

# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015

OneCity, Subang Jaya, Selangor

12 November 2015

## **“HOME FOR GENERATIONS” REDEFINING DEVELOPMENT TRENDS**

### **TRANSLATING INNOVATIVE CONSTRUCTION METHODS INTO COST SAVINGS**

**SR JAILANI JASMANI** *Reg. QS, MRISM, ICECA*

Quantity Surveying Division

Royal Institution of Surveyors Malaysia

JUB Central Sdn Bhd

# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015

## FACTORS AFFECTING CONSTRUCTION COSTS:

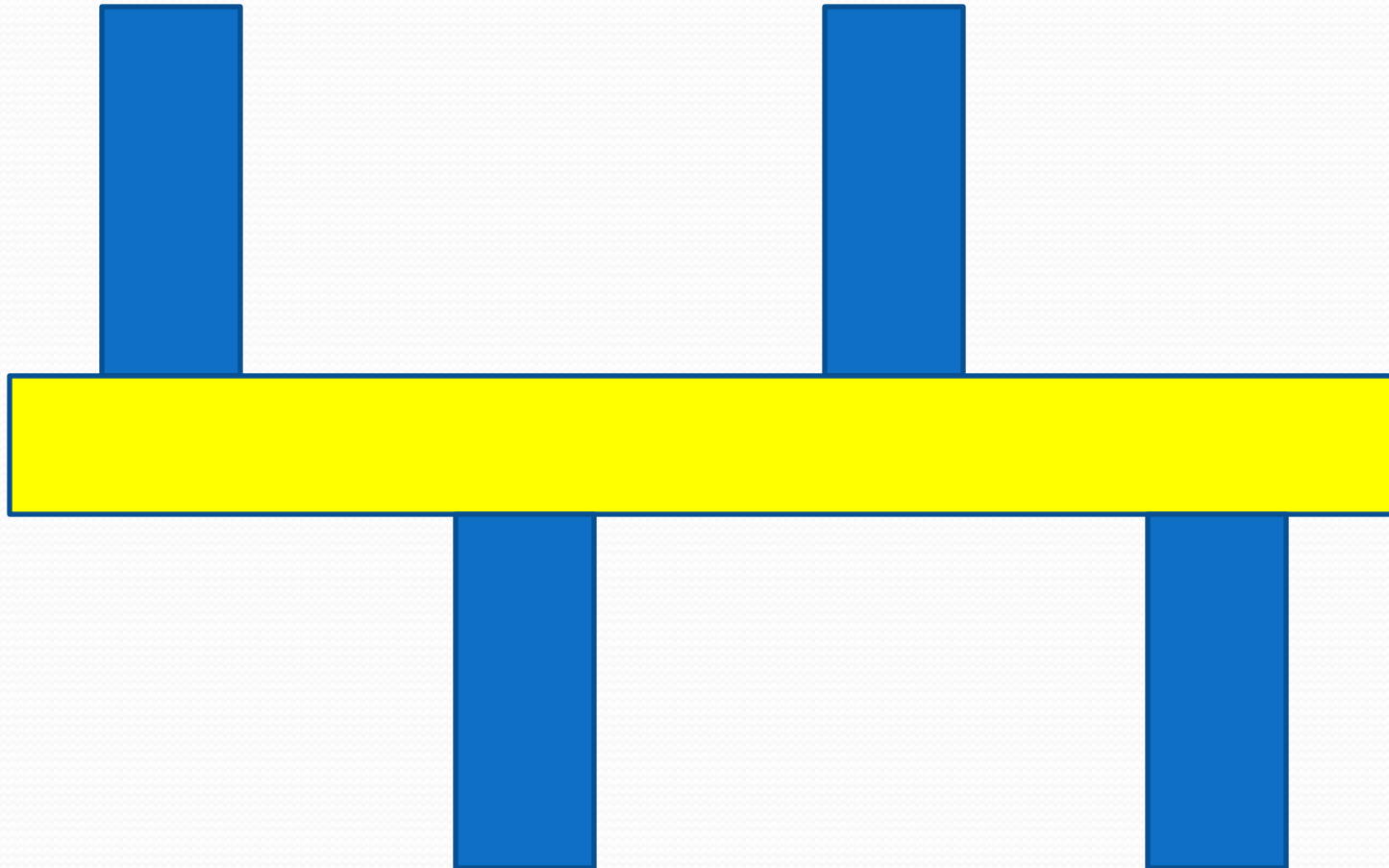
- EFFECTIVE PLANNING
- PROJECT SCHEDULING
- AUTHORITIES REQUIREMENTS
- CLIENT'S & END-USER'S REQUIREMENTS
- DESIGN CONSIDERATIONS & PARAMETERS
- PROJECT LOCATION
- SITE CONDITION
- PROJECT AND CONSTRUCTION MANAGEMENT
- CONSTRUCTION MATERIAL
- CONSTRUCTION TECHNOLOGY/METHOD
- PROCUREMENT STRATEGY
- EFFECTIVE CONTRACT ADMINISTRATION
- COORDINATION OF WORKS
- EFFECTIVE TEAMWORK / PARTNERING
- CONSTRUCTION WASTE CONTROL

# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015

DESIGN PARAMETERS – CASE STUDY NO. 1

FOUR TOWER HIGHRISE CONDOMINIUM WITH SKYBRIDGE

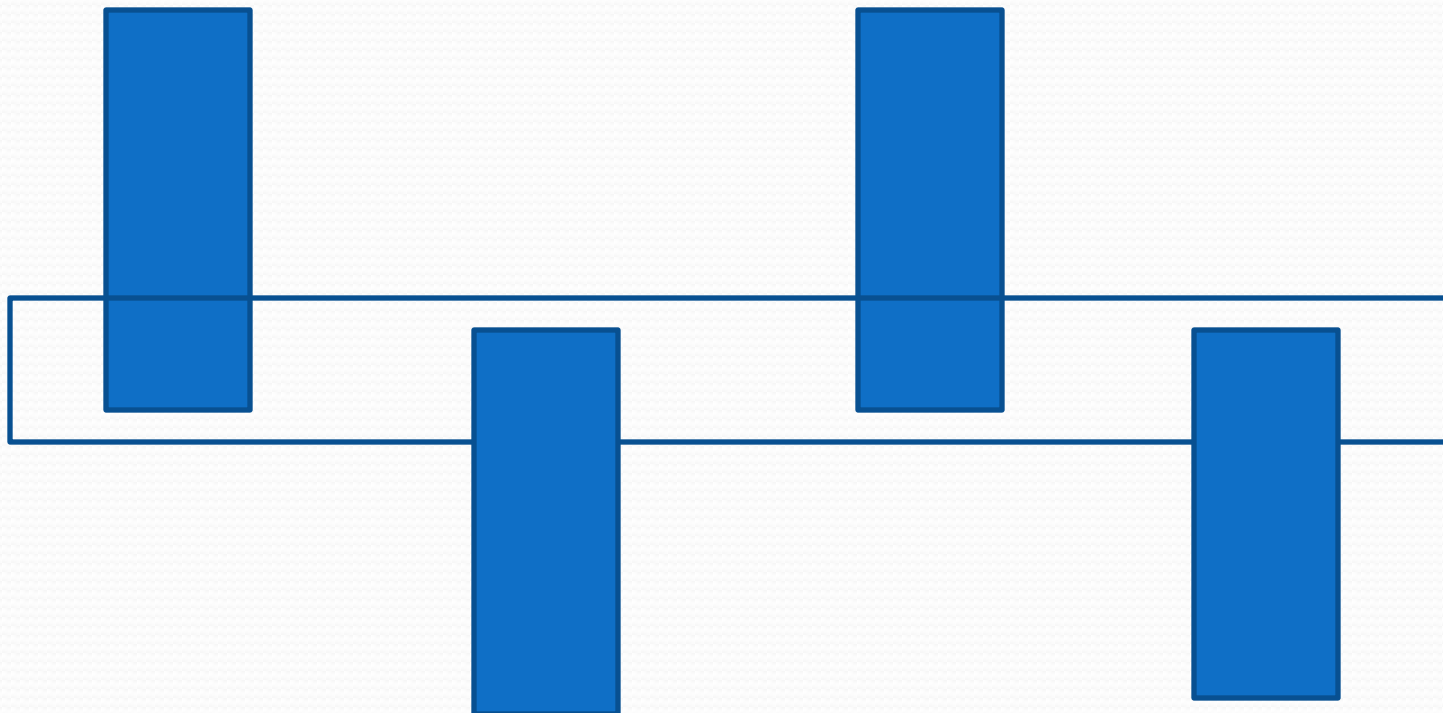
SCHEMATIC LAYOUT ON PLAN – Original layout



# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015

FOUR TOWER HIGHRISE CONDOMINIUM WITH SKYBRIDGE

SCHEMATIC LAYOUT ON PLAN – Revised layout



# **25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015**

**DESIGN PARAMETERS – CASE STUDY NO. 2**

**DOUBLE STOREY TERRACE HOUSE**

**CONVENTIONAL UPPER FLOOR SLAB & BEAM DESIGN vs  
BEAM EMBEDDED IN SLAB**

# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015

## CONSTRUCTION METHODS:

- CONVENTIONAL STRUCTURAL FRAME WITH BRICK INFILL
- SHEAR WALL
- TUNNEL FORM
- LIFT SLAB CONSTRUCTION
- PRECAST REINFORCED CONCRETE STRUCTURE
- PRE-TENSIONING & POST-TENSIONING CONCRETE STRUCTURE
- STRUCTURAL STEEL FRAME

# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015

## CONSTRUCTION METHODS:

- SAWN FORMWORK vs SYSTEM FORMWORK
- CONVENTIONAL FORMWORK FOR SUSPENDED SLAB vs “BONDEK” FORMWORK
- CAST IN-SITU SUSPENDED SLLAB vs PRECAST HOLLOW SLAB
- BRICK INFILL vs PRECAST WALL

# **25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015**

## **CONSTRUCTION METHODS:**

### **INDUSTRIALISED BUILDING SYSTEM (IBS)**

IBS is a term used in Malaysia for a technique of construction where by components are manufactured in a controlled environment, either at site or off site, placed and assembled into construction works.

### **MODULAR CONSTRUCTION**

Modular construction is a term used to describe the use of factory-produced pre-engineered building units that are delivered to site and assembled as large volumetric components or as substantial elements of a building.

# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015



# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015



# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015



# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015



**KBPODS**

# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015



# 25<sup>th</sup> NATIONAL REAL ESTATE CONVENTION (NREC) 2015

