

# Gulf Construction

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# KUWAIT

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# HOUSING PUSH

One of the mega projects that aims to address Kuwait's housing shortage received the go-ahead recently, signalling the country's determination to press ahead with its New Kuwait Vision 2035 ambitions despite the political stalemate and bureaucracy faced by the nation.



The estimated \$6.8-billion South Saad Al-Abdullah Town project ... newly flagged off.

**K**UWAIT has a multitude of projects on the drawing board; with the soaring oil prices, it has the means too to carry out these long-awaited projects that will give a much-needed push to the non-oil sectors, including construction.

However, one big question on everyone's lips is, does the political class have the will and determination to implement these projects?

The project list is awe-inspiring not only for residents, but also for investors, developers and contractors – from airport, metro, highways and housing to oil and gas and industries; it's endless.

One such project that received the go-ahead in late April was the estimated KD2.1-billion (\$6.87 billion) South Saad Al-Abdullah Town project, signalling that Kuwait does intend to press ahead with its New Kuwait 2035 Vision aspirations.

Kuwait continues to be plagued by the

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political impasse between the legislative and executive authorities and excessive bureaucracy, which have thwarted its well laid-out plans and impacted its ability to attract foreign investment in pushing ahead with its development strategy.

The country is currently in the throes of yet another political crisis, having last month witnessed the collapse of its third Cabinet in just over a year and a half – a phenomenon that is not new to the nation whose parliament is regarded as one of the most powerful in the GCC.

According to the Economist Intelligence

Unit, the risk of political stalemate as well as the bureaucracy will continue to deter some investors and possibly slow the flow of public-private partnership (PPP) deals.

Kuwait lags behind its GCC neighbours in attracting foreign direct investment. The EIU believes that the continued delays in major projects since 2016 and the opposition of the National Assembly to foreign investment raise persistent doubts about Kuwait's ability to follow through on its plans and will limit the interest of foreign companies in participating in the country's





**A Mordor Intelligence report states that the country's development plan (2020-2025) focuses on economic reform and implementation of numerous long-stalled megaprojects, including several large infrastructure projects estimated at \$124 billion**

projects. Seven sectors in 2020/2021 attracted inward FDI inflows, with oil and gas accounting for the largest percentage with a 38 per cent share and the construction sector drawing in 15.8 per cent of the inflow.

Meanwhile, as the global war continues on Covid-19, the construction sector – along with other sectors – is contending with the impact that the coronavirus has had on the economy. In interviews with the *Kuwait News Agency (Kuna)*, key players in the industry reported a surge in construction material prices by as much as 30 per cent, shortage of manpower, and increase in transportation expenses. One contractor indicated that the cost of building one square metre prior to the pandemic was estimated at KD150 (\$495) whereas currently it is estimated at KD250 (\$825), marking a 70 per cent increase.

Following a slump in 2020, the construction sector rebounded in 2021 and is expected to register a growth of 14.3 per cent in 2022, before expanding by an annual average rate of 4.1 per cent over the remainder of the forecast period (2023-2025), according to Globaldata's report entitled *Construction in Kuwait – Key Trends and Opportunities to 2025 (H2 2021)*.

According to a report in the *Kuwait Times*, the country currently has more than 700 active projects with a combined value of \$230 billion, 20 per cent of which are near completion.

The government's programmes to promote the development of economic zones, logistic cities, transport and renewable energy infrastructure are expected to continue supporting the recovery of the industry in the coming years. Kuwait's priority to fast-track economic reforms and diversify its economy away from dependence on hydrocarbons will also support the construction industry. The country aims to position itself as a centre for re-exports, shipping and warehousing; to achieve this goal, it

aims to develop a series of 'logistic cities'.

A Mordor Intelligence report states that the country's development plan (2020-2025) focuses on economic reform and implementation of numerous long-stalled megaprojects, including several large infrastructure projects estimated at \$124 billion. These include the \$7-billion Kuwait City Metro; a rail project that will eventually link all GCC countries; a \$4-billion new airport; new planned cities including Silk City/Northern Economic Zone; further development of the Mubarak Al-Kabeer Port on Bubiyan Island; and a large number of mega oil projects. The government is working on over \$4 billion worth of hospital projects as part of its plan to boost the bed capacity of hospitals across the country. There are also plans to increase power generation capacity in the country, the report added.

This apart, significant investment is going into infrastructure including the construction of roads and utilities.

Project implementation has seen frequent delays, especially with large infrastructure projects. The government itself has acknowledged that only 10 projects out of 135 projects included in the 2015-

2020 five-year development plan were completed. With 81 projects delayed and four projects yet to be tendered, these projects are now included in the current five-year development plan (2020-2025), according to Mordor Intelligence.

During the first quarter of this year, Kuwait's project awards fell short of expectations, according to Isam Al-Sager, the Vice-Chairman and CEO of National Bank of Kuwait (NBK) Group, who added that these numbers are expected to gradually recover in the coming months to touch up to KD3 billion for the rest of the year. Just KD110 million worth of project awards were recorded in the first quarter, which Al-Sager blamed on the slow approval process as well as supply chain issues.

However, the silver lining is the improved oil prices which could help accelerate infrastructure project awards in the Gulf state.

According to the NBK's Macroeconomic Outlook 2022-2023, high oil prices will provide substantial support for the economy, given the country's oil revenue dependency. A large fiscal surplus – the first since 2014 – is expected this year, helping to alleviate recent government liquidity constraints.

The authorities are believed to be working on a new strategic plan to drive medium-to-long-term non-oil growth, with a special focus on an expanded role for the private sector. But political disputes between the government and parliament continue to impede effective implementation of reforms and the Vision 2035 development plan.



**The \$16-billion Clean Fuels Project (CFP) became fully operational in September last year.**



**Byout Hessah, part of the Hessah Al Mubarak District, is targeted for completion next year (details online at [gulfconstructiononline.com](https://gulfconstructiononline.com)).**

opment programme for now, according to the NBK report.

Other sources voiced concern about the delay in approving the new budget which may have a negative impact on the economy as these projects have already suffered delays, and the cost of implementing them now would have risen significantly due to inflationary pressures.

## HOUSING

Kuwait gave the green light for the last of the five major housing developments envisaged in the country's Vision 2035 plan, under which it intends to provide some 65,500 housing units through five projects costing about KD3.22 billion by 2029. In fact, the Public Authority for Housing and Welfare (PAHW) is now looking at building a total of 250,000 housing units in the next 15 years to address the huge housing shortage faced by the country.

The latest residential city to be launched, the South Saad Al-Abdullah housing project, will cost a total of KD2.1 billion, which will be phased over the coming state budgets. Other housing programmes underway include Al-Mutlaa Residential City, being built at a cost of KD987.8 million and reported to be 64 per cent complete; South Sabah Al-Ahmad Residential City, being built at a cost of KD732.5 million; Jaber Al-Ahmad City costing KD537.7 million, which is 95 per cent complete; and the suburb of South Abdullah Al-Mubarak,

which is 72 per cent complete.

The South Sa'ad Al-Abdullah project, which extends over an area of 59 sq km, will include 25,000 housing units that will be built as "smart city" under a joint project agreed upon in 2016 between the Public Corporation for Housing Welfare and a South Korean consortium.

## AIRPORT & PORTS

The construction of Kuwait International Airport's new terminal 2 (T2) suffered a setback recently when a fire in the basement construction area caused damage within the zone. However, the contractor, Limak Construction – a part of leading Turkish conglomerate Limak Group – is now pressing ahead with its plans and expects to repair the damage this year in parallel with other activities (*see Page 14*).

Among other plans, Kuwait has also indicated that it intends to build a new airport in the north of the country.

As part of its ambitions to become a regional hub, the country is also focusing on expanding its ports. Kuwait Ports Authority (KPA) has approved 12 projects to expand capacity. It recently awarded Hyundai Engineering & Construction a \$160-million contract to develop seven berths at the port of Mina Al-Shuwaikh, following contracts for infrastructure and power works at Shuaiba Port in southern Kuwait with a combined value of about \$63 million.

Mina Al-Shuwaikh is the main manu-

facturing and industrial area of Kuwait, and is also home to its free trade zone. The port has 21 berths with a total length of a little over 4 km.

KPA is also expected to award the design and consultancy study contract for its estimated \$400-million Logistics Cities Project spanning Doha, Mina Al-Shuwaikh and Mina Abdullah ports shortly.

## OIL & GAS

The new Al-Zour refinery is expected to be operational "within the next few weeks", Kuwait Integrated Petroleum Industries Company (KIPIC) said in late April. Al-Zour was initially expected to come online by the end of 2021, but this was delayed to June 2022.

Meanwhile, Kuwait's \$16-billion Clean Fuels Project (CFP) became fully operational in September last year after six years of work. The last CFP unit to come online was a 70,000-barrels-per-day (bpd) hydrocracking unit at the 454,000 bpd Mina Abdullah refinery.

Among other major developments in the sector, Al-Zour LNG Import Terminal has recently begun commercial operation. A consortium of Hyundai Engineering Company, Hyundai Engineering & Construction Company and Korea Gas Corporation won the \$2.93-billion construction deal from KIPIC for the construction of the LNG terminal in March 2016. ■

(Read more online at [gulfconstructiononline.com](https://gulfconstructiononline.com))



# KUWAIT AT A GLANCE

Package name	Owner	Status*	\$ Million **
Al Abdali Economic Zone (AEZ)	Kuwait Direct Investment Promotion Authority (KDIPA)	Design	756
Al Adan Hospital Expansion	Ministry of Health	Construction	772
Al Farwaniya Hospital Expansion	Ministry of Health	Construction	1,000
Al Jahra Waterfront (Al Corniche) Project	Kuwait Municipality	Design	1,250
Al Khiran Independent Water and Power Project (IWPP)	Kuwait Authority for Partnership Projects (KAPP)	Feasibility Study	4,100
Al Khiran Real Estate Development	Tamdeen Real Estate	Construction	831
Al Nuwaiseeb Road Construction Project	Ministry of Public Works, Public Authority for Roads and Transportation (PART)	Construction	560
Al Sabah Hospital Expansion	Ministry of Health	Construction	700
Al Shaddadiyah Industrial Zone	Public Authority for Industry (PAI)	Construction	300
Al Zour North Independent Water and Power Project (IWPP) – Phase 2/3 (2700 MW)	KAPP	Feasibility Study	1,500
Asimah Cargo City – Package 4B – Buildings	Directorate General of Civil Aviation (DGCA), Ministry of Public Works	Feasibility Study	200
Bubiyah Seaport Project (Mubarak Al Kabeer) – Overview	Ministry of Public Works	Construction	6,500
Bubiyah Seaport Project (Mubarak Al Kabeer) – Phase 1 – Package 3A – Buildings & Infrastructure	Ministry of Public Works	Design	500
Bubiyah Seaport Project (Mubarak Al Kabeer) – Phase 1 – Package 3B1 – Road Network	Ministry of Public Works	Construction	250
Doha Desalination Plant – Phase 2 – 60 MIGD	Ministry of Electricity & Water	EPC ITB	397
Farwaniya Cultural Centre	Ministry of Public Works	Design	400
First Ring Road Extension – Phase 3 – Roadways & Upgrade of Existing Facilities	Ministry of Public Works	FEED	392
Ibn Sina Hospital Expansion	Ministry of Health	EPC ITB	413
Jurassic Production Facilities (JPF) – JPF-4 and JPF-5	Kuwait Oil Company (KOC)	Construction	980
Kuwait Bay Exploration	KOC	E&P	904.5
Kuwait City Cancer Centre	Ministry of Health	Construction	650
Kuwait International Airport Expansion – Overview	DGCA, Ministry of Public Works	Construction	7,000
Kuwait International Airport Expansion – Package 1 – Main Terminal Building (Terminal 2)	DGCA, Ministry of Public Works	Construction	4,500
Kuwait International Airport Expansion – Package 2 – Service Buildings, Roads To Terminal 2 & Car Park – Overview	DGCA, Ministry of Public Works	Construction	552.6
Kuwait International Airport Expansion – Package 2 – Service Buildings, Roads To Terminal 2 & Car Park – Terminal 2 Link Road	DGCA, Ministry of Public Works	EPC ITB	281
Kuwait International Airport Expansion – Runways & Airfield Infrastructure Package	DGCA, Ministry of Public Works	Construction	492
Kuwait National Railroad (KNRR)	KAPP, PART	Feasibility Study	1,990
Mina Abdulla to Al Wafra City Road	Ministry of Public Works	Construction	285
North Kuwait Effluent Water Treatment and Injection Plant (EF1761)	KOC	Commissioning	1,000
Palace of Justice	Amiri Diwan	Construction	1,000
Rehabilitation of Al Ghouse Road Package Overview	Ministry of Public Works	Construction	775
Rehabilitation of Al Ghouse Road – Package 3 – Seventh Ring Road to Fahaheel Expressway	Ministry of Public Works, PART	EPC ITB	198
Replacement of Substations at Mina Al Ahmadi Refinery	Kuwait National Petroleum Company (KNPC)	E&P	165
Sabah Al Ahmad Residential City	PAHW	Construction	7,000
Sabah Al Salem University – College of Social Sciences, Law, Sharia & Islamic Studies	Kuwait University	Construction	550
Shuwaikh Maternity Hospital	Ministry of Health, Ministry of Public Works	Construction	727
South Al Mutlaa City – Housing Package	PAHW	Construction	1,200
South Al Mutlaa City – Infrastructure Package – Overview	PAHW	Construction	1,800
South Al Mutlaa City – Infrastructure Package – Wastewater Treatment Plant	Ministry of Public Works	EPC ITB	525
South Al Mutlaa City – Overview	PAHW	Construction	20,000
South Jahra Labour City	KAPP, Partnerships Technical Bureau (PTB)	PMC	485
Special Needs School Complex	Ministry of Public Works	FEED	1,226
Subiya Power Plant – Phase 4 – 900 MW Expansion	Ministry of Electricity & Water	EPC ITB	650
Technology, Business, Health Sciences and Education Complex	Public Authority for Applied Education & Training (PAAET)	Design	400
The Silk City Project (Madinat Al-Hareer)	PAHW	Design	82,200
Umm Al Hayman Wastewater Treatment Plant (WWTP) – Overview	KAPP, Ministry of Public Works	Construction	1,760
Umm Al Hayman Wastewater Treatment Plant (WWTP) – Phase 1 (500,000 cm/d)	KAPP, Ministry of Public Works	Construction	1,260
Umm Al Hayman Wastewater Treatment Plant (WWTP) – Phase 2 (700,000 cm/d)	KAPP, Ministry of Public Works	Feasibility Study	500

\* E&P = Engineering and procurement; EPC ITB = Engineering, procurement and construction invitation to bid





Consultant	Contractor	Start date	End date
-	-	2014-Q3	2030-Q1
Hill International, System Development & Project Management (SDPM)	Sayed Hamid Behbehani and Sons Company	2013-Q1	2022-Q2
Hill International, SDPM	Sayed Hamid Behbehani and Sons Company	2012-Q3	2022-Q2
-	-	2017-Q4	2022-Q4
-	-	2011-Q1	2026-Q1
-	Al Ghanim International	2014-Q4	2022-Q2
Gulf Consult, Parsons Brinckerhoff	Arab Contractors (Osman Ahmed Osman & Company), Kuwait Arab Contractors Company	2012-Q3	2022-Q2
-	Al Sager General Trading & Contracting, Shapoorji Pallonji	2013-Q1	2022-Q4
-	Mushrif Trading & Contracting Company	2011-Q3	2022-Q2
-	-	2017-Q3	2025-Q4
-	-	2013-Q1	2022-Q2
-	China Harbour Engineering Company (CHEC), Copri Construction Entreprises, Gulf Dredging & General Contracting, Hyundai Engineering & Construction, Kharafi Group, Shaheen Al Ghanim Roads and Bridges	2006-Q1	2024-Q4
-	-	2010-Q3	2024-Q4
PMDC	Copri Construction Entreprises	2018-Q2	2022-Q4
-	-	2019-Q3	2024-Q4
-	-	2015-Q2	2023-Q2
Parsons Brinckerhoff	-	2014-Q1	2022-Q2
-	-	2015-Q2	2022-Q2
KOC	Jereh, National Projects Alliance Company (Napco), Spetco International Petroleum Company	2018-Q1	2023-Q2
KOC	KOC	2014-Q1	2023-Q1
Hill International, SPDM	Al Ghanim International General Trading & Contracting	2010-Q4	2022-Q2
Dorsch Consult, Ingenieria & Consultoria de Transporte (Ineco), SSH International Consultants	Al Dar Engineering & Construction Company, Avic International, Kharafi National, Limak	2007-Q2	2023-Q1
Ineco	Kharafi National, Limak	2007-Q2	2022-Q3
-	Limak Insaat Sanayi	2007-Q2	2022-Q3
-	-	2007-Q2	2024-Q3
Dorsch Consult, SSH International	Al Dar Engineering & Construction Company, Avic International Consultants	2007-Q2	2022-Q3
-	-	2008-Q3	2023-Q1
-	Alghanim Industries	2012-Q1	2022-Q2
-	Dodsal	2012-Q1	2022-Q2
Atkins, Gulf Consult	Mohammed Abdul Mohsin Al-Kharafi & Sons	2015-Q1	2022-Q3
-	Ahmadiyah Contracting & Trading Company, Combined Group Contracting Company	2015-Q2	2024-Q2
-	-	2015-Q2	2024-Q2
Wood	Larsen & Toubro	2015-Q2	2024-Q2
-	Alamiah Building Company, Combined Group Contracting Company, First Kuwaiti General Trading & Contracting Company, Mohammed Abdul Mohsin Al-Kharafi & Sons, Nusaiba Company for General Contracting for Buildings, United Gulf Construction Company (UGCC), United Building Company	2006-Q1	2036-Q1
-	Al Sager General Trading & Contracting, Shapoorji Pallonji & Company	2012-Q1	2022-Q2
-	Impresa Pizzarotti	2011-Q1	2022-Q2
Hill International	Bayan National Construction Contracting Company, Canar Trading & Contracting Company (CTCC), Limak Construction, Recafco	2010-Q3	2023-Q1
-	Cengiz, China Gezhouba Group, Kolin, Limak, Polatlyol, Salini Impregilo	2010-Q1	2025-Q1
-	-	2020-Q2	2025-Q1
Hill International	Bayan National Construction Contracting Company, China Gezhouba Group (Cengiz), Canar Trading & Contracting Company (CTCC), Kolin, Limak, Polatlyol, Real Estate Construction & Fabrication Company (Recafco), Salini Impregilo	2010-Q1	2023-Q3
-	-	2013-Q3	2023-Q1
Gulf Consult	-	2012-Q1	2023-Q1
-	-	2022-Q1	2025-Q1
-	-	2015-Q1	2024-Q1
-	-	2011-Q1	2036-Q1
-	WTE Wassertechnik	2007-Q2	2024-Q4
-	WTE Wassertechnik	2007-Q2	2023-Q1
-	-	2017-Q1	2025-Q1

\*\* List includes projects worth over \$165 million only.

Source: DMS Projects



# ICONIC GATEWAY TAKES SHAPE



Work on Kuwait International Airport's new terminal is well advanced. **BELOW: A rendering of the Fosters + Partners-designed terminal.**

**C**ONSTRUCTION work on the iconic Kuwait International Airport's new Terminal 2 project continues apace, despite the setback caused by the recent fire at the construction site, according to the main contractor working on the landmark development.

In a statement to *Gulf Construction*, Limak İnşaat Kuwait Project Director Richard Meredith says: "Work on the Kuwait International Airport New Terminal 2 project is ongoing and continuing in full compliance with the full support of the government of Kuwait and the Ministry of Public Works. Although the fire on March 28 was a serious incident, the structural damage to the terminal is minimal. The structural area affected is less than 0.1 per cent of the building area and will be repaired this year in parallel with other activities."

"We've been excited to work on this project since it started in 2016, and we're looking forward to completing a unique, world-class terminal. It will be an iconic gateway to Kuwait and be among the world's most advanced and environmentally conscious airports," he adds.



The Kuwait International Airport T2 Terminal project is being handled by Limak İnşaat Kuwait, which was established in 2016 through the Kuwait Direct Investment Promotion Authority (KDIPA).

Under a contract awarded by Kuwait's Ministry of Public Works in 2016, Limak was assigned the responsibility for the construction, completion, furnishing and maintenance of the Terminal Two project. The scope of works involves construction

of the new terminal building, central plant building, water tank building, switching substations, utility tunnels and enabling works, over a 750,000-sq-m site.

The futuristic Fosters + Partners-designed terminal will have a capacity to handle 25 million passengers per year with an initial capacity of 51 gates and stands; and the ability to serve 21 A380s simultaneously. Designed to International Air Transport Association (IATA) Level



of Service A, the new passenger terminal is targeting to be one of the first airport terminals in the world to achieve Leadership in Energy and Environmental Design (LEED) Gold certification.

The building will generate its own solar energy by combining a network of solar energy panels installed on the roof with the thermal characteristics of concrete construction, according to Limak.

Apart from the terminal, Limak was also awarded a \$561-million contract in July 2020 to handle the construction, completion and maintenance of Package Two of the T2 project, which consists of a car-park building and escape tunnel (capacity: 5,137 cars), landside external works and landscaping, the roof, packaged wastewater treatment plant, roads and bridges, stormwater storage tanks, water supply and utility lines and warehouse.

## CONSTRUCTION

Limak marked a major project milestone on site in mid-March by erecting the final shell cassette required for the massive domes covering the inner roof of the Terminal 2 project. Fabricated entirely on site, the shell cassettes are a significant component of the terminal's roof and the project's objective to achieve LEED Gold certification.

"We marked our last significant project milestone on March 17 by installing the last of 36,964 shell cassettes required for the interior roof of the terminal, and we look forward to achieving more key milestones in the future," Meredith indicates.

Despite the logistical challenges presented by the Covid-19 pandemic, T2 construction has continued in full compliance with the measures required to keep the site and employees safe, and Limak has invested in its own factories to combat any long lead times or shortages, he states. Limak built high-tech fabrication and concrete casting plants on site to speed up the construction process.

The shell cassette moulds were constructed and assembled by Limak in Kuwait, and designed by Adapa, a Danish company specialised in mechanical innovation and computer-aided mould manufacturing. The design of the complex structure was undertaken by Germany-based Werner Sobek, while the roof's construction methodology was handled by the Robert Bird Group, a member of one of the larg-



**From concept (above) to construction ... all the 36,964 shell cassettes required for the interior roof of the terminal have been installed.**



est Asia-based urban, industrial, and infrastructure consulting firms.

The shell cassettes comprise a composite structure of steel and concrete reinforced with white Portland cement. Each shell, measuring between 3.5 to 5 m and weighing 2.5 to 6 tonnes, has been specially cured, sandblasted, and sealed.

The shell cassettes were fabricated in nine factory areas, equipped with nine portal cranes, two semi-portal cranes and 17 overhead cranes. On average, 100 shell cassettes were produced daily with output

peaking at 127 per day. Of the 36,964 individual shell cassettes produced, 31,752 have single curved geometries while the remaining have double curved geometries. These cover a total area of 282,179 sq m.

The shell cassettes are grouped together as modular blocks that, when connected, form the massive domes that cover and span the terminal's entire interior space. Mounted on the roof, these innovative and unique segmented dome structures span up to 137 m.

— By Bina Goveas ■