type="checkbox"/>	
8	COMMISSIONING TEST COMPLETED AND TEST RESULT SUBMITTED, SIGNED BY P.E & WITNESSED BY COW AND AUTHORITIES (WHERE REQUIRED)	TO CONFIRM	<input type="checkbox"/>	<input type="checkbox"/>	
9	SHOP DRAWING SUBMITTED	TO CONFIRM	<input type="checkbox"/>	<input type="checkbox"/>	
10	AS-BUILT DRAWING SUBMITTED ( IF REQUIRED)	TO CONFIRM	<input type="checkbox"/>	<input type="checkbox"/>	
11	OM MANUAL SUBMITTED	TO CONFIRM	<input type="checkbox"/>	<input type="checkbox"/>	
12	MANUFACTURERS WARRANTIES ASSIGNED	TO CONFIRM	<input type="checkbox"/>	<input type="checkbox"/>	
13	Q1-Q21 FORM SUBMITTED WITH SIGNATURE	TO ATTACH	<input type="checkbox"/>	<input type="checkbox"/>	
WE RECOMMEND FOR THE ISSUANCE OF CPC			<input type="checkbox"/>	<input type="checkbox"/>	
Prepared By ( Contractor )		Reviewed by, (ARCHITECT INCHARGE)			



## CERTIFICATE COMPLETION AND COMPLIANCE CHECKLIST

CCC CHECKLIST		MATRIX RESPONSIBILITY									
Date: Project:		Master Data Form No. 1									
NO/CHECK	RESPONSIBILITY	Serial Actual step taken out installation	FORM 16	CEB registration	FORM 16 COMPLY	PET	Participation PET	Serial	Strategic		
1	Issuing B1 NOTICE FOR COMMENCEMENT	ARCH				LA					
2	FORM G 1 Stage Certification : Earthwork	CNS				LA					
	FORM G 2 Stage Certification : Building Dwg	ARCH				LA					
	FORM G 3 Stage Certification : Foundation	CNS				LA					
	FORM G 4 Stage Certification : Structural	CNS				LA					
	FORM G 5 Stage Certification : Internal Water Plumbing	MSE				Water Authority					
	FORM G 6 Stage Certification : Internal Sanitary/Plumbing	MSE				JPP					
	FORM G 7 Stage Certification : Internal Electrical	MSE				TNS					
	FORM G 8 Stage Certification : Fire Fighting (General)	ARCH				SCMBA					
	FORM G 9 Stage Certification : Fire Fighting (Kitchen)	MSE				SCMBA					
	FORM G 10 Stage Certification : Mechanical Ventilation	MSE				LA					
	FORM G 11 Stage Certification : Lift/Elevator Installation	MSE				DOGA					
	FORM G 12 Stage Certification : Building	ARCH				LA					
	FORM G 13 Stage Certification : External Water Supply System	CNS				Water Authority					
	FORM G 14 Stage Certification : Sewerage Refractor	CNS				JPP					
	FORM G 15 Stage Certification : Sewerage Treatment Plant	CNS				JPP					
	FORM G 16 Stage Certification : External Electrical Supply System	MSE				TNS					
	FORM G 17 Stage Certification : Road and Drain	CNS				JPP					
	FORM G 18 Stage Certification : Street Lighting	MSE				LATNS					
	FORM G 19 Stage Certification : External Sanitary	CNS				JKUAPS					
	FORM G 20 Stage Certification : Telecommunication	MSE				TELEKOM					
	FORM G 21 Stage Certification : Landscape	LANDSCAPE				LA					

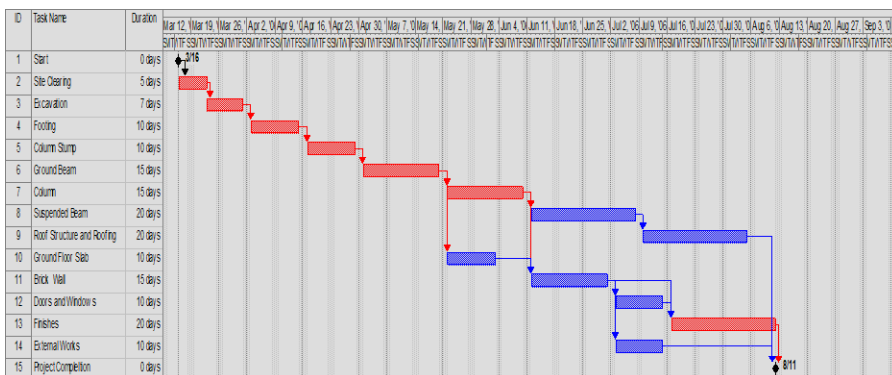
Having a CCC checklist is useful for PSP to delegate documentation collation to its site representative.



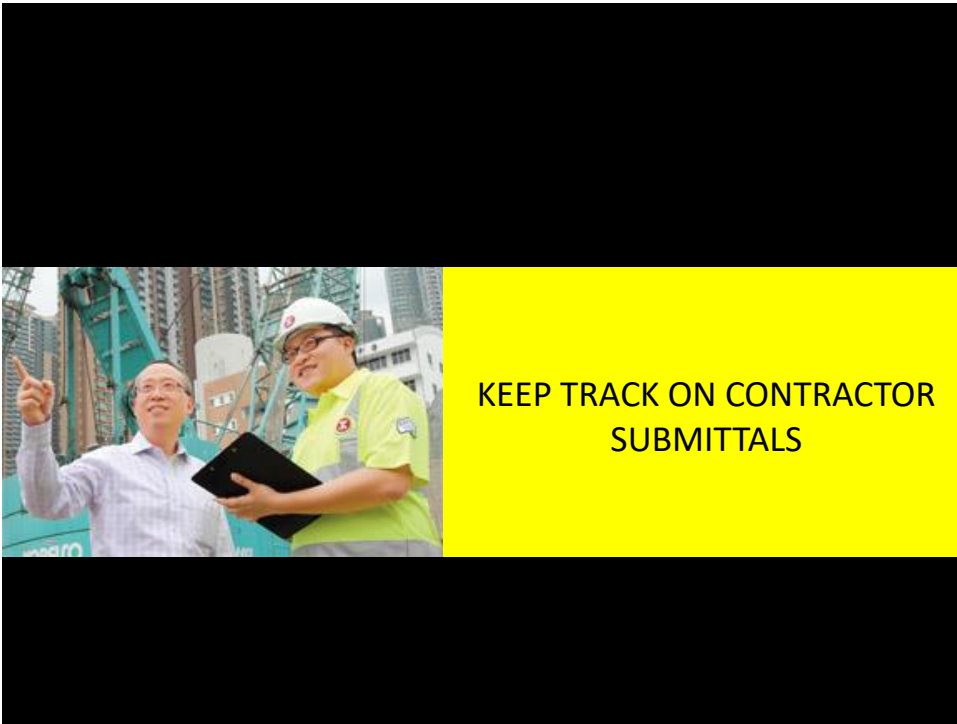
## UNDERSTANDING CONTRACTOR WORK SEQUENCE

### UNDERSTANDING THE WORK PROGRAM SEQUENCING

It is very important to get a copy of the contractor work program and understand the sequencing of its work.



An experience IOW will know whether the work program is workable or back loaded to cause delay.



## CONTRACTOR SUBMITTAL REQUIRED DOCUMENTS

- copies of contracts/ Sub contract
- Work Program
- certificates of insurance
- shop drawings and support calculations
- catalog
- material or equipment samples
- Payment Vouchers
- Work/ Man power Schedule(s)
- material test reports & certifications
- environmental test reports



## PROGRESS REPORT FORMATTING

Construction progress reports are prepared regularly (often monthly) by the contractor during the construction phase and issued to the Contract Administrator /client.

They will generally be a summary of the reports received and discussions held at construction progress meetings with key issues highlighted in an accompanying cover note.

CONTENT FOR PROGRESS REPORT	
1	CONTRACT INFORMATION
2	SITE LAYOUT
3	ORGANISATION CHART
4	PROJECT TELEPHONE HOTLINE
5	SUMMARY OF WORK PROGRESS
6	WEIGHTAGE PROGRESS REPORT
7	TWO WEEKS FORECAST PROGRAMME
8	MASTER WORK PROGRAM ENDORSED
9	PHYSICAL S-CURVE
10	FINANCIAL S-CURVE
11	MANPOWER ON SITE
12	EQUIPMENT ON SITE
13	WEATHER CHART
14	MATERIAL APPROVAL
15	ARCHITECT INSTRUCTION/ ENGINEERS INSTRUCTION
16	SUMMARY LIST OF VARIATION ORDER
17	SUMMARY LIST OF REQUEST FOR INFORMATION
18	SUMMARY OF SITE MEMO AND REPLY
19	SUMMARY OF CONCRETE CUBE TEST RESULT
20	SUMMARY OF MATERIAL TEST RESULT
21	ENVIRONMENTAL AND SAFETY CHECKLIST
22	STATUS OF CLAIMS
23	PROGRESS PHOTOGRAPH





## FORTNIGHTLY OR MONTHLY MEETING

## SITE MEETING

IOW to Remind the Contractor :

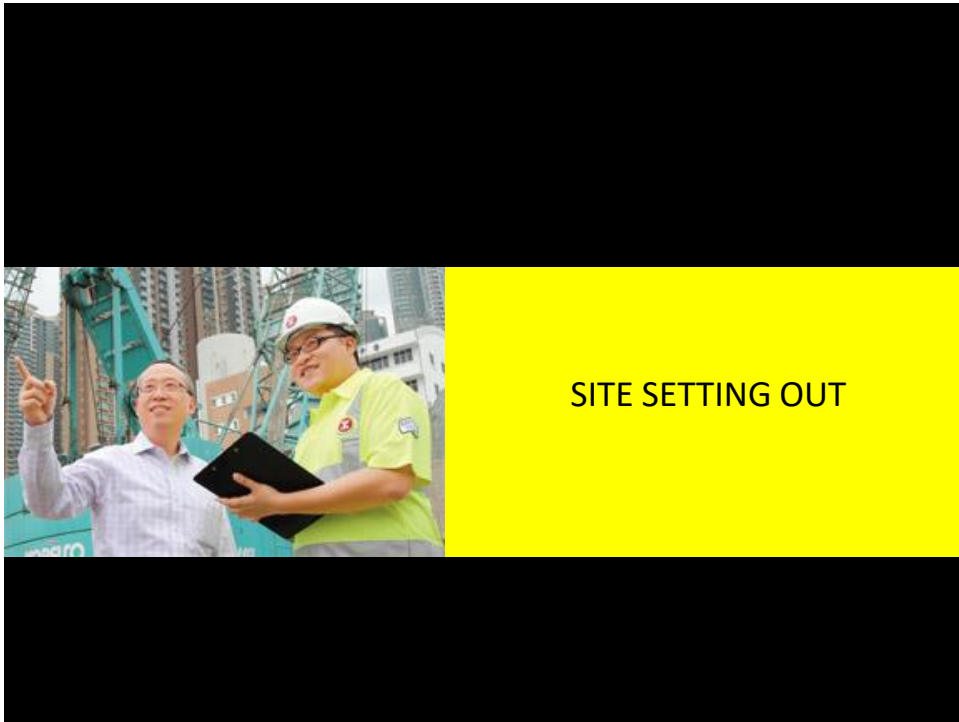
- Schedule site meetings eg every 2 weeks or every month at the Site Office
- Chair by SO /CA/ Architect/ Engineer
- Attended by all Consultant & Site Staff, Main Contractor's Representatives, NSC Rep



Purposes

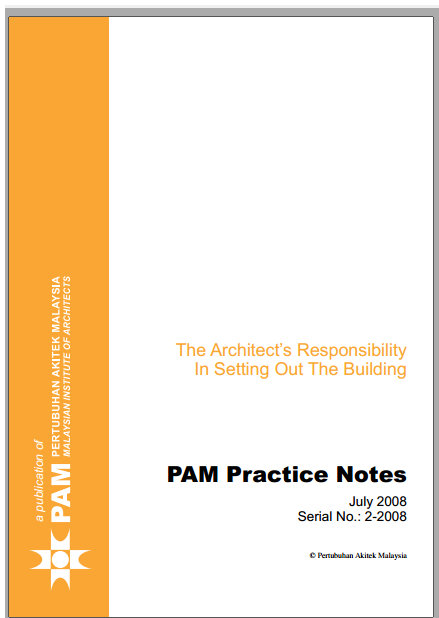
- Progress Monitoring
- to discuss all problems related to the project
- Discussed Project's Progress
  - Progress Report prepared by Main Contractor
  - Minutes of the meetings prepare by the consultant's or site staff





## SITE SETTING OUT

### SETTING OUT AND IOW SCOPE IN SETTING OUT



It is important to get the setting out correct. Wrong setting out may incur problem to the site and building position causing lost of money and time.

A **building** is **set out** in order to clearly define the outline of the excavation and the centre line of the walls, so that construction can be carried **out** exactly according to the plan.

Pertubuhan Arkitek Malaysia has release a setting out practice notes that can be use for Architects and its representative.



## CONCLUSION

### CONCLUSION

**IN CONCLUSION,**

**THERE ARE MANY THINGS THAT AN IOW NEEDS TO  
CONSIDER BEFORE THE CONSTRUCTION COMMENCE  
ON SITE.**

**ALWAYS BE PREPARED BEFORE THE PROJECT STARTS.**