

Engineering . Management . Consulting

COMPANY PROFILE

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ABOUT US

A Growing company founded in 2016 in the name of ADAMS C&I as a sole-proprietorship and accomplished many successful projects. In 2023, the young business grew to become an L.L.C. company under the name of ADSN Energy & Infrastructure, becoming a strong Egyptian/Turkish project engineering and management consulting firm serving the Oil & Gas, Renewable Energy, Infrastructure and Industrial Sectors. Thanks to our professional team with more than 10 years experience in multinational projects, we are able to cover projects of all-scales.

We cherish our clients' trust in our services by providing a 24/7 project support and the fastest & best response our clients could ever find. You will have a direct access to our team anytime of the day to resolve any problem in critical periods of the project. We have enough experience and wisdom to understand the continuous changes of construction projects and coordination requirement, making us one of the best companies to cope with changes with full flexibility and professionalism.

We welcome you to visit our office and have a grasp on what we are able to provide.



CONSULTING SERVICES

PROJECT ENGINEERING

BUILDINGS & SITES

BIM Modeling
Architectural & Master planning
Roads, Hardscape & Landscape
MEP, Electrical & Low current
Steel Structure & Concrete Design

INDUSTRIAL PLANTS

Process Design & Simulation
Storage Tanks & Pressure Vessels
Plants Design & 3D Modeling
Piping Design & Stress analysis
Pipe Supports & Racks
Electrical & Instrumentation

INFRASTRUCTURE

Pipeline Engineering
Wet Utility networks
Dry Utilities

CAE & SIMULATION

FEA
CFD
Energy modeling
Flow Assurance
Hydraulic & Surge analysis
Power Plant dispatch optimization
Accoustic analysis
Vibration analysis
Harmonic studies
Arc flash analysis
Protection coordination
Motor Starting Analysis
Lighting Simulation

MANAGEMENT CONSULTING

One-to-One Professional
Consulting
Portfolio Management
Risk analysis
Feasibility & Economic
Analysis
Digital Strategy consulting
Energy market Researches

KEY REFERENCES



PROJECTS SAMPLES

MODON JEDDAH 3 INDUSTRIAL & BUSINESS CITY PROJECT

Project Location: Jeddah,
Saudi Arabia

Scope of Work:

Architectural & Structural Design

MEP Design

Pipeline Design

Hydraulic & Surge analysis

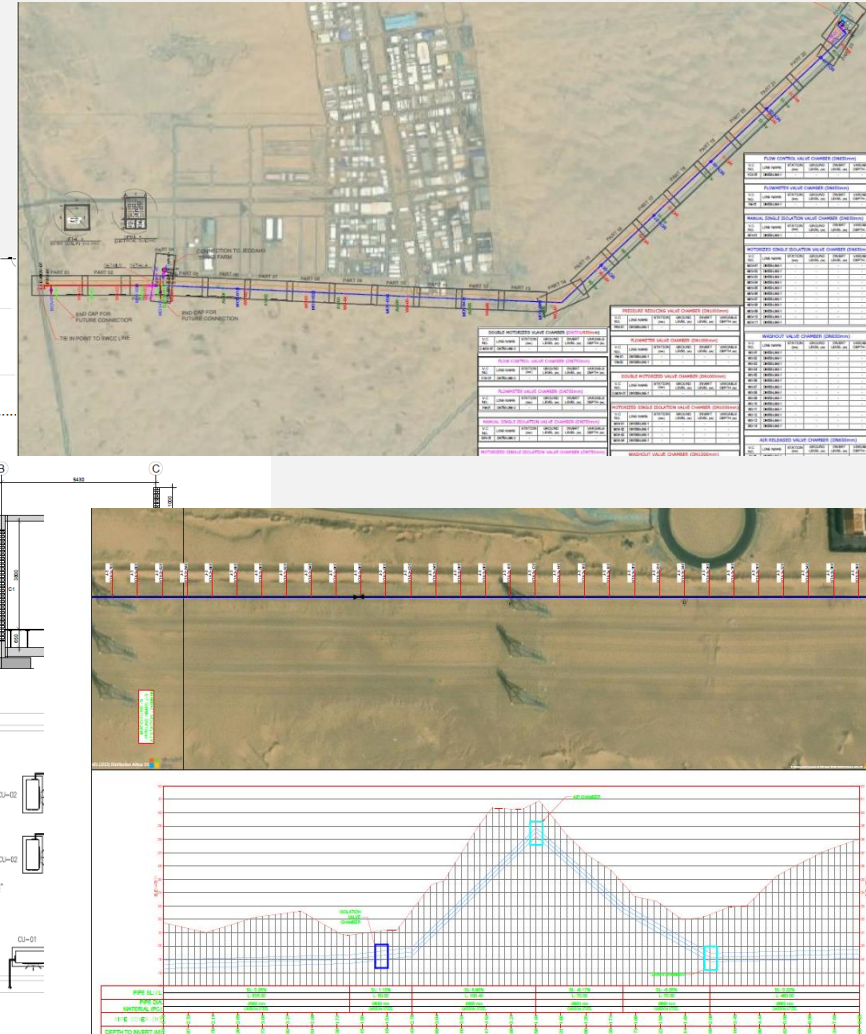
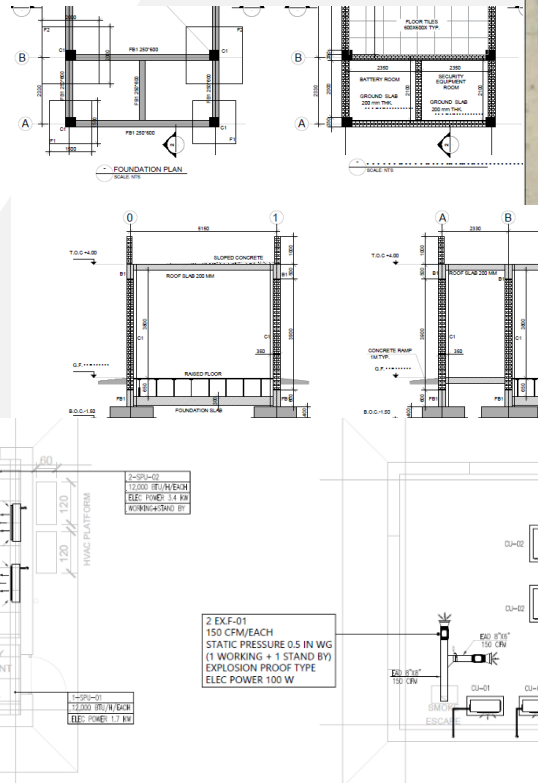
Valve Chambers

Software:

Civil 3D

Bentley Hammer

SAP2000



**INDUSTRIAL SECTOR
INFRASTRUCTURE ENGINEERING**

WATER IMPROVEMENT PROJECTS (QATIF, KHOBAR, DAMMAM 2, DAMMAM 5) PACKAGES

Project Location: Easter Region, Saudi Arabia

Scope of Work:

Pipeline Design (Plan & Profile)

Valve chambers design

Pipe stress analysis for the pump stations

MEP for the Reservoir sites'

buildings

Software:

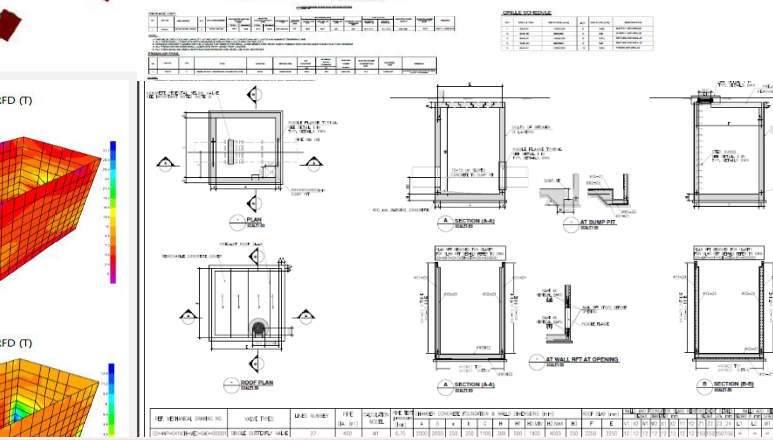
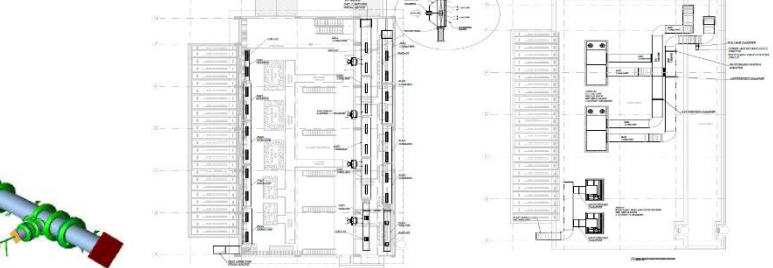
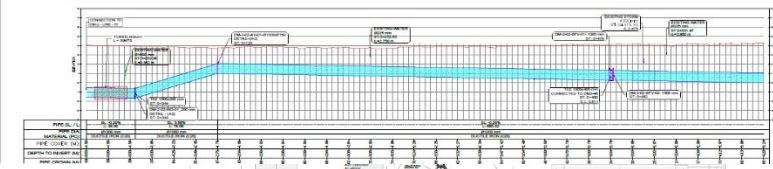
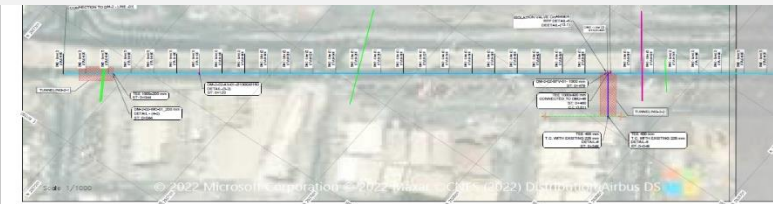
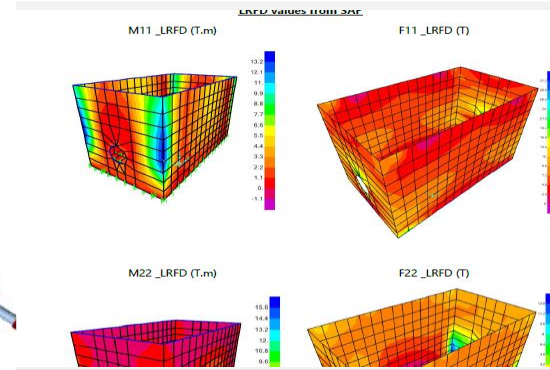
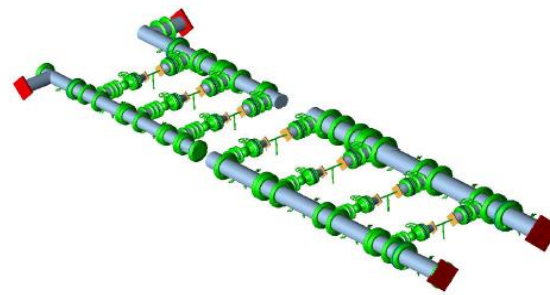
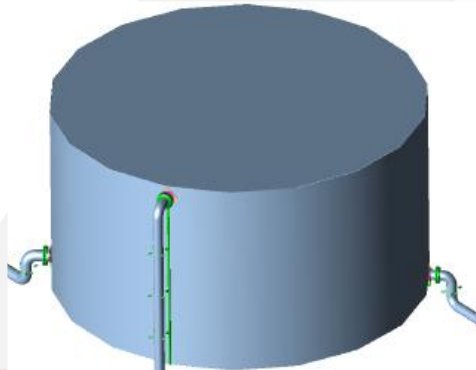
Civil 3D

CAESARII

SAP2000

Carrier HAP

Dialux



**INDUSTRIAL SECTOR
INFRASTRUCTURE ENGINEERING**

MIRFA RO WATER TREATMENT PLANT

Project Location: Abu Dhabi

Scope of Work:

Road Design

Wet Utilities

Dry Utilities

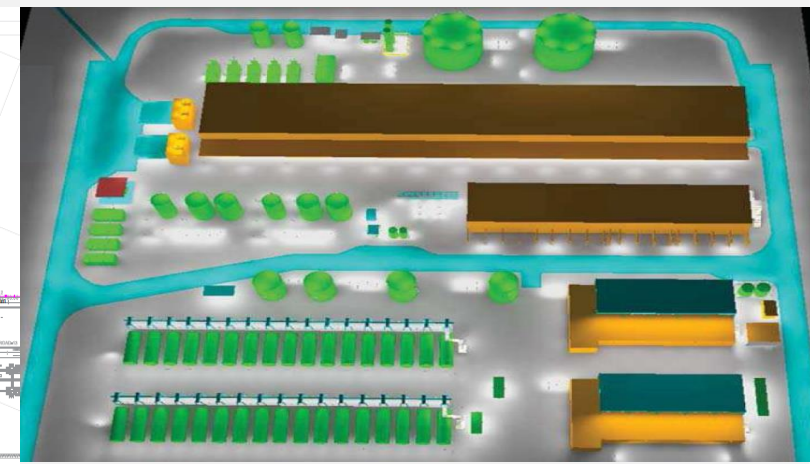
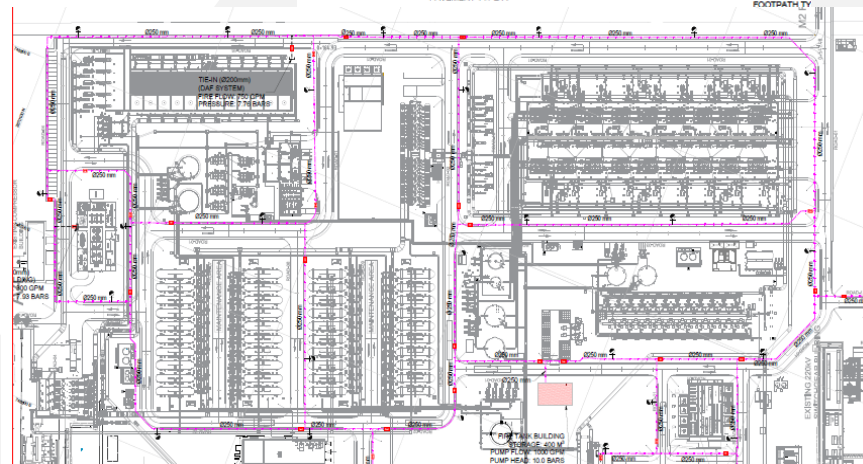
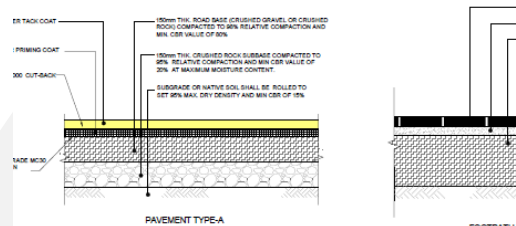
Software:

Civil 3D

Dialux Evo

ETAP

Navisworks



**INDUSTRIAL SECTOR
INFRASTRUCTURE ENGINEERING**

DOHA SOUTH PUMP STATION

Project Location: Doha, Qatar

Scope of Work:

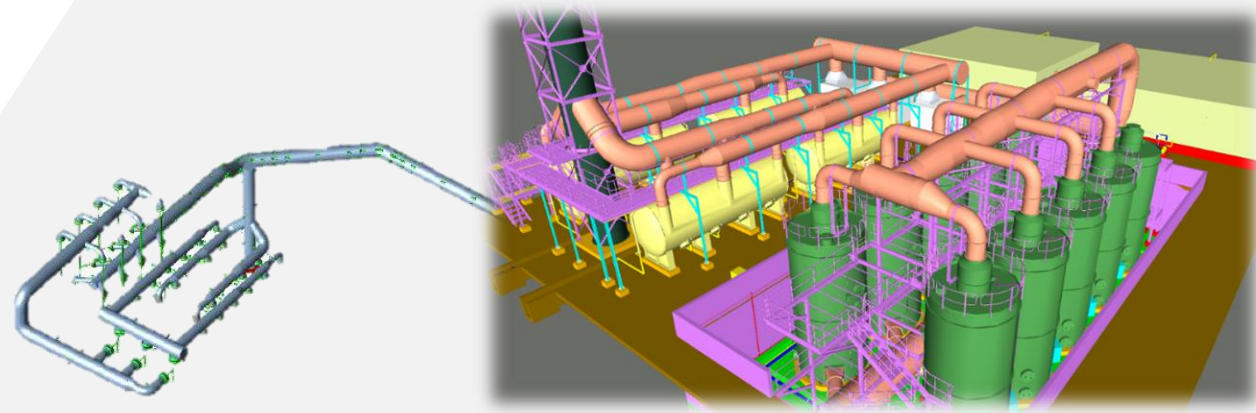
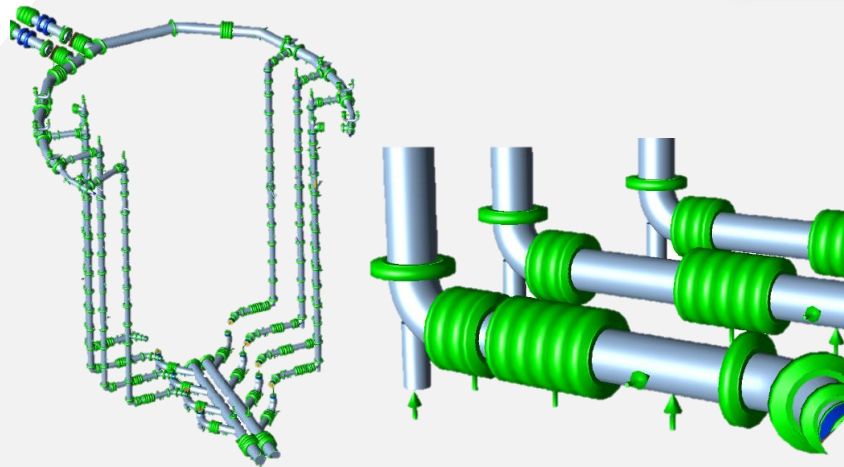
3D Plant Modeling, piping design, stress analysis and supports design

Software:

AutoCAD Plant 3D

CAESARII

SAP2000



INDUSTRIAL SECTOR
PLANT ENGINEERING & 3D MODELING

ABU RAWASH WASTEWATER TREATMENT PLANT

Project Location: Cairo, Egypt

Scope of Work:

3D Plant Modeling, Building Civil & Structural Modeling as per As-built, piping design, stress analysis and supports design

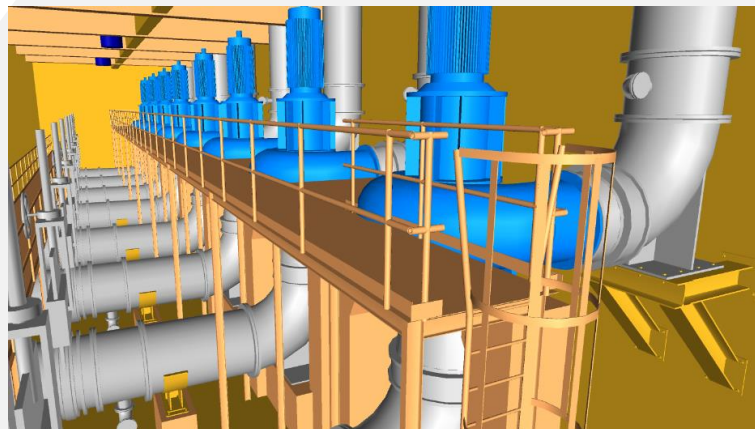
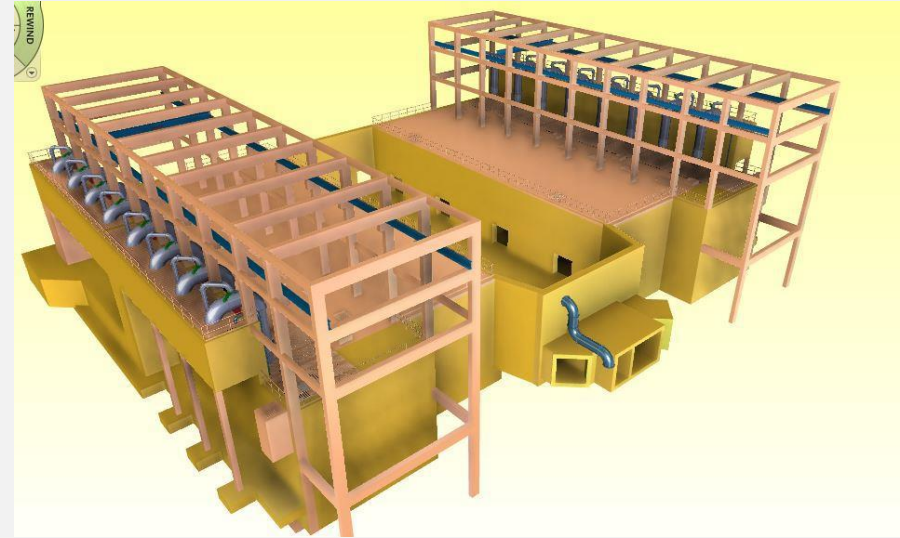
Software:

AVEVA PDMS

TEKLA

CAESARII

SAP2000



AL KHARJ RESERVOIR

Project Location: Riyadh, KSA

Scope of Work:

P&ID preparation, Tank design review, piping design, stress analysis, supports design, hydraulic & surge analysis + Operation & Automation Philosophy

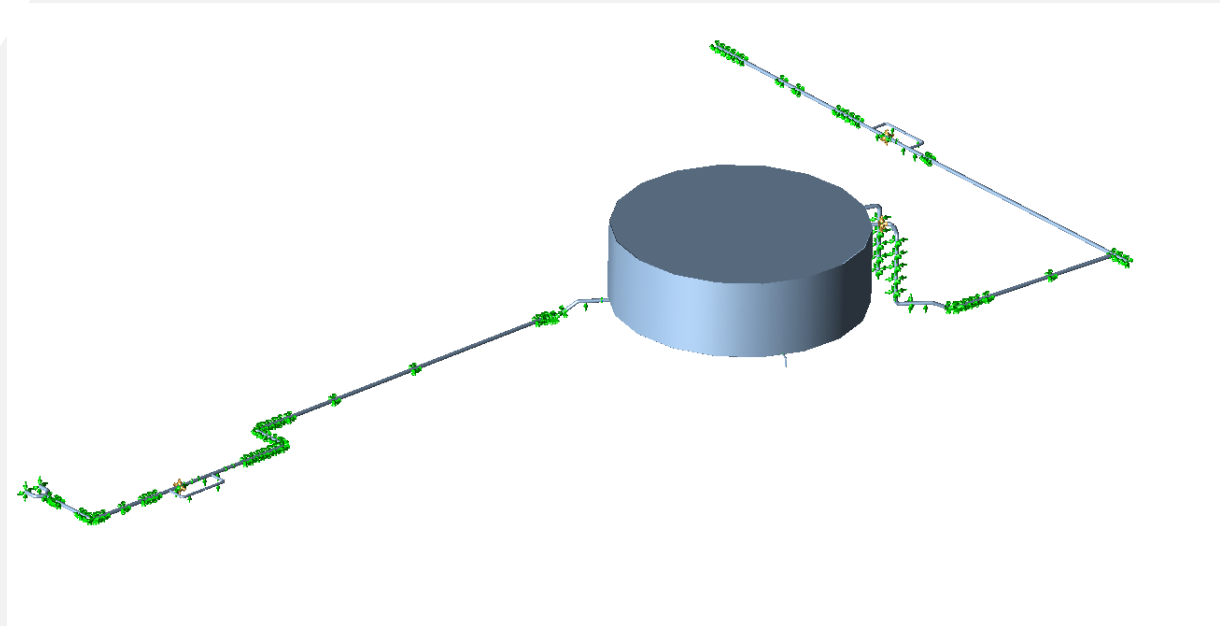
Software:

AUTOCAD PLANT 3D

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RAM CONNECTION



25000 TR CENTRAL UTILITY COMPLEXE

Project Location: Bahrein

Scope of Work:

BIM LOD400 for Mechanical &
Piping Scope.

Pipe stress analysis & Supports

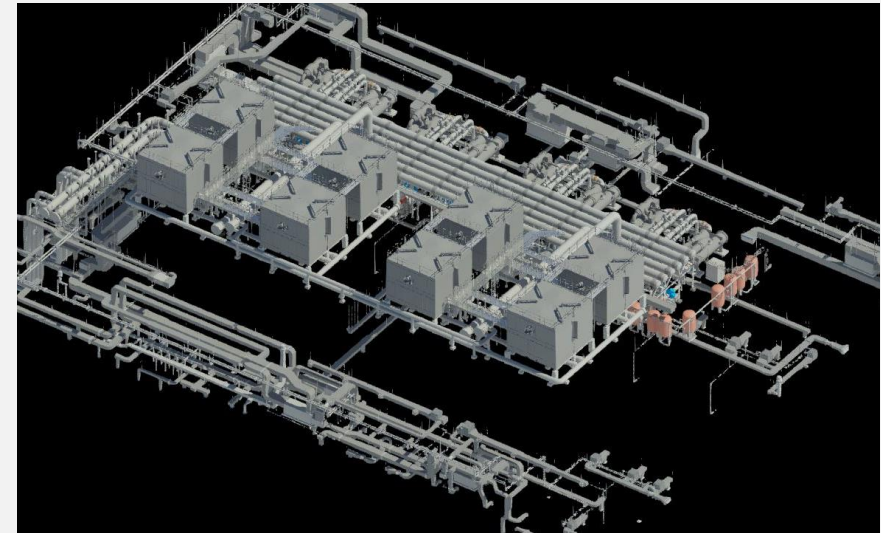
Software:

Autodesk REVIT

CAESARII

SAP2000

IDEA Statica



**INDUSTRIAL SECTOR
PLANT ENGINEERING & 3D MODELING**

9000 TR CHILLER PLANT

Project Location: Kuwait

Scope of Work:

3D Plant Modeling (BIM LOD300),
piping design, stress analysis and
supports design

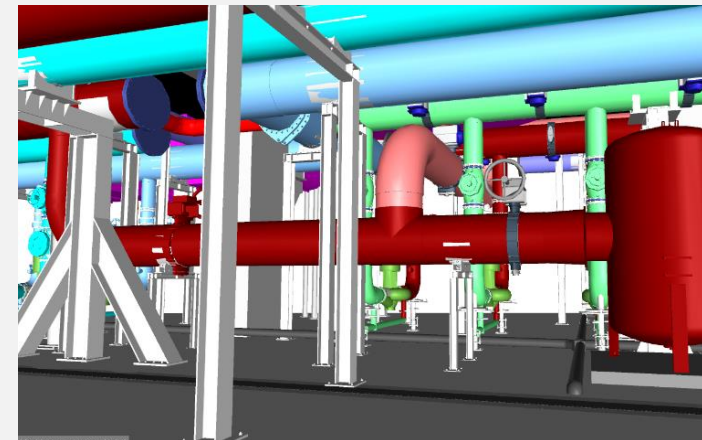
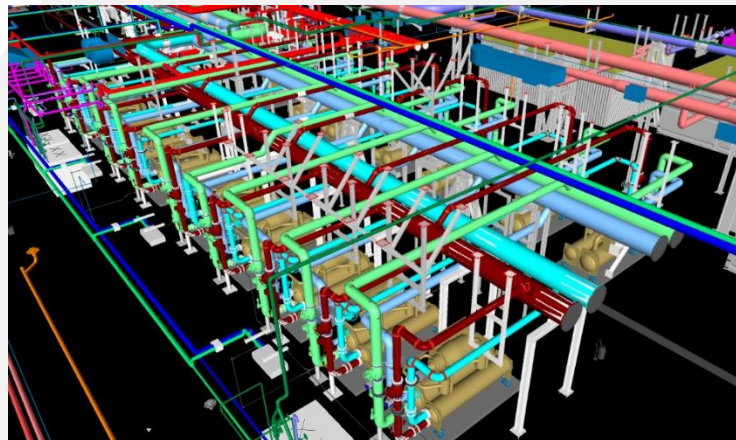
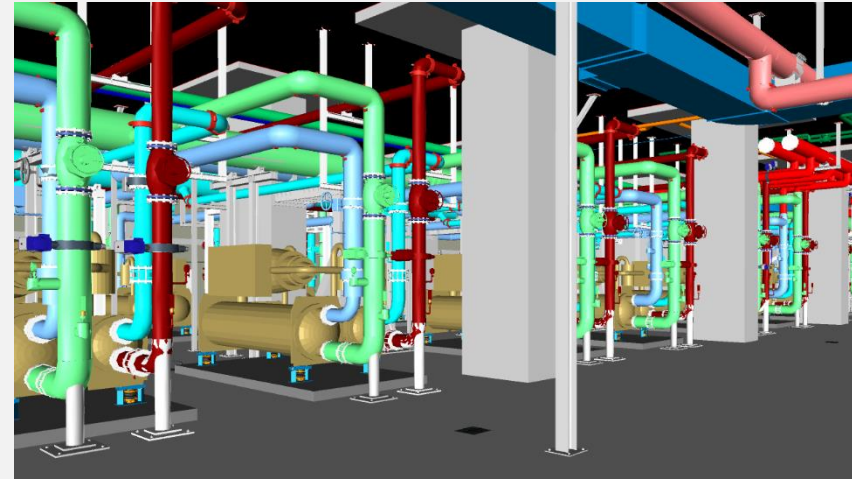
Software:

Autodesk REVIT

CAESARII

SAP2000

IDEA Statica



KIRKLARELI 8 MW BIOMASS POWER PLANT

Project Location: Turkey

Scope of Work:

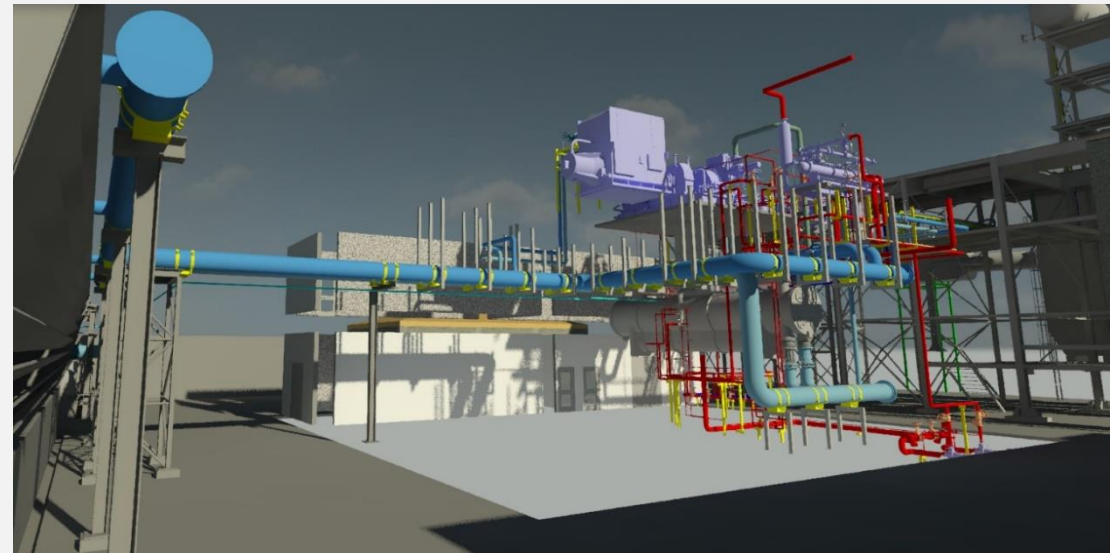
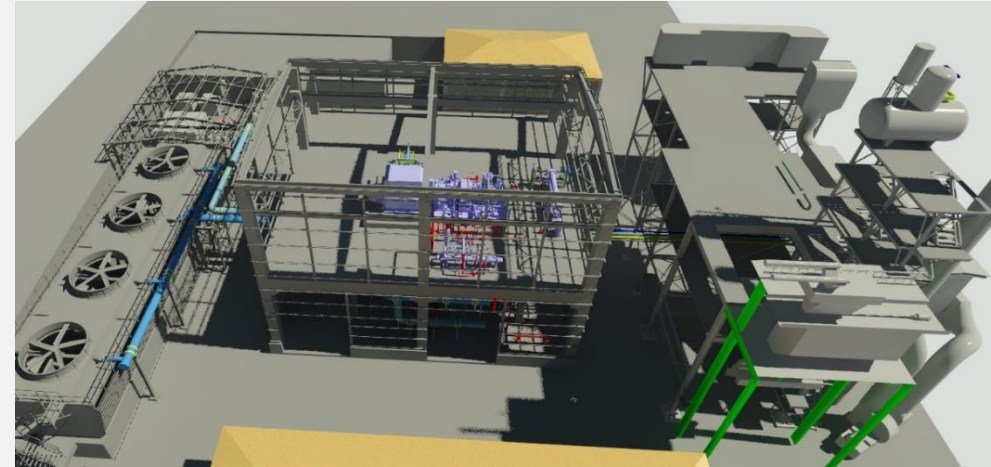
Plant design & Modeling,
piping design, stress
analysis and supports, E&I

Software:

Autocad Plant 3D

SAP2000

CAESARII



INDUSTRIAL SECTOR
PLANT ENGINEERING & 3D MODELING

YELLOW MOUNTAIN PUMP STATION

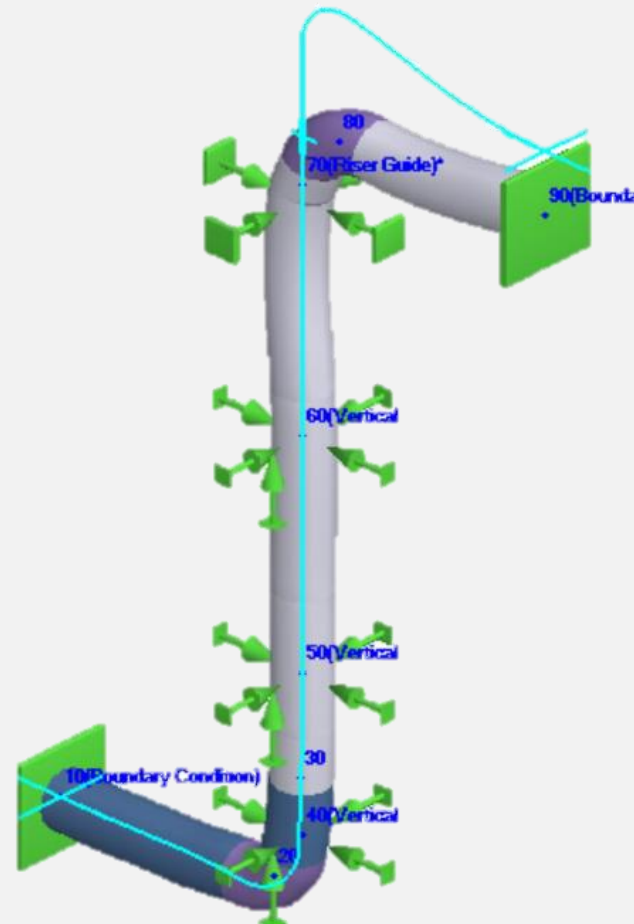
Project Location: Mansoura,
Egypt

Scope of Work:

HDPE lines pipe stress analysis as
per GOST32388 Code

Software:

PASS START-PROF



MIDWATER WATER TREATMENT PUMP STATION & PIPING NETWORK

Project Location: North Coast, Egypt

Scope of Work:

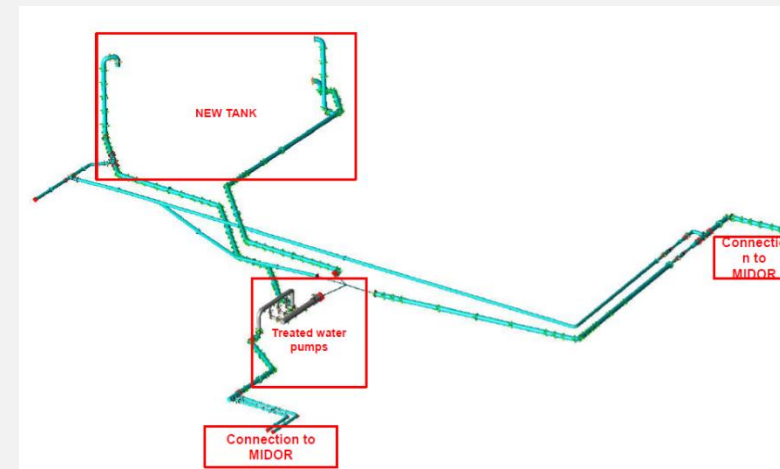
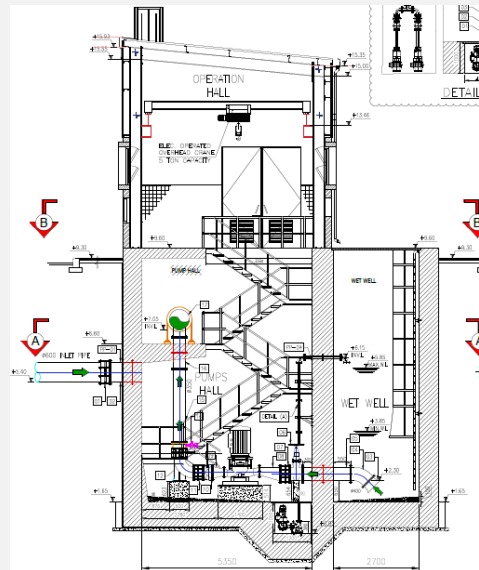
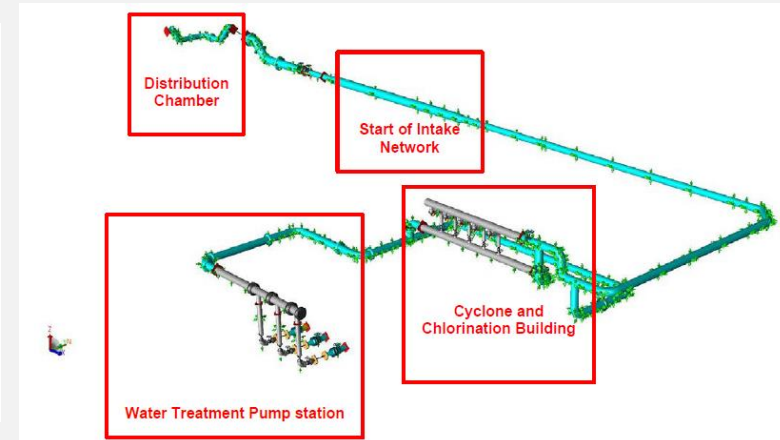
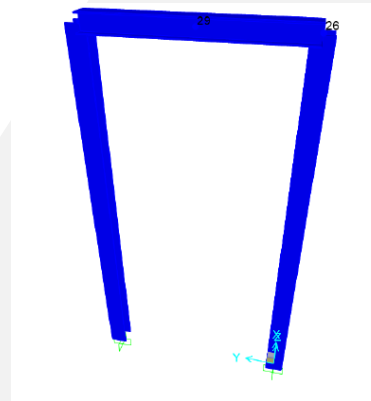
Design of water treatment pump station and connected pipelines and networks. Pipe stress analysis and supports design.

Software:

AUTOCAD

CAESARII

SAP2000



**INDUSTRIAL SECTOR
PIPE STRESS ANALYSIS
& SUPPORTS DESIGN**

TWWI IRRIGATION PIPELINE DESIGN (DARIYAH, DIRAB, HAIR)

Project Location: Riyadh, KSA

Scope of Work:

Pipeline design for 300 km going through Dariyah, Dirab, Hair regions. Hydraulic planning, phasing study, Surge analysis

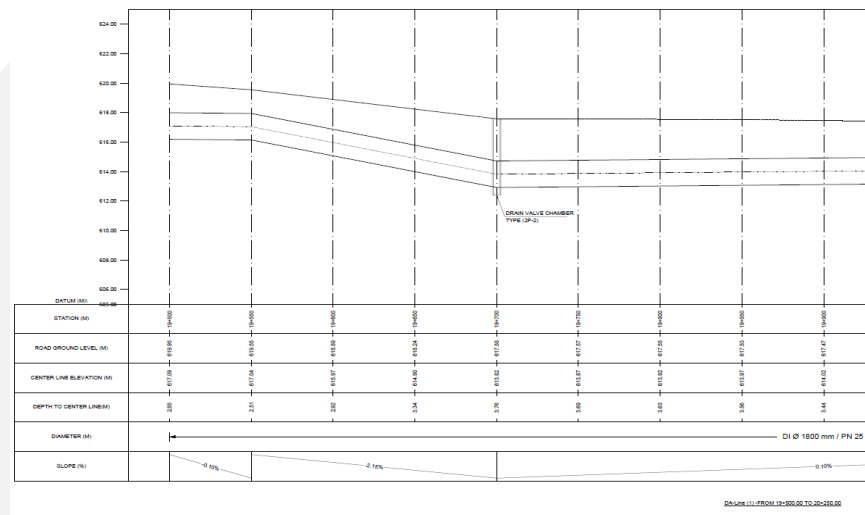
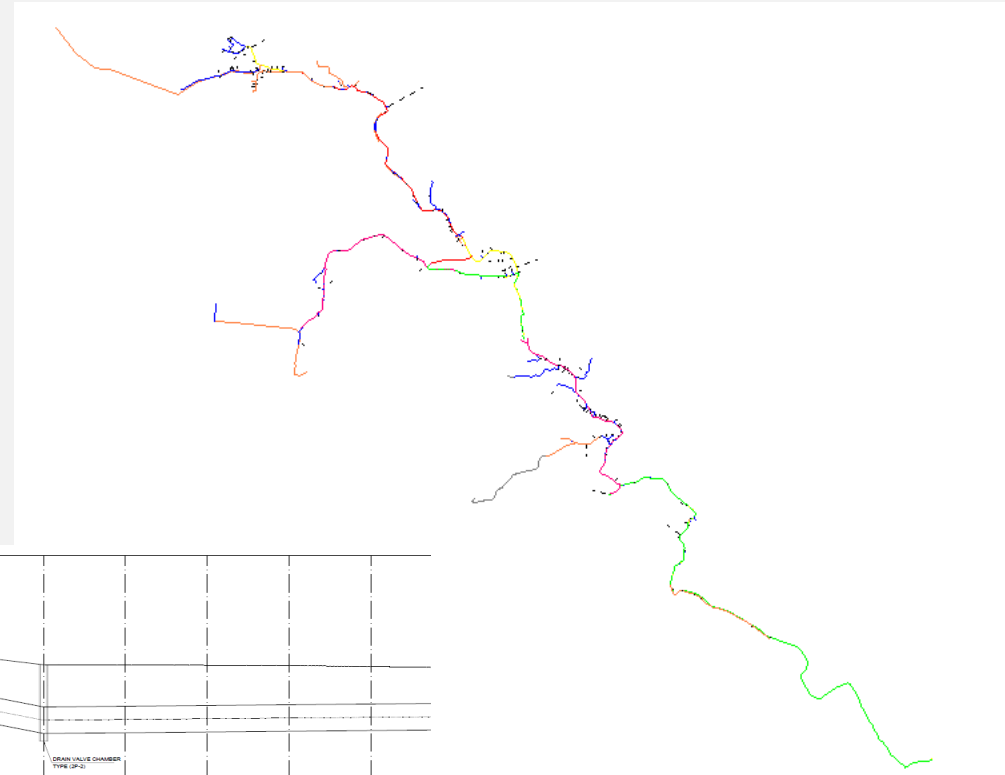
Software:

CIVIL 3D

Bentley WaterGEMS

Bentley HAMMER

CAESARI



INFRASTRUCTURE SECTOR
PIPE STRESS ANALYSIS
FLOW ASSURANCE

AL MANFOUHA PUMP STATION DESIGN & REHABILITATION

Project Location: Riyadh, KSA

Scope of Work:

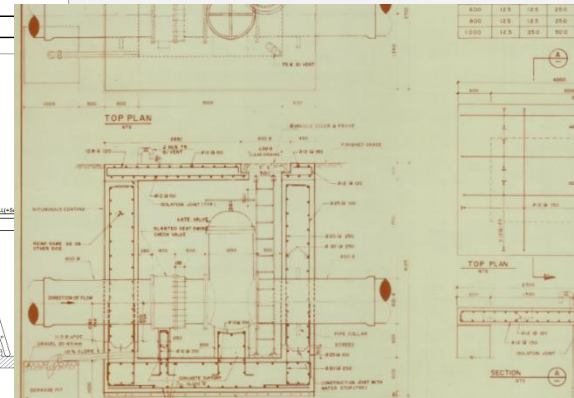
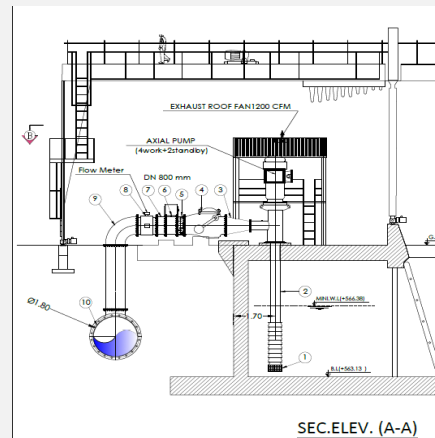
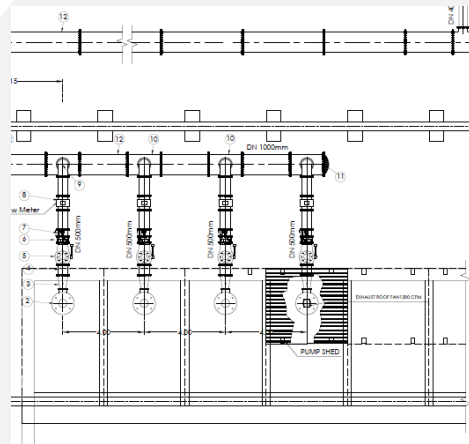
Reverse Engineering and As-built.
New design for Dariyah Line-related pump station inside Al Manfouha: P&ID preparation, piping & equipment GA

MEP design for the pump station and service buildings

Software:

AUTOCAD

CARRIER HAP



INFRASTRUCTURE SECTOR
PIPE STRESS ANALYSIS
FLOW ASSURANCE

ARQA TANK & PUMP STATION

Project Location: Riyadh, KSA

Scope of Work:

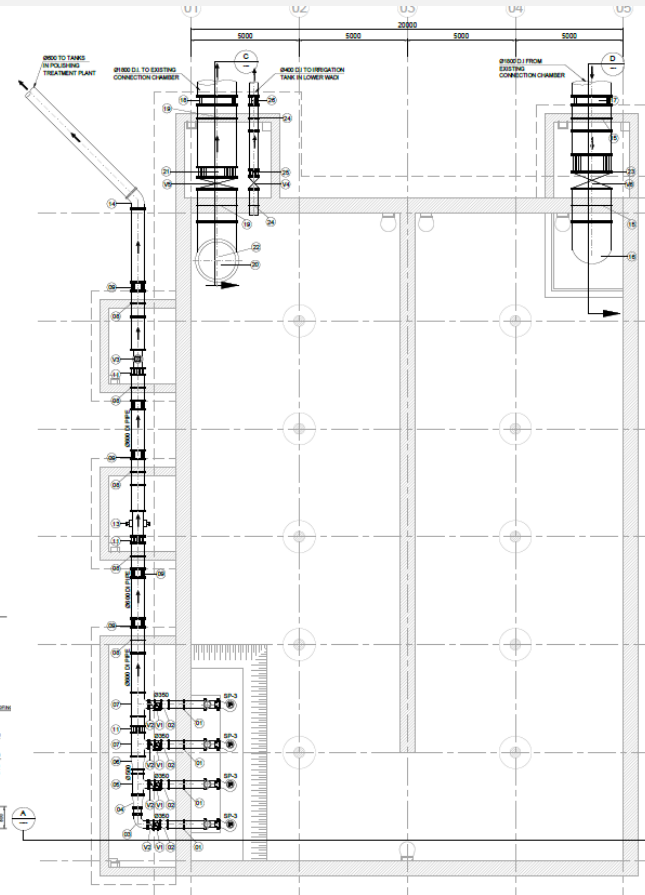
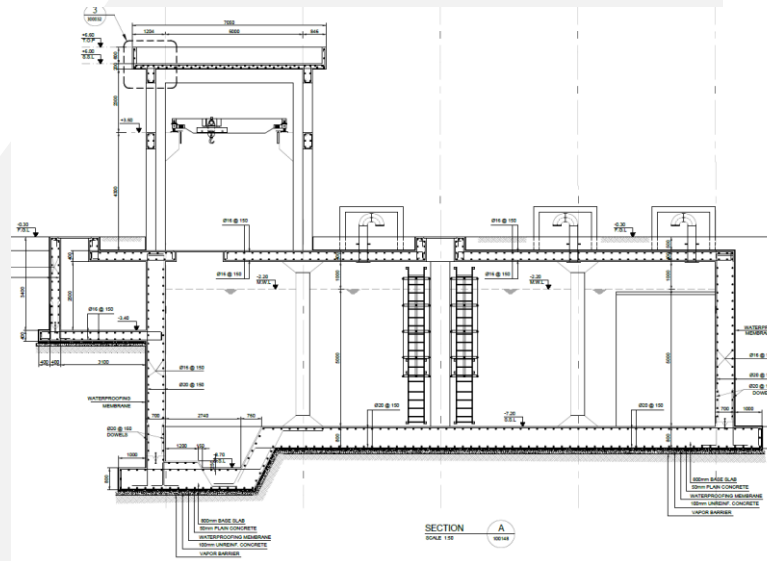
Design package for tank and pump station including mechanical, electrical and structural disciplines

Software:

AUTOCAD

EQUIPMENT SELECTION
SOFTWARE

SAP2000



AL HAMED SOUR GAS PIPELINE

Project Location: Ras Ghareb, Egypt

Scope of Work:

Pipeline design, stress analysis and flow assurance

Software:

AUTOCAD

CAESARII

Pipeline Studio

OLGA

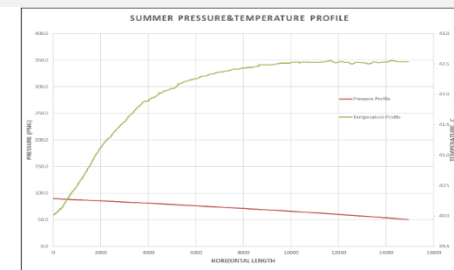
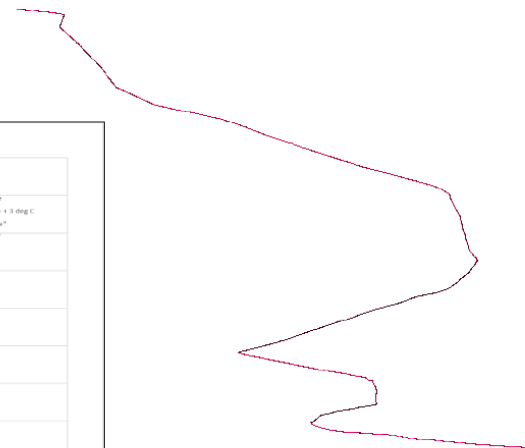
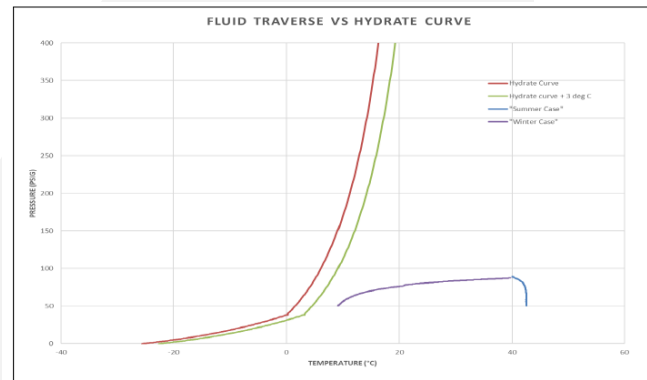
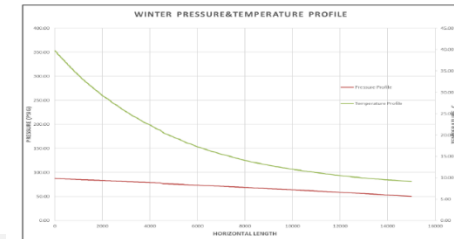


Figure 6-1 Summer Pressure & Temperature Profile



INFRASTRUCTURE SECTOR
PIPE STRESS ANALYSIS
FLOW ASSURANCE

NEOM CIRCULAR CITY

Project Location: Tabuk, KSA

Scope of Work:

Piping & Pipeline design for
reservoir station and pipeline,
pipe stress analysis, pipe
supports & pedestals design

Hydraulic design & surge analysis

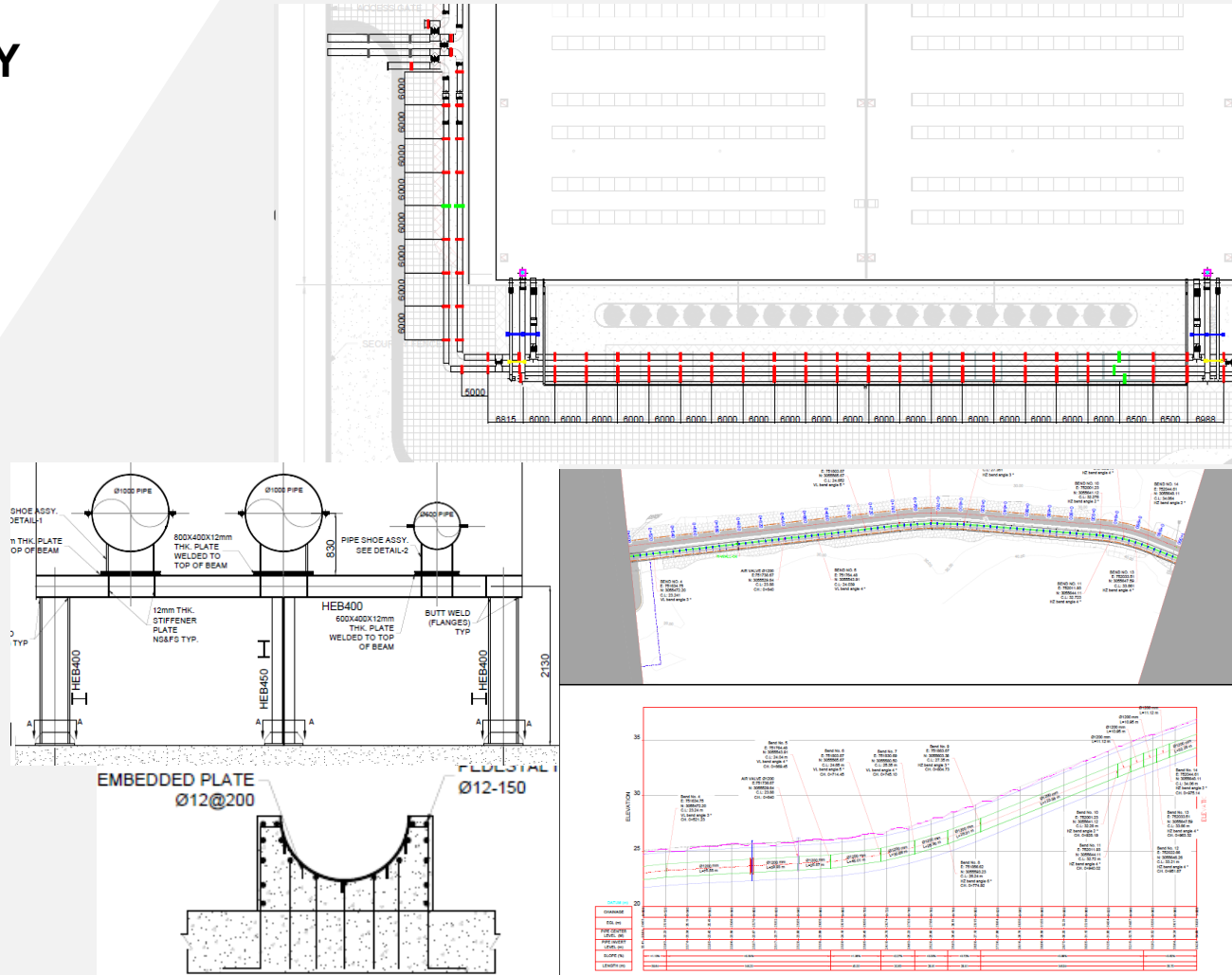
Software:

AUTOCAD PLANT 3D

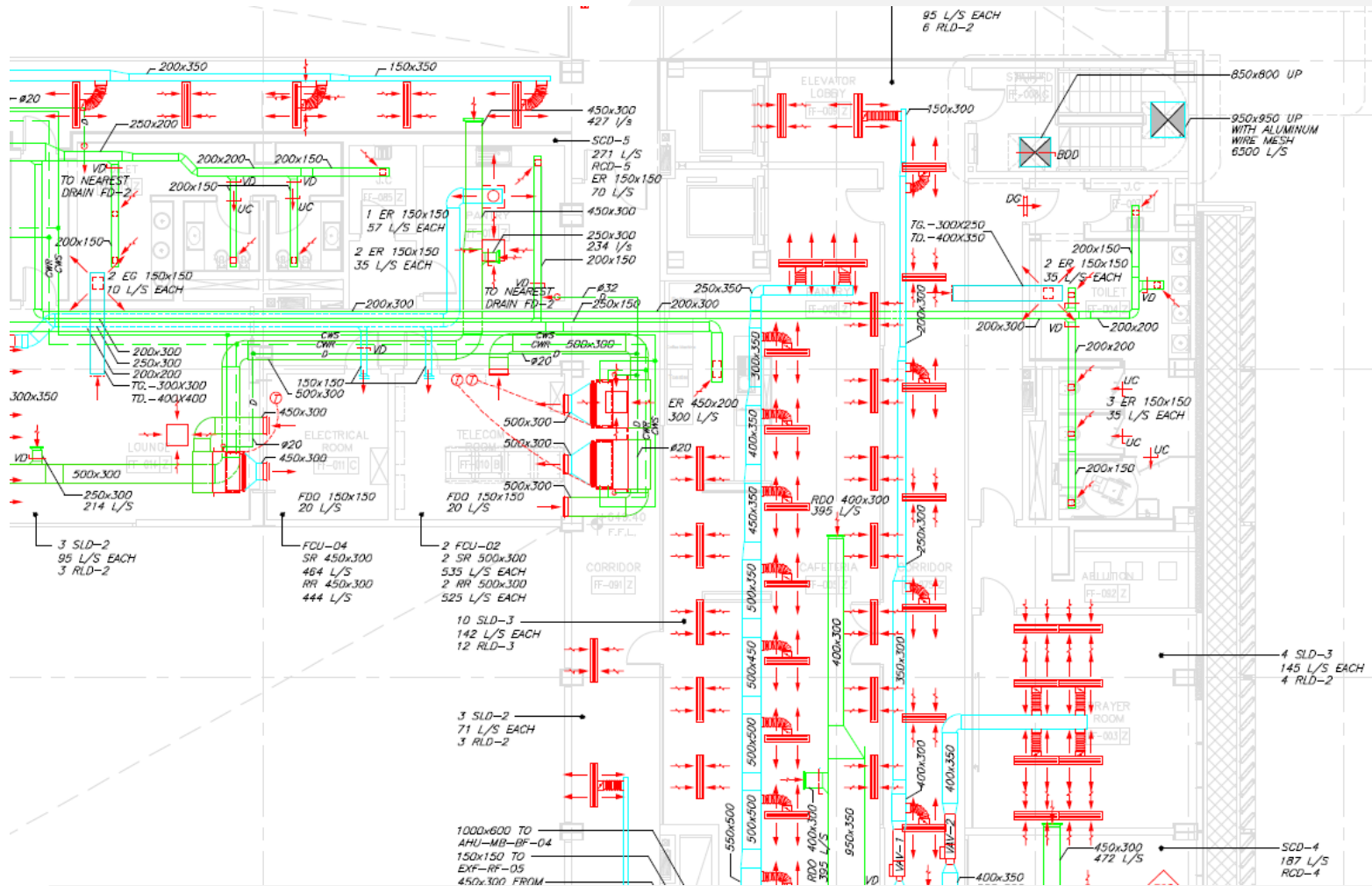
CIVIL 3D

CAESARII

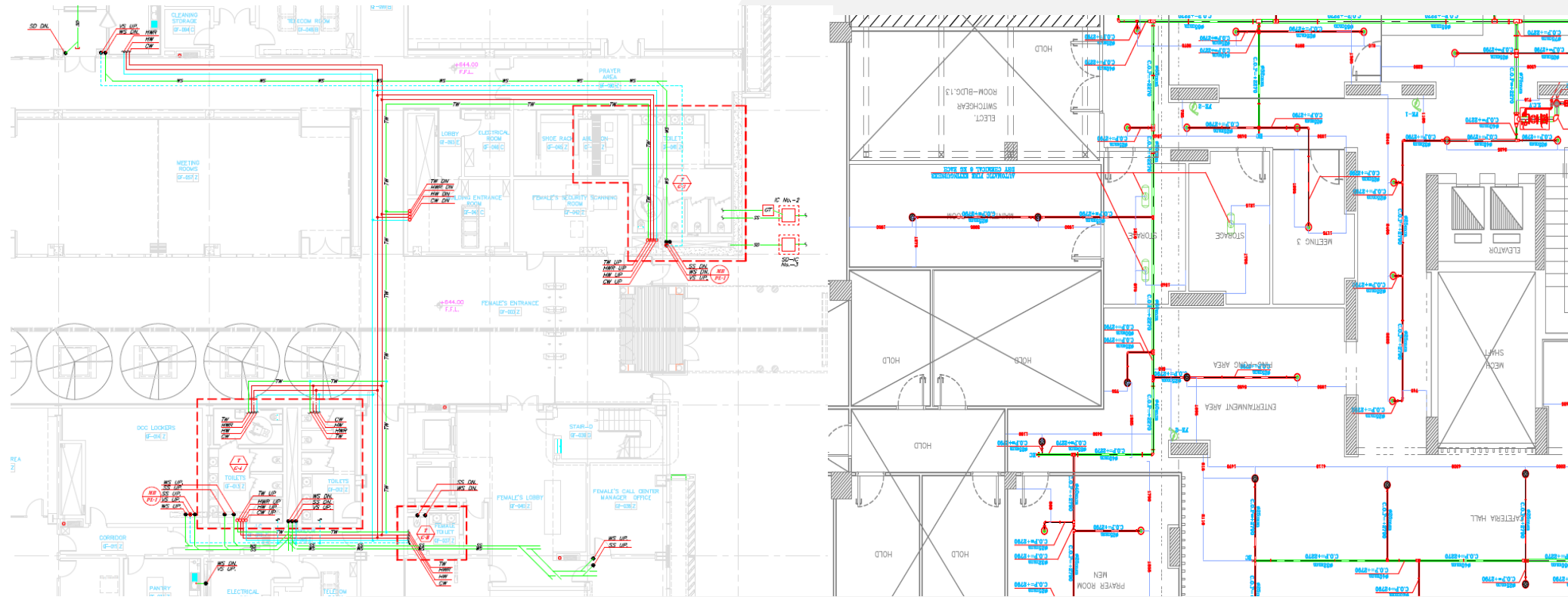
STAAD PRO

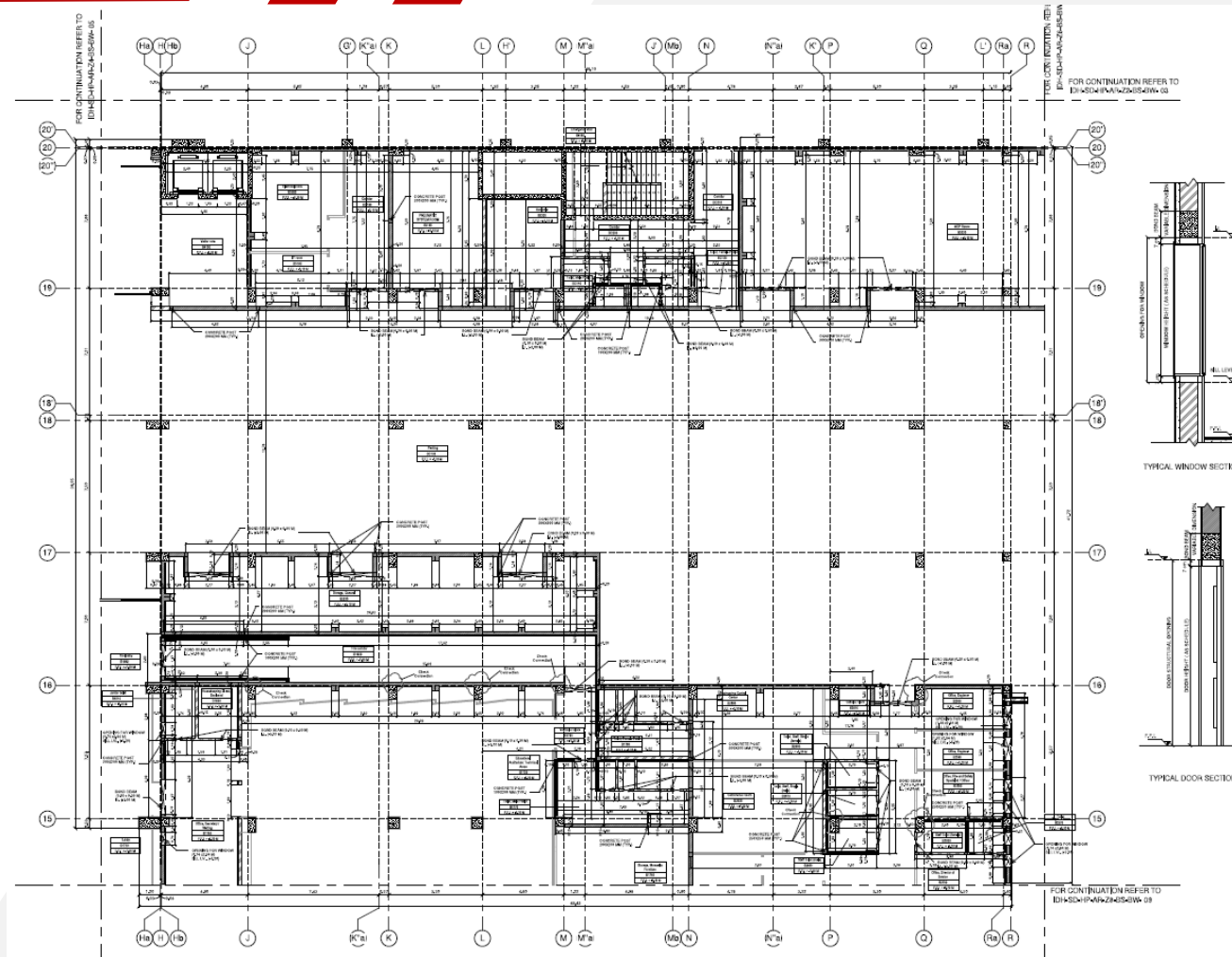


INFRASTRUCTURE SECTOR
PIPING & PLANT, PIPELINE
PIPE STRESS ANALYSIS
SUPPORTS ENGINEERING

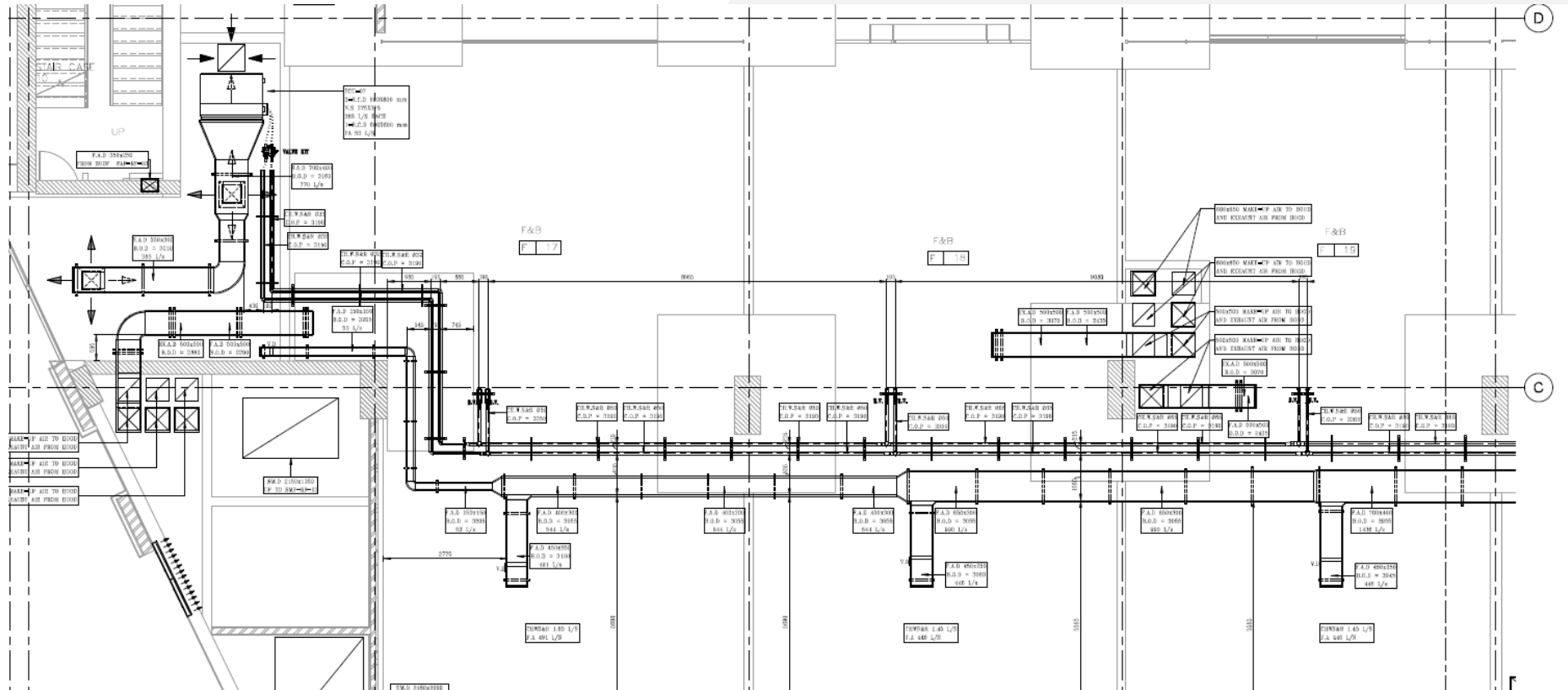


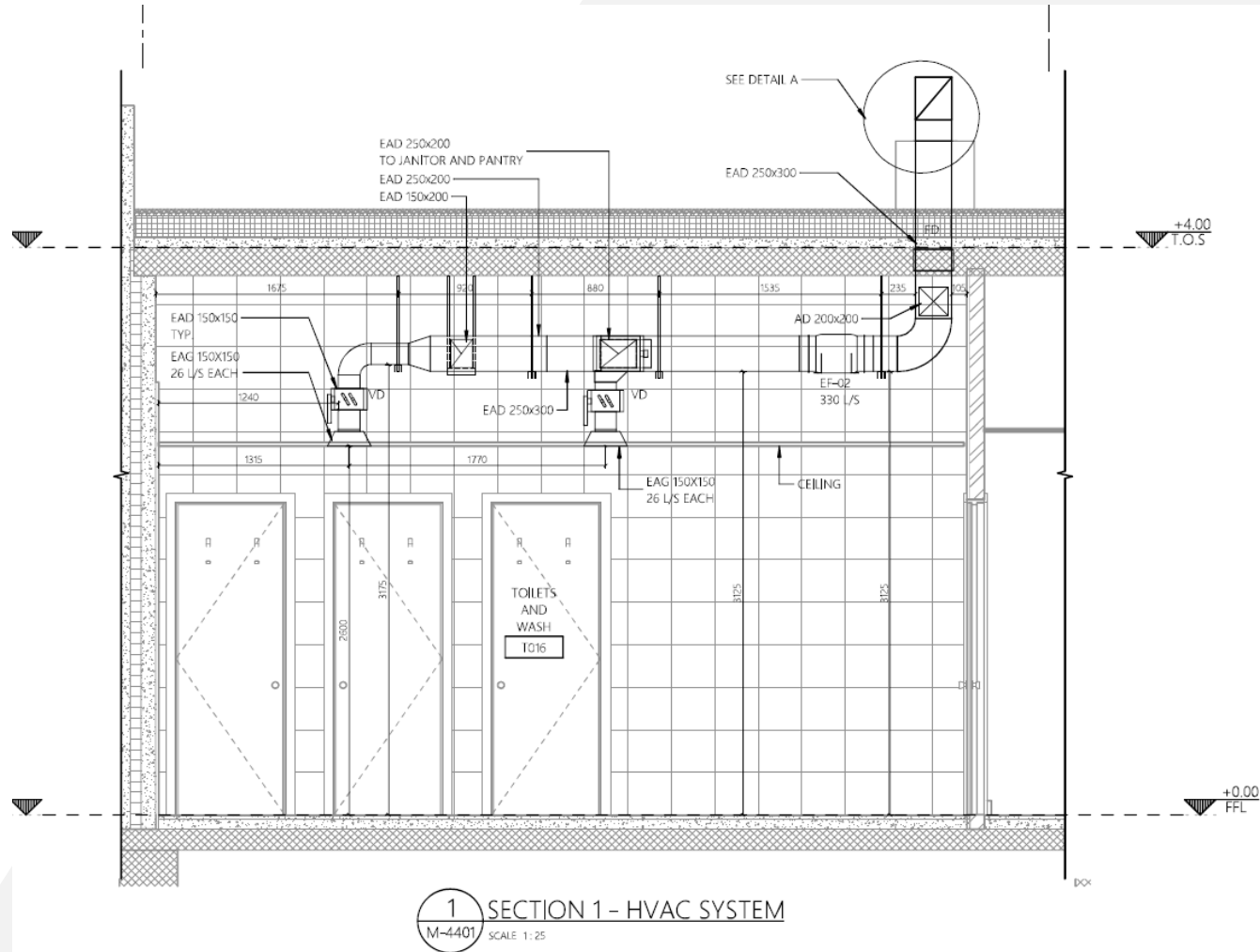
MEP & SHOP DRAWINGS SAMPLES





**MEP & SHOP DRAWINGS
SAMPLES**





REFERENCE PROJECTS

PROJECT	LOCATION	CLIENT	SCOPE OF WORK
Modon 3 Jeddah	Jeddah	Al Rafia/SWCC	<ul style="list-style-type: none"> - Arch. & Str. Design for control buildings - MEP Design - Pipeline design - Hydraulic calculation & surge analysis - Shafts (valve chambers) design
Suez Methanol Derivatives Project	Damietta	Egyptian Maintenance Company (EMC) (known as San Masr)	<ul style="list-style-type: none"> - Pipe stress analysis for 580 critical lines - Piping design coordination - Supports specifications
Sheybarah Hotel	Jeddah	Al Fanar	<ul style="list-style-type: none"> - Pipe stress analysis and supports design for above ground utility, chilled water and heating water networks
Water Improvement Projects	Qatif, Khobar, Dammam	Artelia / Al-Khorayef Water & Power	<ul style="list-style-type: none"> - Pipeline detailed design (Plan & Profile) - Valve chambers mechanical and structural design - Thrust blocks design - Pipe stress analysis for a total of 7 pump stations - MEP (Mechanical & Electrical) Design for 10 Reservoir Sites each includes Guard house, Generator room, Central control building, pump station

PROJECT	LOCATION	CLIENT	SCOPE OF WORK
MIRFA RO Water Treatment Plant	Abu Dhabi	Artelia / Al Nasr Contracting Company	<ul style="list-style-type: none"> - Internal roads and Hardscape detailed design - Wet-utilities networks design (Hydraulic, surge analysis, plan & profile, detailed design) - Valve chambers design - Electrical power & external infrastructure (lighting, power, lightening protection, telecommunication lines)
ZOHR Water Management	North Coast, Egypt	Synergy/SAPESCO	Piping design for steam blowing lines, pipe stress analysis, supports design
NEOM Circular City	Tabuk, Saudi Arabia	Artelia / Sharpoji Pallonji	<p>Infrastructure and piping engineering design package for Northern Easter Reservoir, treated water transmission pipeline, Innovation Center</p> <p>CFD for water flow in reservoir to assess water quality and stagnation. CFD for the utility culvert ventilation (air side)</p>
Yellow Mountain Pump Station	Mansoura, Egypt	Hassan Allam	Piping design and 3D Modeling & pipe Stress analysis for HDPE lines
MIDOR Refinery	Alexandria, Egypt	Synergy/SAPESCO	Piping design for steam blowing lines, pipe stress analysis, supports design
25000 TR Chiller Plant	Kuwait	Confidential	3D Plant Modeling/BIM LOD350 (Mechanical, Piping & Electrical disciplines)
9000 TR Chiller Plant	Bahrein	Confidential	3D Plant Modeling/BIM LOD350 (Mechanical, Piping & Electrical disciplines)

PROJECT	LOCATION	CLIENT	SCOPE OF WORK
TWW Irrigation networks upgrade around Riyadh	Riyadh, Saudi Arabia	Al Amr Group/Saudi Irrigation Organization (SIO)	<ul style="list-style-type: none"> - Conceptual and detailed design of water and irrigation pipeline connecting Dariyah, Dirab and Hair areas around Riyadh (approx. 300 km pipeline). - Hydraulic study evaluating the capacities and design requirements for existing pump stations at Manfouha central station.- MEP design for all connected pump stations - Operation and control philosophy study
Ras Gharib seawater and crude oil wastewater pipeline	Ras Gharib, Cairo	ONSPEC/PETROJET	Design for the wastewater pipeline, valve chambers mechanical and structural design, design of thrust blocks
Lusail Towers Concrete pipeline	Qatar	ACE Qatar/Hyundai Construction	Concrete fluid pumping process simulation and surge analysis (Non-newtonian fluid). piping design, pipe stress analysis, supports design for concrete pumping pipelines going 300 m height in Lusail Towers
Al Kharj Tank farm	Riyadh, Saudi Arabia	Al Rashid Trading & Contracting (RTCC)	Pipe stress analysis for interconnecting pipelines between new and existing concrete tank. CFD for water flow in reservoir & new proposed tank.
Jeddah & AL Taif sewage water treatment Stations	Jeddah/Al Taif, Saudi Arabia	NWC (National Water company)	Tender preparation, pump stations design, hydraulic analysis and infrastructure network design for BOQ estimation
Al Arabi Pump Stations & Infrastructure	Kuwait	Al Habshi Consultants	Design and surge analysis for 3 infrastructure pipelines
Midwater Facilities Upgrade	Alexandria, Egypt	Giza Systems	Piping design and stress analysis for transmission pipelines between the water treatment plant and interconnected tanks

PROJECT	LOCATION	CLIENT	SCOPE OF WORK
Abu Rawash Wastewater treatment plant	Cairo, Egypt	Process Works / Orasqualia	Plant Design with PDMS, MTO, Isometrics preparation, pipe stress analysis, supports calculation and design and project management for the subcontractor.
1400 MW Data Center seawater cooling	Finland	Red Engineering	Infrastructure master planning and surge analysis of 6 km piping network transferring seawater for cooling of 5 data centers with proposing alternatives such as Cushioned check valve, nozzle check valve, surge vessels and air valves, and presentation of modular solution corresponding to each Phase
SFMC Riyadh	Riyadh, Saudi Arabia	Shaker Consultancy Group	Piping specs preparation Pipe stress Analysis for district heating & cooling networks Piping specs preparation
SFMC Jeddah	Jeddah, Saudi Arabia	Shaker Consultancy Group	Pipe stress Analysis for district heating & cooling networks
Khazma Camp	Kuwait	Saudi Preinsulated Piping Industries	CHW buried network pipe stress and hydraulic + thermal analysis
Doha South Terminal Pump Station	Doha, Qatar	ACE Qatar/GEC	Piping and Plant Design, Pipe stress analysis for sewage high pressurized piping as per ASME B31.3 and GRP odor control duct as per ISO14692 Pipe Supports Detailed Design for fabrication

PROJECT	LOCATION	CLIENT	SCOPE OF WORK
			Design and detailing for Steel Structure carrying pipe supports
Jeddah Economic City Infrastructure	Jeddah, Saudi Arabia	Al Fouzan Trading & General Contracting (FTCO)/ EMDAD	Detailed Design of infrastructure piping networks, hydraulic steady state and Transient Surge analysis for 52 km of water, firefighting, irrigation networks and sewage pipeline
King Abdulaziz International Airport Infrastructure	Jeddah, Saudi Arabia	Vision Networks Co.	Pump stations conceptual design, equipment specification and surge vessel sizing.
Muzhil oilfield development	Gulf of Suez, Egypt	ENPROX Overseas	Pipe Stress analysis for Buried CHW network as per ASME B31.4 and B31.1. Pipe supports loads classification and selection
Gianaclis Plant	Al Beheira, Egypt	DEMAC for consultancy & engineering agencies	Tender design for new generator platform, 3-phase separator sizing, heat exchanger sizing, piping GA, Isometrics preparation, pipe stress analysis, pipe supports GA
Al Shamkha Developpment	Abu Dhabi, UAE	Western Region Municipality (Al Dhafra)	Design verification by analysis for existing 16 Barg and 194 °C Vessels with PV-Elite as per ASME Section VIII Division 1
Al Qaid Electrical Substation 132/110/13.8 kV	Hail, Saudi Arabia	International Construction & Development Company (ICD Saudi Arabia)	Design review, project management and construction scheduling for the subcontractor
Khalidiyah Electrical Substation	Najran, Saudi Arabia		
12 MW Generator Test Platform	Jeddah, Saudi Arabia	International Construction & Development Company	MEP design (HVAC, Firefighting & Plumbing), Load bank specification, structural/Skid design. 3D Visualization and BIM Modeling

PROJECT	LOCATION	CLIENT	SCOPE OF WORK
Wadi Al Natroun Aquaponic Farm	Cairo, Egypt	Morgan International Technologies	Master planning and layout preparation, Hydraulic design, piping design, Steel Structure design, BIM modeling + Visualization
Safir Hotel	Cairo, Egypt	Safir Hotels & Resorts	Site visit, test & balance inspection for cooling systems. Recommendation for enhancing efficiency.
Kuwait International Airport District Energy Plant	Kuwait	Gulf Consultants	Plant modeling, Pipe stress analysis, pipe supports GA, steel structure analysis
Kuwait International Airport Utility tunnel	Kuwait	Gulf Consultants	Pipe stress analysis for 2 km piping chilled water network, supports design



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