



## Aryan Tarh Mandegar Detail Profile

ARYAN TARH MANDEGAR (ATM) is a registered company specializing in Civil, Structural, and Architectural Engineering and design.

Established in 2014, ATM adheres to international design and drafting standards to offer high-quality deliverables to customers in a wide spectrum of industries including oil, gas, and petrochemical plants, industrial complexes, commercial buildings, and high-rise buildings.

The team comprises high-caliber professionals with domain expertise in their chosen fields. At your service are mechanical engineers, civil engineers, structural engineers, and architects, supported by engineering draftsmen and design and animation specialists.

### Engineering Services

#### Structural Engineering Design

- ❖ Using industry-standard design and finite element tools, ATM conducts design and analysis for all types of residential and commercial buildings both RCC and Steel.
- ❖ Engineering, Analysis, Detail Design, and Drawing Preparation for:
  - Open structures for pipe racks including steel structures, RCC, and composite structures
  - Equipment supporting structures and shelters
  - Blast-resistant control and substation buildings
  - Vibrating machine foundations (pumps and compressors, turbines, and electrical motors)
  - Fixed-type equipment foundations (pressure vessels, process towers, and reactors)
  - Foundations for skids
  - Above-ground pipeline infrastructure (RCC sleepers, culverts, and pipe bridges)
  - Special steel pipe supports
  - Misc. Structural steel such as platforms, access ways, jump overs
  - Above-ground storage tanks foundation
  - Underground and above-ground RCC storage tanks, half-buried pits, and tanks
  - Box-type concrete cooling towers
  - Long-span hangars and warehouse-building structures
- ❖ Package Preparation to Hire Technical Services for:
  - Site and soil investigation scope of works
  - Seismic hazard studies and site-specific ground motion for seismic design
  - Ground improvement
- ❖ Procurement Services:
  - Material requisition and MTOs for structural steel
  - Anchor bolts and bolt installation templates
  - Sandwich panel cladding
- ❖ Construction and Fabrication Stage:
  - Shop drawing preparation for structural steel

- Shop drawing review and mark up

## Civil Engineering

ATM covers the entire gamut of design & drafting services in civil engineering across industrial, residential, and commercial complexes. ATM caters to various geographies with tailor-made services and is backed by highly experienced civil engineers. Key services offered by ATM include:

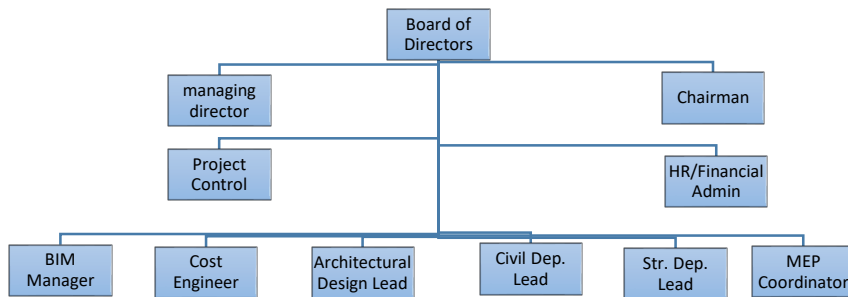
- ❖ Scope of work for site surveying package
- ❖ Ground improvement studies
- ❖ Site grading study to minimize the cost of site preparation
- ❖ Preliminary rough grading drawings and site-level design
- ❖ Design of temporary and permanent access ways to site
- ❖ Geometric design of on-plot roads and streets
- ❖ Design for engineered embankments, flexible and rigid pavements
- ❖ Slope stability analysis and retaining wall design
- ❖ Drainage design including:
  - Hydrological and climatological data collection and analysis and flood mitigation study and design
  - Flood control design
  - Surface run-off study and drainage system design
  - Underground drainage systems
  - Chemical plant drainage networks including oily water systems, potentially oily water, blowdowns, and clean waters
  - Sanitary sewer networks and septic tanks
  - Composite underground drawings, 3d modeling, and coordination through Aveva PDMS

ATM uses Autodesk Civil 3D, Storm, and sanitary design packages for design works.

## Architectural Engineering

- ❖ Study of the physical, structural, and performance aspects of built environments for industrial, semi-industrial, and non-industrial buildings including admin buildings, canteens, dormitories, clinics, fire stations, and guard houses
- ❖ Area validation study and report
- ❖ Basic design for buildings
- ❖ Detail architectural design and quantity take-off
- ❖ 3d modeling
- ❖ BIM-based designs based on Revit packages
- ❖ Landscaping design for industrial and non-industrial buildings
- ❖ Planning and design for laboratories at chemical plants
- ❖ Architectural design of control buildings and substations

## Organization Chart



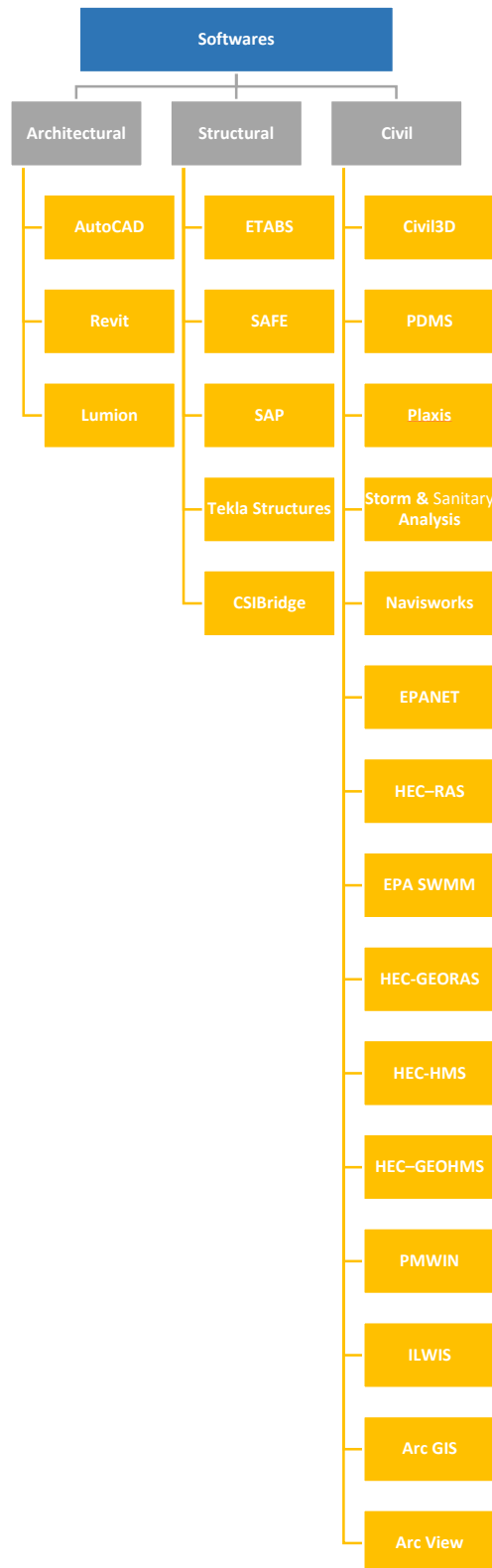
## International Codes and Standards

ATM undertakes design works as per international codes and standards as follows:

- 1- IBC
- 2- ASCE 7
- 3- AISC (360,341,358)
- 4- ACI 318 and other publications from American concrete institute
- 5- API
- 6- NFPA
- 7- FEMA 356
- 8- AASHTO

ATM also uses Neufert for architectural design, and ASCE publications and guidelines in petrochemical industries.

## Software Packages



ATM has developed ready-to-use tools for the design of foundations, base plates, and connections, taking all the design code requirements and the appropriate checks into consideration.



Summaries of Completed and On-going Projects

Farzanegn Oil Refinery

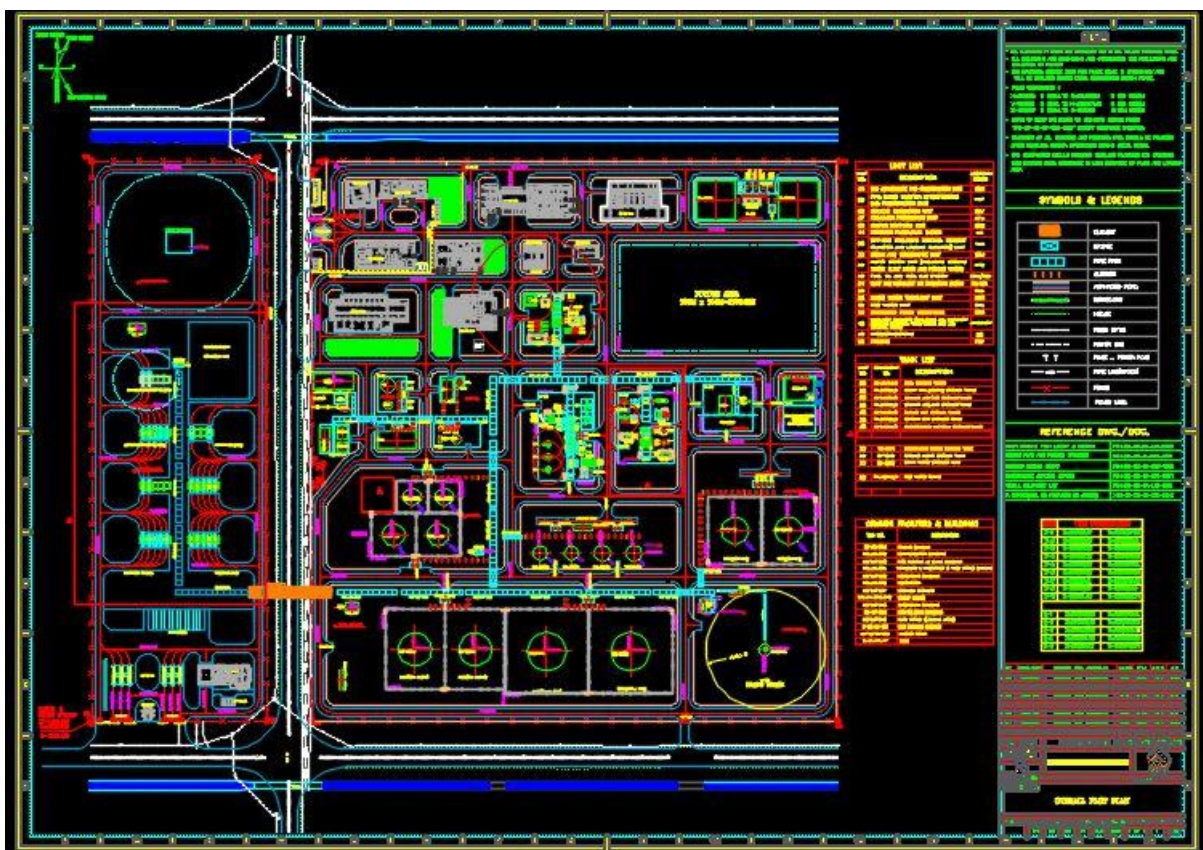
Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)

Main Client: Farzanegan Energy Pars

Date: 2016~2020

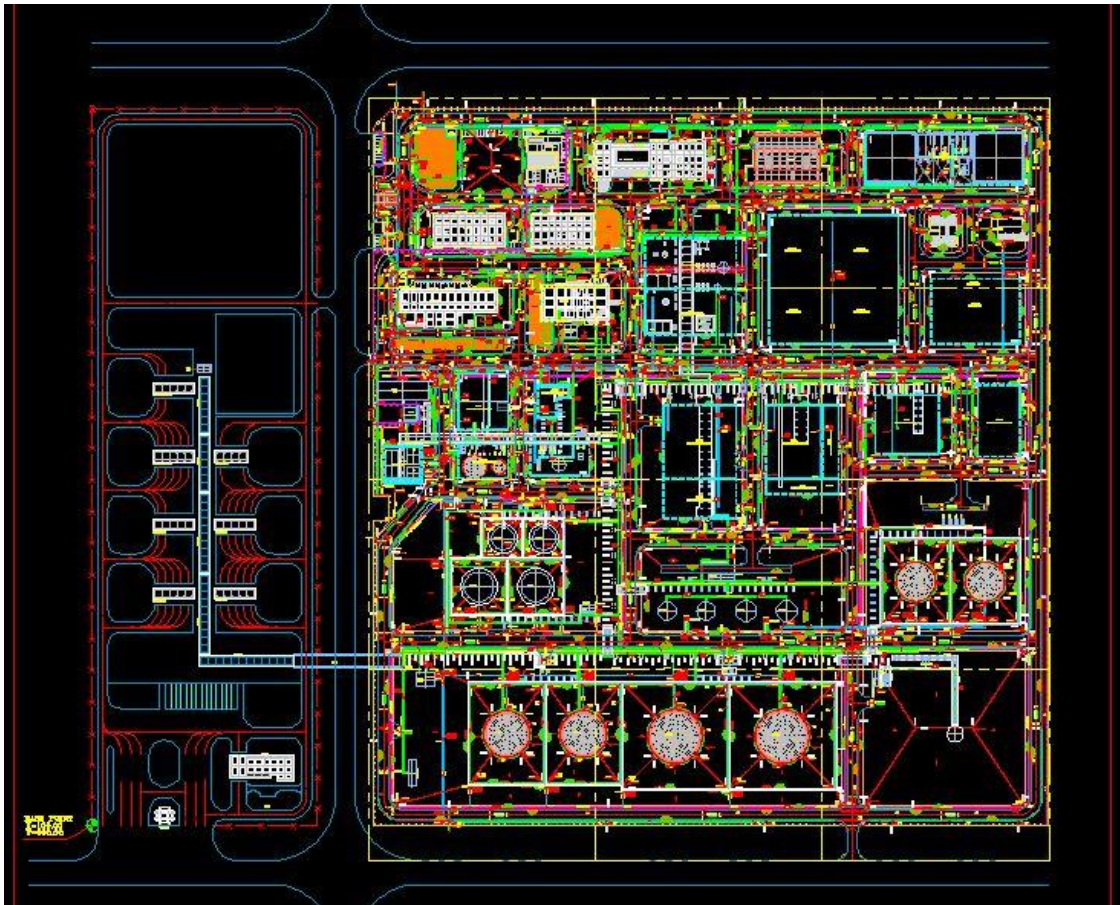
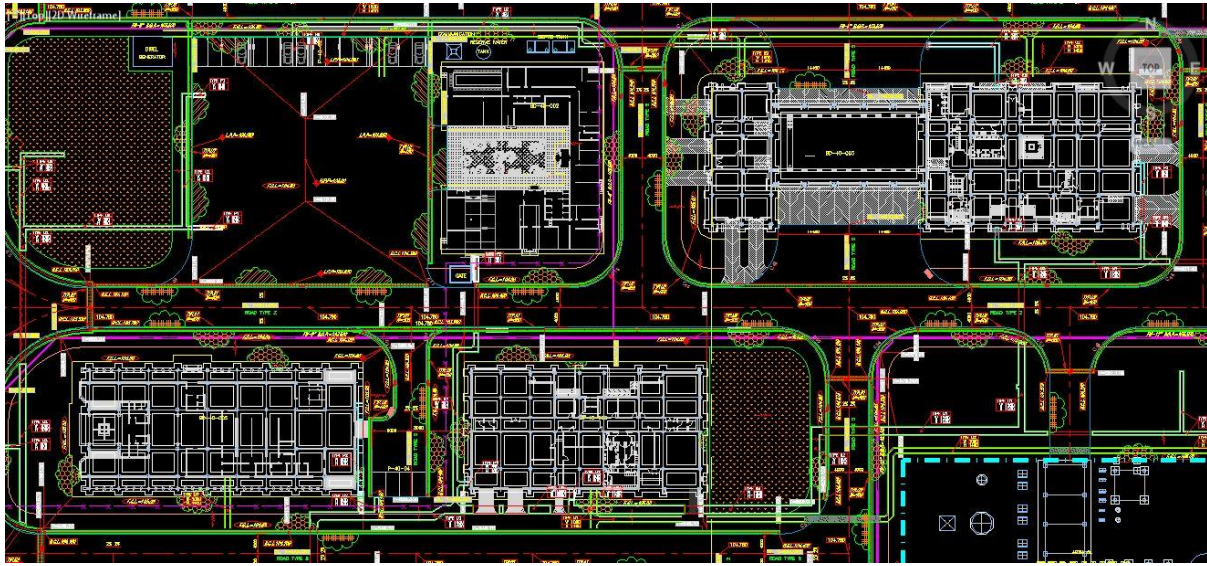
- ❖ Tender Packages for ground improvement, civil and building works
- ❖ Feed Pipeline design (12 Km)
- ❖ Architectural/Structural Design of Buildings
- ❖ Culvert design for crossing the State Highway
- ❖ Foundation Design for Above ground Storage Tanks
- ❖ Pipe Racks
- ❖ Foundation for Fixed Equipment
- ❖ Pile Design

Plot Plan

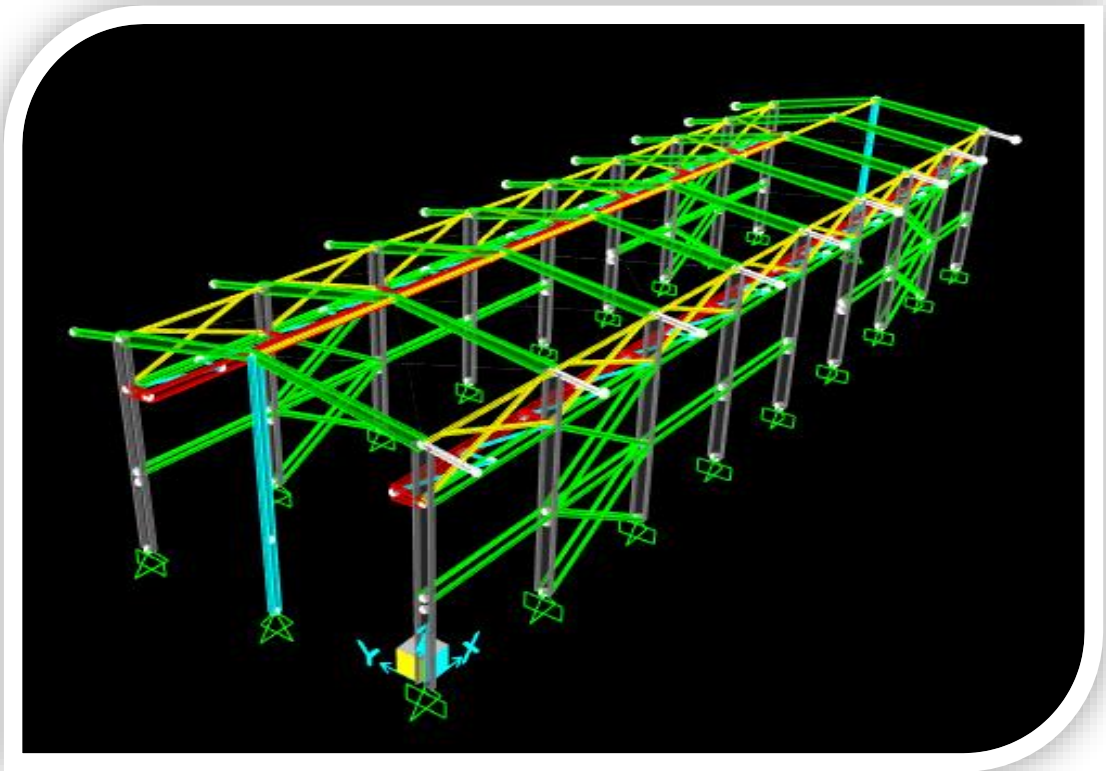
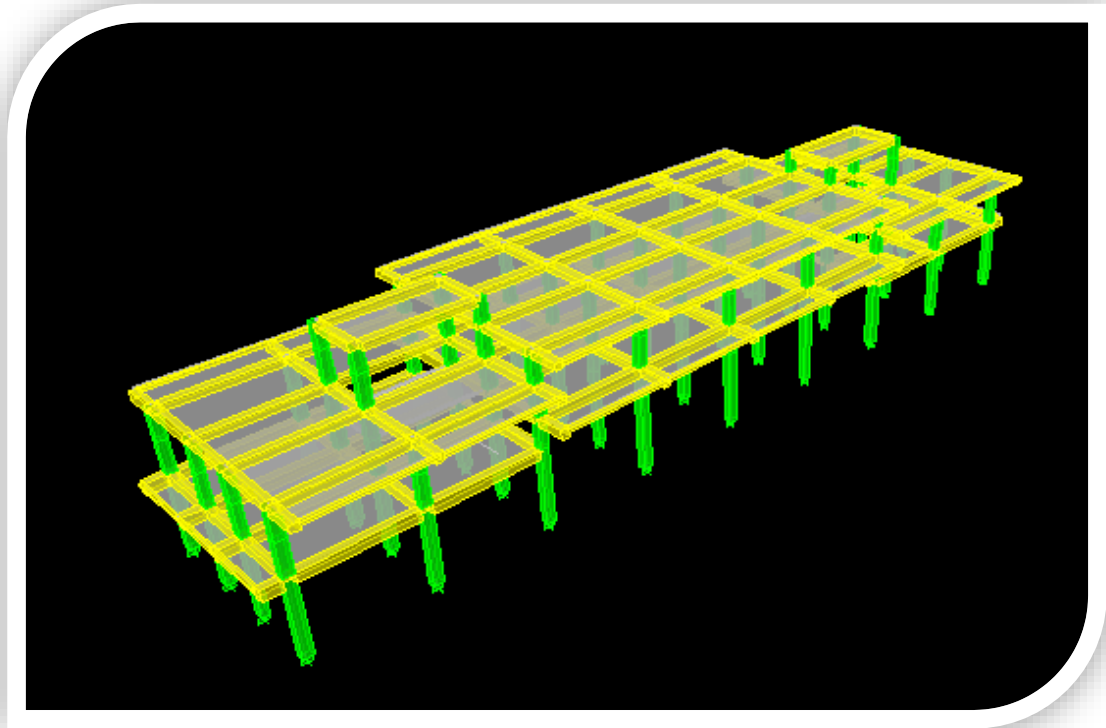




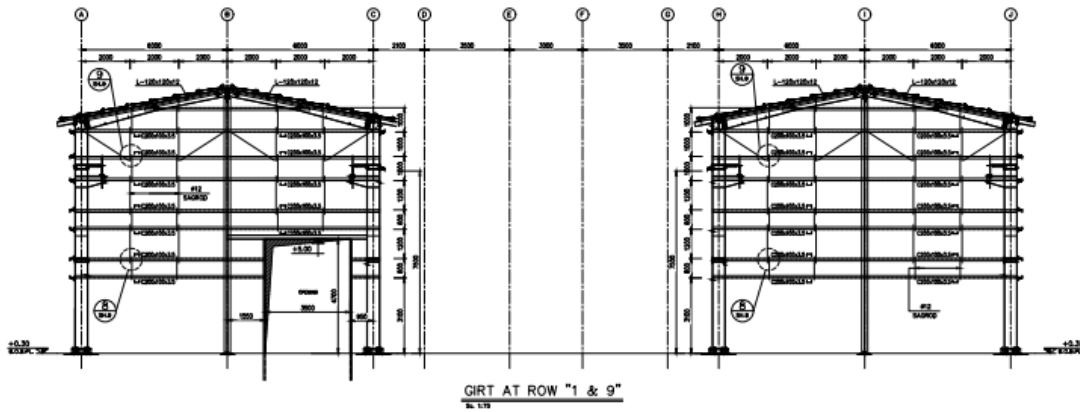
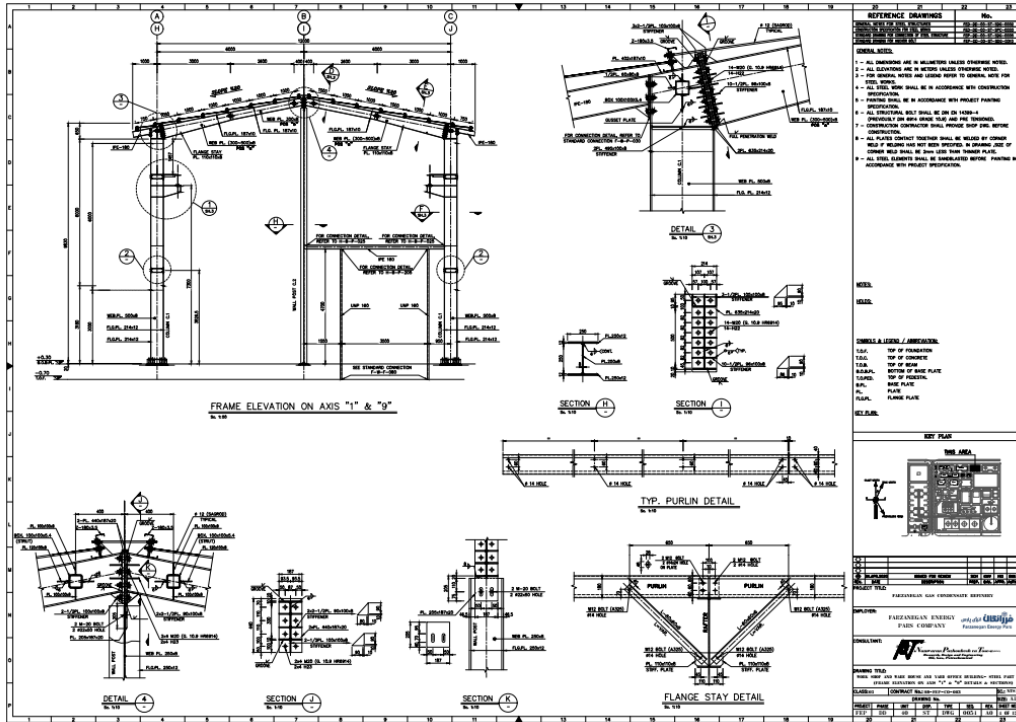
## Under Ground Composite



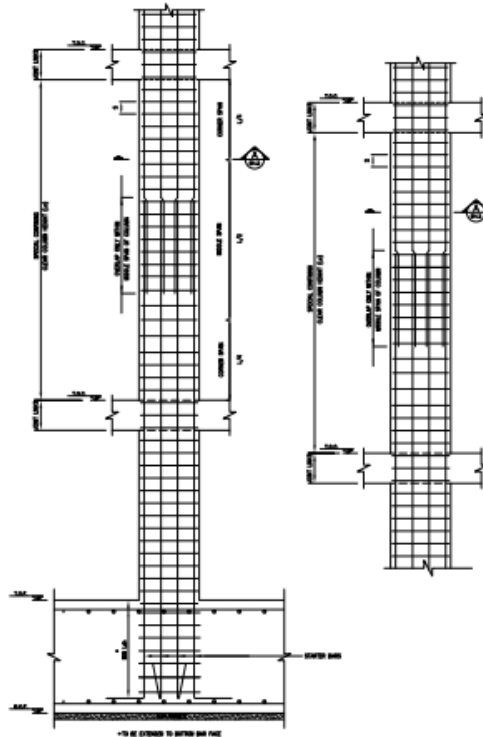
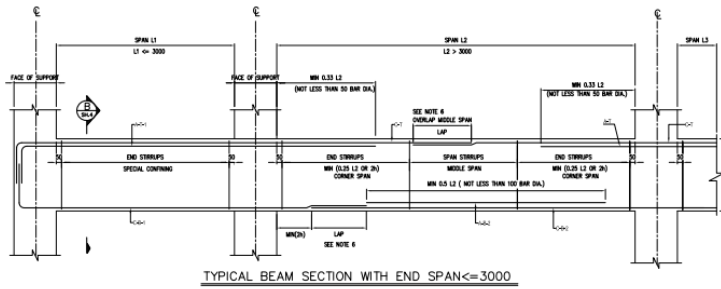
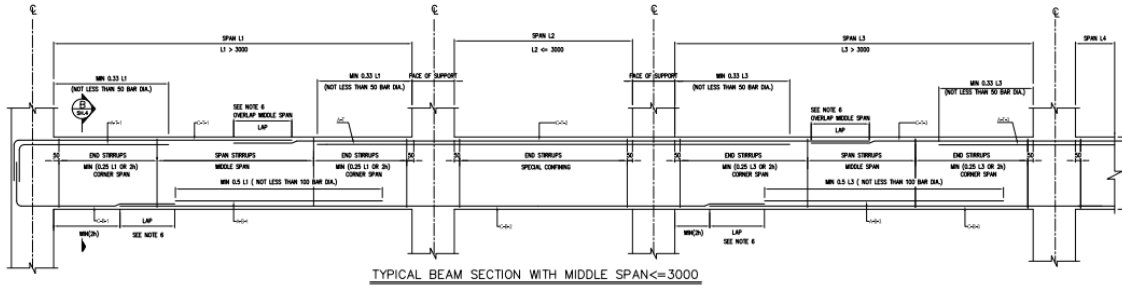
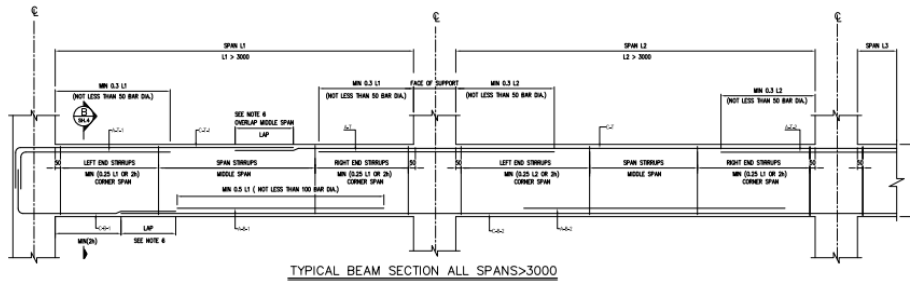
Work Shop & Ware House & Yard Office Building



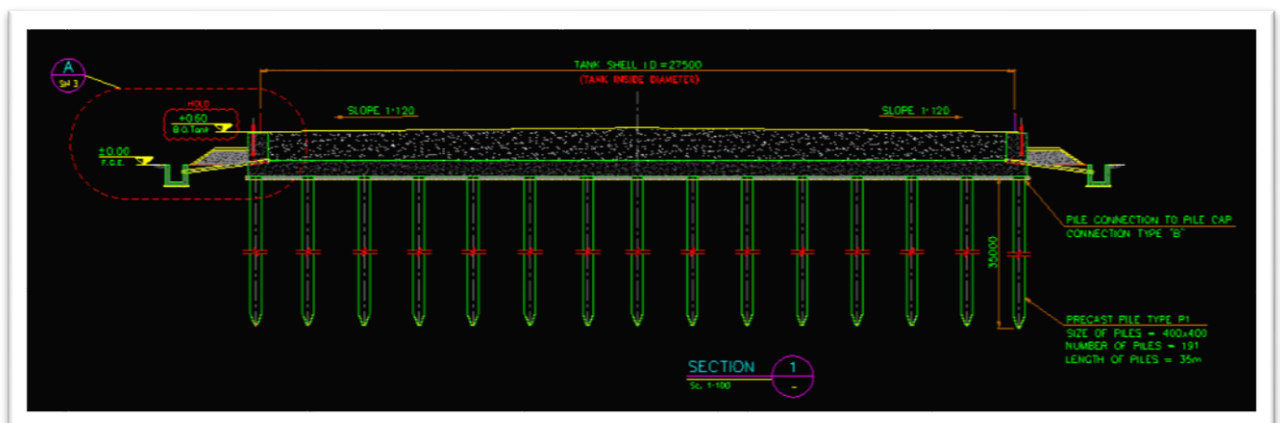
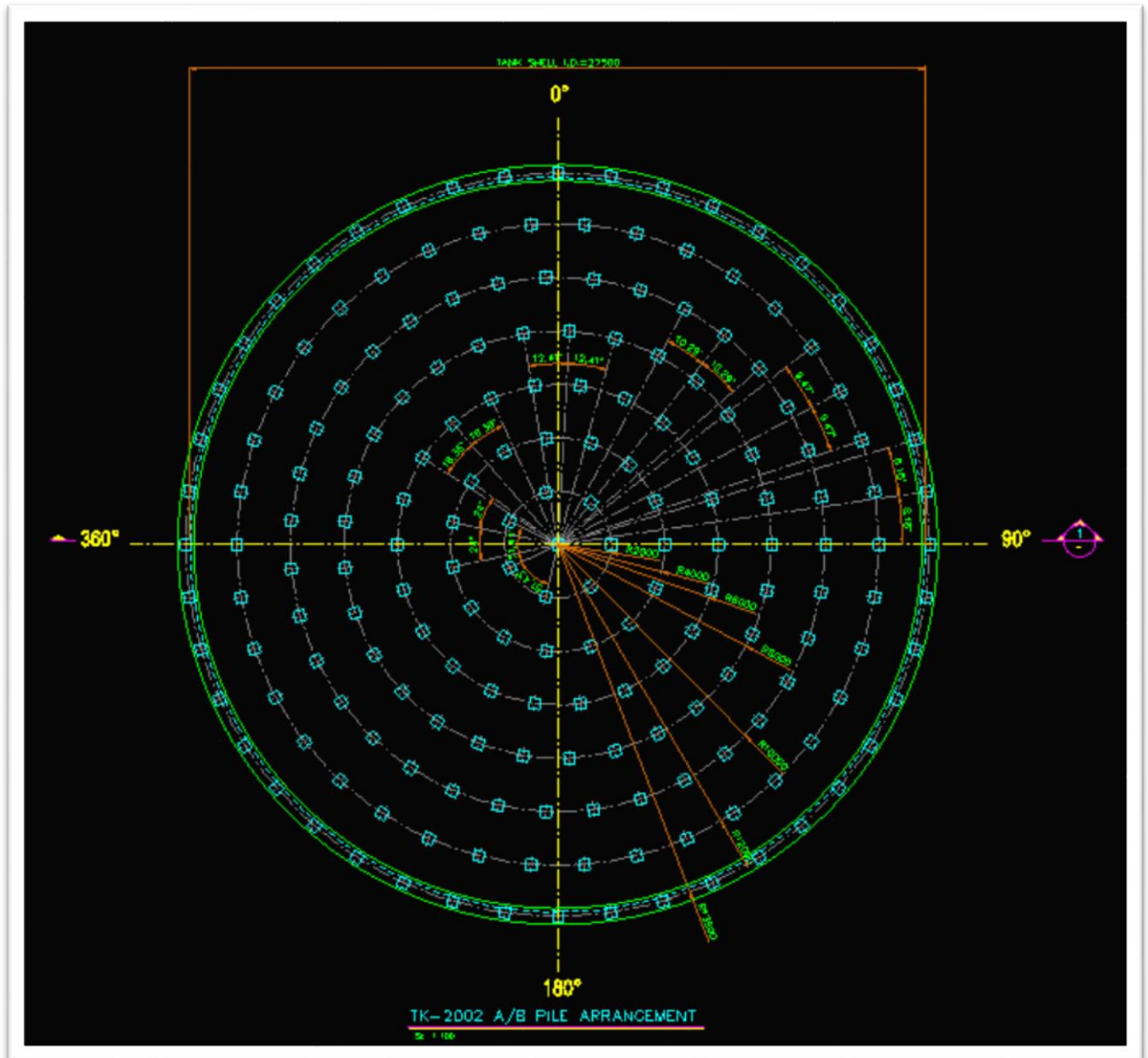




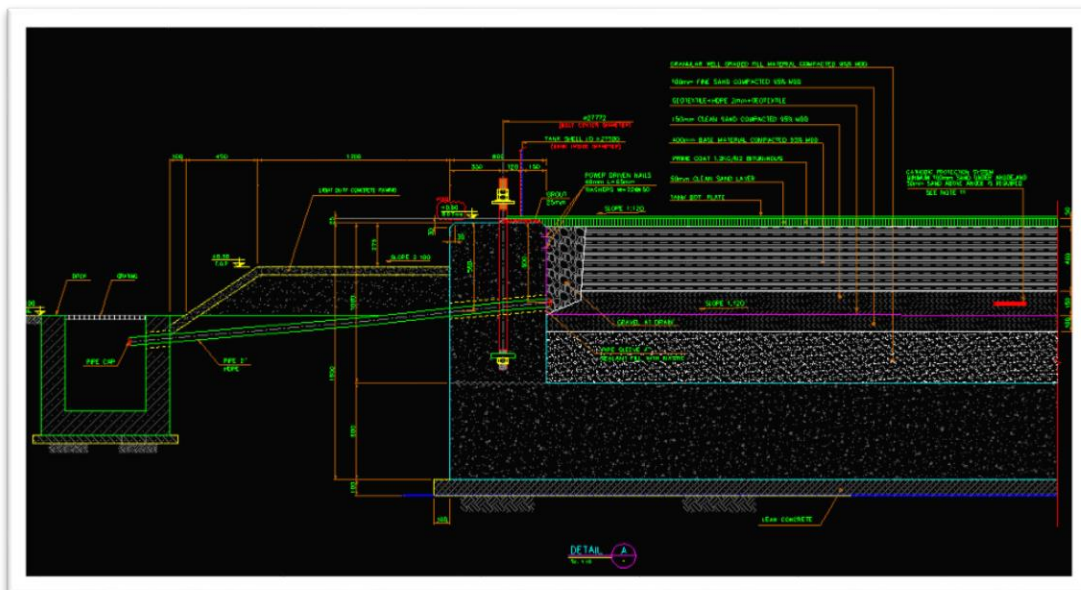
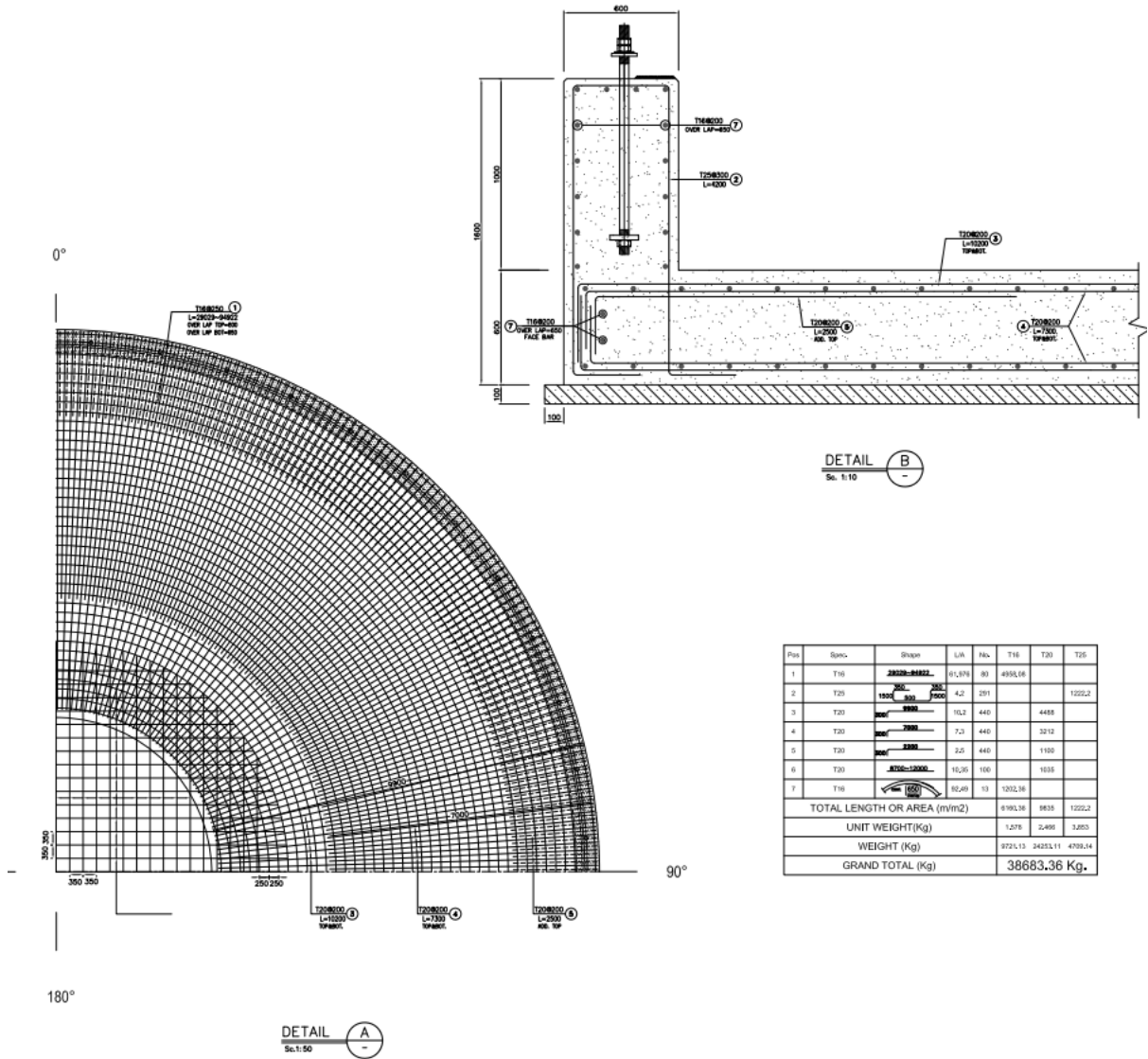
## Sample standard Drawing for Concrete Structure



Pile Design for Storage Tanks

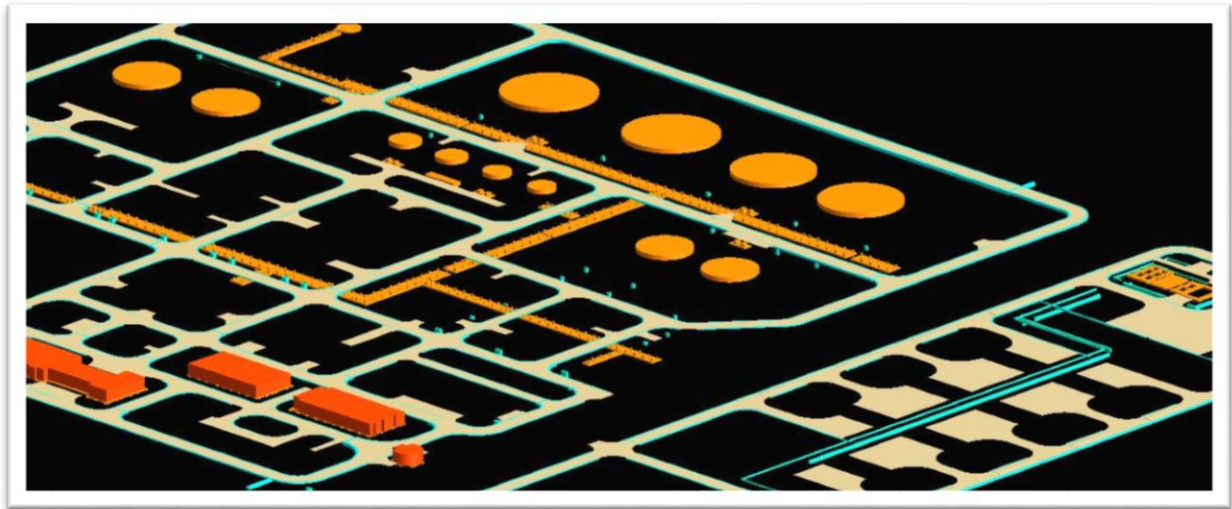


Storage Tank Foundation

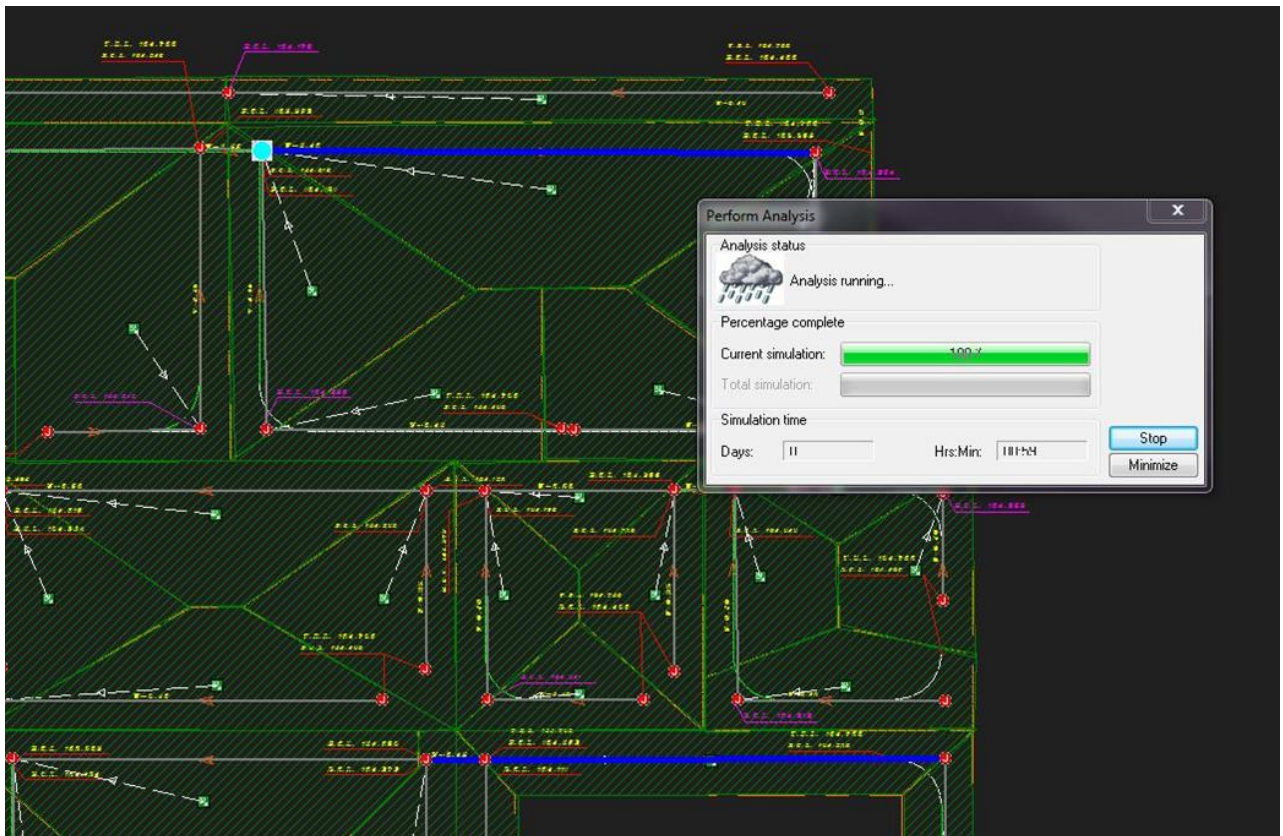




## PDMS Modelling (Civil Items)



## Storm and Sanitary Analysis





## Qeshm Utility Plant (HRSG and Water Desalination Unit)

Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)  
Main Client: Qeshm Pasargad Company  
Date: 2015~2019

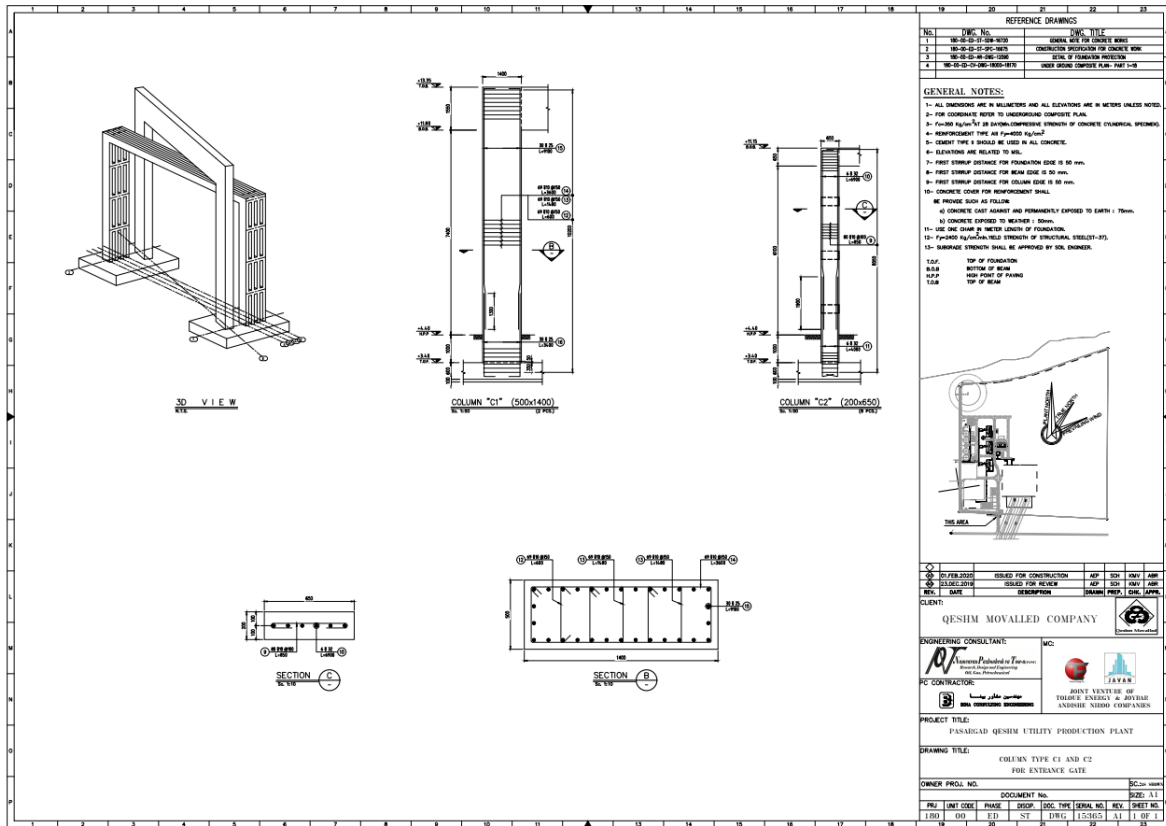
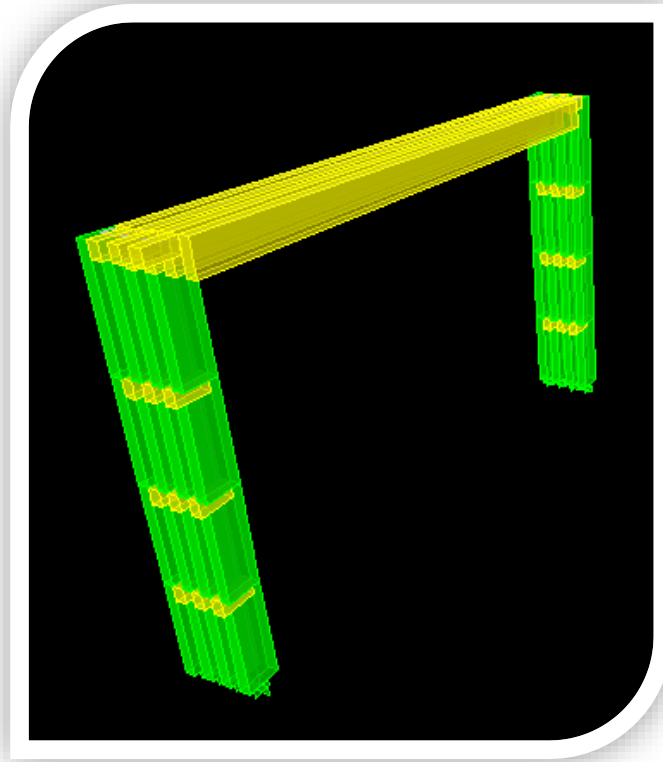
- ❖ Foundation for HRSG boilers
- ❖ Basic and Detail Design for Buildings (Control Building and Substation, Admin Building, Canteen, Fire Station, Repair Workshop Building)
- ❖ Foundation for boilers
- ❖ Foundation for Pump and Compressors
- ❖ Interconnection Pipe racks
- ❖ Water Storage Tanks
- ❖ Industrial Wastewater Collection Pit
- ❖ Special Design for Ground Improvement (Deep Soil Mixing Method)

ATM also provided Engineering Supervision during the construction work period

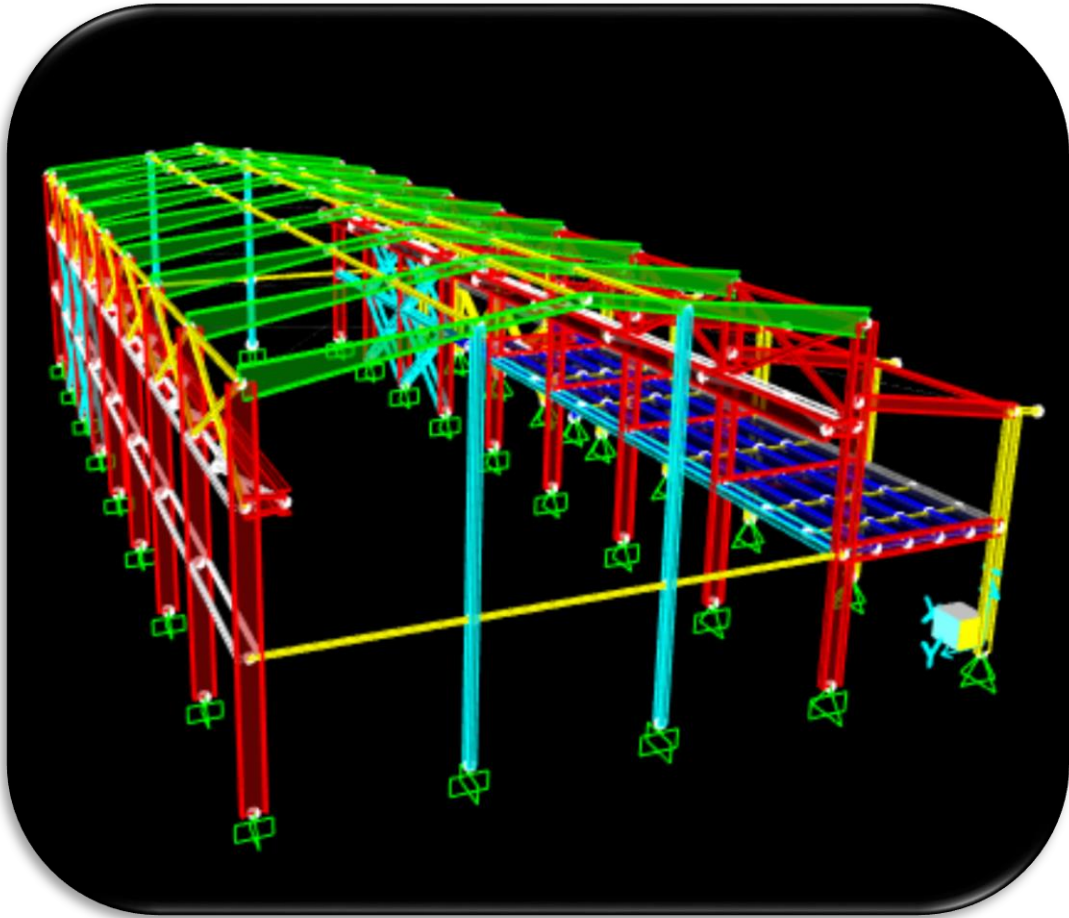
### Plot Plan



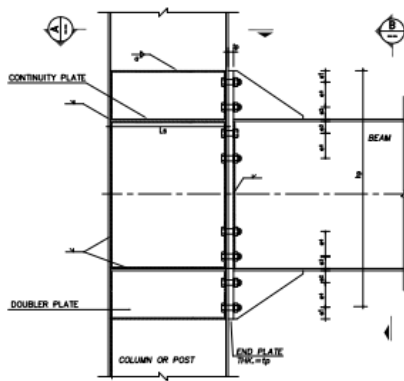
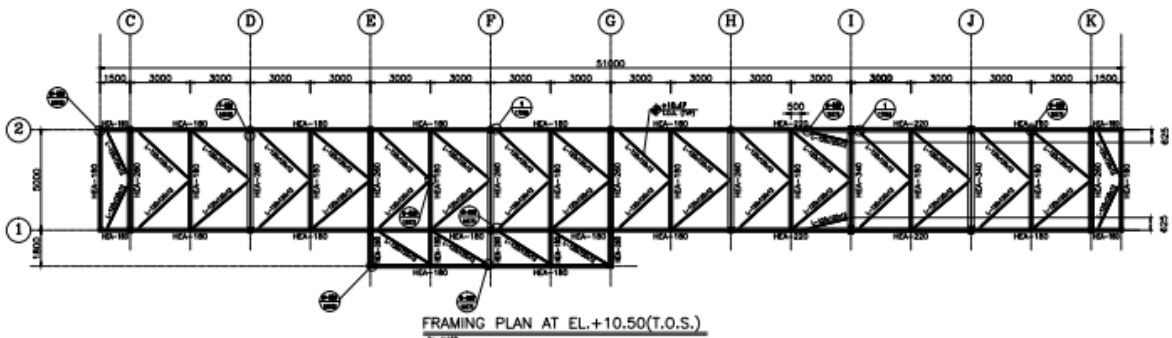
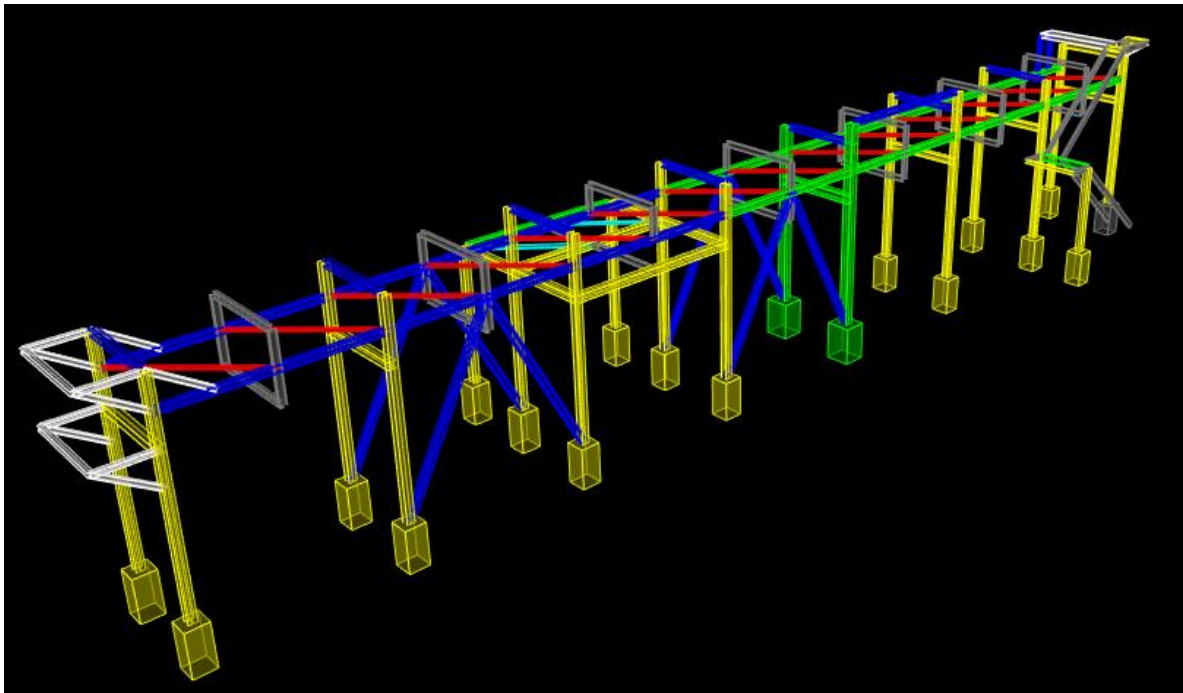
Entrance Gate



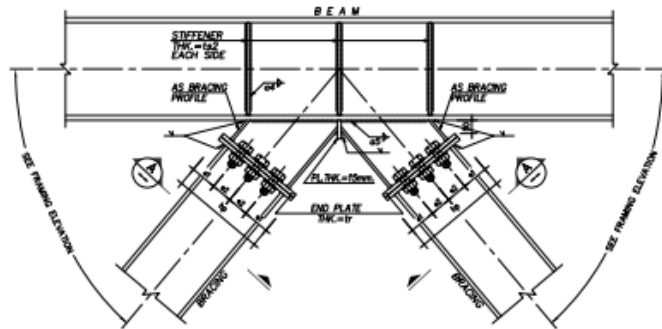
Work Shop



Pipe Rack

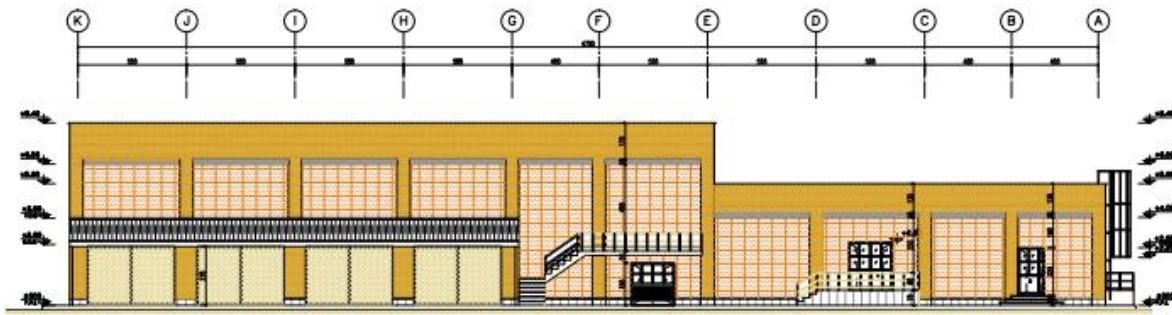


**BOLTED STIFFENED EXTENDED END PLATE - BES**  
SCT:10 F-B-F-011

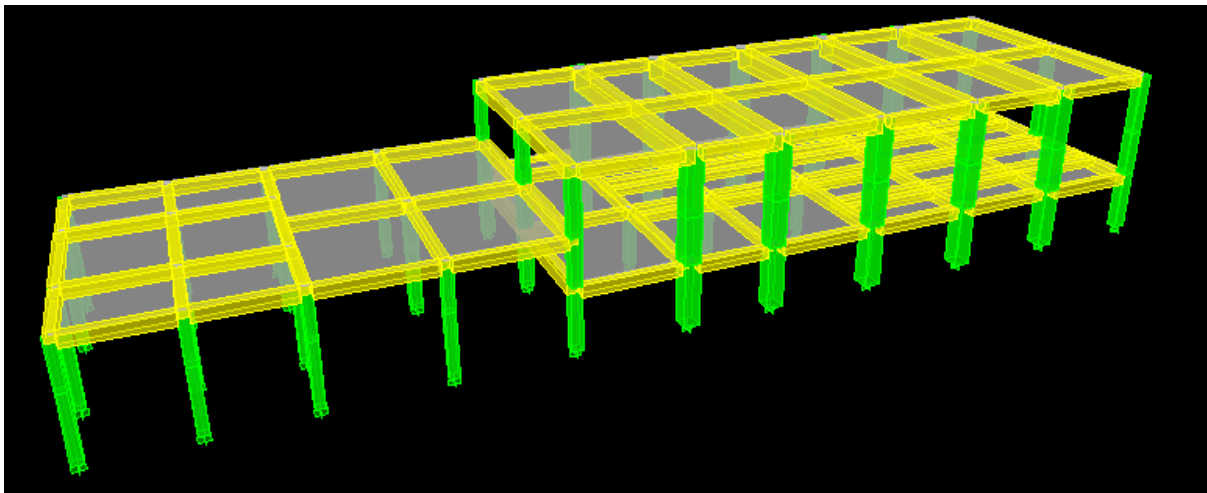




### Laboratory/Marshalling/ MCC Building



**EAST ELEVATION**  
20-1000







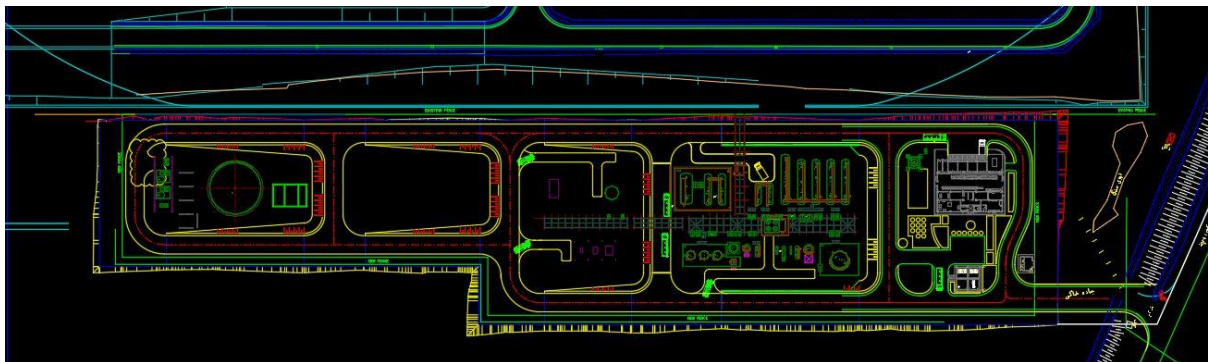
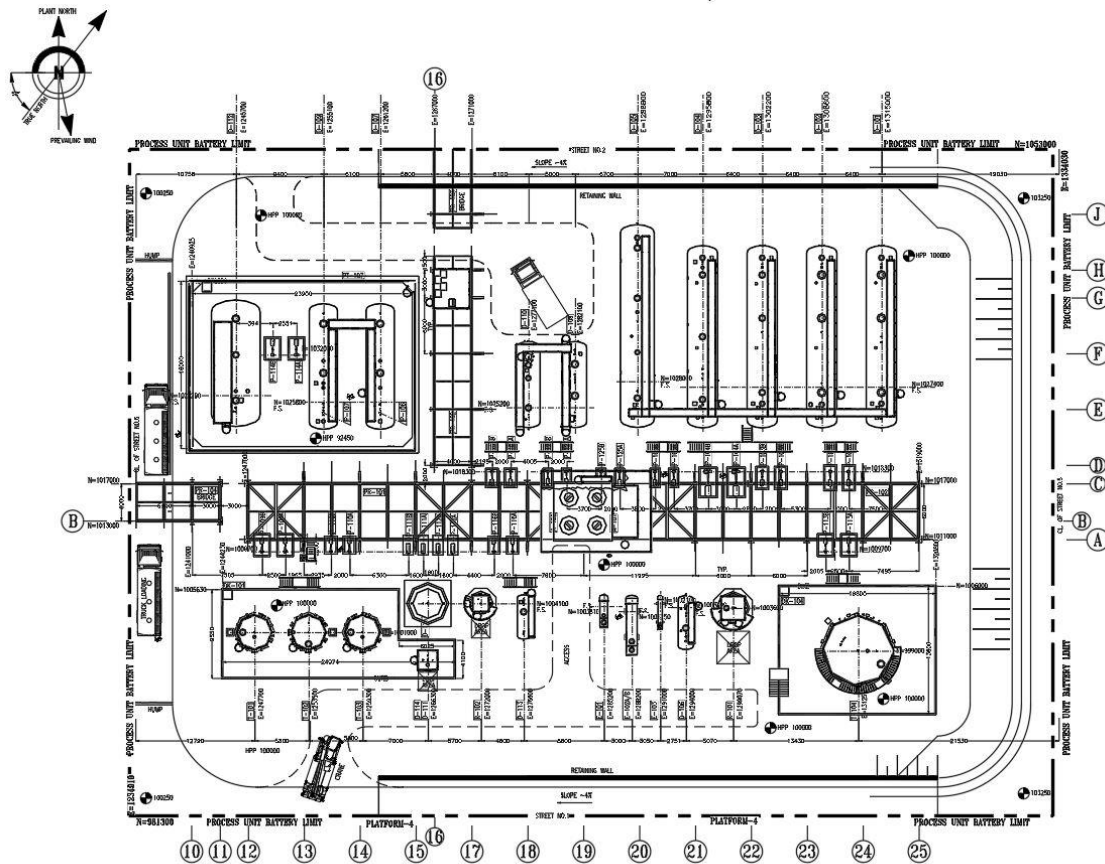
## Demercaptanization Unit

Client: Research Institute of Petroleum Industry  
Main Client: National Iranian Gas Company  
Date: 2014~2017

This project comprised 3 similar process units in gas treating plants and ATM undertook Civil/Structural and Building Work Design through basic and detail phases in an EPC contract.

Tender Packages / Requisition also prepared by ATM.

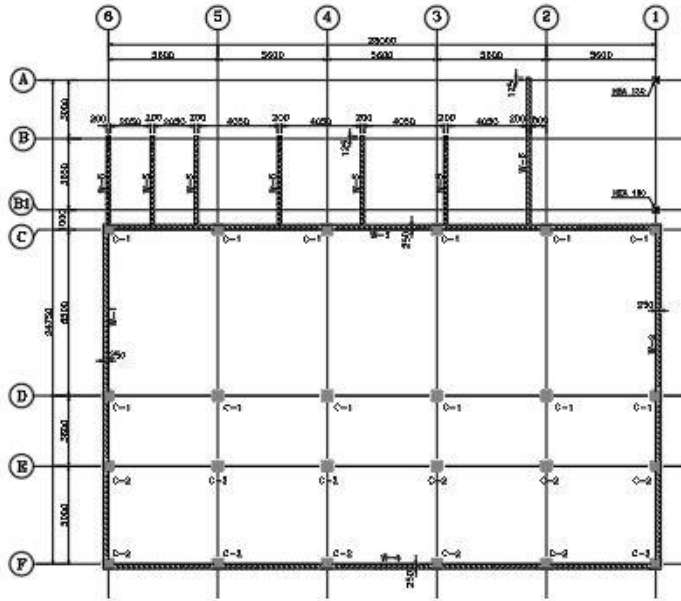
### Plot Plan





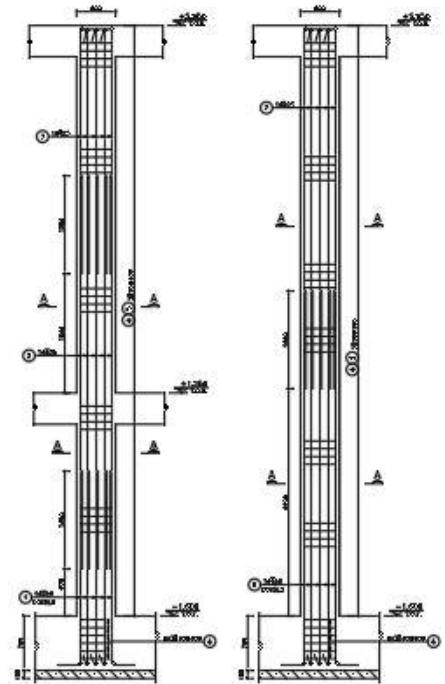


Blast-proof Building



**COLUMNS & CONC. WALL LAYOUT PLAN**

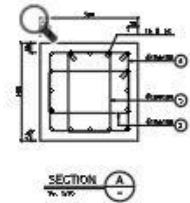
SC-11184



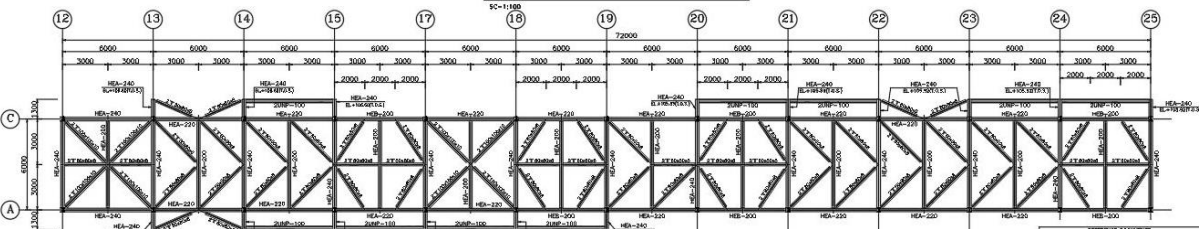
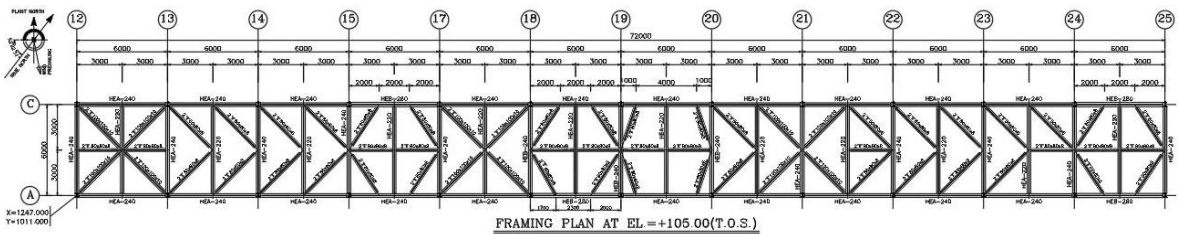
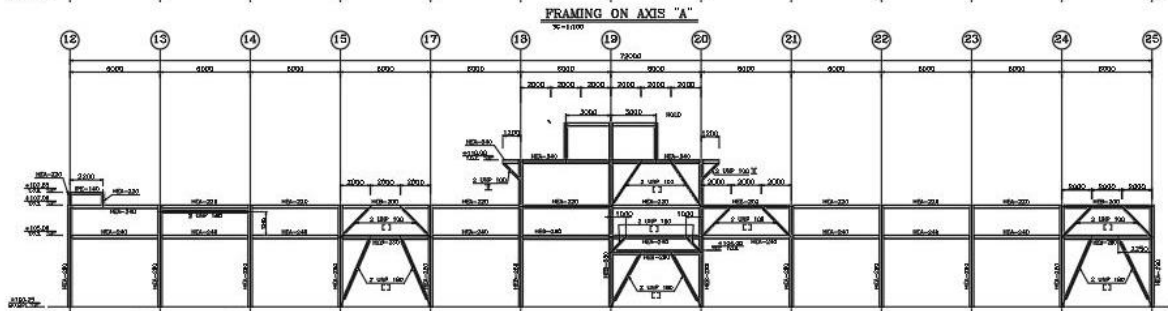
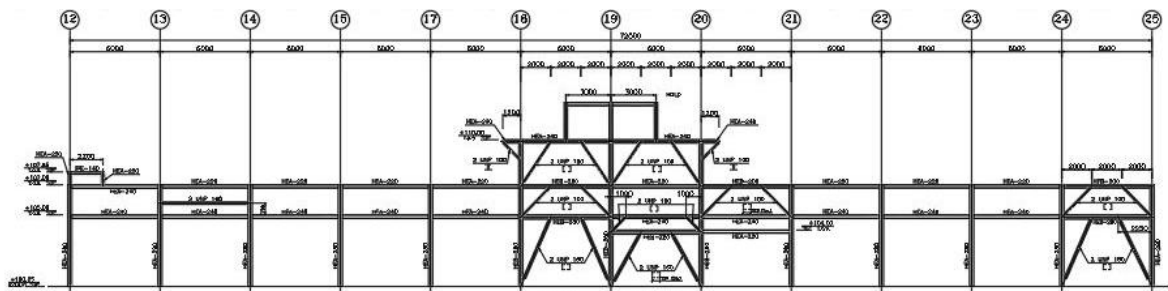
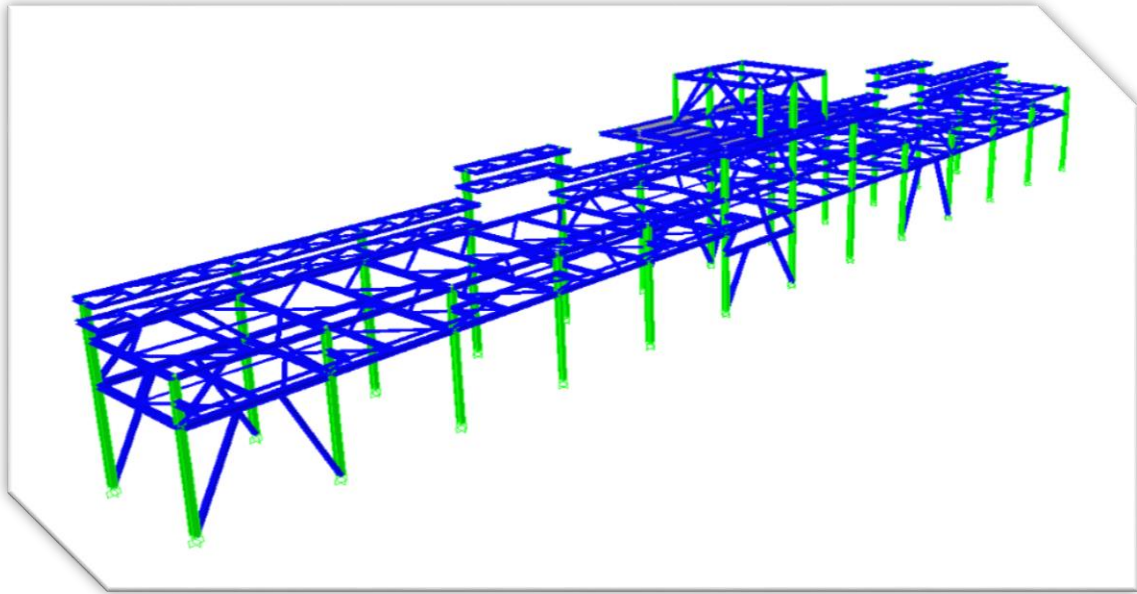
**COLUMN TYPE C-1**

**COLUMN TYPE C-2**

BARS SCHEDULE FOR COLUMNS				
Part	SHAPE	DIA.	NO.	TOTAL LENGTH
	mm	mm		m
1	340_800	28	1 K2	2.30
2	300	25	1 K2	8.00
3	300_250	25	1 K2	8.00
4	400_400	18	13K6	1.80
5	400_400	16	30 K4	1.40
6	300_250	25	1 K2	6.10
7	300_300	25	1 K2	6.00
DIA.				
mm				
TOTAL LENGTH m				21820.80
WEIGHT kg				6.47
TOTAL WEIGHT kg				13707.82
GROSS SQM				21820.80 sq.



Pipe Rack



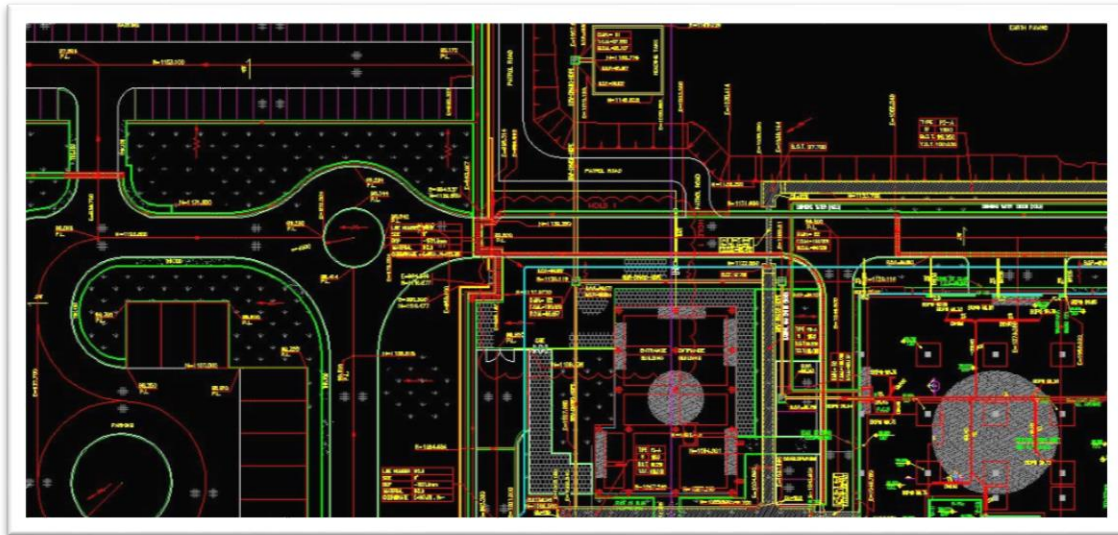
## Silicon Wafer Factory

Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)  
Main Client: Mana Energy Pak Company  
Date: 2019~2020

A unique Project comprising the design of a 4 Hectare Production Factory in the Renewable Energy Industry, has been awarded to us as a partner in Engineering and Structural Conceptual design, Detailed Architectural Design, and detailed civil design as well as design for foundations.

In this project, ATM undertook to transform basic technical drawings from the original design in Germany to adapt to the local conditions of the construction site in Iran in terms of seismic demands and local area conditions.

## Underground Composite

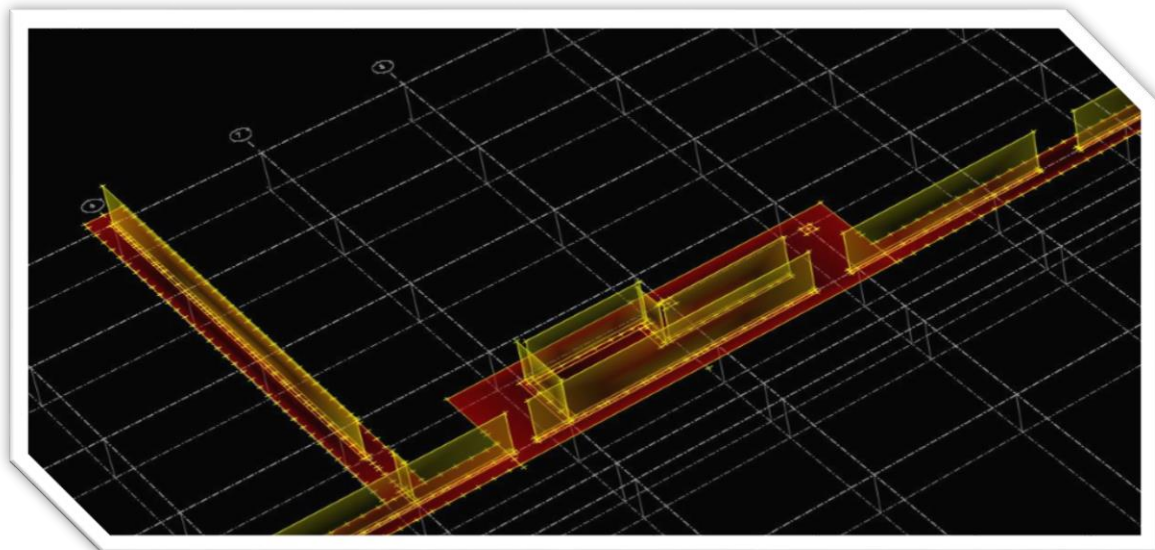
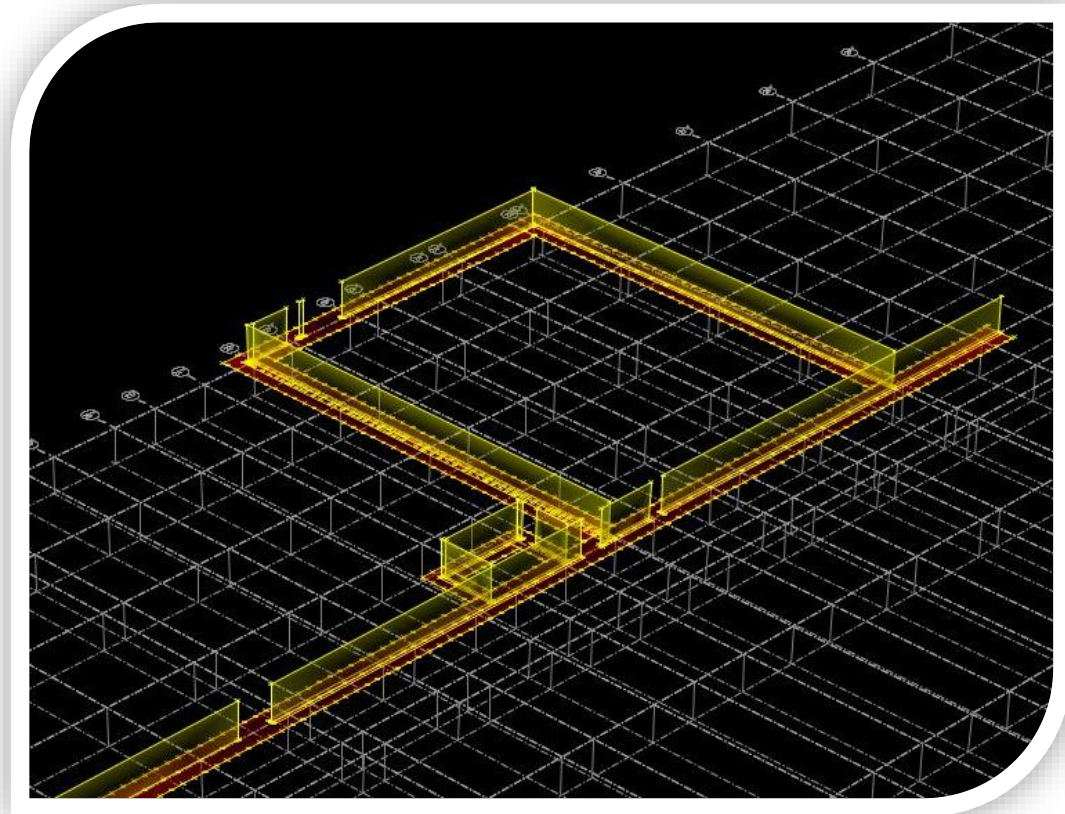


Road & Paving

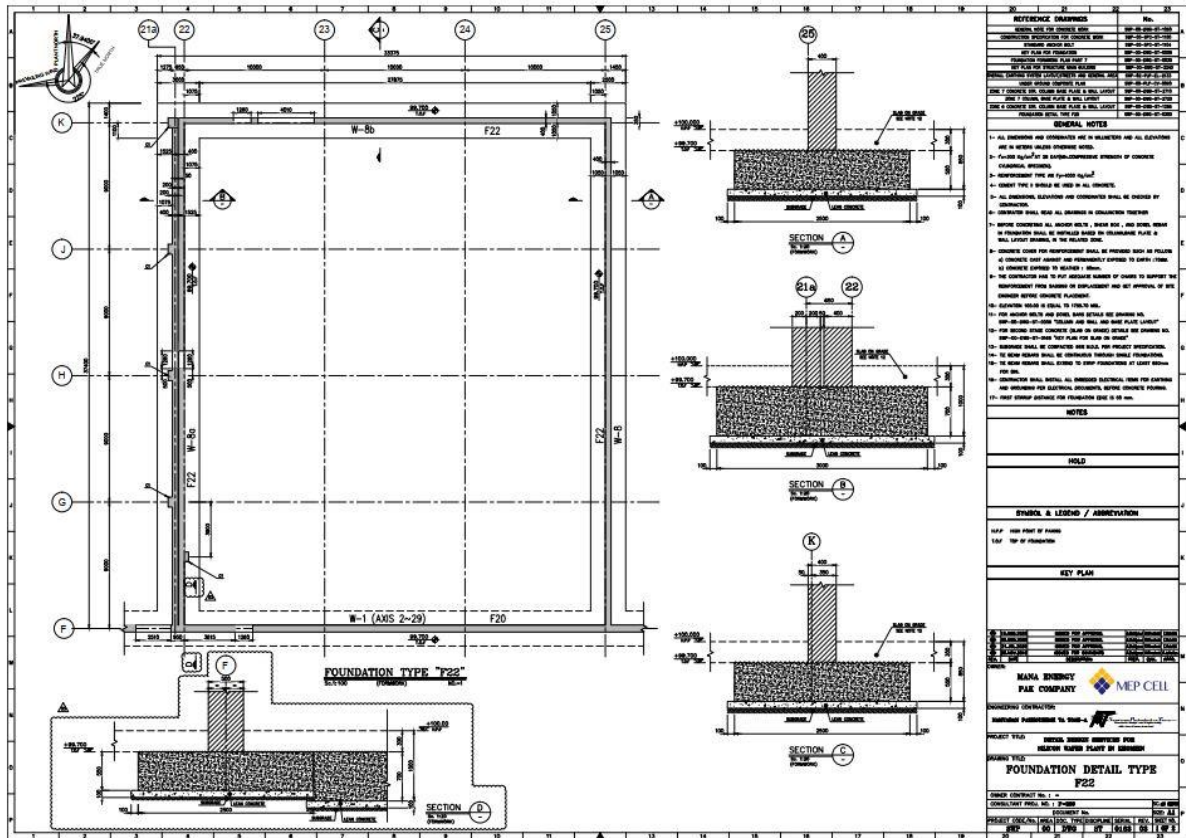




## Foundation Model



Foundation Plan



REVISIONS	NO.	DATE	DESCRIPTION
1	1	13/08/2014	ISSUE FOR CONSTRUCTION
2	2	13/08/2014	REVISION OF FOUNDATION PLAN
3	3	13/08/2014	REVISION OF FOUNDATION PLAN
4	4	13/08/2014	REVISION OF FOUNDATION PLAN
5	5	13/08/2014	REVISION OF FOUNDATION PLAN
6	6	13/08/2014	REVISION OF FOUNDATION PLAN
7	7	13/08/2014	REVISION OF FOUNDATION PLAN
8	8	13/08/2014	REVISION OF FOUNDATION PLAN
9	9	13/08/2014	REVISION OF FOUNDATION PLAN
10	10	13/08/2014	REVISION OF FOUNDATION PLAN
11	11	13/08/2014	REVISION OF FOUNDATION PLAN
12	12	13/08/2014	REVISION OF FOUNDATION PLAN
13	13	13/08/2014	REVISION OF FOUNDATION PLAN
14	14	13/08/2014	REVISION OF FOUNDATION PLAN
15	15	13/08/2014	REVISION OF FOUNDATION PLAN
16	16	13/08/2014	REVISION OF FOUNDATION PLAN
17	17	13/08/2014	REVISION OF FOUNDATION PLAN
18	18	13/08/2014	REVISION OF FOUNDATION PLAN
19	19	13/08/2014	REVISION OF FOUNDATION PLAN
20	20	13/08/2014	REVISION OF FOUNDATION PLAN
21	21	13/08/2014	REVISION OF FOUNDATION PLAN
22	22	13/08/2014	REVISION OF FOUNDATION PLAN
23	23	13/08/2014	REVISION OF FOUNDATION PLAN
24	24	13/08/2014	REVISION OF FOUNDATION PLAN
25	25	13/08/2014	REVISION OF FOUNDATION PLAN
26	26	13/08/2014	REVISION OF FOUNDATION PLAN
27	27	13/08/2014	REVISION OF FOUNDATION PLAN
28	28	13/08/2014	REVISION OF FOUNDATION PLAN
29	29	13/08/2014	REVISION OF FOUNDATION PLAN
30	30	13/08/2014	REVISION OF FOUNDATION PLAN

**GENERAL NOTES**

- 1- ALL DIMENSIONS AND COORDINATES ARE IN METERS AND ALL DIMENSIONS ARE TO CENTER UNLESS OTHERWISE NOTED.
- 2- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 3- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 4- CONCRETE SHALL BE CAST IN PLACE.
- 5- ALL DIMENSIONAL TOLERANCES AND COORDINATES SHALL BE CHECKED BY SURVEYOR.
- 6- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 7- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 8- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 9- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 10- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 11- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 12- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
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- 27- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 28- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 29- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.
- 30- FOUNDATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE CONTRACT DOCUMENTS.

**NOTES**

**SYMBOLS & LEGEND / ABBREVIATION**

**KEY PLAN**

**MANA ENERGY  
PAK COMPANY  
MEP CELL**

**FOUNDATION DETAIL TYPE F22**

**CONTRACT NO. 1**

**CONTRACT VALUE: 1,000,000,000**

**PROJECT NO. 1**

**PROJECT LOCATION: TEHRAN, IRAN**

**DATE: 13/08/2014**

**SCALE: 1:100**

**DESIGNER: A. T. M.**

**CHECKER: A. T. M.**

**APPROVER: A. T. M.**





## Centralized Storage Tank Farm Assaluyeh

Client: ThinkXpert Company

Main Client: Assaluyeh Green Tank Farm Petrochemical Company

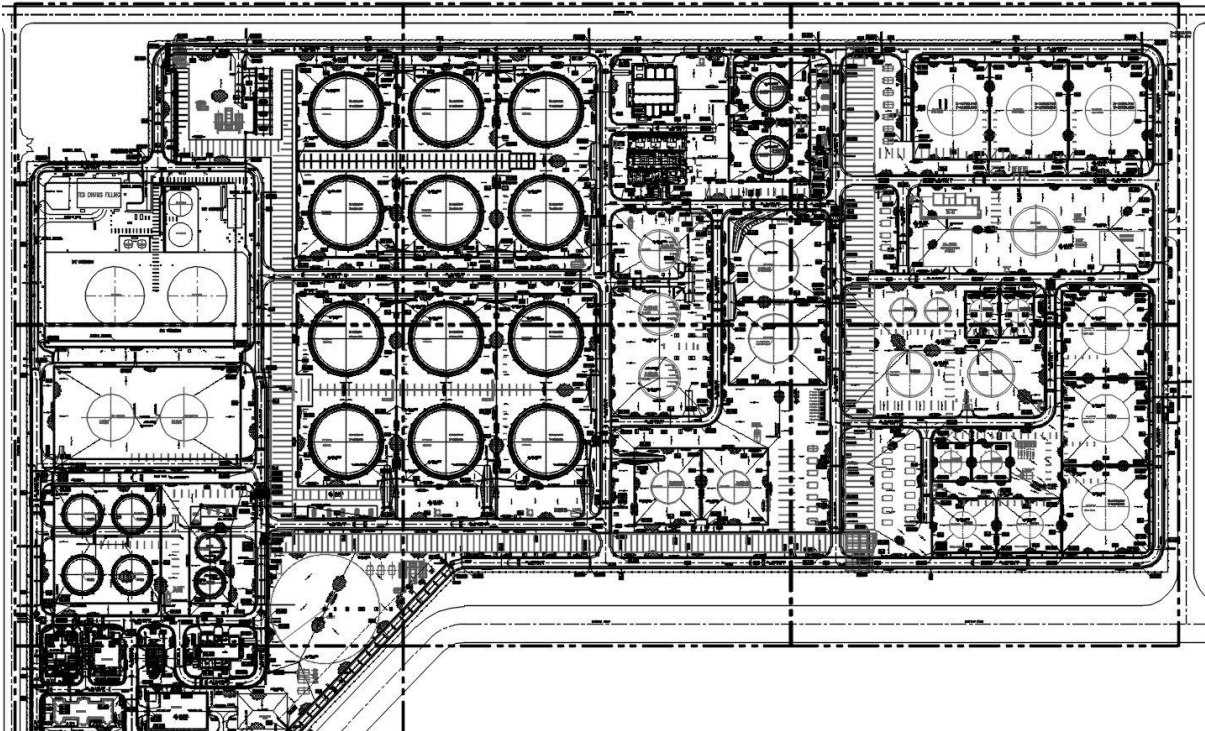
Date: 2014~2019

ATM has completed the Civil and Structural design for a centralized storage tank in the south of Iran in the second Phase of the petrochemical industry zones.

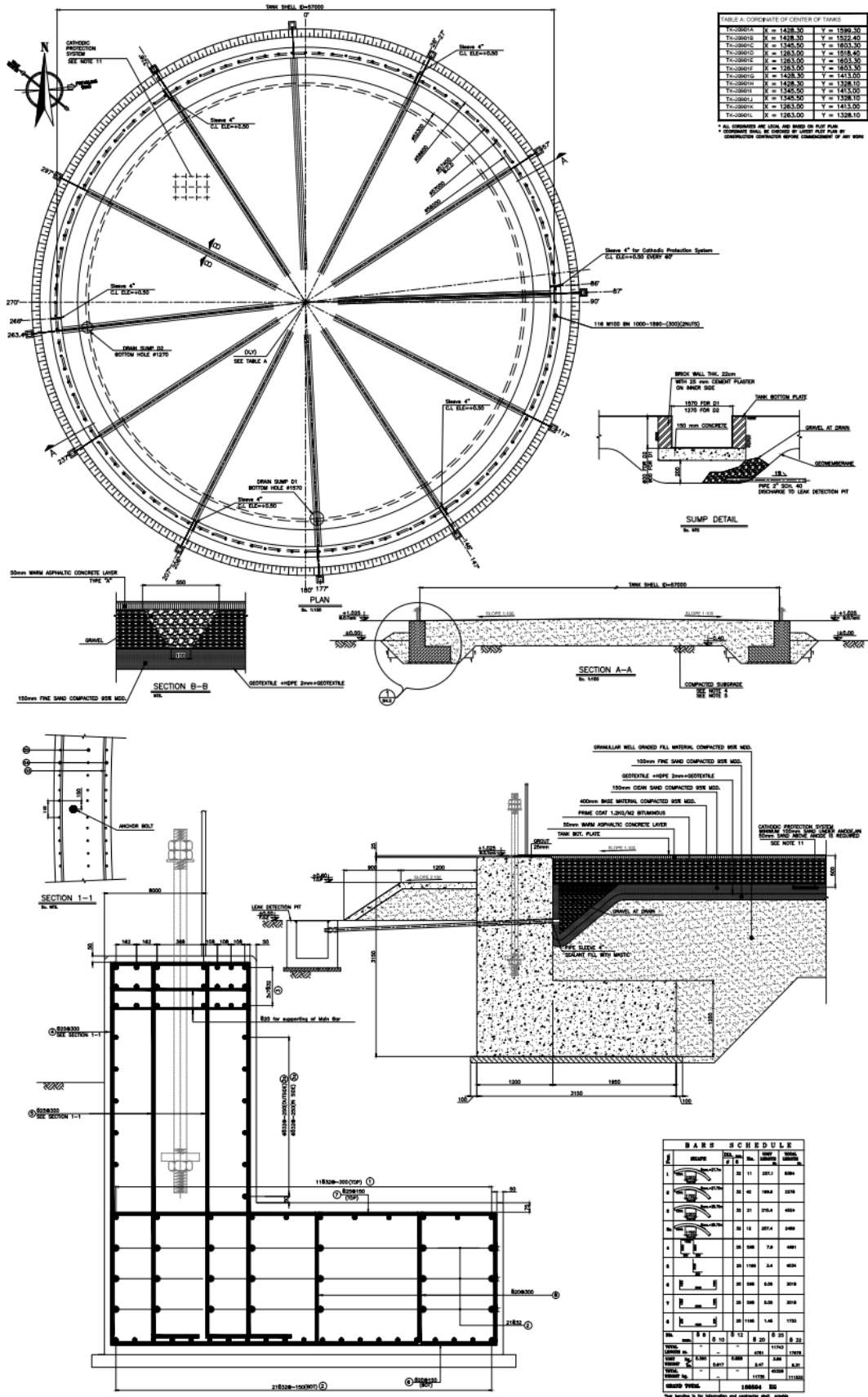
ATM's scope of work comprised foundation design for Above ground storage tanks as well as cold Tanks, all civil and drainage works, and Buildings (Architectural /Structural)

ATM also undertook tender package preparation for civil works.

## Road & Drainage & Paving

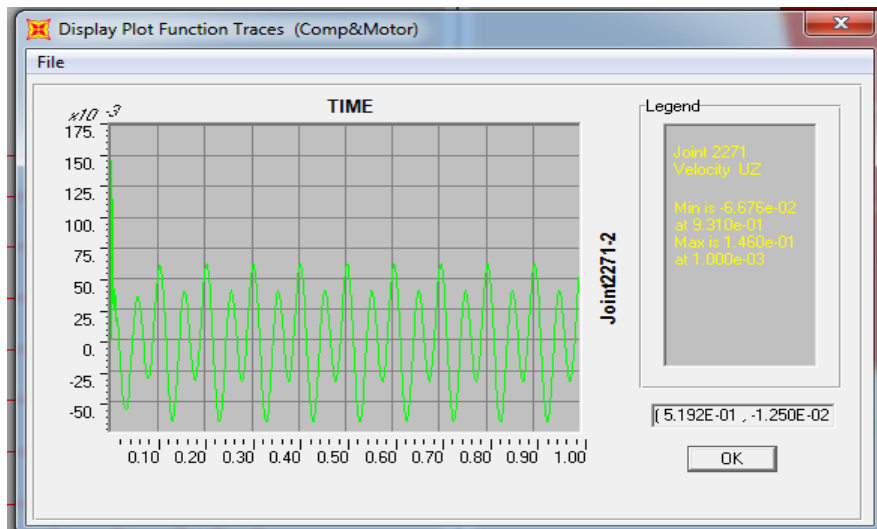
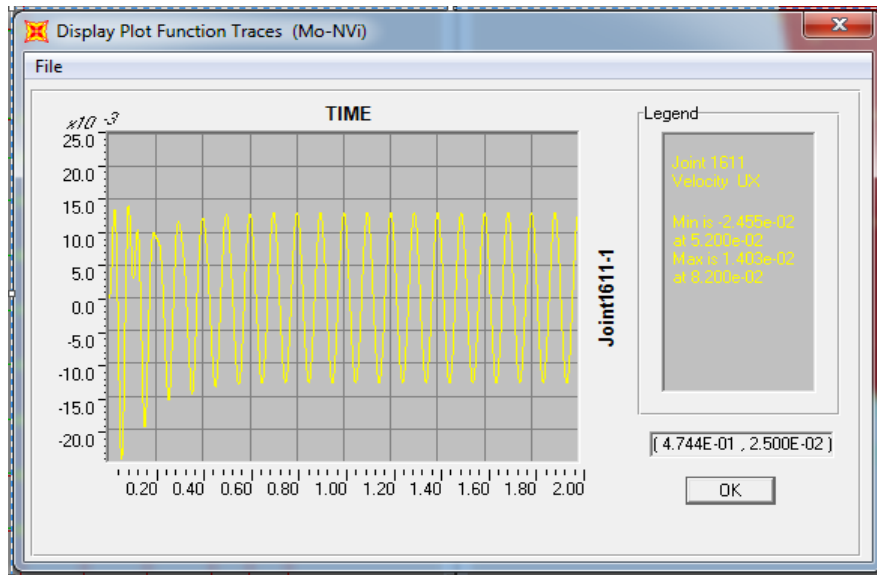
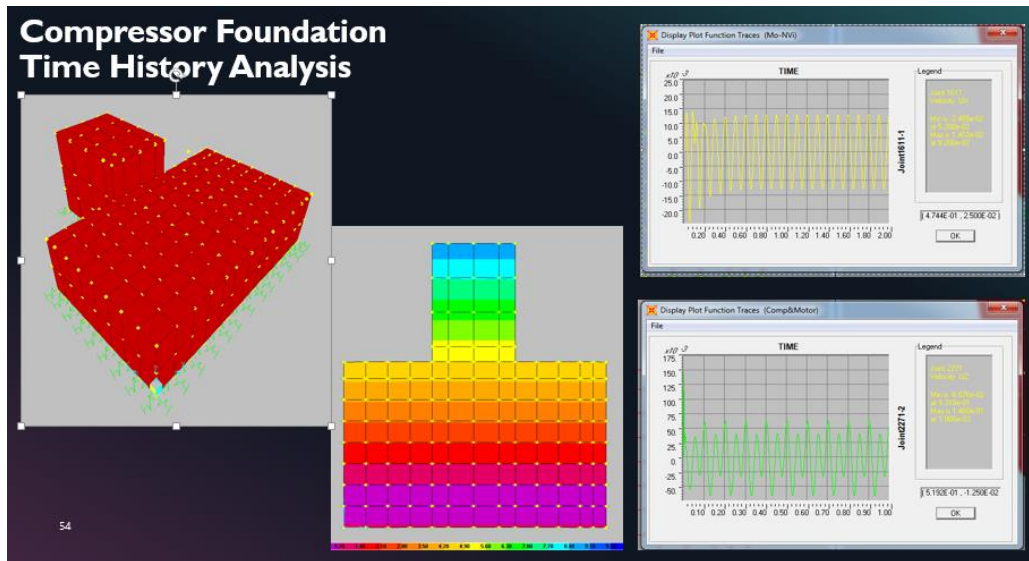


# Methanol Tank Foundation

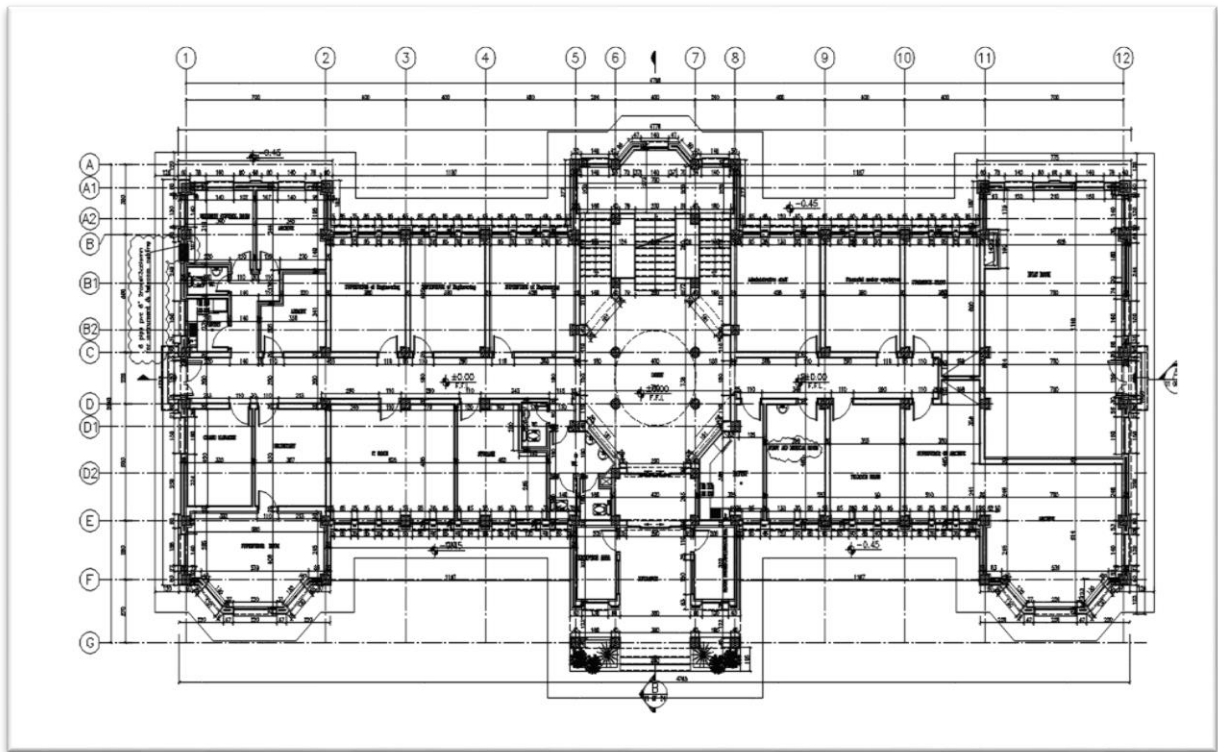




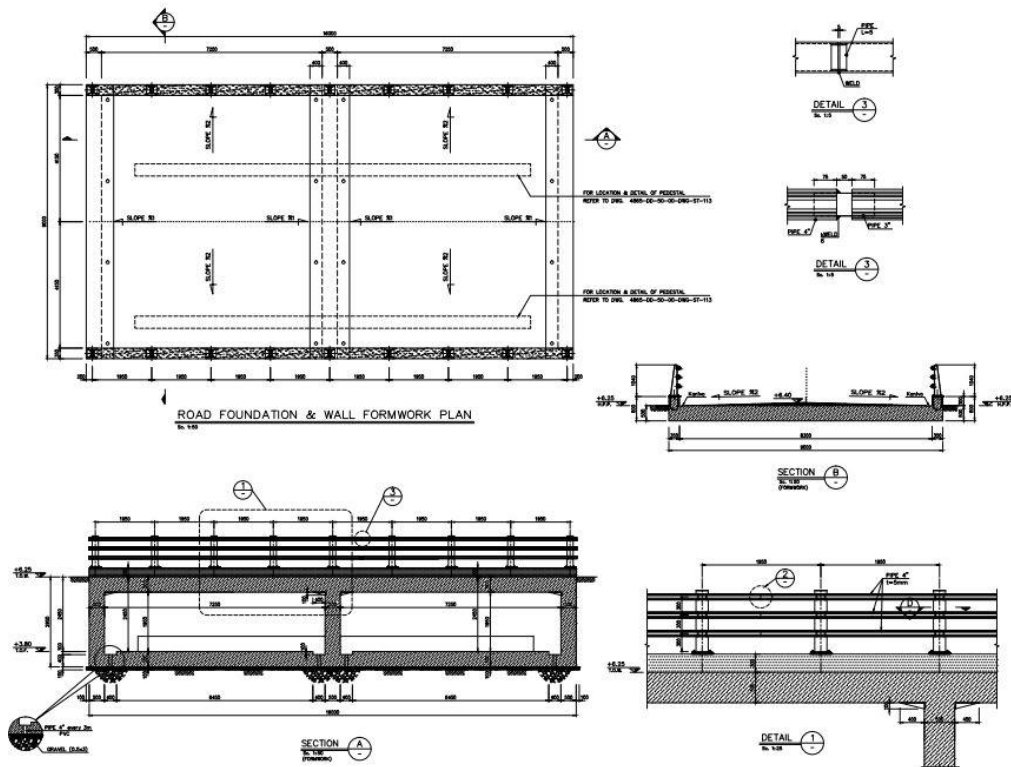
## Compressor Foundation Time History Analysis



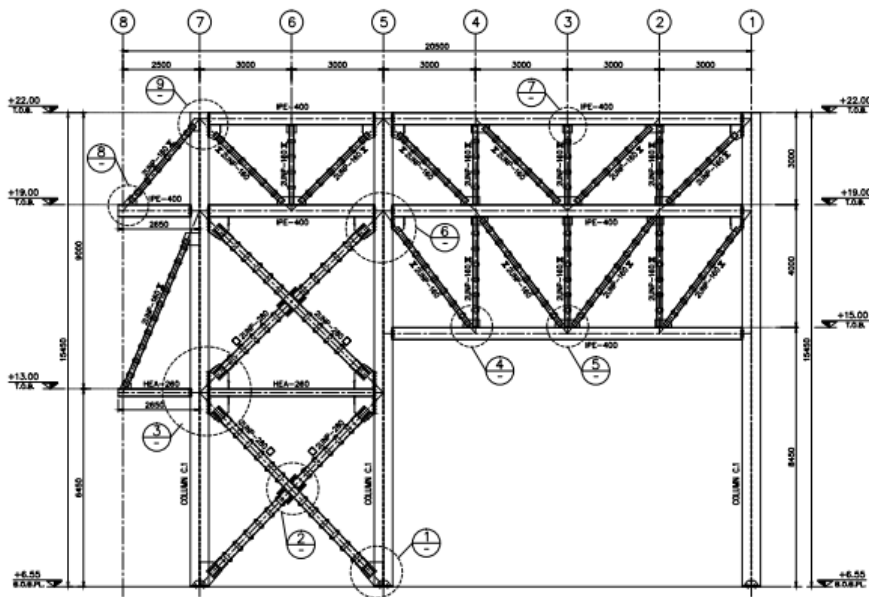
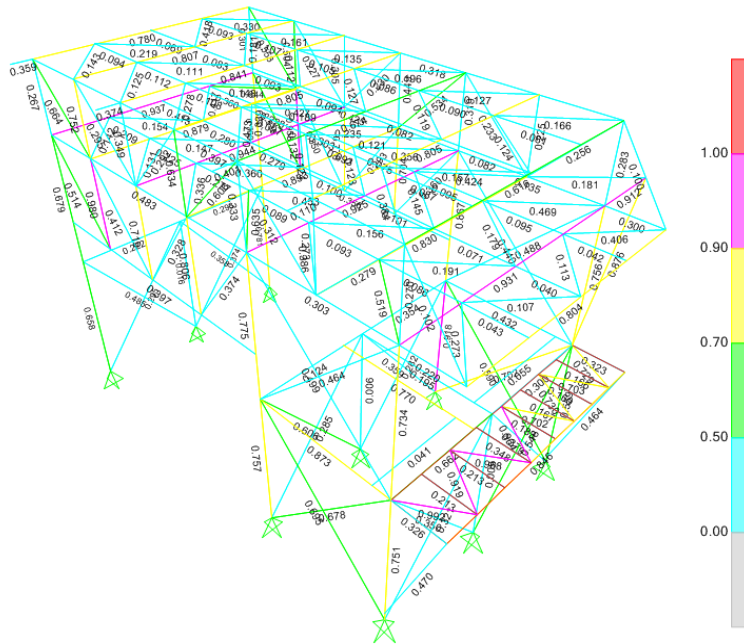
### Administration Building



### Culvert



Pipe Bridge

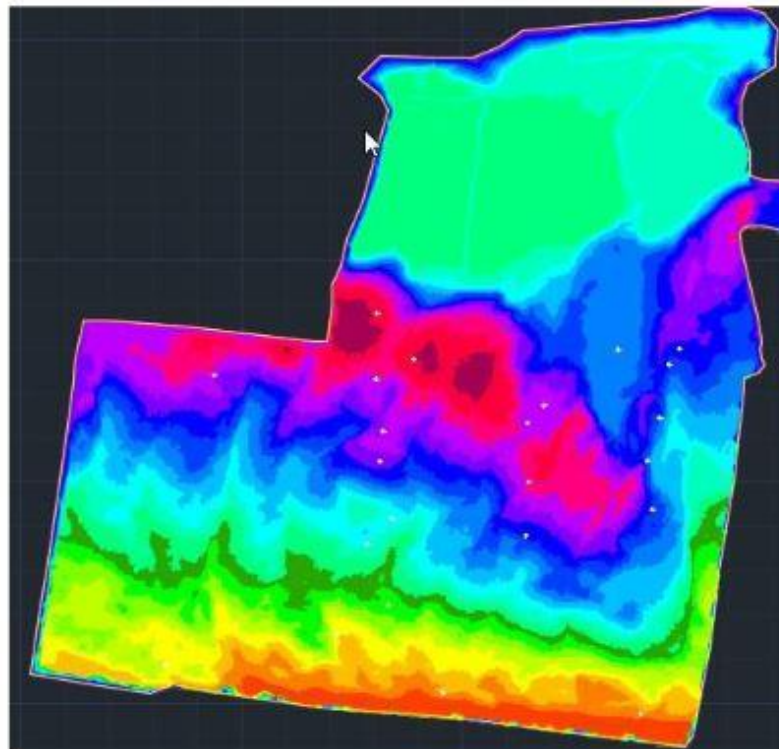


## Mokran Seawater Intake / Pipeline Project

Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)  
Main Client: Mokran Abniroo Company  
Date:2017~2019

In this project, ATM undertook Basic design for Buildings and site preparation and Infrastructures as well as a 30Km pipeline for water transmission.

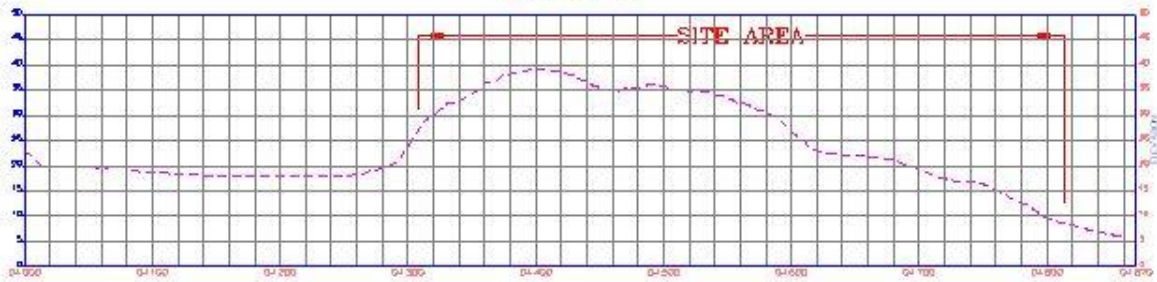
### Topography and Surface Analysis



ID	Minimum Elevation	Maximum Elevation	Color Scheme
1	0.000m	2.000m	0 m2 (Area)
2	2.000m	4.000m	16000 m2
3	4.000m	6.000m	14197 m2
4	6.000m	8.000m	22076 m2
5	8.000m	10.000m	21356 m2
6	10.000m	12.000m	24962 m2
7	12.000m	14.000m	22352 m2
8	14.000m	16.000m	20823 m2
9	16.000m	18.000m	24213 m2
10	18.000m	20.000m	101045 m2
11	20.000m	22.000m	84673 m2
12	22.000m	24.000m	44762 m2
13	24.000m	26.000m	46111 m2
14	26.000m	28.000m	61469 m2
15	28.000m	30.000m	89837 m2
16	30.000m	32.000m	46080 m2
17	32.000m	34.000m	56479 m2
18	34.000m	36.000m	53954 m2
19	36.000m	38.000m	40568 m2
20	38.000m	40.000m	24113 m2
21	40.000m	42.000m	12150 m2



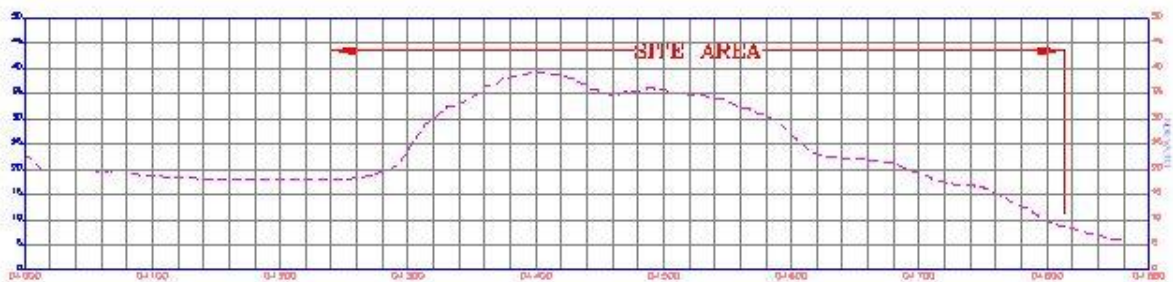
SEC A-A



SEC B-B



SEC C-C

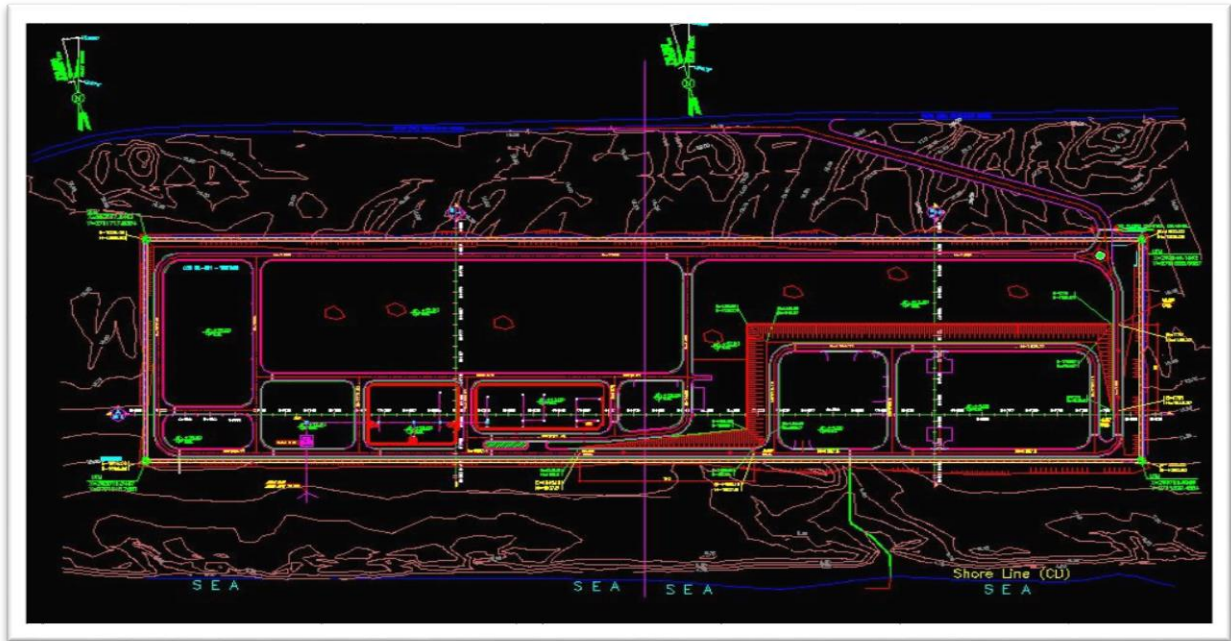


### Drainage System Basic Design





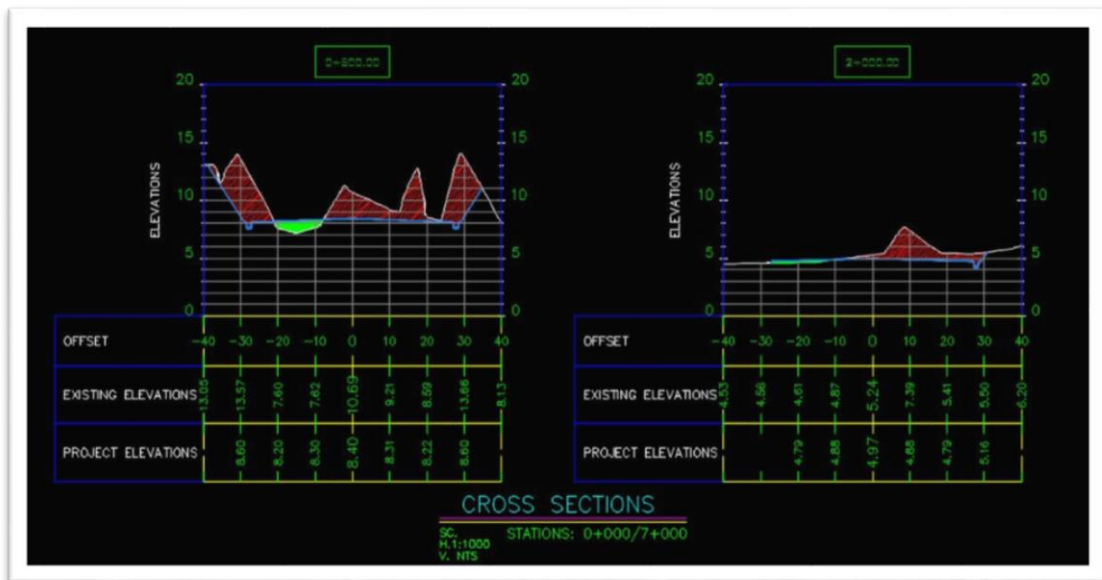
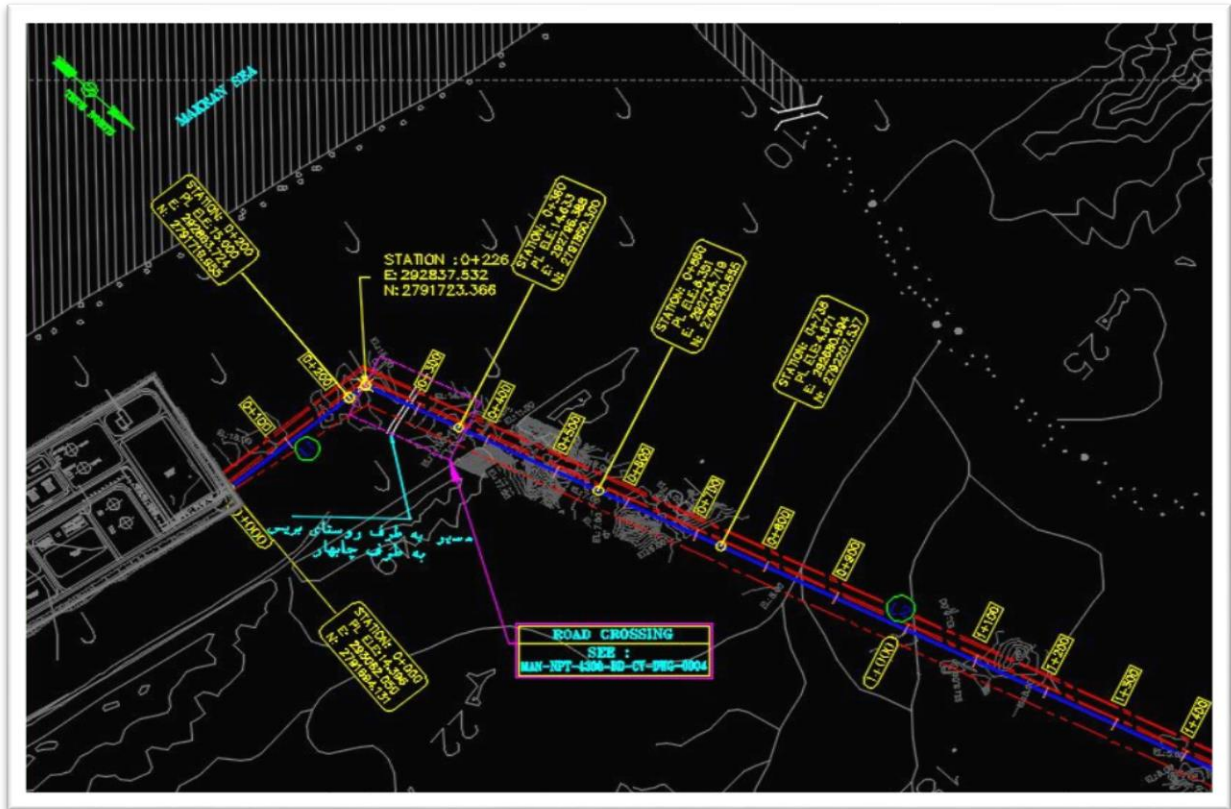
## Road Layout Basic Design



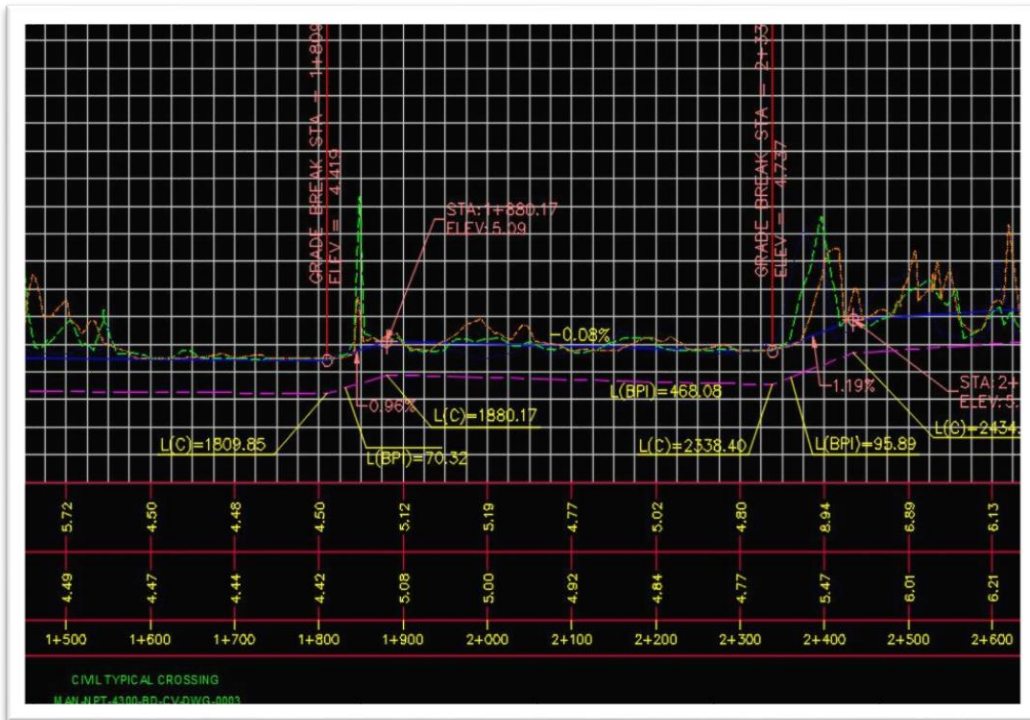
## Flood Control System



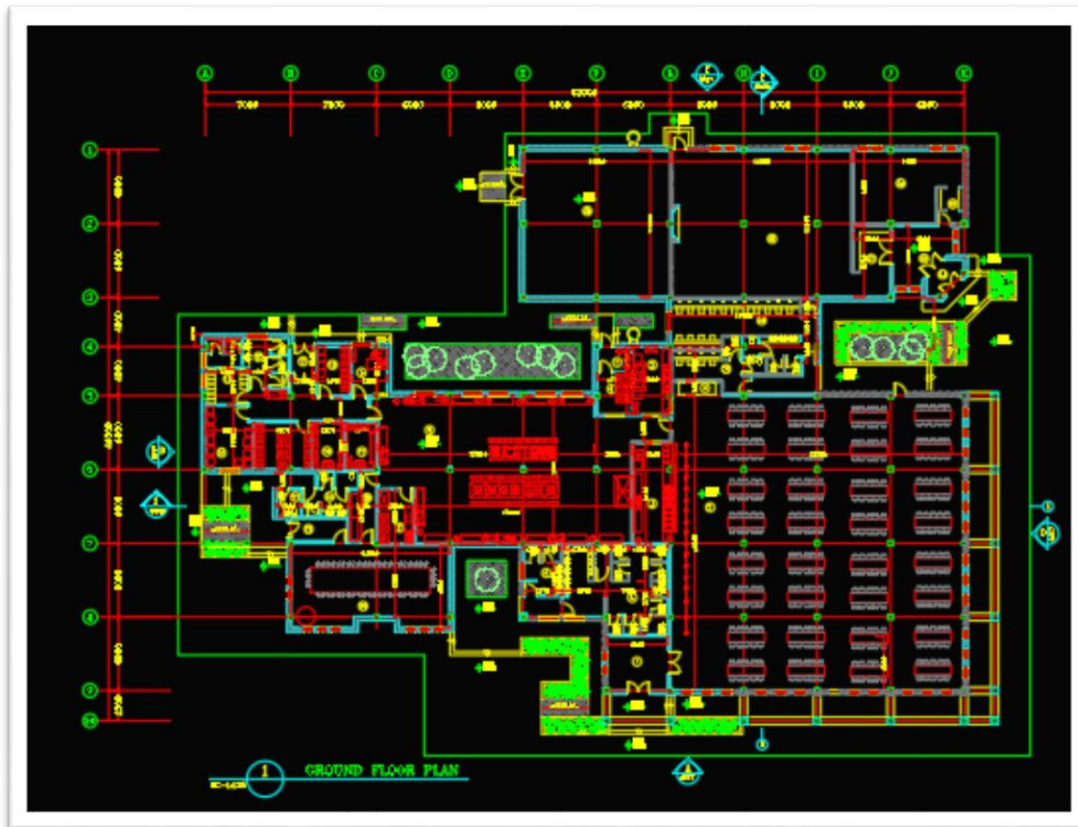
Water Pipe Line







Restaurant



3D VIEW: SOUTH WEST



## Entrance Building



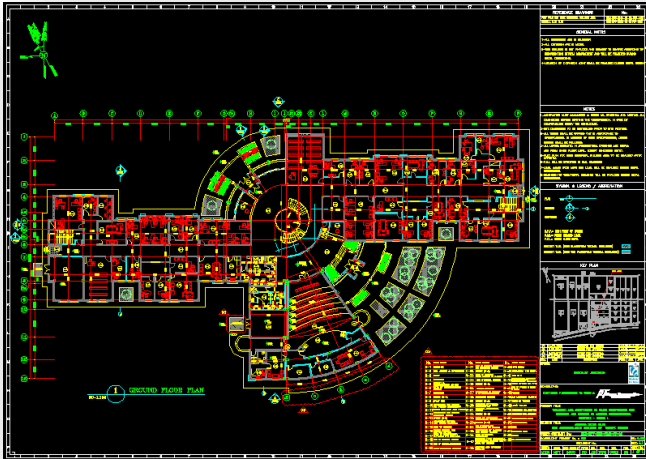


Fire Station & Clinic





## Administration Building

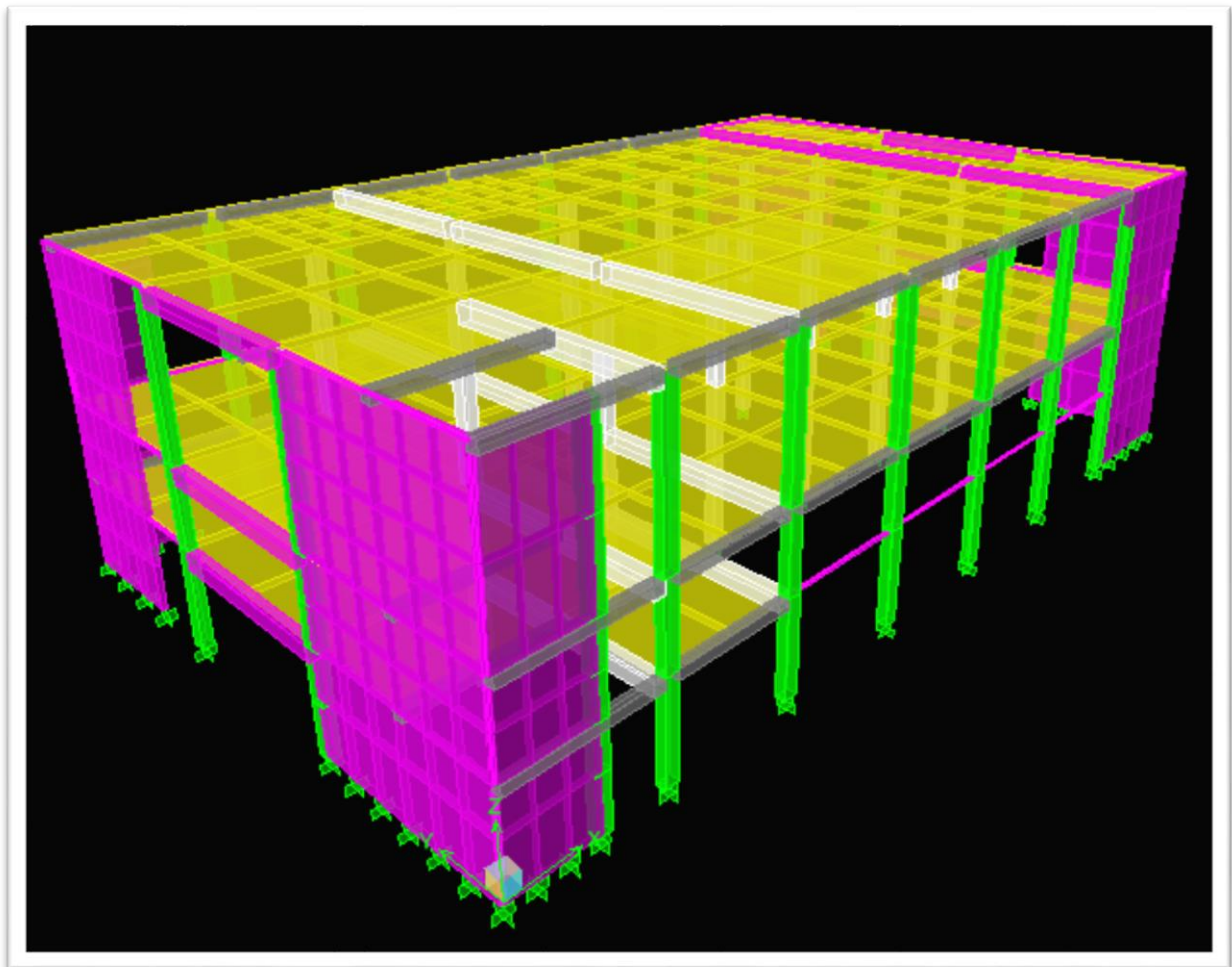


## PKT Project

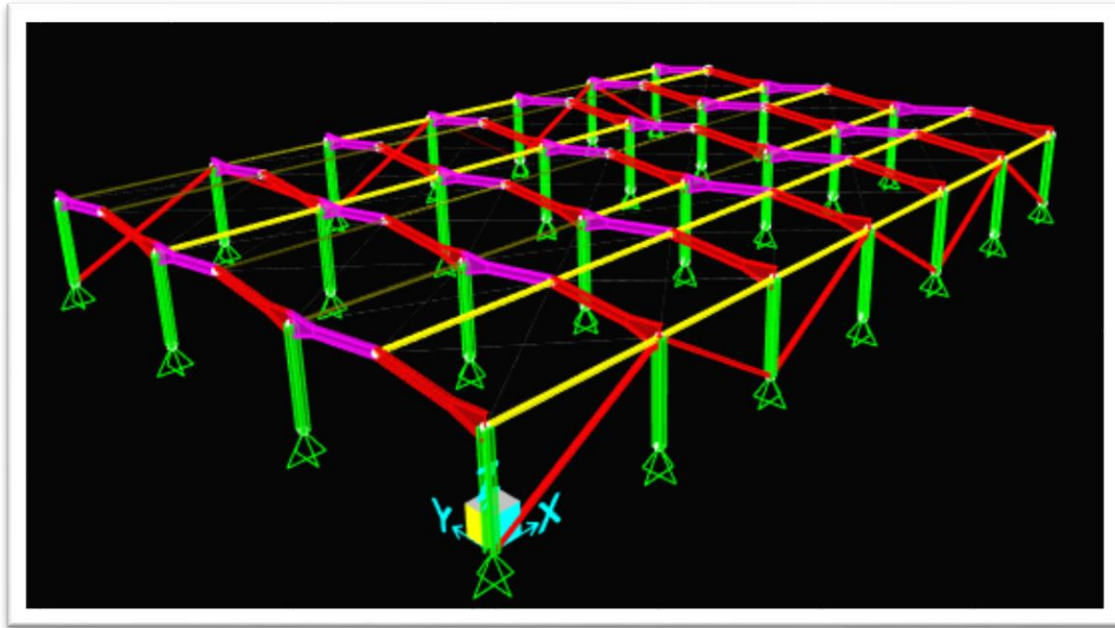
Client: Peyman Keyhan Teb Company  
Date: 2020

This Project comprised a Production Building for Medical items and ATM conducted a detailed structural design of the production building made of reinforced concrete structure including a foundation for production machinery in basic and detailed phases.

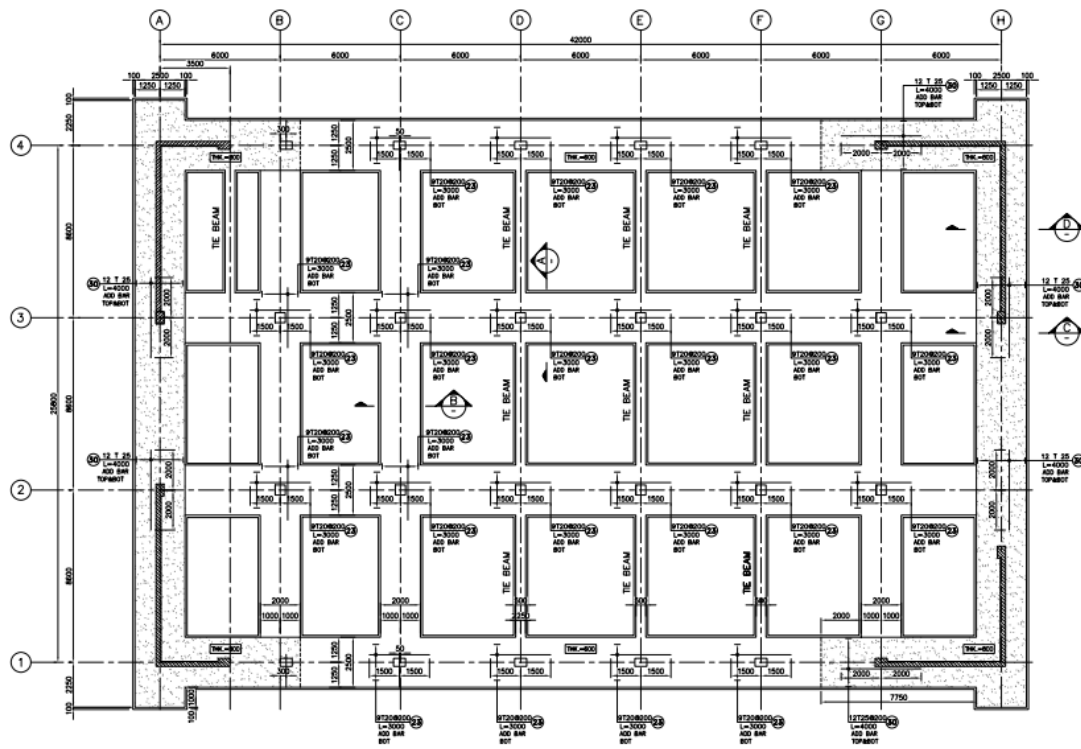
## Concrete & Steel Structure





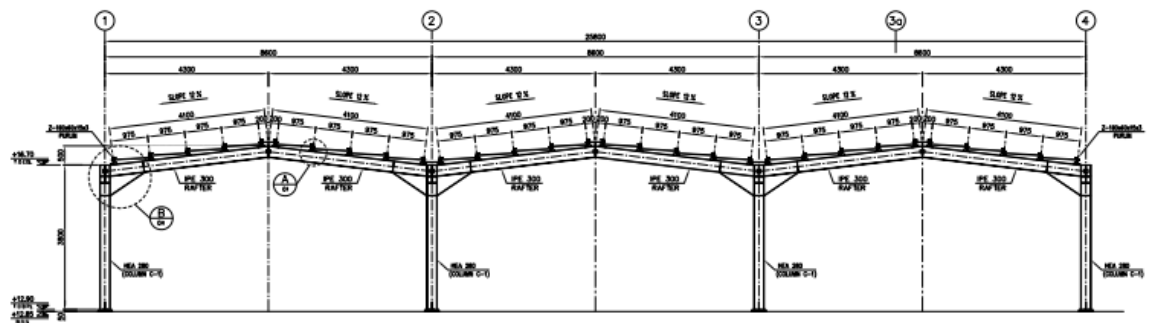


Foundation Plan

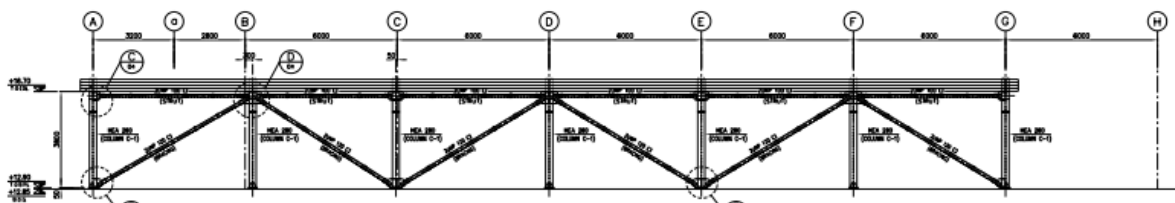


FOUNDATION FORMWORK & ADD BAR PLAN  
Sc. 1:100

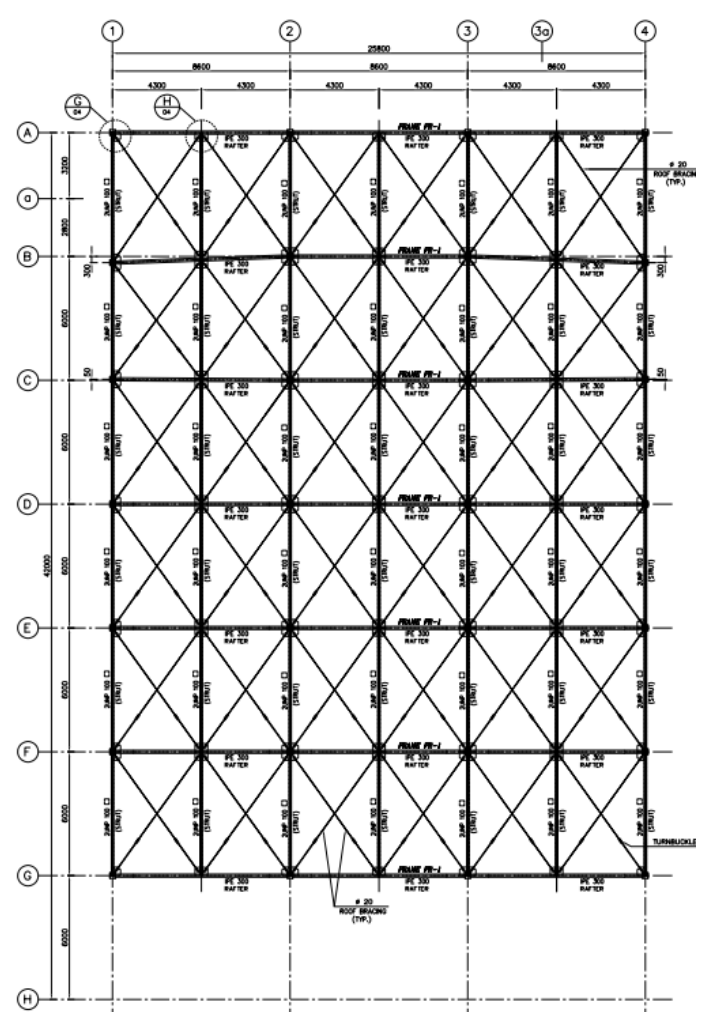
Steel Structure



FRAME TYPE "FR-1"  
SCALE 1:50



FRAMING VIEW ON AXIS "1" & "4"  
SCALE 1:50



ROOF BRACING & STRUTS PLAN  
SC. 1:100

## Bushehr Petrochemical Plant

Client: ThinkXpert Company  
Main Client: Bushehr Petrochemical Company  
Date: 2015~2017

This Megaproject was comprising 3 production sites with various process plants and ATM was providing civil structural consultancy services to the client as managing consultant.

### Plot Plan





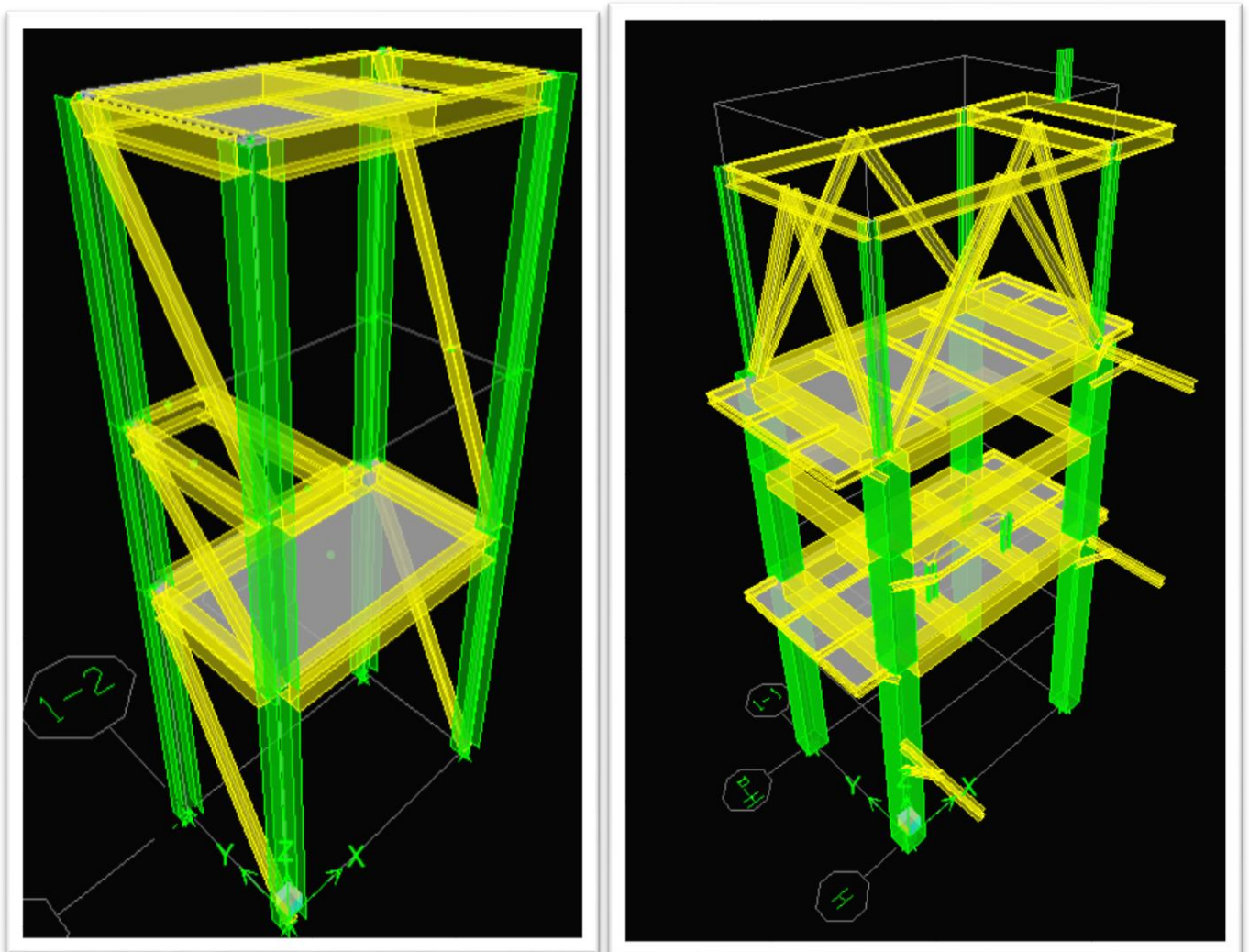
## APG Gum Removal

Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)  
Main Client: Tabriz Petrochemical Company  
Date: 2018-2020

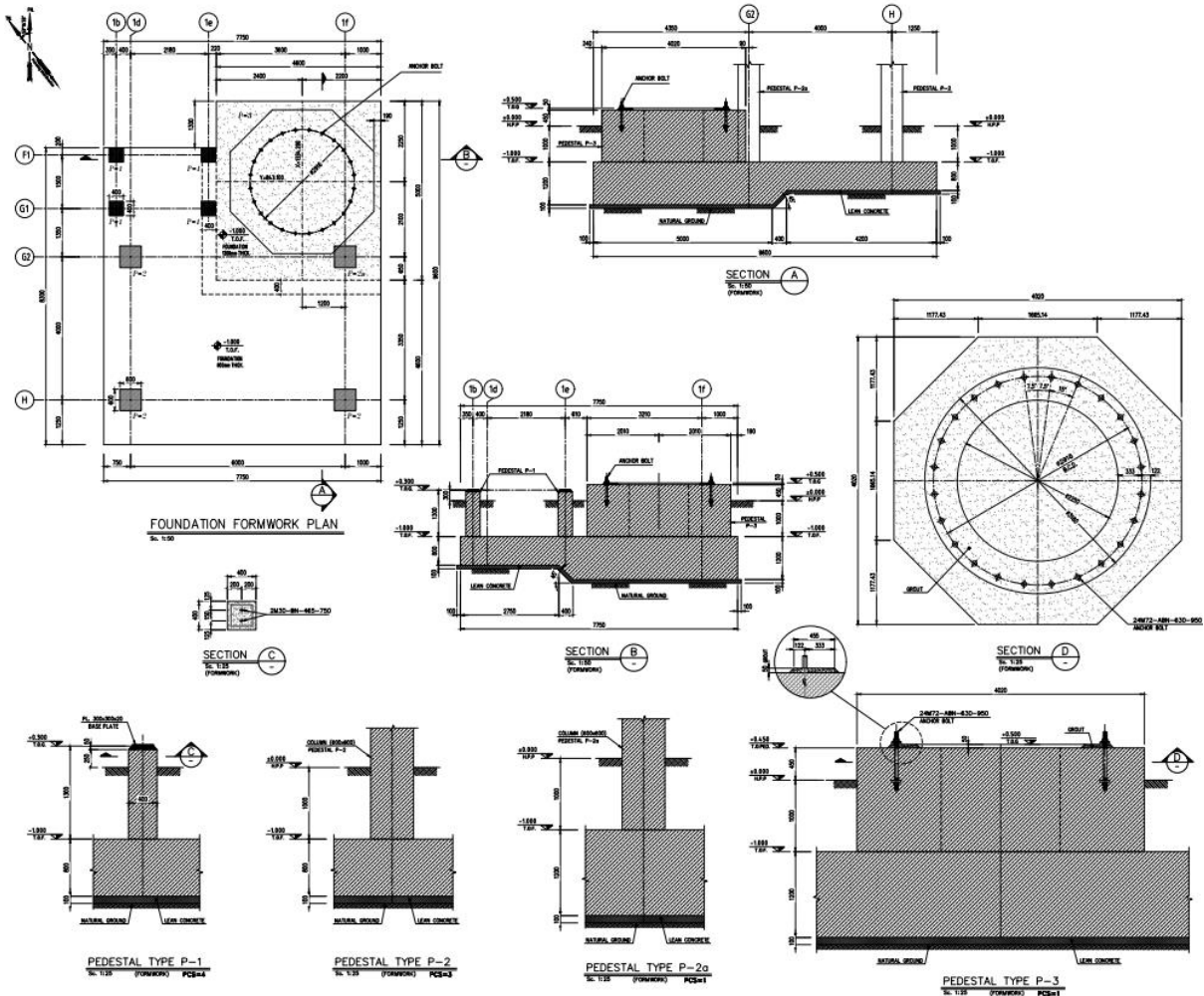
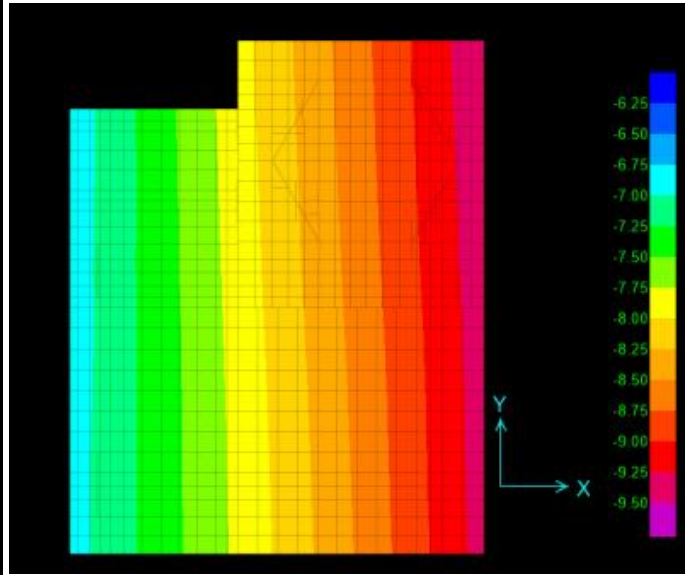
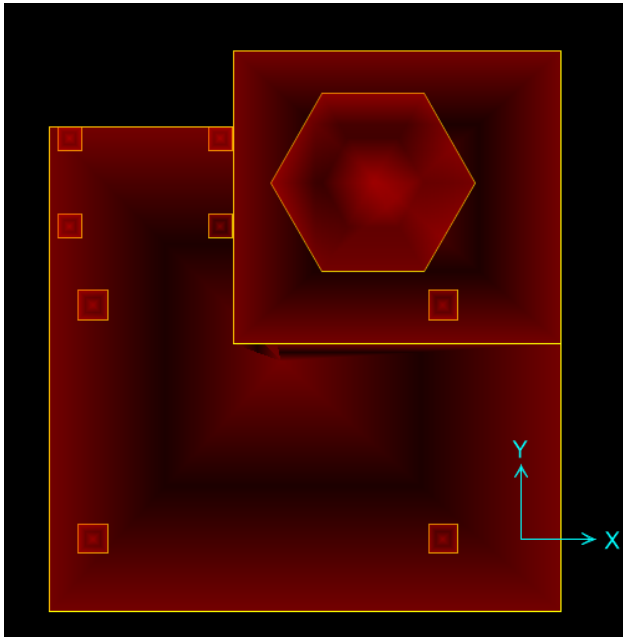
This was an Upgrade Project in Tabriz Petrochemical, Northwest Iran.

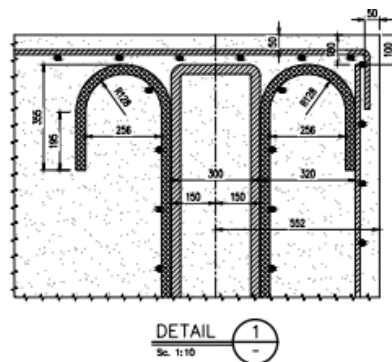
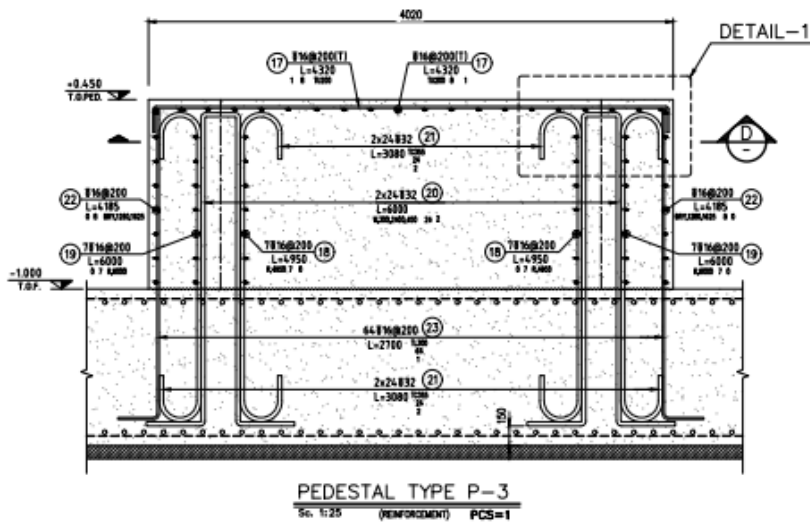
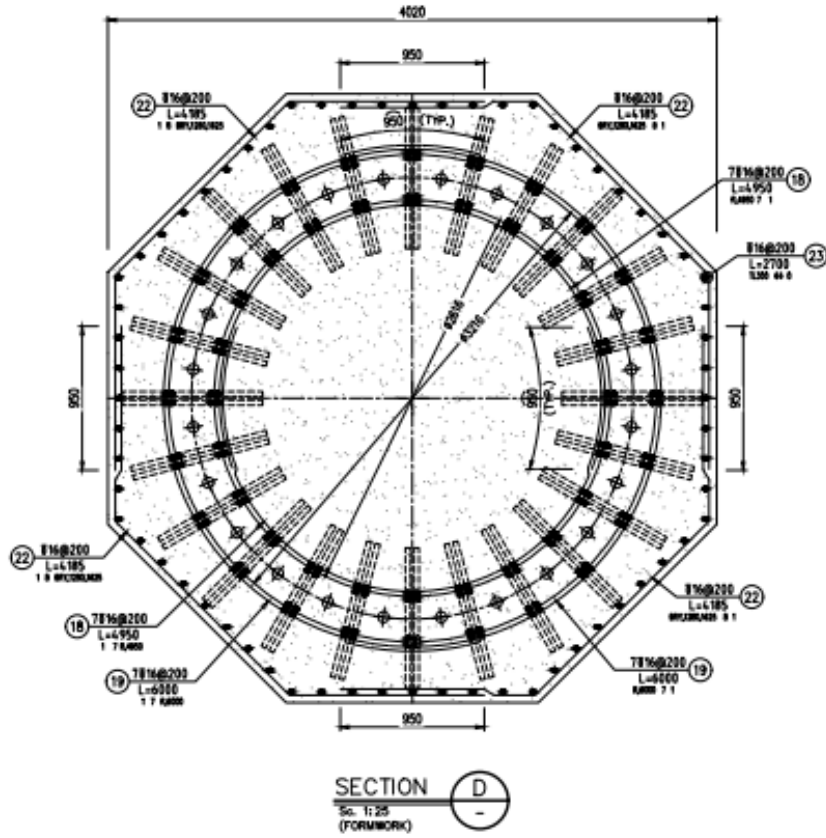
ATM's Scope of work was to provide structural design services including equipment supporting structure, rotary equipment foundation design.

## Equipment Structures



Foundation of Tower





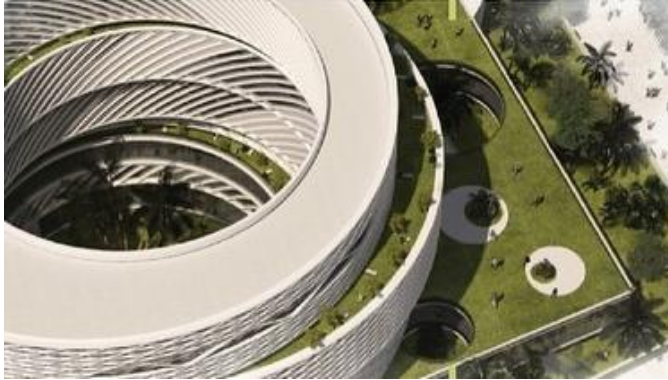


## BandarAbbas 220 Bed Hospital

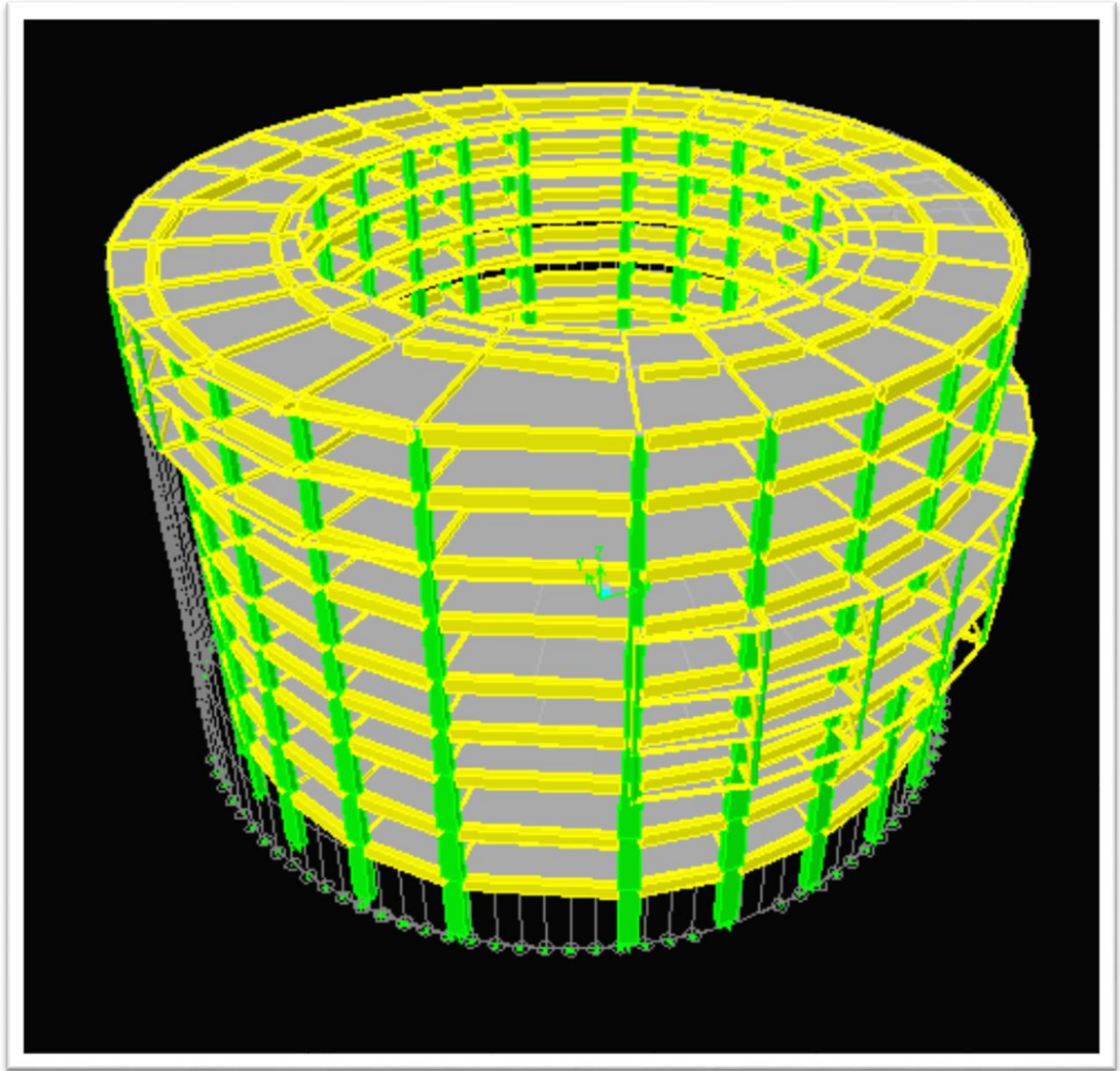
Client: Nik Darman Kourosh  
Date: 2020

A 10 story Building with 36000 Sq. M floor area in the south of Iran with special Architectural design was a real challenge in structural design with 7meter long cantilevers on a round building.

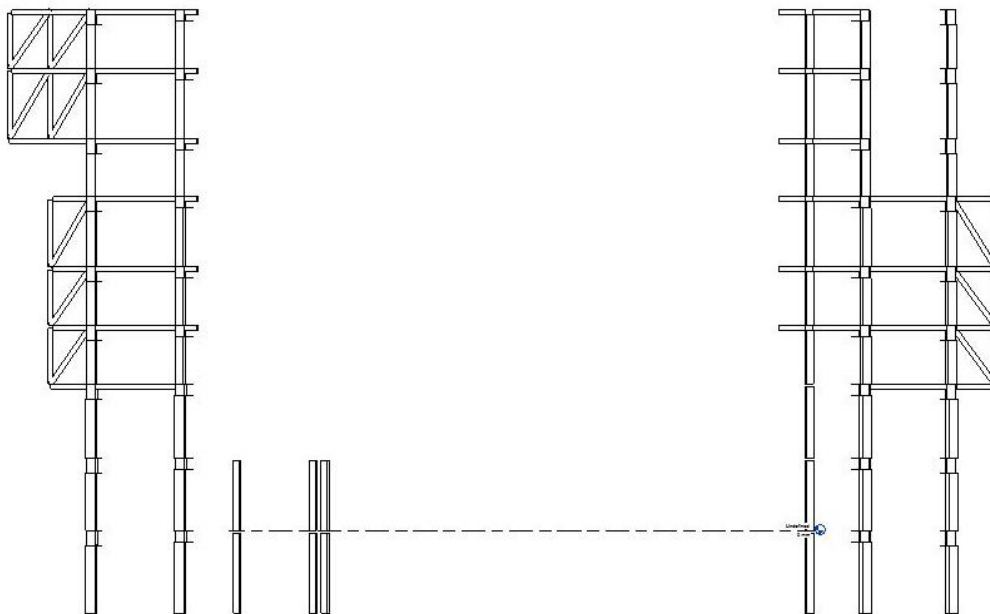
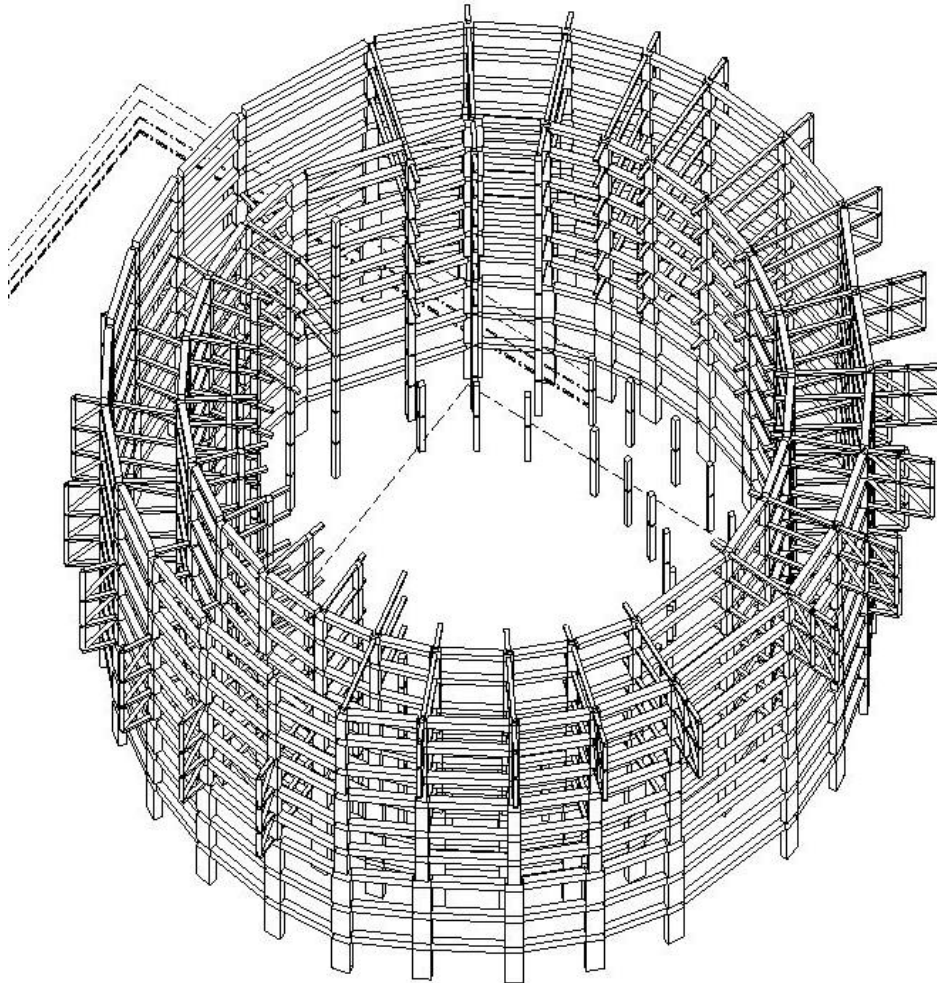
ATM assisted the client in conceptual structural design to address all performance design requirements.



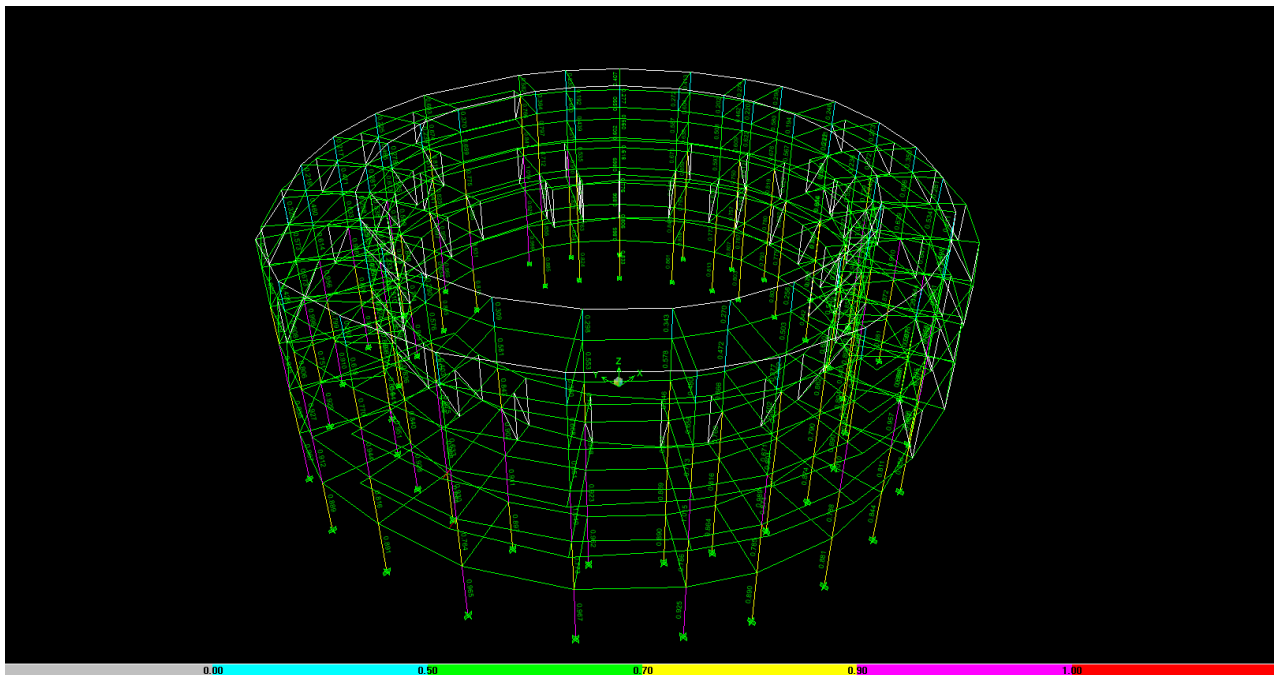
## BandarAbbas Hospital ETABS Model



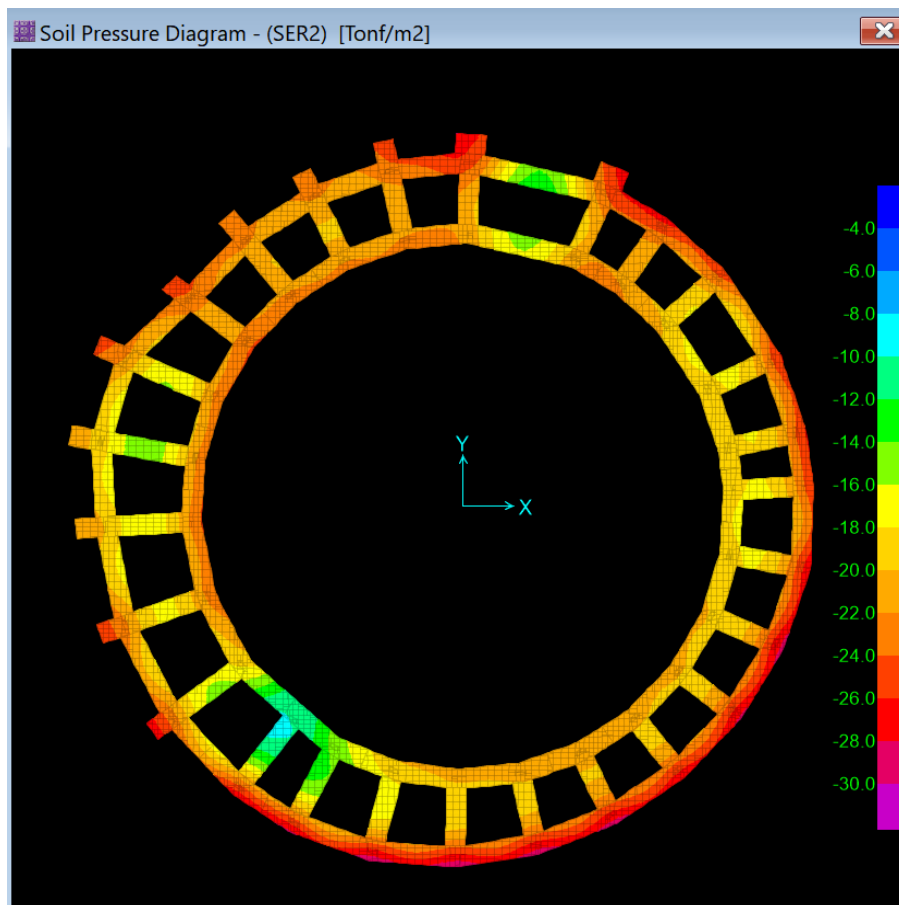




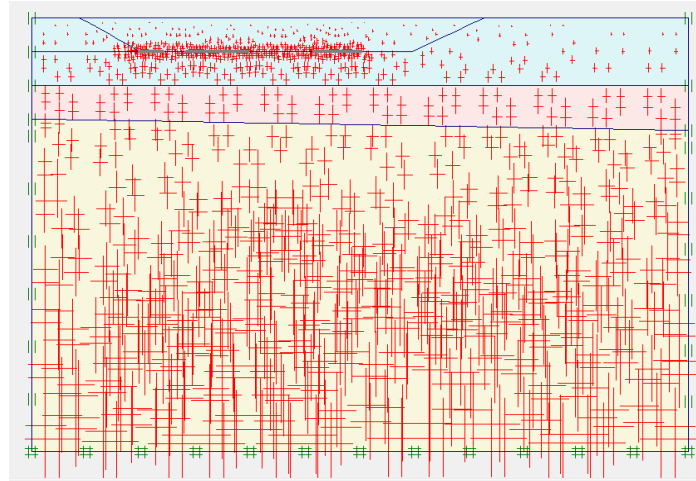
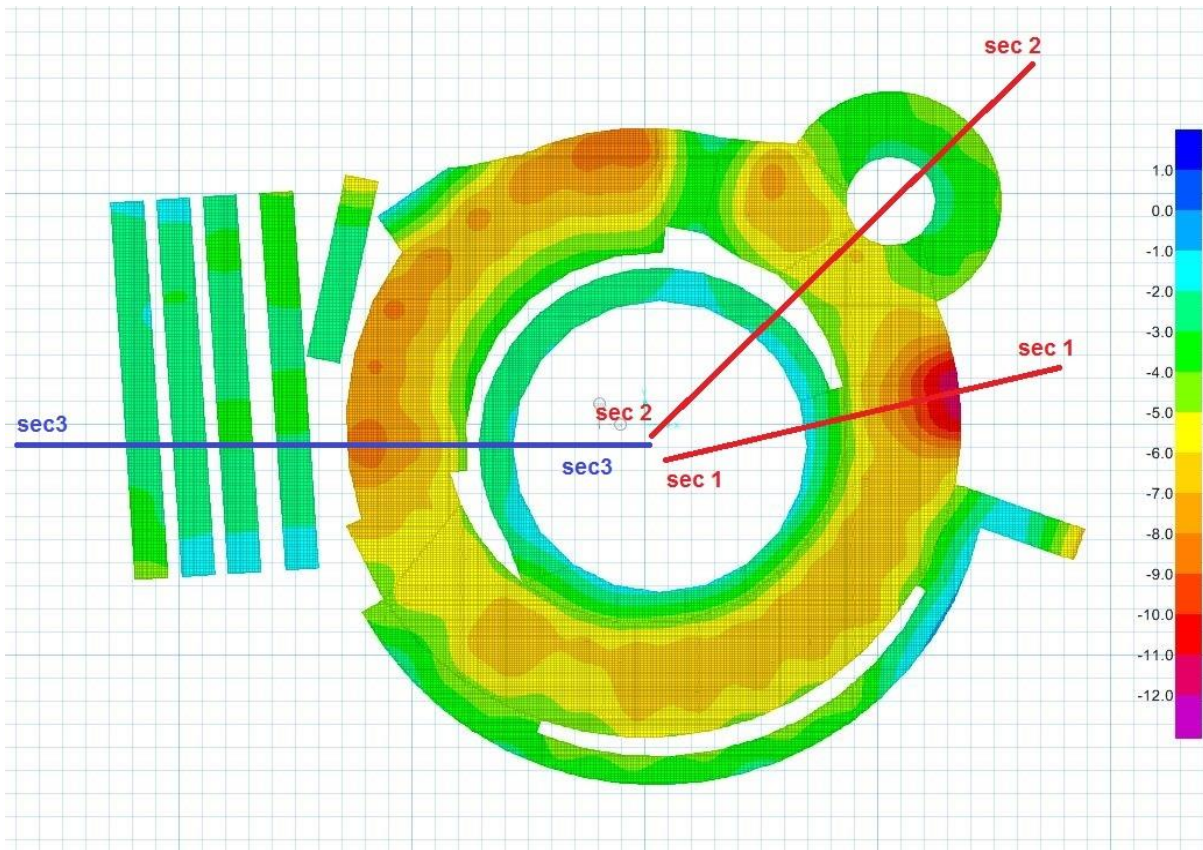


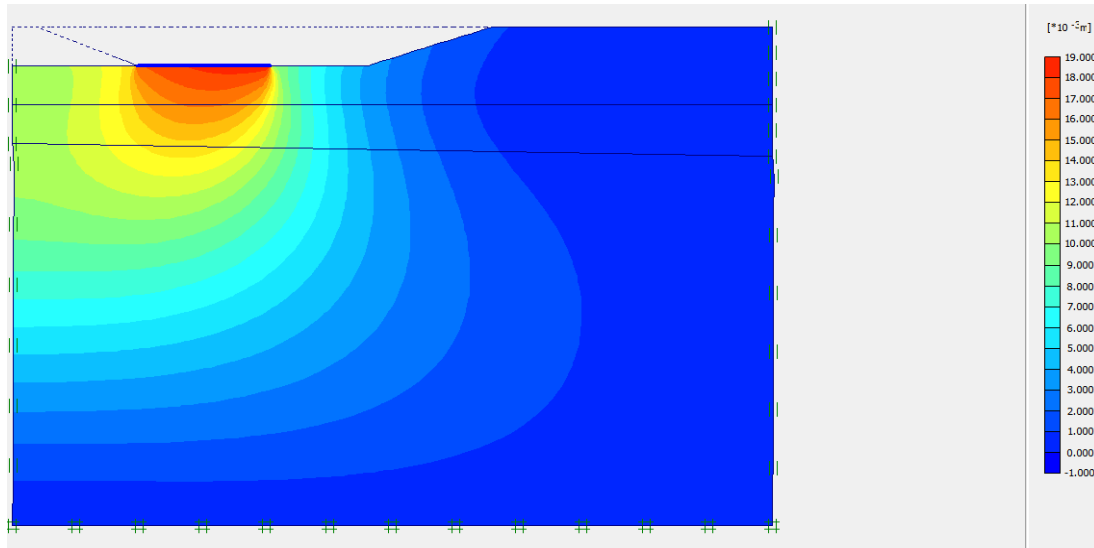
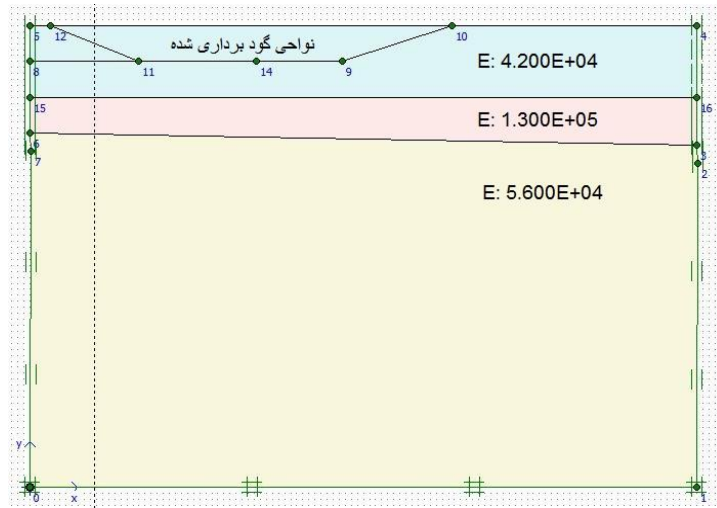


## Foundation Model



PLAXIS Model





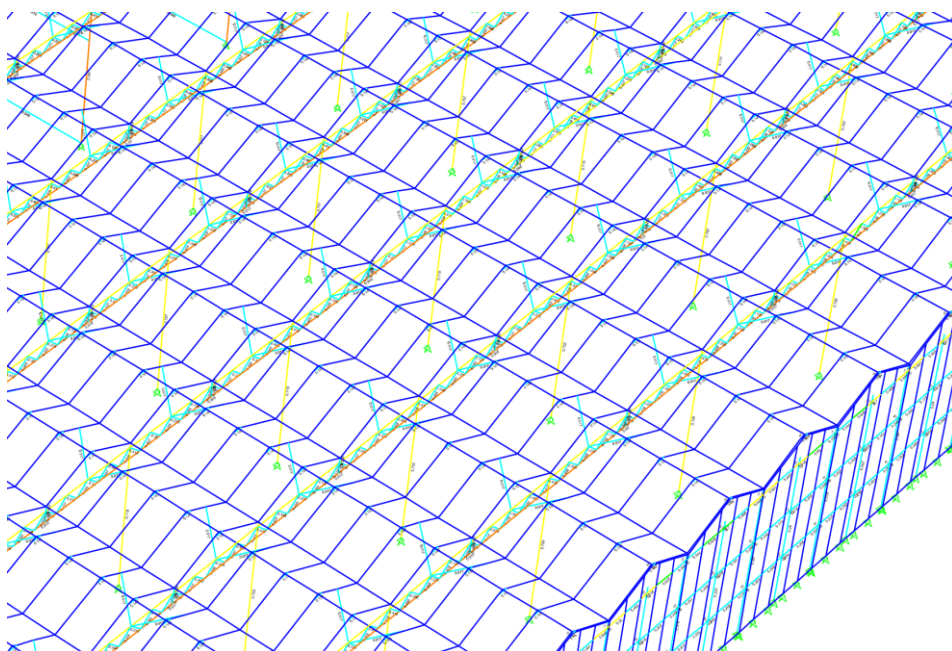
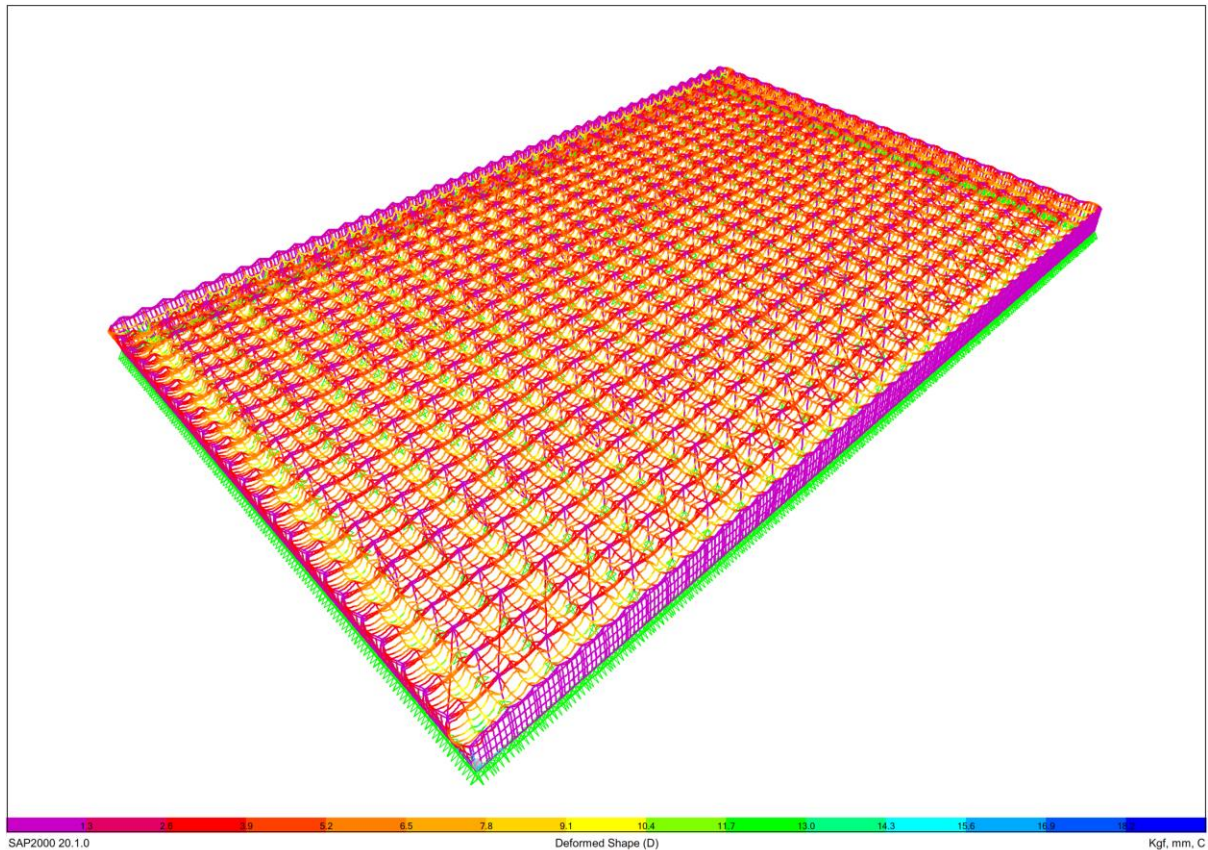


## Siah-Kal Greenhouse Project

Client: Exir Sanat Company  
Date: 2020

ATM provided design review service to the client for this Composite Aluminium and glass light Building for in agricultural industry.

### SAP Model

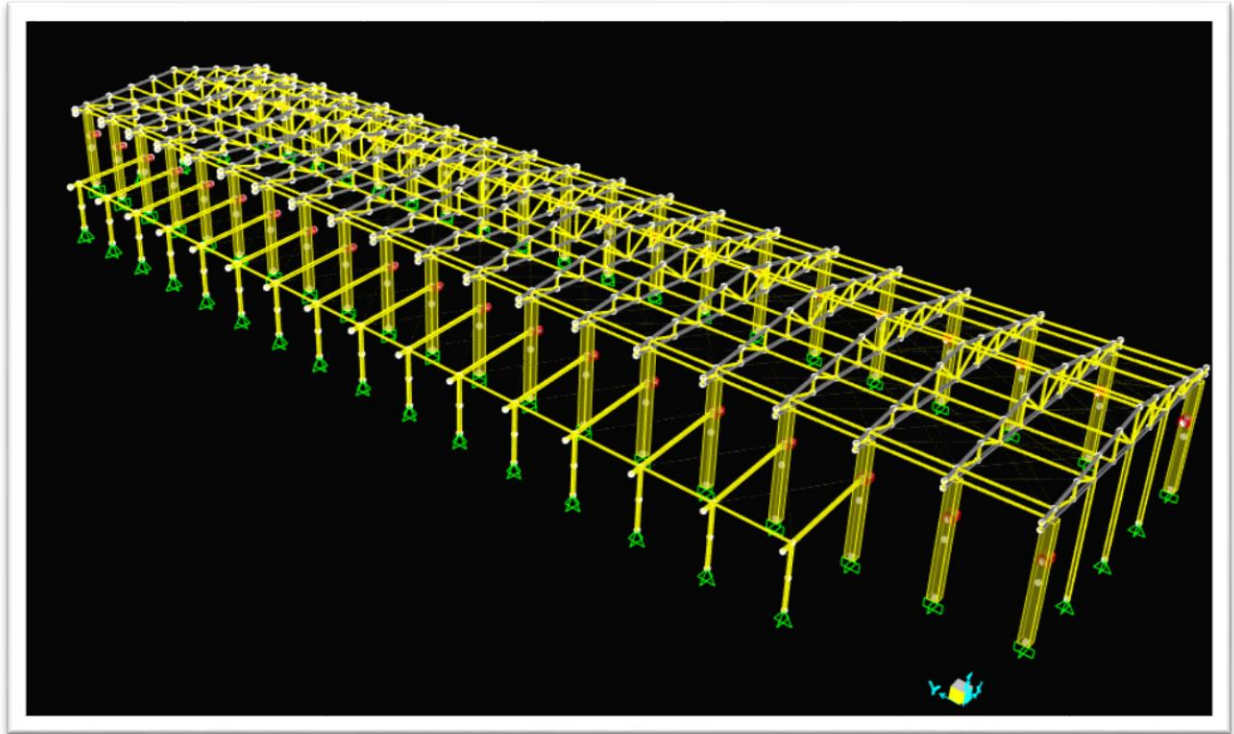


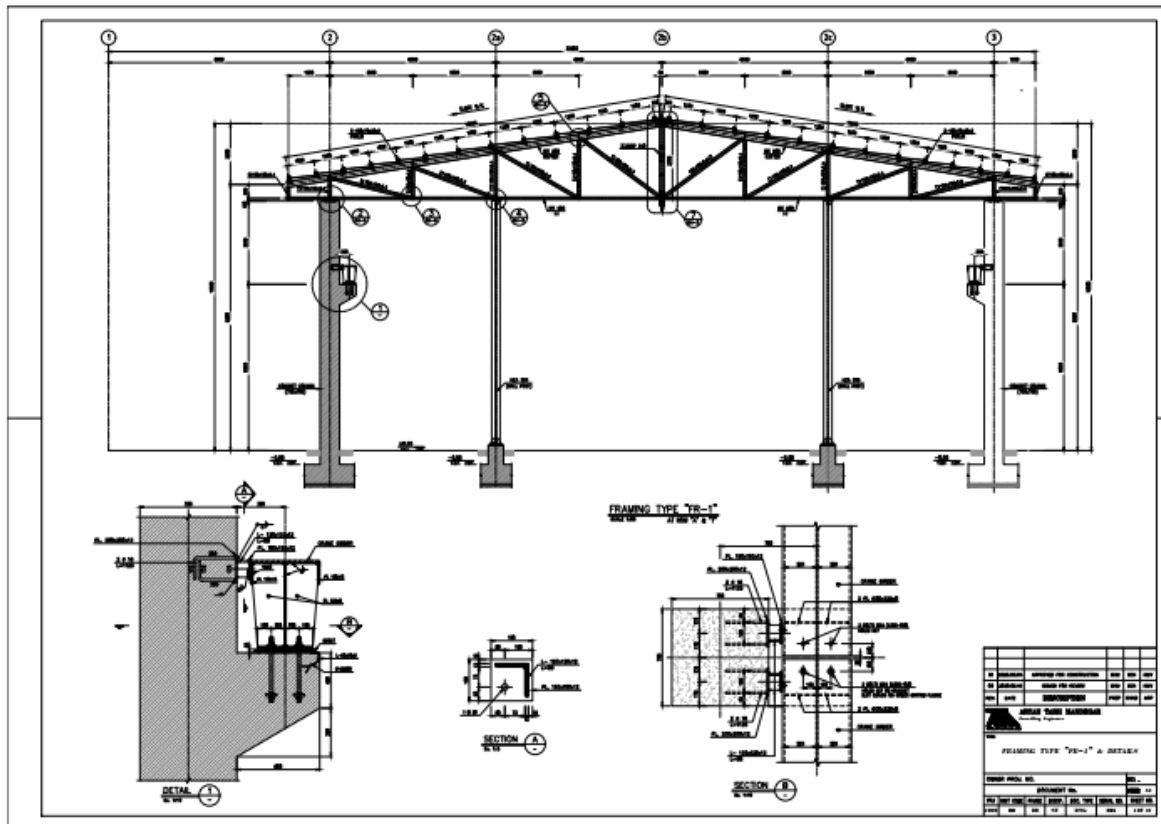
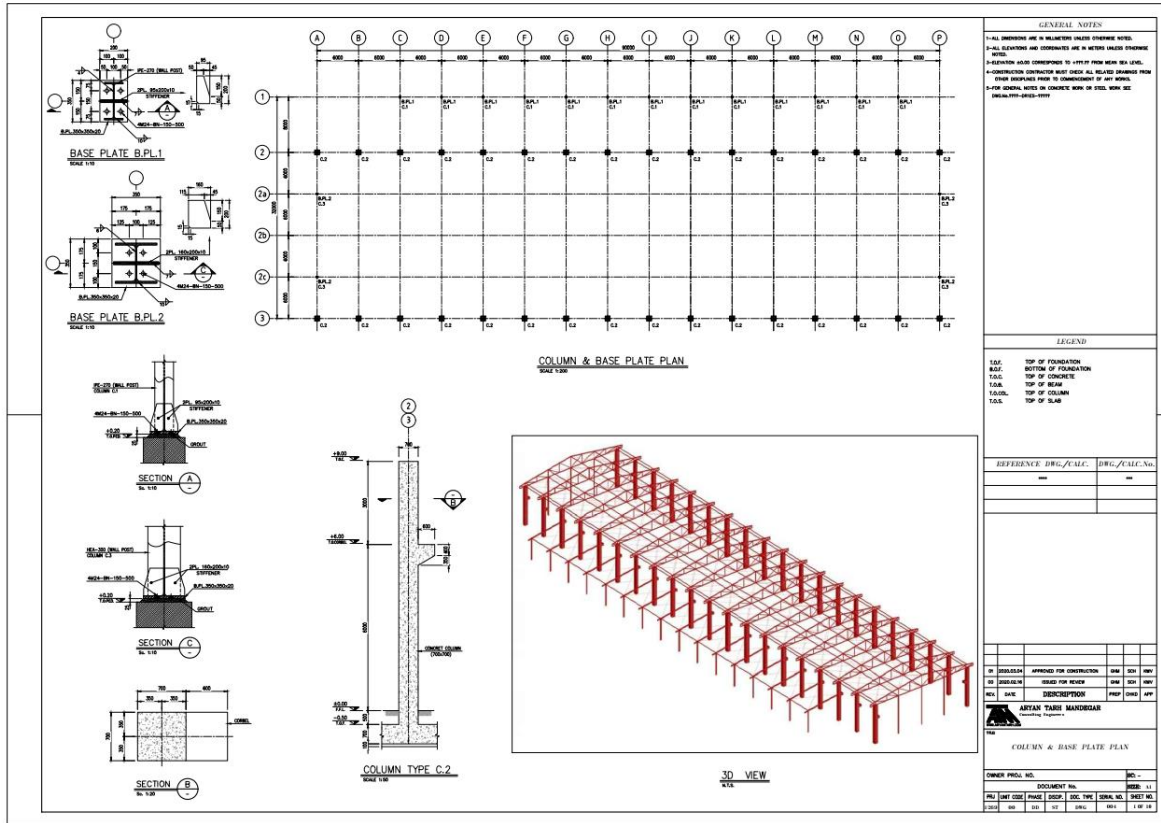
## Precast Pile Production Factory

Client: Exir Sanat Company  
Date: 2020

ATM designed a reinforced concrete Industrial Building which houses production line for precast concrete piles in Abadan, the South of Iran.

### Structure Model





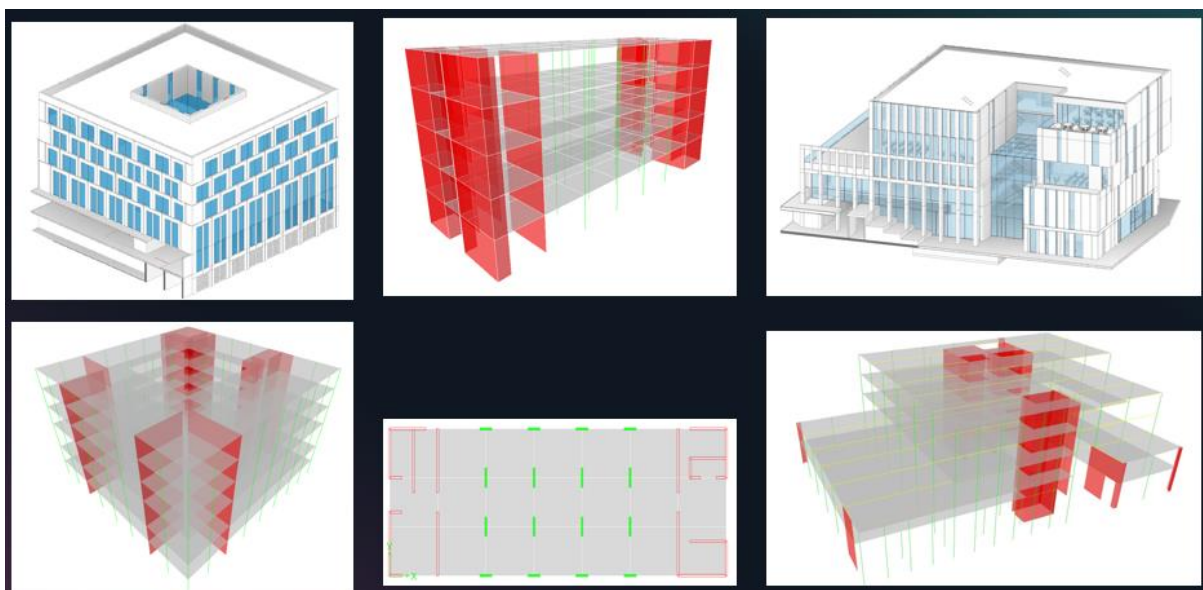
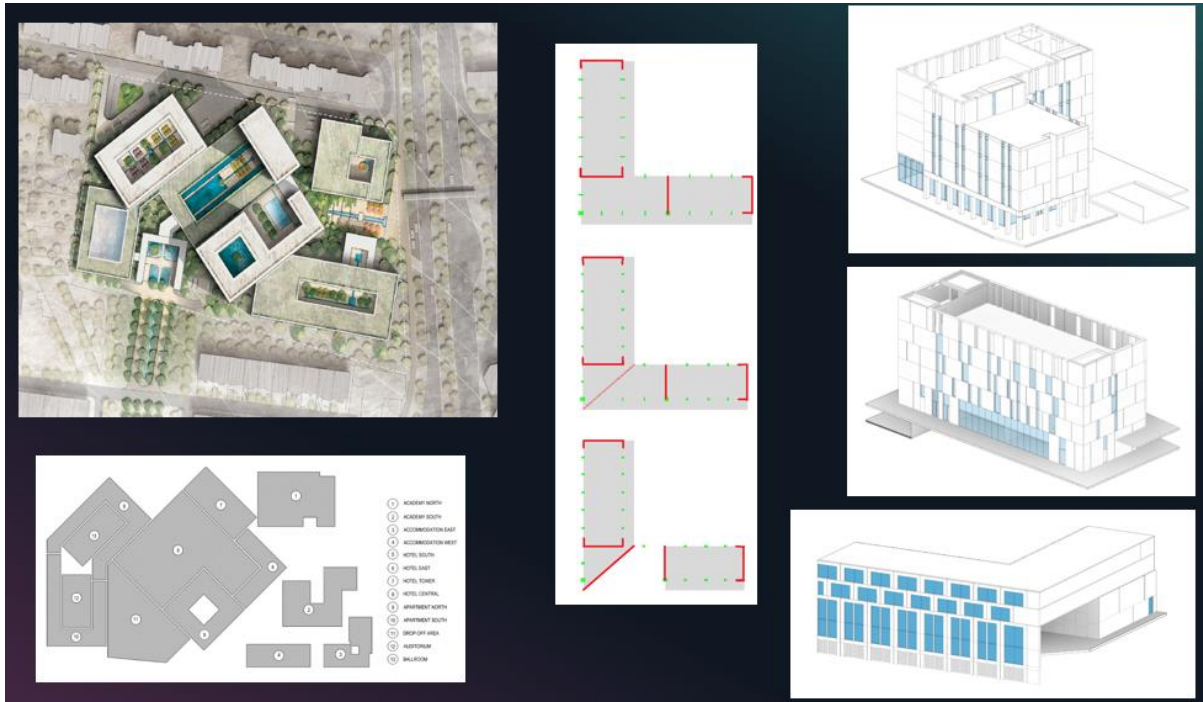


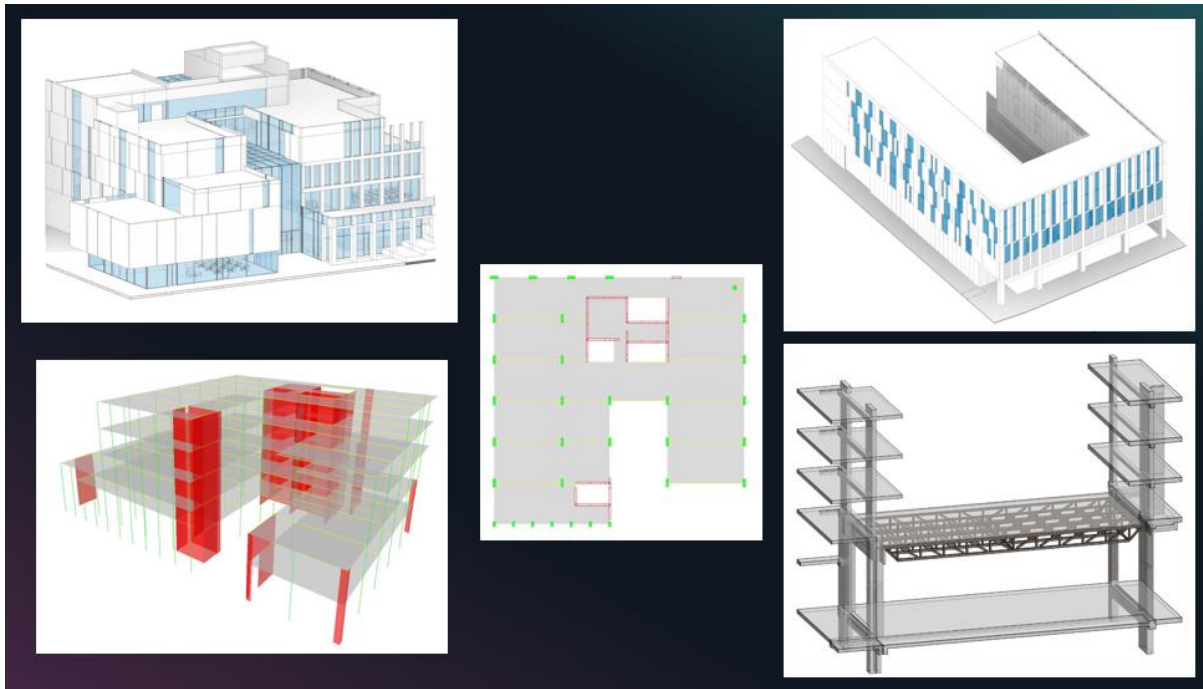
## Rotana Hotels

Client: WME Consulting Engineer  
Date: 2014~2016

In this project ATM served the client by detailed structural design of hotel buildings in Isfahan designed by WME.

## Isfahan Hotel & Academy





## Creek Tower Dubai

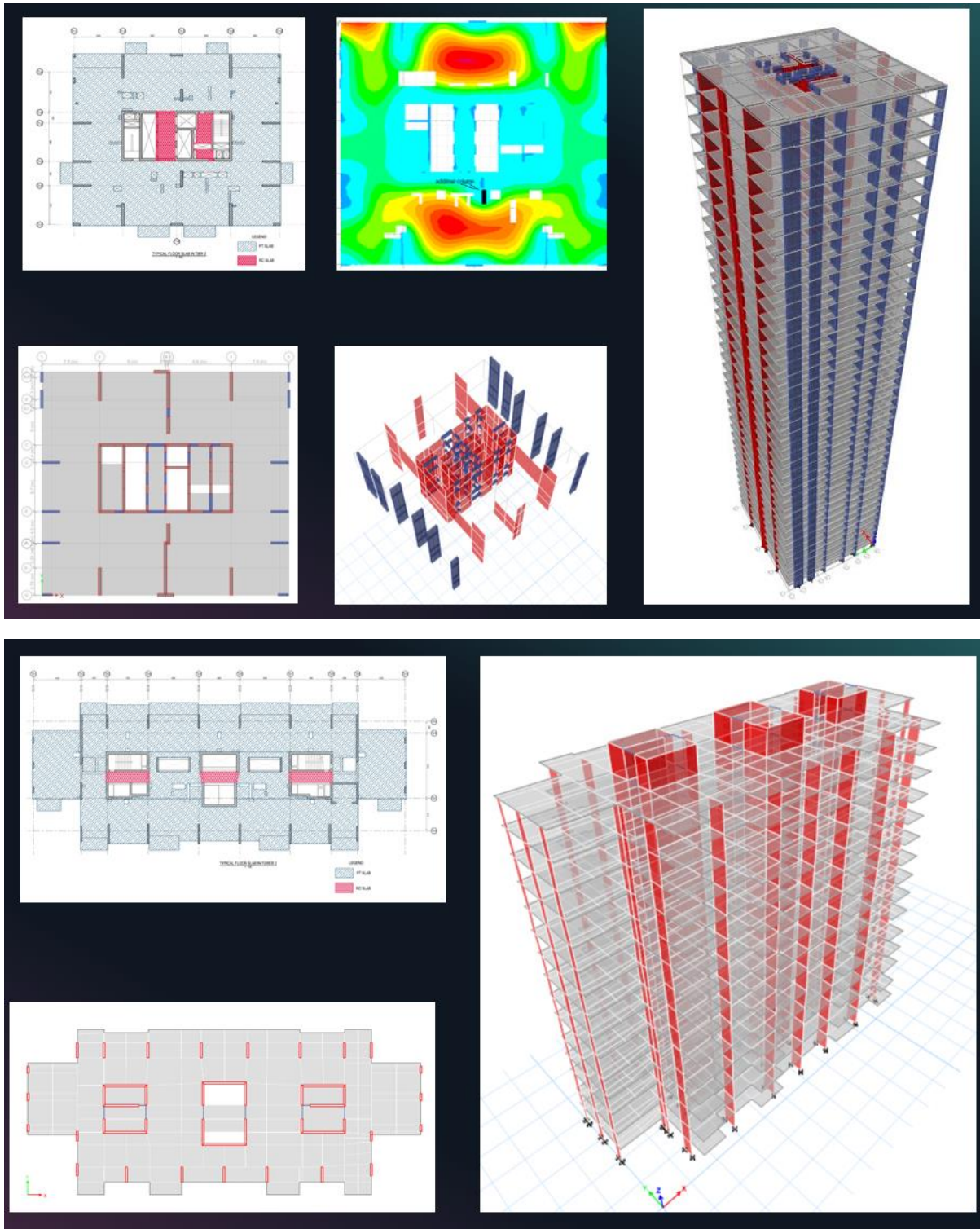
Client: WME Consulting Engineer

Date: 2016~2018

ATM has completed a conceptual and detailed design for two 16 and 70-story residential Towers in Dubai under close collaboration with the Client.

For this project ATM had to incorporate wind tunnel results in structural design which was successfully completed by ATM.

Dubai Creek Harbour





## Methanol Soroush

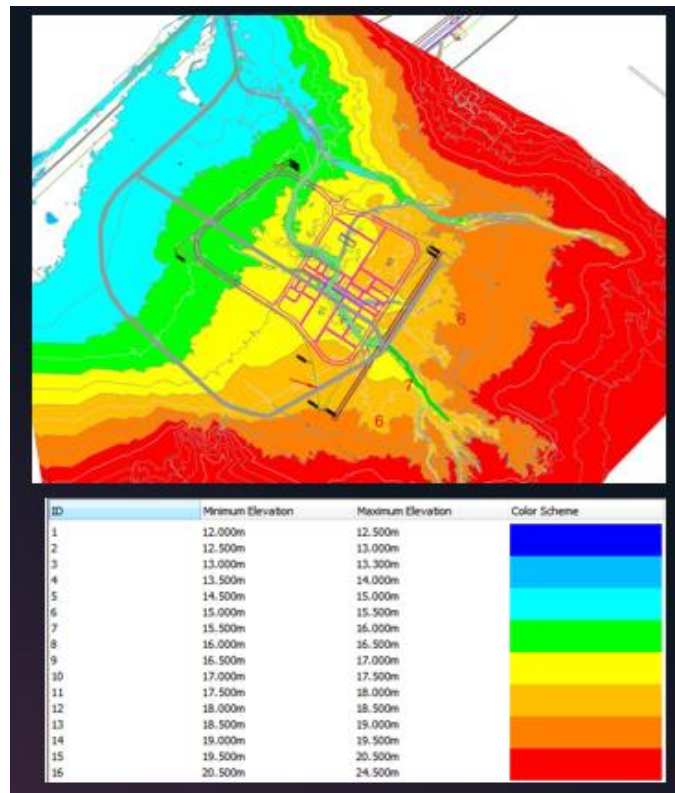
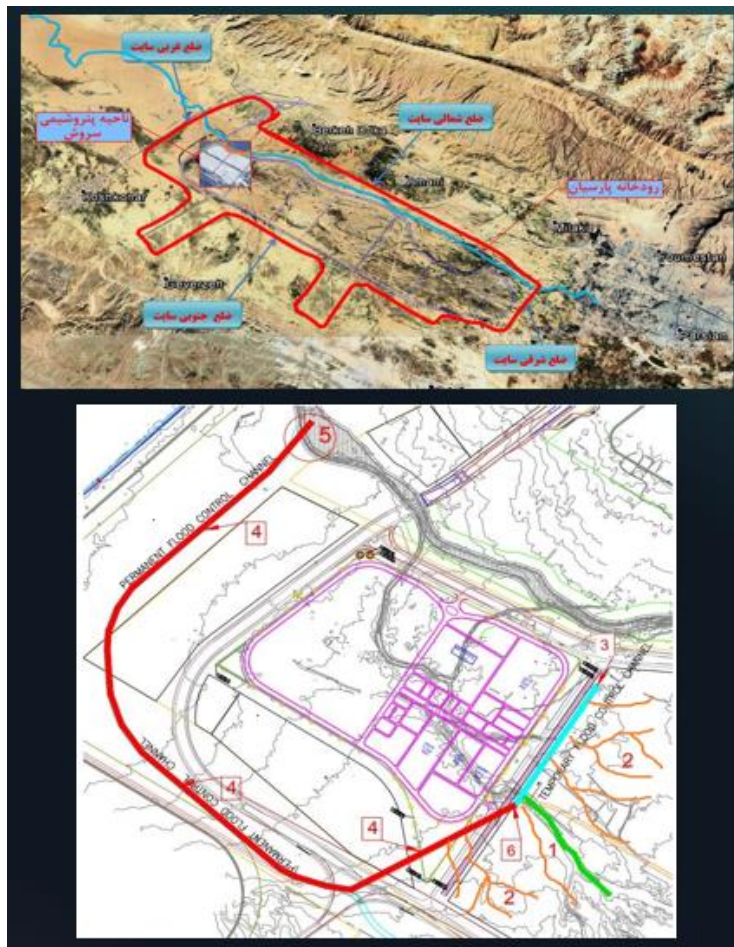
Client: ThinkXpert Company  
Main Client: Pasargad Energy Development Co. (PEDC)  
Date: 2020~On-going

Located in special Energy Zone in Parsian, Iran, Methanol Soroush is a chemical Plant in Soroush Energy Complex awarded to an EPC contractor. ATM have been selected by the client to undertake Civil/Structure/Building design review and verification as a part of managing consultant body.

## Plot Plan

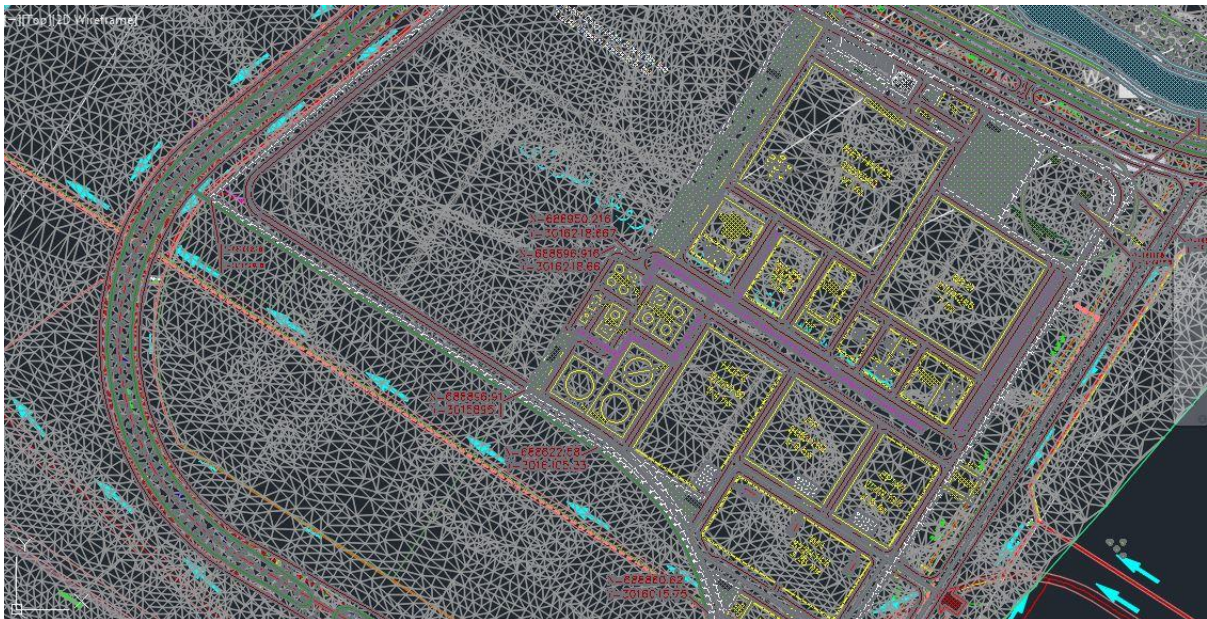
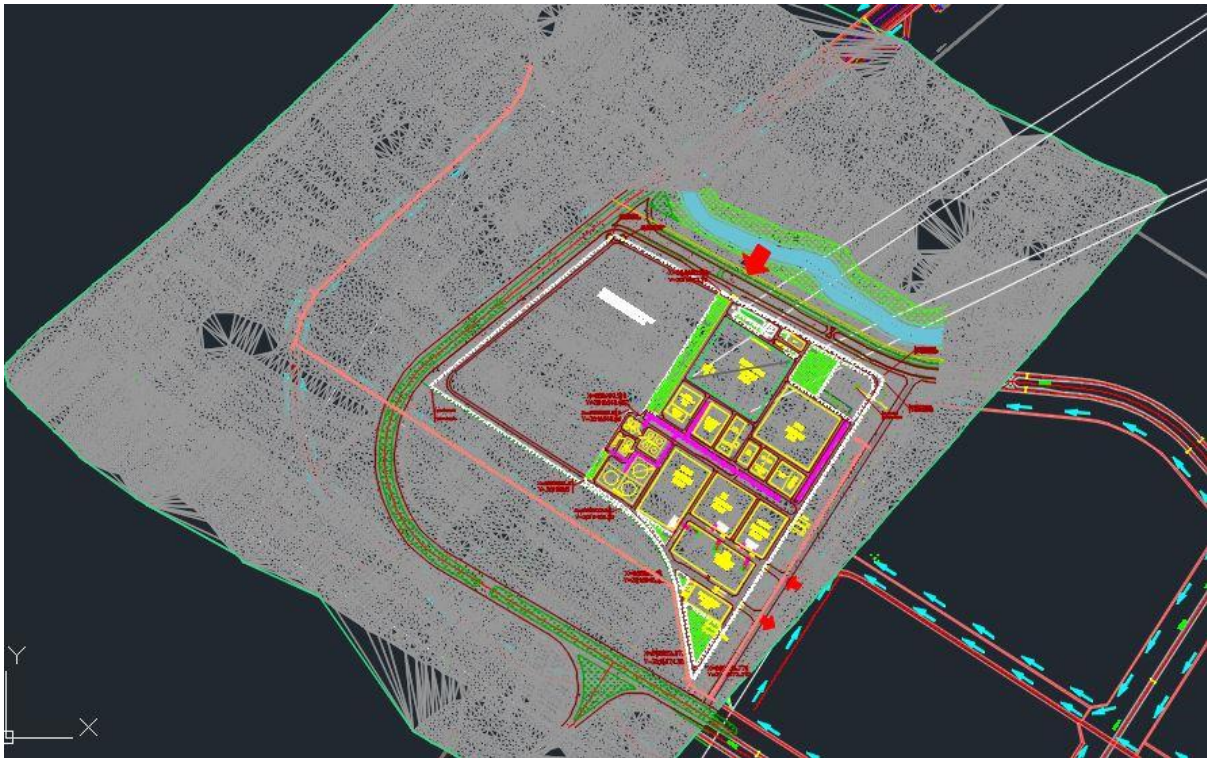


Surface Analysis





Civil3D Model





## Dehloran Petrochemical

Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)  
Main Client: Dehloran Petrochemical Company (DPC)  
Date: 2019~2020

Dehloran Petrochemical Plant was awarded to OIEC on an EPC basis contract. ATM was selected by the client to undertake Civil/Structure/Building design review and verification as a part of the managing consultant body.

### Plot Plan



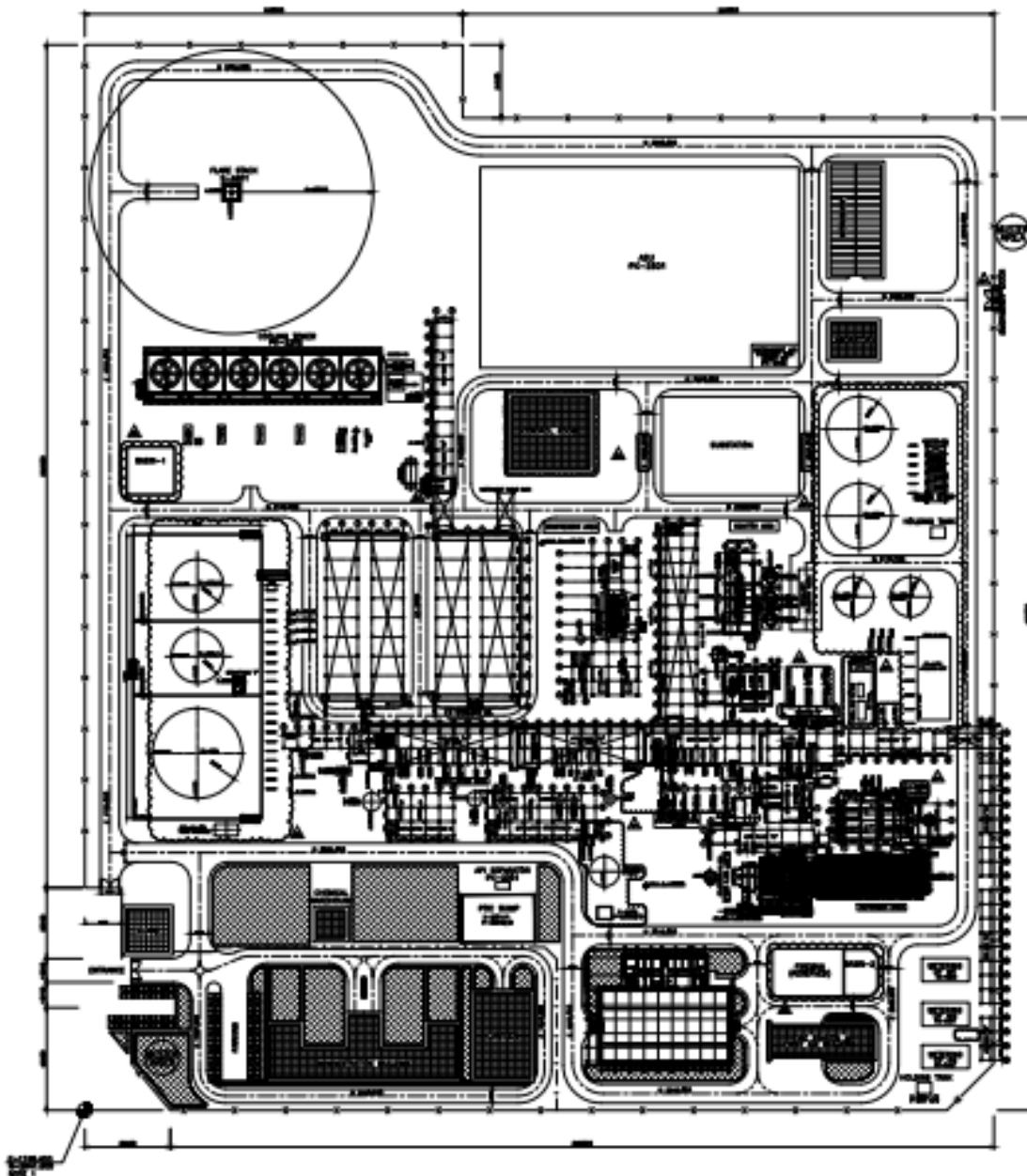
## Methanol Sina

Client: ThinkXpert Company  
Main Client: Sina Petrochemical Company  
Date: 2019~On-going

Located in Mokran Petrochemical Site, Iran, Methanol Sina is a chemical Plant project awarded to an EPC contractor.

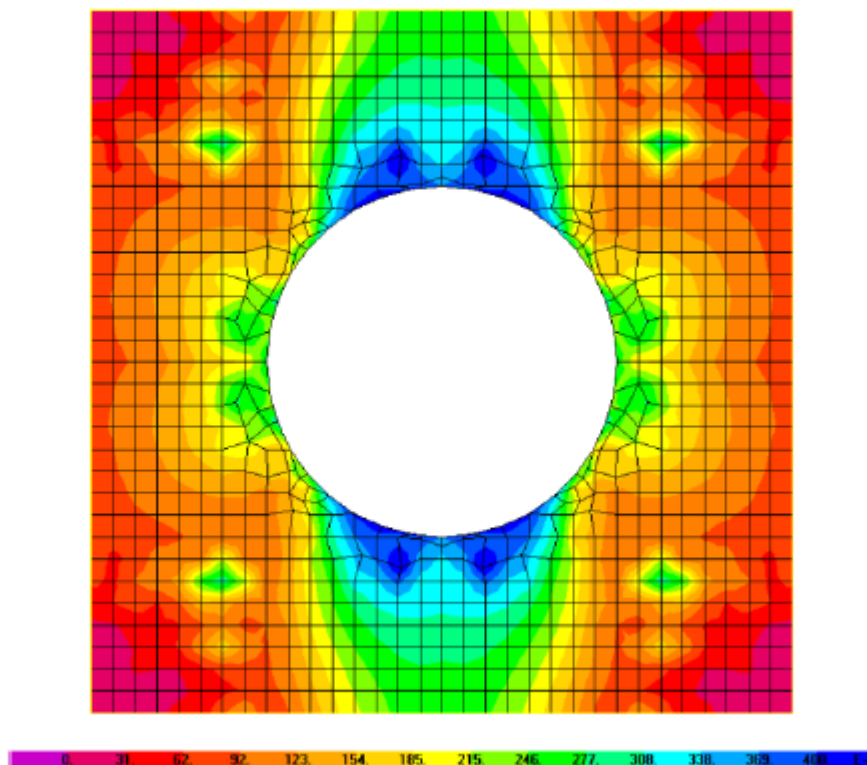
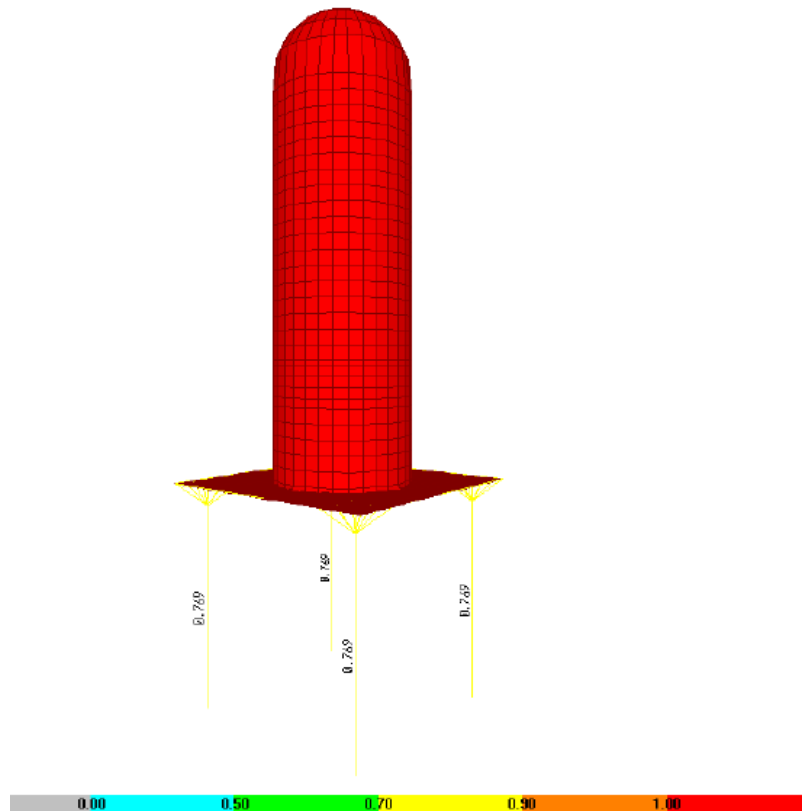
ATM has been selected by the client to undertake Civil/Structure/Building design review and verification as a part of the managing consultant body.

## Methanol Unit Plot Plan



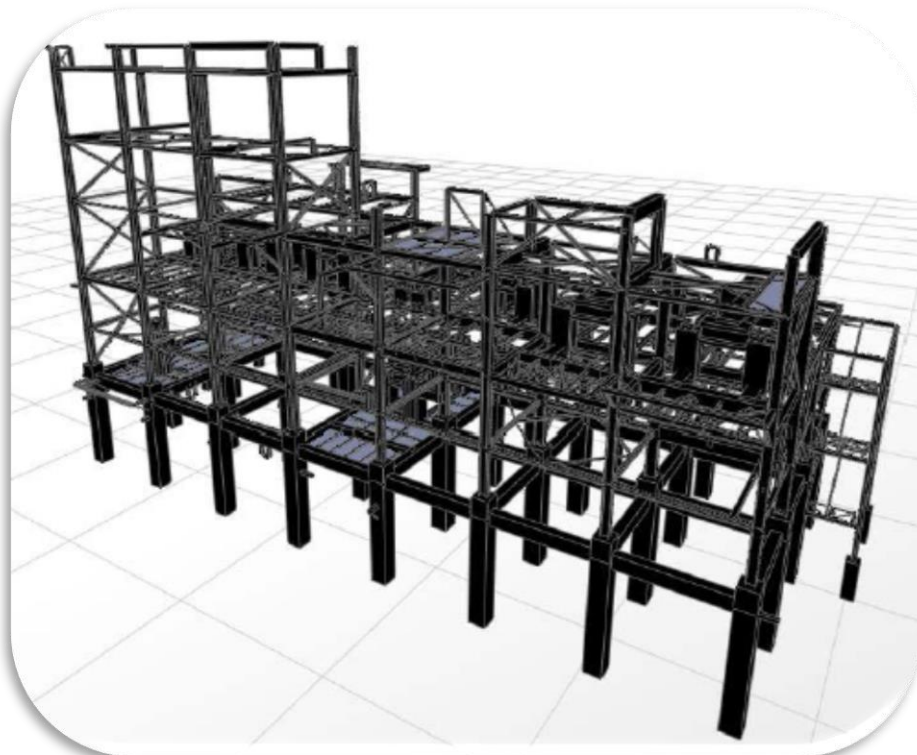
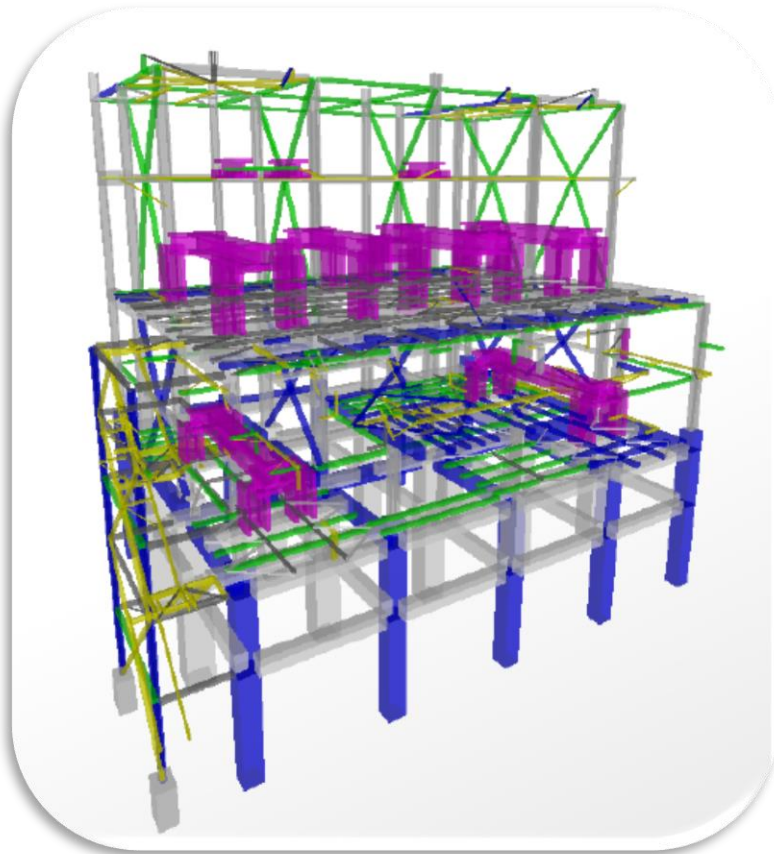
## Equipment Structure & Foundation

Column P-M-M interaction Ratio





## Equipment Structure



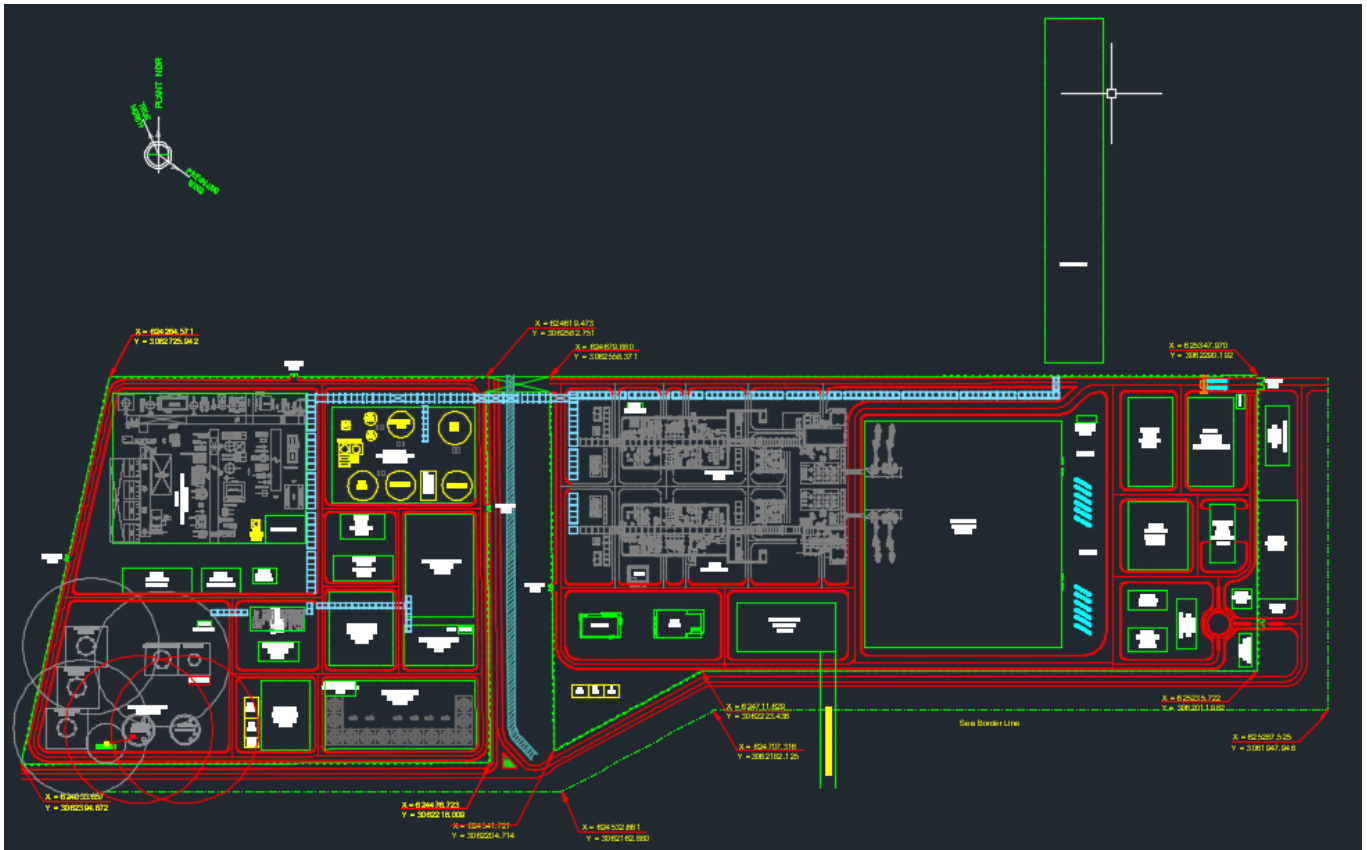
## PDH/PP Kangan

Client: ThinkXpert Company

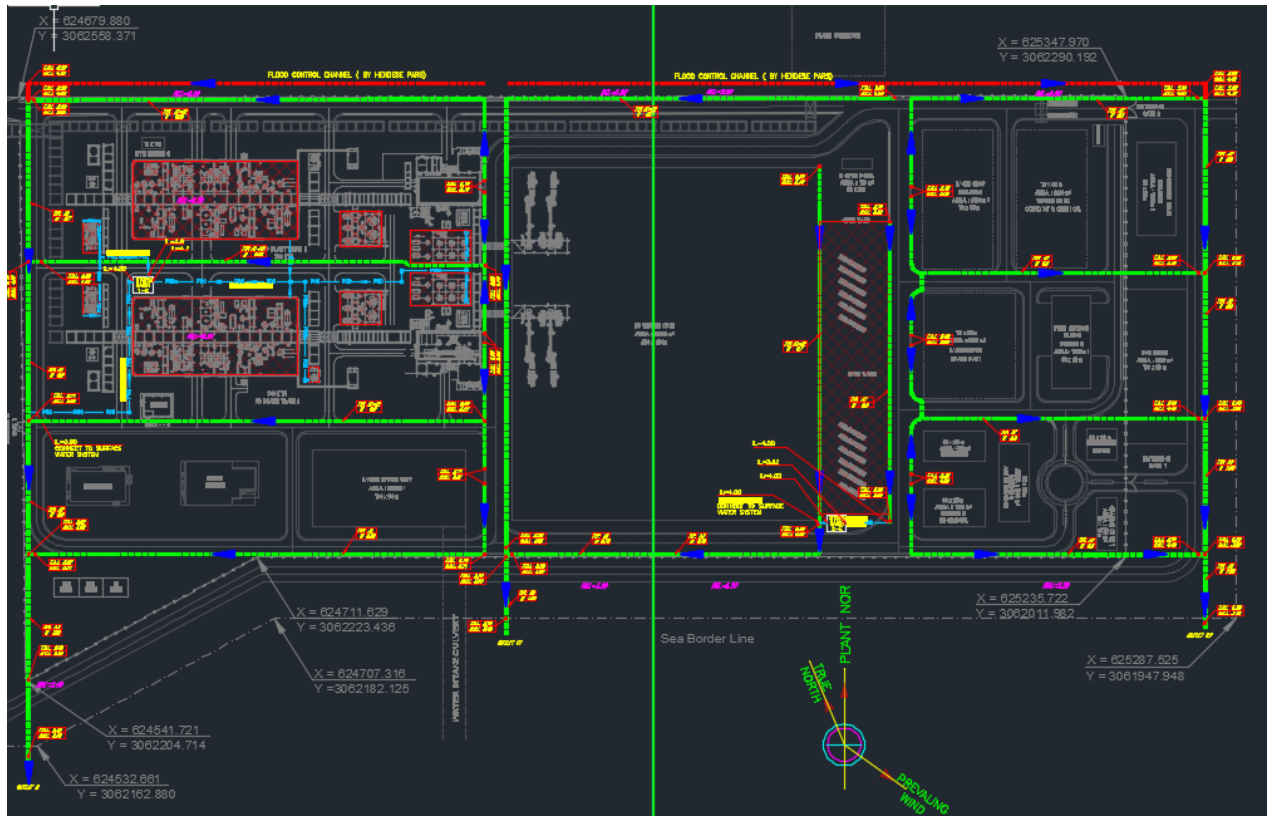
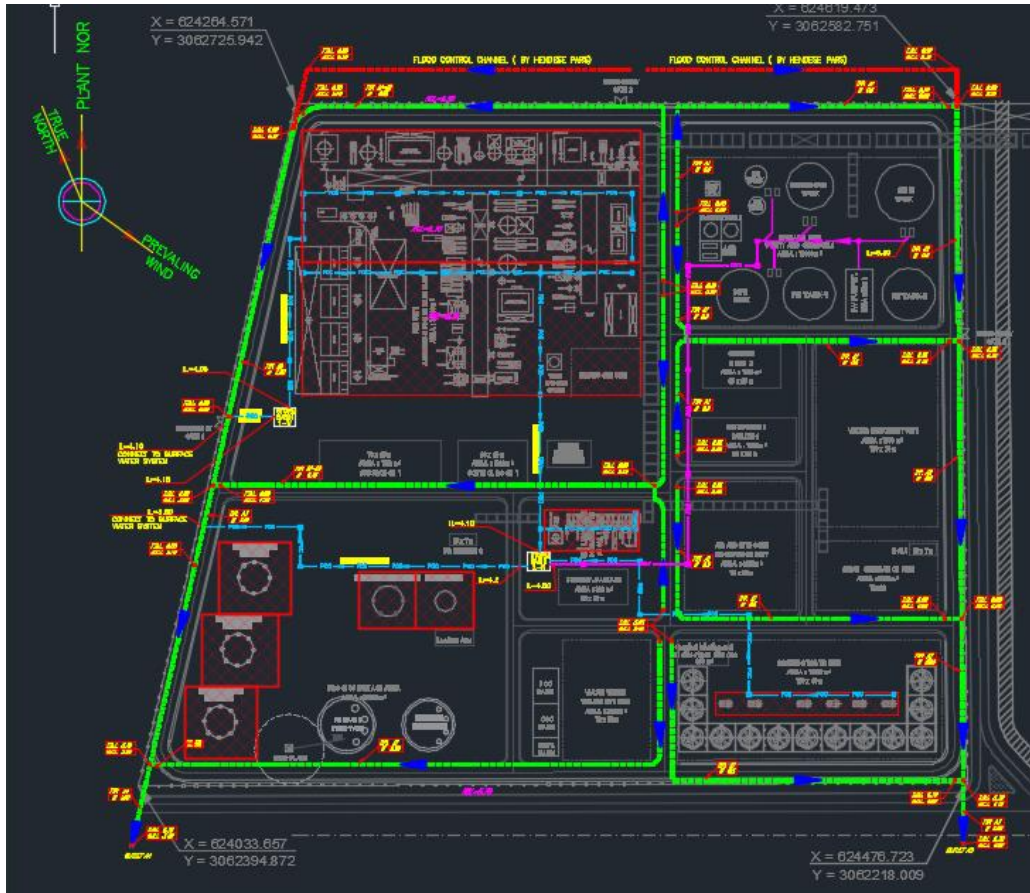
Main Client: Kangan Polymer Development Company

Date: 2020~On-going

PDH/PP in Kangan is a petrochemical complex and ATM is a part of management consulting in early work packages including site preparation land acquisition and ground improvement for this mega project. ATM also prepares annexes to EPC tender packages.

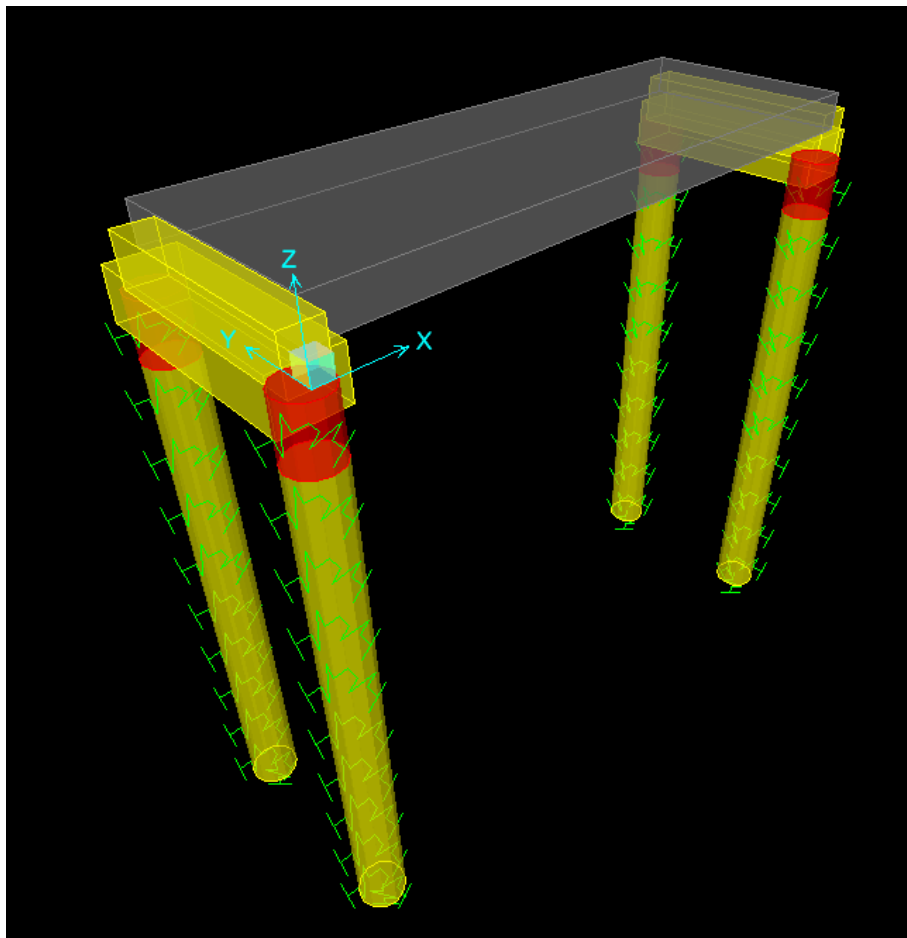
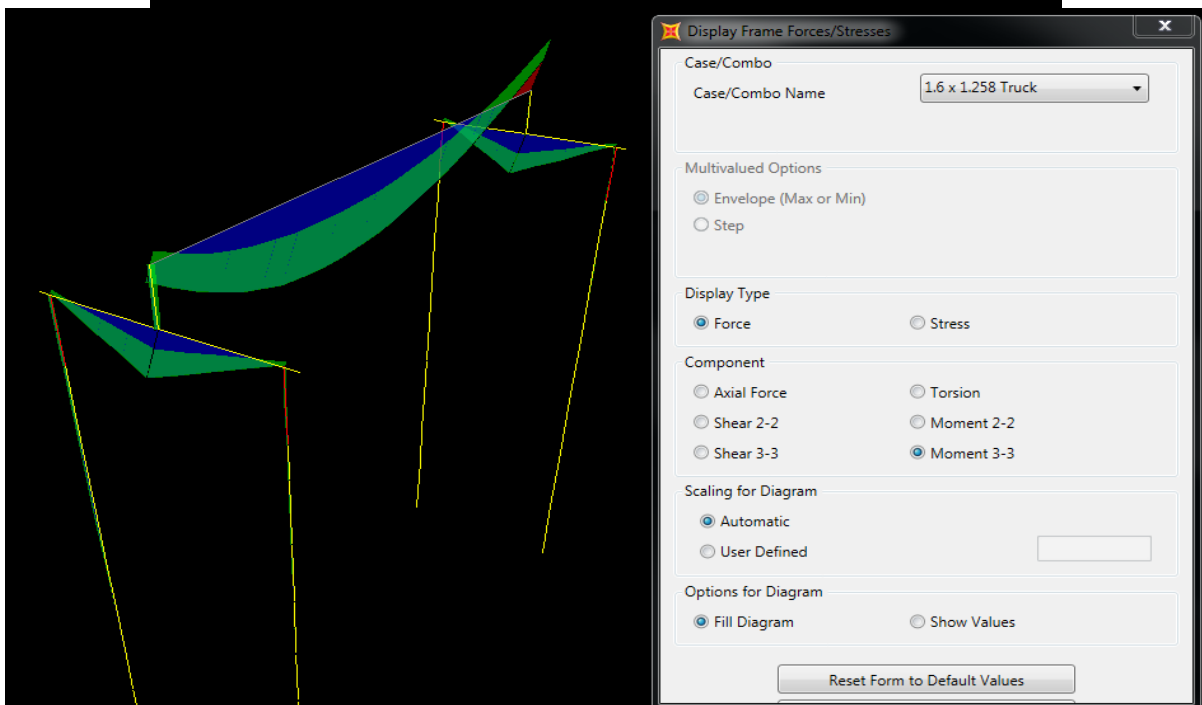


### Drainage system





### 3D Model of Bridge in SAP2000

**Display Frame Forces/Stresses**

Case/Combo  
Case/Combo Name: 1.6 x 1.258 Truck

Multivalued Options  
 Envelope (Max or Min)  
 Step

Display Type  
 Force  
 Stress

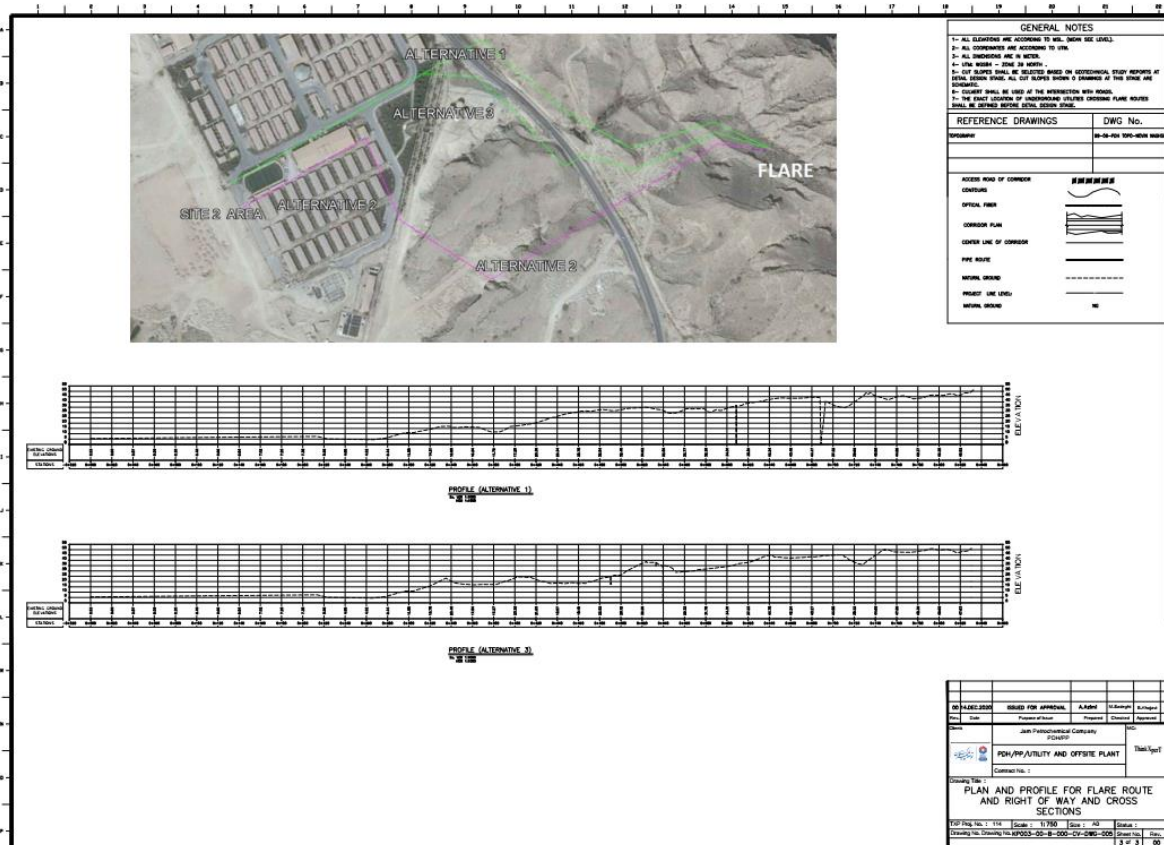
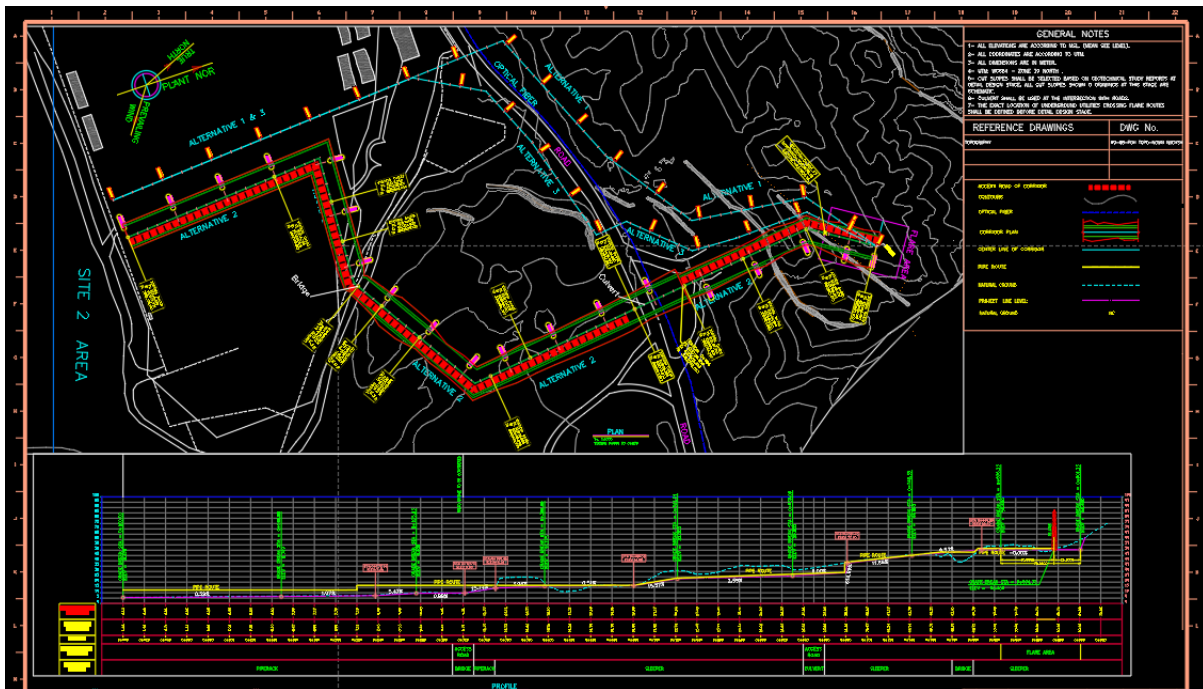
Component  
 Axial Force  
 Torsion  
 Shear 2-2  
 Moment 2-2  
 Shear 3-3  
 Moment 3-3

Scaling for Diagram  
 Automatic  
 User Defined

Options for Diagram  
 Fill Diagram  
 Show Values

Reset Form to Default Values

Plan and profile for flare route

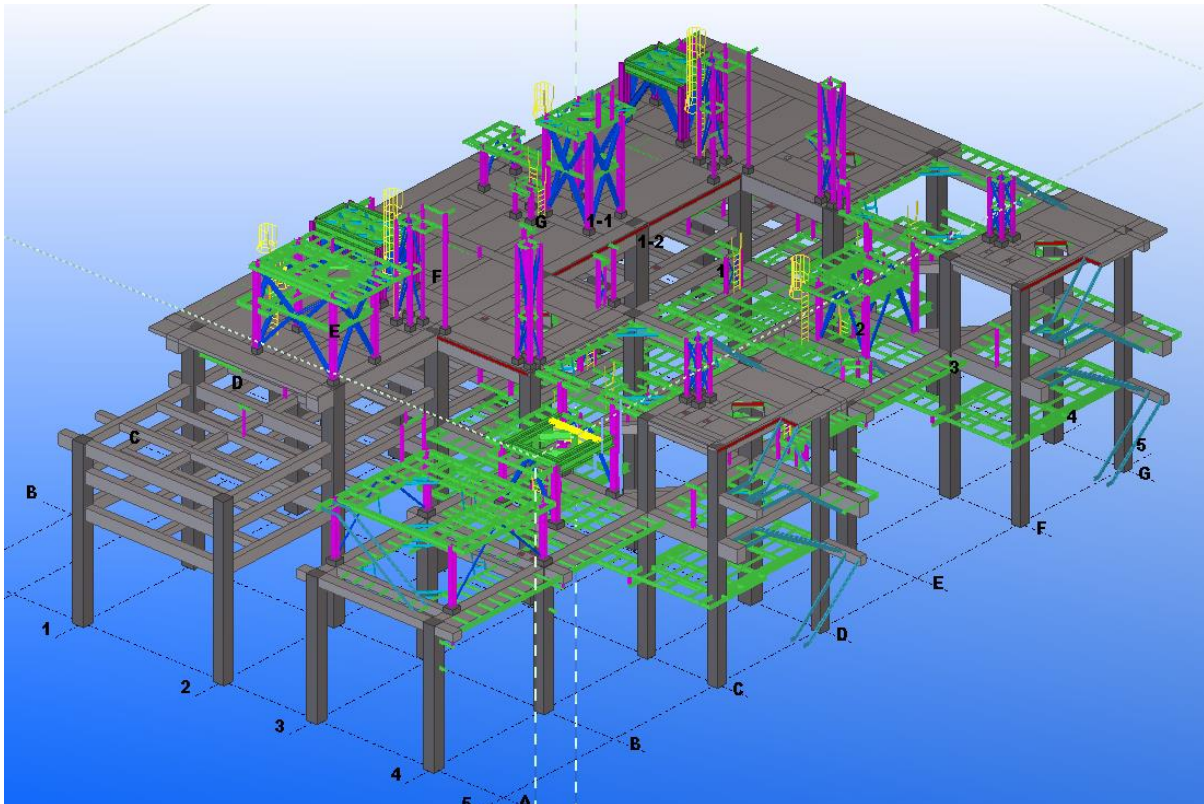


## HDPE Kangan

Client: Energy Industries Engineering & Design (EIED)  
Main Client: Kangan Petrochemical Company  
Date: 2020

Located in Kharg Petrochemical Site, Iran. ATM's scope of work was to provide structural design services for blast-proof control building and foundation.

## Equipment Structure Tekla Model



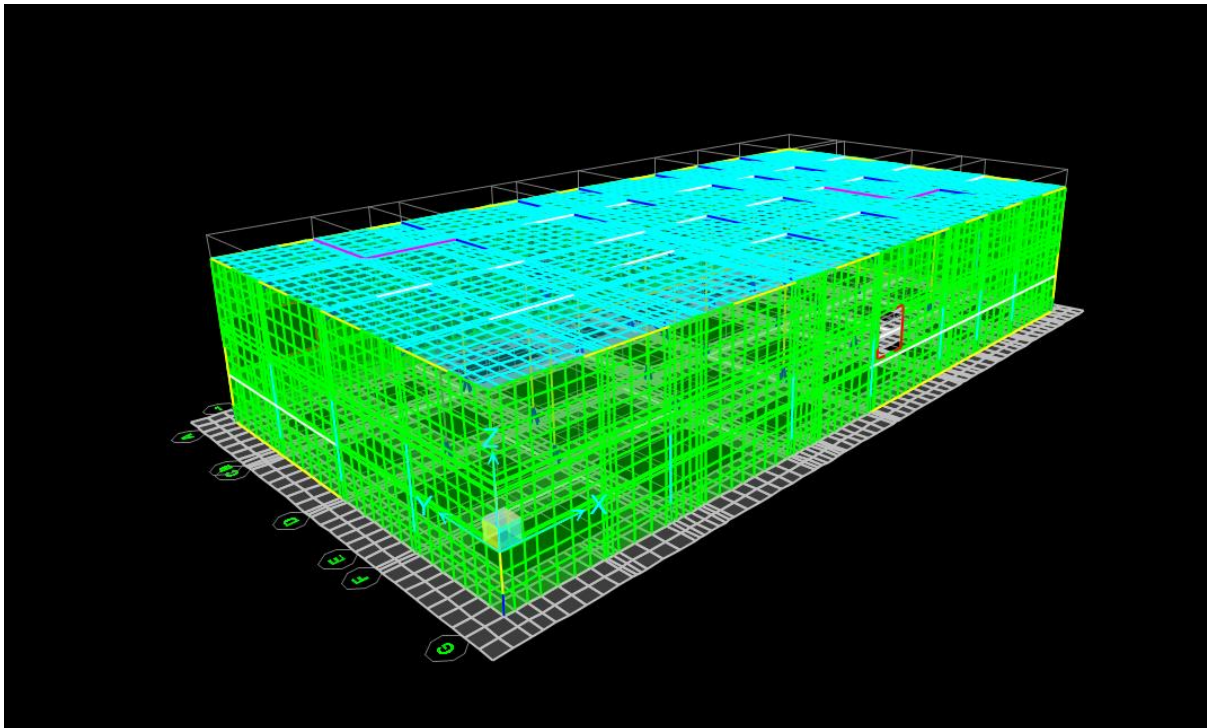


## Control Building of Kharg Project

Client: Namvaran Consulting Engineers  
Main Client: Kharg Petrochemical Company  
Date: 2020~On-going

Located in Kharg Petrochemical Site, Iran. ATM's scope of work was to provide structural design services for blast-proof control building and foundation.

### Control Building

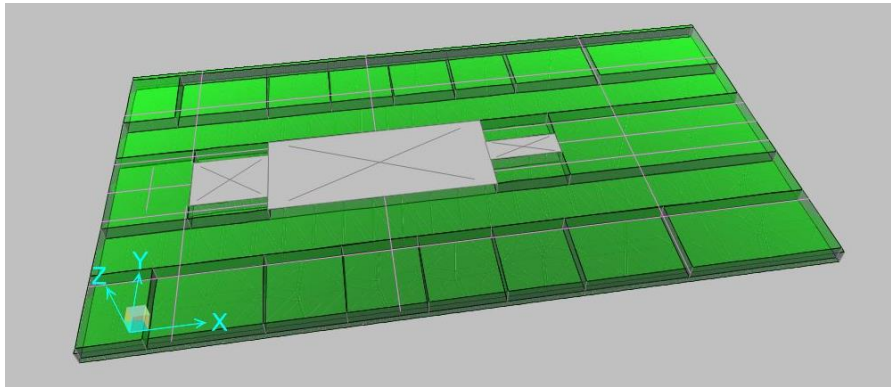


## Sepehr-Jufair Oil Field

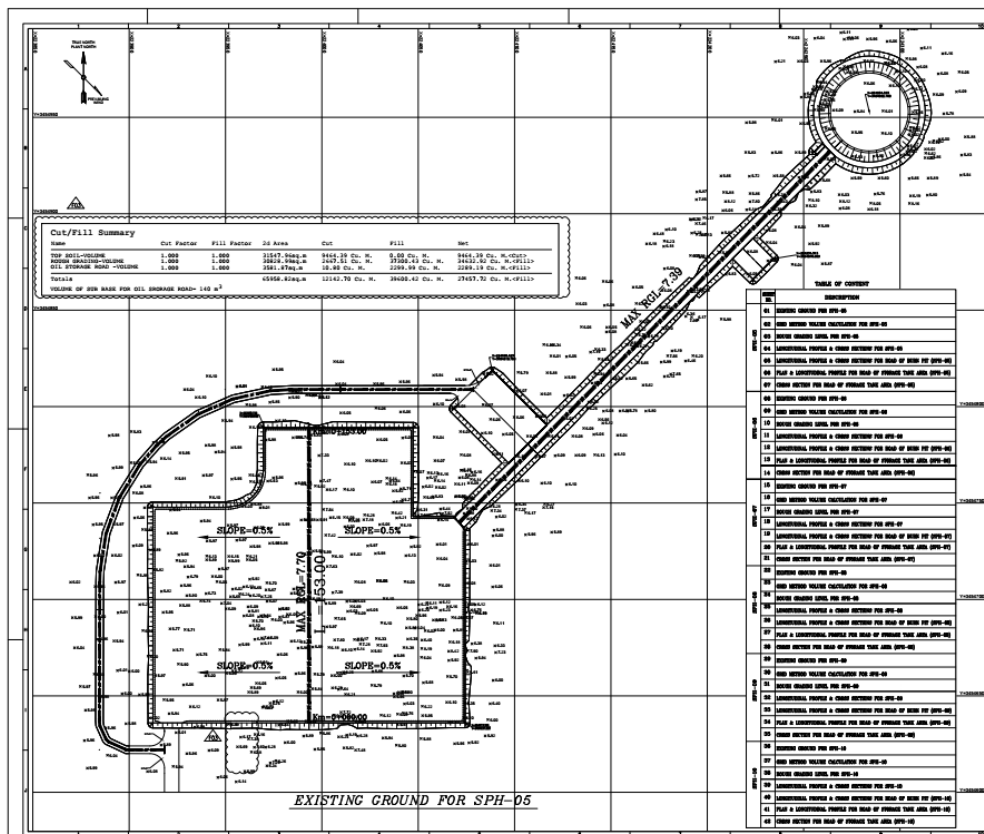
Client: Namvaran Consulting Engineers  
Main Client: Pasargad exploration & production Company  
Date: 2020~On-going

- ❖ Civil design of wellhead area including finish grading and drainage design
- ❖ Structural design of wellhead foundation including rig foundation and other tank and vessel foundation and underground structure and foundation.

### Rig foundation design on SAFE



### Rough grading



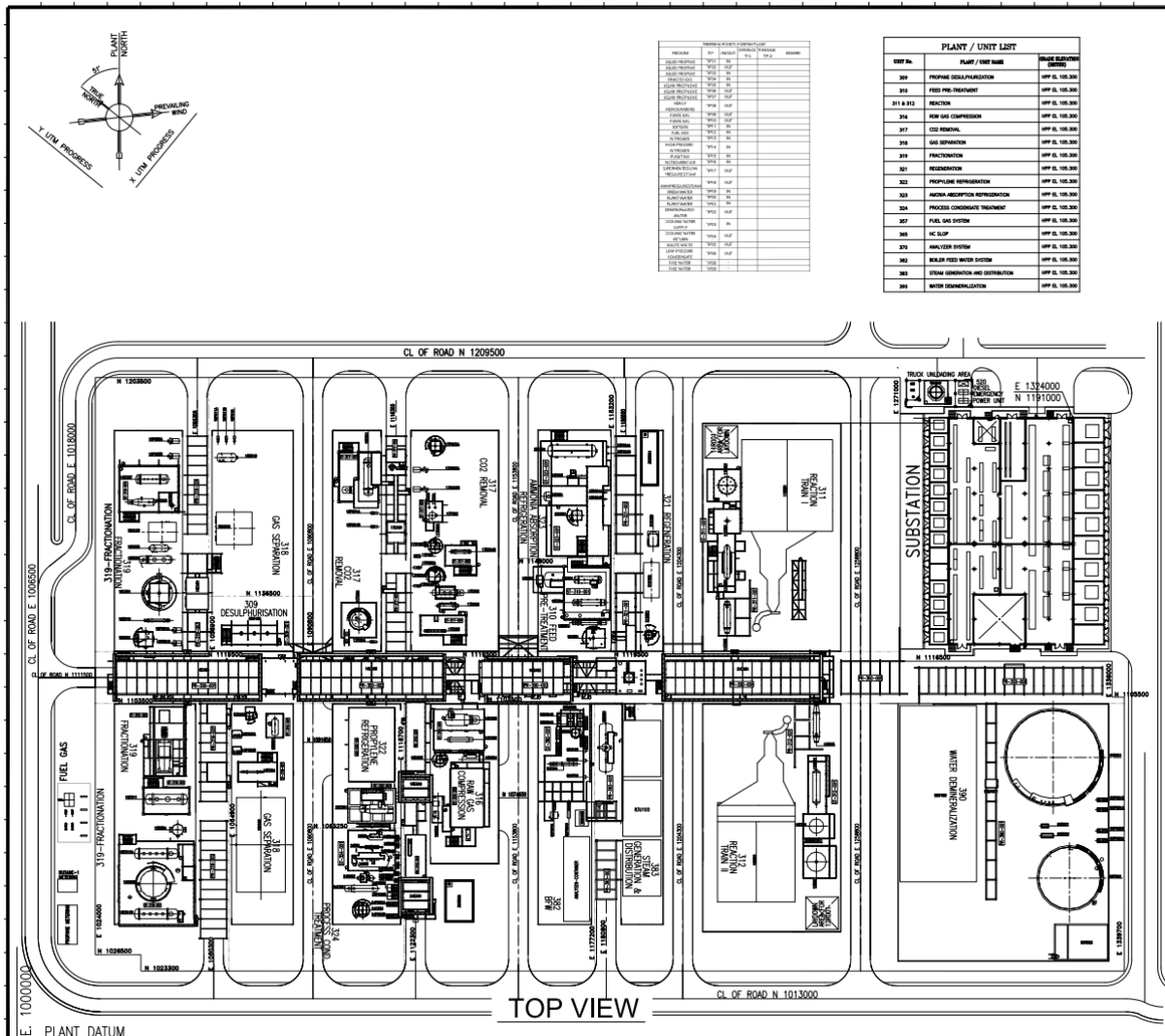
## PDH/PP Complex

Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)  
Main Client: Mehr Petro Kimia Company  
Date: 2020~On-going

This project has started recently and ATM has been selected by the client to undertake the civil and structural design of the PDH/PP petrochemical complex.

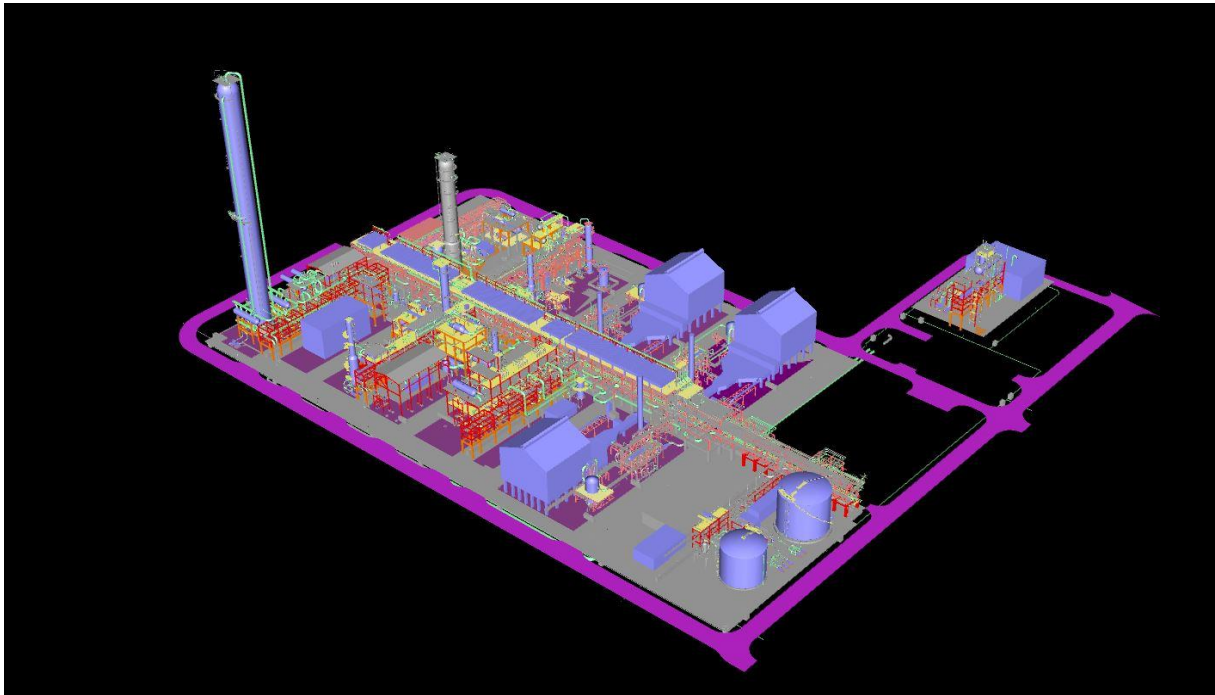
- ❖ Civil Underground, Composite, Drainage System & Paving
- ❖ Foundation Design for Static and Dynamic Equipment
- ❖ Pipe Racks
- ❖ Equipment Structure and Foundation
- ❖ ....

## Plot plan

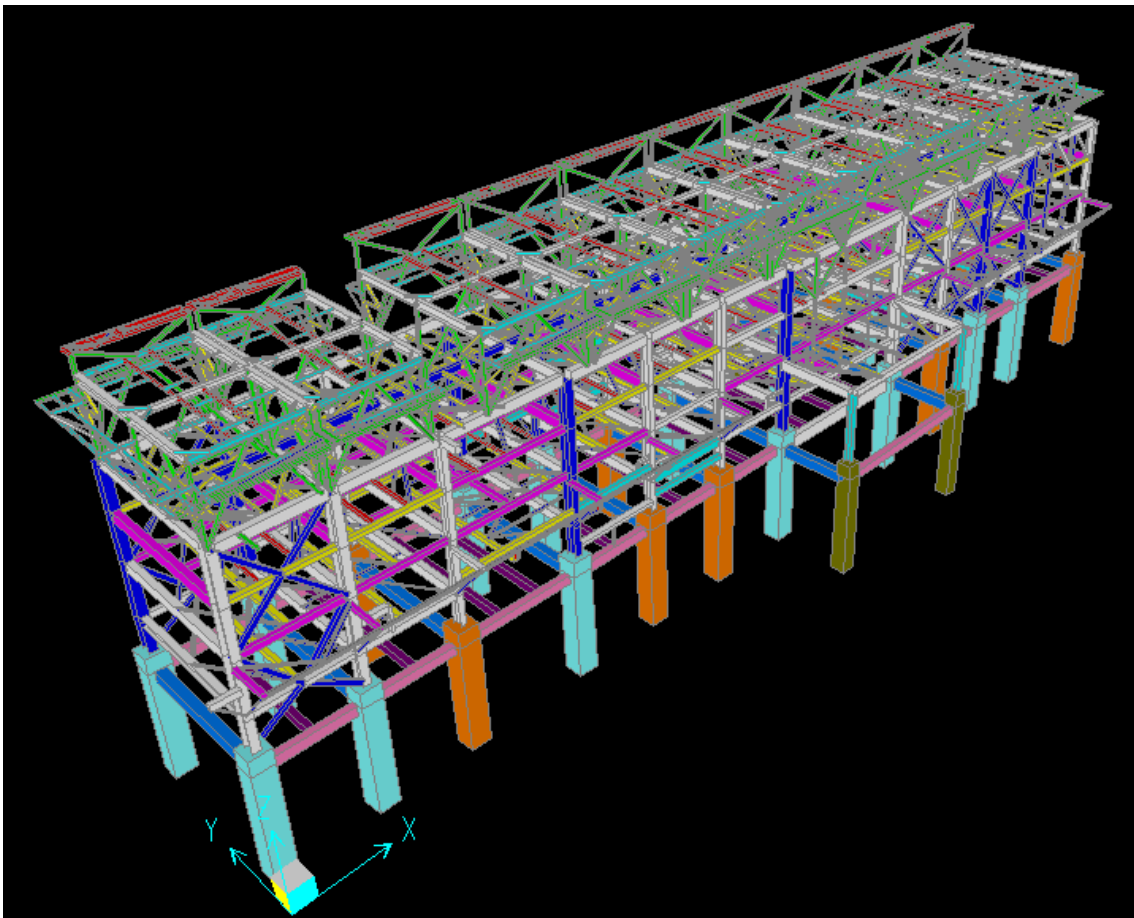




### 3D Model of Site



### 3D Model of Structure in SAP2000

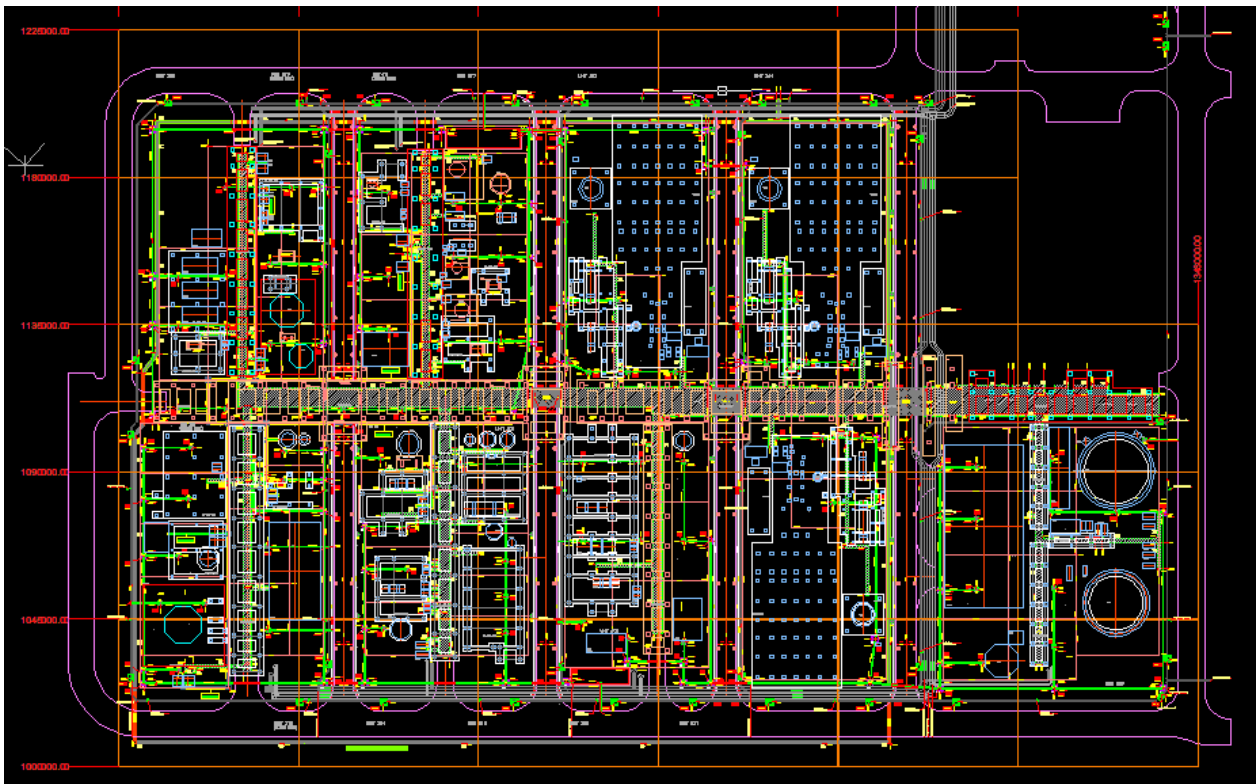




### 3D Model of Underground Composite

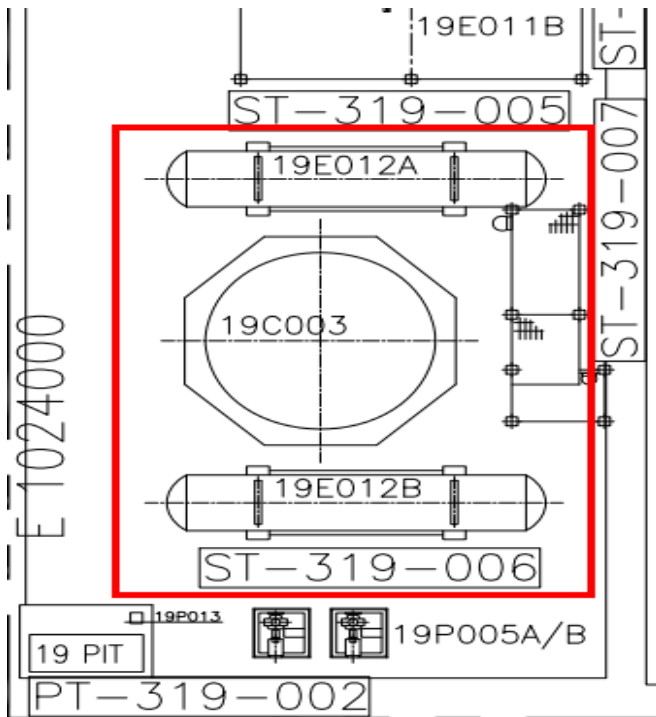


### Surface Drainage And Underground Composite

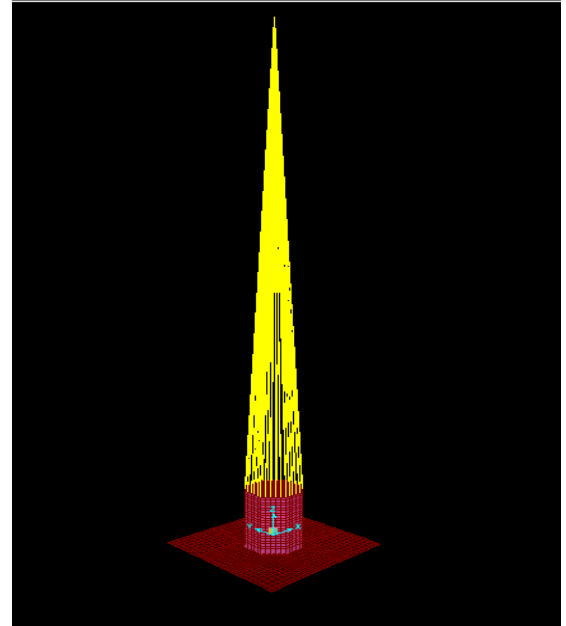




Tower Foundation



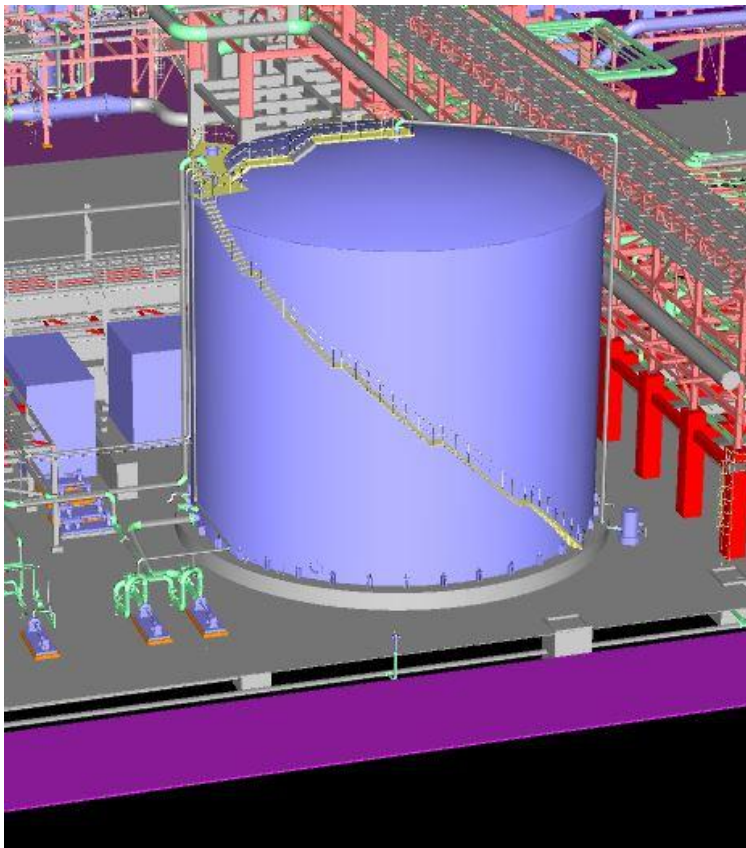
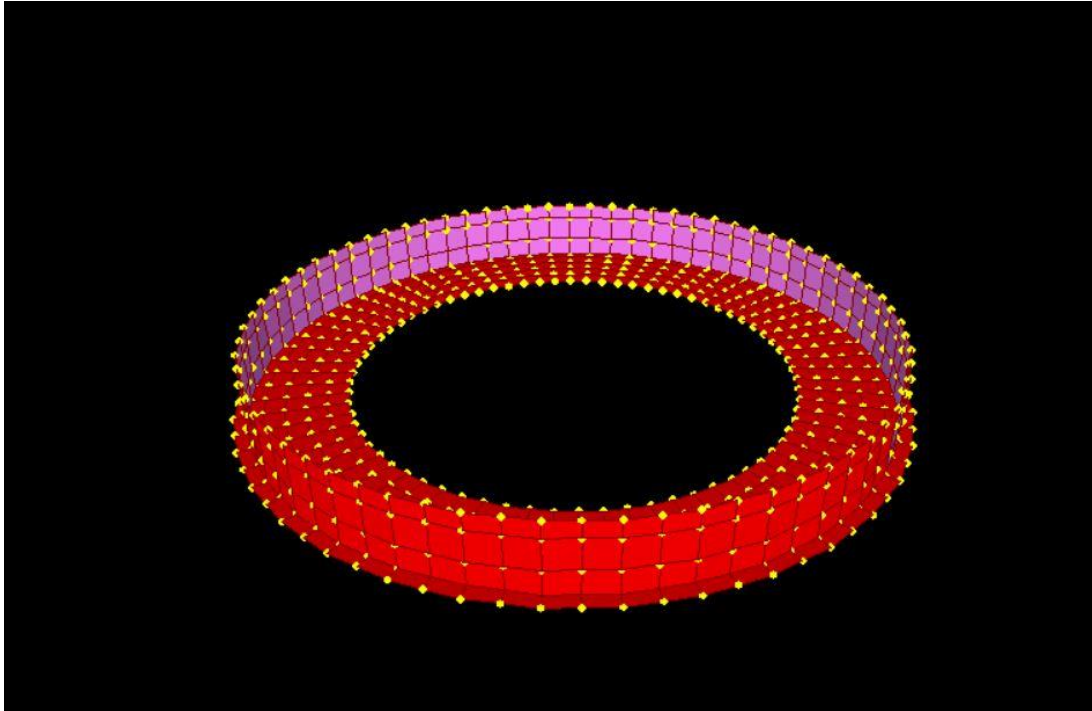
Tower Sap 3D model



Tower 3D model



## Tank Foundation Model



## Qeshm Oil Terminal Project

Client: Shargan

Main Client: Qeshm Oil Investment Co.

Date: 2020~On-going

Qeshm Oil Terminal Project was comprising multiple EPC contracts to build a tank farm complex with all related utility and ancillary items (13 storage tanks with a total capacity of 6.4 mil. barrels). We provided core services for civil /structural building to Shargan consulting engineers as an umbrella company that gives managing consultancy services to the project owner.

Our scope of consultancy was but not limited to verification of overall plot plan, finished grading plans, surface drainage systems against civil engineering codes and project specifications, structural design verification, and building architectural designs against local regulations and project specifications.

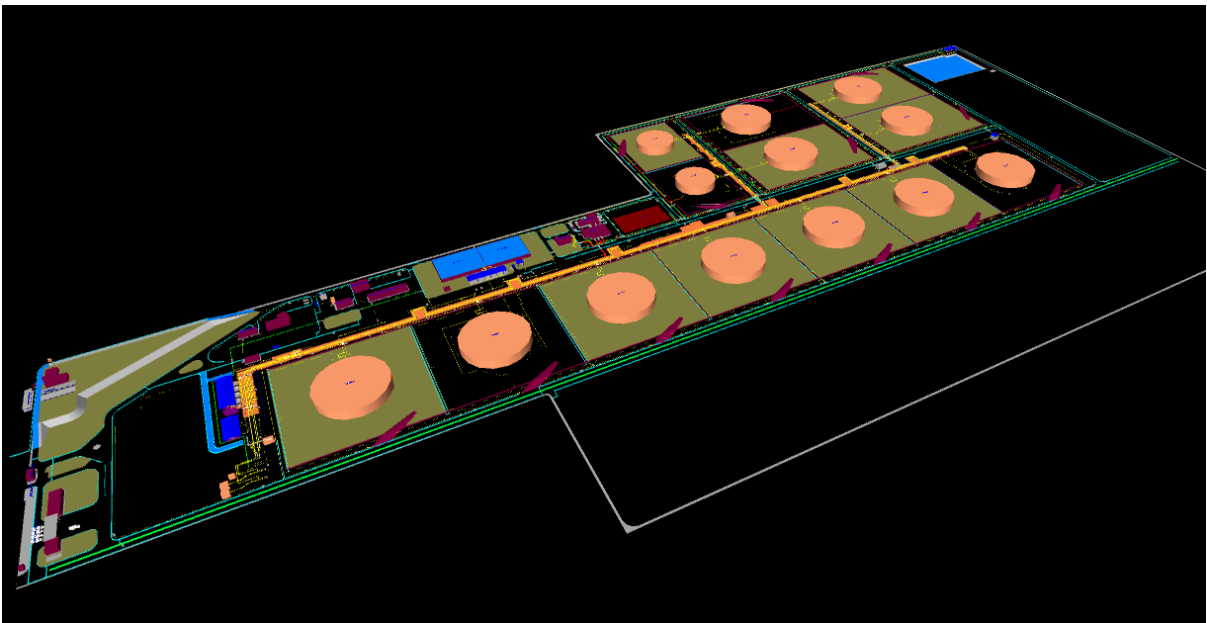






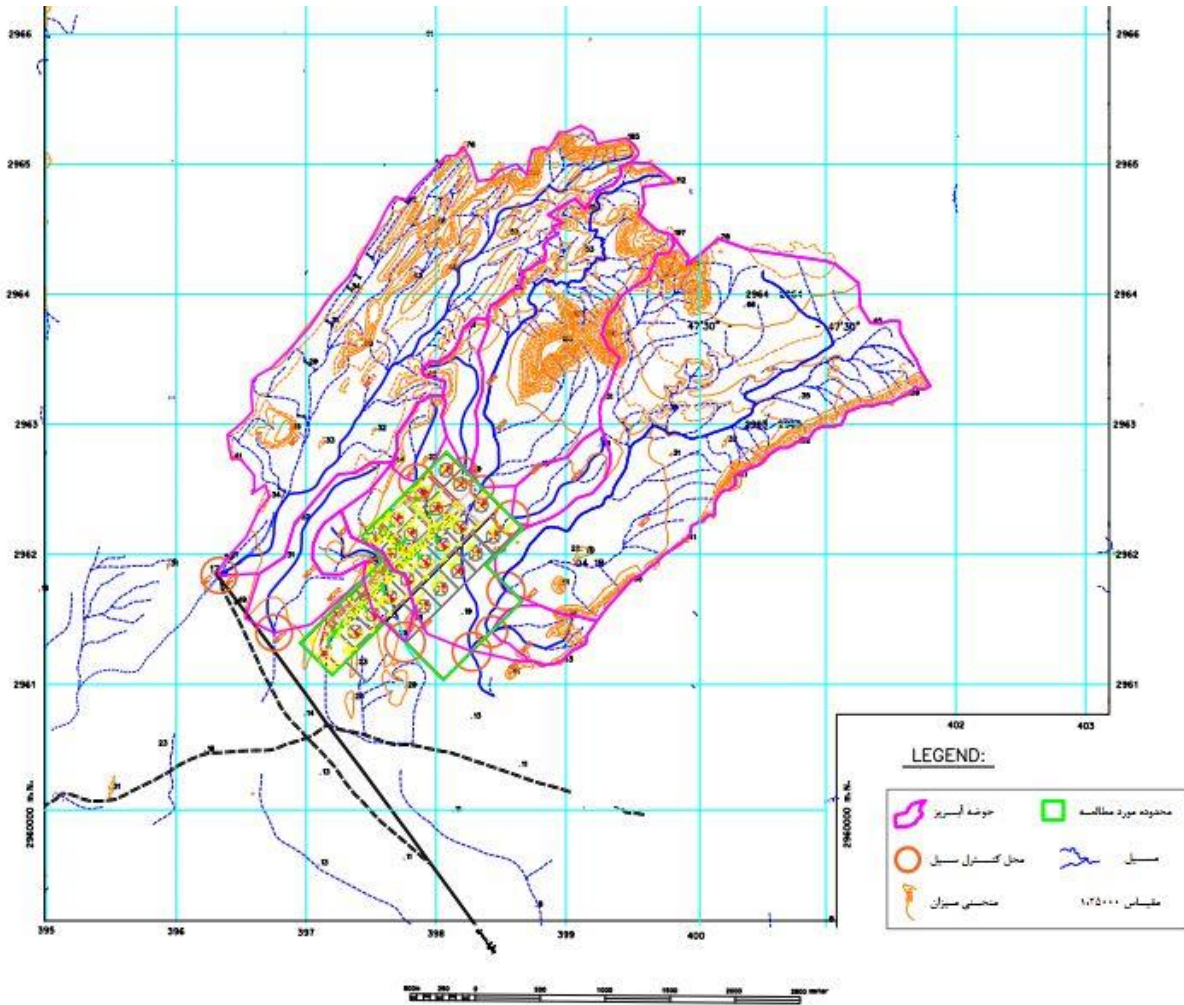


### 3D Model of Site

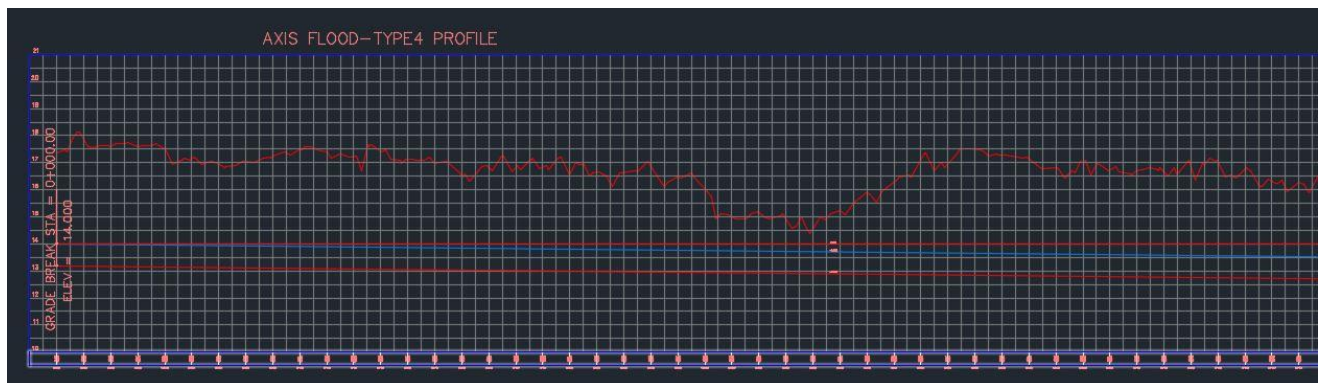




## Flood Control System



نقشه موقعیت مکانی حوضه آبریز آبراهه‌های مشرف و مجاور سایت



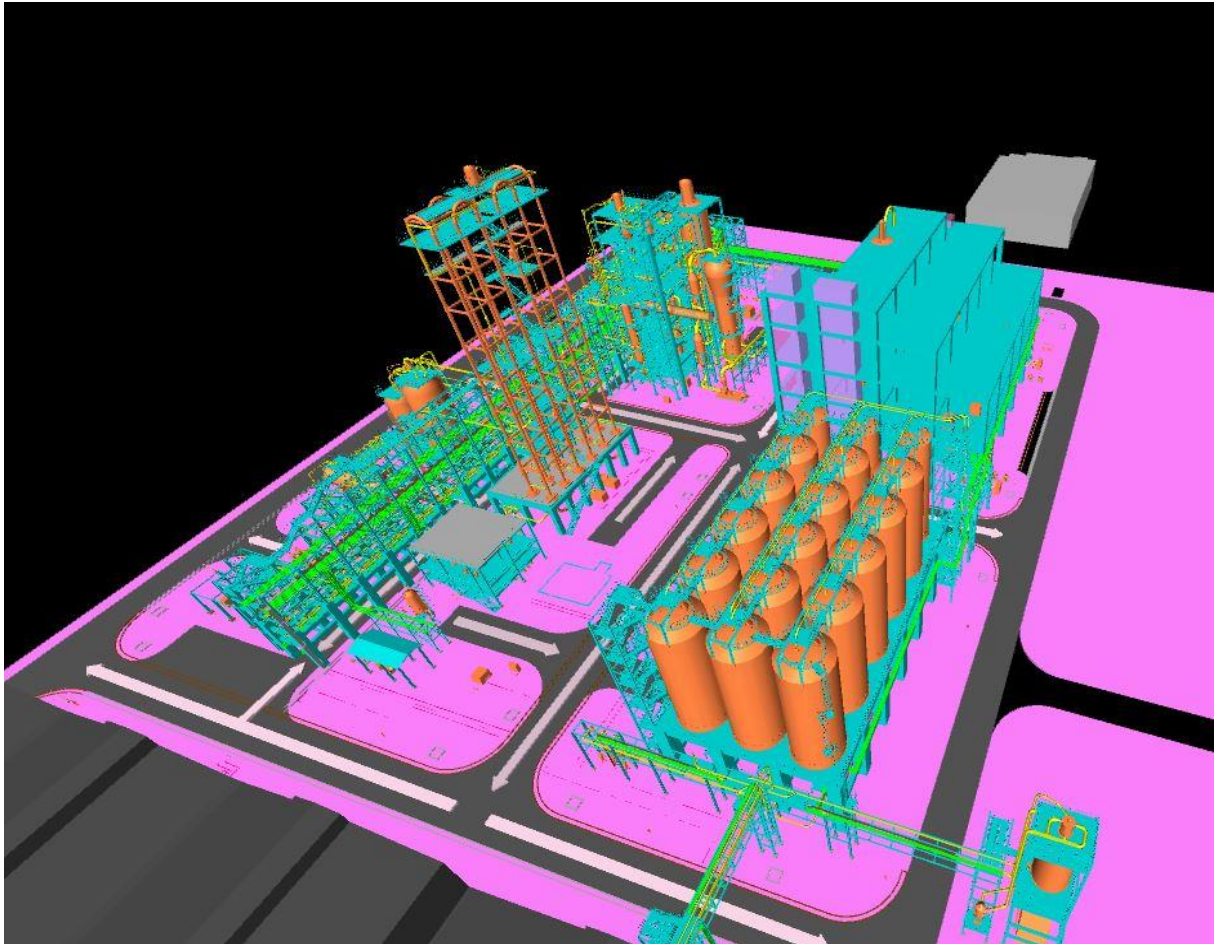


## Pelletizer Building

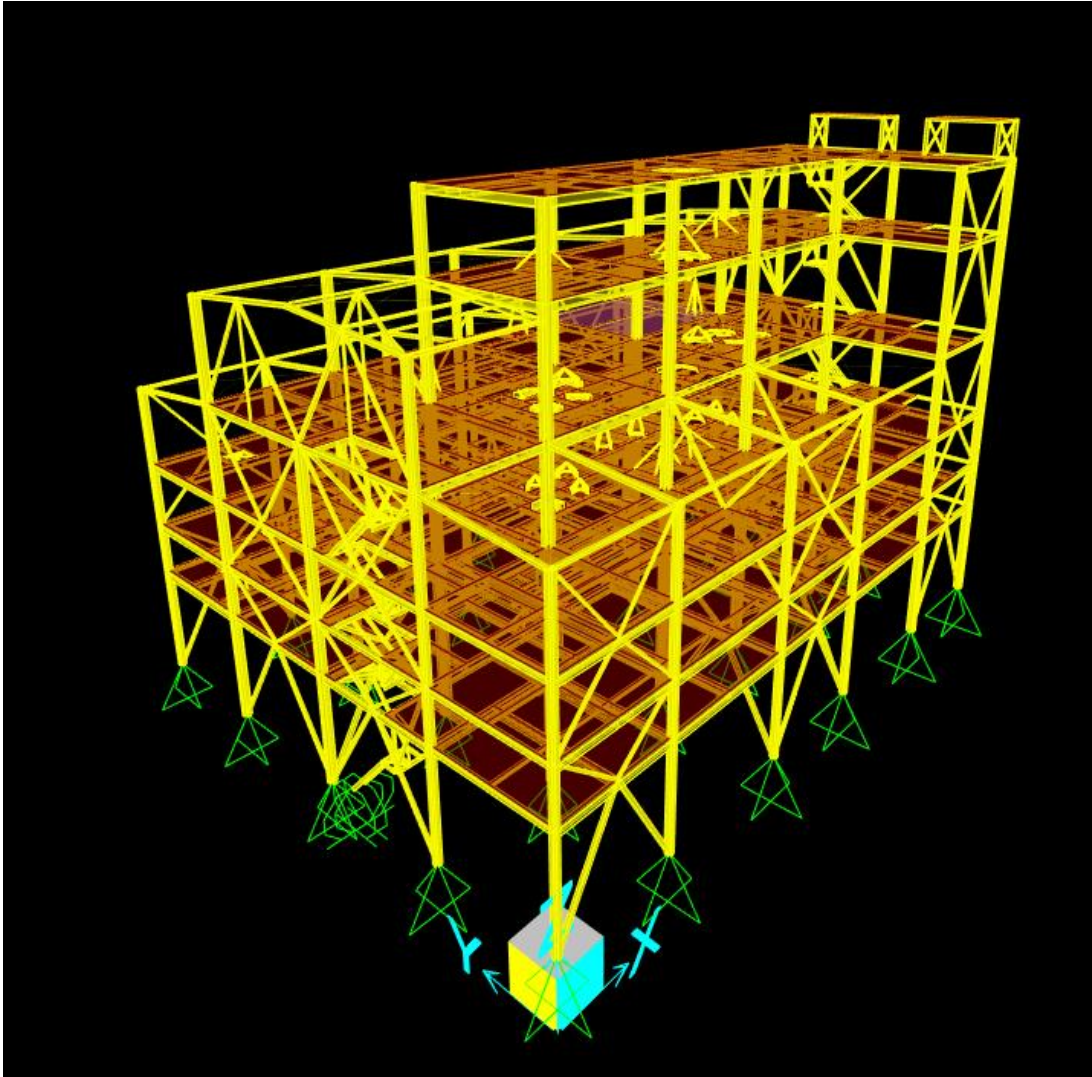
Client: Namvaran  
Main Client: Mehr Petro Kimia  
Date: 2021~On-going

Mehr Petro Kimia Petrochemical Complex is located in the Phase 2 of Assaluyeh Petrochemical. This complex has 2 process units PDH and PP, which is the final product that can be sold PP in different grades. Also, some utility units are located on the site of this complex.

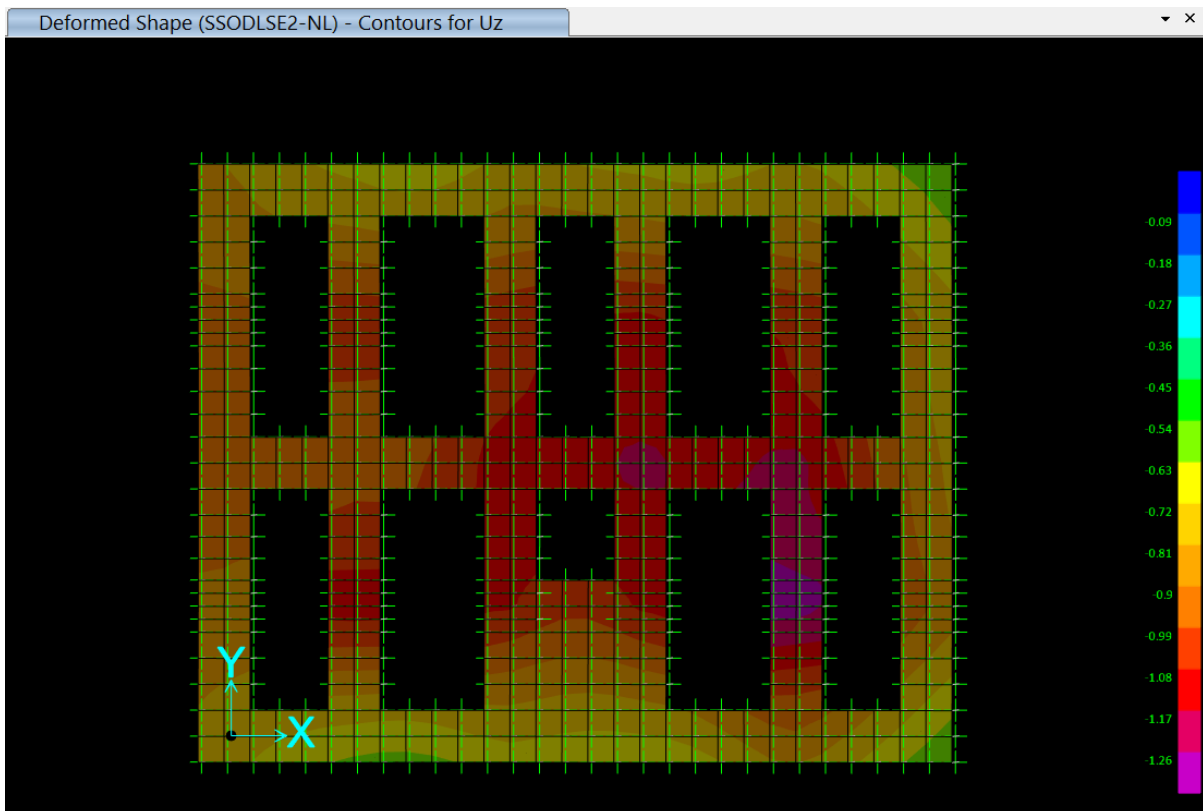
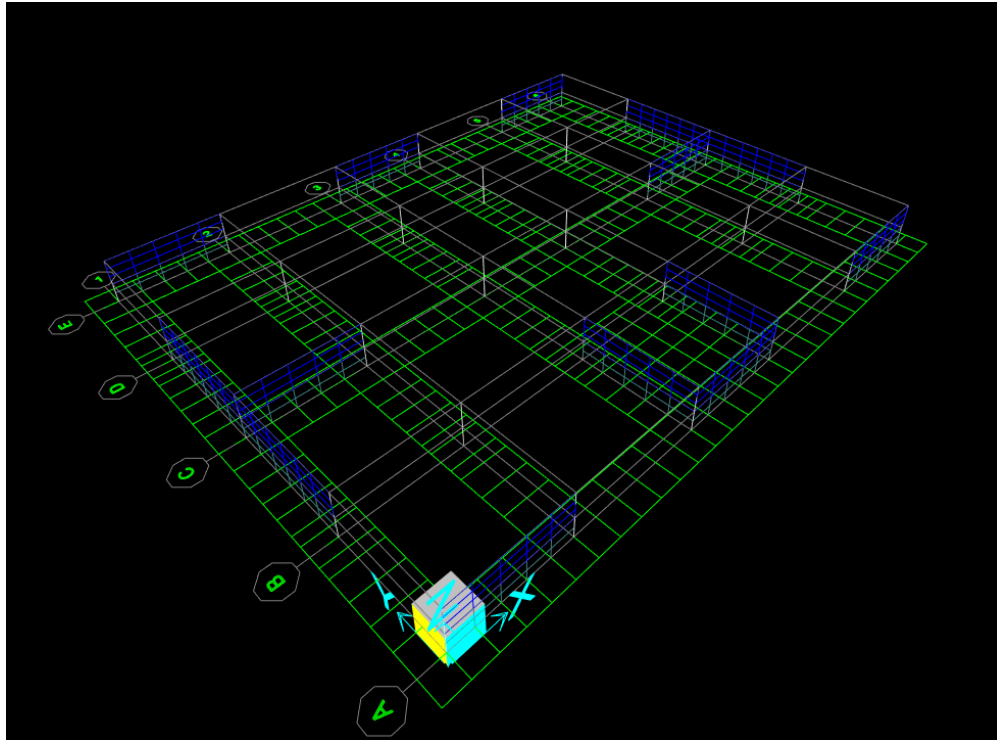
### 3D Model of Site



### 3D Model of Structure in SAP2000



## Foundation Model





## Kimia Sanat Mapna, Methanol

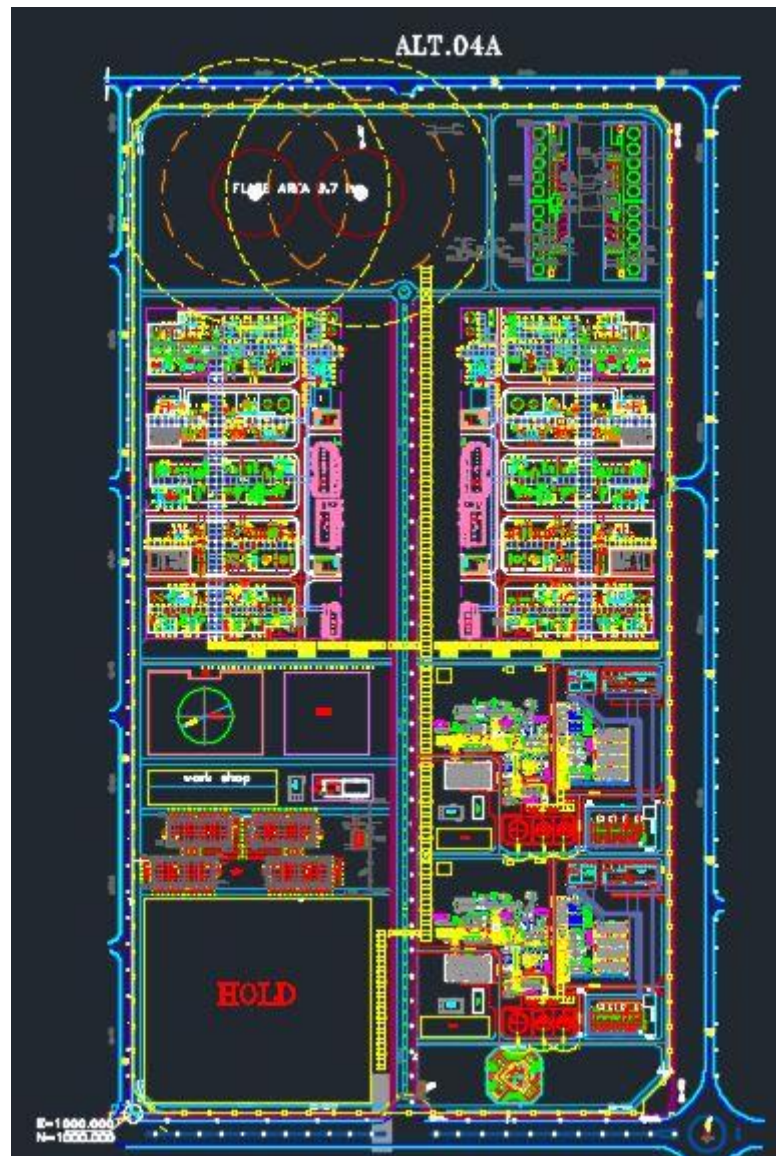
Client: Namvaran Pazhouhesh va Tose-a (Namvaran P&T)  
Main Client: Bakhtar Group  
Date: 2021~On-going

Kimia Sanat Mapna, Methanol is located in Chabahar, Mokran Petrochemical Complex.

Our responsibility in this project is to design for surface drainage system of the plan

- ❖ Drainage System & Paving Plot Plan

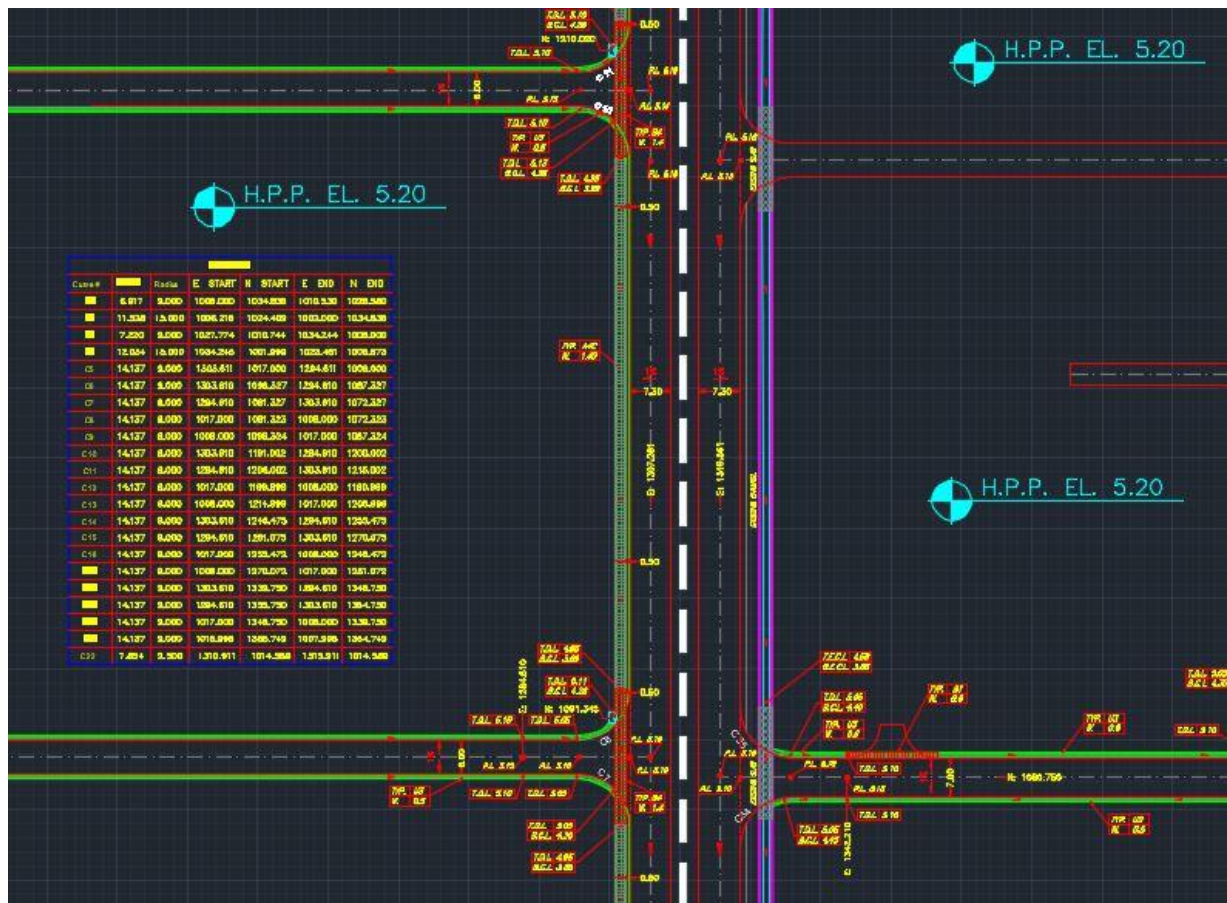
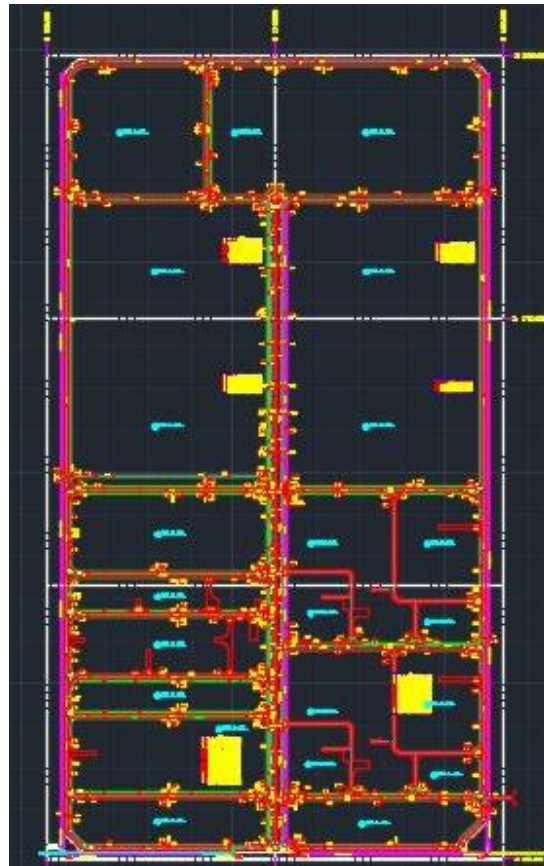
## Plot Plan





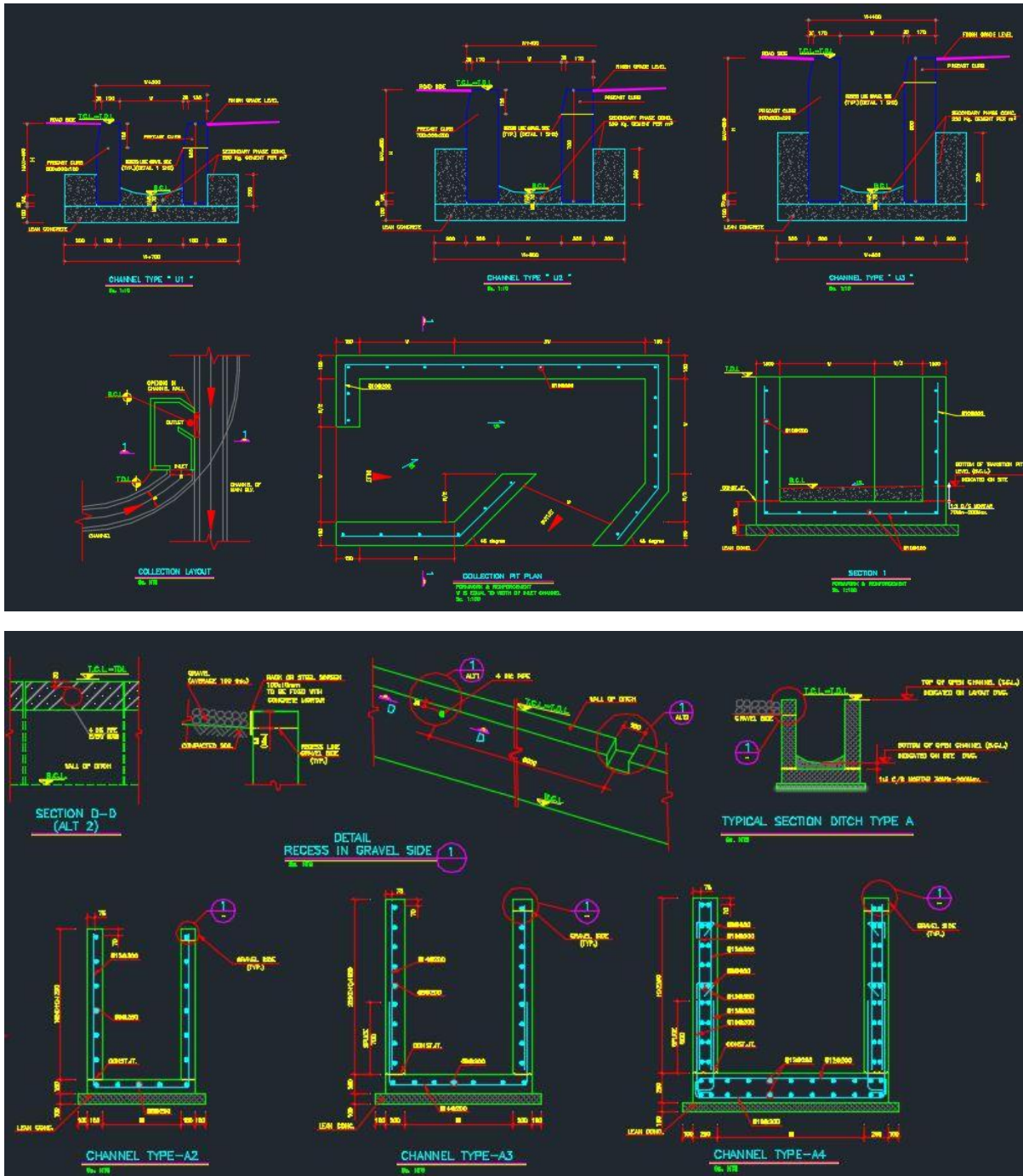


Road and Drainage





## Drainage System Detail



## Eslam Abad Gharb, Methanol

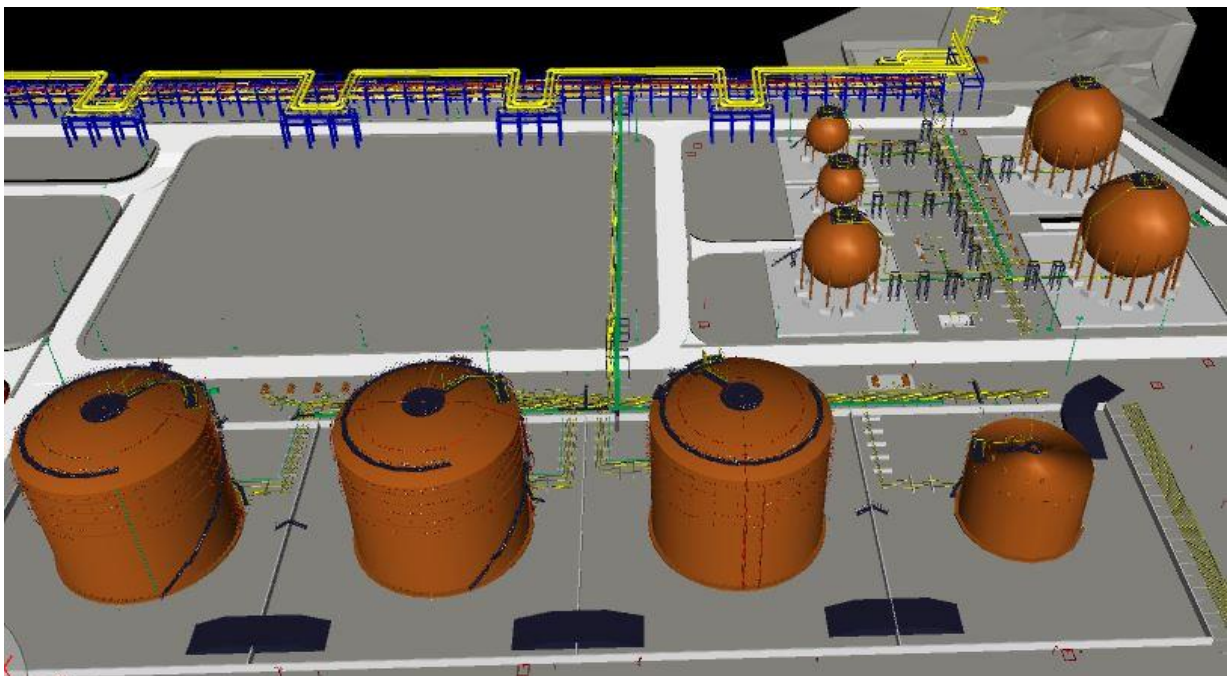
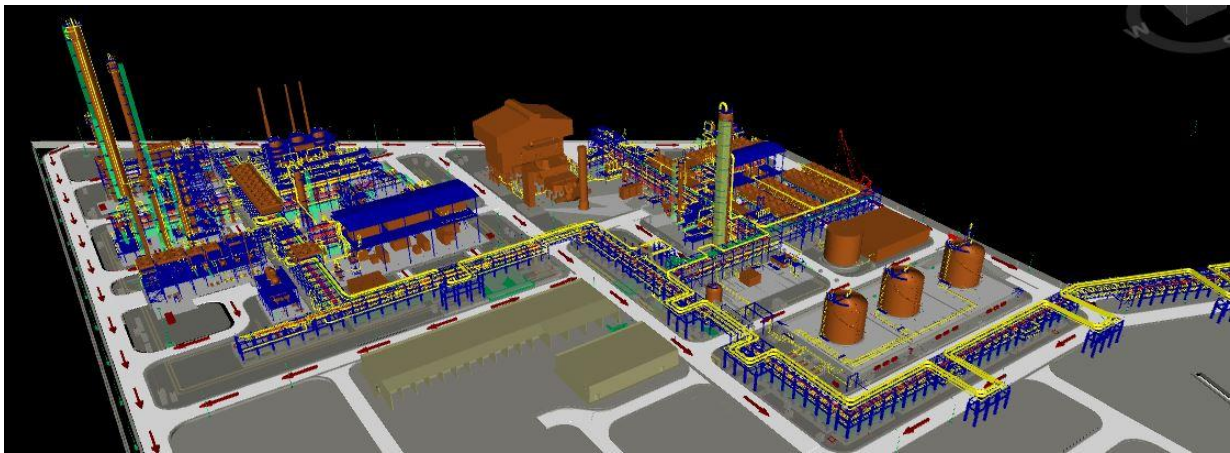
Client: Shargan

Main Client: National Petrochemical Company of Iran (NPC)

Date: 2020~On-going

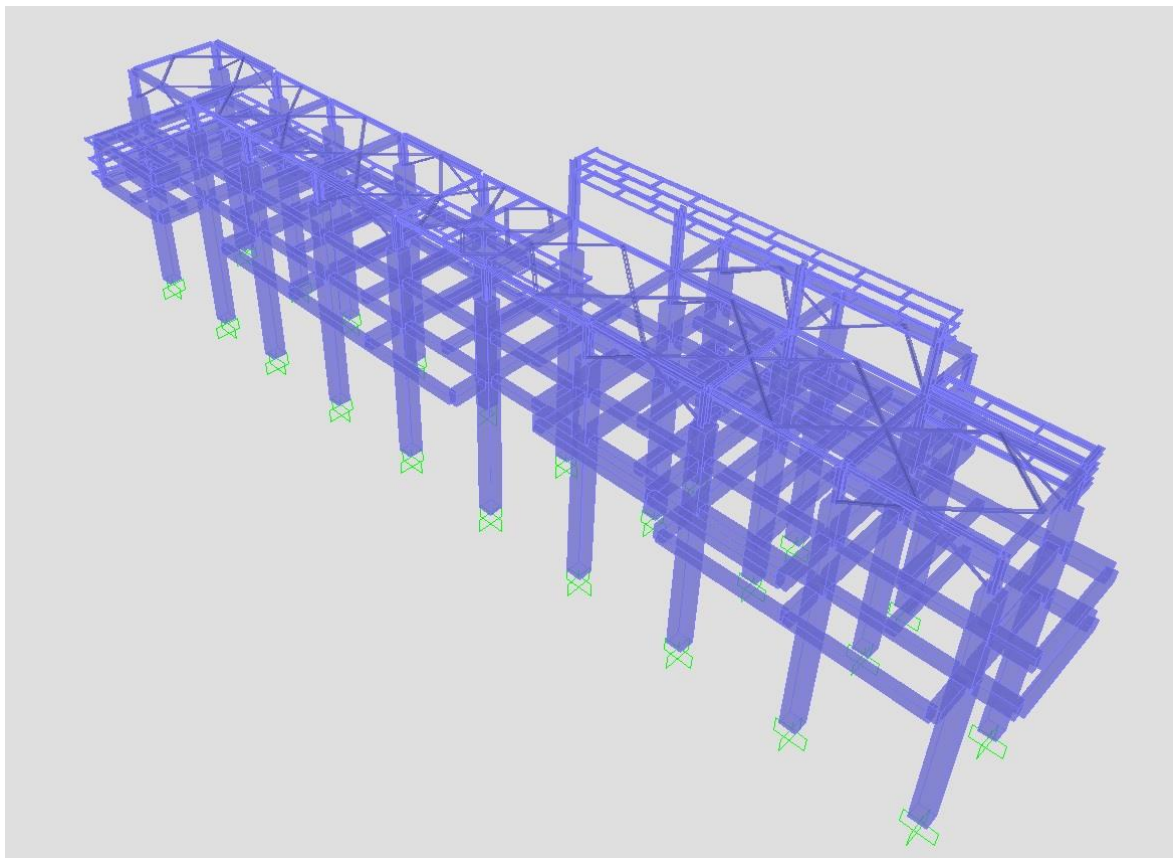
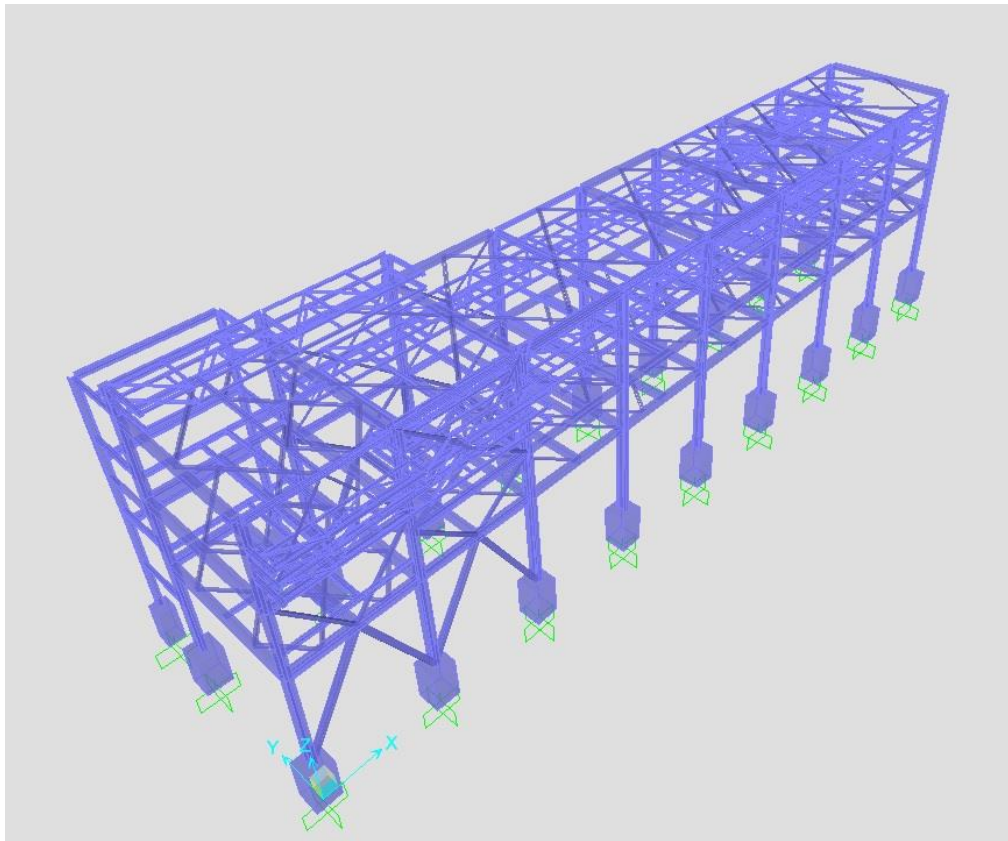
The National Petrochemical Company (NPC) of Iran intends to build a Gas to Propylene (GTP) complex for producing PROPYLENE as PRODUCT. The Plant is to produce 2000MTPD Pure Methanol, using “Natural Gas feedstock”. The PLANT is located in Eslam Abad Gharb, Kermanshah province Iran.

### 3D Model of Site

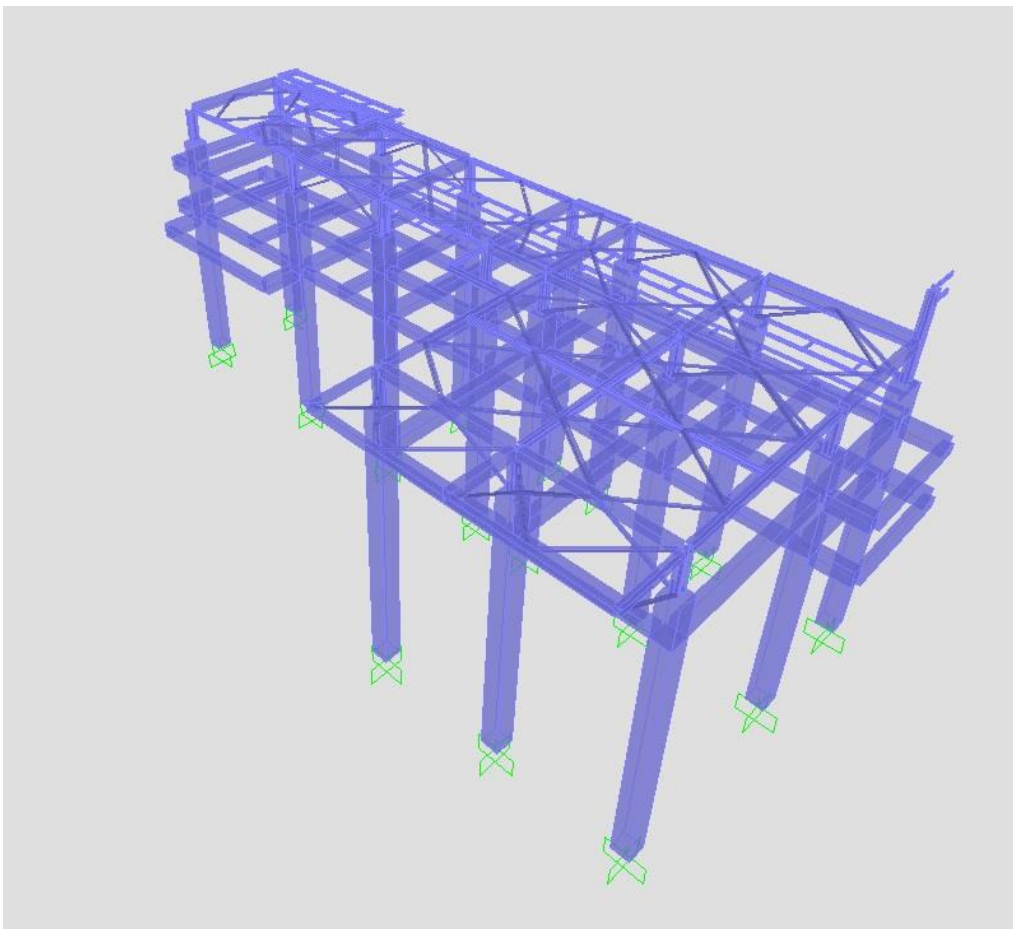
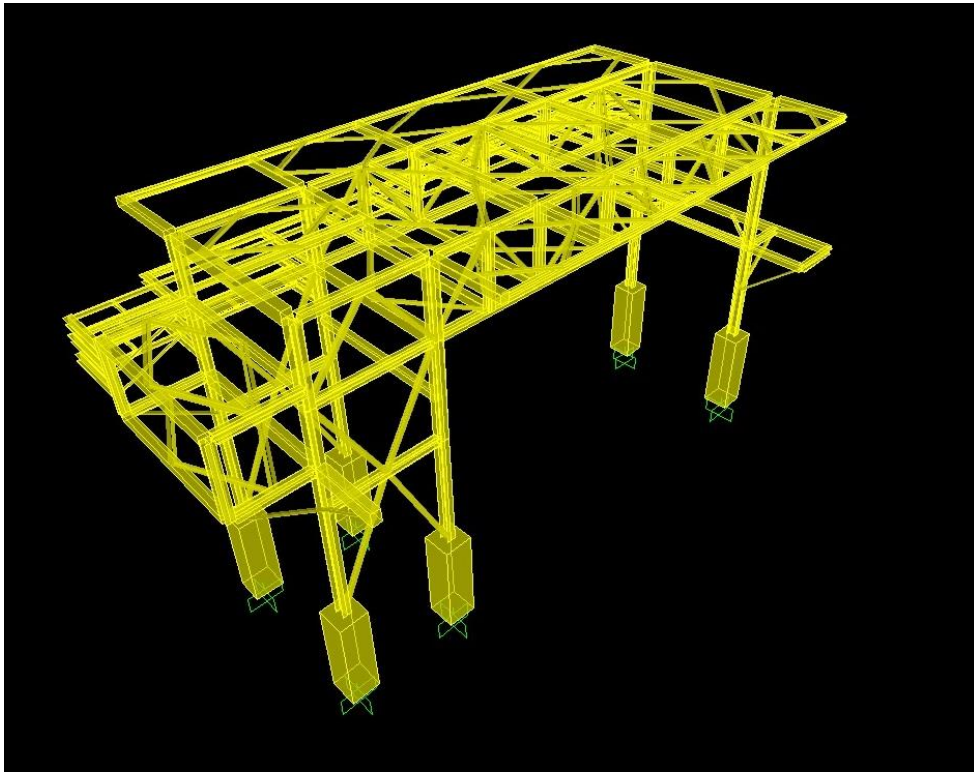




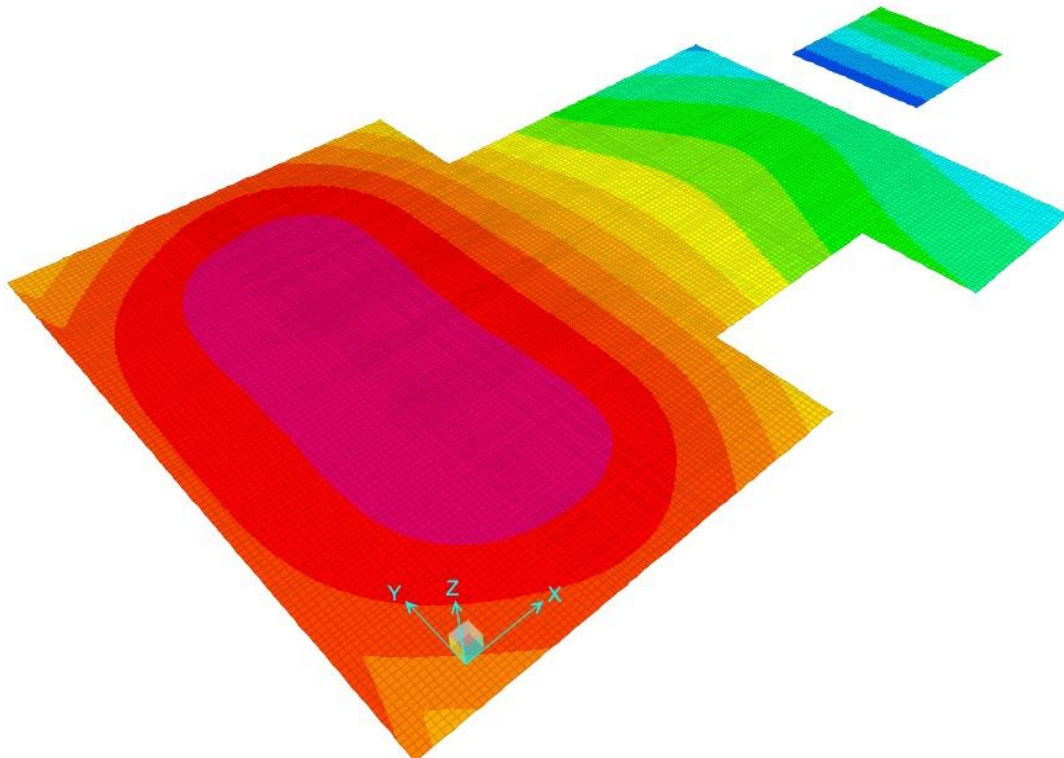
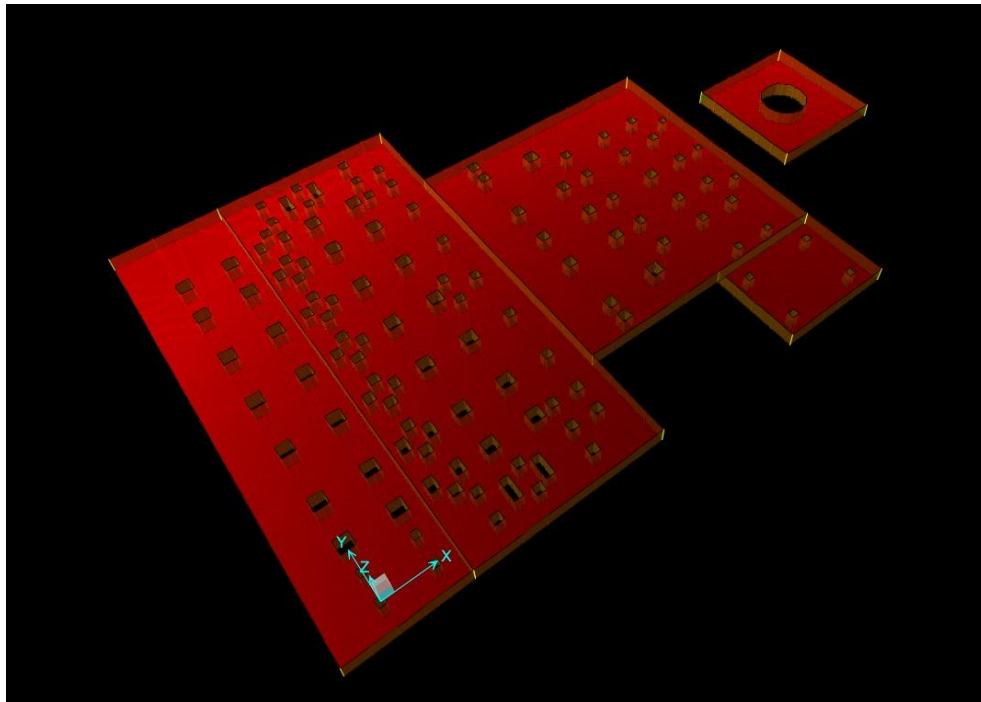
### 3D Model of Piperacks in SAP2000







## Steam Reformer Foundation Model



## Pilot Plant (Beneficiation & Pelletizing)

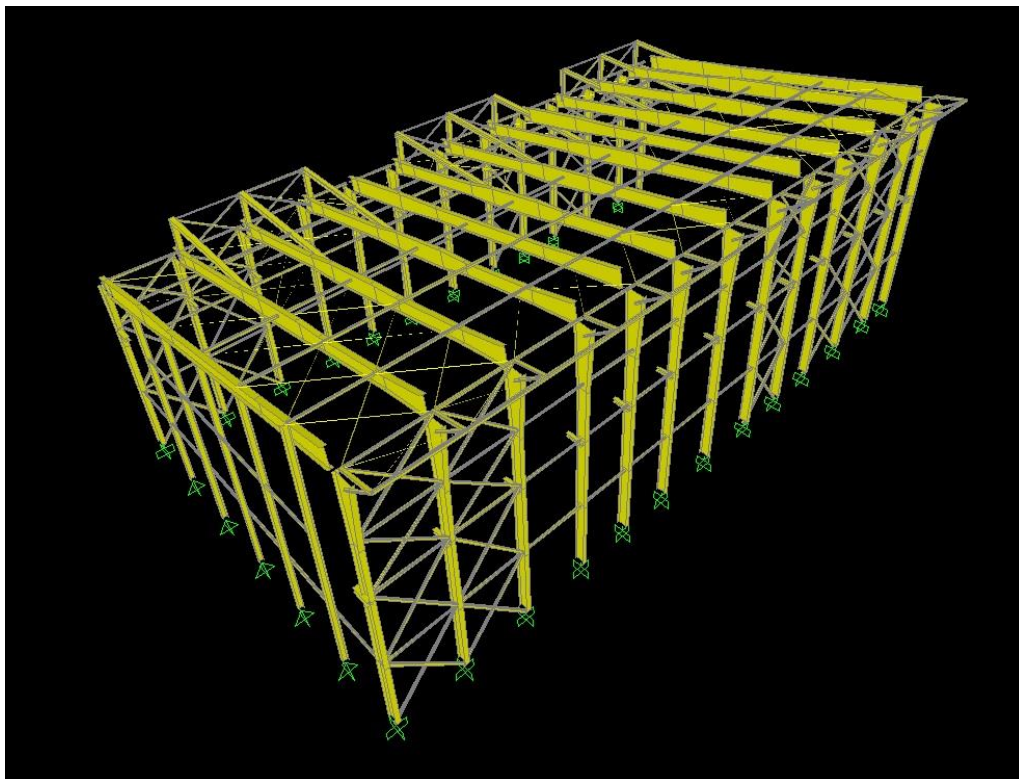
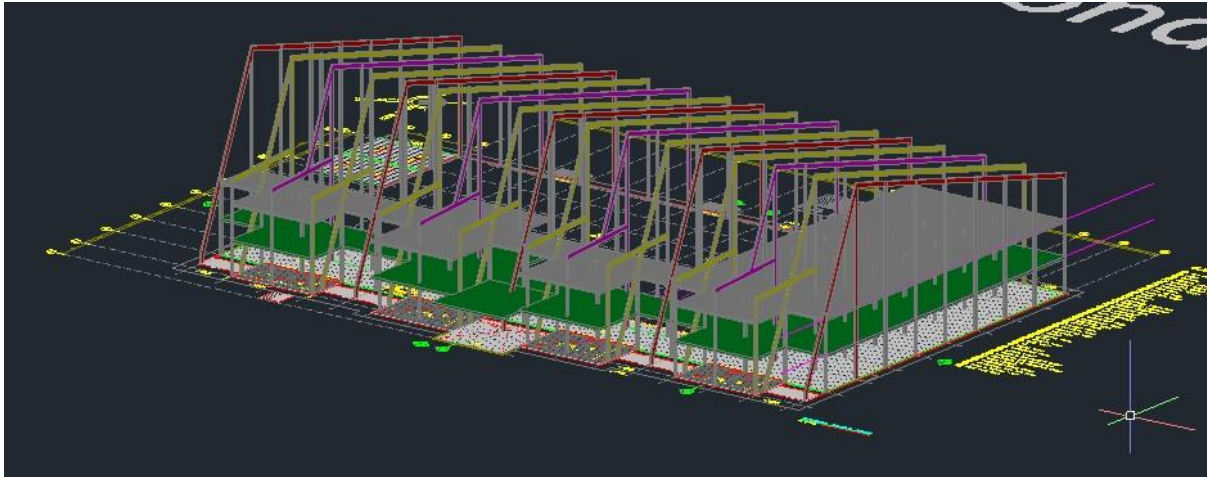
Client: Namvaran

Main Client: Golgohar Mining & Industrial Company.

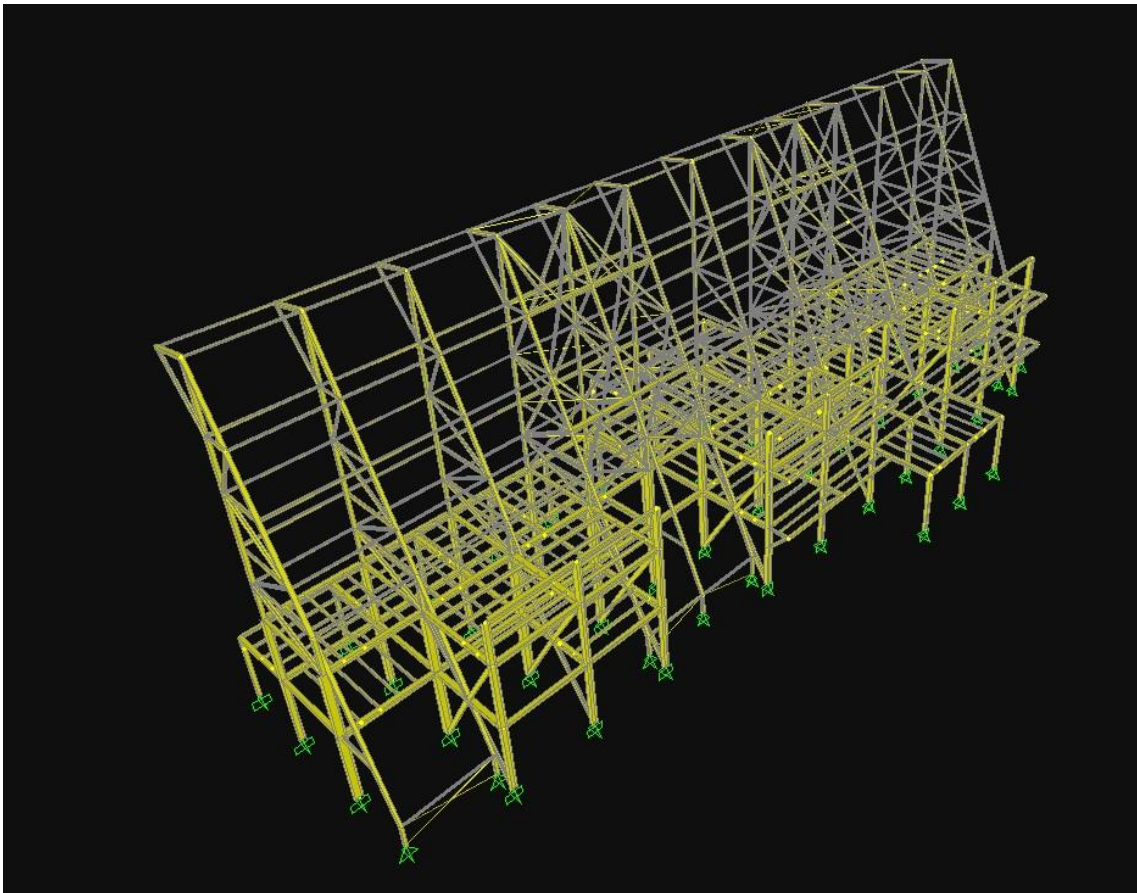
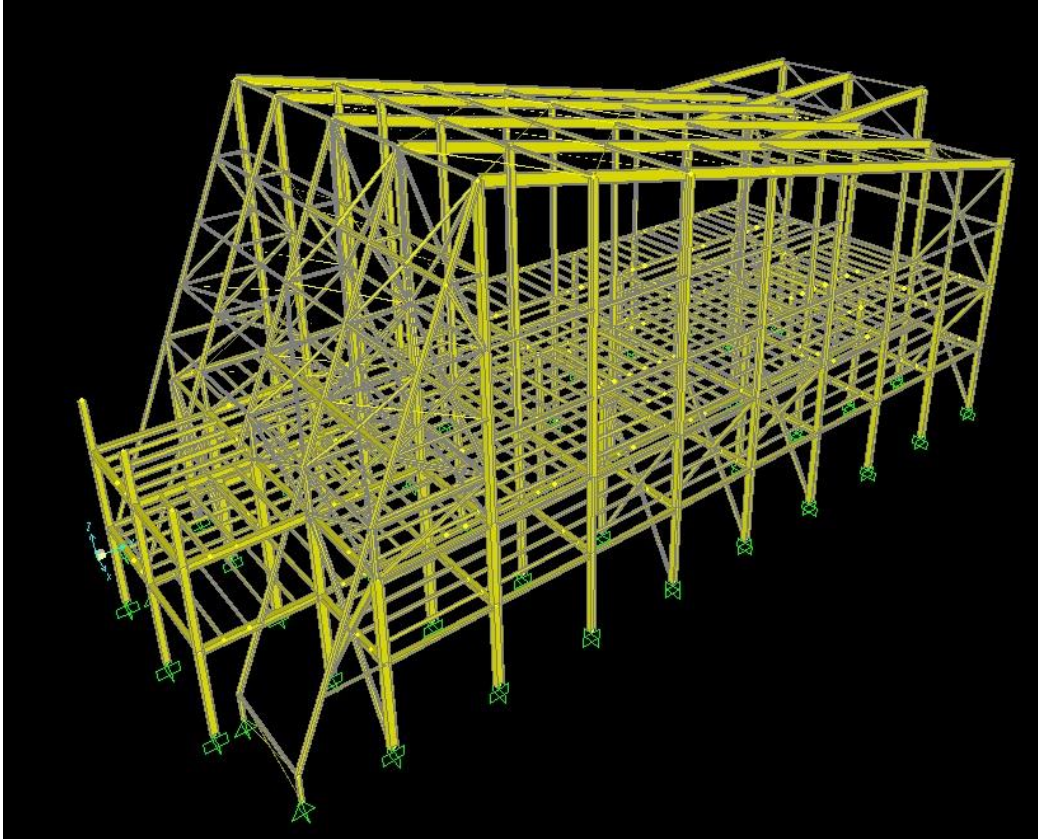
Date: 2021~2022

Our responsibility in this project is to design the main saloon, administration building, and warehouse; the design of stick pile retaining walls and ponds foundation are in ATM's scope of work as well.

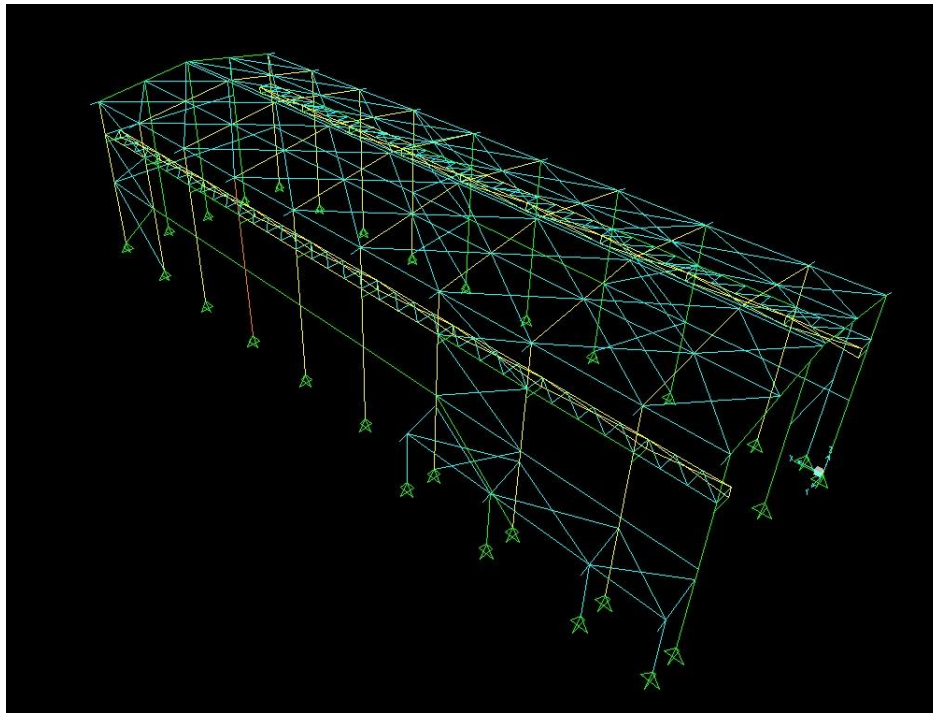
### Beneficiation Structure Sap Model



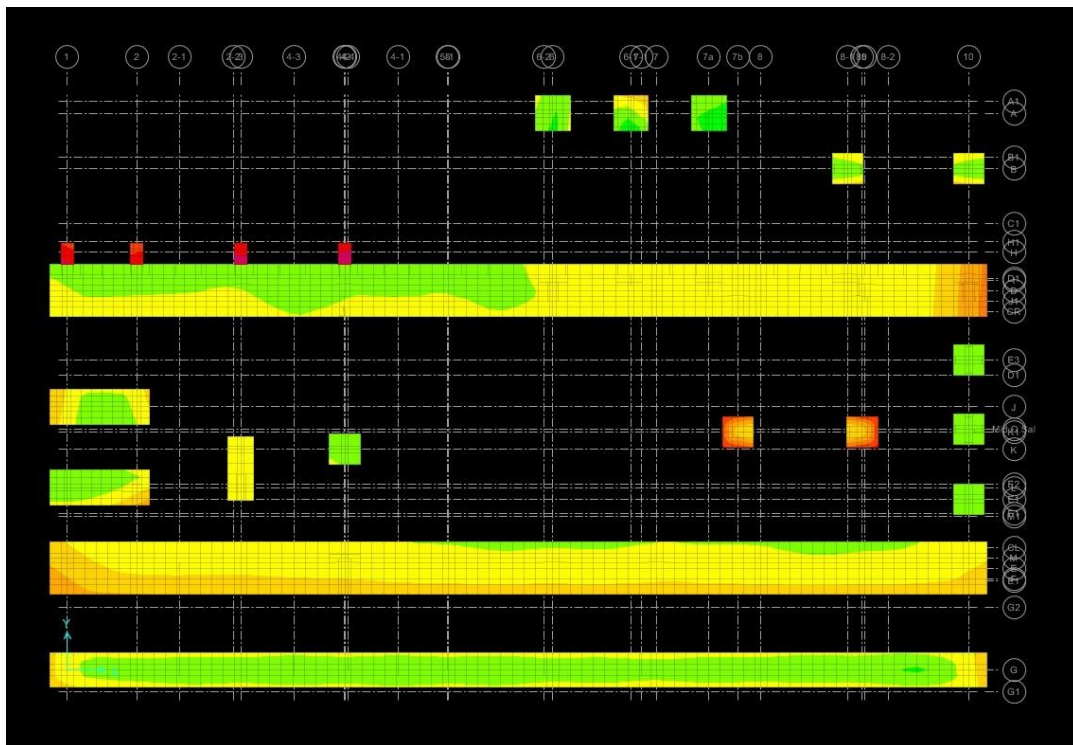




### Pelletizing Main Saloon Structure Sap model

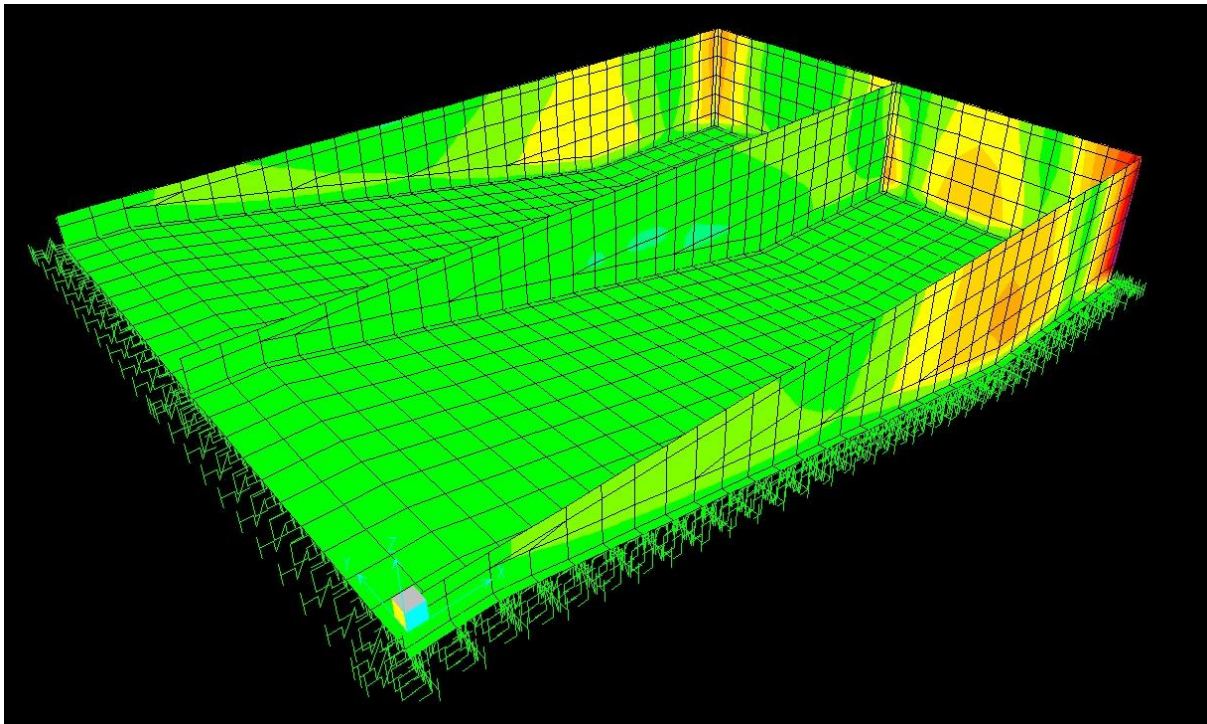


### Pelletizing Main Saloon Foundation Safe model

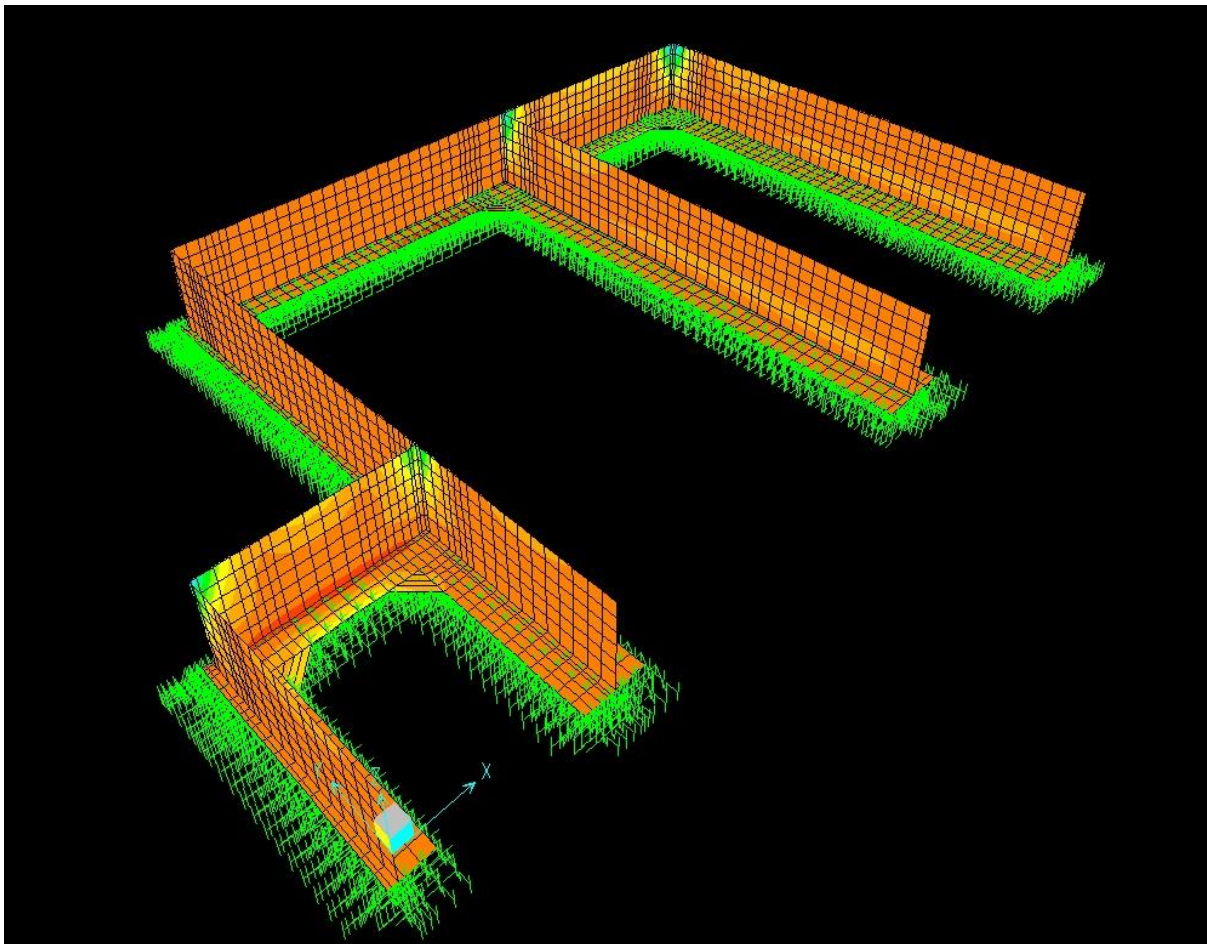




### Settling Pond Structure Sap model



### Storage Area Structure Sap model



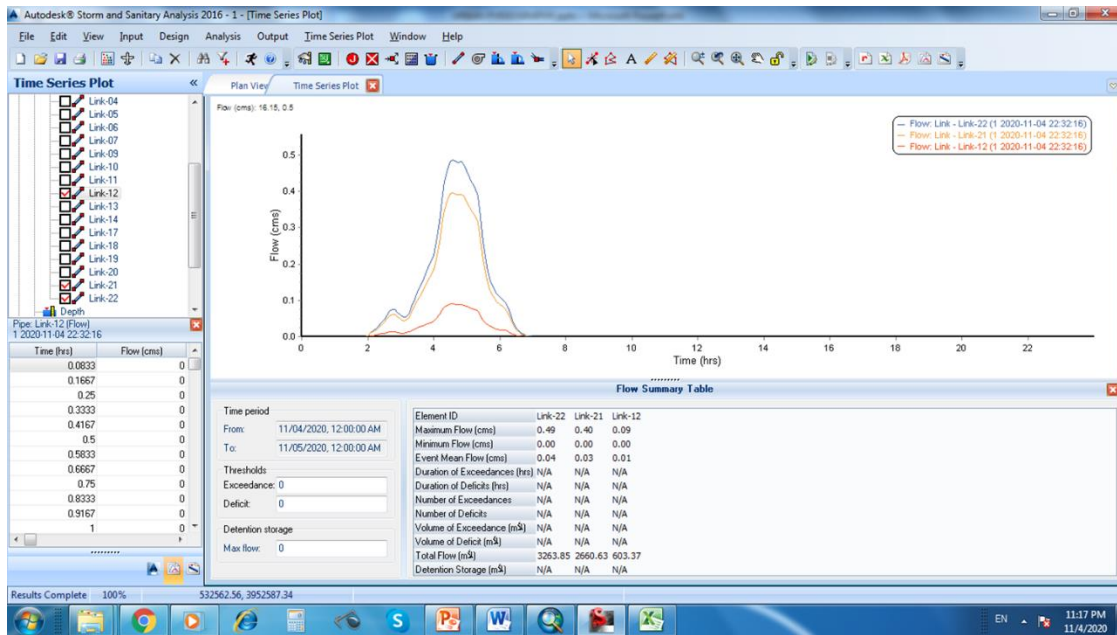


## Flood Control System of Kormoun

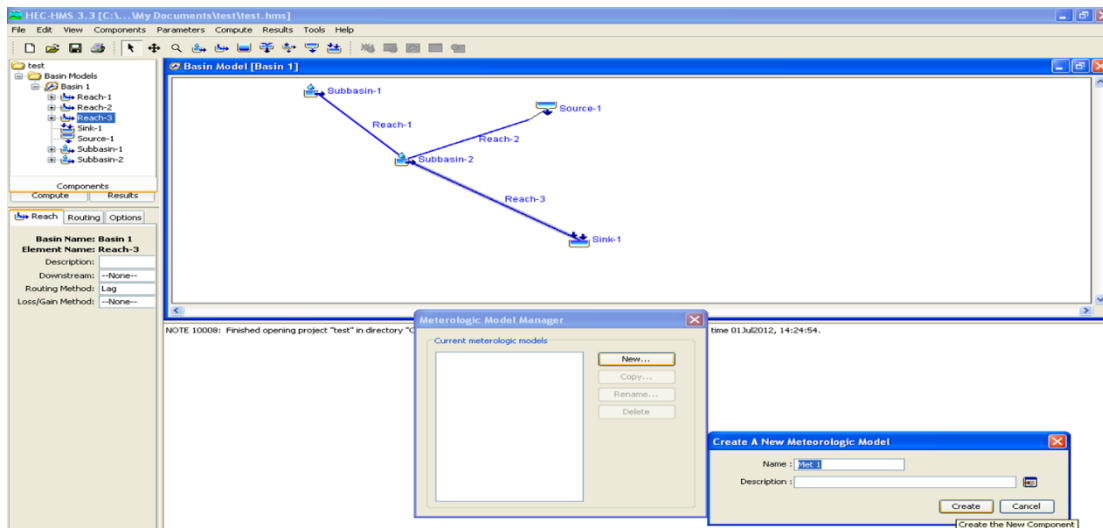
Main Client: Regional Water Company of Hormozgan  
Date: 2017

Kormoun is located in Hormozgan, Iran . Our responsibility in this project is to study and design flood control tank .

## Storm and Sanitary Analysis model



## HEC-RAS model

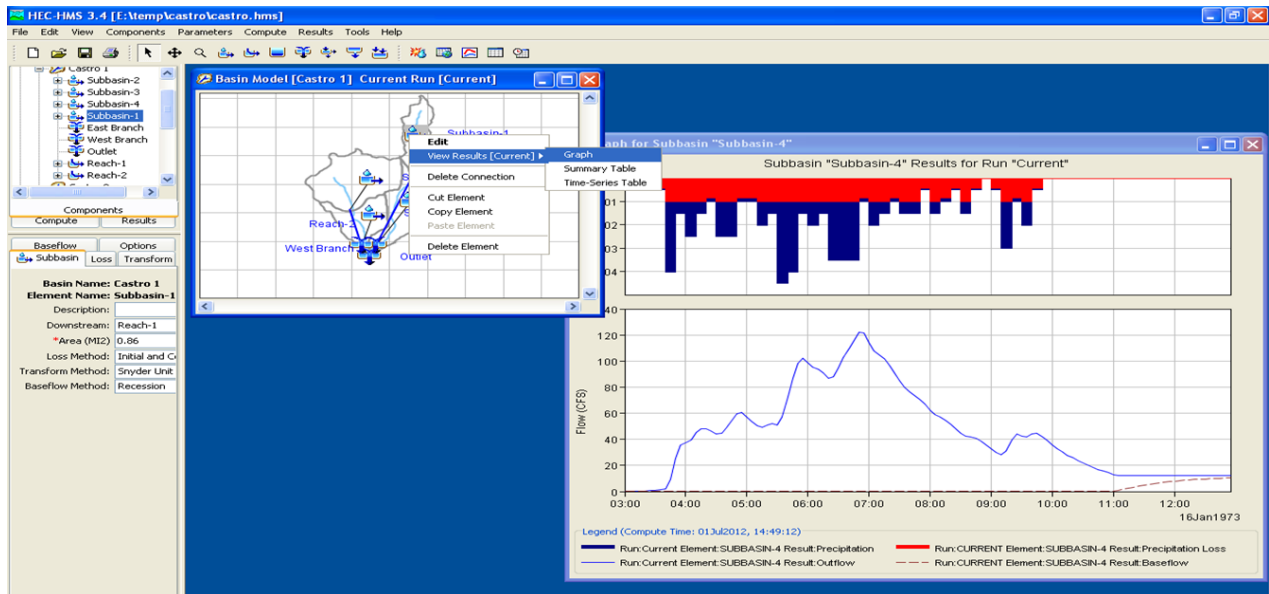


## Khamir Industrial Town Urban Drainage studies

Main Client: Hormozgan Industrial Estate Company  
Date: 2019

Industrial Estate located in Hormozgan , iran . Our responsibility in this project is study and design of flood control system .

### HEC-HMS model , Hydrological Modeling of Catchment Area



### 2D Result of HEC-RAS Model



## Project Management Consultancy Services for River Engineering & Wetlands for Qom Province

Main Client: Regional Water Company of Qom  
Date: 2018

Our responsibility in this project is to study and determine the boundaries of the river and the channels of Qom River .

### Arc Map model

