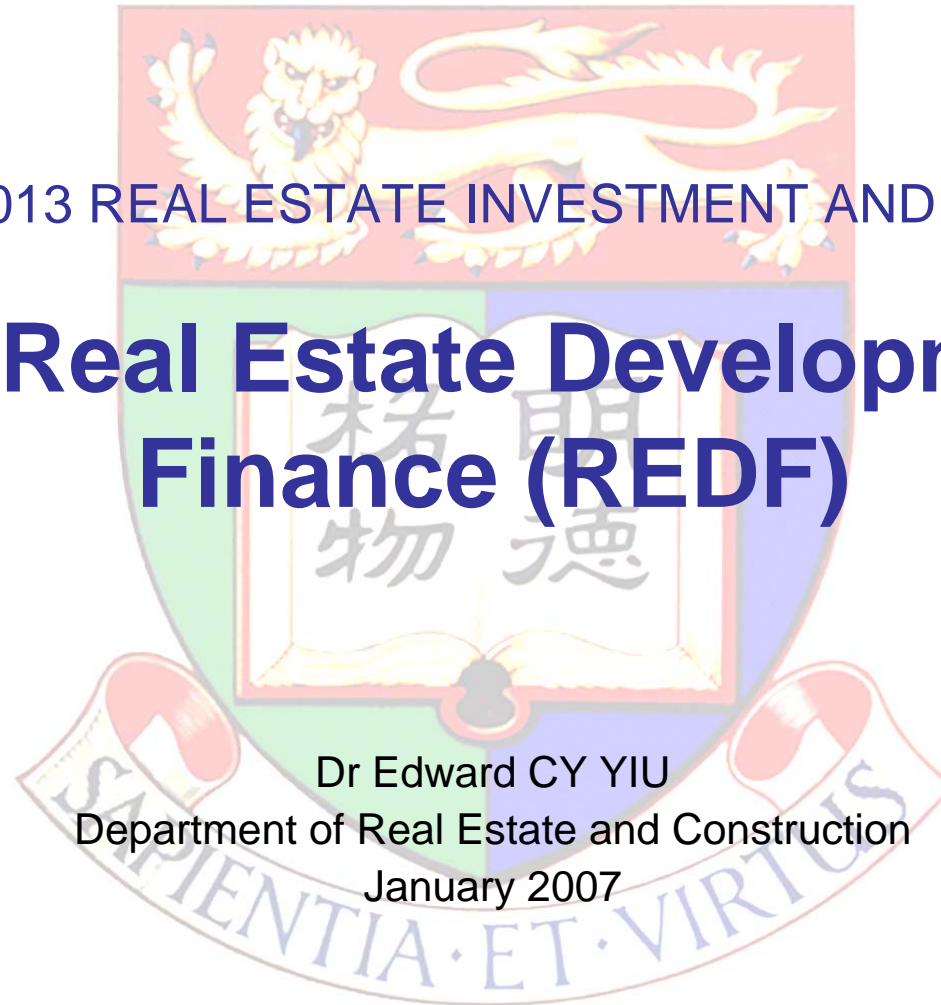


RECO6013 REAL ESTATE INVESTMENT AND FINANCE

## 3.2 Real Estate Development Finance (REDF)

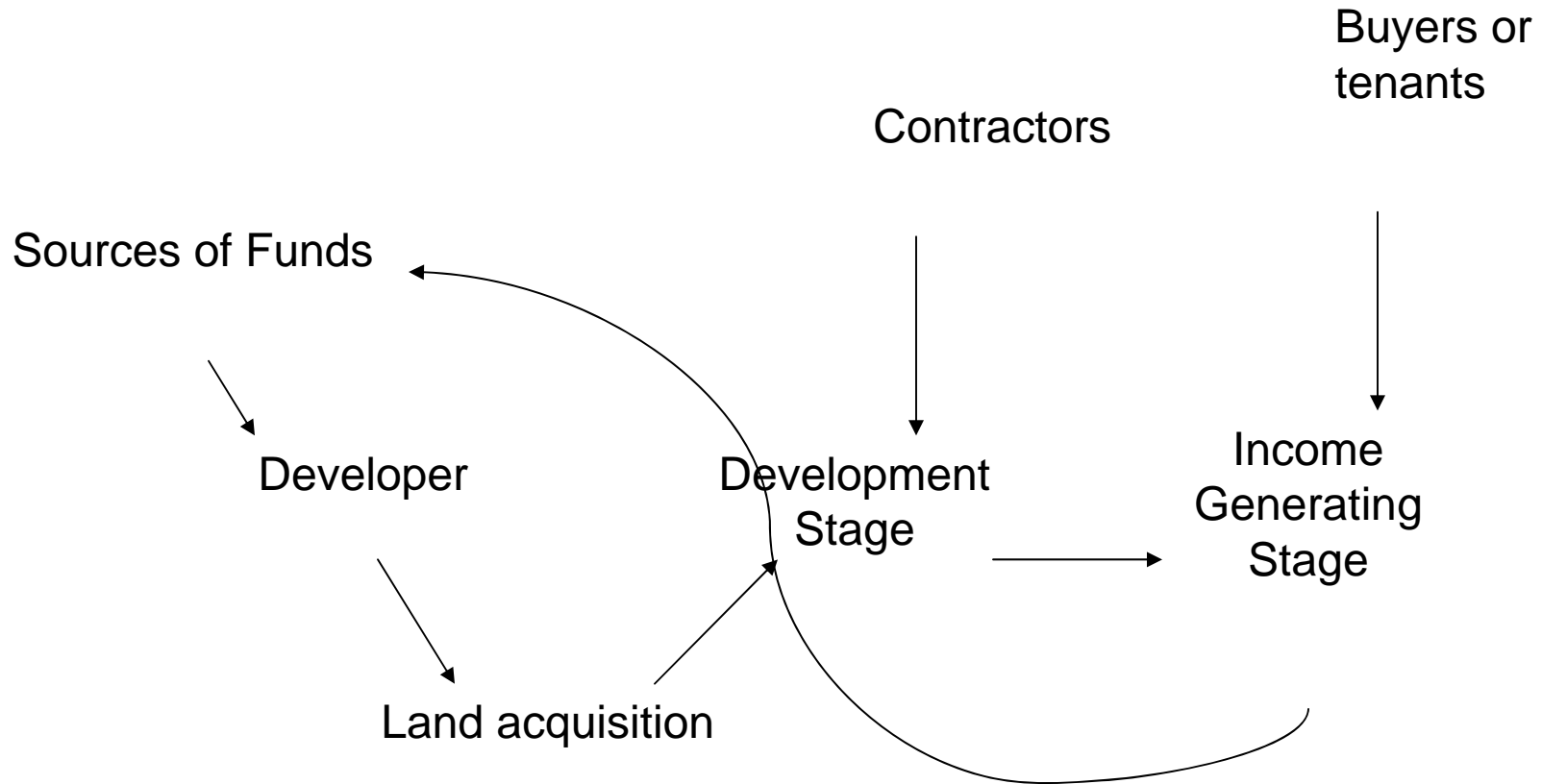


Dr Edward CY YIU

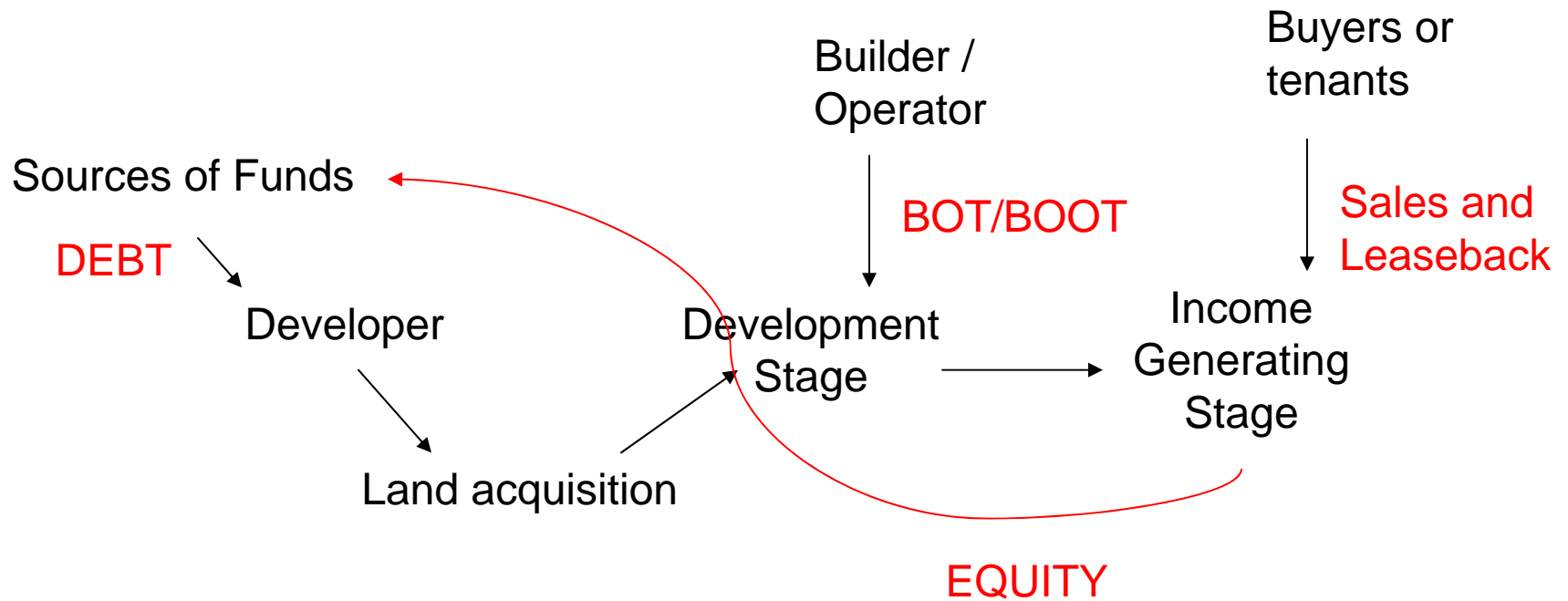
Department of Real Estate and Construction

January 2007

# Real Estate Development



# Real Estate Development

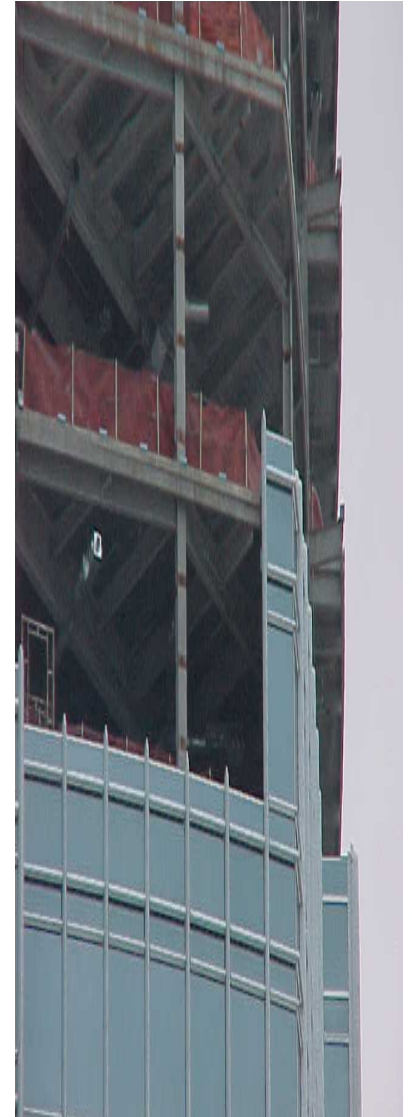


# Feasibility Study

- Technical Feasibility
  - Design and construction
- Financial Feasibility
  - Costs (fund raising)
  - Incomes (sell or lease)
  - Maintenance and Management
- Social, Environmental and Legal Feasibility
  - Master Layout Plan
  - Traffic Impact Assessment
  - Environmental Impact Assessment
  - Comply with regulations

# Sources of Capital for Development

- Finance by cash / assets
  - Paid before acquisition
  - Paid after acquisition
  - Paid by installment / interim payment / milestone / lease
- Finance by loans
  - Bank / institutional loan
  - Issuance of shares / bonds / futures / options / REITs
- Finance by sub-letting land interests
  - Sale and Leaseback
  - Joint Venture (PPP/PFI)
  - Build-Operate-Transfer (BOT)
  - Build-Own-Operate-Transfer (BOOT)
  - Sale of land promises (Naming Rights / Roof-top Antenna / External Wall Advertisement, etc.)



# Pros and Cons of different sources

- Finance by cash / assets
  - Pros
    - Certainty
    - No liability
    - Full control of land
  - Cons
    - Immediate drain of resources
    - Fluctuated cash flow
    - Restricted opportunity
    - Negative equity / illiquid



# Pros and Cons of different sources

- Finance by loans

- Pros

- Steady cash flow
    - Risk sharing
    - Default option / Prepayment option
    - Tap-in any opportunity
    - Better control of quality and asset specificity (eg. UK government project pay by government 30-year bonds)

- Cons

- Liability / liable to be liquidated
    - Increasing cost of loan (Credit Rating)
    - Collateral at risk



# Pros and Cons of different sources

- Finance by land interests
  - Pros
    - No cash drain
    - Ultimate ownership of land retained (no resource drain except time)
    - Own the development at no construction and operation costs
    - Risk sharing
    - Profit making by attracting value-added developers
  - Cons
    - Exercised land option
    - Loss control on land interests
    - High asset specificity / moral hazard
    - Almost always get a deficit (low competition)
    - Poor quality in your part (if clearly defined ownership)



# Cases study

- Standard Chartered Banking HQs, HK-Japan (Sale and Leaseback)
- Hotels Sale and Leaseback, Europe (Sale and Leaseback)
- Eastern Harbour Crossing, HK (BOT / franchise)
- Water Treatment Facility (Moncton, New Brunswick), Canada (PPP)
- John Labatt Centre (London, Ontario), Canada (PPP)
- Hong Kong Convention and Exhibition Centre (Land interests shares in lieu of construction cost)
- Ma Wan Park (Non-profit making JVs)
- Cyberport development (profit making JVs)
- West Kowloon Culture District Development (BOOT + Land interests shares)



# Case 1 Standard Chartered Bank HQs

- Standard Chartered Bank Headquarters in Hong Kong – Sale and Leaseback
- It was completed in 1990 (a redevelopment)
- Nishimatsu Property Co. owns a lease of the site and building for 25 years
- After which it reverts to the bank, under its 850-year lease, at no cost
- Construction cost was about \$600 million
- A JV between Nishimatsu and Gammon Construction Co.



# Case 2 Sale and Lease back Hotel Transactions in Europe

Portfolio	Country	Date	Rooms	Purchaser	Vendor	Price (000'€)
37 Thistle Hotels	UK	2002	5,500	Orb Estates	Thistle Hotels	950,500
4 NH Hotels	Spain	2002	643	Ponte Gadea	NH Hotels	91,500
12 Nomura Hotels	UK	2001	4,318	Royal Bank of Scotland	Nomura	1,625,500
11 Hilton Hotels	UK	2001	2,131	Royal Bank of Scotland	Hilton International	490,000
4 Novotel Hotels (two existing + two developments)	Spain	2000	482 + 2 development projects	DGI (German Fund)	Accor	Confidential
7 Hotels	Spain	2001	2,300	Private Investor	Airtours	110,000
5 Hotels	Southern Europe	2000	2,119	Gothaer	Club Med	112,000
8 Premier Hotels	UK	2000	600	London & Regional	Premier Hotels	72,000

Jones Lang LaSalle Hotels (2002)

European Investors Fly in the Face of Analyst Scepticism to Support Sale and Leaseback in Hotel Sector

# Pros and Cons to Seller

## Advantages

- Provides the release of capital for redeployment elsewhere at a higher return.
- Removes the asset from the balance sheet.
- Contributes to the lowering of the debt-to-equity ratio.
- The seller (as ultimate tenant) has strength in dealing on a leaseback.
- Provides flexibility to complex transactions since the land and improvements can be separated.

## Disadvantages

- Credit agencies may attribute a debt service coverage factor to the lease payments.
- Seller gives up many benefits of ownership of improvements and land;
- Leasehold value has a shorter life than the property.
- Future appreciation of land usually lost.
- A decline in leasehold value can be a significant loss.

# Pros and Cons to Buyer

## Advantages

If carefully examined and secured, can offer a good investment potential.

In the case of unsubordinated land:

- Low-risk investment;

Offers some flexibility in price versus rent negotiations.

Can provide a AAA tenant with long-term lease.

Buyers deduct depreciation.

## Disadvantages

May have to enter into a large mortgage to protect interests.

A leaseback by a non-user may be a good sign that the income won't support the value.

Being aggressive with the seller may give the buyer an investment without a tenant.

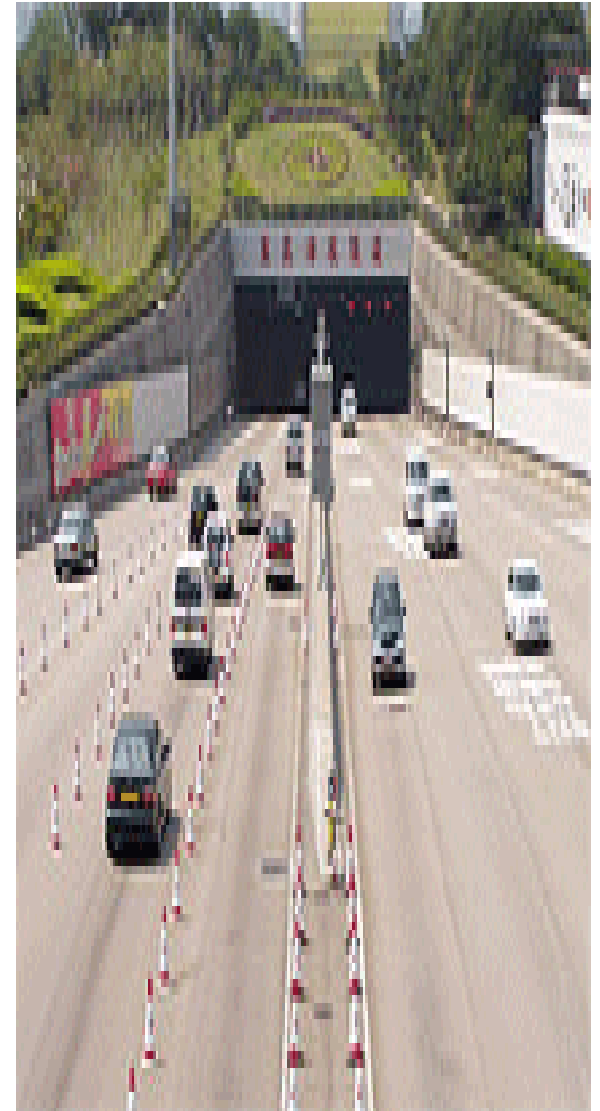
Either the price or the rent will be to the seller's advantage; quite often both.

Jones Lang LaSalle Hotels (2002)

# Case 3: The Eastern Harbour Crossing

## Crossing

- A pioneer project of BOT in 1989
- The New HK Tunnel Co. Ltd. (NHKTC) holds the franchise until 2015
- The franchise was awarded by the government to the company by competitive tender
- Contractor built and operates the tunnel
- Government does not require any investment, but defer the ownership
- Tutorial question: What are the differences of the Western Harbour Crossing (BOOT) project?



# Case 3 (Cont'd)

- Who owns?
  - CITIC Pacific Limited
  - Kumagai International Limited
  - Paul Y. (New Tunnel) Limited
  - Marubeni Hong Kong & South China Limited
  - The Financial Secretary Incorporated





# Case 4 Water Treatment Facility (Moncton, New Brunswick), Canada

- The treatment facility serves 100,000 people in Moncton and neighbouring Dieppe and Riverview.
- USF Canada designed, built, financed and operates the facility under a 20-year licensing arrangement.
- The \$85 million contract is expected to save \$12 million over 20 years, and has brought much-improved water quality to residents.





# Case 5 John Labatt Centre (London, Ontario), Canada

- This 9,000-seat sports and entertainment complex was developed under a design-build-finance-operate-maintain contract with a private sector consortium called London Civic Centre Limited Partnership (LCCLP).
- The City created a special purpose Trust that entered into 50-year ground and occupancy leases with LCCLP, which assumed construction and operation risk as well as a 20-year lease with the London Knights hockey team.
- Capital cost was \$46 million and revenues are shared on a sliding scale weighted from LCCLP to the City over the life of the agreement.



# Case 6: The Hong Kong Convention and Exhibition Centre



# Case 6: The Hong Kong Convention and Exhibition Centre

- Establish HK Trade Development Council in 1966
- Earls Court (UK consultant) reported the feasibility of developing a CEC
- A proposal for a CEC was prepared in 1983
- Government had grave doubts on financial grounds

## Case 6 Cont'd

- Govt offered a site in Wanchai to TDC free of charge
- Condition is that no further cost to the Govt
- TDC appointed C-Fin as the professional advisors, the then project leader
- TDC did not want to invest direct funding in the project

# Case 6 cont'd

- Design and Build contract was used
- Fast-track basis
- No cost to the TDC
- Vague terms: 'NWD shall provide for TDC a first class exhibition centre'
- Why is it possible?

# Case 6 cont'd

- Successful bidder would be granted the space above and around the CED
- New World Development (NWD) was awarded
- She proposed to build 2 world class hotels, an office tower and a serviced apartment tower, together with a CEC.
- Some office space was allocated to the TDC.

# Case 6 cont'd

- NWD used Polytown (project management)
- In house main contractor: Hip Hing
- Project Outcome:
  - TDC have a world class CEC at no capital cost
  - NWD took less than 4 years for the design and construction of the project (1988)
  - The site gifted by the Govt in 1984 was worth up to 5 times by 1988
  - The construction cost for the CEC was about the land value

# Case 7 Ma Wan Park and the Park Island





# Case 7: Ma Wan Park

- A park at no cost other than land premium
- Construction of Tsing Ma Bridge
- Existing village houses were too close
- Govt did not want to invest additional funds for the relocation of villagers
- Sun Hung Kai Properties was invited to submit a master development plan

# Case 7 cont'd

- A grant to develop 5,000 residential units
- GFA = 3.7 million s.f.
- Conditions:
  - a theme park of 2 million s.f.
  - SHK has to invest \$1 billion in the park
  - SHK bears the costs of relocation of villagers
- Land grant by PTG at nil premium in 1997
- 50 years tenure

# Case 7 cont'd

- Govt sole contribution is the land
- A cap of \$1,031 million land premium deduction was imposed
- User clause: 'Public Recreational Dev'
- Operated in a 'Commercial basis but non-profit distributing regime'
- SHK is responsible for its operation, management and maintenance
- Net profit goes into a sinking fund for Park's maint
- Overrun to be borne by SHK

# Case 7 cont'd

- SHK required to invest \$900m
- Development in 2 phases
- Phase 1 completed in 2002
- SHK invested \$600 million in phase 1
- \$300 million in phase 2 including relocation of villagers

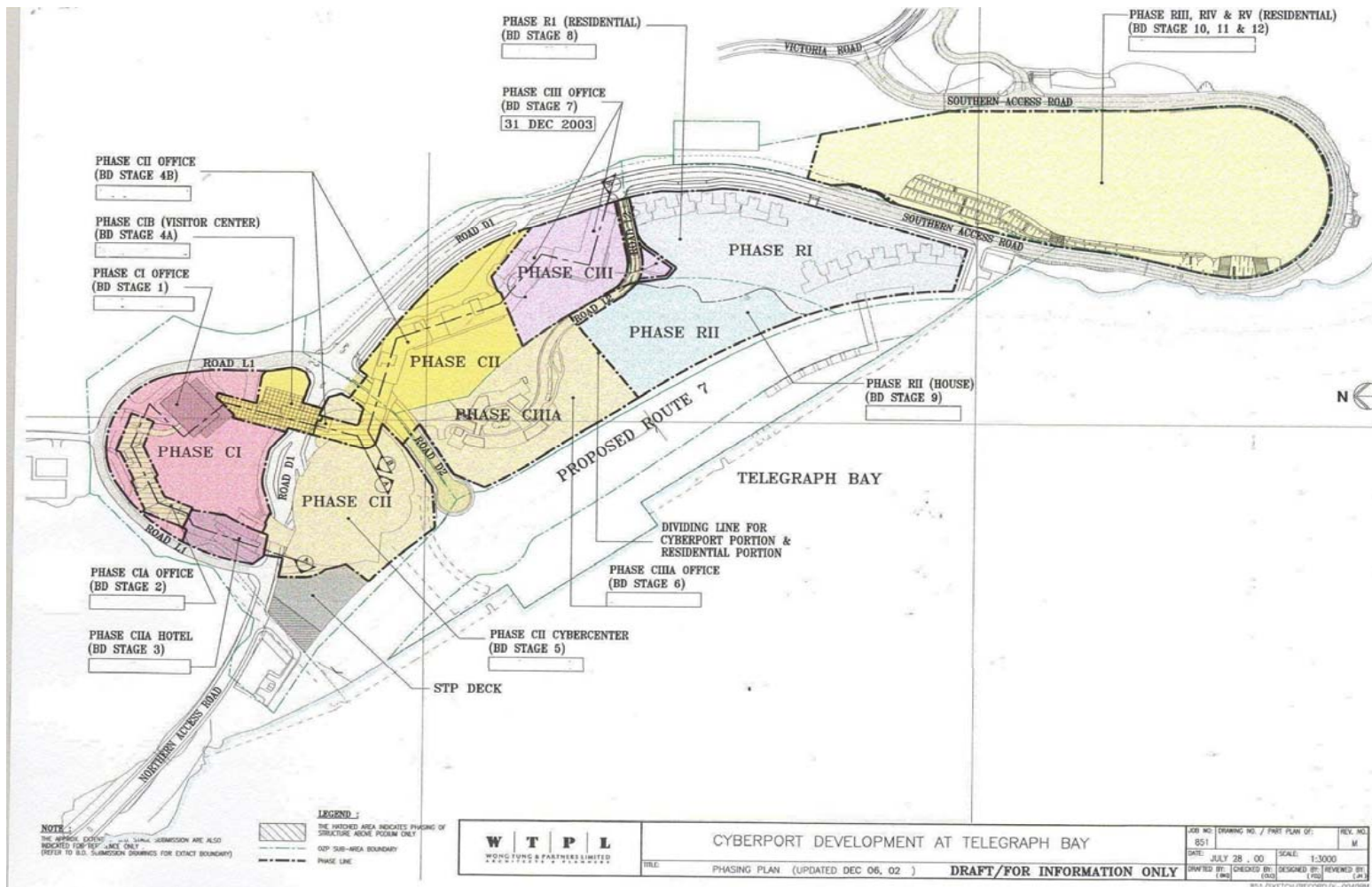
# Case 7 cont'd

- As part of the compensation package
- SHK will rehouse villagers in the northern part of the island
- They may choose either a 3-storey traditional village house of 2,100 s.f. or
- 3 separate units, each of 700 s.f. in one single block

# Case 7 cont'd

- There are 20% villagers refused to move, their houses will be integrated into the Park
- Project Outcomes:
  - Govt relocated villagers without direct investment
  - Govt got a Park at no cost
  - SHK maximizes the development scale on the island
  - The market downturn may cause doubt

# Case 8 Cyberport



# Case 8 Cont'd

- \* The Government's equity contribution will be based on the land value assessed at the time of grant of the development right, which is expected to take place immediately after the Town Planning Board's approval for the rezoning of the Telegraph Bay Outline Zoning Plan, in around 12 to 15 months' time.



# Case 8 Cont'd

- \* The value of the land for the ancillary residential development at the time of grant of development right to PCG was estimated at around \$5.5 billion when the Letter of Intent was signed. PCG's capital contribution is estimated at \$7 billion.

# Case 8 Cont'd

- \* The construction cost for the Cyberport portion is estimated at \$5 billion and that for the ancillary residential development is \$8.7 billion.

# A REDF Case in Beijing

- Century East City
  - A JV Project with Canada Developers
  - A BOT Contract
  - Heritage (A Temple) has to be relocated

# From Outside to Inside





# From Design to Management





# Video Clip of the Century East City, Beijing



# Assessing Returns on Capital Invested in Real Estate Development

- See 2.2 on
  - ROI
  - RONA
  - IRR

# Income and Costs of Development

- Total income:
  - Gross development value (GDV)
- All other costs:
  - Land costs
  - Construction costs
  - Professional fees
  - Marketing fees
  - Interest payments
  - Contingency
- Developer's profit

How to discount future income and costs to present value?





# Managing Cash Flow in a Real Estate Development Company

- See 3.4 on
  - Forward contracts (presales)
- Land reserves
- Debt
- Sales and Leaseback
- BOT / BOOT

# References

- Walker, A. (1996) Project Management in Construction, 3<sup>rd</sup> Edition, Blackwell Science, UK.
- Rowlinson, S.M. and Walker, A. (1995) The Construction Industry in Hong Kong, Longman, Hong Kong.
- [Regional forum: Governance on Public Private Partnerships](#), Prague on 27-28 February 2004 – Prague Congress Centre



# The End

**For enquiries,  
please send email  
to**

**Dr Edward CY YIU**

**Department of Real Estate and  
Construction**

**The University of Hong Kong**

**[ecyyiu@hkucc.hku.hk](mailto:ecyyiu@hkucc.hku.hk)**

