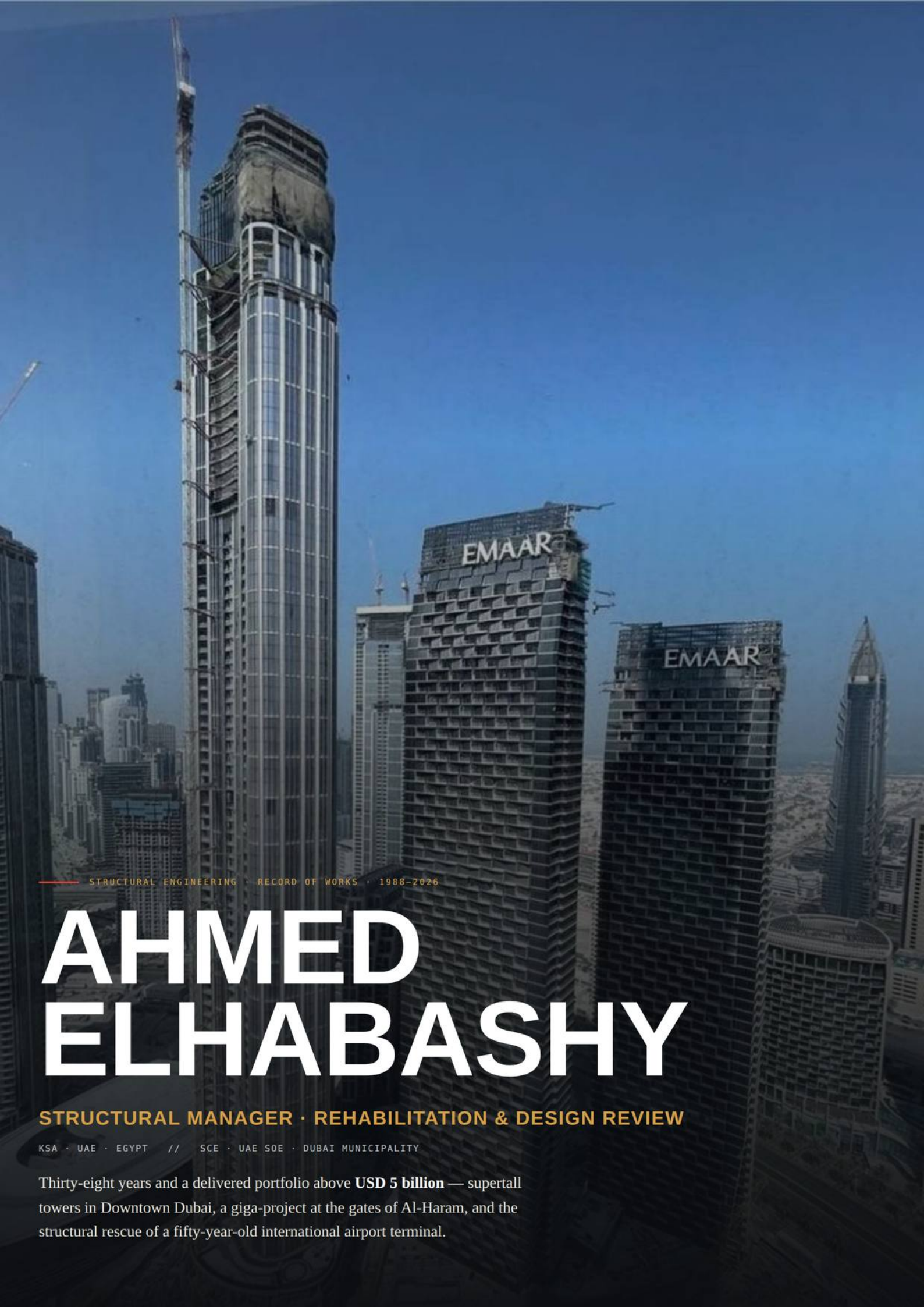




STRUCTURAL ENGINEERING · RECORD OF WORKS · 1988–2026

AHMED ELHABASHY

STRUCTURAL MANAGER · REHABILITATION & DESIGN REVIEW

KSA · UAE · EGYPT // SCE · UAE SOE · DUBAI MUNICIPALITY

Thirty-eight years and a delivered portfolio above **USD 5 billion** — supertall towers in Downtown Dubai, a giga-project at the gates of Al-Haram, and the structural rescue of a fifty-year-old international airport terminal.

38

YEARS IN PRACTICE

Continuous since graduation, 1988

\$5B⁺

DELIVERED PORTFOLIO

Airports, high-rise, cultural, industrial

100⁺

ENGINEERS LED

Peak supervision team, MASAR1

356m

TALLEST DELIVERED

Il Primo at topping out, Downtown Dubai

01

IN DELIVERY

AVIATION · REHABILITATION & STRENGTHENING

KING ABDULAZIZ INT'L AIRPORT

SOUTH TERMINAL REHABILITATION — GENERAL WORKS PACKAGE · JEDDAH

ROLE	ORGANISATION	PERIOD	ASSET	CODES
Structural Manager	AT-JV — TAV & Al-Gihaz	Jan 2025 — present	Built 1975 · 50 yrs in service	SBC · ACI 318 · AISC

Four structures, one programme: the **South Terminal (78,000 m²)**, **West Parking (27,000 m²)**, **East Parking (9,500 m²)**, and a new steel Baggage Handling building with five roof areas re-engineered inside the terminal envelope.

The contract scope was written from condition assessments prepared by two specialist firms. Once the ceilings came down, the real structure told a different story — half a century of sea air off the Red Sea coast, and decades of undocumented alterations. The issued scheme could not be built as drawn.

Rather than stop the site, our own design team re-engineered the solutions during construction. **Roughly 90% of the strengthening standing today was engineered by AT-JV as the work proceeded**, in parallel with every other trade working the same bays.

- Validate ETABS models, calculations and shop drawings against ACI 318, AISC and SBC before anything is cast.
- Primary technical liaison to the Employer (JEDCO) and five lead consultants — ZFP, ACTS, Meinhardt, DAR Al Riyadh, SJ Surbana Jurong.
- Administer RFCs, technical queries, deviations and engineering change under FIDIC; convert inherited design deficiencies into a defensible variation position.
- Every strengthened element carries its own reference number, photographed and recorded at every stage.

BEFORE · JUL 2026



AFTER · AUG 2026

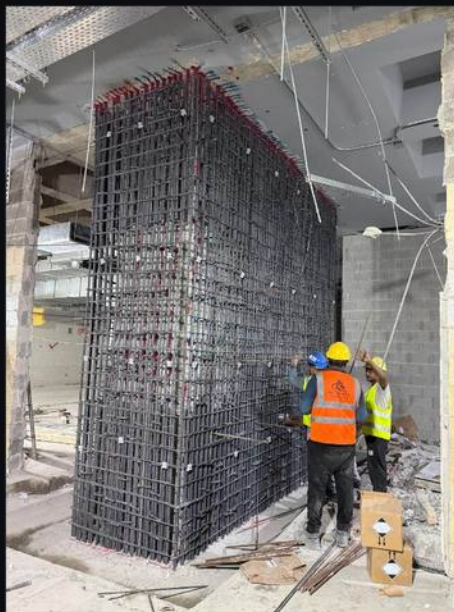




The tunnel, one month apart – drag the handle. Section loss across the full width of the soffit, cover concrete removed for inspection; new steel support installed, secured, and the soffit made good.



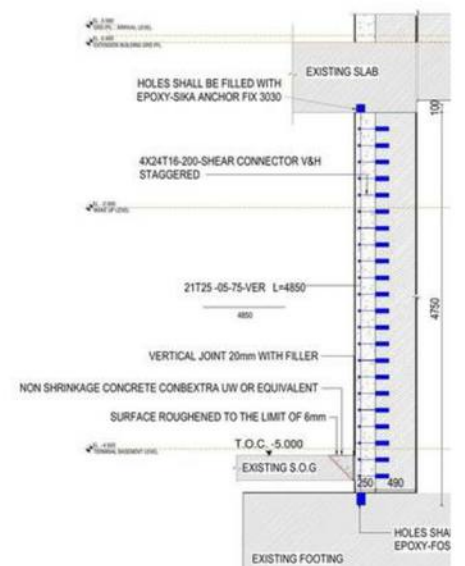
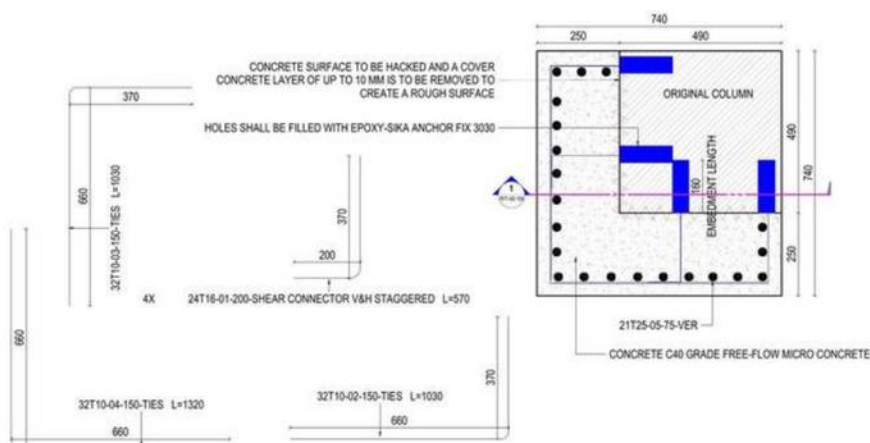
C148 • 11 Nov 2025. Weak concrete removed, substrate roughened, anchor grid set out and primed – step one of five.



Reinforcement cage, hand-tied. A wall-sized element caged floor to soffit, starter bars carried into the slab above.



Proof, not promises. Anchors pull-tested, every batch crushed, designs independently reviewed, behaviour monitored month after month.



Column jacketing, Type L – the author's trade. Original 490 × 490 column enlarged to 740 × 740; verticals, ties and staggered shear connectors scheduled; epoxy anchors, C40 free-flow micro-concrete, non-shrink grout; substrate roughened to 6 mm. Engineered, issued and built while the terminal around it stayed under construction.

THE VARIATION IN NUMBERS – ORIGINAL SCOPE VS BUILT

B001 · COLUMN JACKETING CONCRETE

1,710 m³

against 964 m³ in the original design — **+77%**

BHS AREAS 5–6 · STRUCTURAL STEEL

30 t

against 14.5 t originally foreseen — **+107%**

BHS AREAS 1–4 · CONCRETE + STEEL

280 m³ + 8.5 t

no original scope at all — **100% engineered from zero**

WHY IT MATTERS COMMERCIALY

Every added quantity was identified, engineered and delivered during construction.

That measured gap between contract scope and built reality is what carried the variation — absorbed without stopping the site.

CURRENT · PARALLEL ENGAGEMENT

AVIATION · EARLY CONTRACTOR INVOLVEMENT

KSIA — TERMINAL 6

EARLY CONTRACTOR INVOLVEMENT (ECI) STAGE 1 · UC-568 · CONTRACT C00112

ROLE

Structural Manager

ORGANISATION

AT-JV – sub-consultant to
WGT-JV

STAGE

ECI Stage 1 · in progress

WORKFLOW

Revit → ETABS · AI-assisted
automation

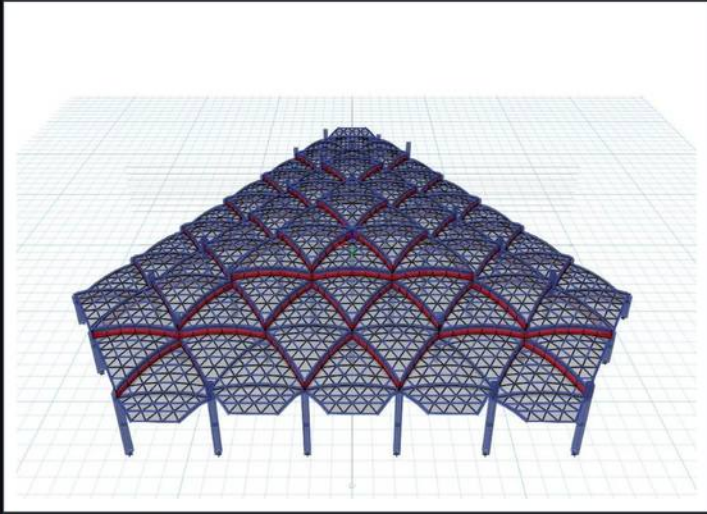
Early Contractor Involvement puts the builder's engineers inside the design room while the design can still be changed cheaply. On Terminal 6, I lead the structural side of AT-JV's Stage 1 scope as sub-consultant to WGT-JV — in parallel with the KAIA delivery on the previous page.

The structure is a repeating family of vaulted roof modules on arched ribs and a triangulated lattice — a geometry that would take weeks to rebuild member by member in an analysis package, and could have to be rebuilt

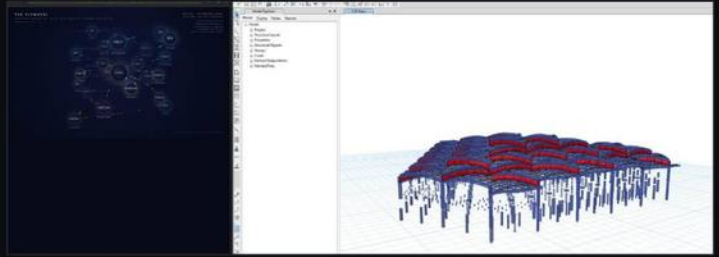
- Structural Manager for AT-JV's ECI Stage 1 engagement (sub-consultant to WGT-JV) — UC-568, Contract C00112.
- Revit-to-ETABS model generation automated: the vaulted-roof lattice and supporting frame produced from the design model, not redrawn.
- Analysis keeps pace with the architecture — each revision re-modelled and re-run in a fraction of the manual cycle.

member-by-member in an analysis package, and would have to be rebuilt again at every design revision.

So it isn't rebuilt by hand. **I built an AI-assisted automation that reads the Revit design model and generates the ETABS analysis model directly** — one geometry in design and analysis, no transcription, and a model that can be regenerated as the design moves. That speed is exactly what ECI-stage engineering exists to exploit.



The generated ETABS model. The full vaulted-roof lattice and supporting frame — produced by the automation from the Revit design model shown in the banner above.



The pipeline at work. The automation loop on one screen, ETABS receiving the generated model on the other — frame from a screen recording of a live run.

03

HOLY CITY GIGA-PROJECT · CONSULTANT SUPERVISION

MASAR1 — PACKAGE A

FOUR HIGH-RISE TOWERS + FOUR SERVICE BUILDINGS · MAKKAH

ROLE	ORGANISATION	PERIOD	TEAM	CODES
Chief Resident Engineer	DAR International (Alfanar)	Mar 2023 — Dec 2024	100+ supervision personnel	SBC · ACI 318 · BS 8110

MASAR sits at the western threshold of Al-Haram Mosque — a masterplan reshaping how pilgrims move from the transit nodes toward the holy site.

Package A is the gateway: the hub connecting the public transport networks serving the district.

— Reviewed and approved designs, shop drawings, calculations and material submittals across all disciplines.

— Resolved design and execution conflicts at source — structural, architectural and MEP interfaces.

I held full technical authority across eight concurrent structures in a dense, access-restricted environment where the working window is set by the pilgrimage calendar, not the programme.

Delivered on time and within budget, with a **~20% efficiency improvement** against baseline through value engineering and optimised sequencing, and **zero safety incidents** across the reporting period.

- Chaired weekly coordination; reported deviations to the client with a documented position.
- Structured mentoring programme — team performance metrics up ~15%.



Package A, aerial. Four residential towers and four service buildings over a retail podium. *Developer visualisation.*



Package -A. The gateway to Al-Haram. The hub connecting the district's public transport networks. *Developer visualisation.*

04

DOWNTOWN DUBAI · CONTRACTOR-SIDE STRUCTURAL DELIVERY

DOWNTOWN DUBAI HIGH-RISE

IL PRIMO · ADDRESS FOUNTAIN VIEWS · BOULEVARD POINT · MASHREQ BANK HQ

Twelve years delivering structure in the densest tower market in the region, on the plots immediately around Burj Khalifa and the Opera House — where the site boundary is the kerb and every lift, pour and closure is negotiated with a live city.

At **TAV Construction** I ran structural engineering for Il Primo and the Address hotel and hotel-apartment towers. At **Arabian Construction Company** I directed structural delivery over nine years across Fountain View Towers, Boulevard Point and the Mashreq Bank Headquarters.

Consistent across all of them: design coordination and package review for code and buildability before release to construction, and coordination processes that cut RFI turnaround and the design-related delay that follows it.

- **Il Primo** — topped out at 356 m, north of the Opera House, facing Burj Khalifa.
- **Address Fountain Views** — 70+ and 60+ storey hotel and hotel-apartment towers over a 12-storey podium.
- **Boulevard Point** — 70+ storeys on Mohammed Bin Rashid Road, link-bridged to The Dubai Mall.
- Lateral systems, cores and vertical transportation reviewed for high-rise wind and seismic demand.



Il Primo, from the site. 356 m at topping out.



Il Primo and Address, from site. 80+, 70+ and 60+ storeys in one cluster.



Boulevard Point. 70+ storeys, link-bridged to The Dubai Mall. *Developer visualisation.*

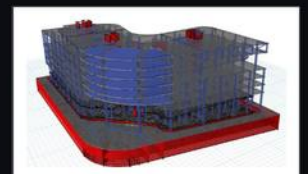
05 · ANALYSIS & DESIGN REVIEW

MODELLING & INDEPENDENT REVIEW

My career runs through contracting, consultancy and owner-side direction. That combination is the reason I can review a consultant's design for coordination, constructibility and code compliance *and* still know what it will cost to build.

On rehabilitation work the model is not a formality. At KAIA the BHS building was surveyed by hand and modelled from scratch before a single member was ordered — and two of the five roof areas proved strong enough as they stood. **No money was spent strengthening them.**

ETABS · SAFE · SAP2000 · REVIT · NAVISWORKS · AUTOCAD



Vision Tower, New Administrative Capital.
Engineering Director, National Investment Group, 2022–23.

High-rise analysis model.
Frame, outrigger and belt-
truss bracing, core and
basement box.

06 · TECHNICAL AUTHORITY

WHAT I AM RELIED ON FOR

ASSESSMENT & STRENGTHENING 01

- Condition assessment and structural appraisal of ageing assets
- RCC jacketing, steel plating, CFRP, engineered openings
- Micro-piling and new foundations under live structures
- Temporary works and load-path continuity during strengthening

DESIGN REVIEW & MODELLING 02

- Independent design review and third-party checking
- Design-model compliance audit — ETABS, SAFE, SAP2000
- AI-assisted Revit-to-ETABS model-generation automation
- Shop-drawing and submittal review cycles
- Revit and Navisworks coordination; AutoCAD documentation

CONTRACT & COMMERCIAL 03

- FIDIC administration — RFCs, technical queries, deviations
- Variation assessment and design-related claims support
- Structural value engineering and material cost optimisation
- Tender submittals, budget forecasting, cost validation

GOVERNANCE & LEADERSHIP 04

- Multidisciplinary team leadership, 100+ engineers
- QA/QC, ITP regimes, NCR resolution, HSE enforcement
- Authority interface — SCE, ADM, Dubai Municipality
- Engineer development and structured mentoring programmes

07 · RECORD

THIRTY-EIGHT YEARS, CONTINUOUS

2025 — PRESENT

AT-JV · TAV CONSTRUCTION & AL-GHAZ HOLDING

Structural Manager · KAIA South Terminal Rehabilitation, Jeddah · KSIA Terminal 6
ECI Stage 1 (sub-consultant to WGT-JV)

2023 — 2024

DAR INTERNATIONAL (ALFANAR)

Chief Resident Engineer · MASAR1 Package A, Makkah

2022 — 2023

NATIONAL INVESTMENT GROUP

Engineering Director · Vision Tower, New Administrative Capital, Cairo

2020 — 2022

TROJAN CONTRACTING

Structural Department Head · Guggenheim Abu Dhabi · KIZAD industrial & logistics portfolio

2017 — 2020

TAV CONSTRUCTION

Structural Engineering Manager · Address Hotels & Hotel Apartments · Il Primo, Dubai

2008 – 2017

ARABIAN CONSTRUCTION COMPANY

Structural Manager · Fountain View Towers · Boulevard Point · Mashreq Bank HQ,
Dubai

2005 – 2008

PI CONSULT — ARAMCO GES CONSULTANT

Head of Civil Engineering Section · Saudi Aramco industrial & infrastructure, SAES,
Al-Khobar

1989 – 2005

THE EGYPTIAN CONSULTING OFFICE · MOKHTAR IBRAHIM CO.

Senior Structural Engineer · Site Section Engineer · Cairo

EDUCATION

M.Sc. Structural Engineering, Menoufia
(2003)
B.Sc. Civil Engineering, Alexandria
(1988)

REGISTRATION

Saudi Council of Engineers (2013)
UAE Society of Engineers (2015)
Dubai Municipality Licensed Steel Design
Eng. (2020)
PMP in progress

LANGUAGES

Arabic – native
English – professional

AVAILABLE

IF A STRUCTURE
IS NOT BEHAVING
AS ITS DRAWINGS
SAY IT SHOULD —
THAT IS MY WORK.

• TRANSFERABLE IQAMA · ONE MONTH NOTICE · KSA-WIDE MOBILITY

elhabashy1966@gmail.com

[+966 53 642 2324](tel:+966536422324)

Jeddah, Saudi Arabia

AHMED ELHABASHY · STRUCTURAL RECORD

Site photography & engineering documentation from the works described · developer visualisations marked as such