



KUALA LUMPUR SPORTS CITY

REJUVENATION PROJECT

PEMBANGUNAN SEMULA KEMUDAHAN SEDIA ADA
DI KOMPLEKS SUKAN NEGARA, BUKIT JALIL,
KUALA LUMPUR (KL SPORTS CITY)

CAWANGAN KERJA BANGUNAN AM 2
TINGKAT 3A, 15 & 16 MENARA PJD
NO. 50 JALAN TUN RAZAK
KUALA LUMPUR

3RD OCTOBER 2019
IKIM KUALA LUMPUR

PWD DESIGN FORUM 2019

3 OCTOBER 2019

KL SPORTS CITY: REJUVENATION PROJECT



PRESENTER

**MOHAMMAD RASYDAN
NOH**

CAWANGAN KERJA BANGUNAN AM 2



PRESENTER

**Ar. NIK MOHD SAMHAN
NIK AZMAN**

CAWANGAN KERJA BANGUNAN AM 2



rejuvenation

/rɪdʒuːvəˈneɪʃ(ə)n/

Noun

the **action or process** of making someone or something look or feel better, younger, or more vital.

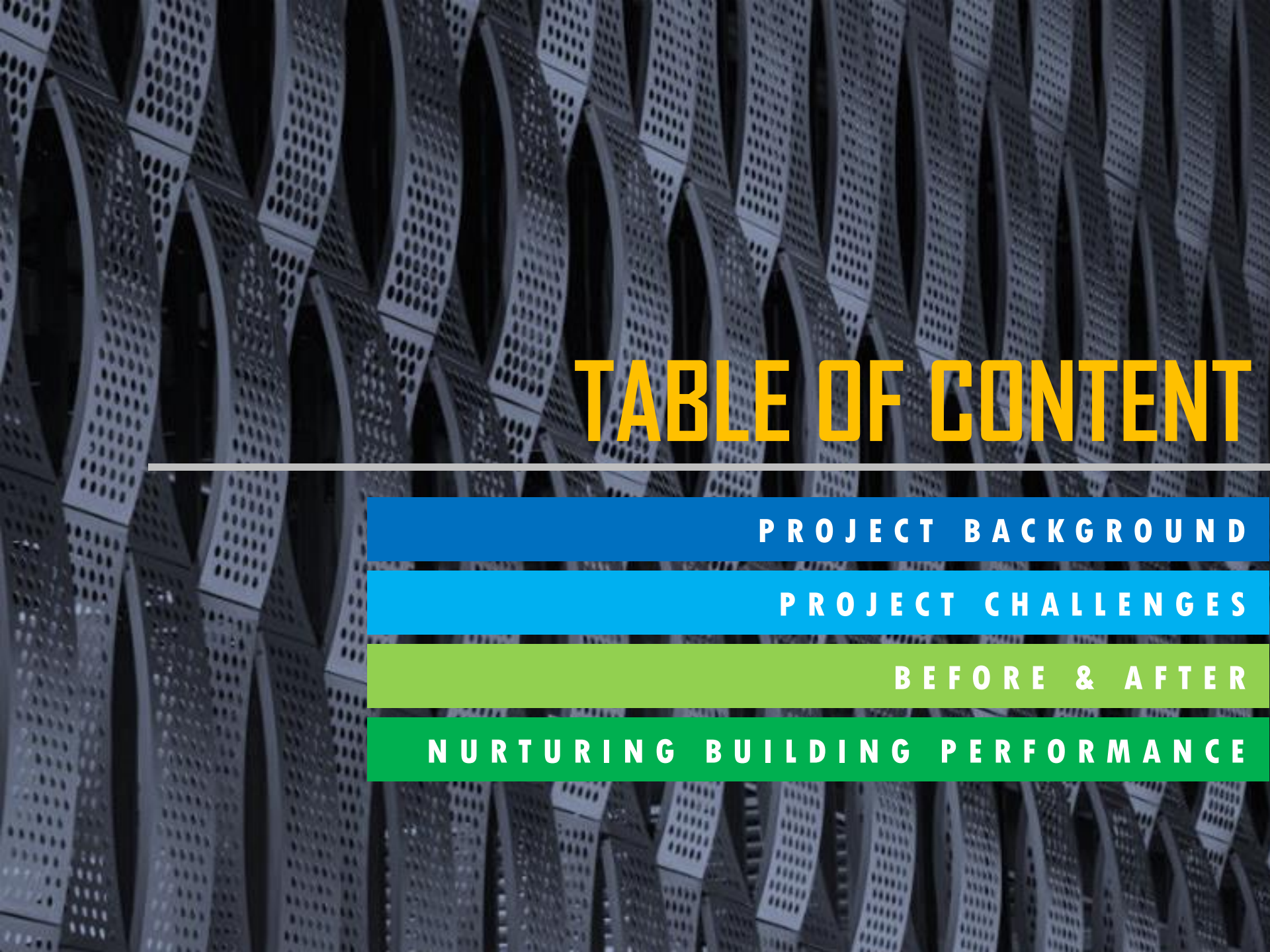


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PROJECT CHALLENGES

BEFORE & AFTER

NURTURING BUILDING PERFORMANCE





PROJECT BACKGROUND

KL SPORTS CITY OBJECTIVE

TIMELINE & LOCALITY

CONTRACTUAL MATTERS

PROJECT GOVERNANCE

1



ICONIC HUB

To become a
National Youth and Sports Hub
attraction

2



SUSTANABILITY

To **optimize** the
existing
infrastructure and
to **sustain** the
number of visitors
to the Sports City.

3



REVENUE

To **generate revenue**
to Perbadanan
Stadium Malaysia
(PSM)

4



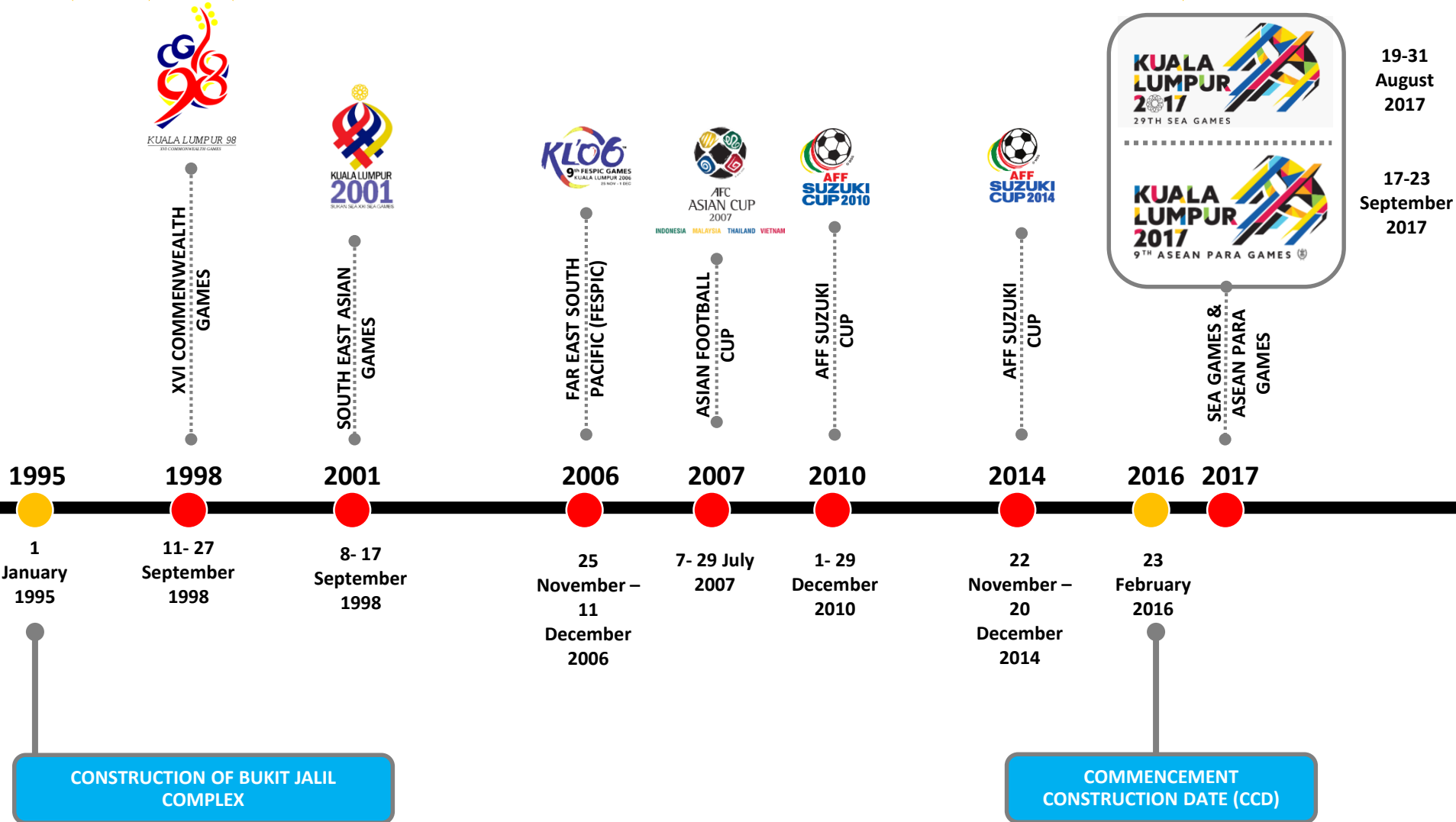
INTERNATIONAL STANDARD

To provide an
integrated sports
complex which is
comfortable and at
par with
international
standards

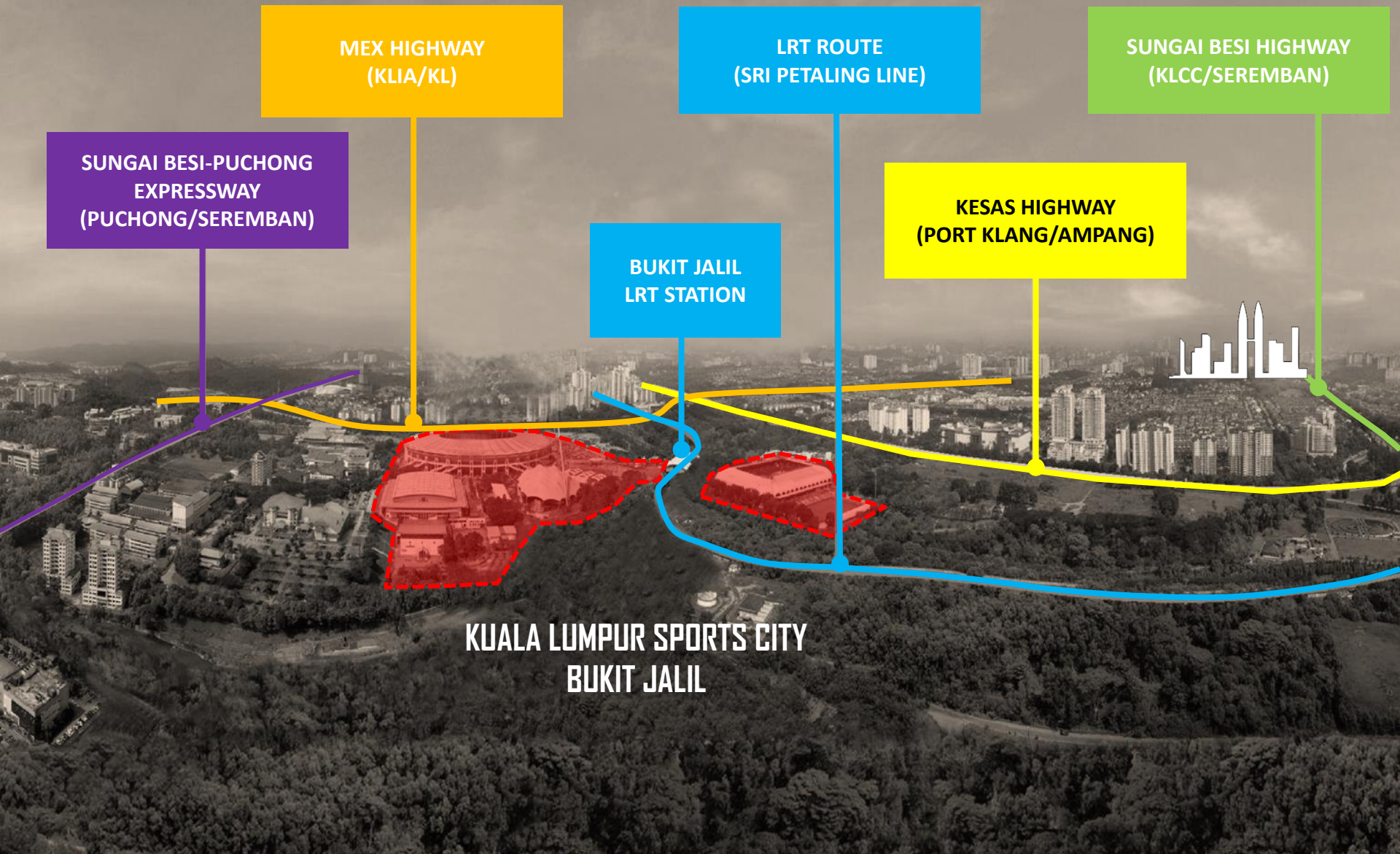
BUKIT JALIL PRESTIGE EVENTS

3 YEARS

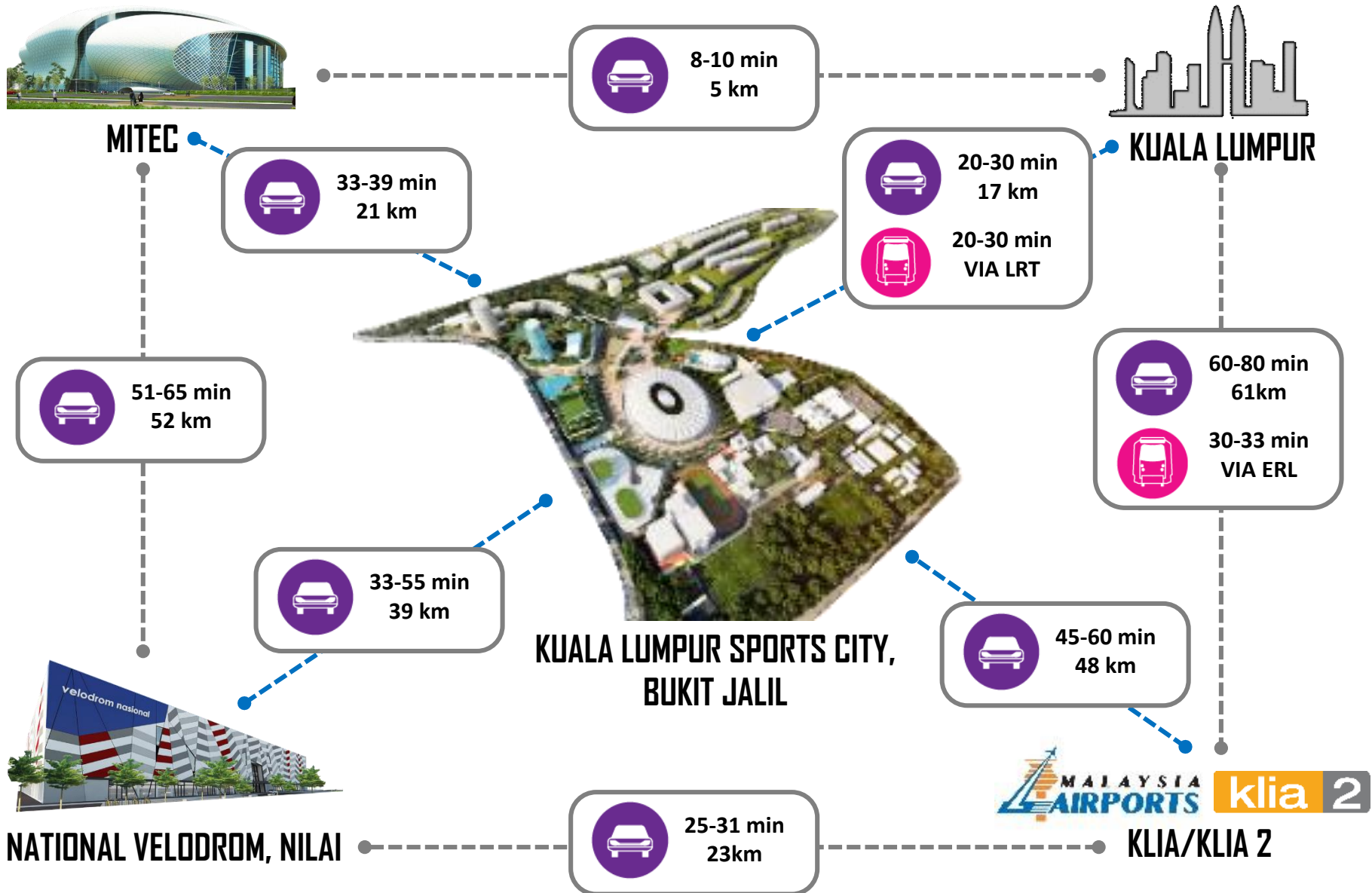
19 YEARS



SITE CONTEXT



SITE LOCATION



SITE PLAN

LEGEND

1

BUKIT JALIL'S LRT

2

NATIONAL STADIUM

3

AXIATA ARENA

4

AQUATIC CENTRE

5

HOCKEY STADIUM 1 & 2

6

CANOPY WALKWAY

7

PARKING

KUALA LUMPUR SPORTS CITY,
BUKIT JALIL

N

INFORMATION	ADDRESS
Owner/Government Representative and Project Director (PD): Ministry of Youth & Sports <i>Kementerian Belia & Sukan (KBS)</i>	 KEMENTERIAN BELIA & SUKAN Aras 15, Menara KBS, No.27 Persiaran Perdana, Presint 4, Pusat Pentadbiran Kerajaan Persekutuan, 62100 Putrajaya.
End User: Perbadanan Stadium Malaysia (PSM)	 PERBADANAN STADIUM MALAYSIA (PSM) Pejabat Ketua Pegawai Eksekutif, Aras 1, Stadium Nasional, Kompleks Sukan Negara, Bukit Jalil, 57700 Kuala Lumpur.
Government's Technical Advisor: Jabatan Kerja Raya Malaysia (JKR)	 IBU PEJABAT JKR MALAYSIA Cawangan Kerja Bangunan Am 2, Tingkat 3A Menara PJD, No. 50. Jalan Tun Razak, 50400 Kuala Lumpur.

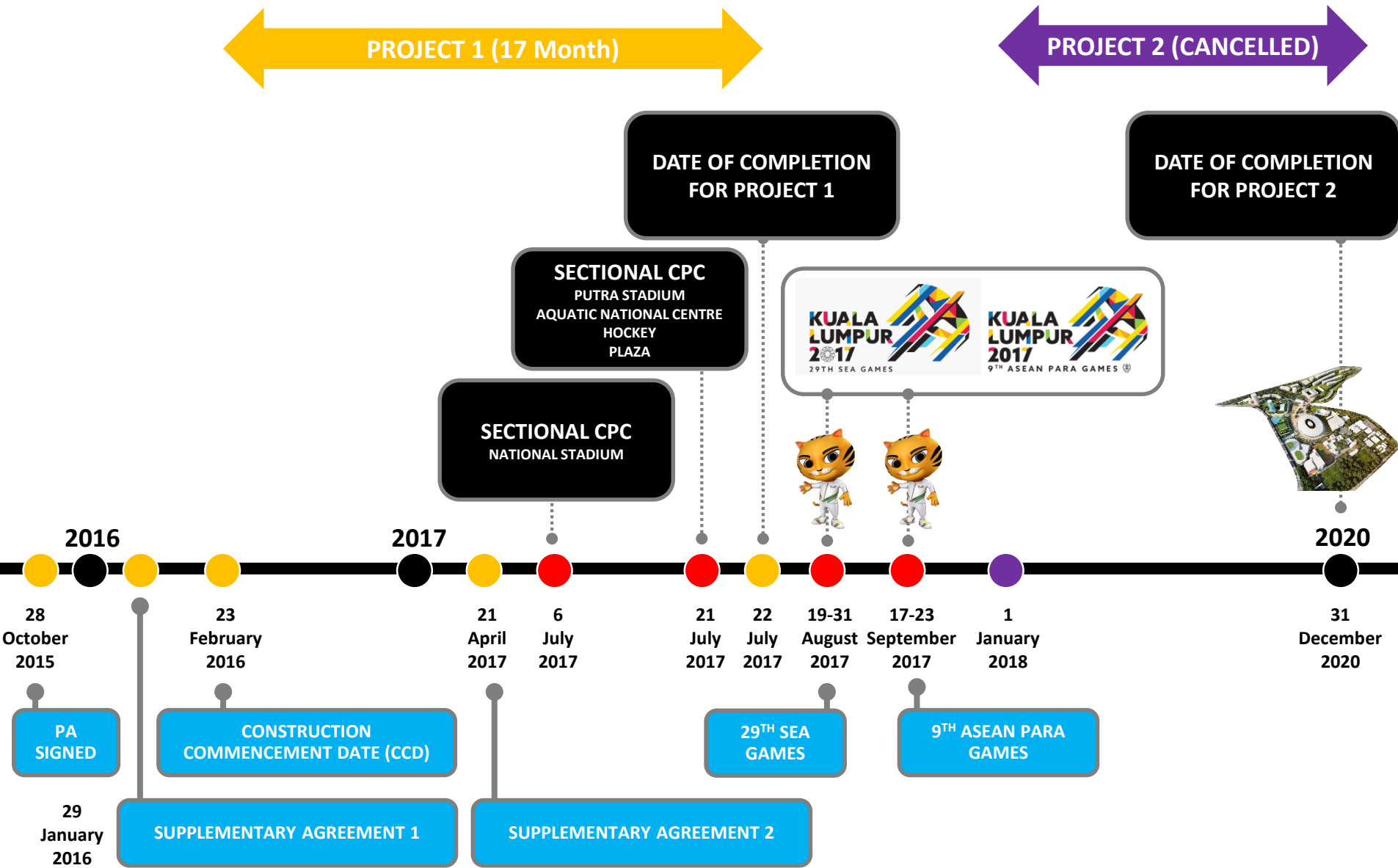
CONTRACTUAL MATTERS

INFORMATION	ADDRESS
Project Director:	KEMENTERIAN BELIA & SUKAN (KBS)
Awarded Company:	RUKUN JUANG SDN. BHD. Level 33A, Menara Nu 2, No. 203, Jalan Tun Sambanthan KL Sentral 50470 Kuala Lumpur MRCB Land Sdn. Bhd.(85%) Rasma Contractors Sdn. Bhd. (15%) Joint Venture Rukun Juang Sdn. Bhd.
Procurement Method:	Privatisation (<i>Land Swapping</i>)
Cabinet Approval/ Agreement:	• Principle Approval: 4th January 2012 • Approved of Successfull Bidder: 13th March 2015 • Privitisation Agreement (PA): 28 October 2015 • Construction Commencement Date (CCD): 23 February 2016 • Supplementary Agreement 1: 29 January 2016 (<i>Terminology and CCD</i>) • Supplementary Agreement 2: 21 April 2017 (<i>Scope and Sectional Completion</i>) • Supplementary Agreement 3 : (<i>Related to land bond</i>) • Supplementary Agreement 4 : (<i>Final adjustment on contract price & cancellation of Project 2</i>)
Cost of Projects	• Project 1 – RM 1,203,000,000.00 (with Reimbursable Sum : RM176,914,000.00) • Project 2 – RM 140,257,764.32 (<i>Paid in cash to the government</i>)
Project Period	• Project 1 – 17 Month (23rd February 2106 until 22nd July 2017) • Project 2 – 36 month (<i>cancel</i>)

PROJECT LAND & EXCHANGE LAND



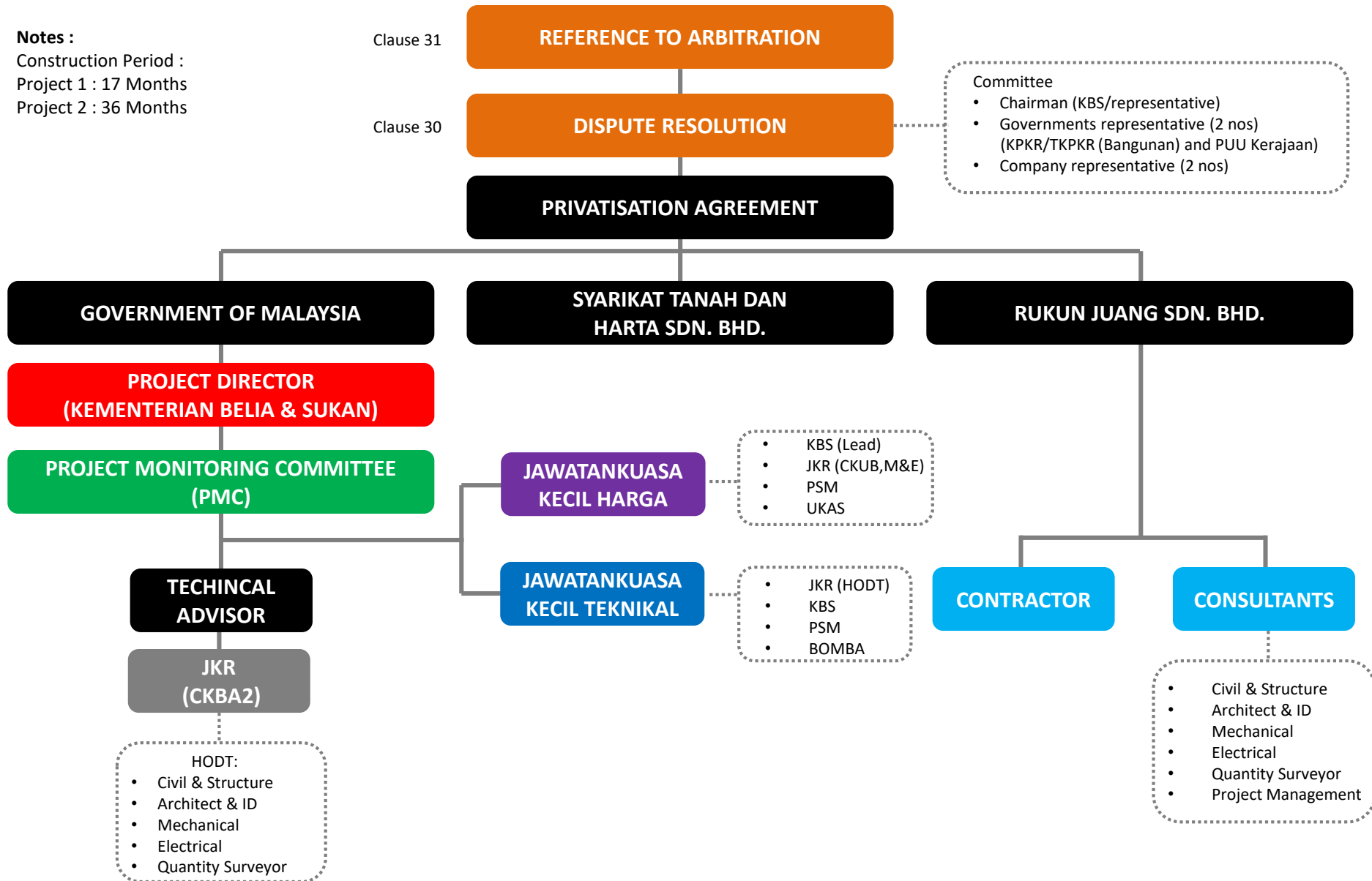
PROJECT TIMELINE



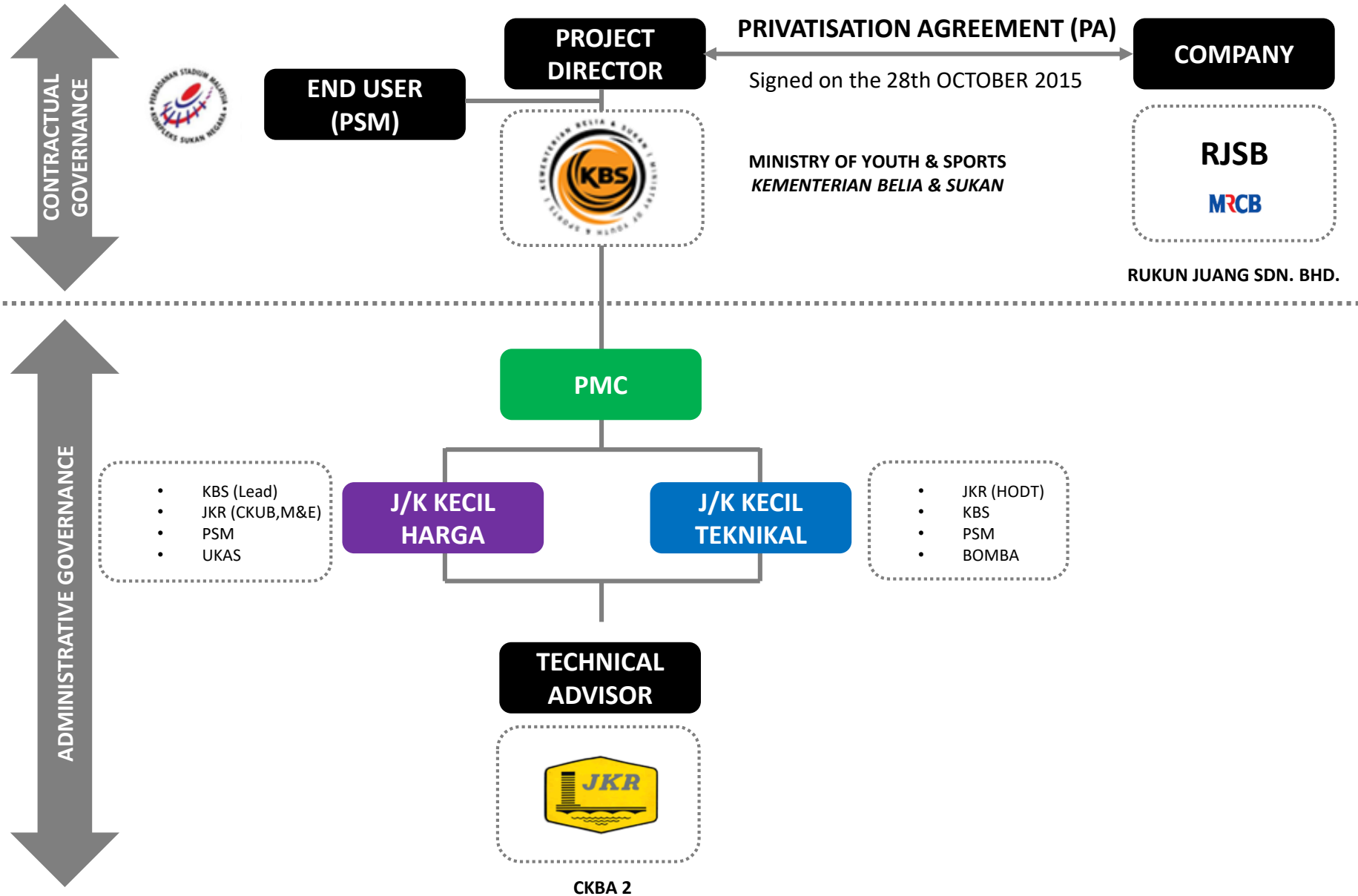
FLOW CHART OF PROJECT TEAM

Notes :

Construction Period :
Project 1 : 17 Months
Project 2 : 36 Months

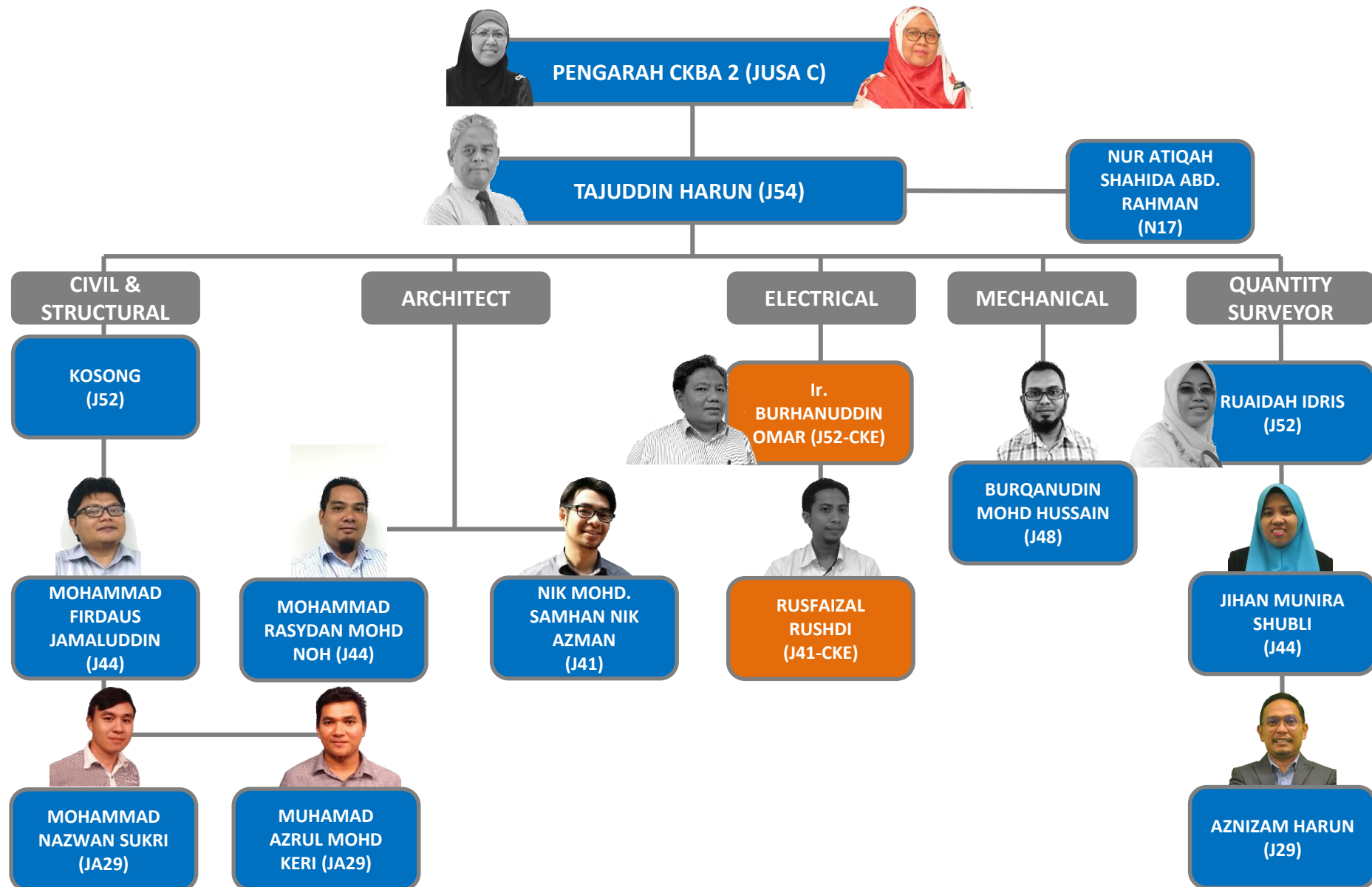


GOVERNANCE OF PROJECT



ORIGINAL TEAM





JKR'S SPORTS CITY PROJECT TEAM

CURRENT TEAM





PROJECT CHALLENGES

CONTENT: PRIVATISATION CONTRACT

TIME & COST

PROJECT DIRECTOR & COMMUNICATION

SCOPE OF WORK/TRADE PACKAGES

PARTIES INVOLVED



PWD CONTRACT

.....

D&B CONTRACT

.....

PAM CONTRACT



**PRIVATISATION
AGREEMENT &
SUPPLEMENTARY
AGREEMENT**

JKR.KPKR.121.010/05 JLD.3
PERLANTIKAN PEGAWAI PENGUASA /
PENGARAH PROJEK

KETUA
PENGARAH
KERJA RAYA

MORE THAN RM750 M
(CONVENTIONAL / DESIGN & BUILT)



CLAUSE 16.2:
SUPERVISORY RIGHTS TO THE GOVERNMENT

SECRETARY
GENERAL,
MINISTRY OF
YOUTH AND SPORTS

SHALL BE THE PROJECT DIRECTOR

PROVISIONAL COST

PROJECT 1

RM 499.213402 M

PROJECT 2

RM 1.100786598 B

**DIFFERENCE VALUE TO BE PAID
BY THE DEVELOPER:**

RM 31.880 M



PROJECT 1

RM 1.203 B

PROJECT 2

CANCELLED

**DIFFERENCE VALUE TO BE PAID
BY THE DEVELOPER:**

RM 140.25776432 M

**JKR.KPKR.113.020.050/03 JLD.8 (8)
PENETAPAN NORMA TEMPOH
PEMBINAAN PROJEK**

69 MONTH

276 WEEKS

1932 DAYS



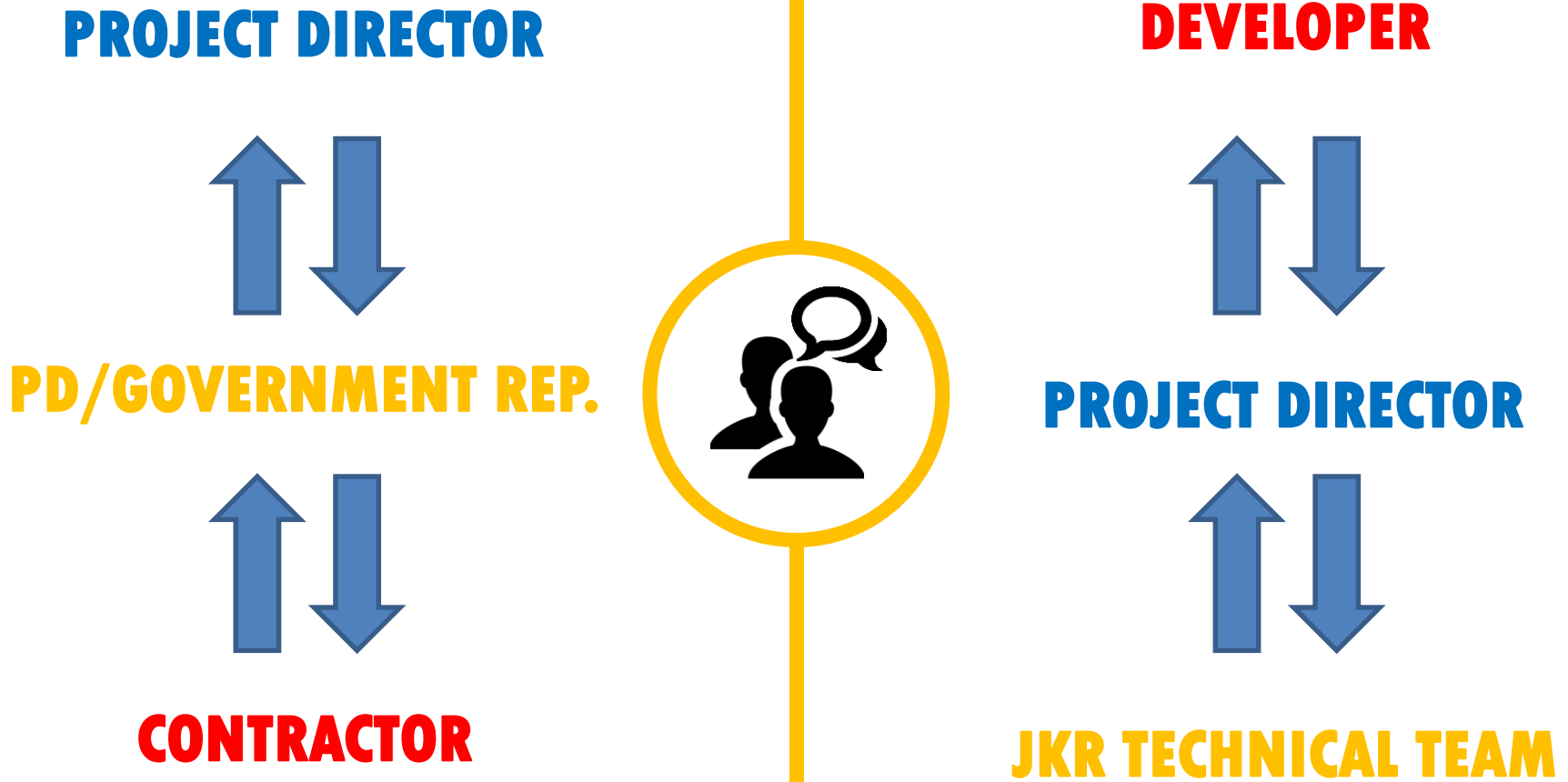
**CLAUSE 13.2: CONSTRUCTION
COMMENCEMENT DATE
(CCD)**

17 MONTH

68 WEEKS

476 DAYS

23 FEBRUARY 2016 – 22 JULY 2017



SCOPE OF WORK BUILDING COMPONENT (PROJECT 1)

NATIONAL STADIUM
.....
AXIATA ARENA
.....
AQUATIC CENTRE
.....
HOCKEY STADIUM 1 & 2
.....
COMMON INFRA
.....
MISC: SPORTS EQUIPMENT



21 TRADE PACKAGES

TP01: Demolition Works
TP03: Façade Works
TP03a: Aquatic Façade
TP03b: Extended Canopy Walkway
TP04: Lifts & Escalator
TP05: Builder's Work (National & Hockey)
TP06: Builder's Work (Putra & Aquatic)
TP07: Plaza & Infra Works
TP08 Interior Design Works
TP09(a): ACMV
TP09(b): Cold Water Plumbing Works & Sewerage
TP09(c): Fire Protection System
TP09(d): Electrical Services
SP01: Stadium Seating
Loose Furniture
SP02: PA System
SP03: Replacement of Turf (Hockey)
SP04: Swimming Pool Equipment System
SP05: Swimming Pool Equipment System
SP06: Swimming Pool Equipment System
SP07: Flood Light

7 SMART PARTNERSHIP PACKAGES

Timing System
Sound Reinforcement System (SRS)
Surveillance System (CCTV)
Telekom (Tidak melibatkan sebarang kos)
Track (Mondo)
External Painting
Gymnastic Equipment/Other Sports Equipment

PERSPECTIVE VIEW - PROJECT 1



BIRD'S EYES VIEW-PROJECT 1



UPGRADED FACILITIES

4 + 1

BUILDING & INFRA



WALKING TIME

5 - 15

MINUTES



PARKING

1,900

CAR



PARKING

56

BUS



LRT STATION
BUKIT JALIL
SRI PETALING LINE



ACCESSIBILITY

4

HIGHWAYS



PARKING

498

MOTORCYCLE



SURVEILLANCE

423

BUILDING & INFRA

NATIONAL STADIUM



SEATING CAPACITY
86,000
NATIONAL STADIUM



CORPORATE SUITES
20
LEVEL 3M



TURNSTILE
89
NATIONAL STADIUM



RUNNING TRACK
MONDO
NATIONAL STADIUM



DESIGNATED AREA
20
160 UNITS AT LEVEL 3



SURVEILLANCE
182
NATIONAL STADIUM



LIFT
5
NATIONAL STADIUM



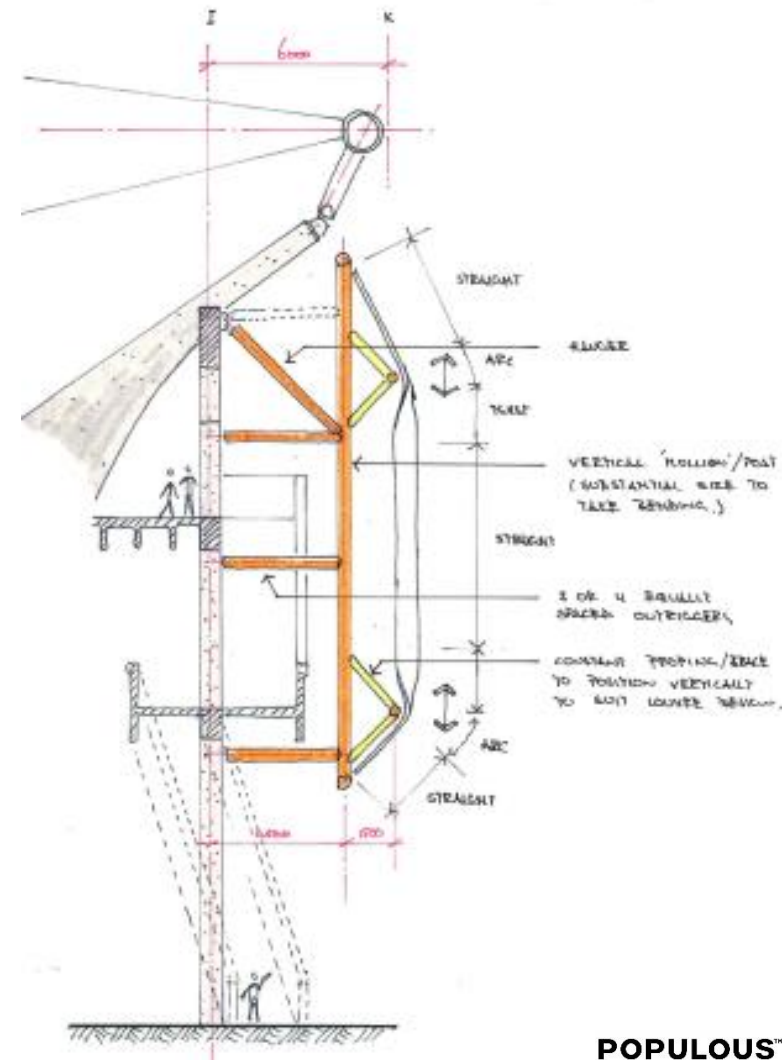
ESCALATOR
4
NATIONAL STADIUM

TWISTED VERTICAL LOUVERS

NATIONAL STADIUM

Blades

- Total number of blades: **678**
- Length between: **13200mm-16800mm**
- Width of blades: **600mm**
- Distance between blades: **1200mm**



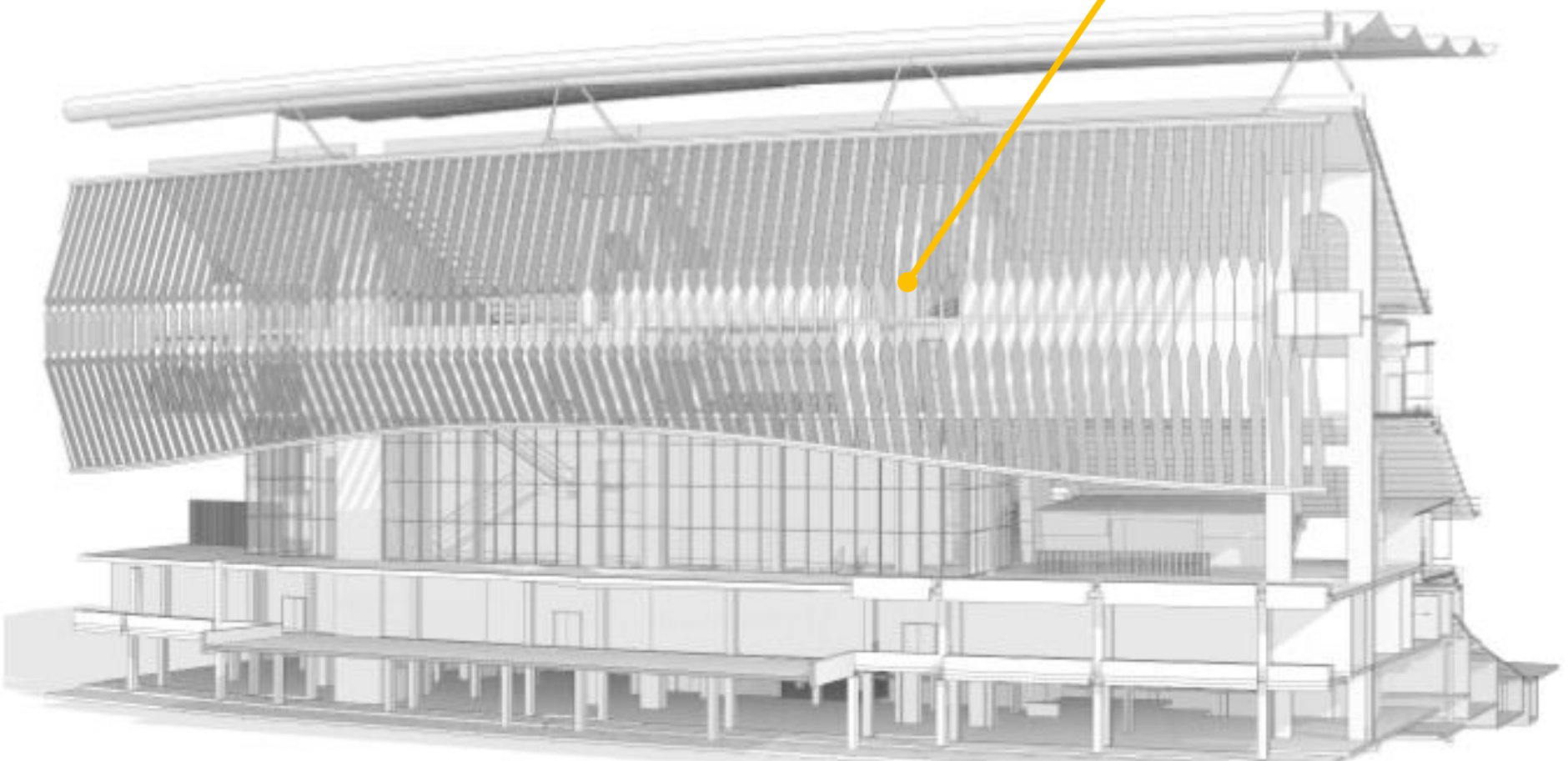
POPULOUS™

CROSS SECTION OF BLADES

TWISTED VERTICAL LOUVERS

NATIONAL STADIUM

TWISTED VERTICAL
LOUVERS INTEGRATED
WITH LED LIGHTS

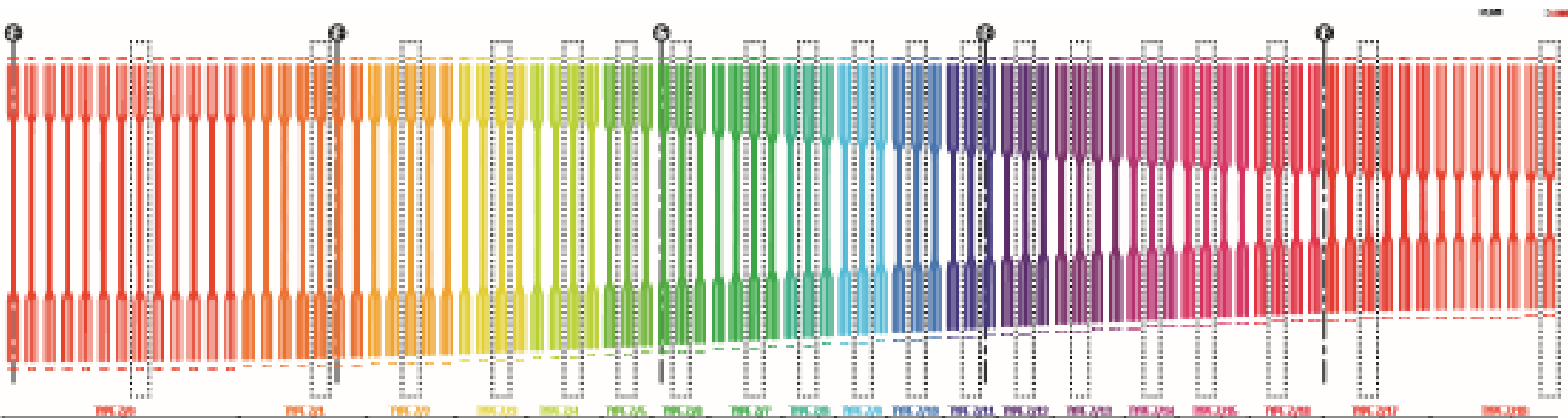


POPULOUS™

BLADES DETAIL

TWISTED VERTICAL LOUVERS

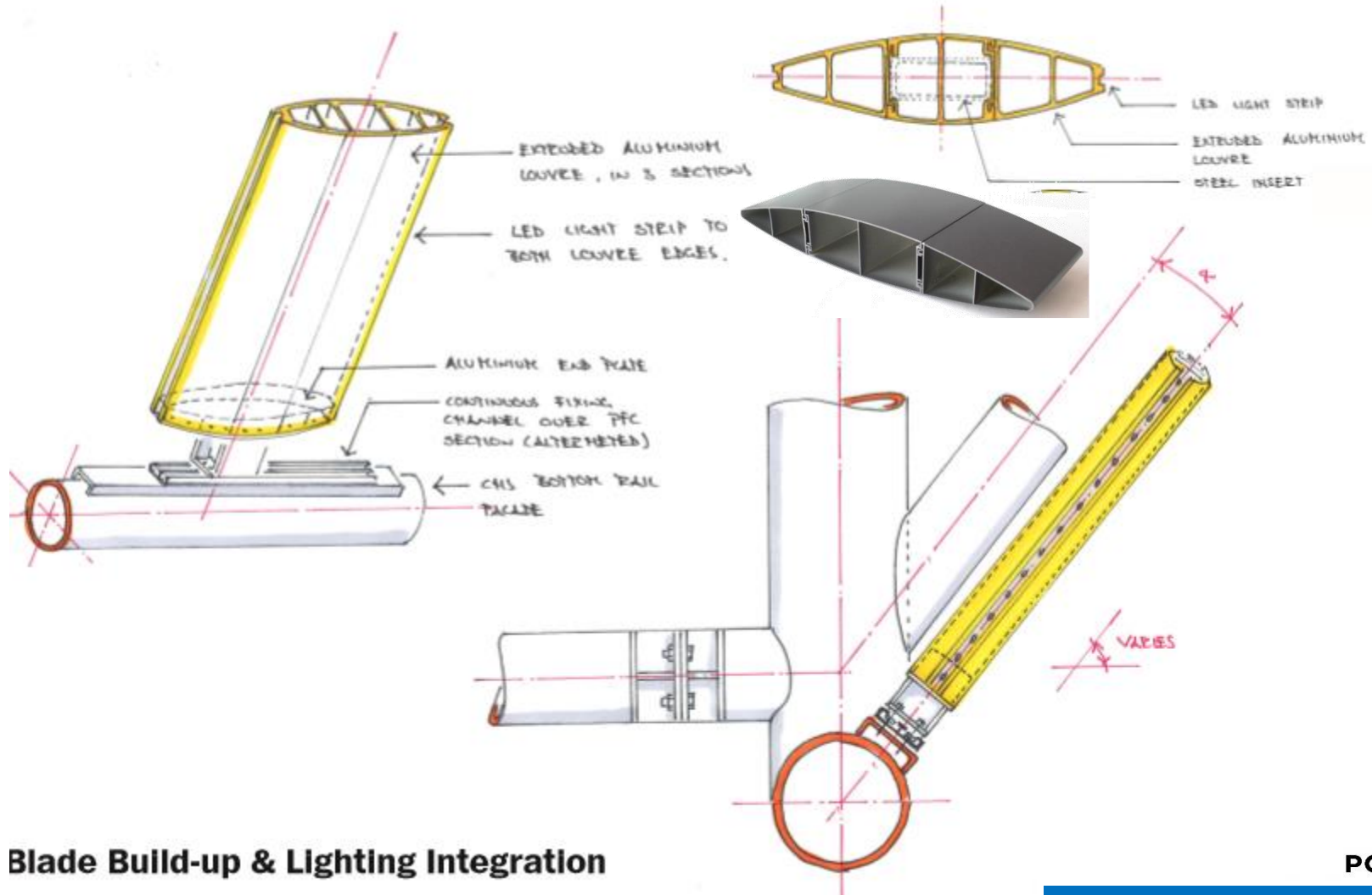
NATIONAL STADIUM



POPULOUS™

TWISTED VERTICAL LOUVERS

NATIONAL STADIUM



Blade Build-up & Lighting Integration

POPULOUS™

BLADES DETAIL





AXIATA ARENA



SEATING CAPACITY

13,851

AXIATA ARENA



RETRACTABLE SEATS

2598

AXIATA ARENA



CORPORATE SUITES

5

LEVEL 3



BADMINTON

4 - 5

COURTS



DESIGNATED AREA

10

AT LEVEL 3



SURVEILLANCE

115

PUTRA STADIUM



LIFT

4

AXIATA ARENA



VOLLEYBALL/TAKRAW

4

COURTS

Panels

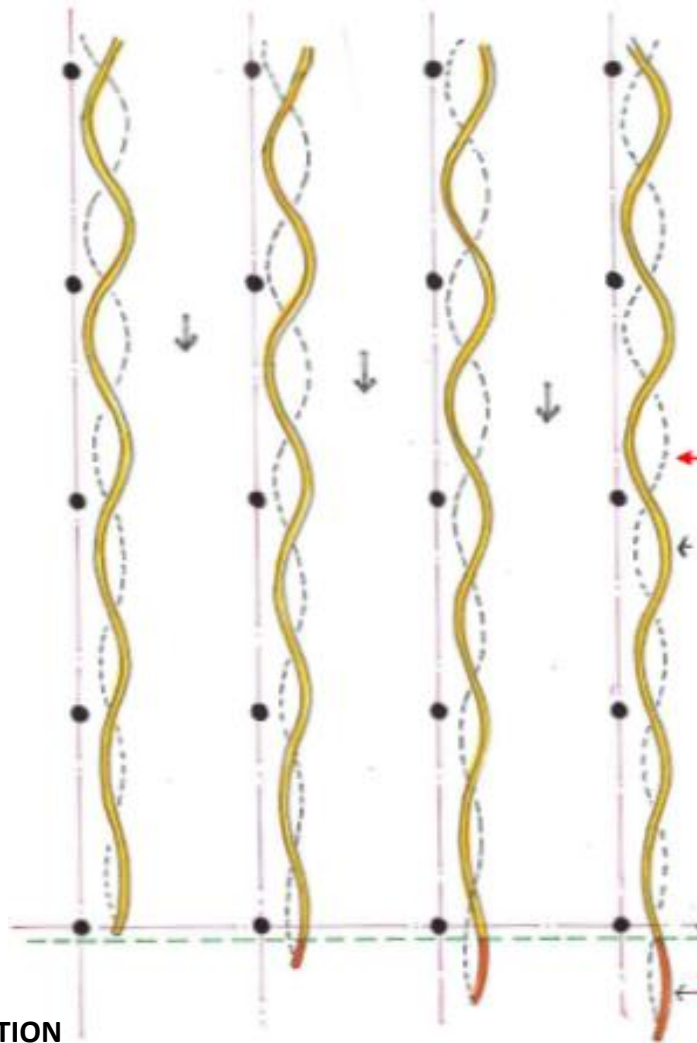
- Total numbers of panels: **2,825**
- Width of panels: **500mm**
- Maximum length of panel: **2160mm**

Typical louvre to 'slide' up or down along façade perimeter

Remove extend below horizontal datum line

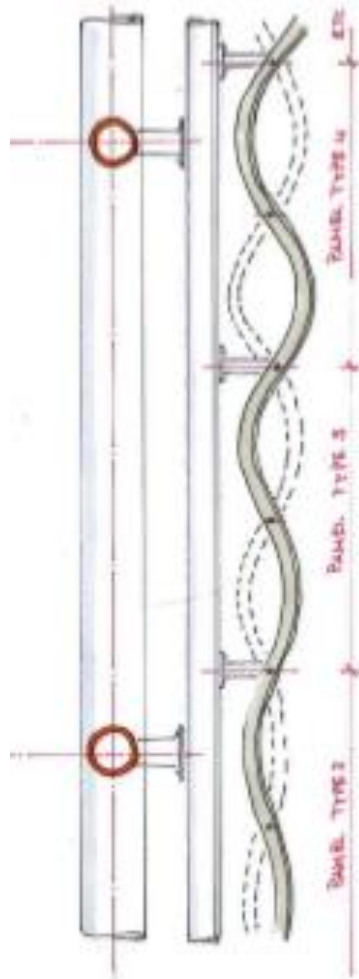
SECTION

- Screen Structure



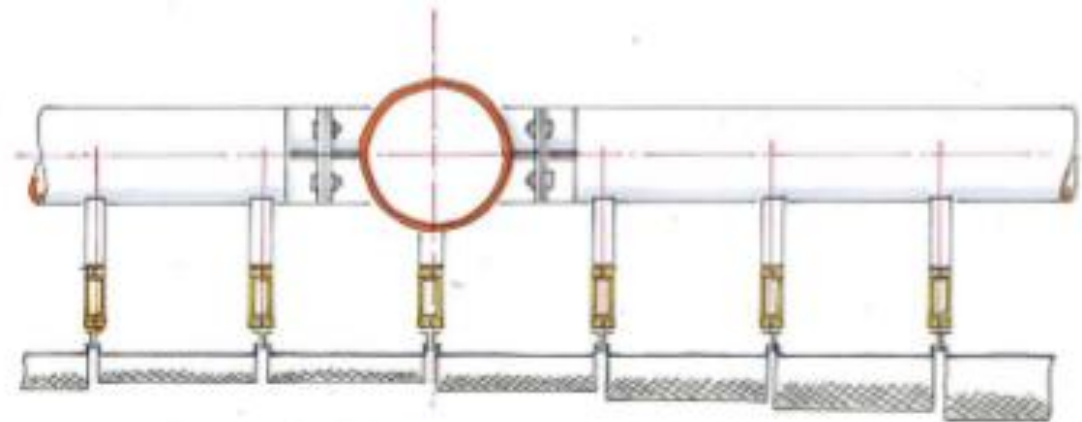
POPULOUS™

CROSS SECTION OF BLADES



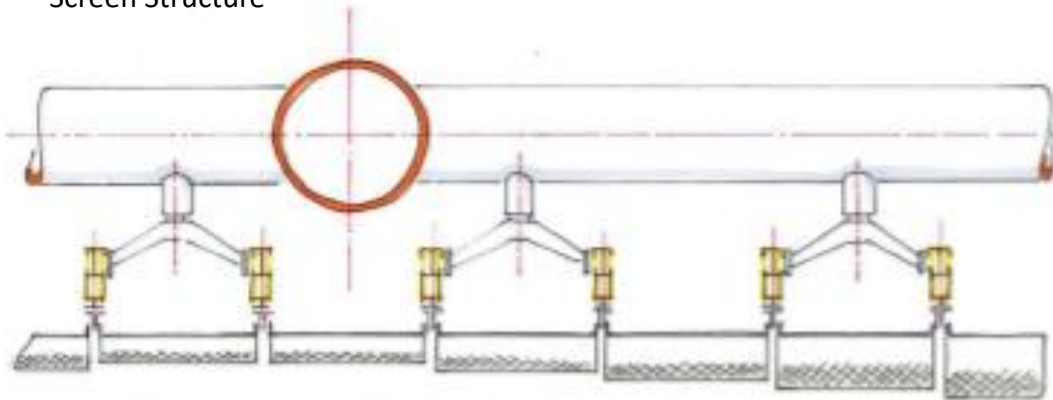
SECTION

- Screen Structure



PLAN 1

- Screen Structure



PLAN 1

- Screen Structure

POPULOUS™

BLADES DETAIL



AQUATIC CENTRE



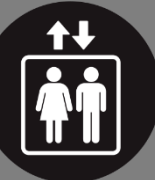
SEATING CAPACITY
4,000
AQUATIC CENTRE



OLYMPIC SIZE POOL
1
10 LANE



DIVING POOL
1
AQUATIC CENTRE



LIFT
2
AQUATIC CENTRE



SURVEILLANCE
52
AQUATIC CENTRE



TRAINING POOL
1
8 LANE



WARM UP POOL
1
AQUATIC CENTRE

EXISTING VIEW

HOCKEY STADIUM 1 & 2



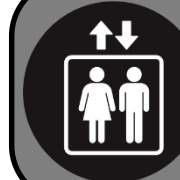
SEATING CAPACITY
11,900
HOCKEY STADIUM 1



SURVEILLANCE
51
HOCKEY STADIUM 1



TURF
XTREME
BY ACT GLOBAL



LIFT
1
HOCKEY STADIUM 1



SEATING CAPACITY
1,925
HOCKEY STADIUM 2



SURVEILLANCE
23
HOCKEY STADIUM 2



TURF
XTREME
BY ACT GLOBAL

PERSPECTIVE VIEW

PLAZA & INFRASTRUCTURE



TREES & PALMS

845

PLAZA & INFRA



WATER ELEMENT

1

UPGRADE POOL



SEATING BENCHES

27

PLAZA & INFRA



JOGGING TRACK

1.3 KM

DISTANCE



SHRUBS

125,683

PLAZA & INFRA



SURVEILLANCE

41

PARKING AREA



BICYCLE RACK

20

PLAZA & INFRA



BICYCLE TRACK

1.4 KM

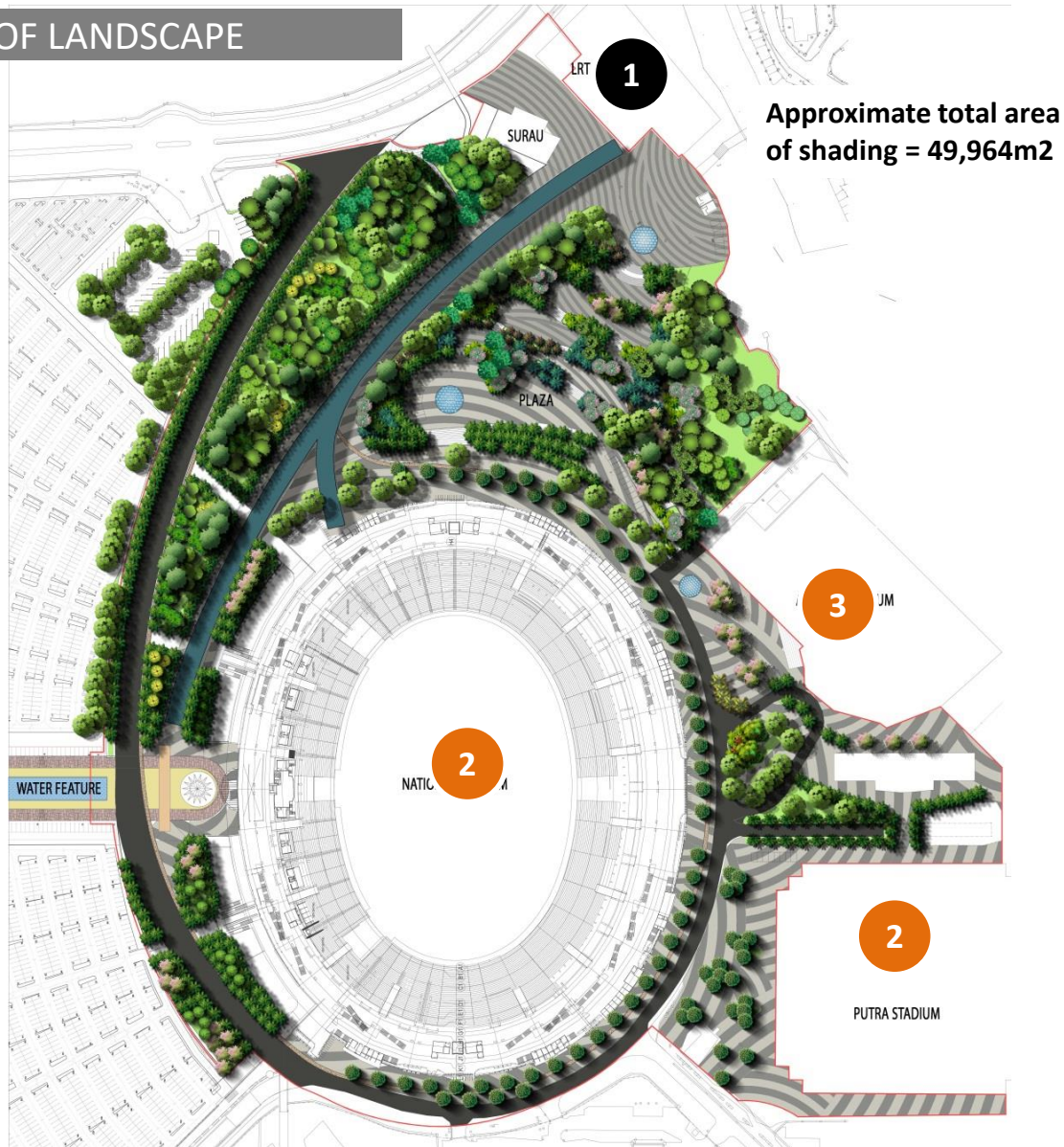
DISTANCE





CONCEPT (LANDSCAPE)

PLAN OF LANDSCAPE



LEGEND

1

BUKIT JALIL'S LRT

2

NATIONAL STADIUM

3

AXIATA ARENA

4

AQUATIC CENTRE

LANDSCAPE WORKS



BEFORE & AFTER

NATIONAL STADIUM

AXIATA ARENA

AQUATIC CENTRE

HOCKEY STADIUM 1 & 2

PLAZA & INFRA

PHOTOS: BIRD'S EYE VIEW

Source: Internet

BEFORE



LEGEND

1

NATIONAL STADIUM

2

AXIATA ARENA

3

AQUATIC CENTRE

4

HOCKEY STADIUM 1 & 2

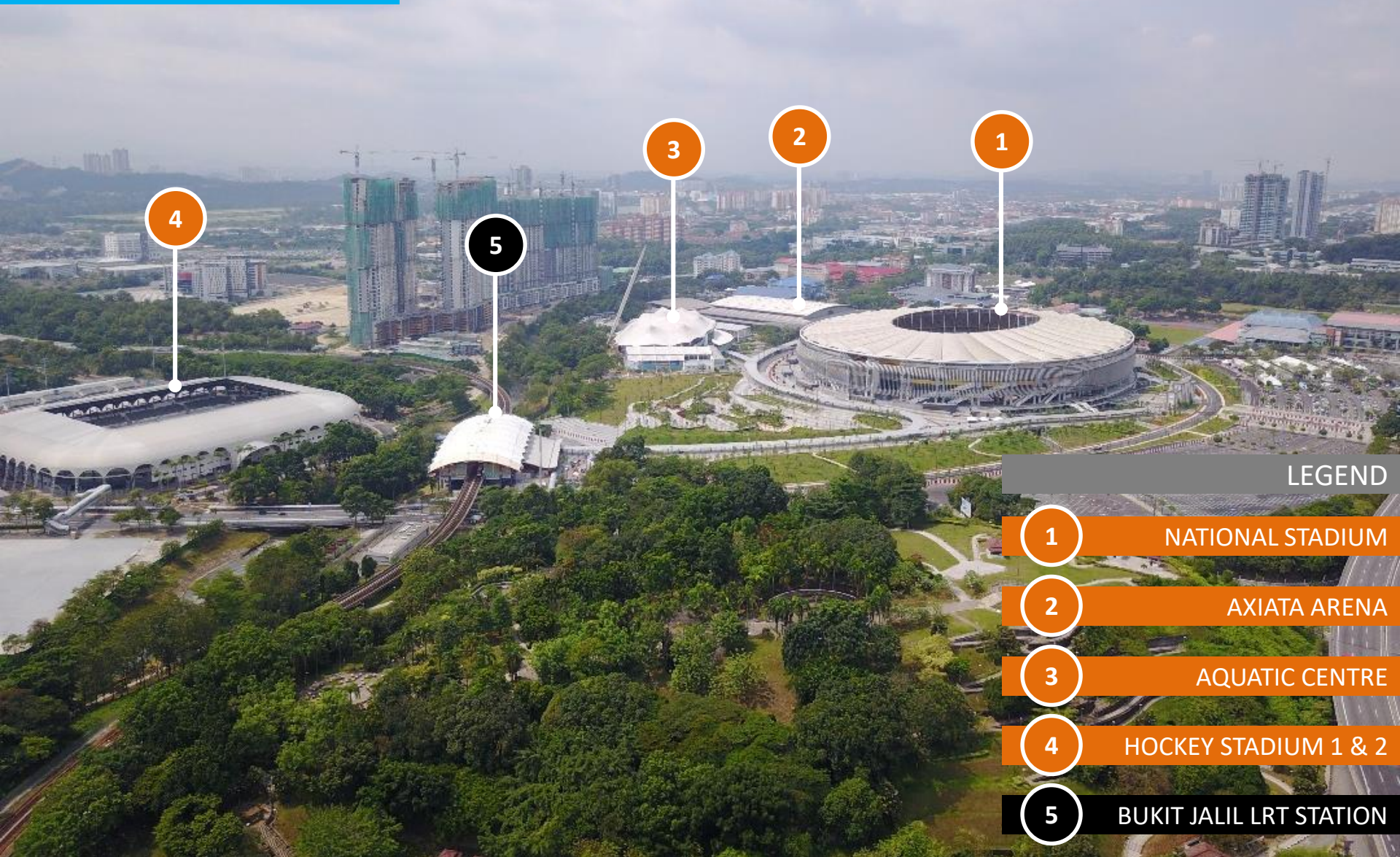
5

BUKIT JALIL LRT STATION

PHOTOS: BIRD'S EYE VIEW

Photos as of 1st August 2017

AFTER



LEGEND

1

NATIONAL STADIUM

2

AXIATA ARENA

3

AQUATIC CENTRE

4

HOCKEY STADIUM 1 & 2

5

BUKIT JALIL LRT STATION

PHOTOS: NATIONAL STADIUM

Source: Internet

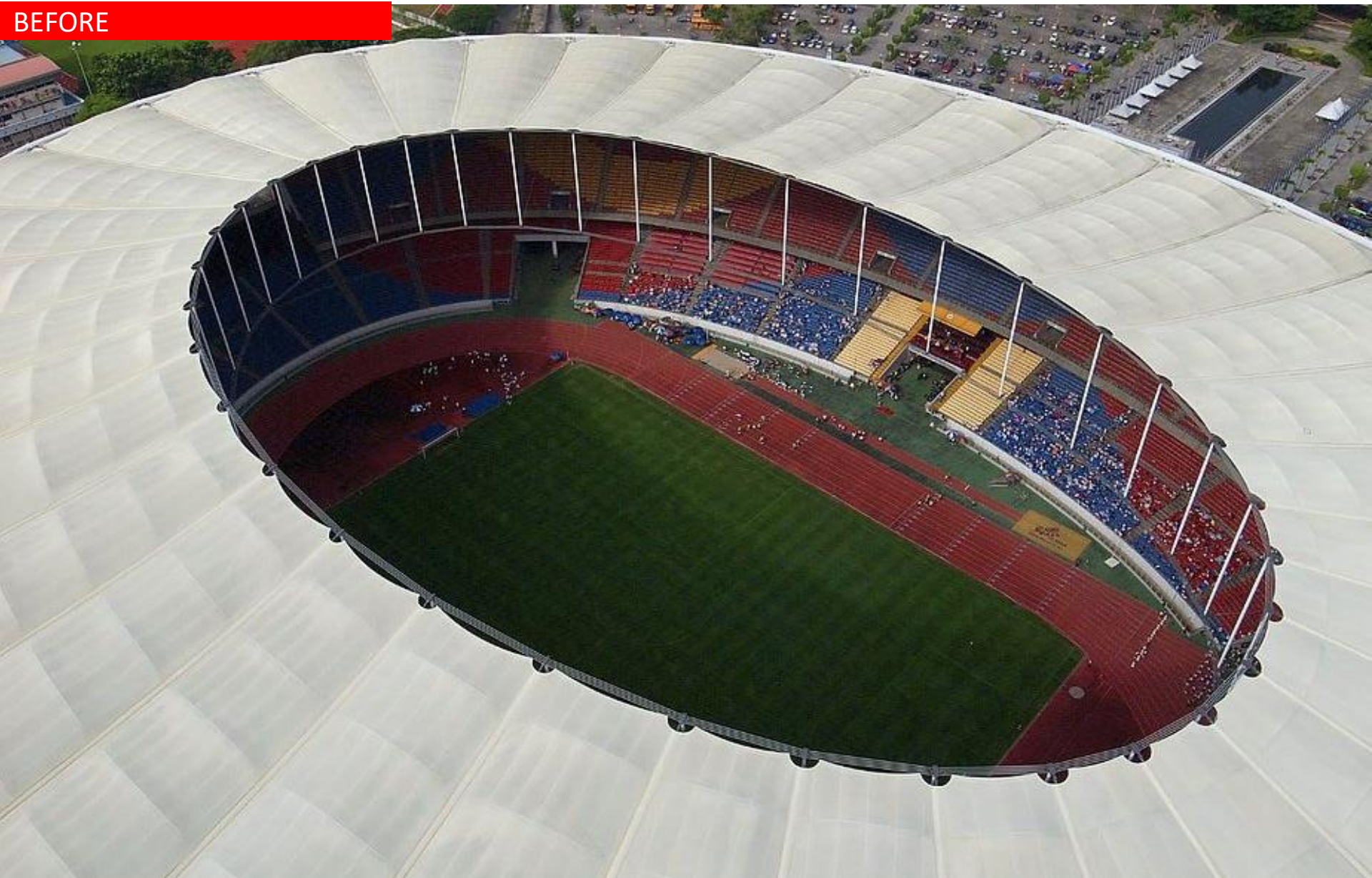
BEFORE



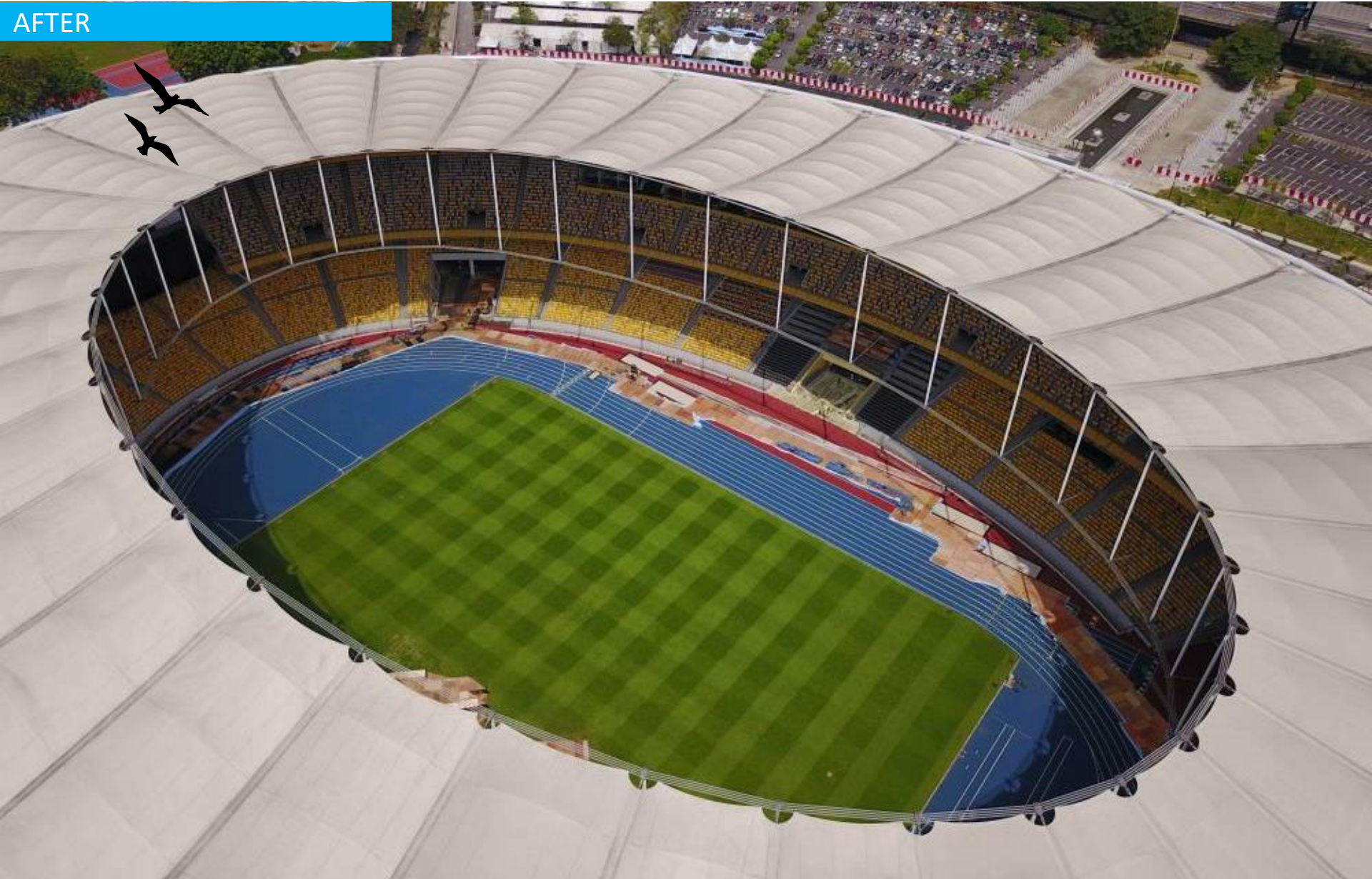
AFTER



BEFORE



AFTER



PHOTOS: NATIONAL STADIUM

Source: *Internet*





AFTER



AFTER

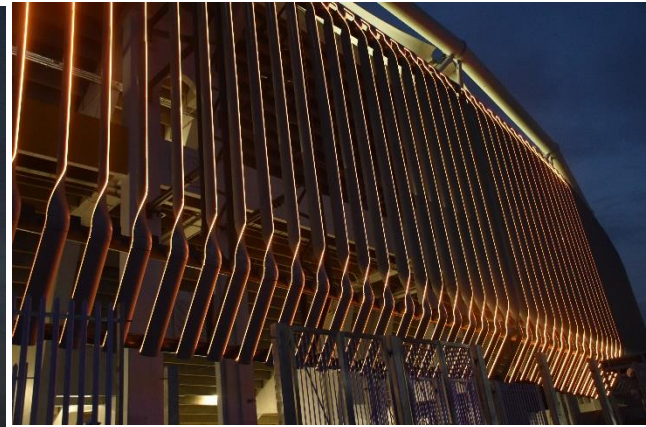
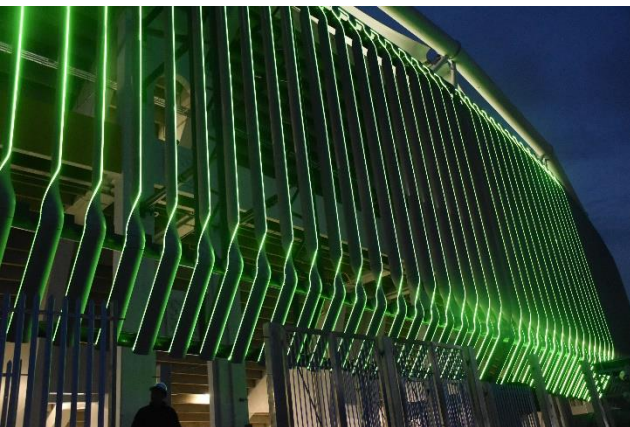
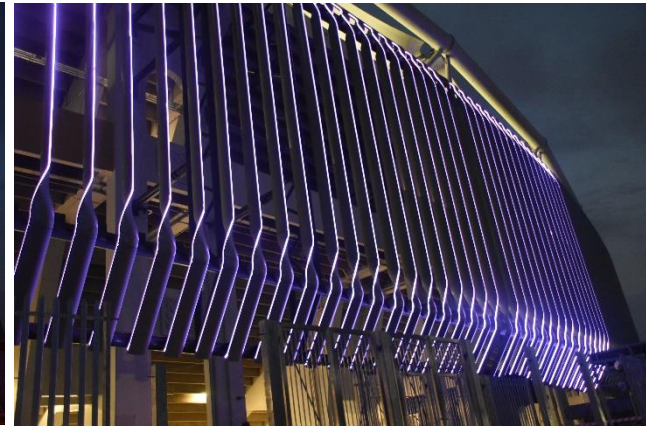
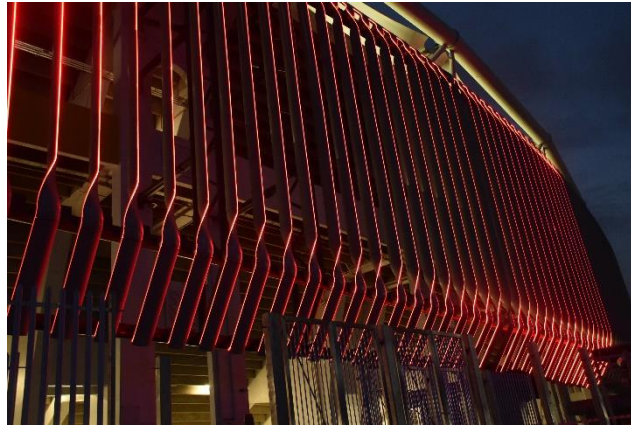


AFTER



ACTUAL LIGHTING EFFECTS

AFTER



ACTUAL LIGHTING EFFECTS

AFTER



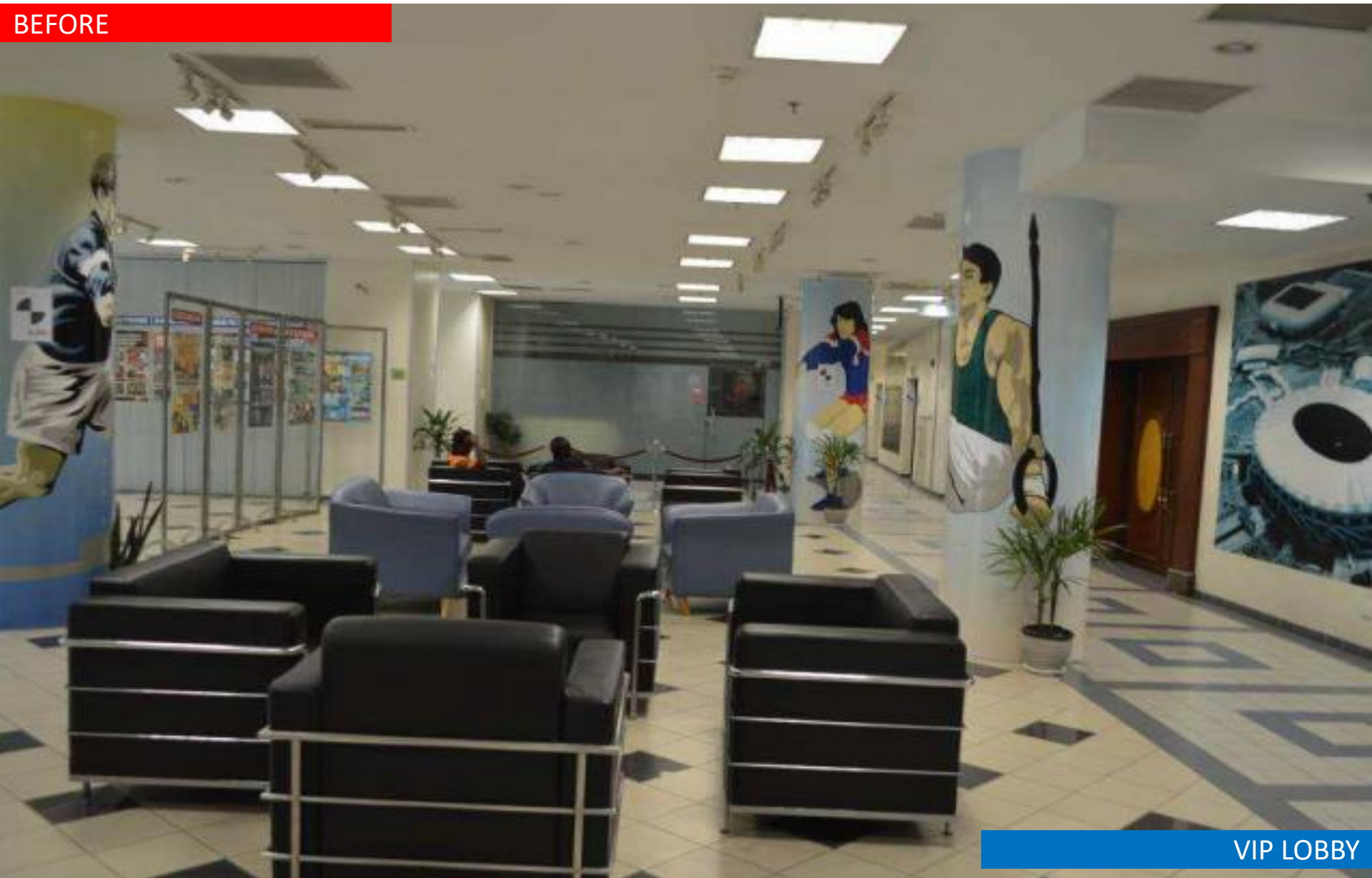
AFTER



AFTER



BEFORE



VIP LOBBY

AFTER



VIP LOBBY

BEFORE



AFTER





BEFORE



AFTER



BEFORE



MAIN LOBBY

AFTER



MAIN LOBBY

BEFORE



AFTER



BEFORE



AFTER



BEFORE



AFTER



AFTER



AFTER



PHOTOS: HOCKEY STADIUM 1 & 2

Source: Internet

BEFORE



AFTER



BEFORE



AFTER



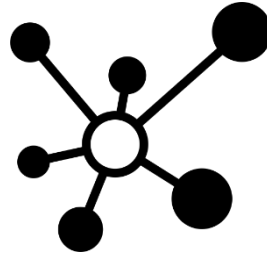
AFTER





NURTURING BUILDING PERFORMANCE

CONNECTIVITY



SOCIAL GROWTH



UNIVERSAL DESIGN



SOFTSCAPES / GREEN POCKETS

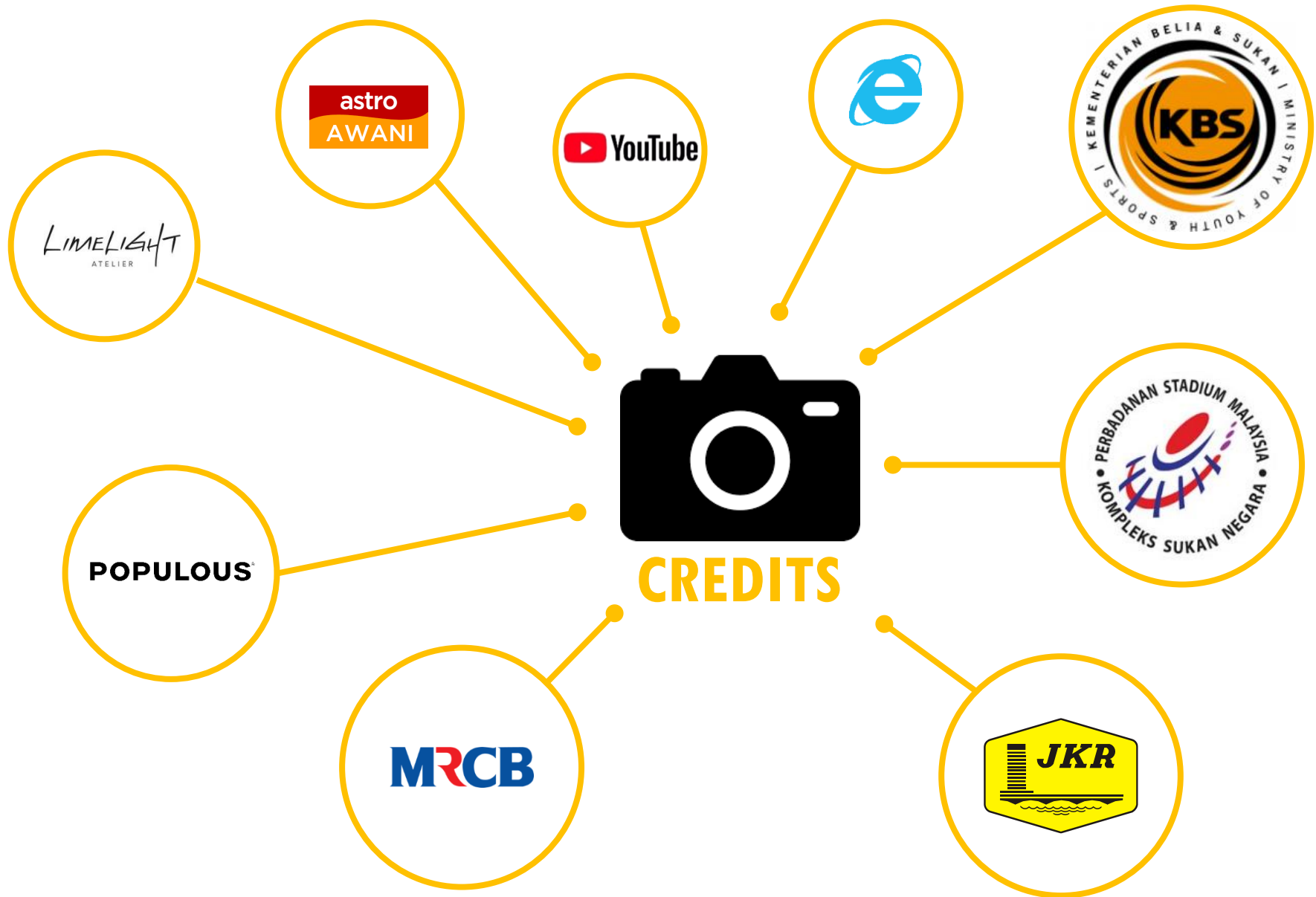


MAXIMIZE USAGE & FUNCTIONALITY





CREDITS



THANK YOU



CAWANGAN KERJA BANGUNAN AM 2
TINGKAT 3A, 15 & 16 MENARA PJD
NO. 50 JALAN TUN RAZAK
KUALA LUMPUR