

# PROFILE OF COMPANY INDICATIVE PROJECTS



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KALLIERGOS O.T.M.  
CONSULTING ENGINEERING



**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY



## **Firm Profile**

The Consulting Engineering firm KALLIERGOS O.T.M. S.A. has a lead role and participation in all major infrastructure projects in Greece and a strong presence in similar projects abroad.

Founded in 2004 via an internal restructure of the operating since 1965 mother Company O.T.M. Ltd, continues the tradition of offering high quality services to State Authorities, General Contractors and Private Equity Organizations. The firm is based in Athens, Greece, housed in private premises. Combining the vast record of experience and the highly qualified Engineering Staff the company has the capacity and resources to apply state-of-the-Art methods of Structural and Earthquake Engineering to projects of any size and level of complexity.





## INTERNAL QUALITY ASSURANCE PROCESSES

### 1. General

Since 2014, Kalliergos OTM has been operating under the ISO 9001 Quality Management System, ensuring that all internal processes support the delivery of high-quality design services. The company's human resources and infrastructure adhere to well-defined quality control procedures, which contribute directly to the successful execution of its projects.

Kalliergos OTM is committed to the continuous improvement of its internal operations. This is achieved through ongoing training for engineering personnel and the integration of advanced technical tools across all design disciplines.

The company is managed and staffed by highly skilled and experienced engineers. Design outputs are regularly reviewed and validated through established procedures to ensure they meet the highest quality standards.

Since 2018, Kalliergos OTM has been fully compliant with GDPR, having integrated its principles into all internal and external operations.

In addition to ISO 9001, the company has also held ISO 14001, ISO 37001, and ISO 45001 certifications since 2025.

### 2. Internal Structure

Kalliergos OTM is organized into specialized engineering departments, including:

- Building Design
- Bridge Design
- Industrial Building Design
- Building Retrofit Design

Each department operates under the guidance of expert engineers and utilizes state-of-the-art software for analysis and design. Administrative functions such as the Secretariat and Accounting Office are fully integrated into the company's operations and are subject to the same rigorous quality standards.



### 3. Infrastructure

The company has established a centralized system for the management and oversight of all design and documentation activities. Engineers and administrative personnel access electronic data through a secure server-client infrastructure with defined access rights and permissions.

Data security is ensured through daily backups and the use of advanced firewall systems. All electronic infrastructure is developed and maintained by a dedicated IT partner. Kalliergos OTM operates from privately owned facilities.

### 4. Software

Kalliergos OTM utilizes globally recognized software for structural analysis and design. Since 2010, Building Information Modeling (BIM) has been implemented in nearly all projects, significantly enhancing the quality of deliverables while minimizing design errors both within the firm and in coordination with other disciplines.

For KALLIERGOS OTM S.A.

Christos Plainis

Member of Board - Quality Manager

# Certificate

Management system as per

**ELOT EN ISO 14001 : 2015**

The Certification Body TÜV HELLAS (TÜV NORD) S.A. hereby confirms as a result of the audit, assessment and certification decision according to ISO/IEC 17021-1:2015, that the organization

**KALLIERGOS O.T.M. S.A.**  
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**114 73 Athens**  
**Hellas**



operates a management system in accordance with the requirements of ELOT EN ISO 14001 : 2015 and will be assessed for conformity within the 3 year term of validity of the certificate.

Scope

**Structural Design, Consulting and Construction Follow Up Services.**

Certificate Registration No. 042 25 0004  
Audit Report No. EM-1455/2025

Valid from 2025-02-06  
Valid until 2028-02-05  
Initial Certification 2025

Athens, 06.02.2025

TÜV HELLAS (TÜV NORD) S.A. Certification Body

**TÜV HELLAS (TÜV NORD) S.A.**  
282, Mesogeion Ave.  
155 62 Athens, Greece  
tuvhellas.gr



# Certificate

Management system as per  
**ELOT ISO 45001 : 2018**

The Certification Body TÜV HELLAS (TÜV NORD) S.A. hereby confirms as a result of the audit, assessment and certification decision according to ISO/IEC 17021-1:2015, that the organization

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**Hellas**



operates a management system in accordance with the requirements of ELOT ISO 45001 : 2018 and will be assessed for conformity within the 3 year term of validity of the certificate.

Scope

**Structural Design, Consulting and Construction Follow Up Services.**

Certificate Registration No. 047 25 0004  
Audit Report No. OH-0668/2025

Valid from 2025-02-06  
Valid until 2028-02-05  
Initial Certification 2025

Athens, 06.02.2025



TÜV HELLAS (TÜV NORD) S.A. Certification Body

**TÜV HELLAS (TÜV NORD) S.A.**  
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# Certificate

Management system as per

**ISO 37001 : 2016**

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**Hellas**

operates a management system in accordance with the requirements of ISO 37001 : 2016 and will be assessed for conformity within the 3 year term of validity of the certificate.

Scope

**Structural Design, Consulting and Construction Follow up Services.**

Certificate Registration No. 066 25 0004  
Audit Report No. AMS-0141/2025

Valid from 2025-01-28  
Valid until 2028-01-27  
Initial certification 2025

Athens, 28.01.2025



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MS Certification  
No of Certificate 185

TÜV®

**TÜVNORDGROUP**



# Certificate

Management system as per

**ELOT EN ISO 9001 : 2015**

The Certification Body TÜV HELLAS (TÜV NORD) S.A. hereby confirms as a result of the audit, assessment and certification decision according to ISO/IEC 17021-1:2015, that the organization

**KALLIERGOS O.T.M. S.A.**  
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**114 73 Athens**  
**Hellas**



operates a management system in accordance with the requirements of ELOT EN ISO 9001 : 2015 and will be assessed for conformity within the 3 year term of validity of the certificate.

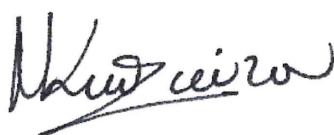
Scope

**Structural Design, Consulting and Construction Follow Up Services.**

Certificate Registration No. 041 17 0178  
Audit Report No. E-2323/2023

Valid from 2023-12-28  
Valid until 2026-12-27  
Initial certification 2017

Athens, 22.12.2023



TÜV HELLAS (TÜV NORD) S.A. Certification Body

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# Major Projects



**KALLIERGOS O.T.M.**  
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#### CLIENT:

The Red Sea Development Company

#### PERIOD:

2021-2022

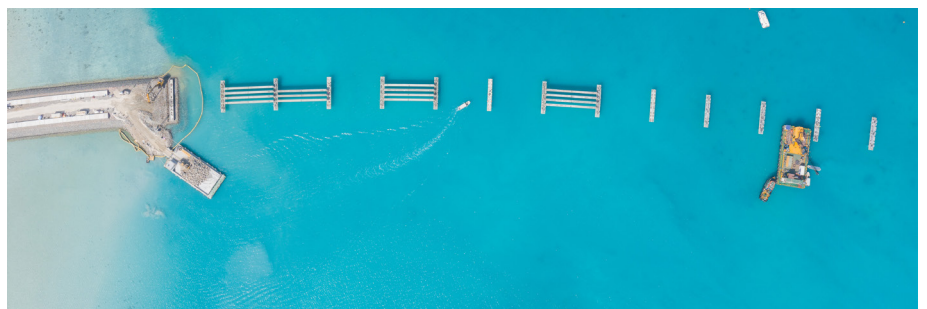
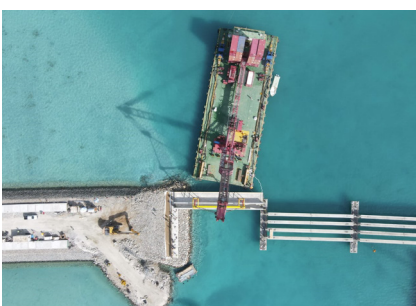
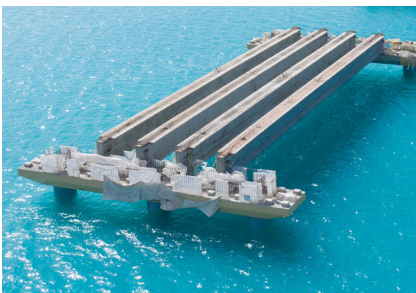
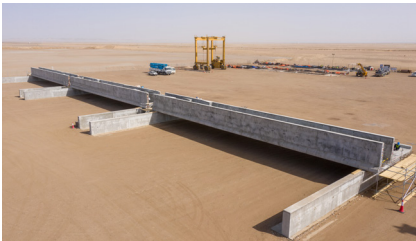
#### CONTRACTOR:

ARCHIRODON

## THE RED SEA PROJECT - SHURAYRAH BRIDGE

#### DESCRIPTION:

The project consists of a central road bridge of 30 spans with a total length of about 1100m, and two smaller ones with spans of about 37m each. The main bridge is located in the sea and connects the mainland of Saudi Arabia with the island of SHURAYRAH. The width of the road deck is 13.50m while on both sides of it there are two sidewalks, two closed MEP corridors as well as planting lanes. The total width of the bridge is circa. 28m. The road deck of the bridge consists of prefabricated prestressed beams and slabs while the structures on both sides are made of prestressed U-shape girders with cantilevers at the bottom flange. The deck rests on pedestals consisting of 3 circular pillars and prefabricated cap-beams.







**KALLIERGOS O.T.M.**  
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## THE RED SEA PROJECT - SHURAYRAH BRIDGE

### CLIENT:

THE RED SEA DEVELOPMENT COMPANY

### PERIOD:

2021-2022

### CONTRACTOR:

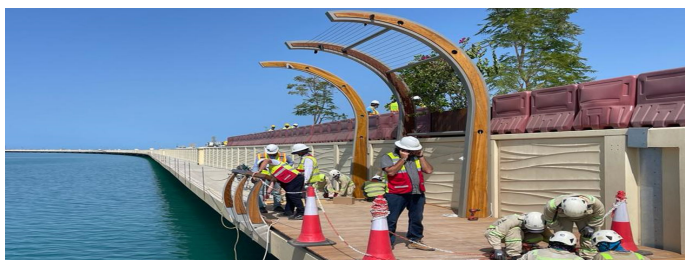
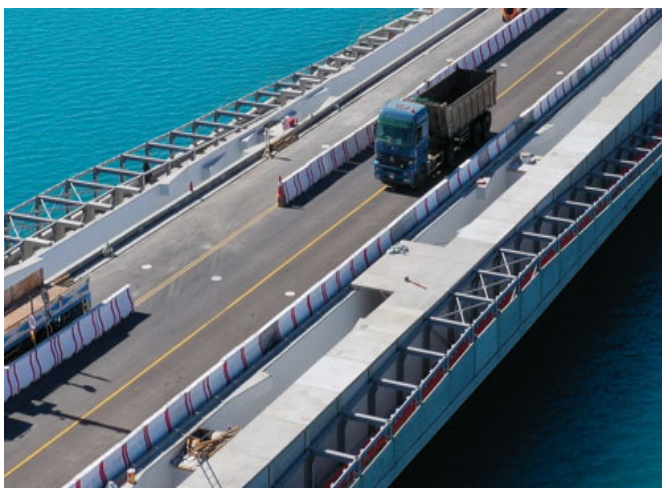
ARCHIRODON

### STRUCTURAL DESIGN FEE:

450,000€

### DESCRIPTION:

The project consists of a central road bridge of 30 spans with a total length of about 1100m, and two smaller ones with spans of about 37m each. The main bridge is located in the sea and connects the mainland of Saudi Arabia with the island of SHURAYRAH. The width of the road deck is 13.50m while on both sides of it there are two side-walks, two closed MEP corridors as well as planting lanes. The total width of the bridge is circa. 28m. The road deck of the bridge consists of prefabricated prestressed beams and slabs while the structures on both sides are made of prestressed U-shape girders with cantilevers at the bottom flange. The deck rests on pedestals consisting of 3 circular pillars and prefabricated cap beams.





## UPGRADE, MAINTENANCE, MANAGEMENT AND OPERATION OF AEGEAN REGIONAL AIRPORTS

### CLIENT:

FRAPORT GREECE

### PERIOD:

2017-2020

### CONTRACTOR:

INTRAKAT

### DESCRIPTION:

Structural Design Services for six Airports of Aegean islands:

- Expansion of **Mykonos** Airport (3.000 m<sup>2</sup>)
- Expansion of **Santorini** Airport (13.000 m<sup>2</sup>)
- Expansion of **Rhodes** Airport (Numerous internal and external steel constructions)
- Expansion of **Samos** Airport (800m<sup>2</sup> and 2 steel canopies)
- Expansion of **Skiathos** Airport (1.500m<sup>2</sup> and 3 steel canopies)
- Complete reconstruction of **Kos** Terminal Buildings (23.000m<sup>2</sup>)
- Structural Design of **Fire Stations** and other auxilliary buildings in all airports(10.000m<sup>2</sup>)





**KALLIERGOS O.T.M.**  
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**CLIENT:**

QATAR RAIL

**PERIOD:**

2014 - 2016

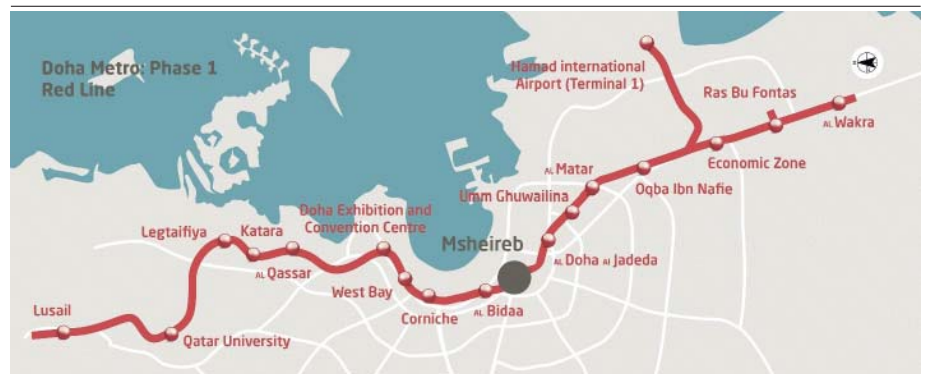
**CONTRACTOR:**

FYAP

## DOHA METRO RED LINE SOUTH

**DESCRIPTION:**

The new Doha Metro Red Line South is currently under construction. The project comprises 7 km of elevated and at-grade double railway as also three rail stations. Bridges main construction method is segmental construction with precast - prestressed segments. KALLIERGOS OTM S.A. has undertaken the Design Verification of all design disciplines.







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## DOHA LINK

### CLIENT:

STATE OF KUWAIT

### PERIOD:

2013

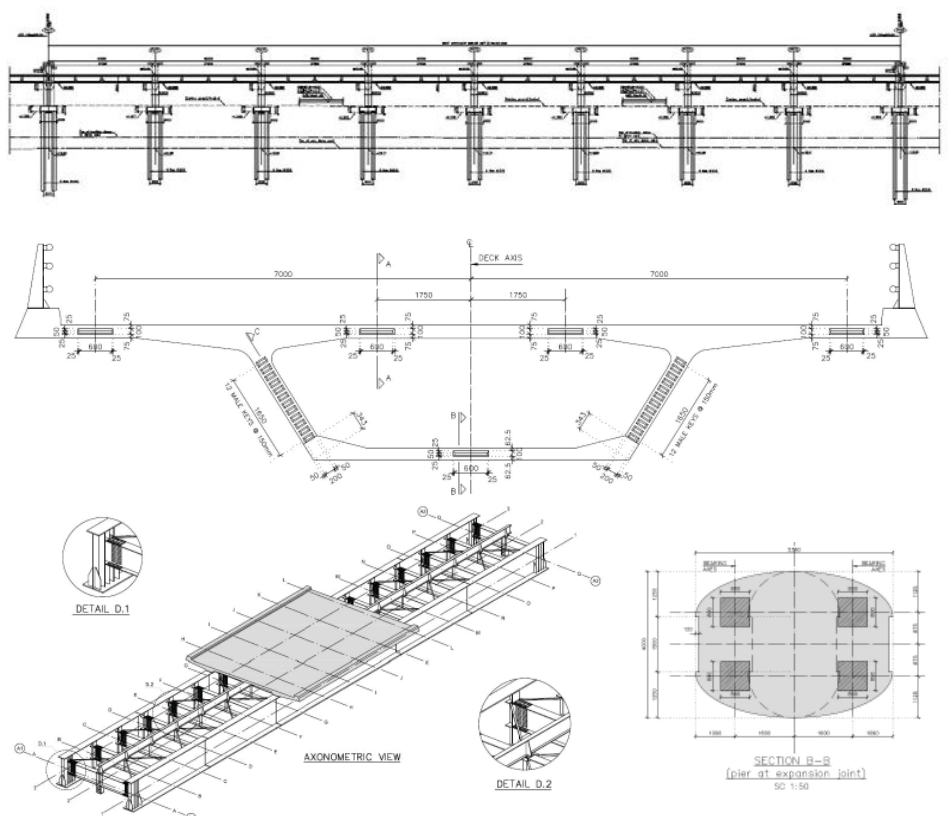
### CONTRACTOR:

ARCHIRODON

### DESCRIPTION:

The scope of work was the preliminary tender design of DOHA LINK Project and was assigned at KALLIERGOS OTM by the contractor ARCHIRODON. For the accurate estimation of quantities, both calculations and drawings were performed at an advanced level for all structures as follows :

- Dual overseas bridge of 7 Km total length. The bridge comprises 123 spans on piers with steel pilees foundations. The bridge deck is provided with precast-prestressed segments.
- Three interchanges comprising bridges and retaining structures.
- One composite bridge spanning 74m over existing pipelines.







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**CLIENT:**

OLYMPIA ODOS S.A.

**PERIOD:**

2008 - 2015

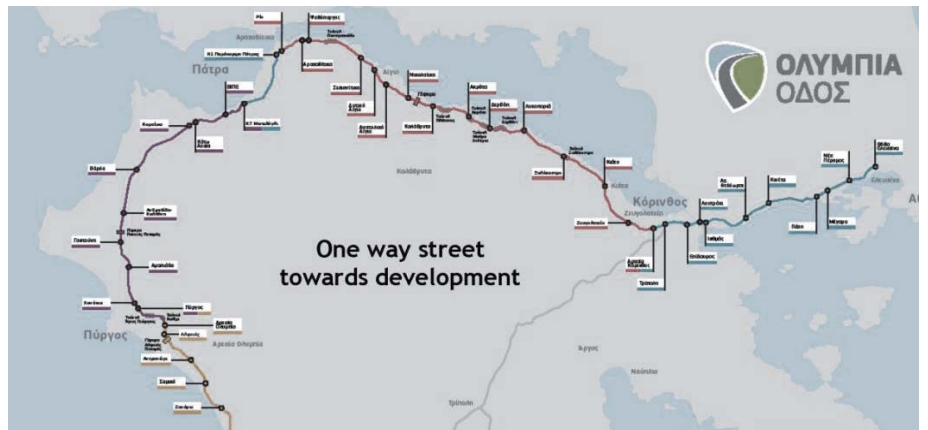
**CONTRACTOR:**

APION KLEOS J/V

## OLYMPIA ODOS

**DESCRIPTION:**

Olympia Odos is one of the major infrastructure projects in Greece and is currently under construction. KALLIERGOS OTM S.A. has undertaken the design of a significant number of structures comprising bridges, lane covers, retaining walls, motorway service buildings as also all signbridges and noise barriers of motorway.





## KORINTHOS - TRIPOLI - KALAMATA MOTORWAY AND THE LEFKTRO - SPARTI BRANCH

### CLIENT:

MOREAS S.A.

### PERIOD:

2006 - 2012

### CONTRACTOR:

MOREAS J/V

### DESCRIPTION:

The MOREAS motorway is one of the major infrastructure projects currently being constructed in Greece. The motorway comprises a significant number of works (bridges, retaining structures e.t.c.). Structural design for the below works was carried out by KALLIERGOS OTM S.A.

2	Cantilever erection bridges
3	High bridges
51	Underpasses
30	Overpasses
20	Bridges over streams
8	Bridges over rivers
18	Widening of existing bridges







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## HELLINIKON METROPOLITAN PARK

### LLA DESIGN CONTRACT

#### CLIENT:

LAMDA DEVELOPMENT

#### PERIOD:

2022-2023

#### ARCHITECT:

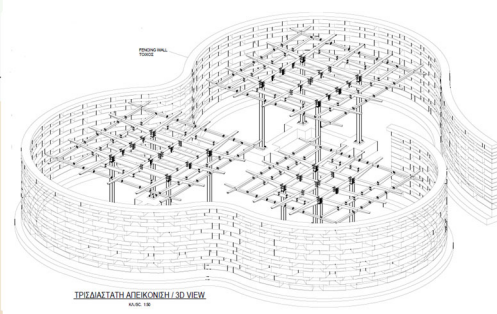
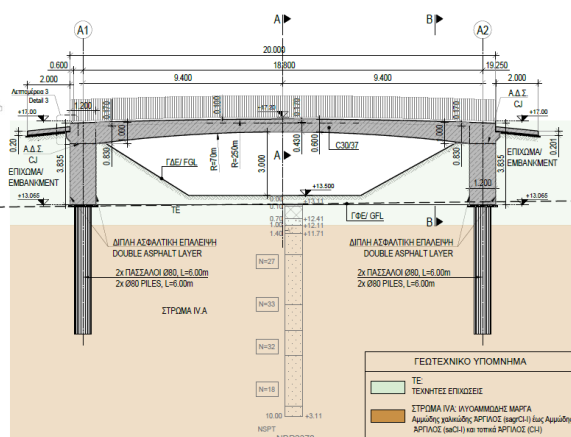
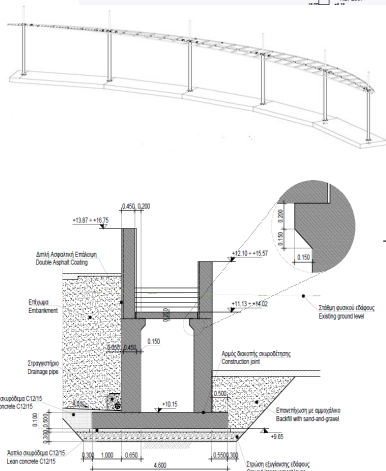
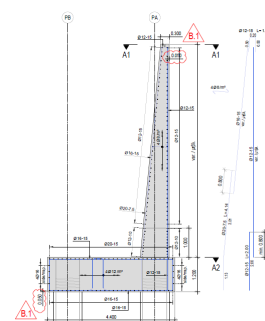
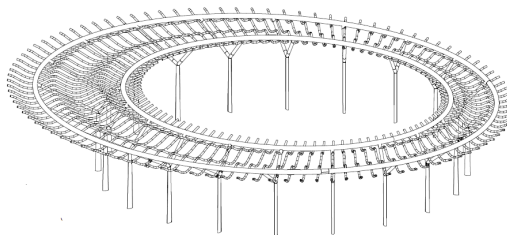
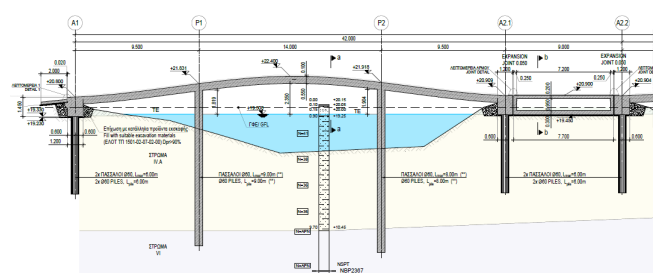
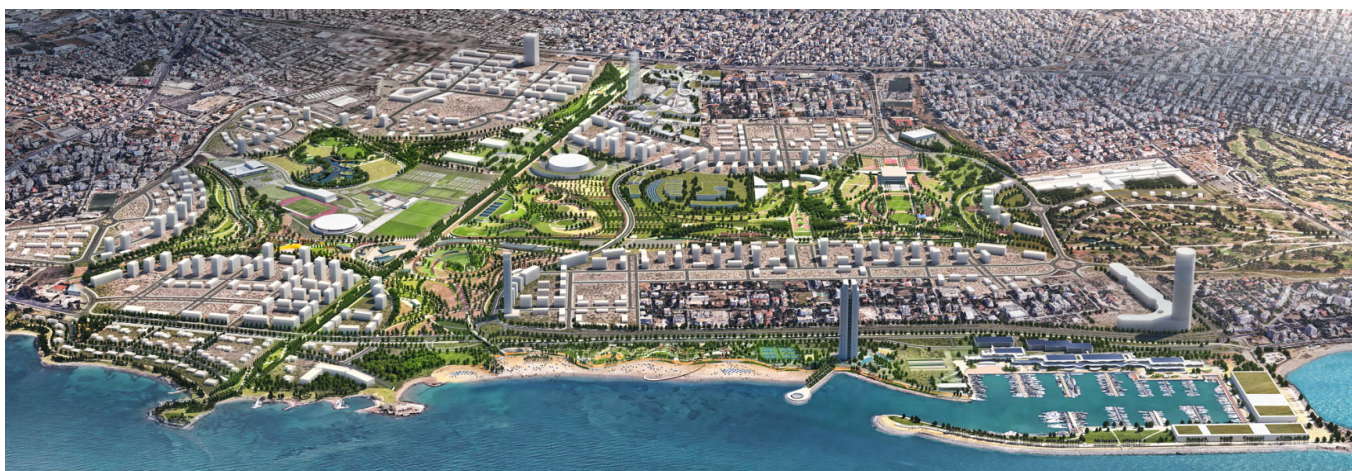
DOXIADIS+

#### STRUCTURAL DESIGN FEE:

340,000€

#### DESCRIPTION:

Landscape structures for the Hellinikon Metropolitan Park including pedestrian bridges (reinforced and prestressed), canopies, small scale buildings, retaining structures, pergolas, foundation of light poles etc. Hellinikon Metropolitan Park is a highly complex and demanding project involving multiple designing teams of all disciplines as also Independent Engineer checking procedures.







**KALLIERGOS O.T.M.**  
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# HELLINIKON METROPOLITAN PARK

## MLA DESIGN CONTRACT

CLIENT:

LAMDA DEVELOPMENT

PERIOD:

2022-2023

ARCHITECT:

SASAKI

STRUCTURAL DESIGN FEE:

140,000€

DESCRIPTION:

Landscape structures for the Hellinikon Metropolitan Park including, steel canopies, small scale buildings, retaining structures, pergolas etc.

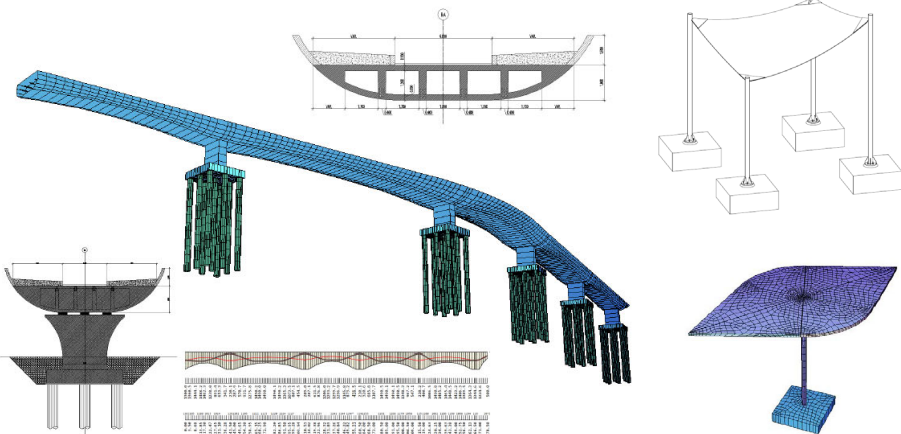
Concept design of the Main Pedestrian Bridge over Poseidonos Avenue. Five span prestressed concrete bridge of 69m max. span on elastomeric bearings. Variable deck width 8m-17m. Complex section geometry.

Hellinikon Metropolitan Park is a highly complex and demanding project involving multiple designing teams of all disciplines as also Independent Engineer checking procedures.

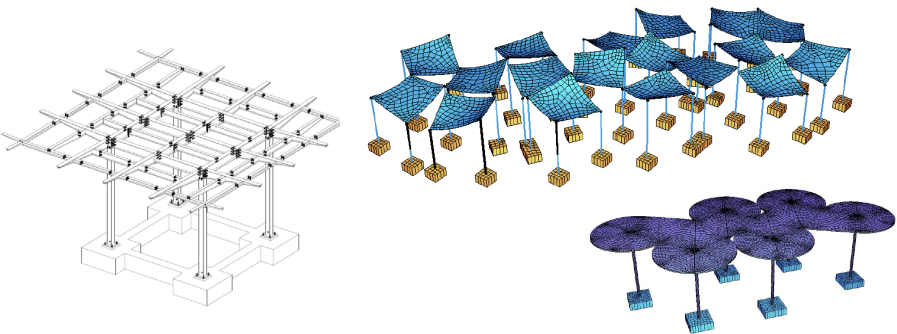
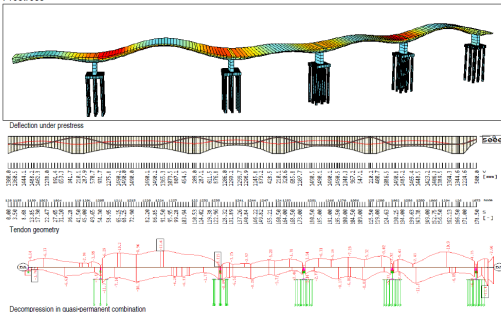


Bridge Identity

Use:	Pedestrian connecting Hellinikon Park with the seacoast
Location:	West of Hellinikon area (coastal side)
Total length:	278.5m
Width:	Variable 8.0m-16.7m
Number of spans:	5 Spans and a cantilever in coast end
Max. span:	69.0m
Height:	Approx. 5.0m clear height
Material:	Prestressed concrete
Deck section:	Multicellular box with variable depth (1.5m - 3.0m)
Piers:	Solid - enlarged on top
Structural system:	Continuous deck on elastomeric bearings
Foundation:	Bored piles
Construction method:	In-situ
Env. conditions:	Marine - Coastal



Prestress





# Buildings



**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## MYKONOS AIRPORT

### CLIENT:

FRAPORT GREECE

### PERIOD:

2017-2020

### CONTRACTOR:

INTRAKAT S.A.

### DESCRIPTION:

Structural Design for the following constructions

- One new terminal building of 2000m<sup>2</sup> area and one Fire Fighting Station of 1000m<sup>2</sup> area.
- Two BHS concrete canopies of 900m<sup>2</sup> total area.
- A facade steel structure wrapping around all terminal buildings of high complexity.
- Internal concrete structures (staircases, elevators et.c.)
- Structural verification and strengthening of one terminal building of 1500m<sup>2</sup> area.
- Apron and landside light masts.

All structures were approved by the Independent Engineer and constructed successfully. BIM model was performed for all structures geometry.







**KALLIERGOS O.T.M.**  
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## MYKONOS AIRPORT

### CLIENT:

FRAPORT GREECE

### PERIOD:

2017-2020

### CONTRACTOR:

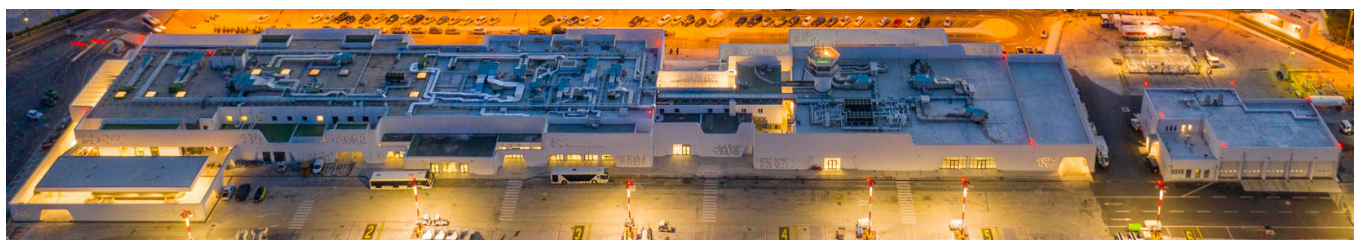
INTRAKAT

### STRUCTURAL DESIGN FEE:

190,000€

### DESCRIPTION:

Structural Design for the following constructions. One new terminal building of 2000m<sup>2</sup> area and one Fire Fighting Station of 1000m<sup>2</sup> area. Two BHS concrete canopies of 900m<sup>2</sup> total area. A facade steel structure wrapping around all terminal buildings of high complexity. Internal concrete structures (staircases, elevators et.c.). Structural verification and strengthening of one terminal building of 1500m<sup>2</sup> area. Apron and landside light masts. All structures were approved by the Independent Engineer and constructed successfully. BIM model was performed for all structures geometry.





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CLIENT:  
FRAPORT

PERIOD:  
2017 - 2020

CONTRACTOR:  
INTRAKAT S.A.

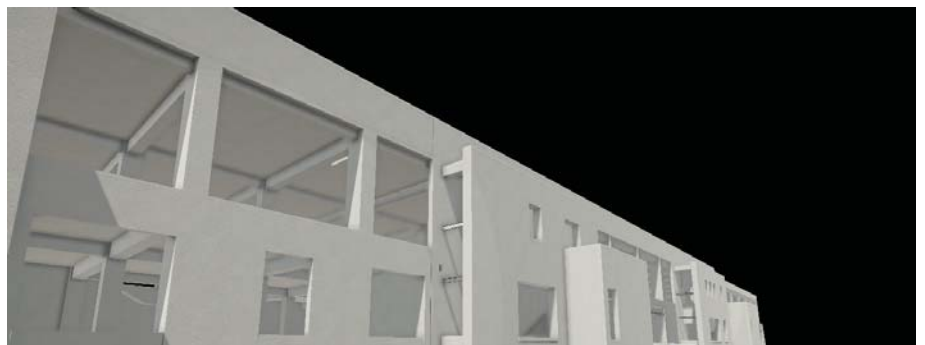
## SANTORINI AIRPORT

### DESCRIPTION:

Structural Design for the following constructions:

- New terminal buildings of a total area of 13000m<sup>2</sup>.
- New Fire Fighting Station of 1000m<sup>2</sup> area.
- Pile walls with temporary anchors of a 100m total length.
- External concrete and steel pergolas of 750m<sup>2</sup> area.
- Multiple internal steel structures.
- A Gate House in airport entrance.
- Structural verification and strengthening of two terminal buildings (2200m<sup>2</sup>)
- Landside and airside light masts foundations.

All structures were approved by the Independent Engineer and constructed successfully. BIM model was performed for all structures geometry.







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## SANTORINI AIRPORT

### CLIENT:

FRAPORT GREECE

### PERIOD:

2017-2020

### CONTRACTOR:

INTRAKAT

### STRUCTURAL DESIGN FEE:

252,000€

### DESCRIPTION:

Structural Design for the following constructions:

- New terminal buildings of a total area of 13000m<sup>2</sup>.
- New Fire Fighting Station of 1000m<sup>2</sup> area.
- Pile walls with temporary anchors of a 100m total length.
- External concrete and steel pergolas of 750m<sup>2</sup> area.
- Multiple internal steel structures.
- A Gate House in airport entrance.
- Structural verification and strengthening of two terminal buildings (2200m<sup>2</sup>)
- Landside and airside light masts foundations.

All structures were approved by the Independent Engineer and constructed successfully.

BIM model was produced for all structures.





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## KOS AIRPORT

CLIENT:  
FRAPORT

PERIOD:  
2017 - 2020

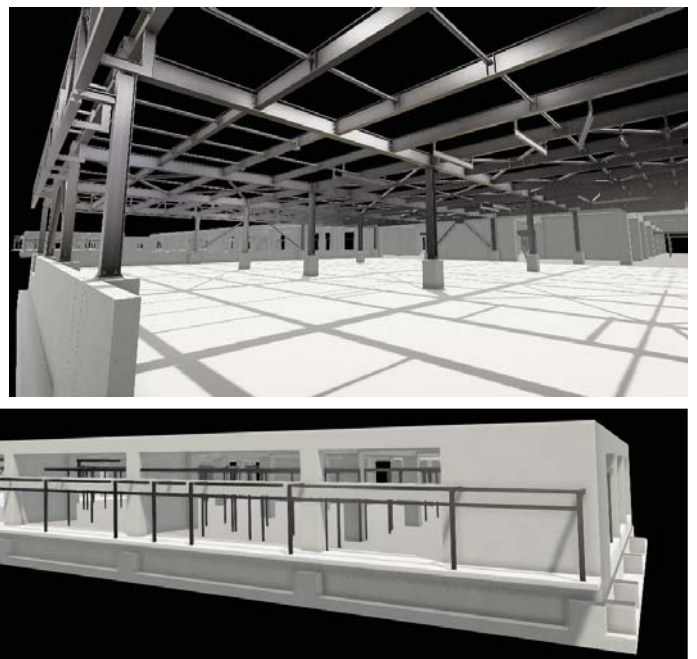
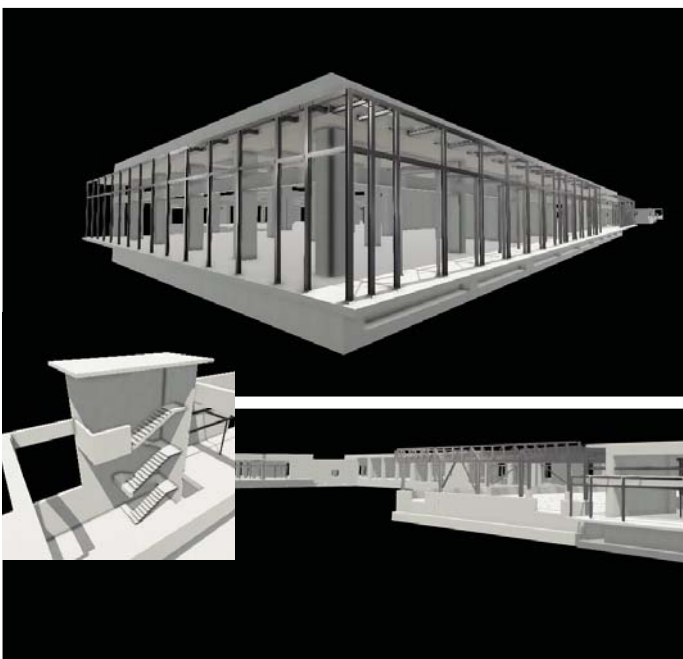
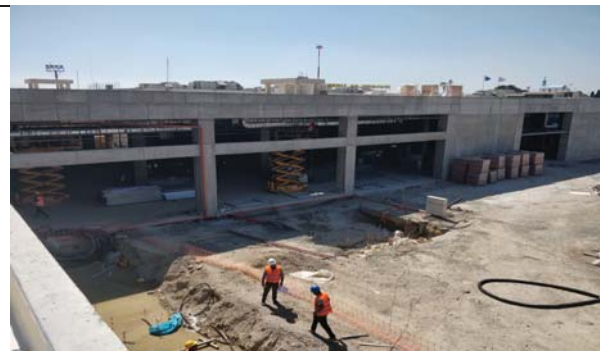
CONTRACTOR:  
INTRAKAT S.A.

### DESCRIPTION:

Structural Design for the following constructions:

- New terminal buildings of a total area of 23000m<sup>2</sup>.
- New Fire Fighting Station of 1300m<sup>2</sup> area.
- External steel canopies of 1100m<sup>2</sup> area.
- Multiple internal steel structures of a total area of 2500m<sup>2</sup>.
- A Gate House in airport entrance.
- A waste yard canopy.
- Landside and airside light masts foundations.

All structures were approved by the Independent Engineer and constructed successfully. BIM model was performed for all structures geometry.







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## KOS AIRPORT

### CLIENT:

FRAPORT GREECE

### PERIOD:

2017-2020

### CONTRACTOR:

INTRAKAT

### STRUCTURAL DESIGN FEE:

144,000€

### DESCRIPTION:

Structural Design for the following constructions:

- New terminal buildings of a total area of 23000m<sup>2</sup>.
- New Fire Fighting Station of 1300m<sup>2</sup> area.
- External steel canopies of 1100m<sup>2</sup> area.
- Multiple internal steel structures of a total area of 2500m<sup>2</sup>.
- A Gate House in airport entrance.
- A waste yard canopy.
- Landside and airside light masts foundations.

All structures were approved by the Independent Engineer and constructed successfully.

BIM model was produced for all structures geometry.





**KALLIERGOS O.T.M.**  
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## RHODES AIRPORT

CLIENT:  
FRAPORT

PERIOD:  
2017 - 2020

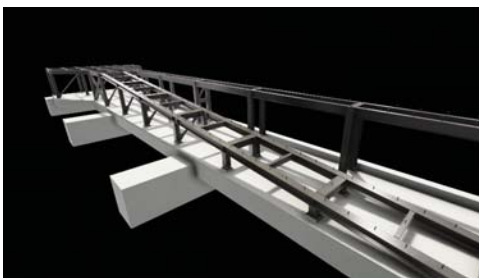
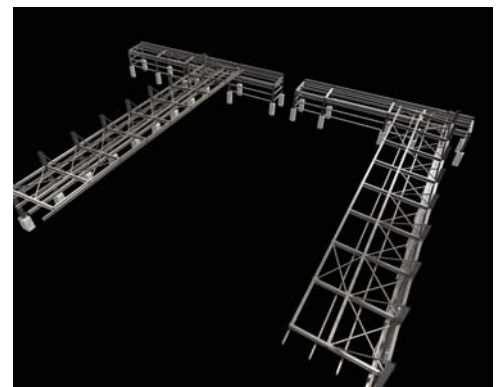
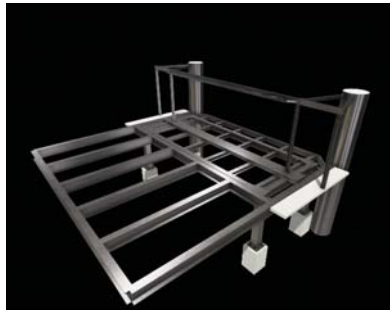
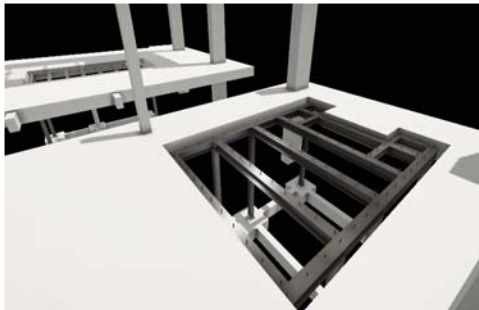
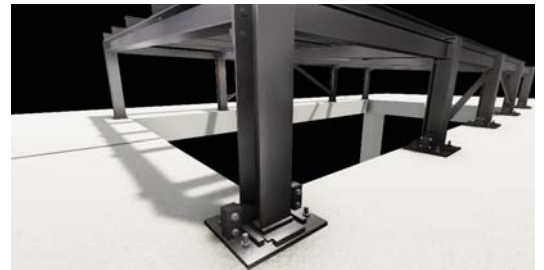
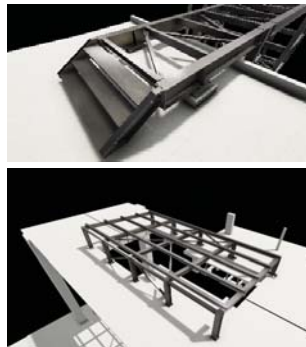
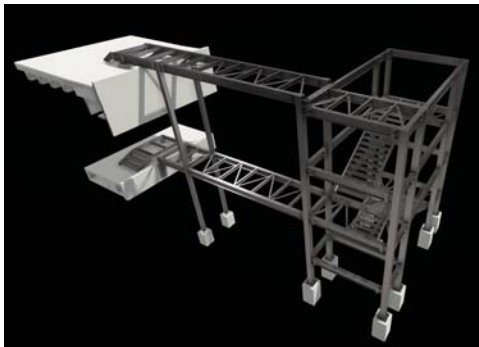
INTRAKAT S.A.

### DESCRIPTION:

Structural Design for the following constructions:

- Multiple external and internal steel structures.
- Two concrete underground tanks.
- New Fire Fighting Station building of 1300m<sup>2</sup> area on pile foundation.
- A Gate House in airport entrance.
- A waste yard canopy.
- Landside and airside light masts foundations.

All structures were approved by the Independent Engineer and constructed successfully. BIM model was performed for all structures geometry.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## SAMOS AIRPORT

CLIENT:  
FRAPORT

PERIOD:  
2017 - 2020

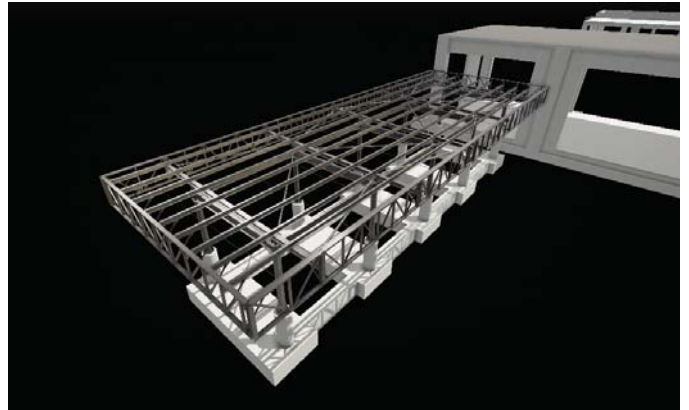
CONTRACTOR:  
INTRAKAT S.A.

### DESCRIPTION:

Structural Design for the following constructions:

- One new terminal building of 760m<sup>2</sup> total area.
- Two BHS steel canopies of 380m<sup>2</sup> each.
- New Fire Fighting Station building of 1000m<sup>2</sup> area.
- A Gate House in airport entrance.
- A waste yard canopy.
- Landside and airside light masts foundations.

All structures were approved by the Independent Engineer and constructed successfully. BIM model was performed for all structures geometry.





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## SKIATHOS AIRPORT

### CLIENT:

FRAPORT

### PERIOD:

2017 - 2020

### CONTRACTOR:

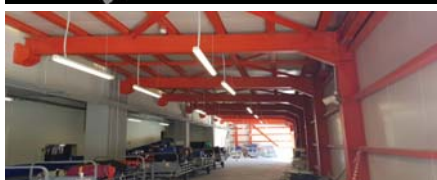
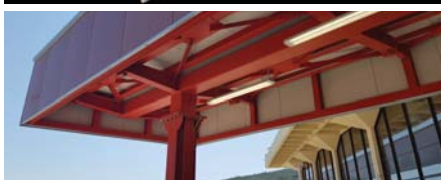
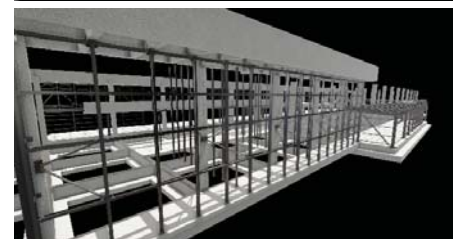
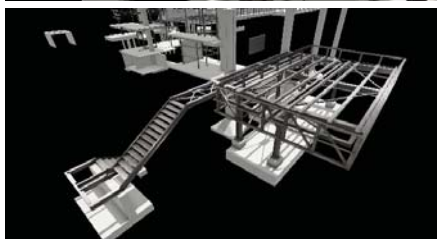
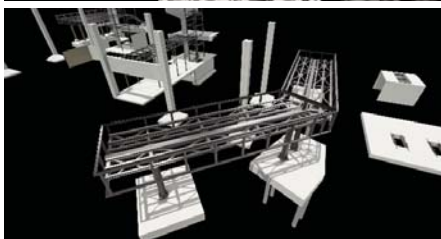
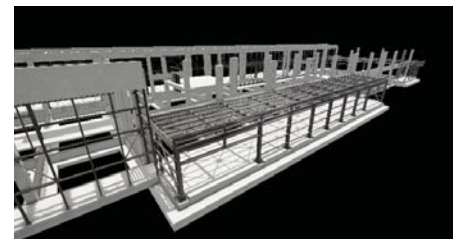
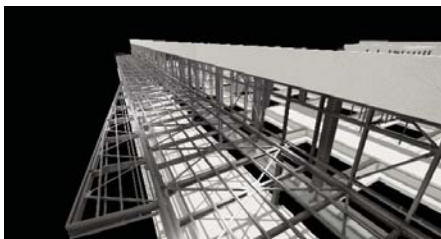
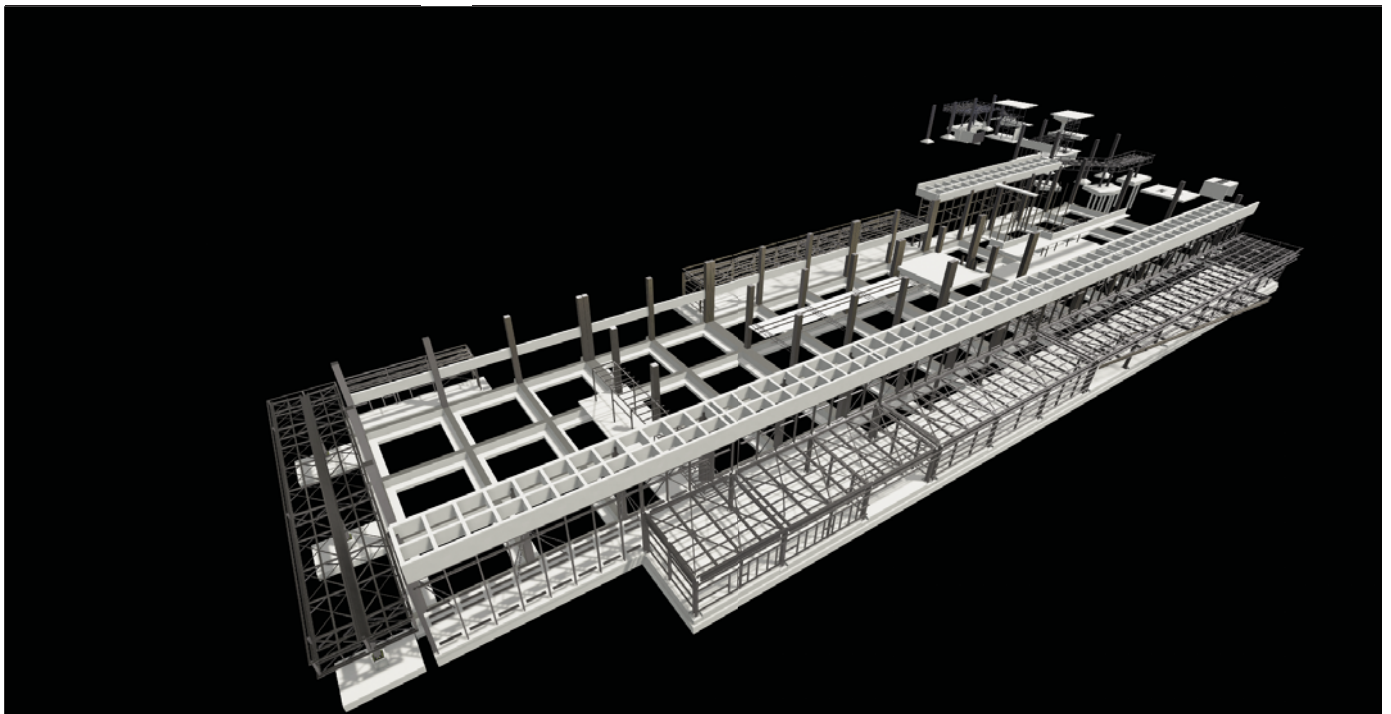
INTRAKAT S.A.

### DESCRIPTION:

Structural Design for the following constructions:

- New terminal expansion steel buildings of a total area of 1000m<sup>2</sup>.
- New Fire Fighting Station of 1000m<sup>2</sup> area.
- Three external steel canopies of 370m<sup>2</sup> area.
- Multiple internal steel structures and facade curtain walls substructure.
- A Gate House in airport entrance.
- A waste yard canopy.
- Landside and airside light masts foundations.

All structures were approved by the Independent Engineer and constructed successfully. BIM model was performed for all structures geometry.





## MYKONOS AIRPORT FACADE STRUCTURE

### CLIENT:

FRAPORT GREECE

### PERIOD:

2017-2020

### CONTRACTOR:

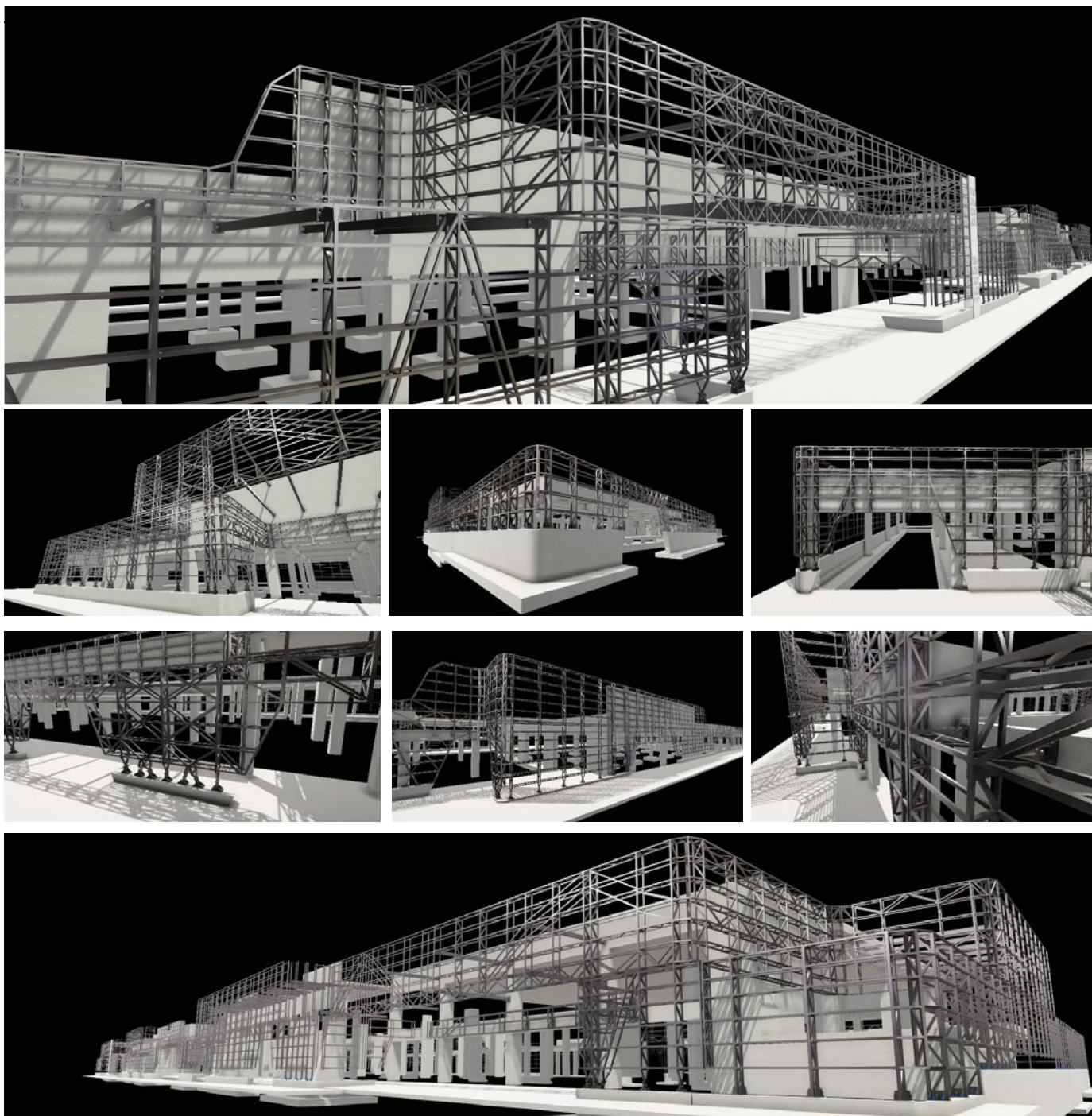
INTRAKAT S.A.

### DESCRIPTION:

The new facade structure of Mykonos Airport is a free form structure developed in two zones/strips of 4m high each at the perimeter of all terminal buildings. The total width of structure is 500mm at a maximum height of 8m. The total length of strips is approx. 650m and the total vertical area approx. 4500m<sup>2</sup>. In extensive facade areas triangle openings are foreseen arranged on a specific grid.

The steel substructure is vertical and horizontal trusses of square hollow sections. The structure is fixed on strip concrete foundation and horizontally supported on terminal buildings via steel struts where required.

A BIM model was created for the total structure.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## RESIDENTIAL HOUSE COMPLEX AND ACCESS ROAD IN TINOS

### CLIENT:

OLIVIER FULCONIS  
NATHALIE BOULLEFORT

### PERIOD:

2017-2018

### ARCHITECTURAL DESIGN:

Deca Architecture

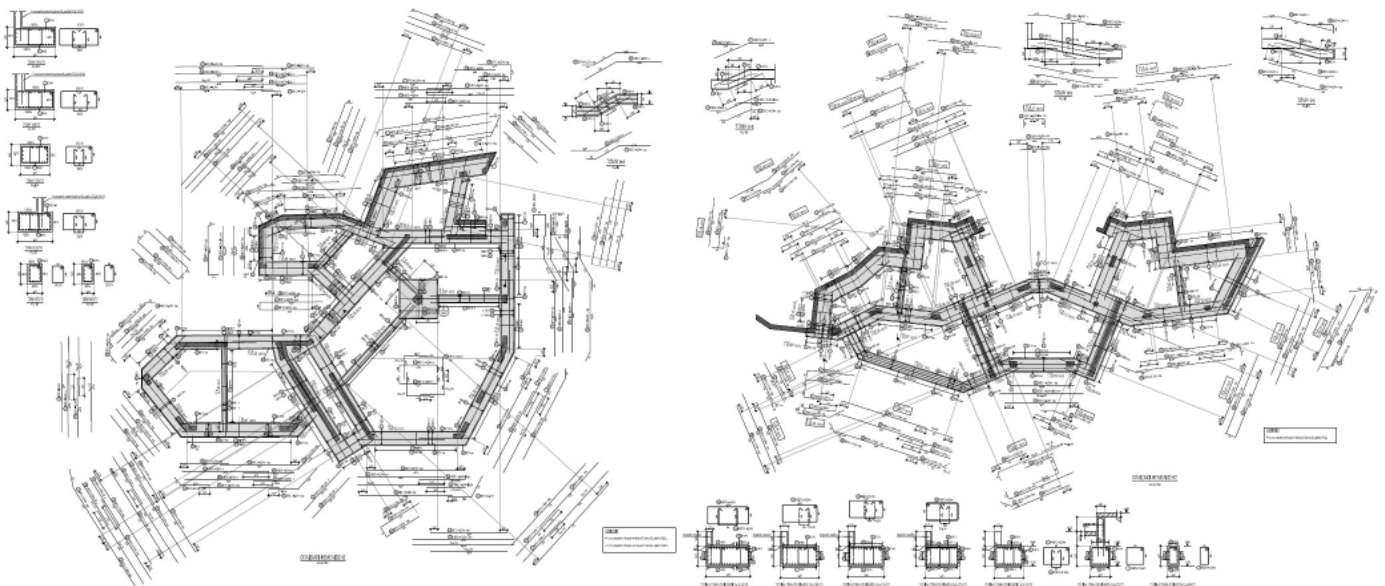
### DESCRIPTION:

Structural design for a house complex and a 1.5Km private access road in Tinos.

- 520m<sup>2</sup> of primary and auxilliary internal spaces
- 100m<sup>2</sup> of sheltered exterior spaces (pergolas)
- 70m<sup>2</sup> pool
- 600m<sup>2</sup> of landscape retaining walls
- 400m<sup>3</sup> water tank
- 140m of access road retaining walls

Highly complex geometry and construction method structures

65 A0 drawings were delivered including full reinforcement detailing





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## VARKO BAY RESORT

CLIENT:

RND INVESTMENTS

PERIOD:

2021

ARCHITECT:

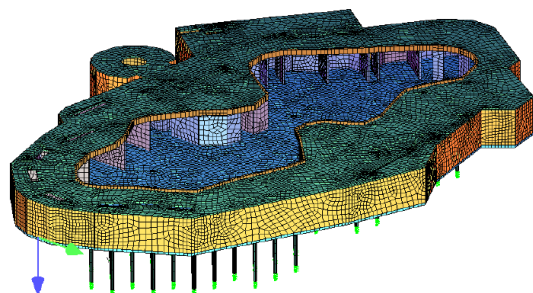
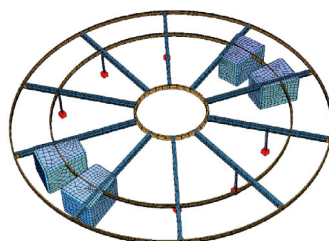
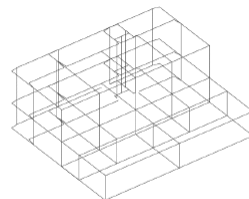
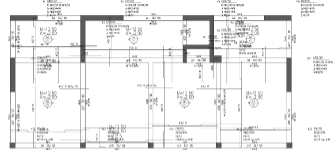
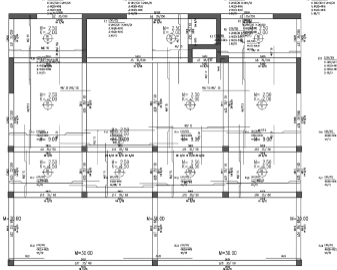
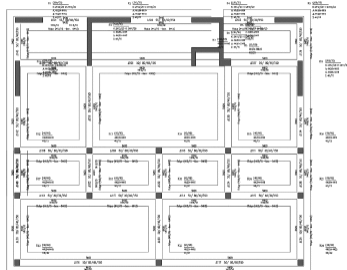
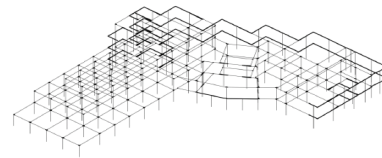
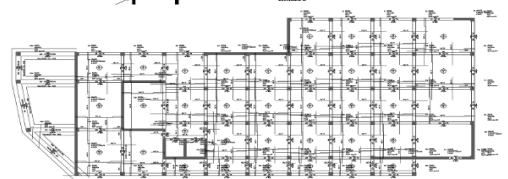
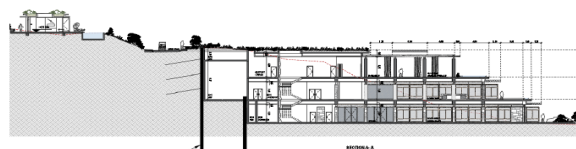
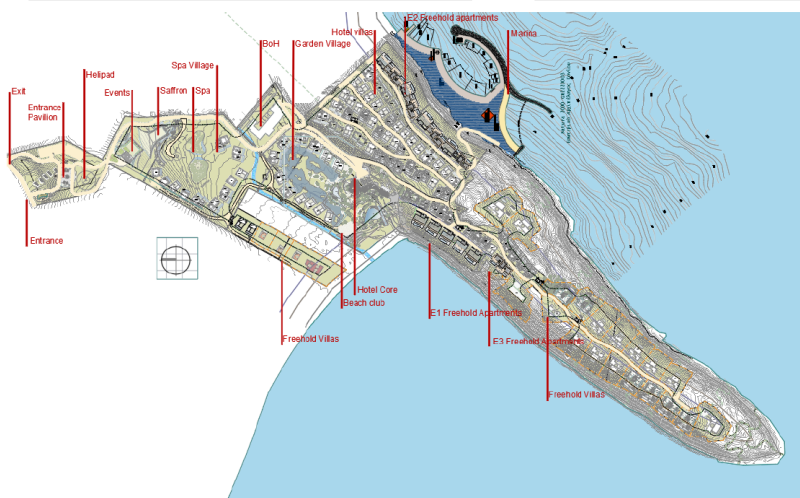
ELASTIC

DESCRIPTION:

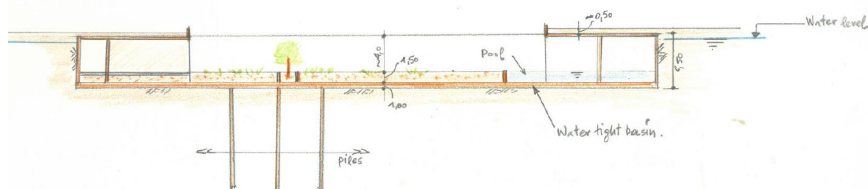
Concept Structural design for a resort complex in Varko area of Aitolioakarnania Greece comprising:

- 14000m<sup>2</sup> of hotel rooms
- 17500m<sup>2</sup> of villas
- 17500m<sup>2</sup> of villas
- 12300m<sup>2</sup> of common areas (SPA, BoH, Hotel Core, Events Building etc.)

In concept phase preliminary calculations, models and Bill of Quantities and Bases of Design where submitted for the total project.



Typical Section







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## VEIKOU 30 ST. APARTMENT BUILDING

### CLIENT:

VEIKOU 30 ATH S.A.

### PERIOD:

2022

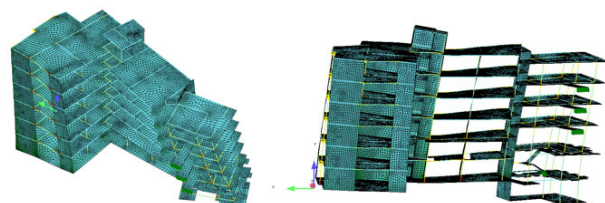
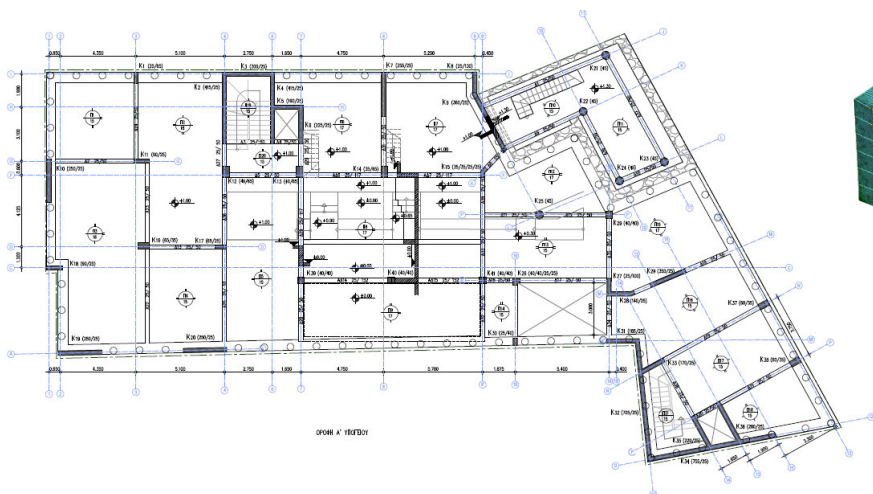
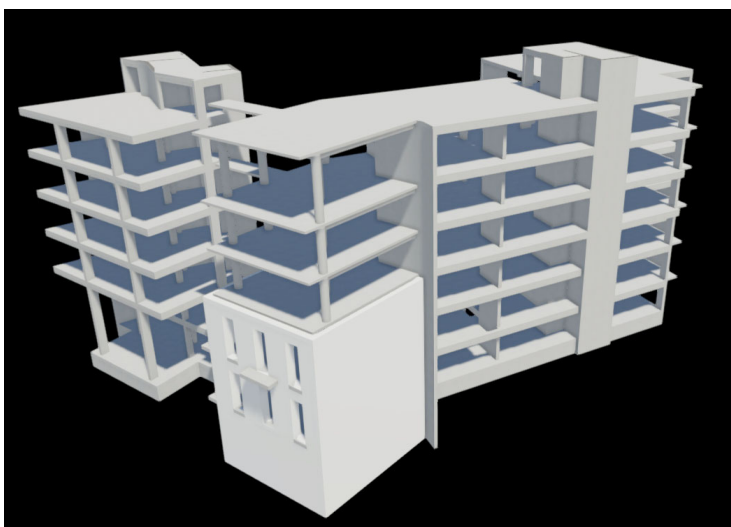
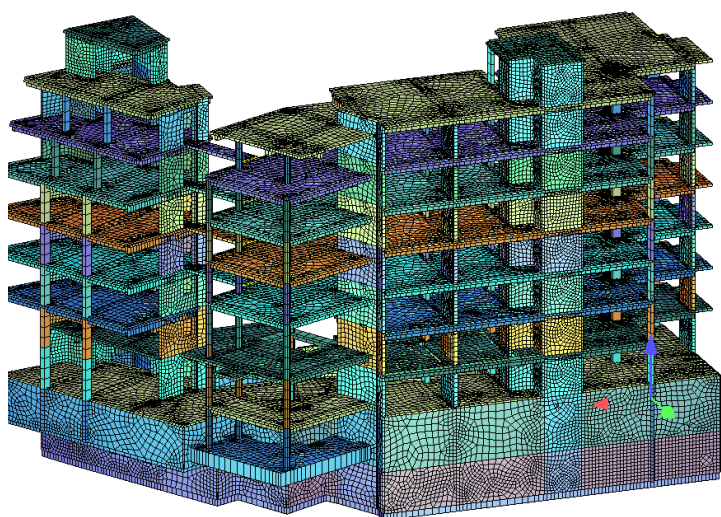
### ARCHITECT:

ELASTIC

### DESCRIPTION:

Preliminary structural design for a house complex in Veikou st. Athens comprising :

- 3000m<sup>2</sup> of new buildings
- 400m<sup>2</sup> existing neoclassical for façade preservation
- Swimming pool
- 4 Pedestrian bridges connecting floors of two structurally independent buildings.



Eigenmodes of Building B1



**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## RESIDENTIAL COMPLEX IN CORFU

### “THE ANTFARM”

#### CLIENT:

ΕΛΙΑ ΚΑΤΑΣΚΕΥΑΣΤΙΚΗ Α.Ε.

#### PERIOD:

2023

#### ARCHITECT:

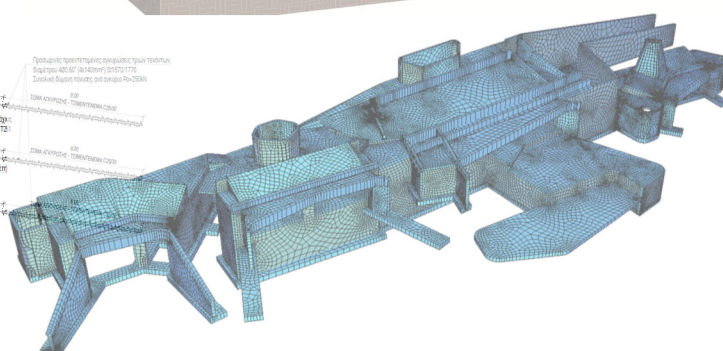
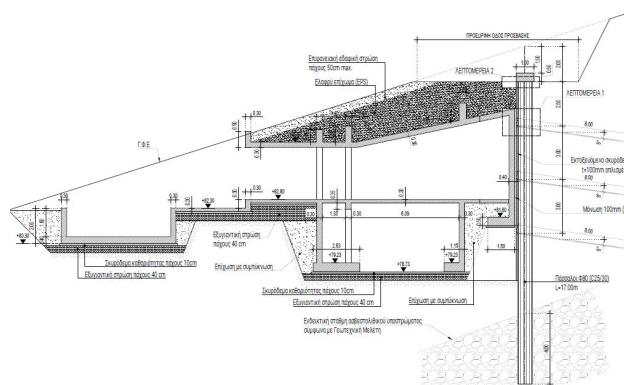
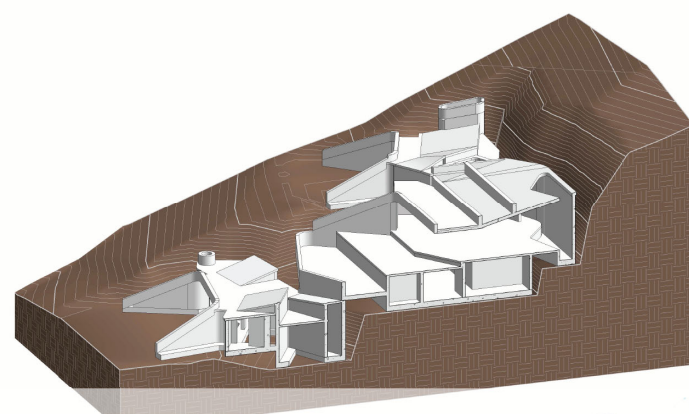
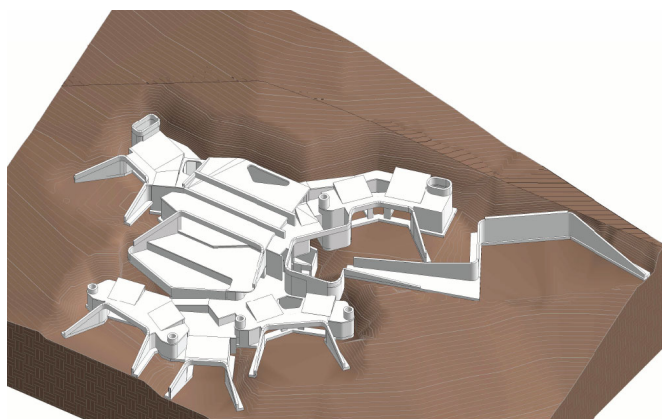
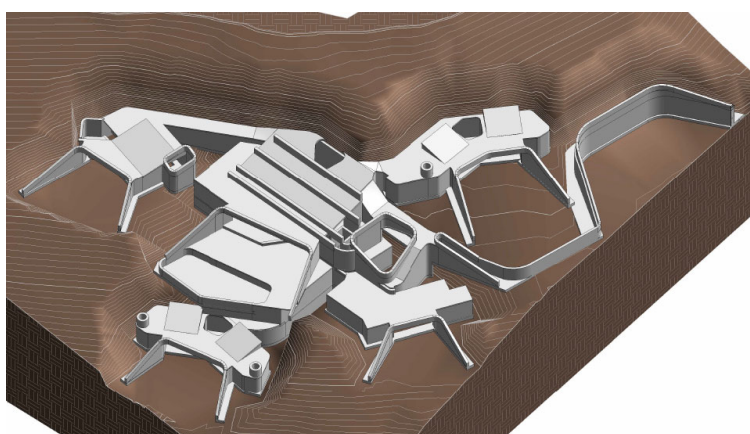
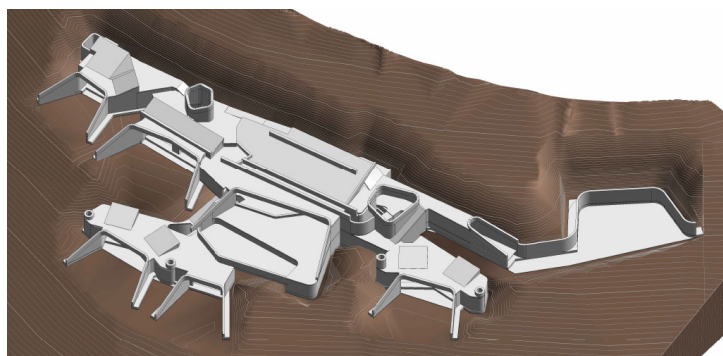
DECA ARCHITECTURE

#### DESCRIPTION:

Structural design for a house complex in Corfu island . Preliminary design for 3 residencies and final design for the one. (permit issued).

- 2500m<sup>2</sup> of internal spaces
- Large scale landscape structures including swimming pools and retaining walls.
- Extremely complex underground structures (υπόσκαφα) of free form geometry (ant farm simulation)
- Temporary retaining wall with prestressed anchors for construction phase purposes.

The project design was exclusively performed under BIM Revit. Coordination between Architect, Structural Engineer and MEP engineer was successfully achieved through BIM360 common model.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## RESIDENTIAL BUILDING IN ANTIPAROS

### “THE WALL”

#### CLIENT:

PATRICK VAN HEURCK

#### PERIOD:

2022

#### ARCHITECT:

DECA ARCHITECTURE

#### CONTRACTOR:

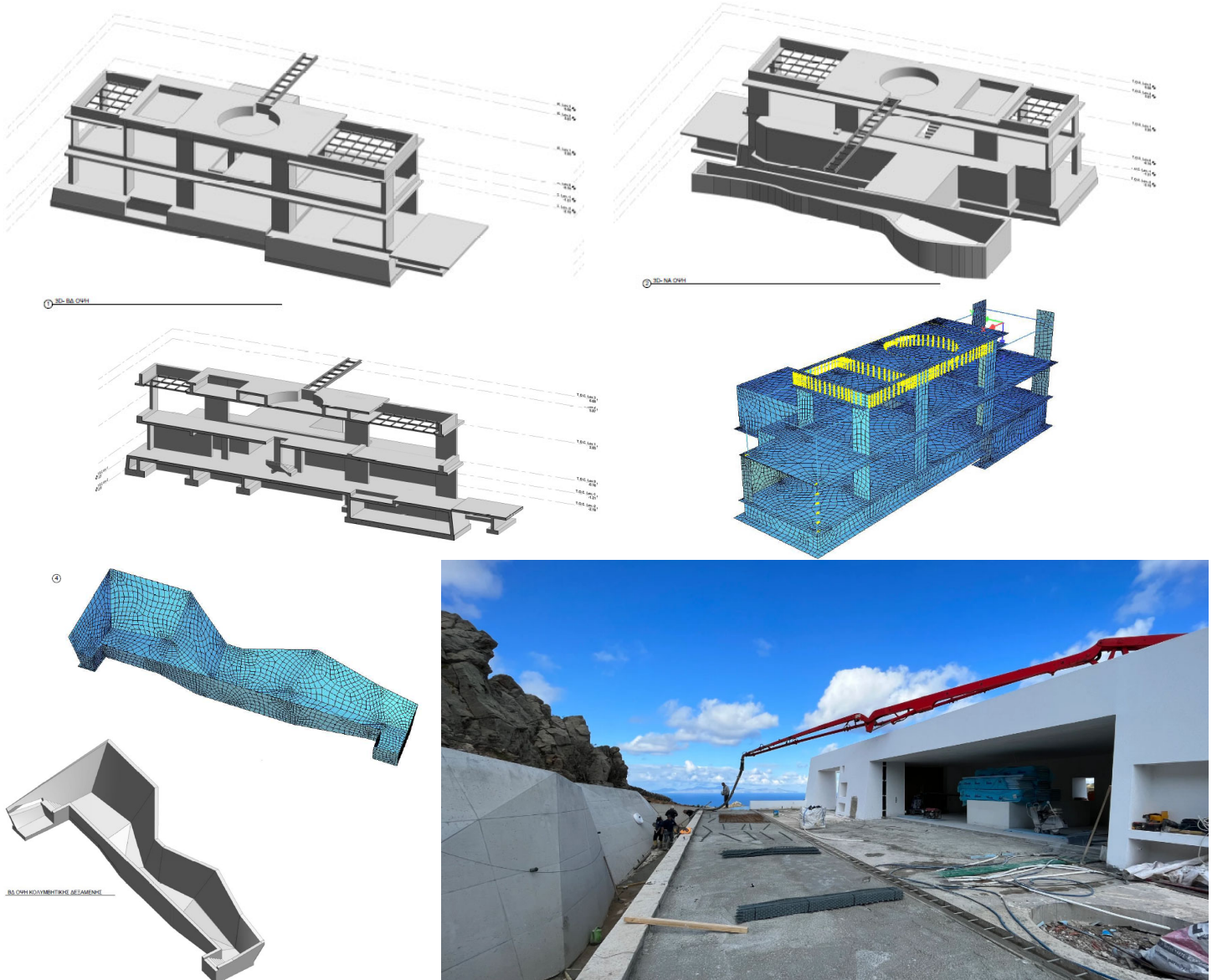
PAROSTEC

#### DESCRIPTION:

Structural design for a house complex in Antiparos comprising:

- 400m<sup>2</sup> of internal spaces
- 200m<sup>2</sup> of steel pergolas
- Swimming pool of free form geometry
- 14m steel pedestrian bridge

The project design was exclusively performed under BIM Revit including reinforcement of concrete. Coordination between Architect and Structural Engineer was successfully achieved through BIM360 common model.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## RESIDENTIAL HOUSE COMPLEX IN FOLEGANDROS

### CLIENT:

SODI AMBROSI JUAN BOSCO

### PERIOD:

2019-2020

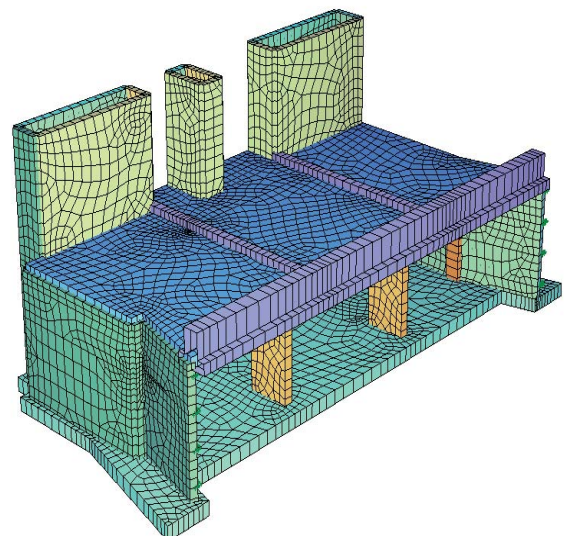
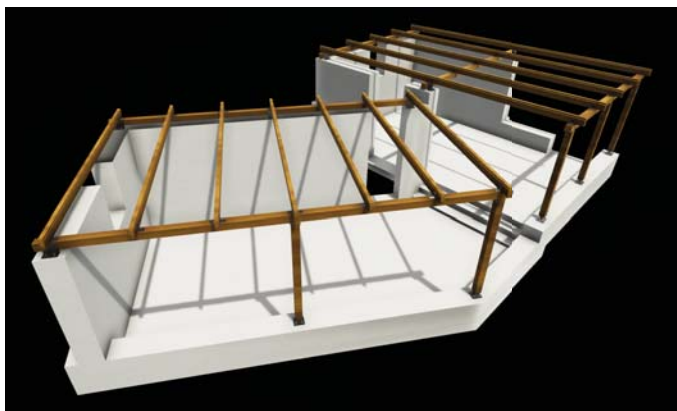
### ARCHITECTURAL DESIGN:

Deca Architecture

### DESCRIPTION:

Structural design for a house complex in Folegandros.

- 130m<sup>2</sup> of stone buildings
- 120m<sup>2</sup> of cut and cover building
- Landscape retaining walls
- Water tanks
- 3 wood pergolas





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## RESIDENTIAL HOUSE COMPLEX IN CRETE

### CLIENT:

FTS Infinity Ltd.

### DESCRIPTION:

Structural design for a house complex in Crete.

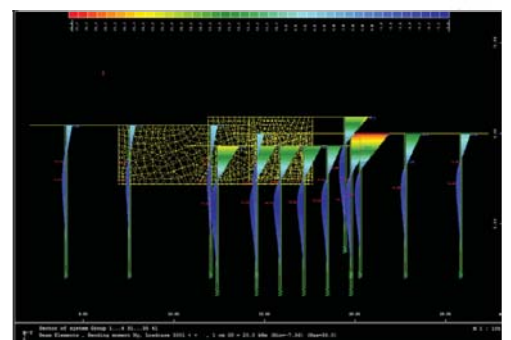
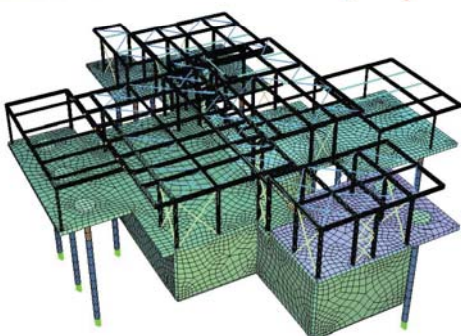
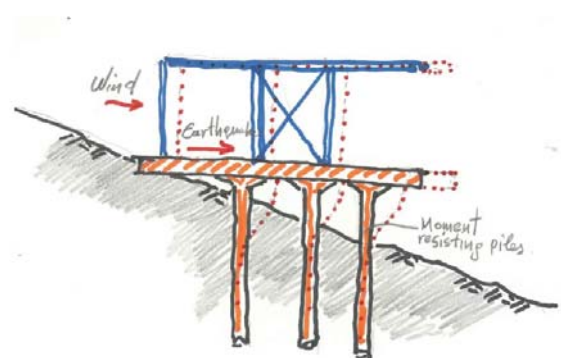
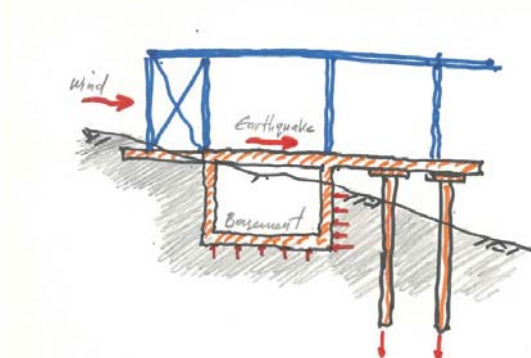
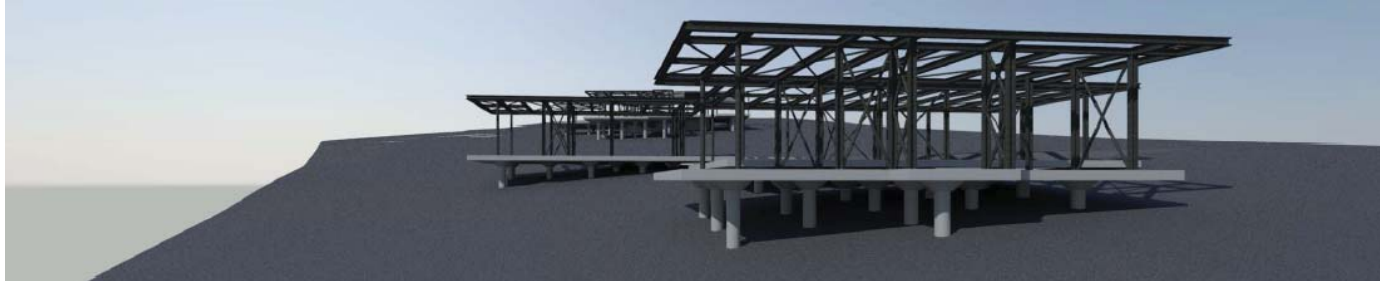
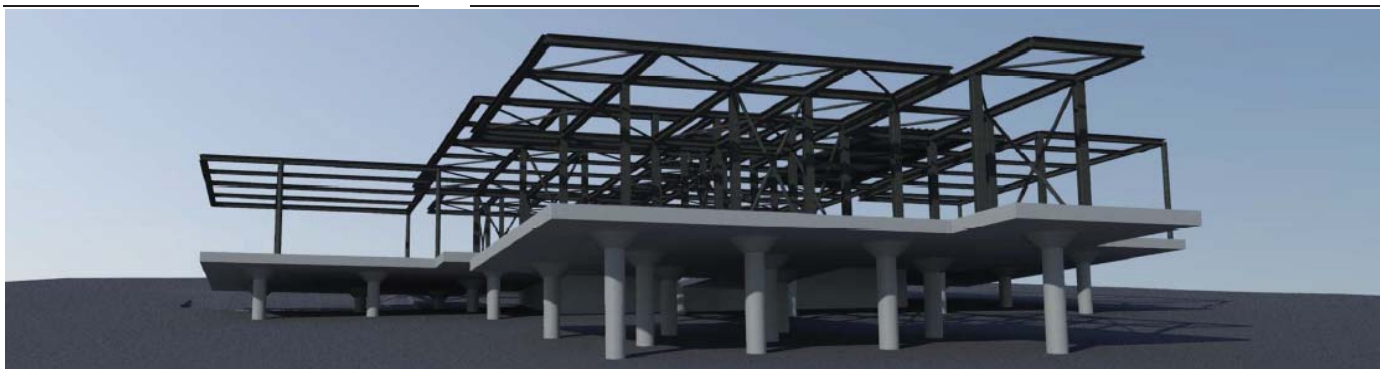
- 2 blocks of total 600m<sup>2</sup> elevated steel buildings on piles
- 200m<sup>2</sup> of steel pergolas

### PERIOD:

2019-2020

### ARCHITECTURAL DESIGN:

Deca Architecture







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## AMPHITHEATRE AT ERT PARK IN ILION - ATTICA

### CLIENT:

E.P.T. S.A.

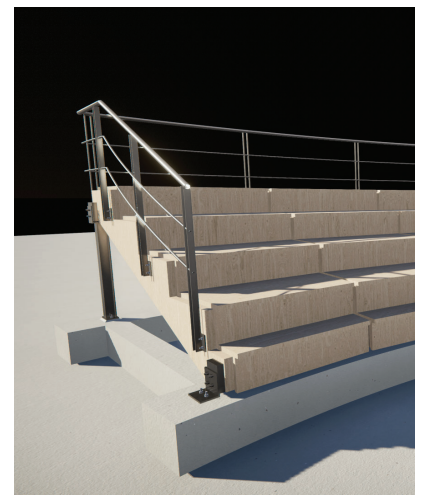
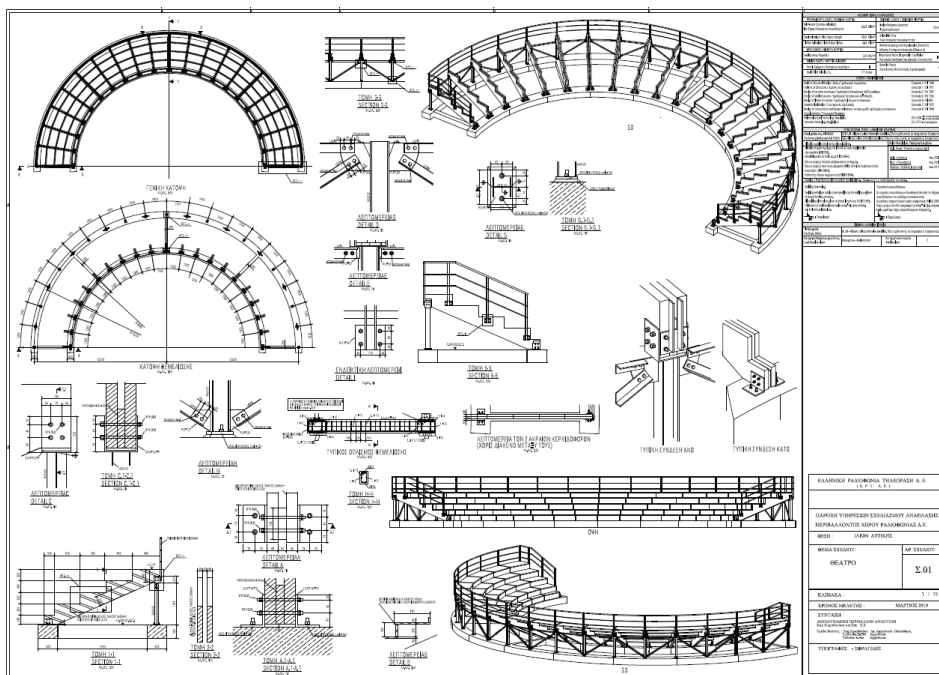
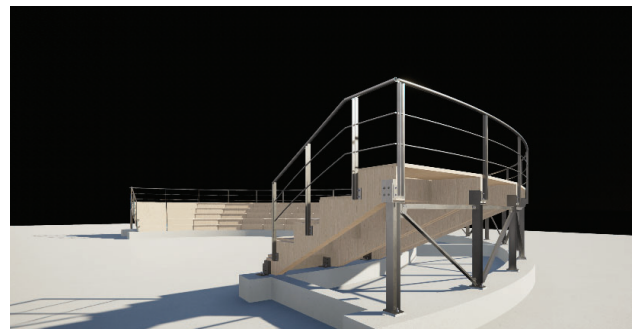
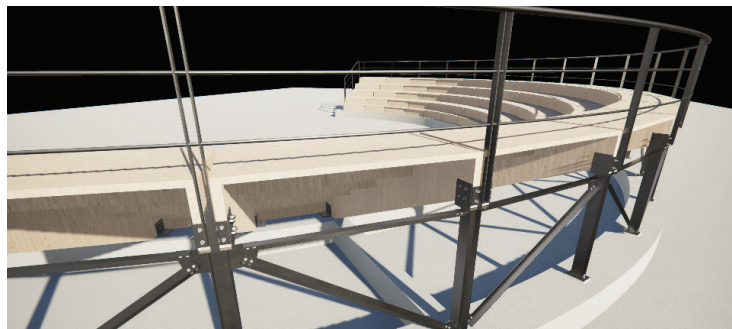
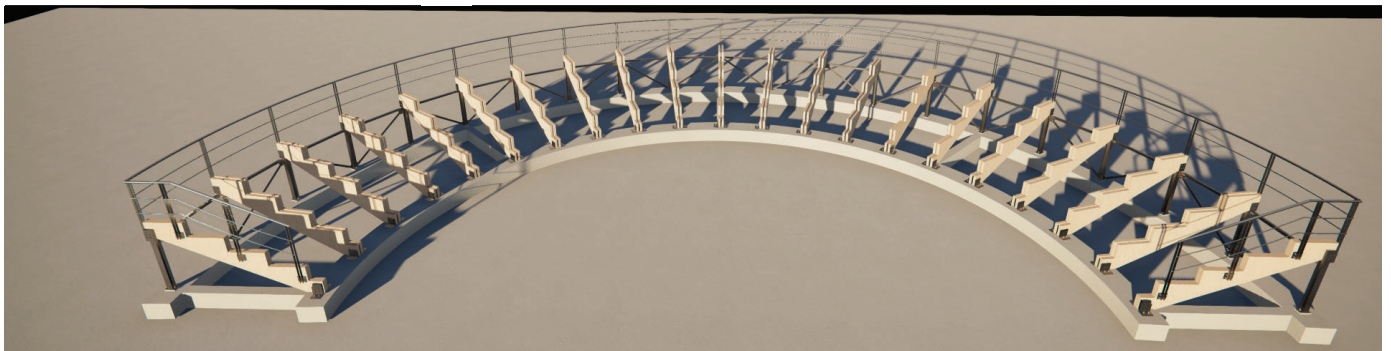
### PERIOD:

2019

### CONTRACTOR:

### DESCRIPTION:

Structural design of a small amphitheatre with bearing structure of timber and structural steel. The structure comprises timber bleachers on steel frames. The foundation of theatre includes radial R/C concrete strips. The design included calculations, drawings and a 3D model in TEKLA BIM software.



## CANOPY IN MYKONOS AIRPORT

CLIENT:

FRAPORT GREECE

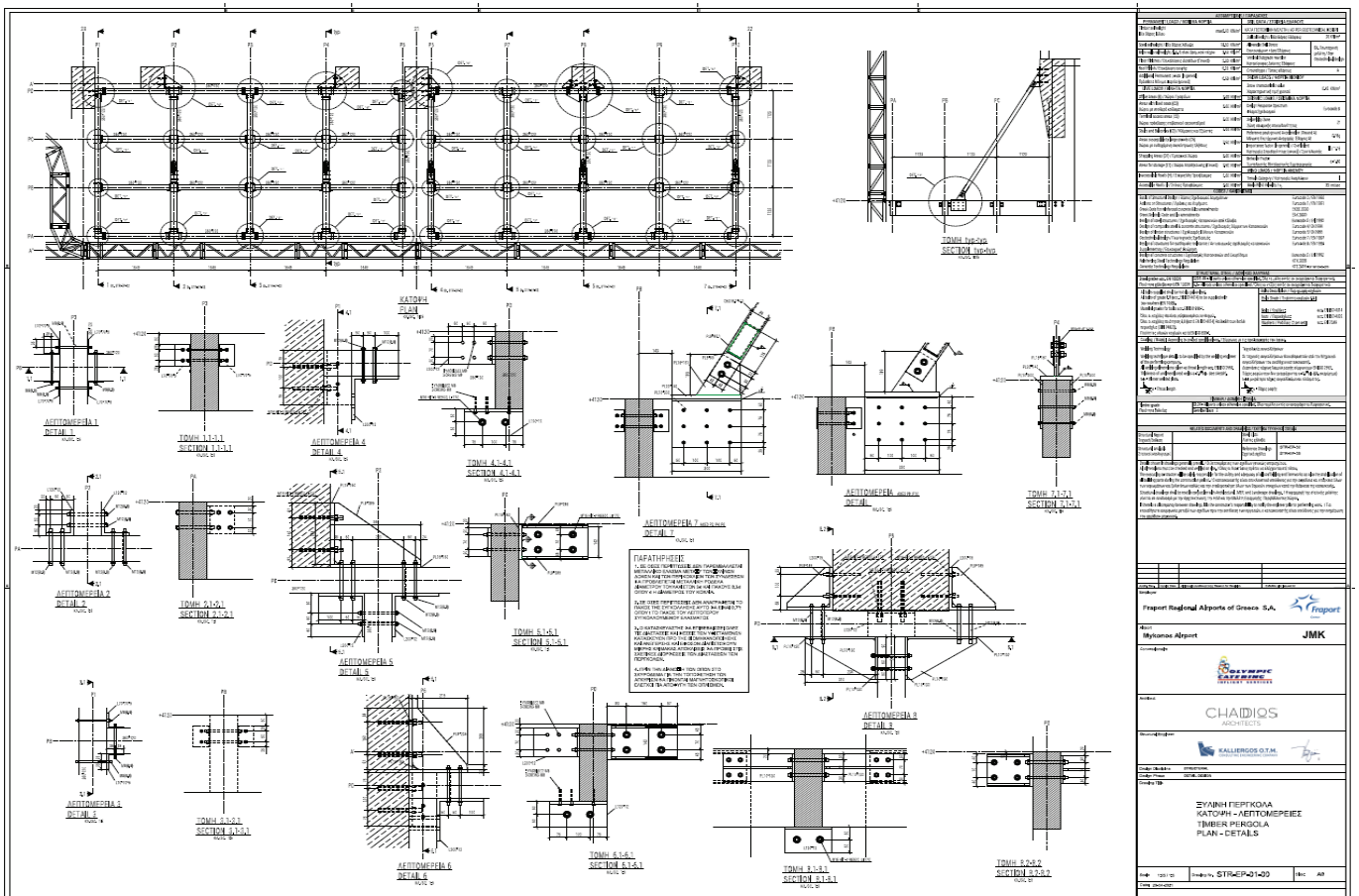
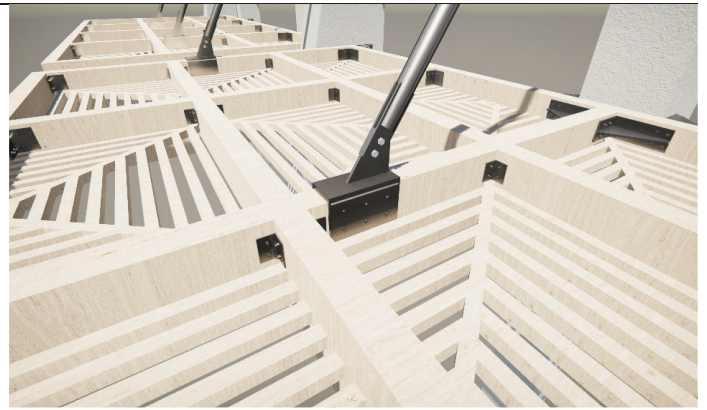
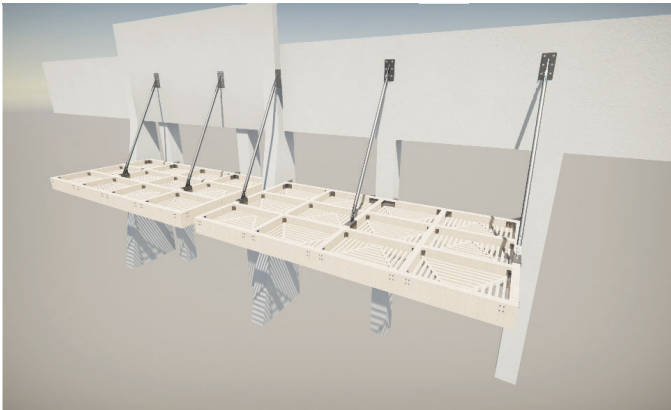
PERIOD:

2020

CONTRACTOR:

DESCRIPTION:

Structural design of a timber and steel suspended canopy outside the Mykonos airport Terminal building. The design included calculations, drawings and a 3D model in TEKLA BIM software.





## LIBRARY BUILDING OF ATHENS UNIVERSITY PHILOSOPHY SCHOOL

### CLIENT:

University of Athens

### PERIOD:

2002

### ARCHITECTURAL DESIGN:

A. NOUKAKIS - P. BABALOY - TH.  
FOTIOU

### DESCRIPTION:

- 7.500 m<sup>2</sup> total area building
- Structural system features : Reinforced Concrete framed structures with steel roof structure.
- Services Offered : Three stages of Structural Design and Tender docementy.
- Cost of structural works 1.435.000 Euros.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

**CLIENT:**

VITA DEVELOPMENT S.A.

**PERIOD:**

2007 - 2008

**CONTRACTOR:**

TERNA S.A.

## COMMERCIAL CENTER AT IOANNINA

**DESCRIPTION:**

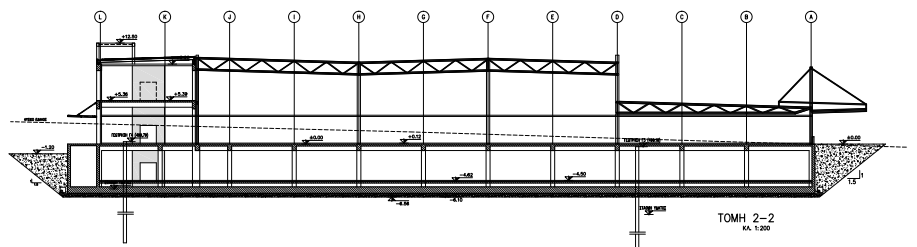
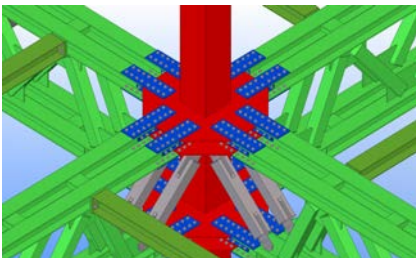
Complex of commercial buildings totalling 46.000m<sup>2</sup> area above ground and additional 26.000m<sup>2</sup> of basement.

**Structural System Features**

A mixture of reinforced concrete and large span structural steel buildings. Access to the center is provided by a prestressed concrete overpass bridge.

**Services offered**

- Full range structural design of steel and concrete buildings.
- Preliminary design of the access bridge.
- Site supervision and construction follow up.





## NEW PHARMACEUTICAL INDUSTRY SAPPES INDUSTRIAL AREA (RODOPI COUNTY)

### CLIENT:

PHARMATHEN INTERNATIONAL S.A.

### PERIOD:

2006 - 2007

### CONTRACTOR:

BETANET ABEE

### DESCRIPTION:

Industrial and Administration buildings Complex.

- Single and two storey high buildings of 12.000 m2 total area and 80.000 m3 total volume
- Reinforced concrete framed structure
- Steel structure 1.250 m2 area
- Steel staircases and free standing passages.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## COMPUTER TECHNOLOGY INSTITUTE

### CLIENT:

Institute of Computer Technology

### PERIOD:

1991 - 1993

### ARCHITECTURAL DESIGN:

D.Kontargiris – A.Lampakis

### DESCRIPTION:

- Design works were assigned following a design contest (best proposal).
- Three storey building of 7000m<sup>2</sup> total area .
- Structural system: Reinforced concrete framed structures.
- Services offered: Geotechnical site investigation. Structural and foundation design







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

**CLIENT:**

J.V. "VAKON" S.A.

**PERIOD:**

1996 - 1998

**CONTRACTOR:**

J.V. "VAKON" S.A.

## BUILDING "POLITIA"

**DESCRIPTION:**

The entire building comprises :

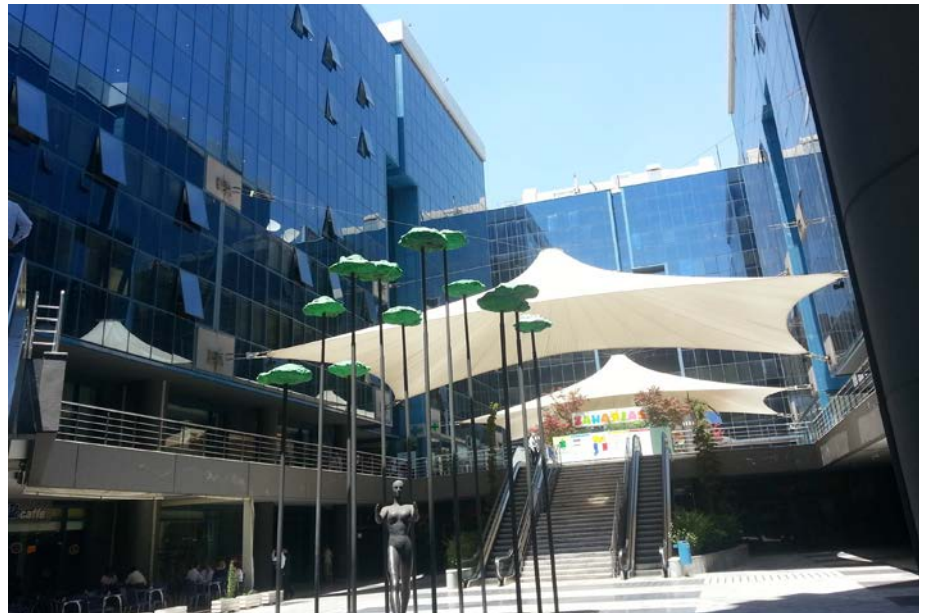
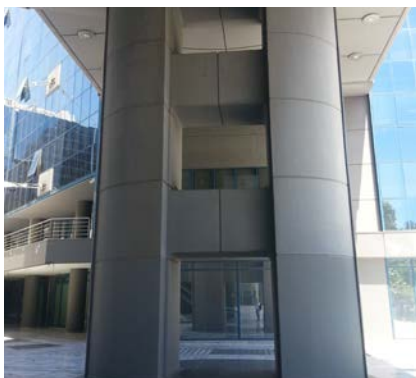
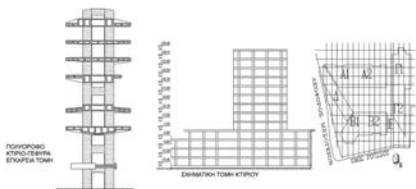
Three separated 10storey buildings with a total of 40.000m2 service area.

A multi level pedestrian bridge, supported on twin pylons.

Three level underground parking facility occupying the entire plan area of 30.000m2.

Open air structures such as ramps, escalators and canopies.

Raft foundation and watertight basin.





CLIENT:

MICHELIN ELASTICS

PERIOD:

2005 - 2006

CONTRACTOR:

BETANET S.A.

## INDUSTRIAL BUILDING OF MICHELIN IN AVLONA ATTICA

DESCRIPTION:

New single storey commercial warehouse building. Overall dimensions 109x82m  $\approx$  9000m<sup>2</sup>. Clear height 7.60m, maximum height 9.6m. Secondary building structures 700 m<sup>2</sup>, height 5m.

Structural system:

- Precast reinforced concrete columns
- Precast-prestressed concrete main beams 18m span length.
- Precast reinforced concrete secondary beams of triangular side elevation shape in interchange with steel trusses of the same shape (20m span length). (Sections 1, 2 respectively).
- Box footings.
- Roof cladding: steel sheets of trapezoidal section.
- Side cladding: combination of precast reinforced concrete panels and steel sheets of trapezoidal section.







# Bridges



**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

#### CLIENT:

Ministry for Environment Physical  
Planning and Public Works

#### PERIOD:

1994 - 1996

#### CONTRACTOR:

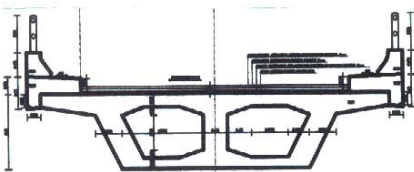
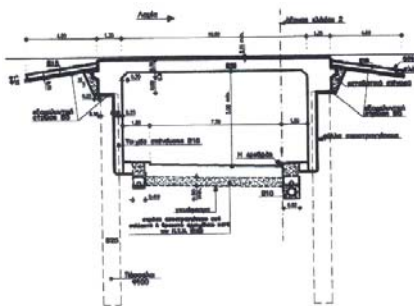
"ATEMKE" S.A.

## ATHENS – LAMIA MOTORWAY AHARNON INTERCHANGE

#### DESCRIPTION:

The complete interchange facility comprised the Motorway overpass bridge (ramp 4), the underpass bridge (ramp 2), piled walls, retain wall, the necessary drainage works e.t.c.

The overpass bridge of ramp 4 is continuous over 5 spans 25,2+3x36,0+25,2m and has a total length of 230 m. The deck structure is formed by a curved, prestressed concrete double cell box girder 7m wide. The underpass bridge of ramp 2 is a continuous reinforced concrete frame 10,5 m clear span and 105m total length, on bored piles  $\Phi 100$ . The construction cost (of structures only) totaled 2,4 bil drachmas in 1994.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

#### CLIENT:

Ministry for Environment  
Dir. of Road Constructions of Attiki

#### PERIOD:

1999 - 2001

#### CONTRACTOR:

J/V ATTIKI ODOS

## KIFISSIAS CIRCULAR INTERCHANGE BRIDGES

#### DESCRIPTION:

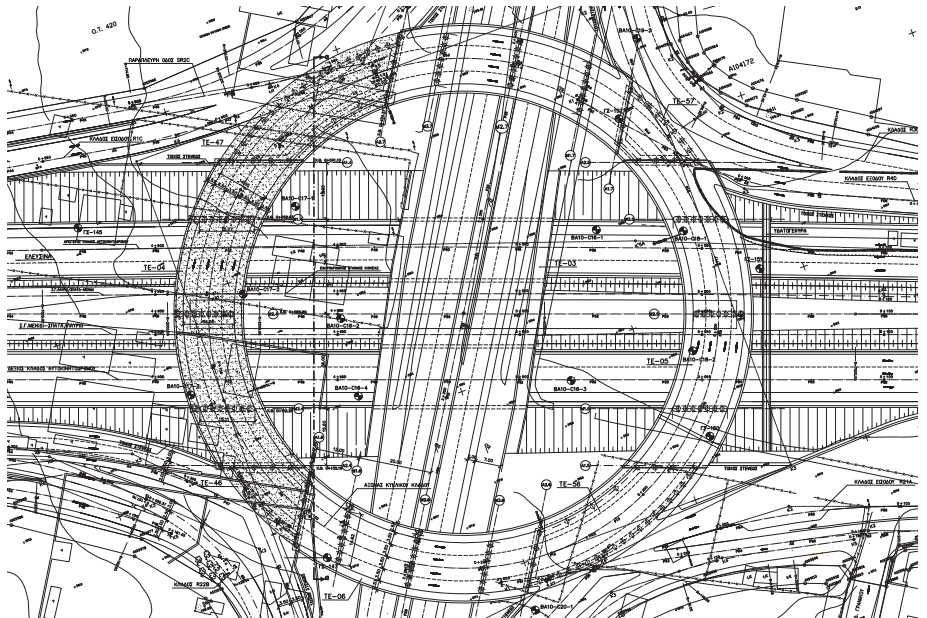
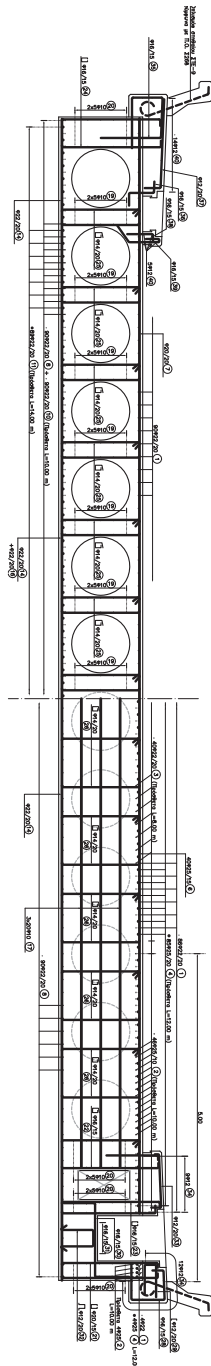
The Kifissias interchange is a 3 levels facility comprising a group of bridges and retaining walls serving the following:

Level 1. Depressed passage of Kifissias avenue

Level 2 Structures carrying the E-S-S freeway, the Suburban R/R lines and the Kifissia station building.

Level 3. Interchange ramp bridges arranged at an 158μ external radius circle

Bridge deck reinforced concrete structures are monolithically connected to wall type piers, thus forming space frames. All piers are on bored pile foundations.





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

#### CLIENT:

Ministry for Environment  
Dir. of Road Constructions of Attiki

#### PERIOD:

1997 - 1998

#### CONTRACTOR:

J/V ATTIKI ODOS

## THE METAMORPHOSIS INTERCHANGE BRIDGES IN ATTIKI ODOS

#### DESCRIPTION:

The Metamorphosis Interchange comprises structures deployed in 4 levels serving the following:

Level 4: Ramp 5 and Ramp 8 bridges. These bridges were constructed over the facilities of the other levers which were constructed at an earlier stage.

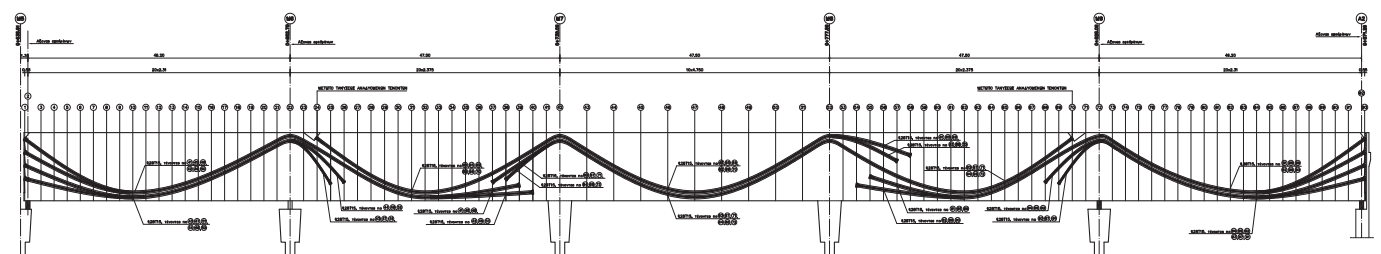
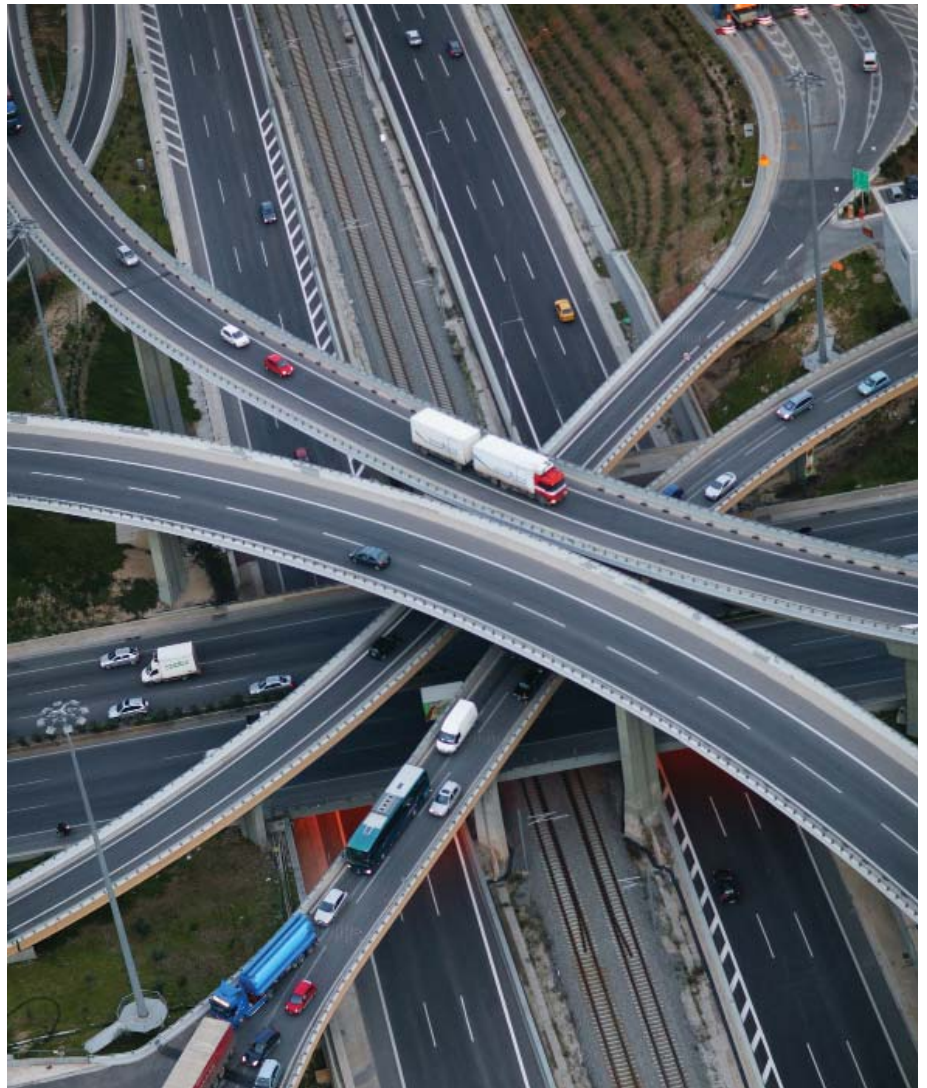
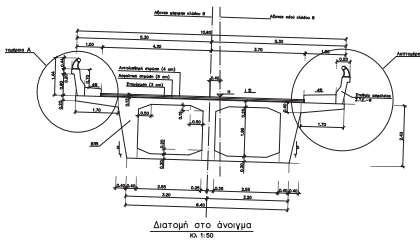
Level 3: Ramp 3 and Ramp 4 bridges.

Level 2: Bridge carrying the Athens-Lamia National Road.

Level 1: Underground passage of E-S-S freeway and the Suburban R/R Line.

The bridge of ramp 5 has a total length of 456m (central spans 47,5m) whereas ramp 8 bridge has a total length of 470,0m (central spans 61,40m).

Both bridges feature prestressed concrete continuous deck supported by single column piers via elastomeric bearing. All piers are on bored piles foundations.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## TUNNELS BY CUT & COVER AT IMITTOS PERIPHERAL

### CLIENT:

Ministry for Environment  
Dir. of Road Constructions of Attiki

### PERIOD:

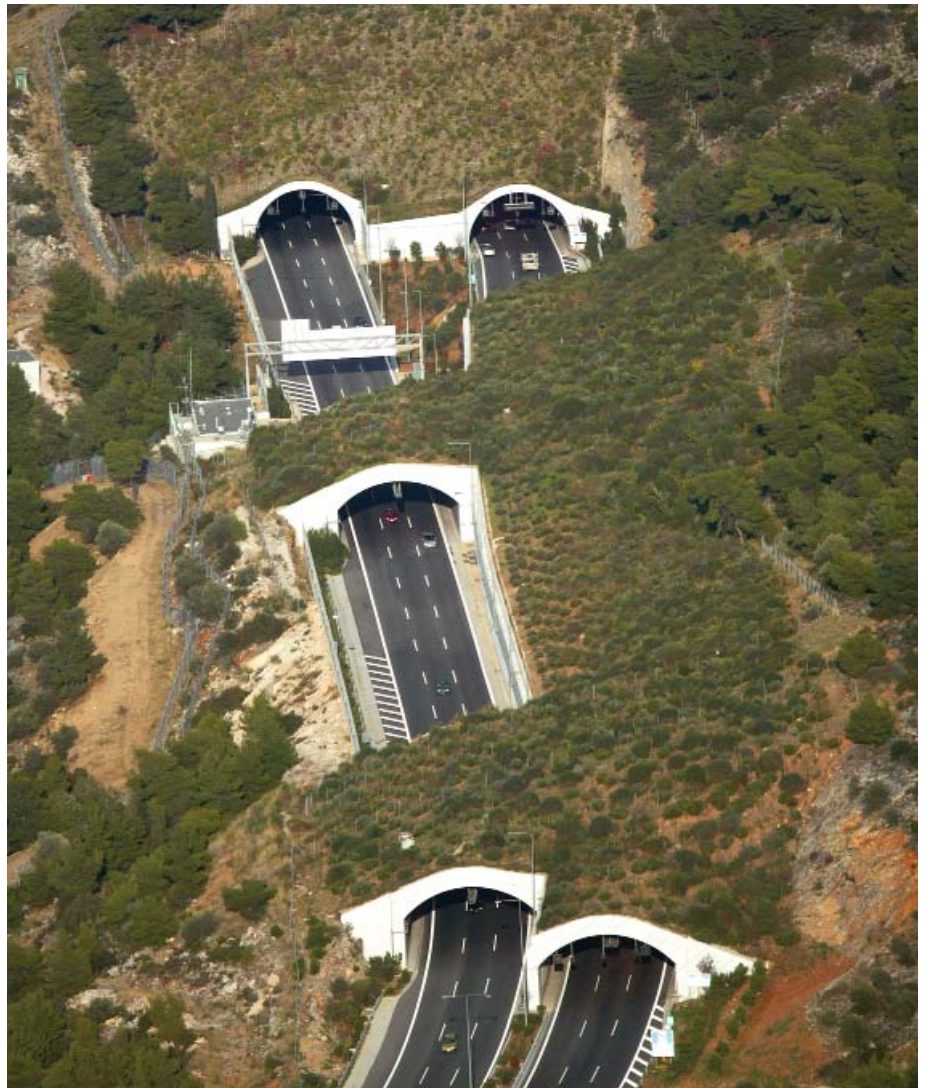
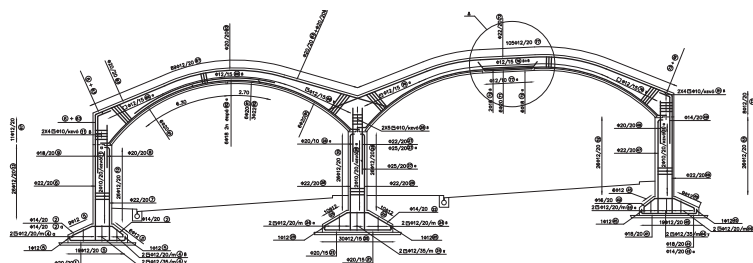
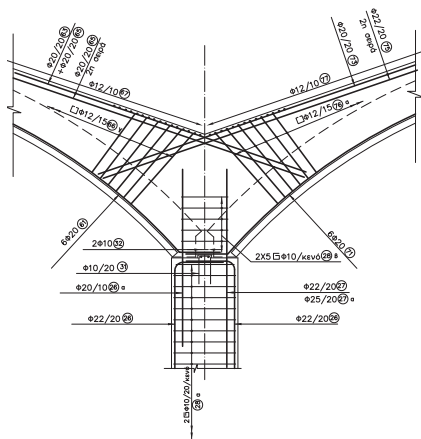
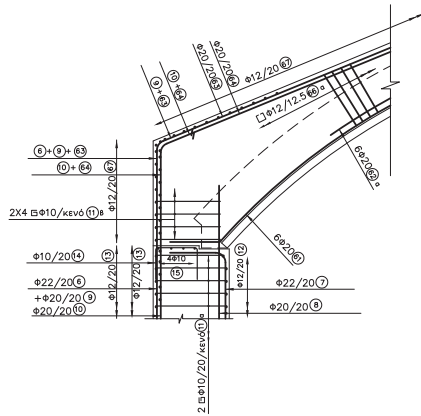
1999 - 2003

### CONTRACTOR:

J/V ATTIKI ODOS

### DESCRIPTION:

To fulfill the environmental requirements for reestablishment of the landscape, the Cut and Cover method was extensively used in a total length of 3.600m. The structures mostly twin, with a width typically of 14,5m (8m-22m), were constructed by cast in situ straight walls, prefabricated arch beams and a final curved cover of reinforced concrete. The system in some places has side openings for the lighting. The area was backfilled and planted. The excavation was partially retained by piling and shotcrete and bolting.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## ATTIKI ODOS PLAKENTIA INTECHANGE BRIDGES

### CLIENT:

Ministry for Environment  
Dir. of Road Constructions of Attiki

### PERIOD:

2001 - 2004

### CONTRACTOR:

J/V ATTIKI ODOS

### DESCRIPTION:

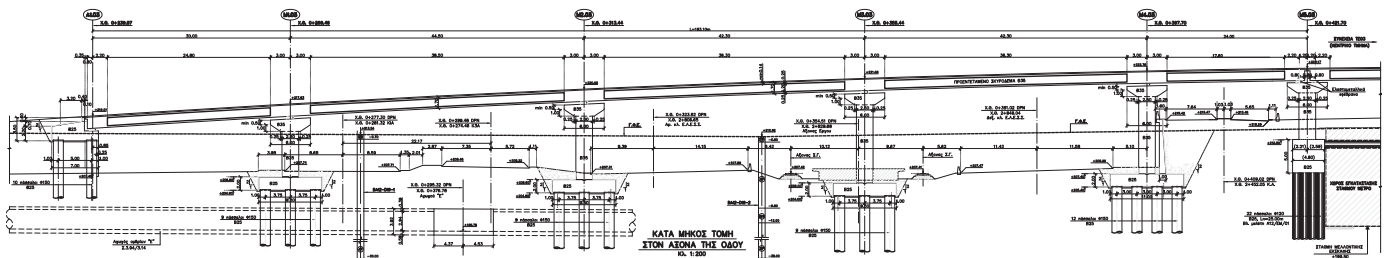
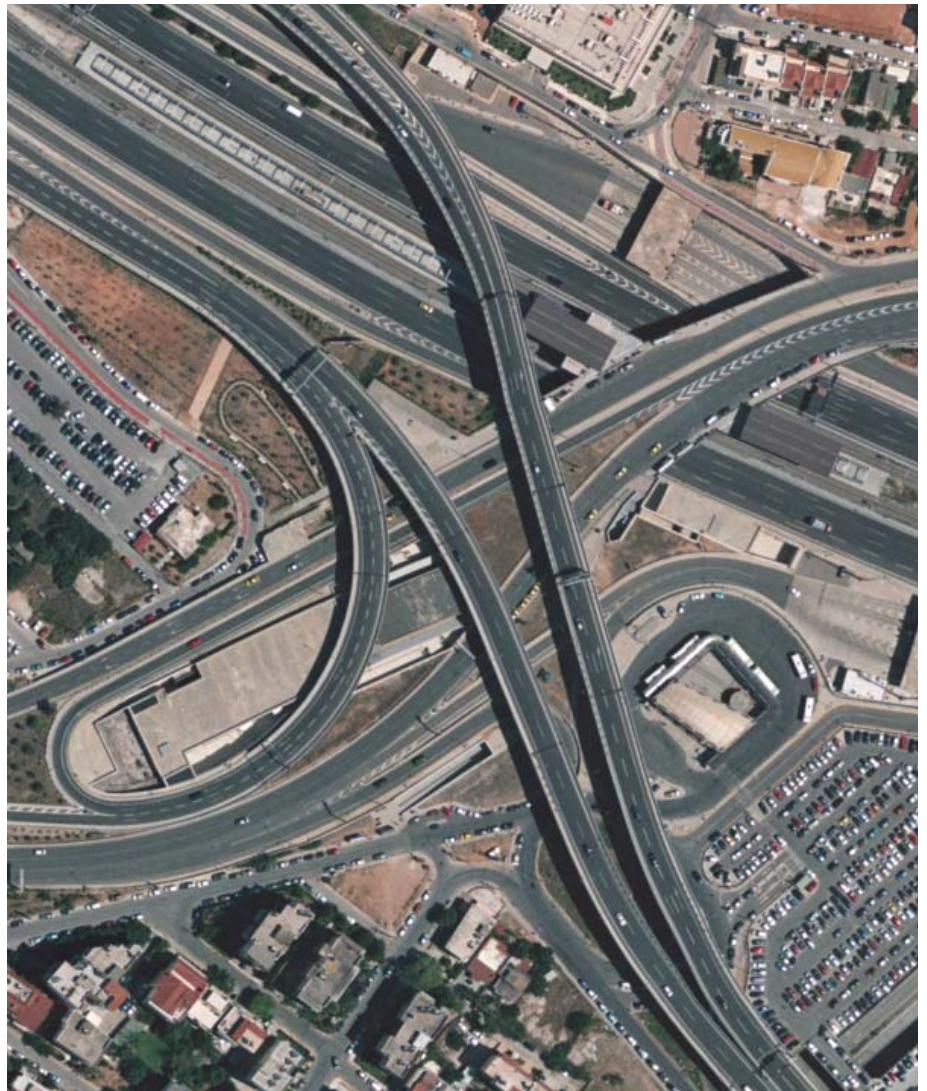
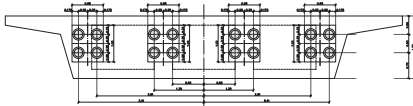
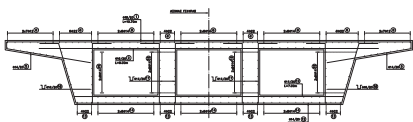
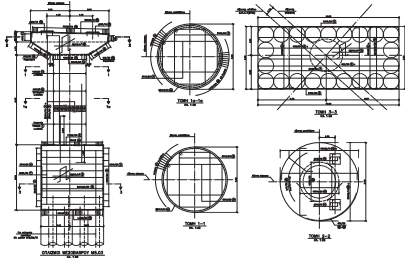
The Plakentia Interchange comprises a group of structures arranged at four different levels and serves the following facilities.

Level 1 : Line 3 of Athens Metro and Plakentia Station building.

Level 2 : E.E.S. freeway and the suburban R/R Line.

Level 3: Plakentias avenue and on grade ramps.

Level 4: Viaducts TE 11 over ramps and TE 03 over Plakentias avenue. The TE 11 bridge has a total length 385m (longer span 44,50m) whereas bridge TE 03 has a total length 314,0m (longer span 42,0m).







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## BRIDGE G5 PRECAST POSTTENSIONED BEAMS EGNATIA ODOS

### CLIENT:

EGNATIA ODOS S.A

### PERIOD:

1998 - 1999

### CONTRACTOR:

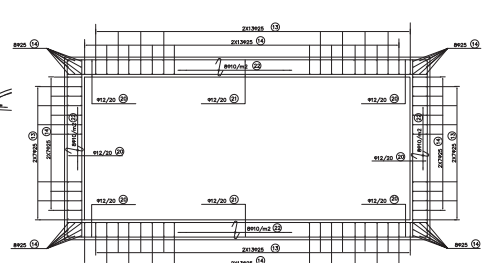
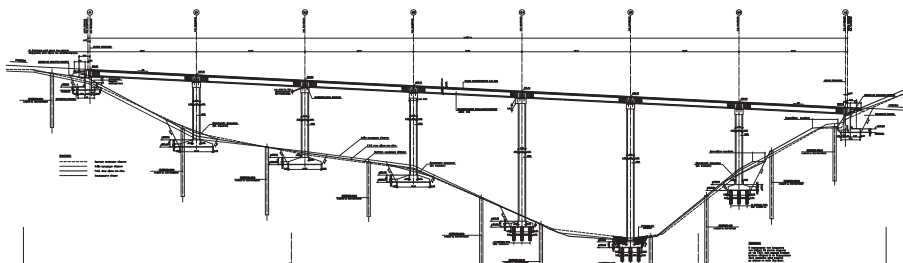
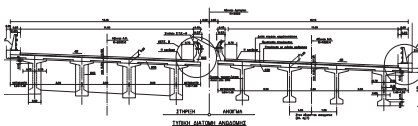
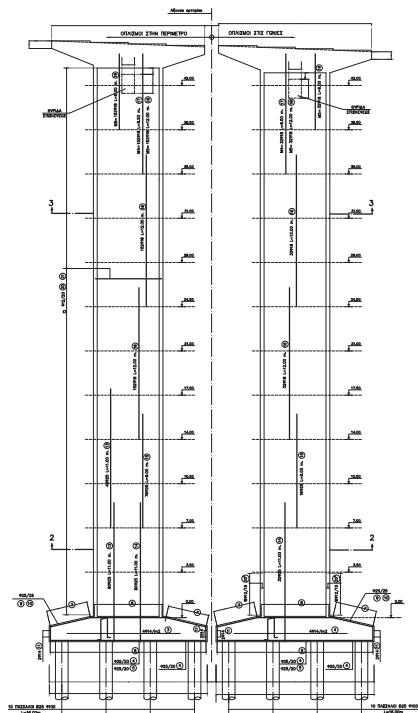
AEGEK S.A.

### DESCRIPTION:

The Egnatia Odos bridge G5 is located at CH 12+300 of section 4.2.2 (Grevena-Kozani) and carries the separated carriageways of the Artery over Kalogyros creek at levels reaching 60m at the deepest point.

The total bridge length of 280m comprises seven equal spans of 40,0m each. The deck structure is formed by four precast posttensioned beam with in situ deck slab which is made continuous over the piers. Deck beams bear via elastomeric bearings on hollow rectangular piers with heights from 20m to 55m.

A combination of spread footings and bored piles were used for pier foundation.



## BRIDGE BY BALANCED CANTILEVER METHOD EGNATIA ODOS

### CLIENT:

EGNATIA ODOS S.A

### PERIOD:

2003 - 2004

### CONTRACTOR:

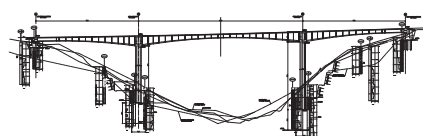
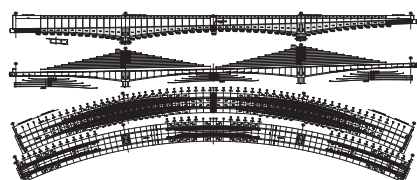
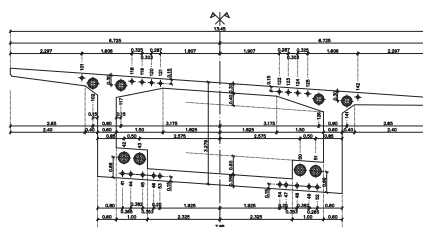
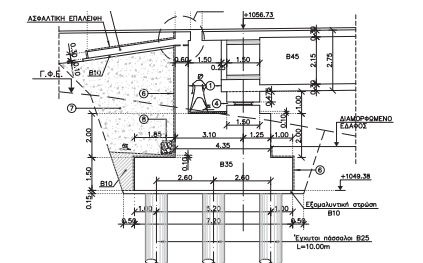
AKTOR S.A.

### DESCRIPTION:

The Egnatia Road bridge G7 is located at CH 2+900 of section 3.5.1 (Metsovo – Panagia) and it carries the Artery across the banks of a natural valley at a maximum of height difference 65,0m.

The bridge length is 270m and comprises of three spans 0,75+120+0,75m. The bridge will be built by balanced cantilever methods with in-situ concreting. The deck structure is a prestressed concrete single cell box girder of variable depth monolithically connected to two piers and supported via pot bearings at the abutments.

Piers M1 and M2 41,7m and 49,5m tall respectively are hollow (box type) of 4,0 x 7,35 outer dimensions in plan and wall thickness of 0,75m. Both piers will be constructed using climbing formwork methods and are founded on solid 10m dia., 15m long concrete shafts, whereas abutments bear on bored piles.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## BRIDGE OF RIVER ALIAKMON EGNATIA ODOS

### CLIENT:

EGNATIA ODOS S.A

### PERIOD:

1998 - 1999

### CONTRACTOR:

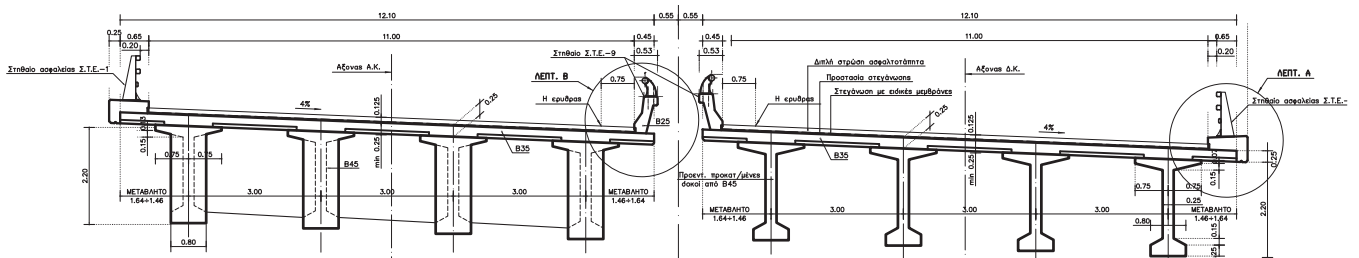
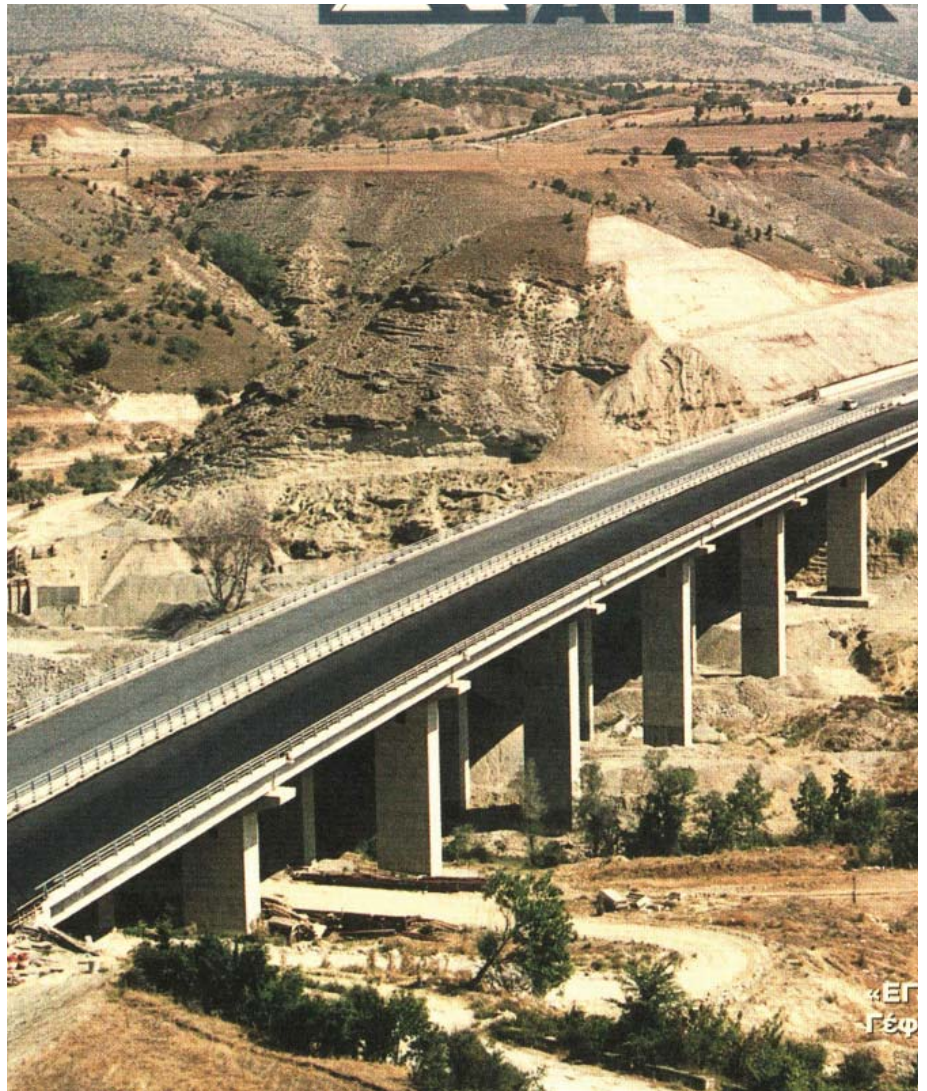
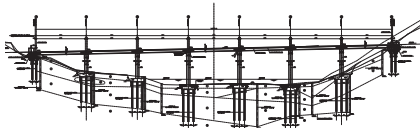
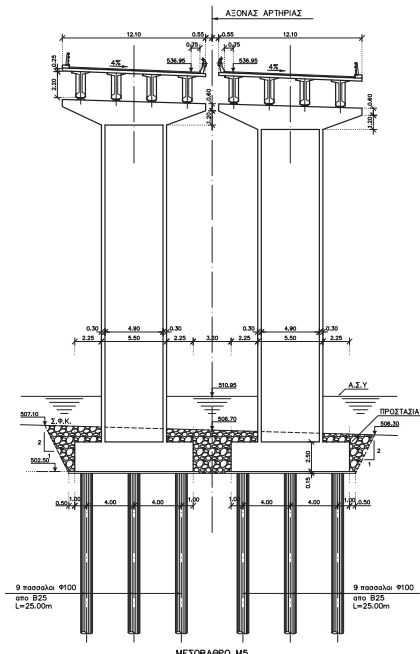
AEGEK S.A.

### DESCRIPTION:

The Egnatia Odos bridge G6 is located at CH 14+400 of section 4.2.2 (Grevena-Kozani) and carries the separated carriageways of the Artery over Aliakmon river.

The total bridge length of 280m comprises seven equal spans of 40,0m each. The deck structure is formed by four precast posttensioned beams with in situ deck slab which is made continuous over the piers. Deck beams bear via elastomeric bearings on hollow rectangular piers with heights 15m to 25m

All piers are on bored pile foundations.





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

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**CLIENT:**

National Highways Funds

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**PERIOD:**

1993 - 1995

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**CONTRACTOR:**

ATEMKE S.A.

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## STEEL BRIDGE "SIRIOS"

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**DESCRIPTION:**

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The project is located at the 43rd km on the motorway Athens-Lamia, consist of two main buildings situated on either side of the motorway and serves as a passengers service station. The two buildings are linked with a steel truss bridge which crosses over the motorway, and apart from access between the two buildings, provides also restaurant and other rest facilities for the passengers. The steel bridge has spans over 55m and has a total width of 19m. The twin trussed girders bear via elastomeric bearing of reinforced concrete abutments which are part of the building structure.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

**CLIENT:**

GREEK STATE

**PERIOD:**

2007 - 2011

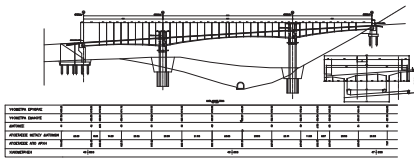
**CONTRACTOR:**

MOREAS S.A.

## BRIDGES A09-TE05 and A09-TE06

**DESCRIPTION:**

The Bridges A09-TE05 (right carriage way) and A09-TE06 (left carriage way) are located close to CH 46+900 in the section STERNA I/C – ARTEMISION Tunnel of the new KO-RINTHOS – TRIPOLI Motorway. Both bridges were built using the balanced cantilever method with three continuous spans of 55+90+55=200m and 65+110+65=240m for TE05 and TE06 respectively. The variable height box girder deck is monolithically connected to the piers and bears on solid seat type abutments via pot bearings. TE05 piers M1 and M2 are hollow box type 7.30x5.00 in plan with 0.75m wall thickness and heights of 20.60m (M1) and 28.0m (M2). TE06 piers M1 and M2 are similarly hollow 6.50x5.00m in plan with 0.75 thick walls heights 19.50m (M1) and 27.60m (M2). All piers were constructed using climbing formworks and bear on solid 10.0m long and 10m diameter cylindrical shafts. The seat type abutments are founded directly on limestone formations.



15 6 2010



## FIRST RING ROAD KUWAIT

### CLIENT:

MINISTRY OF PUBLIC WORK  
KUWAIT

### PERIOD:

2008 - 2011

### CONTRACTOR:

AKTOR – COPRI JV

### DESCRIPTION:

The first Ring Road is a major infrastructure and transportation project designed to ease the traffic to the Airport.

The entire 3km long Motorway project included the following main works:

- Main trough section Underpasses 2,20 km long.
- Flyover Bridges (3 nos) of 1270m total length.
- At grade underpass crossing Bridges (7nos) of 7.000m<sup>2</sup> total area.

KALLIERGOS O.T.M. S.A. was commissioned by the Contractor for Construction Engineering and design follow up during Construction.

Design Scope included: • Design of base slab tension piles.

- Design of temporary excavation side support systems
- Partial modification of Bridge designs to suit construction sequences.





## BRIDGE No2 OF FIRST RING ROAD KUWAIT

**CLIENT:**

MINISTRY OF PUBLIC WORK  
KUWAIT

**PERIOD:**

2008 - 2011

**CONTRACTOR:**

AKTOR – COPRI JV

**DESCRIPTION:**

Bridge No2 is part of the first Ring Road a major infrastructure and transportation project designed to ease the traffic to the Airport. The bridge has a total lengths of 310m comprising a total of ten continuous spans with length from 24.50m to 42.0m arranged in three separated units.

The deck structure is post-tensioned three cells box girder 2.00m deep bearing via pot bearings on single stem piers widened at the top.

Piers are founded on spread footings.

KALLIERGOS – O.T.M. S.A. was commissioned by the Contractor for the Construction Engineering and design services during construction.

Services offered in Bridge No 2 included revision of the post tensioning scheme to suit the actual construction sequence.





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

**CLIENT:**

GREEK STATE

**PERIOD:**

2007 - 2011

**CONTRACTOR:**

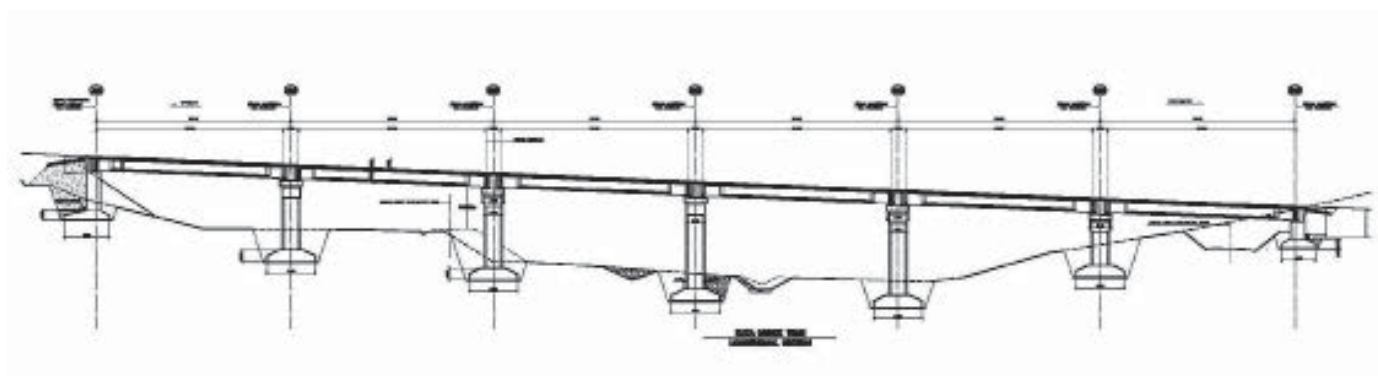
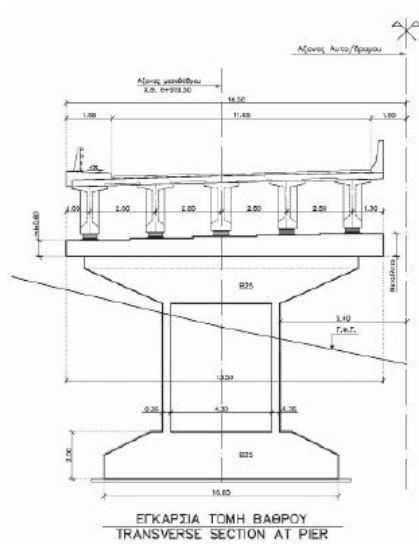
MOREAS S.A.

## BRIDGE A27-TE12

**DESCRIPTION:**

The bridge A27-TE12 of Korinthos-Tripoli Motorway is located between CH 6+881.0 and CH 7+087.0 of the Tsakona-I/C Arfaron section, passing over a 16.0m depth gorge and over the service roads SR8L, SR9R and SR10R.

The total bridged length is 201m comprising six (6) spans of 33.5m each. The deck is formed by precast prestressed beams of 2.00m deep combined with an in-situ deck slab 28cm thick. The single stem hollow piers are founded on 8.00x10.00 m footings bearing on strong flisch formation.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

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**CLIENT:**

GREEK STATE

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**PERIOD:**

2007 - 2011

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**CONTRACTOR:**

MOREAS S.A.

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## BRIDGE A27-TE09

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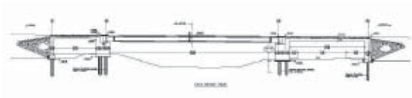
**DESCRIPTION:**

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The MOREAS Motorway bridge A27-TE09 is located at CH 4+573 of the TSAKONARFARON I/C and carries the Motorway traffic across the old N/R Tripolis-Kalamata a central irrigation channel and the adjacent local road.

The total bridge length of 63.0m comprises separated bays over each bridged obstacle. The side bays over the roads are bridged using portal frames on bored piles whereas simply supported precast prestressed beams combined with in-situ deck slab are used in the central segment over the channel.

The internal legs of the side frames are appropriately formed to provide seating for the central deck beams.



A detailed 3D finite element mesh of a mechanical joint, likely a ship's hull connection. The structure features a central vertical column with a flange, and several horizontal pipes or structural members attached to it. The entire model is composed of a dense network of small, interconnected triangular and quadrilateral elements, typical of finite element analysis (FEA) software. The background is a solid blue color.

# Special Structures



**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY





**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

**CLIENT:**

Christian Pfeiffer GmbH

**PERIOD:**

2014

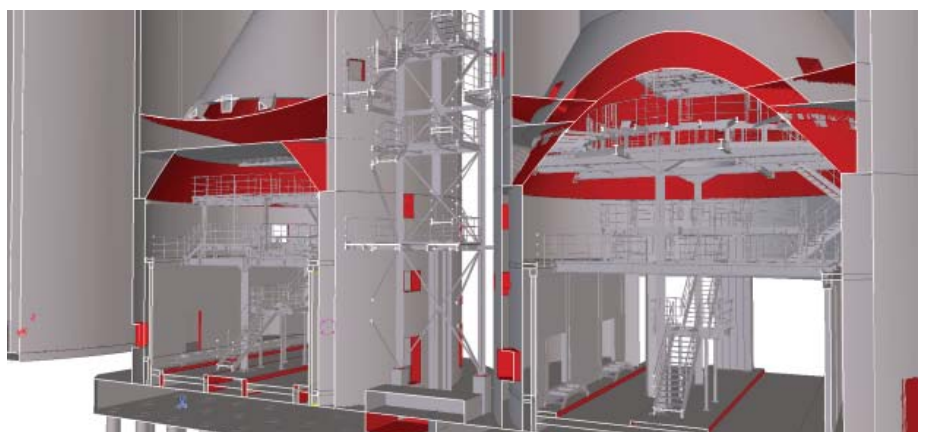
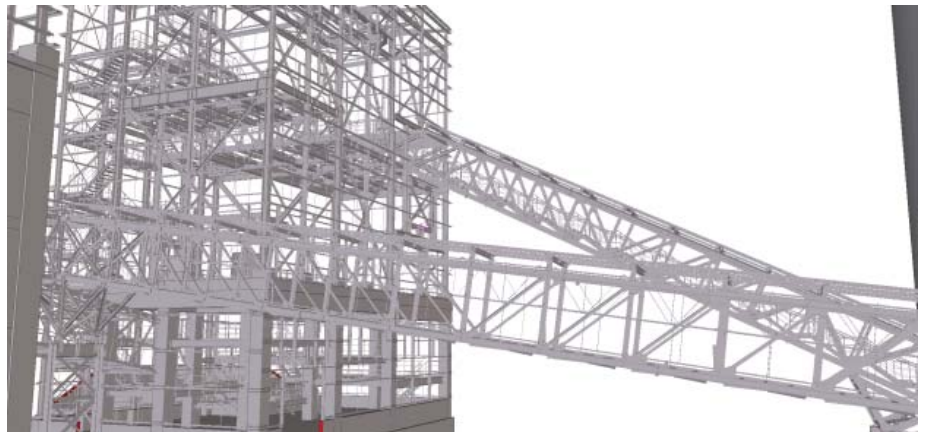
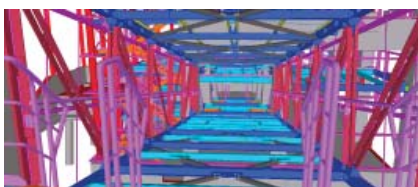
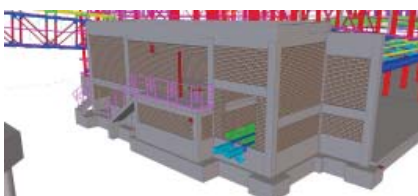
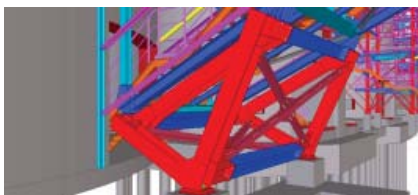
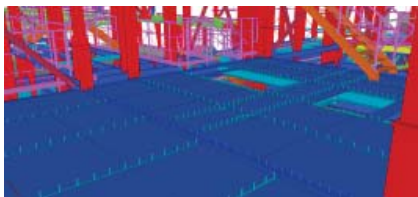
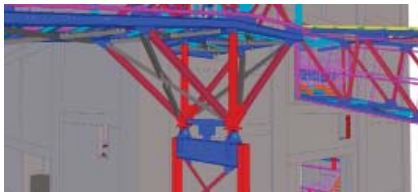
**CONTRACTOR:**

KOTTMANN GmbH

## CEMENT PLANT IN MALAYSIA

**DESCRIPTION:**

- Structural design of multiple buildings and conveyor bridges of plant complex.
- Steel and concrete design.
- Overall steel tonnage 1300t.



## RAW MILL STEEL BUILDING FOR CEMENT INDUSTRY IN BURGLENGENFELD - GERMANY

### CLIENT:

HEIDELBERG CEMENT AG

### PERIOD:

2016-2017

### CONTRACTOR:

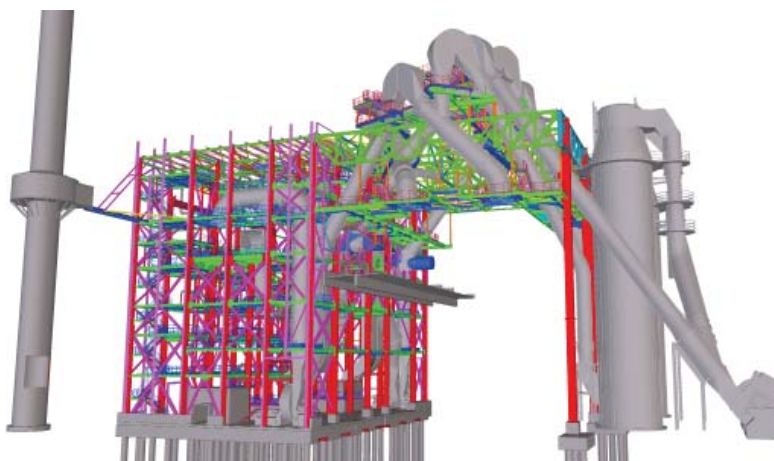
KOTTMANN GmbH

### DESCRIPTION:

Structural design of a steel building with plan dimensions 45m x 35m and a total height of 40m. The building houses a large number of equipment (cyclones, large ducts e.t.c.). A conveyor bridge as also a duct supporting structure of 50m height are supported externally on the building. Total steel tonnage of 1700t.

The foundation is on bored piles.

Detailed erection design was performed for the construction sequence demands.







**KALLIERGOS O.T.M.**  
CONSULTING ENGINEERING COMPANY

## PRESTRESSED CONCRETE CEMENT SILO IN SAUDI ARABIA

### CLIENT:

YAMAMA CEMENT

### PERIOD:

2016-2017

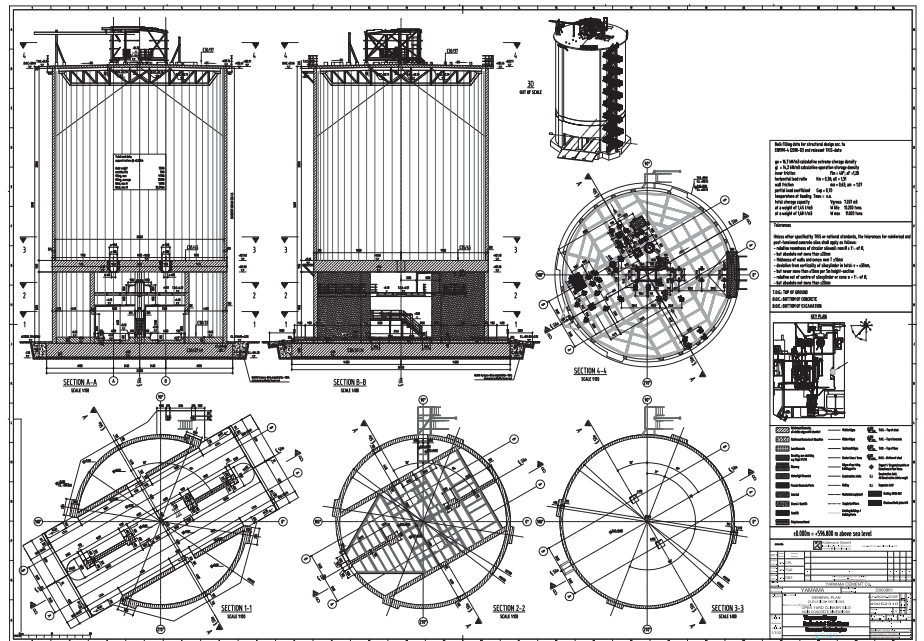
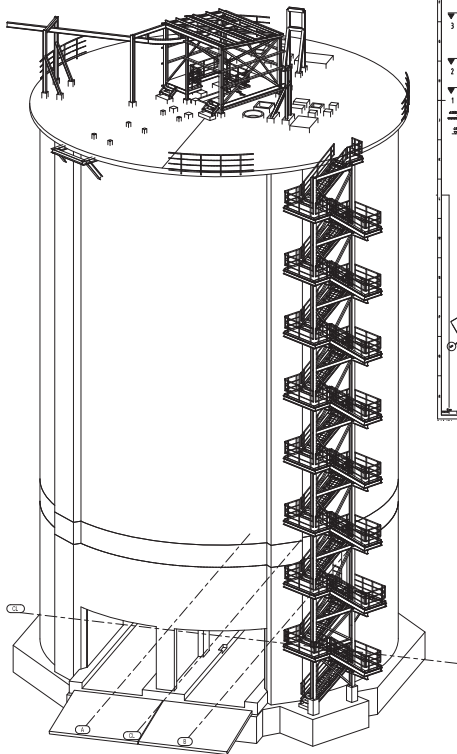
### CONTRACTOR:

KOTTMANN GmbH

### DESCRIPTION:

Structural design of a 22m diameter and 36m height prestressed concrete silo. The silo roof is a composite structure comprising steel trusses and R/C slab. An external staircase along the full height of silo is provided as also one internal platform and various steel structures on the roof.

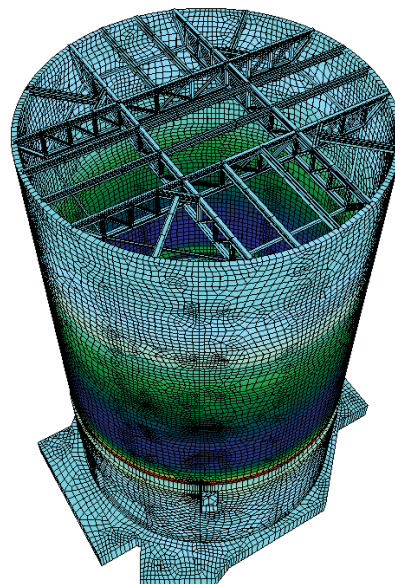
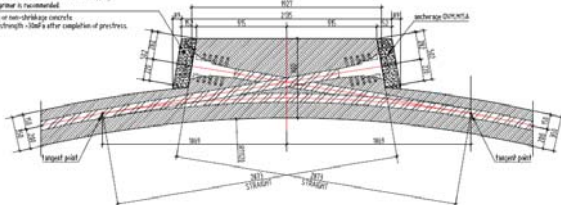
The silo foundation is shallow (foundation slab).



### CLOSING OF POCKETS AT POST TENSION ANCHORS.

- Concrete has to be clean, free of oil, wet and not dripping.
- Use of adhesive grout is recommended.

- Fill with swelling or non-shrinkage concrete.
- Reinforce with through - steel after completion of prestress.



## STEEL BUILDINGS AND OTHER AUXILLIARY STRUCTURES FOR CEMENT PLANT IN SCHELKLINGEN - GERMANY

### CLIENT:

HEIDELBERG CEMENT AG

### PERIOD:

2015-2016

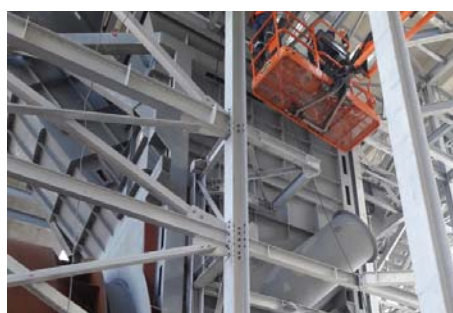
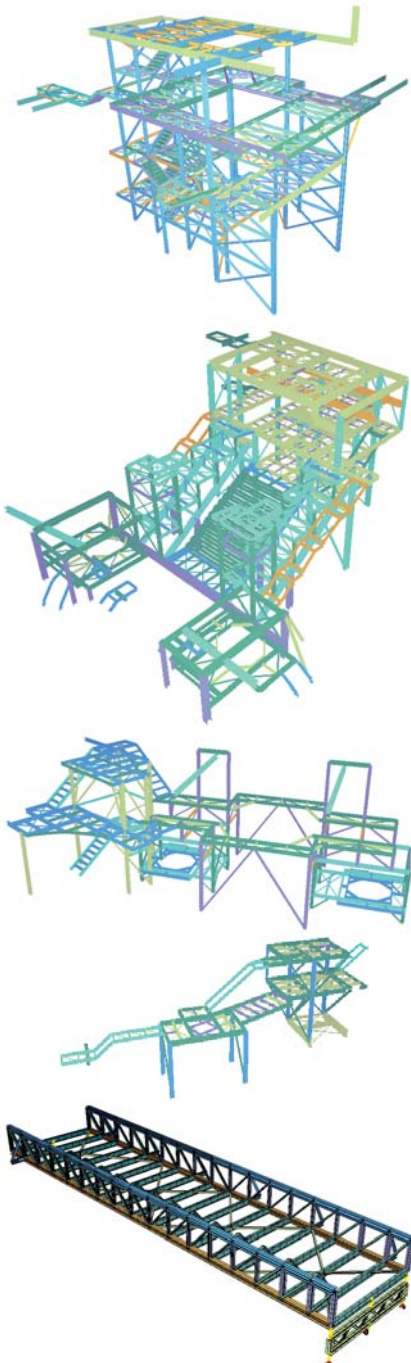
### CONTRACTOR:

KOTTMANN GmbH

### DESCRIPTION:

Structural design of a large number of complex steel structures comprising :

- 3 buildings (Bypass filter, Clinker cooler dedusting, Heat exchanger)
- 11 duct supporting structures
- 1 footbridge (Kiln)
- All internal platforms of 130m high Preheater Tower (25 multilevel steel structures)
- Various auxilliary structures.







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## PODILSKY CEMENT PLANT IN UKRAINE NEW RAW MEAL SILO

### CLIENT:

PJSC

### PERIOD:

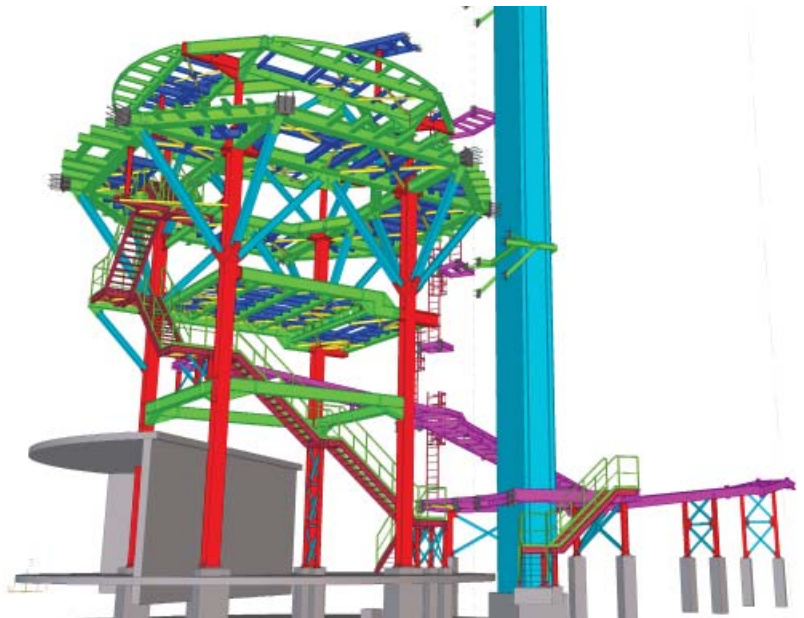
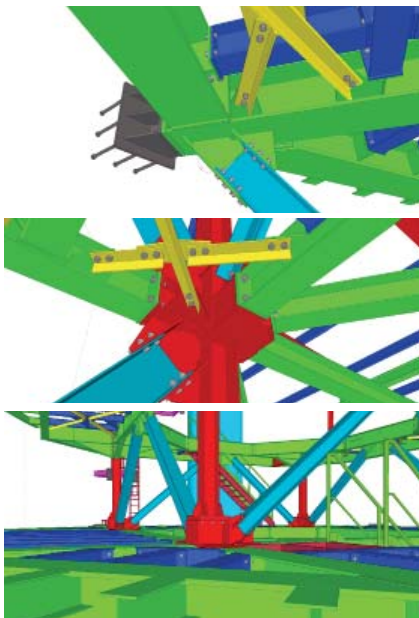
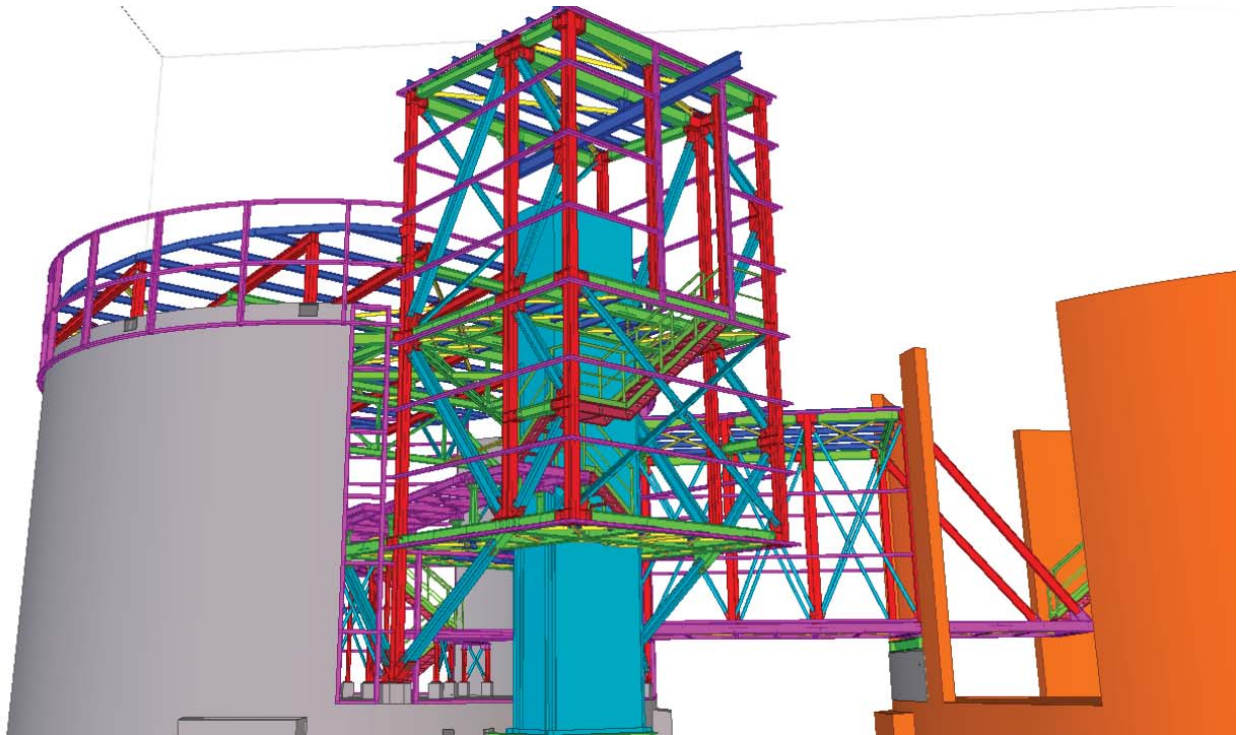
2013

### CONTRACTOR:

KOTTMANN GmbH

### DESCRIPTION:

- Structural design of all steel structures of new silo comprising:
  - Platforms in various levels.
  - Roof and cantilevered housing on top of silo.
  - Bridge connecting old and new silo with seismic isolation.
  - External silo platforms.
- Design of embedded part connections.
- Total weight of steel structures 150 t.



## NEW CEMENT PLANT KALUZHSKY RUSSIA

CLIENT:

KCZ

PERIOD:

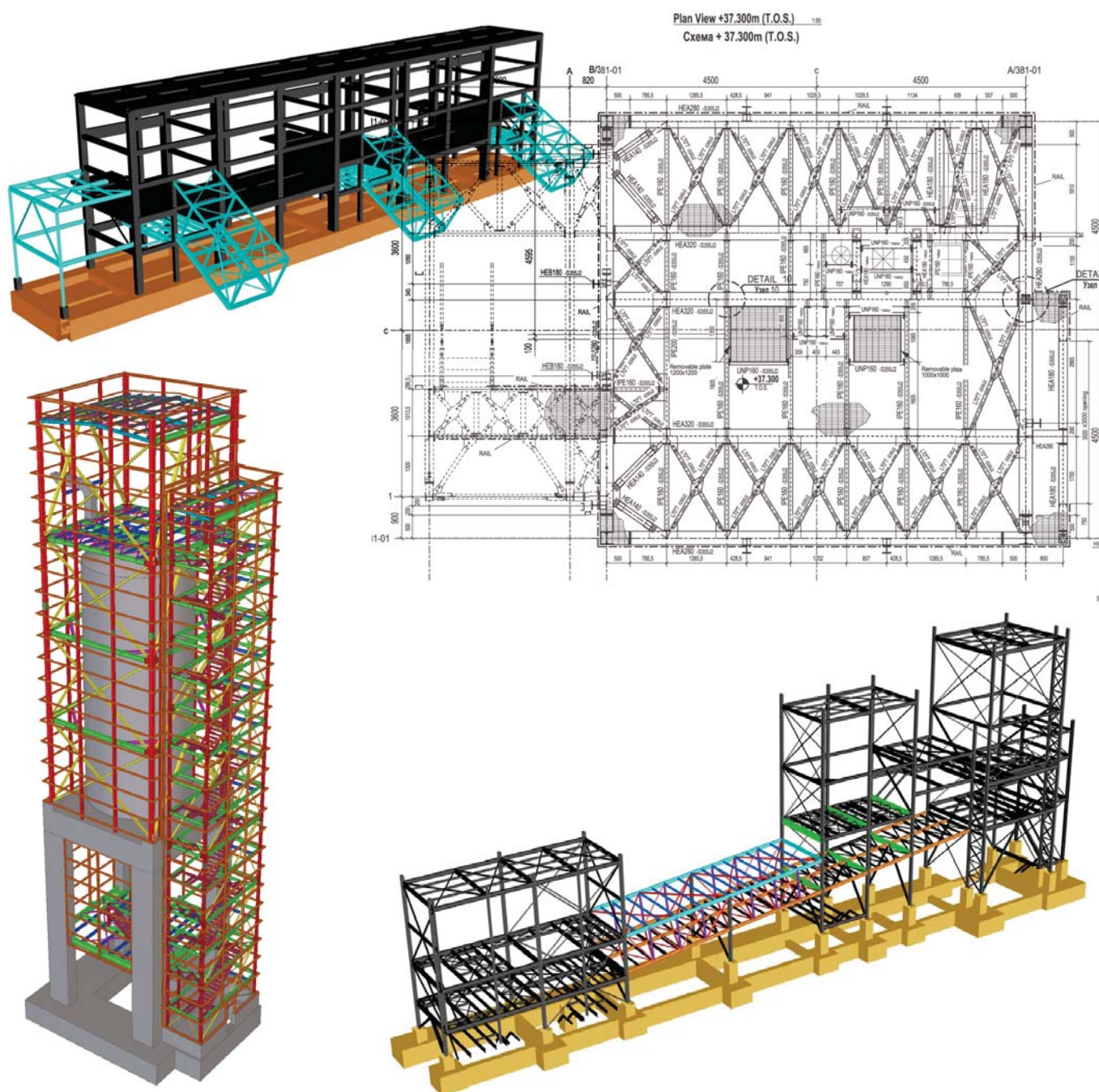
2013

CONTRACTOR:

KOTTMANN GmbH

DESCRIPTION:

- Structural design of three buildings of plant complex.
- Steel and concrete bearing structure buildings.
- Design of main connections.







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CLIENT:

SOCAR

PERIOD:

2013

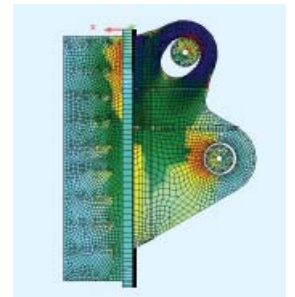
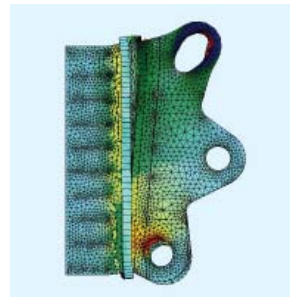
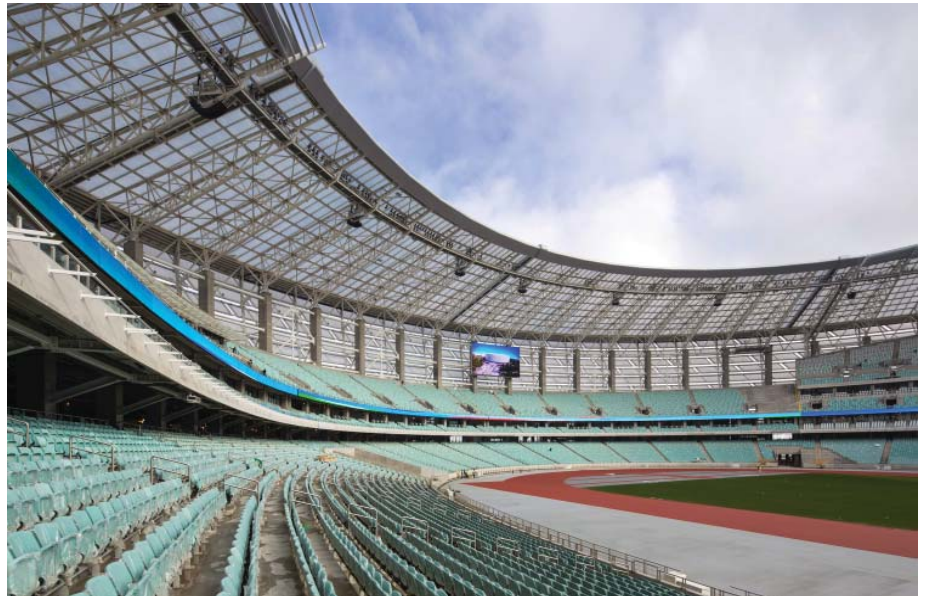
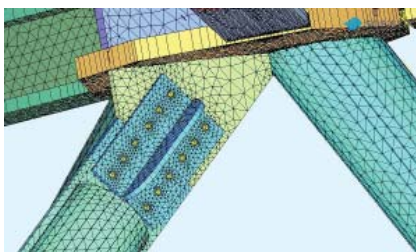
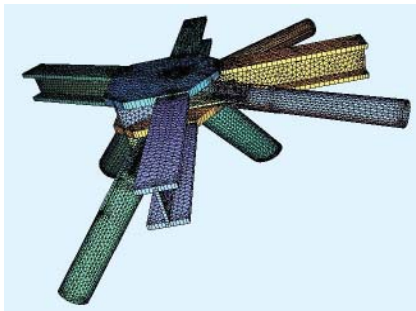
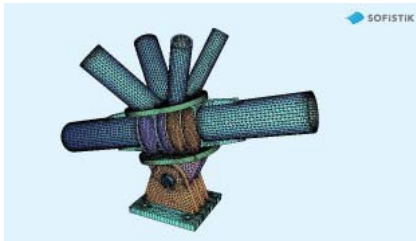
CONTRACTOR:

TEKFEN

## OLYMPIC STADIUM OF BAKU - AZERBAIJAN

### DESCRIPTION:

The Olympic Stadium of Baku has a capacity of 68000 spectators and a total building plan area of 87000 sqm. The steel roof main bearing structure comprises a series of 50m cantilever triangular trusses arranged radially towards the center of stadium. Truss cantilevers are supported on concrete columns on roof top and are fixed via tensioned members on the back. Back structure forms planar trusses the chords of which are the tensioned members and the concrete columns. Lateral stability bracings are placed between some of the concrete columns. Structural design of stadium was performed by Thornton Thomasetti. KALLIERGOS OTM S.A. performed structural verification of all main steel joints of roof. Finite element analysis was used in all joint verifications.



## AGHIOS DIMITRIOSSES UNIT V SUPPLY AND INSTALLATION OF FGD PLANT

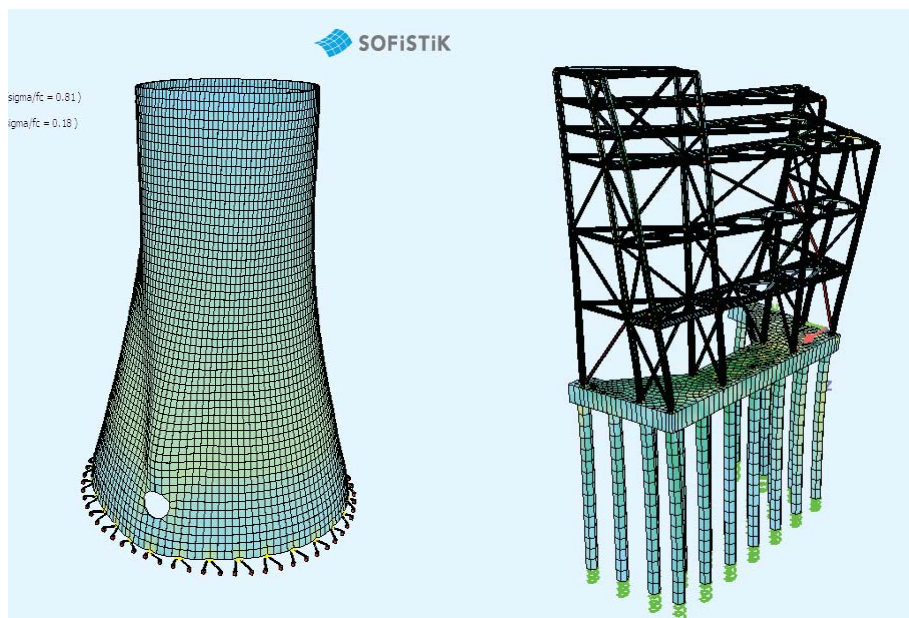
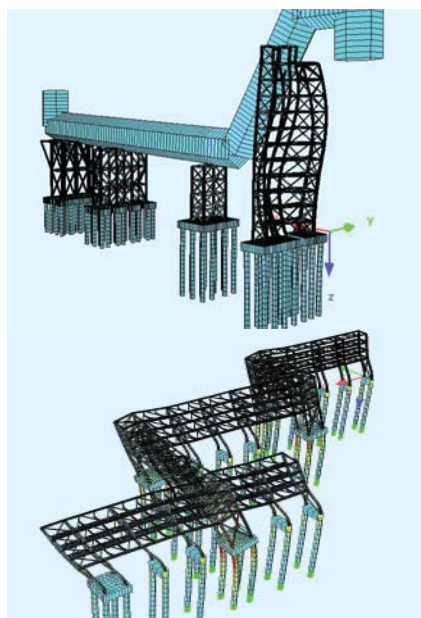
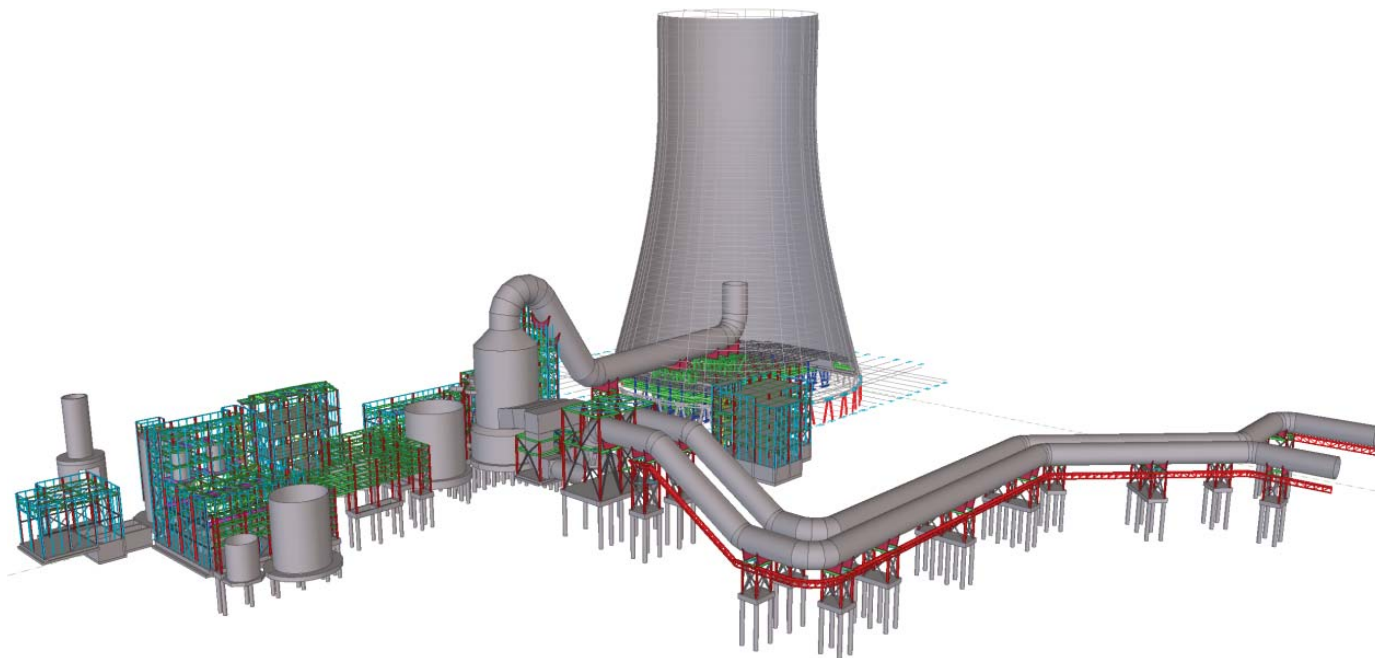
CLIENT:  
PPC S.A.

PERIOD:  
2012

CONTRACTOR:  
INTRAKAT

### DESCRIPTION:

- Structural preliminary design in pre-tender stage.
- Steel buildings, and pipe racks of 3000t total weight.
- Foundations on concrete piles.
- Drilling of cooling tower.
- Project is not yet awarded.





# Buildings Retrofit



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## STRUCTURAL UPGRADE OF BUILDING IN ATHENS

### CLIENT:

EHRET AND KLEIN DEVELOPMENT  
GREECE S.A.

### DATE:

2022

### ARCHITECT:

DECA ARCHITECTURE

### CONSTRUCTION COST:

5,000,000 €

### DESCRIPTION:

Design of an 8-story building with a basement, constructed in three phases from 1932 to 1983.

A structural assessment study, repair and strengthening design, as well as a study for the addition of new steel structures, was carried out for the former DOL building located at 3, Christou Lada Street.

A seismic assessment was performed in accordance with the Greek Code for the Seismic Assessment and Retrofit of Existing Structures (KAN.EPE), along with proposed strengthening measures for columns, beams, and slabs.

A methodology was developed for restoring the durability of the reinforced concrete elements.





## STRUCTURAL STRENGTHENING OF ATTICA BANK OFFICE BUILDING IN ATHENS

### CLIENT:

ATTICA BANK

### DATE:

2022

### DESIGN PHASE:

FIANAL

### CONTRACTOR:

### DESCRIPTION:

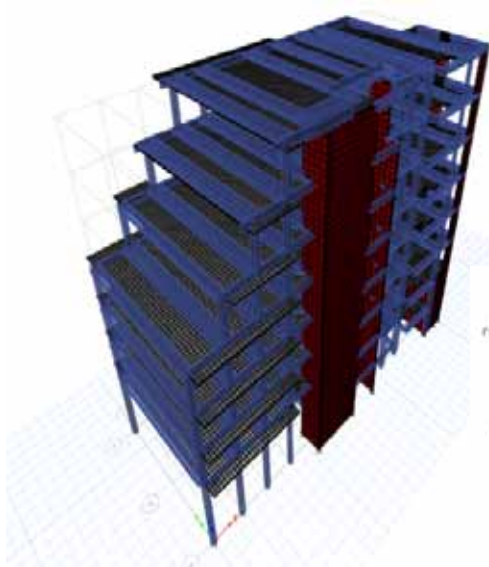
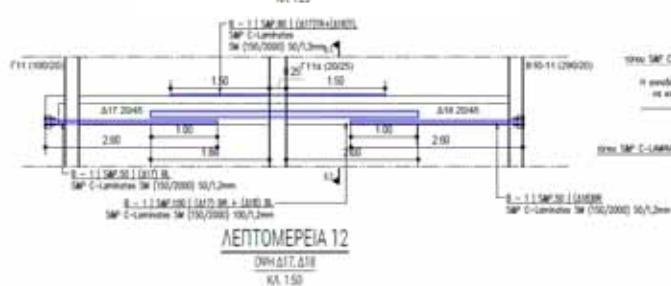
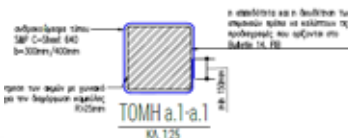
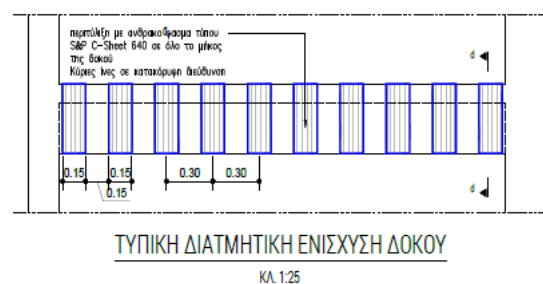
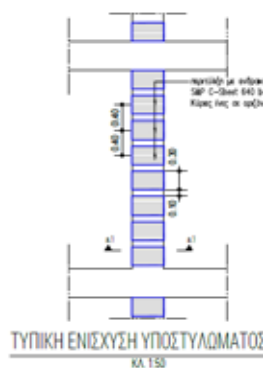
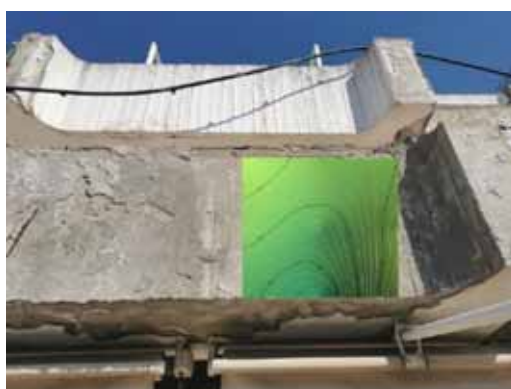
The project concerns an existing building consisting of 2 basement levels and 8 above-ground floors (7 floors plus a mezzanine).

The structural study included:

Development and execution of an investigation program for the load-bearing structure

Preparation of a methodology for restoring the durability of concrete elements  
Seismic and gravity load assessment according to the Greek Code for the Seismic Assessment and Retrofit of Existing Structures (KAN.EPE)

Design proposals and sizing of strengthening interventions for columns and beams  
The study was carried out in collaboration with the engineering firm G. & G. Penelis S.A.





## SEISMIC UPGRADE OF ELAIS INDUSTRIAL BUILDING COMPLEX AT PHALIRON

### CLIENT:

ELAIS-UNILEVER S.A.

### PERIOD:

2005 - 2007

### CONTRACTOR:

EPSILON TECHNIKI

### DESCRIPTION:

The ELAIS industrial complex comprises more than 30 buildings of various forms and different ages used to house the production units and the administration of the Company. The entire complex is declared preservable and seismic upgrade was decided to ensure safe operation condition for both the production units and the other departments.

Services offered : Evaluation of the existing conditions design of strengthening measures and construction follow up.





## RESTORATION OF AN OLD BUILDING IN THE TECHNOLOGICAL PARK OF LAVRION

### CLIENT:

National Technological University

### PERIOD:

1999 - 2000

### CONTRACTOR:

A.NOYKAKIS & Co

### DESCRIPTION:

It is about one of the buildings in the site of old mineral installation that today constitute the "Technological Park of Laurion" in Attiki. It is a structure of the 19th century, with stone masonry and wood roof.

They became the following interventions :

- Repairs in masonry and strengthening of the structure for horizontal forces capacity by constructing steel frames in weak direction of the walls.
- Reconstruction of floors and walls
- New steel stairs and shafts of elevations.





## RETROFIT AND STRENGTHENING OF UNIVERSITY OF ATHENS

**CLIENT:**

UNIVERSITY OF ATHENS

**PERIOD:**

2000 - 2002

**CONTRACTOR:**

A. Delivorias – Kr. Konstantinou

**DESCRIPTION:**

The Historical main building of the National University has suffered relatively light damages due to earthquakes and other causes.

An investigation of the bearing capacity of the building against earthquakes, concluded to the necessity of restoration of the existing damages as well as to certain measures for the strengthening of the building (diaphragms at the roof level, grouting for the connection of the walls etc.). The total cost of the work was approximately 1.100.000.000 greek drachmas .

The bearing system of the building consists of masonry (stone walls) and of wooden floors and roof. It should be noted that, at a part of the building, the wooden floor had been replaced by a reinforced concrete slab.







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**CLIENT:**

Ministry of Education – “DIEFES”

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**PERIOD:**

1991 - 1994

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**CONTRACTOR:**

Mechaniki S.A. – Edrassis S.A.  
V. Kyriakopoulos

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## REESTABLISHMENT OF THE CORFU ENGLISH BARRACKS

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**DESCRIPTION:**

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The building was constructed during the period of the English Occupation (1814-1864). It is founded on the old Venetian Wall of the dry trench (16th century).

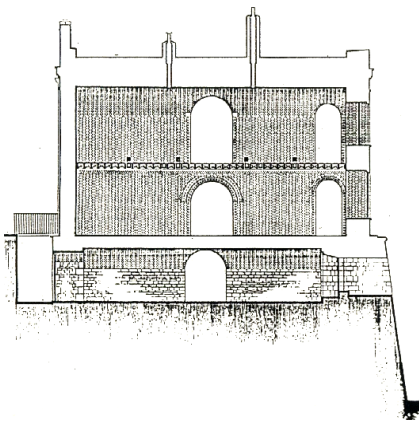
The 0,90 ÷ 1,40m thick walls, as well as the vaults are constructed with solid clay bricks. The objective of the design was to retrofit and upgrade the building as required to house the Historic Archive and the Public Library of the city of Corfu.

The retrofitting works of the building include: reinforcement of the ground by grouting, adjustment of the walls and filling of voids by cement and resin grout, replacement of the floors by reinforced concrete slabs, installation of steel platforms and lift pits.

Total cost of retrofit works 200.000.000 greek drachmas.

The building was used as the Press center for the E.C. summit meeting (June 1994).

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