

= Wignacourt Aqueduct =

The Wignacourt Aqueduct (Maltese : L Akwedott ta ' Wignacourt) is a 17th century aqueduct in Malta , which was built by the Order of Saint John to carry water from springs in Dingli and Rabat to the newly built capital city Valletta . The aqueduct was carried through underground pipes and a system of arches along depressions in the ground .

The first attempts to build the aqueduct were made by Grand Master Martin Garzez in 1596 , but construction was suspended before being continued in 1610 . The watercourse was inaugurated five years later on 21 April 1615 . Several engineers took part in the project , including Bontadino de Bontadini , Giovanni Attard and Natale Tomasucci . The aqueduct was named after Grand Master Alof de Wignacourt , who partially financed its construction .

The aqueduct remained in use until the 20th century . Most of its arches still survive today , and can still be seen in the localities of Attard , Balzan , Birkirkara , Fleur de Lys and Santa Venera . Other remains of the aqueduct include water towers at Santa Venera , Ħamrun and Floriana , and several fountains in Floriana and Valletta .

= = History = =

In 1566 , the capital city of Valletta was founded on the Sciberras Peninsula , which did not have a good water supply . Rainwater collected within the city was not enough to meet the needs of its population . Water had to be carted from springs to the city , but this became difficult by the end of the 16th century , when the city had become the largest settlement in Malta . At the time , there were also fears of an Ottoman attack on Malta , so a steady water supply to the capital was a priority for the military authorities in the case of a siege .

The order to build an aqueduct to carry water from springs in Dingli and Rabat to the capital was issued on 19 October 1596 . That year , Grand Master Martin Garzez brought in the Jesuit Padre Giacomo to design the watercourse . His design was accepted and work was begun , but construction was suspended soon afterwards due to financial reasons .

On 9 January 1610 , works on the aqueduct continued under the direction of another Jesuit called Padre Natale Tomasucci . By this time , Garzez had died and was succeeded as Grand Master by Alof de Wignacourt . In July 1612 , the Bolognese hydraulic expert Bontadino de Bontadini took over the project , probably on the recommendation of Inquisitor Evangelista Carbonesi . Bontadini designed a new watercourse with water being carried through underwater pipes , and over stone arches when there were depressions in the ground . Bontadini was assisted by a Maltese capomastro Giovanni Attard and several other engineers . 600 local workers were employed in the construction of the aqueduct , which was completed in 1614 and inaugurated on 21 April 1615 . The aqueduct cost a total of 434 , 605 scudi , most of which were paid by Grand Master Wignacourt . The aqueduct was therefore named in his honour .

Upon its completion , the aqueduct supplied 1 , 400 m³ (49 , 000 cu ft) of water every day to around 30 , 000 people . The constant supply of water brought about a rise in the populations of Valletta , Floriana and other towns and villages along the route of the aqueduct .

The aqueduct was improved by Grand Master Emmanuel de Rohan Polduc in 1780 . On 4 September 1798 , in the early stages of the Maltese uprising against the French , insurgents ambushed French soldiers near the aqueduct at Mrieħel , in the limits of Birkirkara .

In 1907 , there was a proposal to construct buildings on top of the aqueduct , with its arches effectively serving as an arcade . The Office of the Public Works drew up plans for these buildings , but eventually nothing materialized . The aqueduct remained in use until the early 20th century .

Between 2004 and 2005 , the aqueduct 's surviving arches were restored and a lighting system was installed , at a total cost of Lm 140 , 000 . Some of the arches are in need of restoration once again , mainly due to pollution since a major road is now located along the aqueduct . A section of the aqueduct was extensively damaged in December 2013 due to a car crash , but the damage has since been repaired .

Various sections of the aqueduct are scheduled by the Malta Environment and Planning Authority (

MEPA) as grade 1 national monuments and are listed on the National Inventory of the Cultural Property of the Maltese Islands .

= = Architecture = =

The aqueduct ran from the springs in Rabat and Dingli to the countryside near Attard through underwater pipes . From Attard onwards , the ground level was irregular so stone arches were constructed where there were depressions . The arches begin at present @-@ day Peter Paul Rubens Street (Maltese : Triq Peter Paul Rubens) in Attard , and are initially quite small . They continue through Mdina Road (Maltese : Triq l @-@ Imdina) in Balzan and Birkirkara , and the size of the arches gradually increases as the ground level drops .

At Fleur @-@ de @-@ Lys , the aqueduct crossed the road , and the Wignacourt Arch was built to commemorate the project . The arches then continue through St. Joseph High Road (Maltese : Triq il @-@ Kbir San ?u?epp) in Santa Venera , until they stop at a small tower known as the Tower of St. Joseph . From this tower , water continued its journey to ?amrun , Blata l @-@ Bajda , Floriana and Valletta through underground pipes once again . Water inspection towers were also built at ?amrun and Floriana .

= = = Wignacourt Arch / Fleur @-@ de @-@ Lys Gate = = =

The triumphal archway at the boundary between Fleur @-@ de @-@ Lys and Santa Venera is known as the Wignacourt Arch or the Fleur @-@ de @-@ Lys Gate . It has three doorways , and it is adorned with Wignacourt 's coat of arms and three sculpted fleurs @-@ de @-@ lis , the heraldic symbols of Wignacourt . The suburb of Fleur @-@ de @-@ Lys got its name from this arch , and fleurs @-@ de @-@ lis are featured on the flags and coat of arms of both Fleur @-@ de @-@ Lys and Santa Venera . One of the original plaques on the arch gave due respect to the engineer Bontadino de Bontadini . The arch together with the aqueduct 's water towers and fountains were the first expression of baroque architecture in Malta .

The original arch was demolished in 1944 , and a roundabout was later built on its site . The construction of a replica of the arch was approved in 2012 . The local councils of Santa Venera and Birkirkara , as well as the Fleur @-@ de @-@ Lys Administrative Committee disagreed on what the arch 's name should be , and eventually agreed in 2014 that it should be called " The Wignacourt Arch Known As The Fleur @-@ de @-@ Lys Gate " . The arch was reconstructed in 2015 , and it was inaugurated on 28 April 2016 .

= = = Water inspection towers = = =

= = = = Santa Venera = = = =

The first inspection tower of the Wignacourt Aqueduct is located in present day Santa Venera . It is called the Tower of St. Joseph (Italian : Torre di San Giuseppe) , but it is commonly known as it @-@ Turretta in Maltese or the Torretta in Italian . The turret is linked to the aqueduct 's arches , and it has two floors with a buttressed lower level , giving it the resemblance of a coastal watchtower such as the De Redin towers . It is not clear if the present structure is the original one , since the original designs of the aqueduct show a slightly different tower . The tower had the following inscription (no longer visible) :

QUAM SUBTERRANEIS SESE DUCTIBUS
INFERENTEM HOC LOCO AMITTIS AQUAM
EADEM URBE MEDIA PULCHERRIMO
SESE FONTE COMPERIES EFFERENTEM .
INGENIO MIRO BONTADINI DE BONTADINIS BONON .

===== ?amrun =====

The second water inspection tower was built on the hill of St. Nicholas in ?amrun , and it is known as il @-@ Monument tat @-@ Tromba or it @-@ Turretta ta ' Ato?ja . It has a round shape , and water originally flowed through an open tank in the tower . The tower contains Wignacourt 's coat of arms and a commemorative inscription which reads :

VT SPIRITVS IN AQVIS

SIC SPIRITVS AB AQVIS . (meaning As there is life in water , life started from water)

The tower still exists , but it is in a dilapidated state and it is surrounded by modern houses .

In 1780 , when the aqueduct was improved by De Rohan , a commemorative obelisk was erected some distance away from the tower . It is now found in a private backyard . It has a coat of arms which was damaged in World War II , and an inscription which means :

Emmanuel De Rohan made this aqueduct stronger for the collection of water , with a newer one better built by the kind hearted Prince for the health of his people in the year 1780 .

===== Floriana =====

The third and final water inspection tower was built in Floriana , and it became known as the Wignacourt Water Tower . It is located close to Argotti Botanical Gardens and the Sarria Church . It is a round structure supported by pilasters , and it also contains a fountain and a horse trough . The top of the tower contains a sculpted fleur @-@ de @-@ lis , and it is also decorated with the coat of arms of the Order of St. John and the personal arms of Wignacourt . Below the coats of arms is the following inscription :

TURRICULA ORNATUM LILIIS CAPUT EFFERO VT VRBE

INSPICIAM FONTEM VIVIFICANTIS AQUÆ .

BONTADINO DE BONTADINIS , BONOM . AQUÆ DUCTORE MDCXV .

The tower was included on the Antiquities List of 1925 .

The tower was restored between June 2015 and June 2016 by the Ministry for Transport and Infrastructure .

===== Fountains =====

With the completion of the Wignacourt Aqueduct , many fountains supplied by water from the aqueducts were built in Valletta .

===== Wignacourt Fountain =====

The first fountain which was connected to the aqueduct was the Wignacourt Fountain , located in St. George 's Square in Valletta , facing the Grandmaster 's Palace . The inauguration ceremony of the aqueduct on 21 April 1615 was held at this fountain . When the square became a parade ground for the British military , the fountain was relocated to St. Philip 's Gardens in Floriana , where it remains today .

The baroque fountain consists of a large circular basin with three smaller seashell @-@ like basins above it , supported on a pedestal containing sculpted dolphins . It is scheduled as a Grade 1 monument , but it is currently in a dilapidated state .

===== Fountain at the Valletta Marina =====

Another fountain was located at Valletta 's marina , just outside Del Monte Gate and near the fish market . It had an ornate basin , a marble cannon barrel @-@ shaped spout , topped by a bronze statue of Neptune holding a trident in one hand , with the other hand resting on an escutcheon containing Wignacourt 's coat of arms . The statue is based on the Portrait of Andrea Doria as Neptune . The marble of the spout has a latin inscription which translates to English saying " Why

are you afraid little boat ? there is no fire here , but water instead of shot . "

According to Giovanni Bonello , the statue was sculpted by Leone Leoni in 1584 . Other sources erroneously attribute it to the Flemish sculptor Giambologna or to one of his pupils , generally Pietro Tacca . The fountain supplied excess water from the Wignacourt Fountain to ships anchored at the Grand Harbour .

In 1858 , the statue of Neptune was relocated to the Grandmaster 's Palace 's lower courtyard , which is now also known as Neptune 's Courtyard . The fountain 's spout is now located at the Malta Maritime Museum in Birgu .

The statue of Neptune is often described as a giant . The area around the original location of the fountain remained known as fuq l i?gant (on the giant) until well into the 20th century .

= = = Omnibus Idem fountain = = =

Another fountain , sometimes also known as the Wignacourt Fountain , was built close to Porta Reale in Valletta . It consists of a lion 's head pouring out water into a stone basin , topped by the coat of arms of Wignacourt and the Order and surrounded by a garland of flowers and interlocking seashells . Below the coats of arms is a radiating sun with the inscription Omnibus Idem (meaning the same to all) , indicating that the water was freely available to everyone .

This fountain was relocated a number of times throughout its history : first in 1874 when the building near which it was built was demolished , in the 1960s when the City Gate was rebuilt , in 2000 when Saint James Cavalier was renovated and converted into a cultural centre , and again in the early 2010s during the City Gate Project . Due to these relocations and restorations , nothing remains of the original fountain .

= = = Other fountains = = =

Other fountains built in subsequent centuries , such as the Lion Fountain in Floriana , which was built in 1728 during the magistracy of António Manoel de Vilhena , were also supplied by water from the aqueducts .

= = Commemorations = =

The aqueduct is featured on a ceiling at the Archbishop 's Palace in Valletta .

The 400th anniversary of the aqueduct was commemorated on 21 April 2015 . A ceremony was held in Valletta , with schoolchildren carrying water from City Gate to St. George 's Square , where a re @-@ enactment of the inauguration of the aqueduct was held .

The anniversary was also commemorated by a silver coin minted by the Central Bank of Malta . The coin shows the aqueduct on the reverse and Grand Master Wignacourt on the obverse .

MaltaPost also issued a set of two stamps on 21 April 2015 . The stamps show Wignacourt Arch and the Wignacourt Water Tower in Fleur @-@ de @-@ Lys and Floriana respectively .