PREFACE 前言

近年来，我国高等职业教育蓬勃发展。为贯彻国家大力发展职业教育的精神，贯彻高等职业教育“以服务为宗旨，以就业为导向，走产学结合的发展道路”的办学方针，实现培养高素质的技能型专门人才的目标，顺应高等职业英语课程改革的方向，我们通过广泛的调研，在深入了解建筑类高职院校英语教学需求的基础上，编写了这本建筑行业英语教材，意在帮助学生打好英语语言基础的同时，进一步提高学生工作过程中的英语交际能力，使他们能够跟着专业学好英语。

本教材的特色是将建筑行业需求与英语学习融为一体，既着眼于建筑行业实际，又服务于建筑行业，从建筑行业的视角来促进英语的学习。教材针对建筑行业中的土木工程、工程管理、建筑环境设计及建筑设备四大板块确定编写方案，每个板块中又包含四个单元，依据建筑类企业的工作流程、典型的工作环节和场景设计教学内容，力求使学生具备在本行业领域运用英语进行基本交流的能力。

教材共有四大章节，包含十六个单元，每单元内容涉及一个主题，围绕特定职业主题展开，分别涉及建筑材料、建筑施工、建筑结构、工程测量、工程管理、工程造价、房地产、施工主体、建筑装饰、风景园林规划与设计、建筑色彩与建筑风格 、绿色建筑、建筑电气、给排水、暖通与空调、智能建筑。全书涉及了建筑工程技术人员和管理人员在各自工作实际中的会话用语，如建材询价订购、施工计划与进度、工地参观、施工安全检查、招投标等行业常用的会话内容；还增加了施工日志、设计方案及说明、合同协议、可行性报告等建筑行业实用的应用文体，既涵盖与行业相关的典型工作内容与场景，又强调相应的语言技能训练，使学生英语语言技能的发展和职业技能的发展同步。经过近些年在一些高职院校的使用，我们对本教材进行了一次认真、全面的修订，并且增加了建筑文化链接的模块，丰富了教学内容。

史晓慧负责整个项目的策划与编写，吴承霞博士主审了教材并对本书的编写给予全方位的指导。本书的主编为：史晓慧、闫鑫。姜红艳、孙丽娜、刘晓玲、施荣、李海滨、张静、张妍、张婷婷、任斐斐、张静华、李楠、王翠、符娅、蒋沫沫、孟丽平等多位在建筑学院教学一线工作的老师参与了本书的编写。本书在编写的过程中，得到了河南建筑职业技术学院及相关院校多位专业老师的大力协助，他们帮助校稿，提出修改意见；在编写本书同时也咨询了企业一线具有丰富工作经验的技术人员，他们对本书一些问题给出了专业解释，使教材更符合职业能力培养的要求。在他们的帮助下本书的编写才得以顺利完成，在此一并表示衷心的感谢。

《建筑英语》是我们结合行业进行英语教学改革的一次尝试。由于编者时间有限，疏漏之处在所难免，希望使用者不吝赐教，批评指正。

编 者

CONTENTS 目录

Chapter 2

Project Management

(General Introduction)

Project management is a carefully planned and organized effort to accomplish a specific one-time objective, for example, construct a building or implement a major new computer system. Project management includes developing a project plan, which includes defining and confirming the project goals and objectives, identifying tasks and how goals will be achieved, quantifying the resources needed, and determining budgets and timelines for completion. It also includes managing the implementation of the project plan, along with operating regular "controls" to ensure that there is accurate and objective information on "performance" relative to the plan, and the mechanisms to implement recovery actions where necessary. Projects usually follow major phases or stages, including feasibility, definition, project planning, implementation, evaluation and support/maintenance.

Projects need to be performed and delivered under certain constraints. Traditionally, these constraints have been listed as "scope" , "time" , and "cost" . These are also referred to as the "Project Management Triangle" , where each side represents a constraint. One side of the triangle cannot be changed without affecting the others. A further refinement of the constraints separates product "quality" or "performance" from scope, and turns quality into a fourth constraint.

The time constraint refers to the amount of time available to complete a project. The cost constraint refers to the budgeted amount available for the project. The scope constraint refers to what must be done to produce the project's end result.

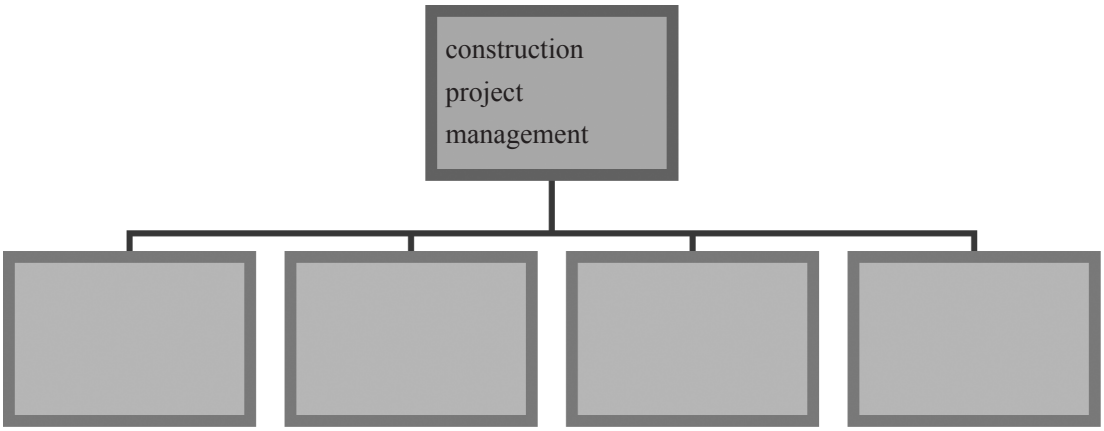
In this chapter, you will read four articles which relate to construction project management, after which you'll be familiar with the basic elements in the management of a construction project, the basic knowledge of project cost, and a preliminary cognition of real estate.

Unit 5

Construction Project Management

Warm-up Questions

1. **Who is the implementer of construction project management?**
2. **What are the four sequential stages of construction project management?**



Learn to Speak

Talking About Issuing Tender Document

Black: the consultant engineer of the owner

Mr. Jin: the representative of the contractor

(Black is issuing tender document to Mr. Jin)

Mr. Jin: Good afternoon! Nice to meet you again!

Black: Good afternoon! Nice meeting you too. Firstly I would like to congratulate you that after our examination of your prequalification document your company has been accepted to enter the next stage for tendering of the Huatian Building Project. Now please receive the tender document for the civil works.

Mr. Jin: Thank you! Excuse me, might I know how many companies are still in the competition and who they are?

Black: Certainly not! It is our commercial secret.

Mr. Jin: I am sorry. I did so just from curiosity, no other purpose. Please forget it.

Black: Now let's see the tender document. You see there are so many volumes. Volume 1 is the Contract Conditions. The Volume 2 is the Bill of Quantities.

Mr. Jin: Is the contract price a rate basis one?

Black: Yes. But each rate should cover all the direct and indirect costs for supply, implementation and completion of the work mentioned in each item and an analysis of several rates for large quantities of the works should be attached to the tender submission.

Mr. Jin: OK. We will study the explanation of rates carefully and work out most competitive price.

Black: Volume 3 is the Scope of Works. Please provide the detailed construction schedules for each building in accordance with our general guiding schedule shown in this volume.

Mr. Jin: We have noticed that there are some Key Dates marked in the General Guiding Schedule. Can we make some adjustments to the Key Dates in our detailed schedule for some individual buildings without affecting the completion for the whole works?

Black: No, you can't. The Key Dates for the most important part of the works are fixed. There are penalties in different grades for the liquidated damages caused by the delay of the Key Dates. It will be discussed later. Let's turn to Volume 8, now you must see to it that all the materials are to be fulfilled and submitted according to the requirement: Part 1. Letter of Agreement; Part 2. Construction Method Statement; Part 3. Quality and Safety Programs; Part 4. Bill of Quantities.

Mr. Jin: By the way, could we ask whether you will favorite the lowest price or not for the tendering?

Black: We will make our decision in accordance with our comprehensive analysis and judgment to your tender document. We hope you will do your best to fulfill all the parts of the tender document and hand over to us in time. OK, that's all for today's meeting.

Read to Know

Construction Project Management

Construction project management is the construction enterprises' planning, organization, supervision, coordination and control of a project from **conception** to **completion** on behalf of a client by using modern management techniques to achieve **predetermined** objectives of **scope**, cost, time and quality.

Construction project life cycle can be divided into four stages: Bidding Phase,

Construction Preparation Stage, Construction Stage, and Final Acceptance Stage. These four **sequential** stages are the entire process of the construction project management. Now let's focus on the first three stages.

Bidding Stage

The owner plans and designs the construction project, and then issues the invitation letter. General contractor decides whether or not to bid on the project. Much of the work of preparing a bid consists of **soliciting** and collecting quotes from **subcontractors** and **suppliers**. In preparing a competitive bid, contractors must consider the costs of **equipment**, labor, materials, subcontractors, job and company **overhead**, **contingency**, and profit. This is the first stage of construction project management, the **ultimate** management goal of this stage is the signing of project contract.

Construction Preparation Stage

In this stage the main content of construction project management is the following:

- Establish the Department of Project Manager;
- Compile construction organization design, which mainly consists of construction scheme, construction schedule and construction plan;
- Formulate construction project management plan to guide the construction project management activities;
- Write the commencement application.

Construction Stage

The contractor's **on-site** project teams will depend on the size and the **complexity** of the project. A large project management team consists of a project manager, assistant project manager, field engineer, several project engineers, scheduler, materials expediter, estimator, and **clerical** staff. The project manager is in **overall** charge of the project, responsible for the rate of progress, financial control, safety, and ultimate profit of the job, to make sure that the work meets the quality expectation of the owner. In a word, the construction project team is to complete a high-quality project, on time, safely, at a profit.

In construction stage construction project management consists of project cost and schedule control, quality control, materials management and risk management, etc..

Project Cost and Schedule Control

There are two essential functions of the project management team: project cost and

schedule control. Cost control is achieved by preplanning the cash flow requirements for the project, and then **monitoring** the cash requirements during the project. Schedule control is **analogous** to cost control. A detailed project schedule, with costs for each activity, is developed prior to the start of the work. Changes are reflected in the **updated** schedule as work progresses.

Quality Control

Quality in construction is defined as meeting or exceeding the needs of the customer. One must conclude that quality in construction is more than supplying right materials. Quality is also about finishing on time, without shortcuts, safely, with **budget**, and without **claims and litigation**. Quality control is about the inspection of work to ensure that it meets the quality standards specified in the contract. Inspector's job is quality control, they perform that function by accepting work that meets the **specifications**, and rejecting work that does not.

Materials Management

The purpose of materials management is to ensure that materials are **delivered** in time to the site in the quality and quantity required. Materials should be ordered early enough to ensure they will arrive when needed.

Risk Management

There are risks **inherent** in the construction industry. Managing risks means minimizing the risks and insuring against the risks.

Notes

① Compile construction organization design, which mainly consists of construction scheme, construction schedule and construction plan.

【译文】编制施工组织计划，主要是施工方案、施工进度计划和施工平面图。

【分析】关系代词which引导定语从句，修饰名词词组construction organization design。

② The project manager is in overall charge of the project, responsible for the rate of progress, financial control, safety, and ultimate profitability of the job, to make sure that the work meets the quality expectation of the owner.

【译文】项目经理全面负责项目，掌握工程进度，控制资金流动，保证施工安全，确保最大收益，并且保证施工符合业主的要求。

【分析】in charge of 负……的责任，主持，管理。 To make sure that... 是不定式表目的。

③ Schedule control is analogous to cost control.

【译文】进度控制和成本控制类似。

【分析】be analogous to 与……类似的，类似于。

④ There are risks inherent in the construction industry.

【译文】建筑业本来就存在风险。

【分析】be inherent in 为……所固有，是……的固有性质。

Basic Vocabulary

conception	/kən'sepʃən/	*n.*	思想，观念，概念
completion	/ˌkəm'pli:ʃ(ə)n/	*n.*	完成，结束
predetermined	/'pri:di'tə:mind/	*a.*	预先确定的，预定的
scope	/skəup/	*n.*	范围；余地
sequential	/si'kwinʃəl/	*a.*	连续的，一连串的
solicit	/sə'lisit/	*vt.*	请求，乞求
subcontractor	/ˌsʌbkən'træktə(r)/	*n.*	转包商；分包者
supplier	/sə'plaiə/	*n.*	供应厂商
equipment	/i'kwipmənt/	*n.*	设备，器械
overhead	/'əuvəhed/	*n.*	经常开支，管理费用
contingency	/kən'tindʒənsi/	*n.*	意外事件，可能性
ultimate	/'ʌltimit/	*a.*	最大(高；终)的
on-site	/ɔn sait/	*a.*	现场的
complexity	/kəm'pleksiti/	*n.*	复杂，复杂性
clerical	/'klerikəl/	*a.*	办事员的；书记的
overall	/'əuvərɔ:l/	*a.*	全面(部)的
monitor	/'mɔnitə/	*v.*	监视，监听，监督
analogous	/ə'næləgəs/	*a.*	相似的
updated	/ʌp'deitid/	*a.*	最新的；现代化的
budget	/'bʌdʒit/	*n.*	预算
		vi.	编预算
claim	/kleim/	*n.*	索赔

litigation	/ˌliti'geiʃən/	*n.*	诉讼
specification	/ˌspesifi'keiʃən/	*n.*	规范；说明书
deliver	/di'livə/	*vt.*	投递；传送；运送
inherent	/in'hiərənt/	*a.*	内在的，固有的

Professional Vocabulary

cash flow	现金流动
working drawing	施工图
control and coordination	控制和协调
construction progress	施工进度
schedule of construction	施工进度表
project manager	项目经理
schedule control	进度控制
cost control	成本控制
quality control	质量控制
bidding phase	投标阶段
construction preparation stage	施工准备阶段
construction stage	施工阶段
acceptance stage	验收阶段
construction organization design	施工组织计划
construction scheme	施工方案
construction plan	施工平面图
commencement application	开工申请报告

Exercise

I. Answer the following questions according to the text.

1. What is construction project management?
2. What is the project manager's responsibility?
3. In construction stage what is the main content of construction project management ?

II. Match the English in Column A with their Chinese equivalents in Column B.

Column A	Column B
(　　) 1. construction management	a. 估计成本

(　　) 2. estimate the cost	b. 全面负责
(　　) 3. the schedule of construction	c. 风险最小化
(　　) 4. quality control	d. 符合规范
(　　) 5. consist of	e. 施工进度表
(　　) 6. in overall charge of	f. 建筑业
(　　) 7. prior to	g. 施工管理
(　　) 8. construction industry	h. 先于
(　　) 9. minimizing the risks	i. 包括
(　　) 10. meet the specifications	j. 质量控制

III. Translate the following sentences.

1. A Construction project management is the construction enterprises' planning, organization, supervision, coordination and control of a project from conception to completion on behalf of a client by using modern management techniques to achieve predetermined objectives of scope, cost, time and quality.
2. Cost control is achieved by preplanning the cash flow requirements for the project, and then monitoring the cash requirements during the project.
3. The purpose of materials management is to ensure that materials are delivered in time to the site in the quality and quantity required.

Learn to Write

LETTER OF AUTHORIZATION
授权书

Writing Tips

在投标书（bid）中，当投标书和合同签字人不是投标商（bidder）的法人时，必须要有法人授权书，授权投标商代表签署投标书和合同。

Sample

LETTER OF AUTHORIZATION

I, **the name of legal representative**, the undersigned legal representative of **the company name of the bidder**, hereby authorize the undersigned **the name of the duly authorized representative** to be true and lawful representative of the Company from the date of this letter

of authorization to act for and on behalf of the Company with legally binding effect for and in respect of **the name of the project** to sign the bids. And I acknowledge all the contents contained in the bids signed by the authorized representative.

It is hereby authorized. My entrusted agent has no right of sub-entrustment.

Name of the Company:_____(official seal)

Legal representative:_____(signature)

Authorized representative:_____(signature)

Date:_____

Task

Imagine you are the legal representative of SINOPEC 5th Construction Corp.(中国石化集团第五建设公司), write a letter of authorization to authorize one person to be in for the bid for the construction of Synthetic Gas Plant(合成气装置工程).

Further Study

Project Construction Certificate

Project Name			
Pile No.		Project Place	
Project Scale		Latitude Height	
Legal Person		Designing Unit	
Construction Unit		Supervision Unit	
Project scale and completion and handover evaluation: 1. 180, 000m^3 subgrade excavation, 210, 000 m^3 subgrade filling, 10 culverts and passages (348.32m), 10, 491 m^2 side slope protection, 14, 768 m^3 soil-shielding walls and 11, 017 m^3 draining engineering. 2. 3 middle and large bridges (962m). 3. 13, 195m Liuyi Tunnel. 4. The evaluation score is 97.2.			
Original Price	RMB × ×	Actual Price	RMB × ×
Original Period	28 months	Actual Period	28 months
Comment of the Employer and Supervision Unit			
The project of the contract section is qualified. Employer: (seal) Supervision Unit: (seal)			

工程施工证明书

工程名称			
起讫桩号		工程地点	
工程规模		海拔高度	
项目法人		设计单位	
施工单位		监理单位	
本合同段主要工程量及交工评定 1. 路基挖方180, 000 m^3，路基填方210, 000 m^3，10涵洞，通道348.32m，边坡防护10, 491 m^2，挡土墙14, 768 m^3，排水工程11, 017 m^3。 2. 大中桥962m。 3. 隧道13, 195m。 4. 本合同段工程交工验收总评分97.2。			
合同总造价	××元	实际造价	××元
合同工期	28 个月	实际工期	28 个月
建设单位及监理单位意见			
本合同段工程交工验收为合格。 建设单位：（盖章） 监理单位：（盖章）			

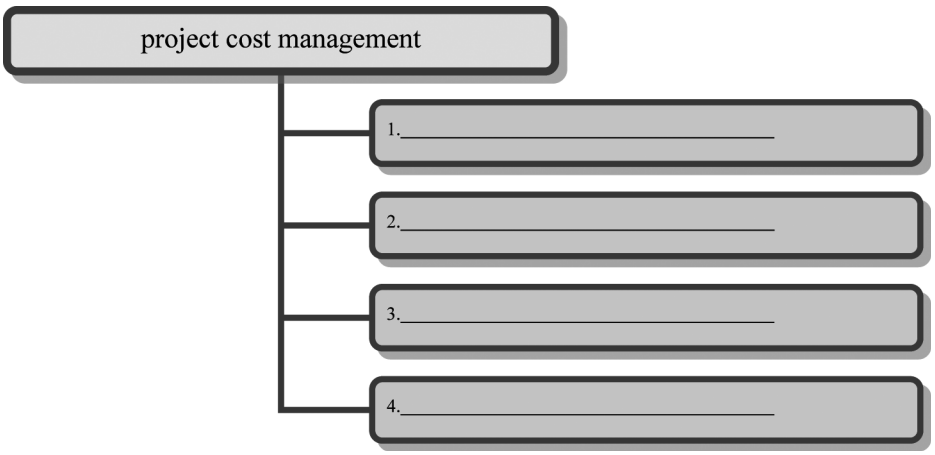
Unit 6

Project Cost

Warm-up Questions

1. What is the role of project cost?

2. What are the development stages of project cost management?



Learn to Speak

Commercial Negotiation of Contract Conditions

(The first phase of the tender is submitting bids, and the second stage is the negotiation phase, which includes technical negotiations and business negotiations. In the following dialogue Black and Jin Xing conduct business negotiations on Contract Conditions. Black—the consultant engineer of the owner, Jin Xing—the representative of the contractor.)

Black: Mr.Jin, Today we would like to discuss contract conditions.

Jin Xing: OK. That's just why I am here.

Black: First I would like to make it clear that in principle the contract conditions are complied with the "FIDIC" document. I am sure that you must have read these special conditions carefully and you can present your comments now.

Jin Xing: Frankly speaking, we do have some different opinions on the Conditions if you don't mind. Firstly there is not a clause for the advanced payment for the contractor in the Conditions. As usual the contractor should have around 10% of contract value for preparation of works after the contract is signed and then the contractor provides a bank guarantee of same value of the payment.

Black: I am afraid that there is no room for discussion in this point. It is the principle of this contract that the payment can be started only from the progress payment. Contractors must prepare the fund for their mobilization cost by themselves but they may include the loan interest into the oncost in their price. Are there any more comments to the Contract Conditions?

Jin Xing: Contractor must commence the works within 10 days after the signing of the contract, and we think it is a little bit too tight.

Black: We don't think so. In the definition in Clause 1, it has made clear that this project includes both the permanent works and temporary works. It is quite enough for your people to move in and set up the construction equipment on site to start your temporary works within 10 days. For such a tight construction program we can not allow any delay for commencement.

Jin Xing: Concerning time for completion, we have proposed to complete the civil works one month in advance during the technical negotiation. We are still awaiting for your reply.

Black: We have carefully considered your proposal, but after co-ordination with other parties involved in this project, it is not necessary to modify the general program, so we have to stick to the completion schedule of 44 month.

Jin Xing: In such a case we have no objection to keeping the original schedule. There is one thing very important to the progress of the works. We must point out here.

Black: Please.

Jin Xing: It is mentioned in the Clause 60 Drawing Supply that the engineer will supply all drawings in accordance with the necessity of the progress of the works defined in the Drawing Supply Schedule. But what shall we do if the delay of the drawing supply really happens?

Black: We will do everything to avoid it.

Jin Xing: Our proposal is to add a sub-clause like that in case the contractor suffers delay of drawings supply he is entitled to have: an extension of time to the contract period and an amount of a cost for compensation to catch up with the progress will be added to the contract price. We think the above two points are very reasonable and should be added in this clause.

Black: We agree with your above two points in principle. But we must add a sentence after the two points that the time extension and cost increase will be determined by the engineer after due construction with the employer and the contractor.

Jin Xing: OK, we agree to your modification to this new sub-clause.

Black: It is necessary to have one more sub-clause for this important issue like that the contractor shall give notice to engineer within a reasonable time when he thinks it will cause delay to the works without being supplied with the drawing.

Jin Xing: We can do that for good will but will not take any responsibility for the delay of drawing supply.

Black: Of course not. It just shows the co-operative spirit from the contractor.

Read to Know

Project Cost

There are two definitions of project cost. From the **perspective** of investors' or owners' investment control, project cost is defined as the total cost of fixed **assets investment** of the **anticipated** or actual **expenditure** of a construction project from conception to completion. From the perspective of the contractors, project cost means the price of a constructive contract accepted by the investors and contractors in bidding,which is the actual construction price of a construction project not including various costs in the early and late stage of the project in **architecture**. It is also referred to as project price expectedly or actually formed in **transactions**, namely, the construction and **installation** engineering price plus total price of a construction project for completion of a project.

Owing to large amount of capital, specialty difference and market dynamic factors, project cost has somewhat uncertainty during the whole construction period. Project cost has **hierarchical** and **compatible** characteristics.

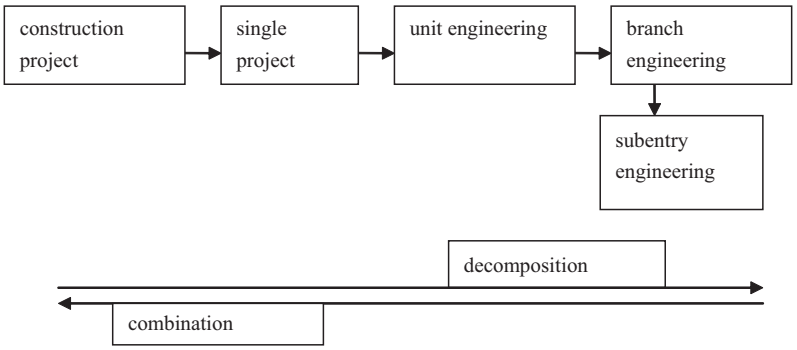
Cost valuation of construction project is to calculate and determine the cost of a construction project, which is also named project pricing or project price estimation.

The basic principles of project pricing are **decomposition** and **combination** of a project. A construction project is an engineering **complex**. The **premise** of calculating the project cost is to decompose the project, while the pricing of project is the process of the

combination of every price.

Firstly, decompose the project into **subentry** engineering; secondly, calculate engineering quantity; thirdly, determine the unit price; and finally, calculate cost in accordance with the regulations. Namely, subentry engineering cost and branch engineering cost→unit engineering cost→single project cost→total cost of the project.

Project Cost=∑(engineering physical quantity×unit price)

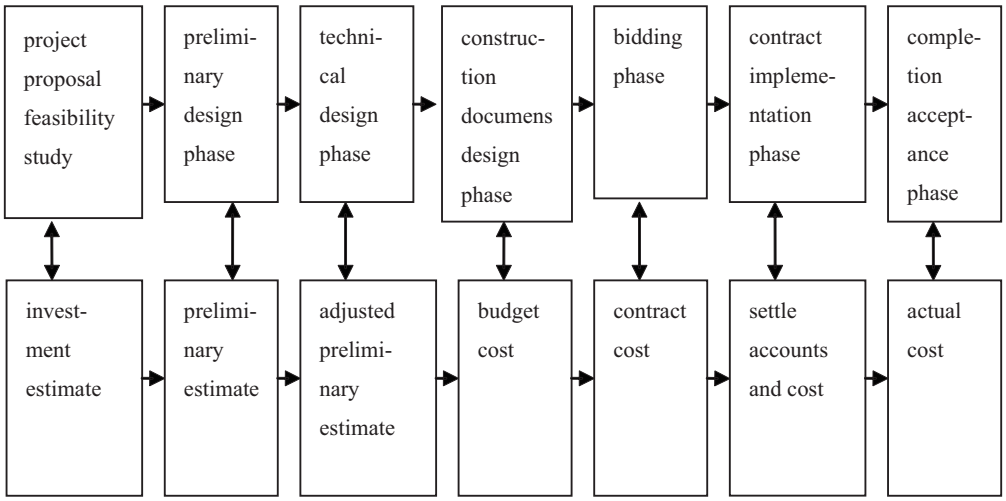


decomposition and combination of a project

The Features of Project Pricing

(1) Each project must be priced **separately**.

(2) Engineering project cost management is a dynamic procedure of cost estimation in the full process of project **implementation**. The following **diagram** shows the dynamic procedures of cost estimation.



schematic diagram of project pricing

Investment estimation, which refers to the process of calculating and determining the investment required for the proposed project beforehand through the preparation of estimate documents in the project proposal and feasibility study stage.

Design estimate, which refers to the process of calculating and determining the project cost according to design intent through the preparation of project estimates **documentation** in the **preliminary** design stage.

Construction budget, which refers to the process of calculating and determining the project cost according to budget documents through construction drawings in the construction design stage.

(3) **Compositionality** quality

The calculation of project cost is the combination of every part of engineering cost.

(4) **Diversity** of valuation methods

Valuation basis varies in different stages of the project, and so does the requirements for **accuracy** of each pricing, and these determine the diversity of **valuation** methods.

(5) **Complexity** of basis

Pricing is impacted by many factors, which contribute to the complexity of valuation basis.

The Basic Methods of Project Pricing

(1) Quota valuation mode (unit price method of construction material)

Engineering cost = ∑(engineering physical quantity×unit price of direct cost)+ indirect cost + profit + tax

(2) valuation mode of bill of quantities (Method of comprehensive unit price)

Engineering cost = ∑(engineering physical quantity×comprehensive unit price) + **stipulated** fees + tax

There exist two project pricing modes: Quota valuation mode and valuation mode of construction quantity bill.

Construction project cost management consists of construction project investment

cost management and engineering price management based on the two **implications** of project cost. The purpose of determining and controlling project cost in every stage of construction is to improve investment **efficiency** and management effect of construction and installation enterprises.

Notes

① From the perspective of investors or owners, for investment control project cost is defined as the total cost of fixed assets investment of the anticipated or actual expenditure of a construction project from conception to completion.

【译文】工程造价是指一项工程建设项目预期开支或实际开支的全部固定资产投资费用，从项目的决策开始，到项目交付使用止。这一含义是从投资者或业主的角度来定义的。在讨论投资控制时，工程造价就是这个概念。

【分析】该句的主语是project cost, 谓语动词是 is defined as 被定义为，称为，the total cost... a construction project 是表语。from conception to completion 从项目的决策开始，到项目交付使用止。from the perspective of 从……的角度。for investment control 对于投资控制来说。

② From the perspective of the contractors, project cost means the price of a constructive contract accepted by the investors and contractors in bidding,which is the actual construction price of a construction project not including various costs in the early and late stage of the project in architecture.

【译文】从承包商角度来定义，建造一个项目的价格是在建筑市场通过招投标，由投资者和建筑商共同认可的价格，即发承包价格。从建筑角度来说，即建造某个建设项目的实际建造价格，不包括建设项目的前期和后期的各种费用。

【分析】accepted by是过去分词短语表示被动的意思，表示价格被接受。which is the actual... in architecture 该句中which 引导非限制性定语从句，对先行词the price of a constructive contract 作进一步说明。not including 不包括。

③ It is also referred to as project price expectedly or actually formed in transactions, namely, the construction and installation engineering price plus total price of a construction project for completion of a project.

【译文】就是工程价格，即为建成一项工程，预计或实际在多种交易中所形成的建筑安装工程的价格和建设工程的总价格。

【分析】该句由两部分组成，be referred to as 被称为，formed in transactions 表示被动的意思，价格被形成，namely 后的句子进一步解释了project price 的含义。

④ The premise of calculating the project cost is to decompose the project, while the pricing of project is the process of the combination of every price.

【译文】工程造价的计算中，对项目的分解过程是工程计价的前提，而工程项目计价过程就是一个逐步组合的过程。

【分析】while 在该句中表示转折。

⑤ Many factors can impact on pricing, which contributes to the complexity of valuation basis.

【译文】由于影响造价的因素多，决定了计价依据的复杂性。

【分析】which 引导非限制性定语从句，代替前半句many factors can impact on pricing. impact on 影响，contribute to 有助于，导致。

Basic Vocabulary

perspective	/pə'spektiv/	*n.*	视角，观点
asset	/'æset/	*n.* [*pl.*]	财产， 资产
investment	/in'vestmənt/	*n.*	投资，投资额
anticipated	/æn'tisipeitid/	*a.*	预期的，预先的
expenditure	/iks'penditʃə/	*n.*	经费，费用，支出额
architecture	/'ɑ:kitektʃə/	*n.*	建筑学(业)
transaction	/træn'zækʃən/	*n.*	交易，业务
installation	/ˌinstə'leiʃən/	*n.*	装置，设备；安装
hierarchical	/ˌhaiə'rɑ:kikəl/	*a.*	按等级划分的
compatible	/kəm'pætəbl/	*a.*	相容的
decomposition	/ˌdi:kɔmpə'ziʃən/	*n.*	分解
combination	/ˌkɔmbi'neiʃən/	*n.*	结合(体)，联合(体)
complex	/'kɔmpleks/	*n.*	综合体
premise	/'premis/	*n.*	前提
subentry	/'sʌbˌentri/	*n.*	小项
separately	/'sepəritli /	*ad.*	分别地，个别地

implementation	/ˌimplimen'teiʃən/	*n.*	履行；完成
diagram	/'daiəgræm/	*n.*	图解，简图，图表
documentation	/ˌdɔkjumen'teiʃən/	*n.*	（总称）文件
preliminary	/pri'liminəri/	*a.*	初步的，预备的
compositionality	/ˌkʌpəziʃə'næliti/	*n.*	组合性
diversity	/dai'və:siti/	*n.*	多样性
accuracy	/'ækjurəsi/	*n.*	准确，精确
valuation	/vælju'eiʃən/	*n.*	定价，估价
complexity	/kəm'pleksiti/	*n.*	复杂，复杂性
stipulate	/'stipjuleit/	*vt.*	规定
implication	/ˌimpli'keiʃən/	*n.*	含义
efficiency	/i'fiʃənsi/	*n.*	效率，功率

Professional Vocabulary

total cost of fixed assets investment	固定资产投资总额
the construction and installation engineering price	建筑安装工程价格
subentry engineering	分项工程
branch engineering	分部工程
single project	单项工程
engineering physical quantity	工程实物量
investment estimate	投资估算
design estimate	设计概算
construction budget	施工图预算
quota valuation mode	定额计价方法
unit price method of construction material	工料单价法
valuation mode of bill of quantities	清单计价方法
comprehensive unit price	综合单价

Exercise

I. Answer the following questions according to the text.

1. What is the definition of project cost?
2. What are the modes of project pricing?
3. What does construction project cost management consist of based on the two

implications of project cost?

II. Match the English in Column A with their Chinese equivalents in Column B.

Column A	Column B
( ) 1. project pricing	a. 工程量清单
( ) 2. unit price	b. 规费
( ) 3. engineering quantity	c. 工程造价
( ) 4. construction drawings	d. 投资控制
( ) 5. direct cost	e. 间接费用
( ) 6. stipulated fee	f. 单价
( ) 7. bill of quantity	g. 工程计价
( ) 8. investment control	h. 施工图纸
( ) 9. indirect cost	i. 直接费用
( ) 10. project cost	j. 工程量

III. Translate the following sentences.

1. Owing to large amount of capital, specialty difference and market dynamic factors, project cost has somewhat uncertainty during the whole construction period.

2. Valuation basis varies in different stages of the project, and so does the requirements for accuracy of each pricing, and these determine the diversity of valuation methods.

3. Construction project cost management consists of construction project investment cost management and engineering price management based on the two implications of project cost.

Learn to Write

Letter of Acceptance
中标通知书

Writing Tips

确定中标单位后，招标单位应与5日内持评标报告到招标管理机构核准，招标管理机构在2日内提出核准意见，经核准同意后，招标单位向中标单位发放“中标通知书”。中标单位收到中标通知书后，按规定提供履约担保，并在规定日期、时间和地点与建设单位进行合同签订。中标通知书的内容应当简明扼要，只要告知招标项目已经由其中标，并确定签订合同的时间、地点即可。

Sample

Letter of Acceptance

Date

To: **name and address of the Contractor**
Subject: **Notification of Award Contract No.**

This is to notify you that your Bid dated **[insert date]** for execution of the **[name of the contract and identification number], as given in the Contract Data** for the Accepted Contract Amount of the equivalent of **amount in numbers and words and name of currency,** as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the Performance Security Form included in Section 9 (Contract Forms) of the Bidding Document.

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Attachment: Contract Agreement

Task

根据以下信息写一份中标通知书:
(1) 合同总额：7 800万欧元
(2) 中标单位：中建一局 China Construction First Building（Group）Corporation Limited
(3) 中标项目：圣彼得堡涅瓦中心项目（Stockmann Nevsky Centre）

Further Study

Function of Cost Estimate

In spite of many types of cost estimate used at different stages of a project, cost estimate can best be classified into three major categories according to their functions. A construction cost estimate serves one of the three basic functions: design, bid and control.

1．Design estimate For the owner or its designated design professionals, the types of cost estimates encountered run parallel with the planning and design as follows:

- Screening estimate (or order of magnitude estimate)
- Preliminary estimate (or conceptual estimate)
- Detailed estimate (or definitive estimate)
- Engineer's estimate based on plans and specifications

For each of these different estimates, the amount of design information available typically increases.

2. Bid estimates For the contractor, a bid estimate submitted to the owner either for competitive bidding or negotiation consists of direct construction cost including field supervision, plus a markup to cover general overhead and profits. The direct cost of construction for bid estimate is usually derived from a combination of the following approaches.

- Subcontractor quotations
- Quantity takeoffs
- Construction procedures

3. Control estimate For monitoring the project during construction, a control estimate is derived from available information to establish:

- Budget estimate for financing
- Budgeted cost after contracting but prior to construction
- Estimated cost to completion during the progress of construction

成本估算的功能

尽管项目不同阶段使用的成本估算有很多类型，根据其功能不同，成本估算最好划分为三大类。建筑成本估算提供以下三种基本功能之一：设计、投标和控制。

1. 设计估算 对于业主或指定的设计专业人员而言，与规划和设计同时进行所涉及的成本估算类型如下：

- 投资估算（或量级估算）
- 初步估算（或概念估算）
- 详细估算（确定性估算）
- 根据设计图纸和规范所做施工预算

对于这些不同的估价，应适当增加些易获得的、有代表性的设计方面的信息量。

2. 投标报价 对于承包人，为竞标或谈判而递交给业主的投标报价的组成有包括现场管理费用在内的直接施工成本，加上包含常规企业管理费用和利润在内的上涨幅度。投标报价中的直接施工成本通常结合下述方法得出：

- 转包商报价单
- 工程量清单
- 施工程序

3. 造价控制 为了施工期间对项目进行监督，根据可利用资料做出造价控制从而确定：

- 融资概算
- 签约后施工前的预算成本
- 施工过程中完成部分的预算价值

Unit 7

Real Estate

Warm-up Questions

1. Look at the pictures and say the types of these buildings.




(1)_____ (2)_____ (3)_____ (4)_____

2. Look at the following words—CBD, SOHO, CLD, CID, MORE. Please guess what's the meanings of the above mentioned words?

Learn to Speak

A Dialogue at the Sales Center

Scene: Sales Center of the Xin Yuan International City Garden

A: Property Sales Girl—Linda

B: Client—Miss Song

Linda: Welcome to the Xin Yuan International City Garden. Miss, may I help you?

Miss Song: Yes, I want to know something details about your building.

Linda: OK. Please take some brochures detailing Xin Yuan International City Garden Phase 1.This way, please, and take a look at the model of the building. Xin Yuan International City Garden has a total of two blocks which are labelled Block 1 and Block 2. Block 1 is housing residence which has a total of twenty-first levels. The twentieth and twenty-first are penthouses. There are four units in one level. The sizes of the units are 100 square meters and 130 square meters. Block 2 is

commercial and residential complex.

Miss Song: Well, let's look at the Block 1. By the way, why is the price between the 8th floor and 12th floor so different?

Linda: It's because of the view.

Miss Song: How many elevators are there?

Linda: There are two elevators.

Miss Song: How about the car-park space?

Linda: There is a total of one hundred and twenty parking lots at the underground garage, in which twelve are for visitors and the rest are for residents.

Miss Song: Any other facilities?

Linda: Sure, look at this two-story building, on the first floor is a recreation quarter. There are two swimming pools, one is for adults and the other one is for children. On the second floor is a gymnasium for resident members only.

Miss Song: When is the completion date?

Linda: The completion date will be on May 6th 2011.

Miss Song: How about the price and the bank mortgage?

Linda: Please check up the price list. The average price is about 6, 000 *yuan* per square meter. There are five different banks that will provide a seventy percent mortgage loan. Also, the developer will offer another ten percent mortgage to purchasers.

Miss Song: How many payment methods are there?

Linda: It's all written on the brochure price list. I believe there will be one right for you. Please hurry up because almost half of the units have already gone.

Miss Song: Thank you. I think I have to talk to my family. Thank you for your help.

Linda: You're welcome.

Read to Know

Real Estate Development

Real estate development is the process by which an entity makes improvements to real property, thereby increasing its value. In legal form the developer may be an individual, but is more often a partnership, limited liability company or corporation. However, anyone involved as a **principal** in such **transaction**s is a property developer by occupation. However, systematic education for real estate development has not truly existed until the last decade as many developers have historically come from career paths

as architecture, finance, city planning, engineering or construction.

There are two major categories of real estate development activity: land development and building development.

Land developers typically acquire natural or "unimproved" land (often referred to raw land, real property with no improvements or **infrastructure**) and improve or alter it with utility connections, roads, earth grading, **covenants** and **entitlements**. Infrastructure improvement provides a base for further development of built improvements. Covenants define the context in which future development of built improvements may take place(often in the form of deed restrictions on particular parcels: a sort of "private zoning code" limited only to those properties). Entitlements are secured legal permissions from regulatory bodies (typically in the form of permits, but sometimes in the form of re-zoning or planned unit developments). Once these improvements have been made to the raw land, it is typically **subdivided** and sold **piecemeal** at a profit to individuals or building developers.

Building developers acquire raw land, improved land, and/or redevelopable property in order to construct building projects. The buildings are then sold entirely or in part to others, or retained as assets to produce cash flow via rents and other means. Some building developers have their own internal departments for designing and constructing buildings (more common among larger developers), while others subcontract these parts of the work to third parties (typical of small developers).

Although there are specific educational programs which are tailored to teaching real estate with an emphasis on development (in the United States, typically MBA programs at university-level business schools), or a few universities that offer a Master of Real Estate Development, however, many development company managers tend to come from architectural, construction, and related field, but an educational background in finance is typically a **prerequisite** for obtaining entry-level employment with an established development company. Real estate development requires extensive and complex financing arrangements to be successful, as few people or organizations have the money to **undertake** development projects on their own.

Real estate development is first and foremost a cash flow business. Real estate is, by its nature, an expensive non-liquid asset. This means that it costs a lot of money to own it, and it can be difficult to sell. In development activity, there are also the added

costs of improvements (typically called "hard costs") and the fees of various and **sundry** consultants necessary to get the work done properly (typically called "soft costs").

Since there are significant **initial** investment requirements, a majority of real estate development projects are financed with a large amount of debt **leverage**. While more leverage increases **potential** profit, it also magnifies risks and builds in a periodic negative cash flow (regular payments on the debt). Projects will generally be profitable if the **upfront** commitment of cash is kept to a minimum and the project can quickly start generating a positive cash flow sufficient to cover debt service.

There are some financing patterns, as follows:

- Private investors(insurance funds, wealthy individuals, joint ventures, etc.).
- Public investors (REITs, share offerings, etc.).
- Private debt(individual loans, bank **mortgage**s, etc.).
- Public debt(redevelopment loans, etc.).
- Private grants(non-profit target **grant**s, etc.).
- Public grants(affordable housing credits, tax **incentive**s, etc.).
- Equity financing(use of cash flows from other projects owned by the developer).

Successful real estate developers can become enormously wealthy due to the large sums of money being transacted and the value of the assets they control. However, because of the non-liquidity of their assets, they also are very often cash-poor. Instability to remain cash **solvent** is the primary cause of business failure for real estate developers.

Notes

① Systematic education for real estate development has not truly existed until the last decade as many developers have historically came from career paths as architecture, finance, city planning, engineering or construction.

【译文】直到过去的十年间，房地产开发的系统性教育才真正存在，当时许多开发商原先都是从建筑师、财务师、城市规划师和工程师转变过来的。

【分析】短语"not... until..."译为"直到……才……"。句中两个as的用法：1.as与when, while都是引导时间状语从句的从属连词，含义都是"当……的时候"。用as

时，主句和从句的动作同时发生，具有延续的含义；2.as作介词，意思是“作为”，“以……身份”。

② Land developers typically acquire natural or “unimproved” land (often referred to raw land, real property with no improvements or infrastructure) and improve or alter it with utility connections, roads, earth grading, covenants and entitlements.

【译文】土地开发商通常都会获得天然的或未经开垦的土地(通常指没有经过改良或基础设施建设的天然的土地和不动产)进行改良或更改，为其添加有用设施、开辟道路、进行土地分级、立下契约和可获得权。

【分析】短语“refer to” 译为“提到；讲起；有关；涉及；参考；查阅”。在此句中，其中“it”指代的是“natural or ‘unimproved’ land”。

③ Although there are specific educational programs which are tailored to teaching real estate with an emphasis on development (in the United States, typically MBA programs at university-level business schools), or a few universities that offer a Master of Real Estate Development, however, many development company managers tend to come from architectural, construction, and related field.

【译文】尽管有针对房地产开发专门制作的教育项目(在美国，特别是商学院大学水平的MBA课程)，或有些大学所颁发的房地产开发专业的硕士学位，然而，许多开发公司的管理者都是来自于建筑、建造和某些相关领域。

【分析】“which”和“that”在句中分别引导定语从句，其先行词分别为“specific educational programs”和“a few universities”。其中短语“tailored to”译为“根据……调整”，例如，tailor to one’s need“使适应特定需要”。

④ This means that it costs a lot of money to own it, and it can be difficult to sell. In development activity, there are also the added costs of improvements themselves(typically called “hard costs”) and the fees of various and sundry consultants necessary to get the work done properly (typically called “soft costs”).

【译文】这就意味着经营它需要大量资金，但出售却较难。而在开发的过程中，还会有不断改进的额外费用(通常被称为“硬费用”)以及为了使工作进一步完美化所需的各种各样的资讯费(通常被称为“软费用”)。

【分析】在本句中“that”引导的是宾语从句，“get sth done”译为“使……被做”。

Basic Vocabulary

principal	/ˈprinsəpəl/	*a.*	最重要的
		n.	负责人，校长；资本；主角
transaction	/trænˈzækʃən/	*n.*	交易，业务
infrastructure	/ˈinfrəˈstrʌktʃə/	*n.*	结构，基础设施
covenant	/ˈkʌvinənt/	*n.*	契约
		v.	立书保证
entitlement	/inˈtaitlmənt/	*n.*	权利
subdivide	/ˈsʌbdiˈvaid/	*v.*	再分，细分
piecemeal	/ˈpi:smi:l/	*a.*	零碎的
prerequisite	/pri:ˈrekwizit/	*n.*	先决条件，前题
undertake	/ˌʌndəˈteik/	*vt.*	承担，着手做；同意，答应，保证
sundry	/ˈsʌndri/	*a.*	种种的
initial	/iˈniʃəl/	*a.*	开始的
		n. [*pl.*]	(姓名等的)首字母
leverage	/ˈli:vəridʒ/	*n.*	力量，影响；杠杆作用，杠杆的力量
potential	/pəˈtenʃəl/	*a.*	潜在的，可能的
		n.	潜力，潜能
upfront	/ʌpˈfrʌnt/	*ad.*	预交的，预付的
mortgage	/ˈmɔ:gidʒ/	*n.*	抵押，抵押借款
		vt.	抵押
grant	/grɑ:nt/	*n.*	拨款，授予物
		vt.	授予，同意，准予
incentive	/inˈsentiv/	*n.*	刺激，鼓励，激动
solvent	/ˈsɔlvənt/	*a.*	有偿付能力的，不负债的

Professional Vocabulary

interest	产权
cash flows	现金流量
cost of development	开发费
finance costs	融资成本
location classification	地段等级

floor area	建筑面积
plot ratio	容积率
site coverage	建筑密度
project approval	项目许可
planning approval	规划许可
urban planning	城市规划
public bidding	公开招标
state-owned land	国有土地
reconstruction of old area	旧区改造
fiscal allotment	财政拨款
planning permit of construction engineering	建设工程规划许可证
grant or transfer	出让或转让
depreciation allowances	折旧费

Exercise

I. Answer the following questions according to the text.

1. What is the real estate development?
2. What are the two major categories of real estate development activity?
3. Why is real estate development called a non-liquid asset?

II. Match the English in Column A with their Chinese equivalents in Column B.

Column A	Column B
( ) 1. deed restrictions	a. 债务杠杆
( ) 2. re-zoning	b. 财产税
( ) 3. non-liquid asset	c. 房屋空置率
( ) 4. debt leverage	d. 文契约束
( ) 5. pension funds	e. 政策性住房
( ) 6. REIT(real estate investment trust)	f. 城镇住房公积金
( ) 7. tax incentive	g. 拆迁补偿费
( ) 8. property tax; estate(or capital) duty	h. 再分区
( ) 9. housing vacancy rate	i. 房屋置换
( ) 10. compensation for demolition	j. 保险金
( ) 11. buy or exchange houses	k. 非流动资产
( ) 12. policy-related house	l. 税收鼓励

( ) 13. insurance funds m. 抚恤金

( ) 14. urban housing provident fund n. 房地产投资信托公司

III. Translate the following sentences.

1. Real estate development is the process by which an entity makes improvements to real property, thereby increasing its value.

2. Real estate development is first and foremost a cash flow business. Real estate is, by its nature, an expensive non-liquid asset.

3. Successful real estate developers can become enormously wealthy due to the large sums of money being transacted and the value of the assets they control.

Learn to Write

Lease of House Contract
房屋租赁合同

Writing Tips

房屋租赁合同是房屋出租人和承租人双方签订的关于转让出租房屋的占有权和使用权的协议，其内容是出租人将房屋交给承租人使用，承租人定期向出租人支付约定的租金，并于约定期限届满或终止租约时将其房屋完好地归还给出租人，其规定了租赁双方的权利与义务，必须具备以下条款：

1. 当事人姓名或名称及住所。当事人指出租人和承租人；
2. 标的物，即租赁的房屋，包括地址、面积、范围、装修及设施状况；
3. 租赁用途，即承租人租赁房屋的目的；
4. 租赁期限；
5. 租金；
6. 修缮责任；
7. 变更与解除合同的条件。

Sample

Lease Contract

Lessor (hereinafter called party A):**********

Lessee (hereinafter called party B):********

According to Contract Law of PRC and other regulations, the two parties through consultation hereby agree upon, and shall be bound by, the following terms:

Article 1: The leasing item is_____located in Erqi District of Zhengzhou.

Article 2: Lease term is _____ years from _____to _____.

Article 3: The area of item is _____square meters and the rent of which is_____per square meter every year. The above rent adds up to _____yuan a year, RMB _____yuan per month on average.

Article 4: Party B should pay rent to party A at the prescribed time before putting into use. The rent of the first three months shall be paid within 3 days from the day on which this agreement is reached.

Article 5: Power utilization shall be within the electric capacity of _____every square meter, utilization of water should be within _____tons every month. Within the above scope, party B pays the electricity bills every month by the rate of RMB _____ *yuan* KWH(kilowatt-hour) which shall be paid at the latest on every 30th. Beyond the scope, then party B shall undertake all the responsibilities and make up the loss of party A which is caused by overuse of power and water.

Article 6: Regulations about other fees.

Party B undertakes a fee of RMB 1, 000 *yuan* monthly for ensuring public security.

Party B pays party A RMB 400 *yuan* monthly as the fees for the public affairs such as maintenance of the environment and sanitation in party A as well as landscaping, etc.

Article 7: Party B should cover insurance for his property, and take proper measures to guard against theft, fire and ensure public security. In case of accidents, robbery, fire, etc or force majeure (like earthquake, flood...etc.), party B undertakes the loss by himself.

Article 8: In case of damage of house and equipment caused by party B, he shall make repairs immediately or bear the compensation accordingly. Party A shall inform party B in written notice seven days in advance in case he intends to maintain the leasing items or auxiliary facilities, party B should cooperate readily.

Article 9: If party B intends to carry on reformation of the houses or add equipment, he shall inform party A in advance to get written approval, and apply to the concerning departments before starting the procedure.

Article 10: Within the leasing term, party A has no right to sell or transfer for this item.

Article 11: This contract will be effective after being signed by both parties. Any party has no right to terminate this contract without another party's agreement. Anything not covered in this contract will be discussed separately by both parties.

Article 12: During the lease term, any party who fails to fulfill any article of this contract without the other party's understanding will be deemed to breach the contract. Both parties agree that the default fine will be RMB _____ *yuan*. In case the agreement cannot be reached, any party may summit the dispute to the court that has the jurisdiction over the matter.

Article 13: There are 2 originals of this contract. Each party will hold 1 original(s). Other special terms will be listed bellows:

_____

_____

_____

Party A(signature):
ID No.:
Address:
Date:

Party B(signature):
ID No.:
Address:
Date:

Task

According to the above article, please fill in this form.

Details Form for Leasing

Lessor	
Lessee	
Leasing item	
Leasing term	
Leasing area	
Rent(per month)	
Details :(you can write something that we should pay attention to)	

Further Study

The Brief Introduction of Ocean City (Tianjin)

Address： Hujiayuan along Jin-Tang Highway, Tanggu District, Tianjin (across from Huabei Taoci)
Telephone：+86（022）66580555/665
Project Website：http://www.tjoceancity.com.cn/

Ocean City (Tianjin) is situated at the heart of the Binhai Development Zone in Tianjin. To the east is the Middle Ring West Road; to the south is the Jin-Tang Highway, conveniently linked with the Development Zone and Tanggu District. The Jin-Bin Light Rail Hujiayuan Station is just round the corner, it is just a half-hour drive to the downtown areas of Beijing and Tianjin. The project occupies an area of 68 hectares, with a GFA of 1,765,255 square meters. The entire development is focused on high end residences and has nearly 100,000 square meters of supporting public infrastructure. It is an integrated high class community with residential, commercial, entertainment and leisure elements. Ocean City (Tianjin) of the future will grow in tandem with the Binhai New District to become another glamorous high class mega community with limitless growth potentials.

远洋城(天津)项目简介

地址：天津市塘沽区胡家园津塘公路段（华北陶瓷对面）
电话：+86（022）66580555/665
项目网站：http://www.tjoceancity.com.cn/

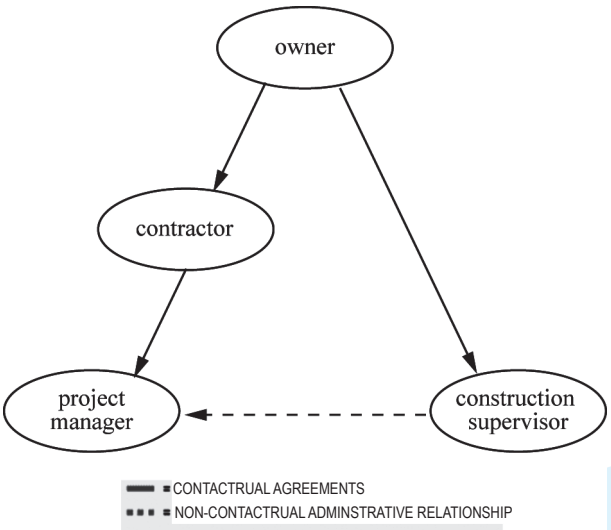
远洋城（天津）位于滨海新区核心区，东侧紧邻中环西路，南侧紧邻津塘公路，与开发区和塘沽区交通联系便利，津滨轻轨胡家园站近在咫尺，半小时车程直达北京及天津中心城区。项目总占地面积68公顷，地上总建筑面积1, 765, 255平方米，整体规划高端住宅为主体、兼有近100, 000平米的配套公建，是集居住、商业、娱乐、休闲为一体的综合性高档社区。未来的远洋城将与滨海新区共同成长，成为天津又一令人瞩目的超大规模高尚社区，升值潜力不可限量。

Unit 8

The Main Bodies of the Construction

Warm-up Questions

1. What are the main bodies of the construction?
2. According to the graph, tell the relations among them.



Learn to Speak

John: **Supervision Engineer**
Mike: **Contractor**

(It's a summer morning. The temperature is about 39℃. John comes to the construction site and talks with Mike about the project.)

John: Morning, Mike.

Mike: Morning, John.

John: I find some of your workers don't wear the safety helmet.

Mike: Oh, really? I guess maybe the weather is too hot for them.

John: But compared with the precious life and according to the regulations, they should wear the safety helmet.

Mike: Yes, you are right. I'll warn them after a while.

John: There's another thing. The owner thinks the windows of second floor should be bigger, well, about 1, 800 × 1, 500mm.Then they can get sufficient daylighting.

Mike: But we've done it already.

John: I know, but I don't think enlarging the size will take a lot of time.

Mike: Sir, we are beating the deadlines.

John: Come on, don't play tricks with me. It will only take about 2 days to finish it.

Mike: OK, just do it as the owner wants.

John: In accordance with the contract, we should finish the main building by the end of next month. But it seems difficult to finish it according to the current progress.

Mike: Right, the continuous high-temperature influences the schedule. We also hope to finish it on time.

John: Well, what do you think of beginning the work at 5:00 a.m. from tomorrow? The workers can have one more hour to rest at noon. Besides you extend one more hour in the evening.

Mike: OK, only in this way can we finish it on time.

John: OK. See you.

Mike: See you.

Read to Know

Main Bodies of the Construction

Owner, **contractor**, construction **supervisor** and project manager are the main bodies of construction. The relationship among them is trustor-trustee relationship based on the **contract**. The relationships between the contractor and owner, construction supervisor and project manager are the **client** and **trustee**. The relationship between the contractor and contractor is **subordinate** and **superior**, but now there is also the relationship of client and trustee based on the contract.

Owner

Owner here refers to the owner of the property. Owners may be natural persons, legal persons and other organizations, may be the citizens or organizations of its nation and can also be a foreign citizen or organization.

In construction project contract, construction unit is also called the owners or project owner. It refers to the main **investment** subject or the **investor** in the construction project, it is also the main body of the construction project management.

Contractor

The contractor shall design, **execute** and complete the works in accordance with the contract, and shall **remedy** any **defects** in the works. When completed, the works shall fit for the purposes for which the works are intended as defined in the contract.

The contractor shall provide the plant and contractor's documents specified in the contract, and all contractor's personnel, goods, **consumables** and other things and services, whether of a **temporary** or **permanent** nature, required in and for this design, execution, completion and remedying of defects.

The work shall include any work which is necessary to satisfy the employer's requirements, or is implied by the contract, and all works which although not mentioned in the contract are necessary for **stability** or for the completion, or safe and proper operation of the works.

The contractor shall, whenever required by the employer, submit details of the arrangements and methods which the contractor proposes to adopt for the execution of the

works. No significant **alteration** to these arrangements and methods shall be made without this having previously been notified to the employer.

Construction Supervisor

Construction supervisor refers to the legally qualified engineering supervision unit who supervises the construction process in construction quality, construction duration and use of construction funds of the contractor on behalf of client to supervise the construction process in accordance with the entrustment of client and based on laws, administrative regulations and relevant technical standards for construction, design documents and construction contracts.

Project Manager

During the design phase, the construction manager's suggestion involves the performance criteria, site conditions, and availability of materials and labor. Information pertaining to temporary job facilities is also provided. Where long lead-time machinery, equipment, or materials are needed, construction manager will make arrangements for their procurement and delivery. During the design process, construction manager prepares preliminary, interim, and final project budgets and construction schedules.

During the construction operations, project manager assumes the responsibilities for the supervision, coordination, and administration of the project. Of top importance in this regard are coordinating the work of the separate contractors, checking the actual progress of the project against an established time schedule, and exercising every effort to keep the cost of the work within the approved budget. Also often involved are quality control, safety, progress payments, contract changes, claims, expediting the construction progress, shop drawings, acceptance testing and so on. The extent of services to be provided by the construction manager can be tailored to suit the individual owner's requirements.

Notes

① The relationship between the project manager and contractor is subordinate and superior, but now there is also the relationship of client and trustee based on the contract.

【译文】项目经理与承包商之间是上下级关系，目前也会出现建立在合同基础上的委托

人与被委托人关系。

【分析】based on the contract 是过去分词短语做后置定语，修饰relationship，相当于定语从句which is based on...。如：The marriage based on true love often brings happiness. 基于真爱的婚姻常常会带来幸福。

② The contractor shall design, execute and complete the works in accordance with the contract, and shall remedy any defects in the works.

【译文】承包商应该按照合同设计、实施和完成工程，并修补工程中的任何缺陷。

【分析】in accordance with 按照；与……有关的。如：International business should be conducted in accordance with the law of nations. 国际间的事务往来要遵守国际法。

③ The work shall include any work which is necessary to satisfy the employer's requirements, or is implied by the contract...

【译文】工程应该包括为满足雇主要求或者合同隐含要求的任何工作。

【分析】which在本句中引导的是一个定语从句，修饰any work。如：This is the watch which I am looking for. 这就是我要找的那块手表。

④ No significant alteration to these arrangements and methods shall be made without this having previously been notified to the employer.

【译文】若事先未通知业主，对这些安排和方法不得做重要改变。

【分析】alteration to 改变。如：There is a structural alteration to the building. 这座建筑物在这儿有一处结构上的改变。

⑤ Construction supervisor... on behalf of client to supervise the construction process... .

【译文】建设工程监理……代表发包人对工程建设过程实施监督。

【分析】on behalf of 代表。如：At the airport he read an address of welcome on behalf of the association. 在机场上他代表该协会致了欢迎词。

Basic Vocabulary

owner	/'əunə/	*n.*	所有人，物主，业主
contractor	/kən'træktə/	*n.*	立契约的人，承包商
supervisor	/'sju:pəvaizə/	*n.*	监督人，管理人，检查员，督学，主管人，导师

contract	/ˈkɔntrækt/	*n.*	合同，契约，婚约，合约
		v.	订合同
client	/ˈklaiənt/	*n.*	客户，委托人
trustee	/trʌsˈtiː/	*n.*	受托人，理事
subordinate	/səˈbɔːdinət/	*n.*	属下，附属物
		a.	下级的，次要的，附属的
		vt.	使居下位，使服从，把……放在次要
superior	/sjuːˈpiəriə/	*n.*	上级，高手，上标
		a.	上层的，上好的，出众的，高傲的
investment	/inˈvestmənt/	*n.*	投资，投资额，投入
investor	/inˈvestə/	*n.*	投资者
execute	/ˈeksikjuːt/	*vt.*	执行，处决，实行，完成
remedy	/ˈremidi/	*n.*	药物，治疗法，补救
		vt.	治疗，补救，矫正
defect	/diˈfekt/	*n.*	缺点
		vi.	背叛
consumable	/kənˈsjuːməbl/	*a.*	可消费的
		n.	消费品
temporary	/ˈtempərəri/	*a.*	暂时的，临时的
permanent	/ˈpəːmənənt/	*a.*	永久的，持久的
stability	/stəˈbiliti/	*n.*	稳定性
alteration	/ˌɔːltəˈreiʃən/	*n.*	改变，变更

Professional Vocabulary

construction management	施工管理
construction project contract	建设工程合同
engineering project supervisor	工程监理
construction supervision system	监理制度
engineering report; project report	工程报告
change in the work	工程变更
schedule drawing	工程图
invitation for bid	邀标

planning approval	规划许可
planning permit of construction engineering	建设工程规划许可证
public bidding	公开招标
quality assurance	质量保障
quality control	质量控制
statement of work	工作说明
planned start date	计划开始日期
late finish date	最晚完成日期
valuation	估价

Exercise

I. Answer the following questions according to the text.

1. What's the relationship between the project manager and contractor?
2. What shall contractor do according to the text?
3. How does the construction supervisor work on behalf of the client?

II. Match the English in Column A with their Chinese equivalents in Column B.

Column A	Column B
( ) 1. construction project contract	a. 建设工程监理
( ) 2. contractor document	b. 技术标准
( ) 3. technical standard	c. 建设资金
( ) 4. construction quality	d. 工程进度付款
( ) 5. design document	e. 建设工程合同
( ) 6. construction supervision	f. 在线协同工作
( ) 7. construction funds	g. 施工质量
( ) 8. progress payment	h. 设计文件
( ) 9. online collaboration	i. 施工进度表
( ) 10. time schedule	j. 承包商文件

III. Translate the following sentences.

1. Owners may be natural persons, legal persons and other organizations, may be its own citizens or organizations and can also be a foreign citizen or organization.
2. The contractor shall, whenever required by the employer, submit details of the arrangements and methods which the contractor proposes to adopt for the execution

of the works.

3. During construction operations, project manager assumes the responsibilities for the supervision, coordination, and administration of the project.

Learn to Write

Contract Agreement
合同协议书

Writing Tips

组成整个国际工程合同的文件十分复杂，但在国际工程合同文件中，往往有一份合同协议书，在此协议书中，要简单列出合同双方签订合同协议书的背景、对合同文件中措辞和用语的含义的说明、组成协议书的文件构成（即整个合同文件的各个组成部分）、双方的相互承诺等。在合同文件中加入这一份协议书，有时是业主所在国的法律要求，有时是出于惯例做法。目的是对构成整个合同的各个文件的汇总和说明。

Sample

Contract Agreement

This Agreement is made on the _____ day of _____

Between _____ **[name of Employer]** of _____ **[mailing address of Employer]** (hereinafter called "the Employer") of the one part, and _____ **[name of Contractor]** hereinafter called "the Contractor") of the other part.

Whereas the Employer desires that the Works known as _____ should be executed by the Contractor, and has accepted a Tender by the Contractor for the execution and completion of these Works and the remedying of any defects therein.

The Employer and the Contractor agree as follows:

1. In this Agreement words and expression shall have the same meanings as are respectively assigned to them in the Conditions of Contract hereinafter referred to.

   The following documents shall be deemed to form and be read and construed as part of this Agreement:

   a. The Letter of Acceptance dated _____

   b. The Letter of Tender dated _____

   c. The Addenda Nos _____

   d. The Conditions of Contract

   e. The Specification

   f. The Drawings, and _____

g. The Completed Schedules

2. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity with the provisions of the Contract.
3. The Employer hereby covenants to pay the Contractor, in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price at the times and in the manner prescribed by the Contract.

In witness whereof the parties hereto have caused this Agreement to be executed the day and year first before written in accordance with their respective laws.

SIGNED by: _____ SIGNED by: _____

For and on behalf of the Employer in the presence of For and on behalf of the Contractor in the presence of

Witness: _____ Witness: _____

Name: _____ Name: _____

Address: _____ Address: _____

Date: _____ Date: _____

Task

Suppose you are the boss of Shenzhen ABC Construction Co., LTD, please finish the above Contract Agreement.

Further Study

监理证书

SQC

CERTIFICATE OF CONFORMITY OF QUALITY MANAGEMENT SYSTEM CERTIFICATION

Certificate 03107Q10225R1M-1

This is to certify the quality management system of

FUJIAN HUADA ENGINEERING CONSTRUCTION SUPERVISION COMPANY

Add:NO.39 WUYIBEI ROAD,FUZHOU CITY,FUJIAN PROVINCE,CHINA

is in conformity with

GB/T19001-2000 - ISO9001:2000 standard

This certificate is valid to the following product(s)/service

FOREST INDUSTRY AND ECOLOGIC ENGINEERING,HOUSE STRUCTURAL ENGINEERING BUILDING SUPERVISE

Date of Issue : 05-17 2007

Date of Expiry: 05-16 2010

Director:

Beijing San Xing 9000

Quality Certification Body

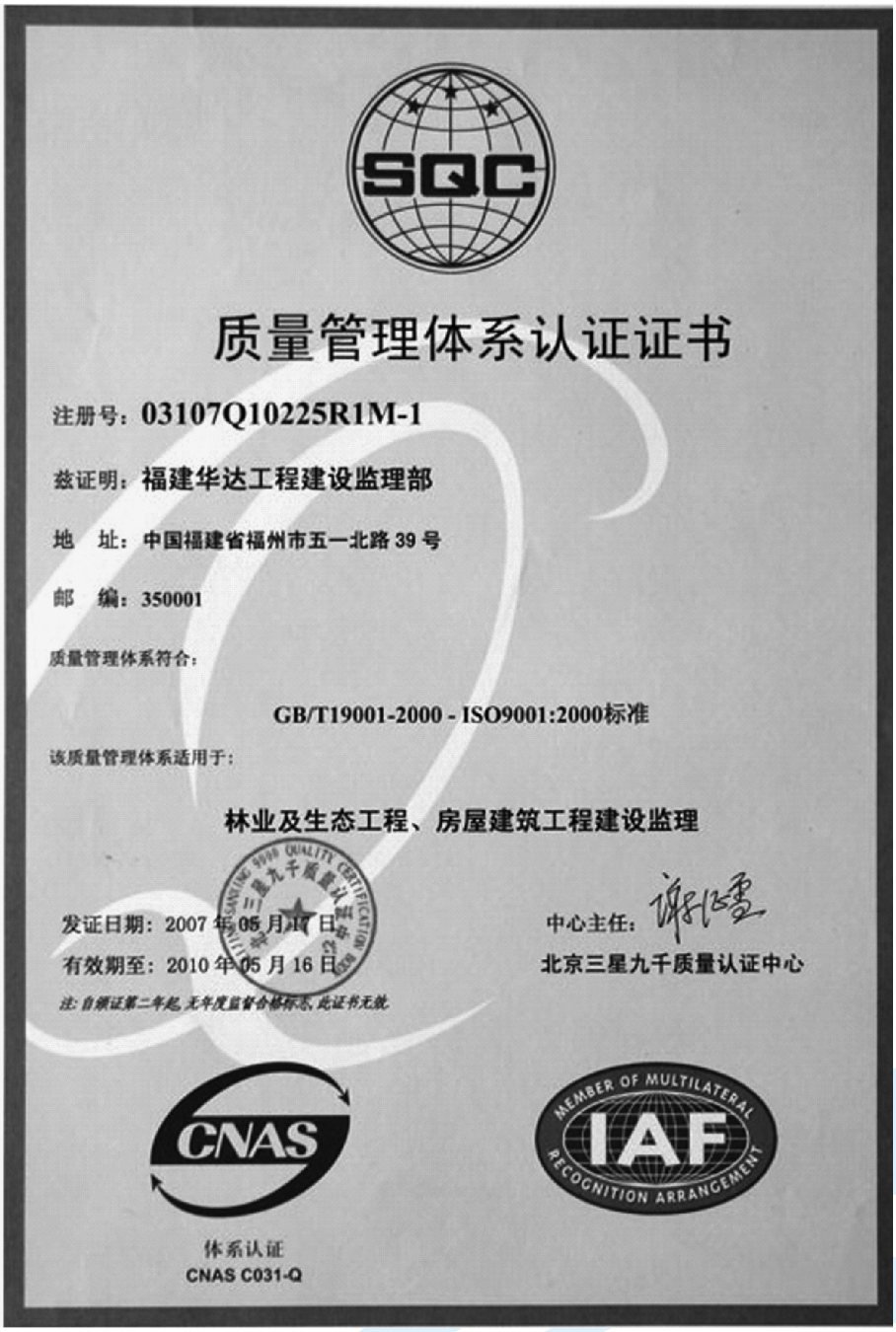
Note:the certificate will be invalidity without mark of conformity of annually supervision since the second year of validity.

CNAS

MANAGEMENT SYSTEM

CNAS C031-Q

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF



SQC

质量管理体系认证证书

注册号：03107Q10225R1M-1

兹证明：福建华达工程建设监理部

地　址：中国福建省福州市五一北路 39 号

邮　编：350001

质量管理体系符合：

GB/T19001-2000 - ISO9001:2000标准

该质量管理体系适用于：

林业及生态工程、房屋建筑工程建设监理

发证日期：2007 年 05 月 17 日

有效期至：2010 年 05 月 16 日

中心主任：

北京三星九千质量认证中心

注：自颁证第二年起，无年度监督合格标志，此证书无效

CNAS

体系认证

CNAS C031-Q

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT

IAF

Architecture Culture Link(建筑文化链接)

Passage 1

Yuelu Academy

The gate was formally built at the time of the Song Dynasty, and was then called central gate. The present structure was renovated in the 7th year of Tongzhi reign of Qing Dynasty, adopting the structure of a General Gate of southern China. The characters "Yuelu Academy" on the horizontal tablet were inscribed by Emperor Zhen Zong, the emperor of Song Dynasty. Yuelu Academy is one of the four famous academies in China. It was established on the basis of monks running school by Zhudong, the magistrate of Tanzhou prefecture in 976A.D., at the time of Northern Song Dynasty. The academy has witnessed a history of more than one thousand years without a break, so it was called a "one-thousand-year-old academy".

Located at the heart of the academy, the lecture hall is the most important place for teaching and momentous ceremony as well as the core of all construction of the academy. The hall had 5 lecture rooms when it was first built in the 9th year of Kaibao reign, northern Song Dynasty. In the 6th year of Qiaodao reign, southern Song Dynasty, the famous idealist Zhangshi and Zhuxi made a joint lecture here, which was the first joint lecture in the Confucian academies of China. Under the foreside brim of the hall is a horizontally-inscribed board "Seeking truth from the facts" written by Bing Bucheng, the principle of the industrial school. He treated it as a school motto in order to encourage students of the academy to be realistic in doing everything throughout their lives so as to judge wisely.

In the center of the hall are two gilding inscribed wooden boards. One reads "Learn before you can probe the infiniteness of the universe." Emperor Kangxi of Qing Dynasty inscribed it to encourage the idealists to advocates their philosophy and to improve their self-cultivation. The second was inscribed by Emperor Qianlong and it reads "The doctrines taught here in the south are genuine Confucian doctrines." This is the highest praise the academy could receive from the perspective of the advocates of idealism, indicating the essential status of the academy in the history of the idealism.

岳 麓 书 院

岳麓书院的大门始建于宋代，旧称“中门”，清代同治7年进行过翻修，采用的是南方将军门式的结构。门上的匾额是宋朝皇帝真宗所赠。岳麓书院是中国古代四大书院之一。北宋开宝九年（公元976年），潭州太守朱洞在僧人办学的基础上，正式创立岳麓书院。历经千年，弦歌不绝，故世称“千年学府”。

讲堂位于书院的中心位置，是书院的教学重地和举行重大活动的场所，也是书院的

核心部分。自北宋开宝九年（976）岳麓书院创建时，即有“讲堂五间”。南宋乾道六年（1167），著名理学家张栻、朱熹曾在此举行“会讲”，开中国书院会讲之先河。檐前悬有“实事求是”匾。民国初期湖南工专校长宾步程撰。校长将其作为校训，旨在教育学生崇尚科学，追求真理。

大厅中央悬挂两块鎏金木匾：一为“学达性天”，由康熙皇帝御赐，意在勉励张扬理学，加强自身的修养；二为“道南正脉”，由乾隆皇帝御赐，它是皇帝对岳麓书院传播理学的最高评价，表明了岳麓书院在中国理学传播史上的地位。

Passage 2

Chengde Mountain Resort

Chengde Mountain Resort, also known as Rehe Temporary Palace, is situated in Chengde City of Hebei Province. It was originally built for the royal families of Qing Dynasty to spend the hot summer months and to handle political mandate. The mountain resort is characterized by its simplicity and elegance. It consists of numerous palaces, the largest royal garden in China and wonderful scenery, combined with a pleasant climate.

The Mountain Resort is divided into four parts: the Palace Area, Lake Area, Plain Area and Mountain Area. The Palace Area lies in the south part of the Mountain Resort and is a concentration of palaces where the royal families lived. It covers on area of 100,000 sq meters, consisting of four main complexes: the Main Palace, the Pine-Crane Hall, the Ease Palace (damaged) and the Pine Soughing Valley.

The Lake Area lies to the north of the Palace Area. Dotted with eight islets, it is divided into several sections of different sizes. In total there are eight lakes in the Lake Area, respectively called Cheng Lake, Mirror Lake, Ruyi Lake, Upper Lake, Lower Lake, Silver Lake, Half-moon Lake and Inner Lake. Rehe spring is famous for its crystal-clear wave.

The Plain Area is located at the foot of the mountain, north of the Lake Area. The plain is a vast area, and is covered with thick grass and trees. The plain area consists of three sections: a garden populated by various trees in the east, a vast grassland for riding horses in the west and a group of temples in the north. The west of the Plain Area is called the “Horse Racing Grassland”, where Emperor Qianlong used to hold barbecues with the chieftains of minorities.

The Mountain Area, located in the northwest of the Mountain Resort, accounts for 80% of the total area. The mountain area comprises four valleys: Filbert Valley, Pine Valley, Pear Valley and Pine-cloud Valley, which run from south to north. The mountain peaks surrounding the area form a natural curtain which impedes the cold wind blowing in from Northwest China.

承德避暑山庄

承德避暑山庄又名热河行宫，位于河北省承德市。避暑山庄最初是为清代皇室夏日避暑和处理政务所建的行宫，山庄以朴素淡雅为格调，内有无数座宫殿和中国最大的皇家花园。整个区域风景如画，气候宜人。

承德避暑山庄的建筑布局分为四大部分：宫殿区、湖区、平原区和山区。宫殿区建于南端，是皇帝处理公务和皇室居住的场所。宫殿占地10万平方米，包括正宫、松鹤斋、万壑松风和东宫（已毁）四组建筑。

湖区位于宫殿区之北，有大小岛屿八处，即：澄湖、镜湖、如意湖、上湖、下湖、银湖、半月湖及内湖，把湖区分成几个大大小小不同的部分，热河温泉以其透明似水晶的水而闻名。

平原区位于山脚，湖区的北部。广阔的平原区主要是茂盛的草地和树林，可以分成三个区域：东部林地、西部草原和北部寺庙。平原区的东边是万树园，西边是试马埭，乾隆皇帝曾在这里设宴款待少数民族的首领。

山区位于山庄西北部，占整个园林面积的80%。由四条由南而北的沟壑组成：榛子峪、松峪、梨树峪和松云峪。高耸的山峰好似天热屏障，阻挡西北寒风的侵袭。