QALA QUARRY
Gozo

Stone extraction begins for the new parliament.

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Gozo

Stone extraction begins for the project. These were the largest monolithic stone elements extracted, fabricated and installed on the project, 3.5m x 1.8m x 1.8m, net weight fabricated of 18 tons.

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CITY GATE
Valletta

City Gate project takes lining shape.

FABRICATION & EXTRACTION

The Valletta City Gate required the largest stone elements on the project. These had to be fabricated to the extreme tolerances required for the project to ensure that all the complex 3D monolithic elements, mainly L-pieces forming the corners, are lined up.

The equipment had to be re-engineered so that the extreme monolithic elements could be fabricated.

FIXINGS

The extreme size, seismic engineering requirements for the stone elements and extreme precision needed to install the elements called for the development of specific fixings. These fixings were developed by the R&D department of Halmann Vella in collaboration with the University of Malta.

A series of tests and analysis was undertaken in order to develop the fixings required to lift the stone elements, with a maximum of 18 tons and then fix the stone elements to the required seismic parameters. The research established the allowable stress and safety factors for the fixings used on project.

INSTALLATION

Using the specially developed Halmann Vella fixings the stones were lifted and fixed in position. In addition specially designed lifting rigs were developed in order to reduce the lifting stress within the stone prior to installation. The system performed and enabled the team to install the elements regardless of size, weight and complexity of shape with a very high efficiency rate.

2009

PROPOSALS by RENZO PIANO
Genoa, Italy

Renzo Piano was born in 1937, into a family of builders. He was educated and subsequently taught at the Politecnico di Milano. He graduated from the University in 1964 and began working with experimental lightweight structures and stone sections.

2010

QALA QUARRY
Gozo

Qala Quarry was identified to supply all the natural stone for the City Gate project.

2011

QALA QUARRY
Gozo

Stone extraction begins for the new parliament.

2012

STONE FABRICATION
Halmann Vella Ltd, Lija

Stone fabrication for corners of City Gate begins, largest monolithic stone element fabricated and installed on the project, 3.5m x 2.2m x 1.8m, net weight fabricated of 18 tons.

2013

FREE STONE BLOCK QUARRYING
Qala, Gozo

Large scale stone block quarrying begins for the City Gate project.
Malta is an island state comprising an archipelago of two major islands in the Mediterranean Sea. It lies 80 km south of Sicily, 284 km east of Tunisia, and 333 km north of Libya. The country covers just over 316 km², making it one of the world's smallest and most densely populated sovereign states. The capital of Malta is Valletta, which is also the oldest capital city in the European Union. Malta has two official languages: Maltese and English.

Malta has a long Christian legacy and its Roman Catholic Archdiocese of Malta is sometimes traditionally claimed to be an Apostolic See, because, according to the Acts of the Apostles, Paul the Apostle was shipwrecked on Malta. Catholicism is the official religion in Malta.

In 2009, internationally renowned architect Renzo Piano was assigned a World Heritage Site by UNESCO in 1980. The Royal Opera House. The City of Valletta was officially recognised as a World Heritage Site in 1980. The Royal Opera House.

Valletta is the capital of Malta, colloquially known as Valletta (English: The City) in Maltese. It is located in the central-eastern area of the island of Malta having its geographical center with access to the Mediterranean Sea and its western coast in the Grand Harbour. The Gżira Island to the north of Valletta is part of the Malta Islands and is connected to the main island of Malta by a bridge. Valletta is the administrative capital of Malta.

Valletta has a population of 6,675. In 2011, the city had an estimated population of 6,675. The city is the seat of the Maltese government, and many of the country's important cultural and religious sites are located here. Valletta has a rich history and is considered one of the most beautiful cities in Europe. It is known for its well-preserved architecture and cultural heritage, making it a popular tourist destination.

Valletta is considered one of the most beautiful cities in Europe, and its rich history and cultural heritage make it a popular tourist destination. The city is home to a number of important cultural and religious sites, including the Church of St Paul and the Palace Armoury.

Valletta is adorned with buildings from the 16th century onwards, and its historical importance throughout history, and a succession of powers, including the Phoenicians, Romans, Moors, Normans, Sicilians, Habsburg Spain, and the Knights of St. John, who ruled the island from the 16th to the 19th centuries.

Valletta is often described as the ‘fortified city’ and is considered one of the most beautiful cities in Europe. The city is known for its well-preserved architecture and cultural heritage, making it a popular tourist destination.

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2009
Proposal by Renzo Piano
Genoa, Italy

2010
Qala Quarry
Gozo

2011
Qala Quarry
Gozo

2012
Stone Fabrication
Halmann Vella Ltd, Lija

2014
New City Gate Flank Stairs
Valletta

Qala Quarry
Gozo

City Gate project starts taking shape.

August

• 4 Main Architectural Elements
• 900 individual Stone Elements
• Varying from 18 Tons to 120kgs
• Varying from 3.5m in Height to 0.3m
• Designed using 3D Engineering Software and Fabricated using 5 Axis Technology
• Specially Developed Stone Fixings for Lifting and Seismic Restraint

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