C.H.E.P.A.

(CORK HARBOUR ENVIRONMENTAL PROTECTION ASSOCIATION)

WITNESS STATEMENT

5TH MAY, 2009

AN BORD PLEANÁLA

STRATEGIC INFRASTRUCTURE APPLICATION PL04.PA0010

WASTE-TO-ENERGY FACILITY AND TRANSFER STATION AT RINGASKIDDY, CO. CORK

APPLICANT: INDAVER (IRELAND)

My name is Marcia D'Alton. I am a member of CHEPA, the Cork Harbour Environmental Protection Association. CHEPA is an organisation which brings residents of all sides of Cork Harbour together with the common aim of protecting and improving the living and recreational environment of Cork Harbour.

I am Deputy Mayor of Passage West Town Council. The jurisdiction of Passage West Town Council encompasses the three harbourside towns of Passage West, Glenbrook and Monkstown. During my term as elected member, I drafted the *Architectural Design Guidelines for Passage West and Monkstown* in consultation with and on behalf of Passage West Town Council. These have since been acknowledged in the current *Carrigaline Electoral Area Local Area Plan* and will be incorporated into the redrafting of the *Local Area Plan* in 2012. I have delivered presentations on the architectural heritage of Passage West and Monkstown on behalf of Passage West Town Council to several departments within Cork County Council, to larger developers with an interest in the towns and to community groups. The aim of these initatives was to achieve a common goal for new development to complement and enhance the valuable architectural heritage of Passage West and Monkstown. I have researched, designed and produced the Passage West and Monkstown Railway Heritage Trail which celebrates items of railway infrastructure along the route of the old Cork, Blackrock and Passage Railway. I am a member of the Advisory Group of the Cork Harbour Forum and Chairperson of the Working Group on Heritage in Cork Harbour.

I qualified as a civil engineer from University College Cork in 1994 and obtained a Masters of Engineering Science in 1995. I worked as an environmental consultant until 2003, both for one of Ireland's then lead consultancies and running my own consultancy. My fields of specialisation are treatment and management of non-hazardous, agricultural and sludge wastes, nutrient management, renewable energy development, catchment water quality management, waste water treatment, the licensing and permitting of waste handling facilities and Integrated Pollution Control licensing. I have completed projects in these areas for a range of clients, including local authorities, the Department of the Environment, Heritage and Local Government, the UK Department of the Environment and Rural Development, the North/South Ministerial Council, the European Commission, private industry and community groups.

I have been sailing in Cork Harbour for most of my life and am a member of Monkstown Bay Sailing Club.

I am a mother of four young children, all of whom attend school in Scoil Barra Naofa, Monkstown.

My family and I lived in Monkstown until three years ago. We now live in Passage West.

1. Introduction

When I was elected in 2004, I made a list of ten priority commitments which I was to strive to achieve during my term as a member of Passage West Town Council. The first of these was "sensitive and sustainable development of Cork Harbour".

Martello Towers are part of a bigger picture that tells a story. That story is about who we are, where we came from, what we have become, how we got there and what we experienced along the way. The Martello Towers of Cork Harbour are indivisible from the history of the Harbour, a history which touches the lives of all Irish people and many of those living in distant lands whose ancestors once sailed past Roches Point into worlds unknown.

"*… Architectural heritage constitutes an irreplaceable expression of the richness and diversity of Europe's cultural heritage, bears inestimable witness to our past and is a common heritage of all Europeans*."

(Granada Convention, 1985)

2. The building of the Cork Harbour defences

After the battle of Kinsale in 1601, the British military constructed James Fort on the western side of Kinsale Harbour. This pentagonal shaped fort was the harbour's main protection until the construction of the massive, star-shaped Charles Fort on the opposite side of the water in 1678. Protected by James Fort on one side and Charles Fort on the other, Kinsale became the natural base for the British navy in Ireland. But in the latter half of the 18th century, Cork Harbour became increasingly used by the British, eventually replacing Kinsale both as a naval base and as a port for merchant vessels.

In 1775, revolutionaries took over the British colonies of North America, claiming complete independence from Great Britain. The American War of Independence followed. When France entered the war on the side of the Americans in early 1778, there was real danger of a French invasion of Ireland. As all food from Ireland to British troops left through Cork, Cork and its huge harbour were particularly vulnerable. So during the American War of Independence, the British began its fortification of Cork Harbour. A battery was built at Cobh. Forts were constructed on the headlands at either side of the Harbour entrance: Forts Camden and Carlisle. A small fort was constructed at the eastern end of Spike Island. Batteries were built at Roches Point.

Although the American War of Independence ended in 1783, trouble soon arose again between Britain and France. In 1793, with a mammoth army formed by compulsory mass conscription, the French marched into the Netherlands, Italy, Austria, parts of Germany and planned two invasions of Ireland. The British government began to repair and reinforce coastal defences and to train and equip a huge force of volunteers. All of the fortifications of Cork Harbour constructed during the American War of Independence were brought back into use.

The first attempt at invasion came during 1796, when the French General Hoche set sail for Bantry Bay from Brest with a fleet of 50 ships carrying 15,000 troops. The plan was to march from Bantry, seize the port of Cork and be in Dublin shortly after. But the easterly winds that

blew as the fleet approached Bantry were so violent that they could not go ashore. The ships turned back home, battered and dispirited.

Two years later, the French tried again. The French General Humbert took the British by surprise when he landed in Killala Bay, County Mayo with three ships and about 1,000 soldiers. Despite their small numbers, the invaders made their way as far as County Longford. Although defeated there by the British in the Battle of Ballinamuck, General Humbert's invasion taught the British an important lesson: reinforcing the coast.

But the meteoric rise of France's military star, Napoleon Bonaparte, brought a threat greater than any before. When he became Emperor in 1802, he declared: "*we must destroy the English monarchy ... Let us concentrate all our efforts on the navy and annihilate England*". By the end of the following year, Napoleon had amassed an army of 130,000 and 2,000 ships. His first invasion of Britain came in 1805. Although it failed, it was the first action of what would become known as the Napoleonic Wars.

During these dark times, the British expected a Napoleonic attack almost hourly. Furthermore, it was entirely feasible that such an attack might come through Ireland. Cork Harbour, as the most important harbour in Ireland, had to have its defences strengthed. The small fort at the eastern end of Spike Island was replaced by a much larger one. Forts Camden and Carlisle were modified and reconstructed. The battery at Cobh was brought back into service. Fine storehouses and naval buildings were constructed on Haulbowline Island. Powder magazines were built on Rocky Island. Five Martello Towers were built: three to protect the Harbour from a landside enemy approach and two to complement the forts and batteries in protecting against enemy entry from the sea. As Admiral Earl St. Vincent said at the time: "*I do not say the French can't come; I only say they can't come by* sea". To complement the coastal defences, a new barracks was built on the high ground to the north of Cork City and a gunpowder mills and adjacent artillery barracks was built at Ballincollig.

The Napoleonic Wars lasted until the French Army was finally defeated in the Battle of Waterloo in June 1815. Britain stood tall as the strongest power in Europe with the Royal Navy the strongest fleet in the world. At this time, Cork Harbour was the principal naval base and merchant shipping anchorage in Ireland.

For 40 years, threats of invasion were forgotten. Then in 1852, France was revived as an empire under Napoleon III. Napoleon III was the nephew of Napoleon Bonaparte. The appearance of another Napoleon made many people in Britain very nervous. Towards the end of the 1850s, when he was found to be building a new squadron of armoured steam frigates, the Royal Commission Report of 1860 advised remodelling of Forts Camden and Carlisle and construction of new batteries to protect the Harbour entrance. A line of casements was to be completed in Fort Westmoreland and the vestiges of the earlier fort were to be removed. An additional gun was to be mounted in the fort, facing south towards the Harbour entrance. A small work was recommended for Corkbeg Island to improve crossfire of the Harbour. The battery at Cobh was to be remodelled and armed with a tier of heavy guns so as to give support to Fort Westmoreland should an enemy attack come from the east. A new battery was recommended for White Point. The Report recommended the retention of the Martello Towers as defence works and recommended the construction of three additional Martello Towers – 2 in Ballycotton Bay and 1 at Ringabella.

Of all the recommended works, only the upgrades to Forts Camden, Carlisle and Westmoreland had been carried out by the time Napoleon III was defeated by the German, Otto von Bismarck. Soon thereafter, Napoleon III gave up his throne.

Although Charles Fort was abandoned as a coastal defence work by 1890, the defences at the entrance to Cork Harbour were once again upgraded. Batteries of quick firing guns were installed at Forts Camden and Carlisle and a Brennan Torpedo was installed at Fort Camden.

The upgrading of the Cork Harbour defences continued into the twentieth century. Fort Templebreedy was built in 1902, a little over one mile to the south of Fort Camden. During World War I, Cork Harbour was the headquarters of the Royal Navy command in Ireland, serving as a base for dealing with U-boats approaching from the west.

In 1923, although the former naval dockyard at Haulbowline was handed over to the Irish government, the ports stayed under the control of the British government. There were some changes to the armament in the forts but because there was political uncertainty internally in the British government as to the value of holding on to Cork Harbour, there was no further upgrading of defences. In March 1938, the British government announced that it would hand over Cork Harbour unconditionally to the Irish government. Official handover of the Harbour defences was on 11th July 1938.

Within a year of the handover, World War II broke out. Although Ireland was neutral, the army was mobilised and the coastal artillery put on alert. The defences of Cork Harbour were once again examined and some changes were made to armaments in Forts Templebreedy, Westmoreland and Carlisle. The Irish Army engineers built a new battery observation post in Fort Westmoreland and mounted anti-aircraft guns on the ramparts.

When the war ended in 1945, the Irish army was reduced to a peacetime strength. Fort Templebreedy was dismantled in 1946. All the supplies and ammunition from Templebreedy were taken to Spike Island and were scrapped some years later. Spike Island, which the British had used as a convict depot since 1847, was taken in charge by the Department of Justice and continued to be used as a prison until 2004. Fort Camden was handed over by the government to Cork County Council in 1989. The headquarters of the Irish navy is on Haulbowline Island, while the old powder magazines on Rocky Island now house one of Ireland's two crematoria. Fort Carlisle is owned by the Department of Defence and continues to be used for defence training purposes.

3. The function and construction of Martello Towers

The five Martello Towers in Cork Harbour were built, firstly, to provide bomb-proof towers from which fire could be directed at Napoleon's ships and, secondly, to form a rallying and strong point from which the cavalry and infantry could repel the French invaders. Both the name and the concept came from a circular stone tower built in 1565 at Mortella Point in Corsica. The Corsicans had been building towers of this kind for many years. They were one or two stories high, 12 – 15 m in diameter and with a single door 5 m off the ground which could be reached only by climbing a removable ladder. The local Corsican people paid for the construction of the towers and for the watchmen who, should they spot pirates, would light a fire on the roof of the tower to alert the defence forces. Even when the threat of pirates dissipated, the Corsicans continued to build these towers to warn of foreign invasion. The

strength of the tower at Mortella Point tremendously impressed the British when their attempts to capture it were thwarted for several consecutive days.

Generally, the Martello Towers built at the beginning of the 19th century by the British, were round with an entrance doorway on the first floor and two small windows. An incredible feat of engineering, their construction involved the sinking of deep stone foundations and the building up of the tower, generally sloping from a wider base to a narrower top. The walls were so thick that it took some 500,000 bricks to build each tower and, to provide extra defence, the walls were usually thicker on the sea side than on the land side. Legend says that the mortar itself was as strong as granite blocks and was made from a mix of ground granite, lime, ash, hot wax and ox blood.

Inside, ammunition and supplies were stored on the ground floor. The middle floor was of timber supported by a main beam. Usually divided into three or four rooms, it was used as the garrison's living and sleeping quarters for 24 men and one officer. There were two fireplaces for cooking and heating. A stone staircase was built into the wall, leading up to the roof, where the cannon was mounted on a rotating oak carriage. The weight of the cannon was supported by a massive brick pillar rising from the foundations to the roof. The cannon could be pivoted through 360°, providing defence from all sides.

Martello Towers were built to complement and defend existing forts, gun batteries and important vantage points. Some towers were built on low-level beaches, while others were built on low cliffs. Where possible, the towers were placed close together or sufficiently close to another coastal defence that they could cover each other and create a deadly crossfire.

At its height, the British Empire was the largest empire in history and the foremost global power. The spread of Martello Towers across the world reflects the British battle to defend that empire from Napoleon at the beginning of the 19th century. Martello Towers were constructed in England, Scotland, Ireland, Jersey, Guernsey, Spain, Sicily, Canada, Mauritius, South Africa and one each in Australia, Bermuda, Barbuda, Jamaica, Sierra Leone, Sri Lanka, Trinadad and the British Virgin Islands.

At the time of construction, each of the Martello Towers cost Stg.£2,000 – 3,000 to build and, when the threat of Napoleonic invasion had dissipated, the British government came under severe criticism for the expenditure. It is ironic that not one of the towers was ever tested for the purposes intended and truly a great tribute, as the best defence must be that which deters attack.

4. Martello Towers in England

Between 1804 and 1812, 103 Martello Towers were built along the coast stretching from Seaford in the west to Aldeburgh on the East Anglian coast. Of these, 43 remain standing.

4.1 Martello Towers of the South Coast of England

Of the 74 towers built along the South Coast of England, 25 are left. Towers 1 – 9 were built around Folkestone, Kent. All of these are constructed in brick, tapering from a wider base to a narrower top. Six of the nine were built to stand in the centre of a dry moat. Three of the

nine are currently used as private residences. Tower 3 was opened as the Martello Tower Visitor Centre by Shepway District Council displaying local history and geology, but I understand this to have closed in 2004. The remaining five are derelict and only one of these five, standing in the grounds of a secondary school, is in relatively good condition. Of all the nine, only five of the Towers remain as they were when built in the early 19th century: the other four have all had additions, particularly to the roof.

Towers 10 – 19 were built around the town of Hythe. Six of these ten towers are no longer standing. Some were washed away by the sea, while others were removed in the late 1800s for the construction of the Hythe promenade. One of the four left is totally in ruins, whilst two others are derelict but in reasonable condition. They are, however, in the middle of the Hythe Ranges and so public access is unlikely. The only one in use is Tower 13, which has been converted into a private residence. It now only vaguely resembles a Martello Tower: its walls have been made thinner to increase the internal floorspace, the windows have been made bigger and a bit has been added on top.

Towers 20 – 27 were built around the town of Dymchurch. Five of these eight are gone. One is derelict with the roof and central pillar missing. Another has been converted to a private residence but has a new door at ground level and an addition to the roof. Tower 24 is owned by English Heritage and is open to the public as the Museum of Martello Towers.

Towers 28 – 30 were built in and around the town of Rye, Sussex. One of these was washed away by the sea, while the other two are derelict. Both stand in a dry moat, while one of the two is also surrounded by a wet ditch. A brick platform has been added to the roof of one when it appears to have been used as a coastguard station, while half of the moat and bank has been removed from the other.

Towers 31 – 38 were built at Pett Level, Sussex. All have been washed away by the sea. Similarly, Towers 39 – 50 at Bexhill are also all gone.

At Norman's Bay, Tower 55 was boarded up but works have recently been undertaken to restore it. Towers 51 – 54 and Towers 56 – 58 have already been taken by the sea.

Five of the eight towers around Pevensey Bay remain standing. Two are derelict. Towers 60, 61 and 62 are all private residences. Tower 60 has a new glass superstructure. Tower 61 is in the centre of Martello Estate and during World War II had position-finding equipment placed on its roof. Tower 62 is in a caravan park and is up for rent. It has a new concrete superstructure, a new door at ground level and new windows.

Towers 67 – 73 were built at Eastbourne. Six are no longer standing. Tower 73, built of yellow London brick, was in use as a museum since 1911 but is currently closed. Tower 74, at Seaford, is still in use as the Seaford Local History Museum. This Tower has a moat, although half of it has been totally enclosed to increase floor space inside the museum.

4.2 Martello Towers of the East Coast of England

Twenty-nine Martello Towers were constructed in Essex and Suffolk. Unlike those on the south coast, they were numbered alphabetically and when the end of the alphabet was

reached, they were numbered as AA, BB, etc. The Essex towers are brick, similar to those of the south coast. However, they were larger, stronger and had what is known as a trilobular shape so that they could accommodate three guns on the parapet. Also unlike the towers of the south coast, the door and window opes were faced with stone.

Of the 11 constructed in Essex, Tower A, at St. Osyth, is open to the public as the East Essex Aviation Museum. Tower C, the Jaywick Martello Tower, was opened in September 2005 by Essex County Council to exhibit a range of interesting and innovative projects such as digital artworks and interactive educational materials. It has a floor to ceiling screen for 3-D video projections, a look-out station on the roof and is managed by the local secondary school. Tower F is used as a restaurant. It has a look-out post on the roof. Three others remain standing, unused, but in reasonable condition. The remaining five are gone.

Six of the eighteen Towers built in Suffolk are gone. Tower M on the River Orwell was once used as a water tower. It is now unused but is in good condition. Tower R was rediscovered recently in the foundations of a Felixstowe hospital. The hospital site was sold for development and there is now no access to the Tower. Tower T at Felixstowe Ferry is not in good condition, but continues to perform as a store for the local golf club. Tower Z is in poor condition. Five of the Suffolk Martello Towers have been converted to private residences. In all but one case, the structure of the original Tower has been altered, either with parapet additions or window enlargements. Only two of the eighteen Suffolk Towers are open to the public. Tower CC at Aldeburgh has a most unusual quatrefoil shape which could accommodate four guns. Tower CC is owned by the Landmark Trust and is available for holiday lets. Suffolk Coastal District Council owns Tower P on the Felixstowe seafront. It once had a moat; this was filled in. It has an appendage on the roof to facilitate its use by the local coastguard. The District Council had hoped to use it as a Window on the World attraction in 2009, but this project has been put on hold. However, the District Council does guided tours around Tower P on request.

5. Martello Towers in Ireland

Fearing an invasion of Napoleon from the west, the British constructed a chain of Martello Towers around the shores of Ireland. The order for the first came from King George III with the agreement of Parliament and the Duke of Wellington. Over 70 were planned, but 52 were built. The first was on Garinish Island, Co. Cork, in 1805. This was swiftly followed by four more on Bere Island to protect Bantry Bay through which the French had attempted an invasion in 1796. A string of towers was built along the coastline both north and south of Dublin to protect the British stronghold of the Pale during the period 1805 – 1806. The others, placed in Co. Wexford, Co. Galway, along the Shannon. Lough Swilly, Lough Foyle and at strategic locations in Cork Harbour, were all constructed between 1810 and 1815. The timing and location of these Irish towers is relevant in that it led to significant differences in their design and method of construction. Seven of the Irish towers have been lost: two on Bere Island disappearead, three in Dublin were demolished in the building of the railway, the stone from another in Bray was used to build the local sea wall and one in South Dublin was planned but never built. All of the other Irish Martello Towers are still standing.

5.1 Martello Towers of North Dublin

The twelve Martello Towers of North Dublin have a very characteristic look. They all taper from a wider base of 38 – 40 ft (11.6 – 12.3 m) to a narrower top. All are about 24 ft (7.3 m)

high. All have machiolations over the first-floor doorway and the majority were designed to mount one 24 pdr gun. Some have rendered walls on granite rubble, others are rendered on limestone rubble, while three are built in coursed limestone. Door and window opes are all square headed. None of the North Dublin Towers is surrounded by a moat.

Four of the twelve North Dublin towers are currently used as private residences: that at Sutton, Portmarnock, Malahide and Portrane. All of these conversions have involved significant change to the original structure. None is publicly accessible. Tower 2 at Howth was neglected until 2003 when it was restored and opened as Ye Olde Hurdy Gurdy Museum of Vintage Radio, where old radios, music boxes, gramaphones and other related items are on exhibit. Tower 3 is on Ireland's Eye and is accessible to tourists in the summer. Towers 6, 8, 9, 10, 11 and 12 are all vacant. Tower 12 at Balbriggan is in particularly poor condition, with the top taken off. Tower 9 is in Drumanagh, in the middle of a site protected by the OPW as being of valuable Iron Age significance while Tower 10 is on Shenick Island in Skerries, also owned by the OPW. Towers 6, 8 and 11 at Donabate, Rush and Skerries rest in private ownership.

5.2 Martello Towers of South Dublin

The sixteen Martello Towers of South Dublin are similar in size to those of North Dublin but differ in that they are constructed of granite blocks. As in the case of North Dublin, all taper from a wider base to a narrower top and all have square headed opes for doors and windows. Also as in the case of North Dublin, none is built in a moat. However, they differ in that the majority were designed to mount an 18 pdr gun, lighter than those for which the North Dublin Towers were designed. All but Towers 9 on Dalkey Island and Tower 15 at Williamstown have a machiolation over the doorway. The Dalkey Island and Williamstown towers are two of four, the others being Tower 16 at Sandymount and Tower 3 on Ireland's Eye Island, which are what were called "double" towers. These are considerably larger than the standard tower and could mount two guns. Both the Williamstown and Ireland's Eye Island towers differ from all the other Dublin towers in that they have a projecting parapet supported by continuous courses of corbels. Ireland's Eye Island is under the administration of Fingal County Council, the Martello Tower at Williamstown is owned by Dublin City Council. Both are currently unused.

The other tower owned by Dublin City Council is Tower 14 at Seapoint. This is currently being restored for use as an archive by the Genealogical Society of Ireland and will be publicly accessible. Tower 7 at Killiney Hill and its associated gun battery were purchased by a private individual from South Dublin County Council who finished a full restoration of both in July 2008. Tower 11 at Sandycove, known as the James Joyce Tower, is probably the most well known Martello Tower in the country and houses the Joycean Museum. The opening scene from Joyce's "Ulysses" is set in this tower.

None of the other South Dublin towers is publicly accessible. Tower 16 at Sandymount, which now has several doors at ground floor level, was used as a tram terminus and café up until the 1970s. Although now closed, Dublin City Council is anxious to see it put to amenity use. Tower 9 on Dalkey Island is in good condition and owned by South Dublin County Council, while Tower 10 on Dalkey Road is currently being restored. The remaining Towers 2 in Bray and 6 in Killiney are private residences. Tower 2 has had a glass roof put on the parapet, while Tower 6 bears only a fleeting resemblance to its original form.

5.3 Martello Towers of County Cork

The Ilnacullin Tower on Garnish Island, unlike most of the Irish Martello Towers, has a straight cylindrical shape. However the Tower which is there now is not that which was first built in 1805. The original tower was condemned by engineers at the time as being of inferior design and workmanship, was torn down in 1812 and was replaced in 1815 using the same design as that used for the Cork Harbour towers. It has straight sides of rubble masonry and is now fully restored, serves as a focal point in the magnificent gardens of Garinish Island and is a local key tourist attraction.

Of the four Martello Towers constructed on Bere Island, only two, the Ardagh Tower and the Cloughlan Tower, remain. Both are similar in design to the Towers of North Dublin: they taper from bottom to top and have machiolations over the door. Unlike the square opes of the Dublin towers, they have an arched head above the door and are built of coarse masonry rubble. The interior and roof of the Ardagh Tower have been renovated and it is publicly accessible. The Cloughlan Tower lies in ruins.

One of the towers lost on Bere Island was particularly interesting. Called the Cathcart Tower, it was surrounded by a moat and on two sides of it was a raised glacis under which were casemate barracks and a magazine. There was no design like this in any tower in either England or Ireland.

The five Martello Towers in the British naval stronghold of Cork Harbour were amongst the last to be built in Ireland and are quite different from those constructed in the rest of Ireland. The external wall surfaces are almost vertical, resulting in a drum-shaped profile. All are built of coursed limestone brick with brickwork for internal divisions. None of the Cork Harbour towers has a machiolation over the door. None has the central pillar typical of the towers on the south coast of England. Instead, the cannon and its pivot was supported by a massive domed roof, constructed to be bomb-proof. All the Cork Harbour towers have U-shaped protrusions for drainage never seen on the Dublin towers and all have arched opes for doors and windows. The British regarded the Cork Harbour towers as being the ultimate in Martello Tower design and, rather than mount old guns as pivots on the roofs of the towers, installed specially fabricated six-pointed, star-shaped pivots made of cast iron.

It is widely believed that the Monning Tower on Great Island is the only Martello Tower built outside Corsica to have ever seen action. Situated at the end of the Marino Point promontory, it was captured by Captain Mackay of the Fenians in December 1867. The purpose of the raid was theft of the small arms stored in the tower. The Monning Tower is of circular shape, 40 ft in diameter, 37 ft high and designed to take one 24 pdr gun. It is currently disused.

The Martello Tower at Belvelly is situated on the axis of the bridge carrying the road from Cork across Foaty Island and on to Great Island. It has recently been sensitively restored and is currently used as a private residence. A mile further east, the Rossleague Tower was the third constructed at the back of Great Island to protect Cork Harbour from a potential invasion from the east landward side. The Monning, Belvelly and Rossleague Towers are largely identical in design and dimension.

The Martello Tower built on Haulbowline was a strong point for the island. Larger than the Great Island towers, it has a diameter of 50 ft and a height of 37 ft. It too was designed to take one 24 pdr gun. Areas of the Harbour not visible from Fort Westmoreland on Spike Island could be seen from the Haulbowline Island Tower. Equally, the Haulbowline Tower

was positioned to stop any invader who might have made it past Fort Haulbowline Island. The Haulbowline Island Tower has been renovated by the Navy and serves as a Naval Museum. While Department of Defence property is not generally open to the public, tours of the island are welcomed by appointment.

The Ringaskiddy Tower was constructed on higher ground at the end of the Ringaskiddy peninsula such that it overlooked much of eastern Cork Harbour, Monkstown Bay and the landward side on the approach from Carrigaline. Its principal function was to prevent an enemy from taking the hill and bringing batteries to bear on Fort Westmoreland. The largest of the towers in Cork Harbour, it is 51 ft high and has an external diameter of 40 ft. It was the only one of the Cork Harbour towers designed to take two 24 pdrs, although only one was ever mounted.

Apart from the Cathcart Tower on Bere Island which has long since disappeared, the Ringaskiddy Tower is the only Martello Tower in Ireland surrounded by a dry moat cut into the rock on which it is built. As it rises from the moat, the walls of the tower are coarse limestone rubble, with limestone block starting at first floor level. The drainage features on the Tower are also unusual; they extend 200 – 300 mm beyond the external walls. Nowadays the door is approached by a causeway over the moat; back in the 1800s, it was accessed by drawbridge. The moat is 8 ft deep and 16 ft wide, although together with its outer wall it has an overall depth of 12 ft. Running some 50 ft out from the moat is a glacis, or area of sloping ground designed to keep the enemy under fire until the last possible moment. The glacis runs to a low stone wall at the end of the ordnance ground, marked by four ordnance stones.

Six more ordnance stones marked the line of a designated path running from the Ringaskiddy Tower to Gobby Beach. The Ringaskiddy Tower is one of three Martello Towers in the country of which I am aware to have a dedicated access path.

The Ringaskiddy Tower is owned by the Industrial Development Agency (IDA). It lies derelict although in reasonably good condition. It appears as if someone tried to enlarge the western-facing window and it has been suggested that efforts might once have been made to convert it into a residence. Although the wooden floors internally are in very poor condition, the stonework appears sound, the moat reasonably clear, the parapet intact and, apart from heavy growth of ivy around the north and west faces, the roof is remarkably weed-free. The tower is currently boarded up and locked.

5.4 Martello Towers in the rest of Ireland

Three Martello Towers were built in Co. Wexford. The one at Baginbun Head was built first and was similar to the Dublin towers but had four machiolations. It is currently a private residence. The other two were built in the 1812 – 1815 period to protect Duncannon Fort. These two are much the same as those built along the south coast of England.

Three Martello Towers were built in the West of Ireland between 1810 and 1812. The Finnavarra Tower and the Aughinish Tower each mounted three guns and were built to the English east coast design. Each of the two was supported by a battery. The Finnavarra Tower is in ruins, but the Aughinish Tower is being renovated as a private residence. The third West of Ireland tower is at Rossaveal, Co. Galway and is constructed to a design similar

to the towers of the south coast of England. It is unused and in reasonable condition, although part of the parapet has been removed.

The only two inland Martello Towers constructed in Ireland were at Banagher and at Meelick. The tower at Banagher, known as Fanesker Tower, took a single 24 pdr gun and was designed along the lines of the south coast towers of England. That at Meelick was a much bigger elliptical structure mounting three guns and to the same design as those on the English east coast.

Around this time, four Martello Towers were built along the shores of Lough Swilly at Knockalla Point, Dunree, Muckamish Point and on Inch Island. All were designed as keeps for batteries. The cam-shaped Knockalla Fort is privately owned and its tower is due for renovation into a private residence. Muckamish Tower is also used as a private residence. It is circular in plan with a machiolation over the door similar to the Dublin Bay towers. The Inch Island tower was similar to that at Knockalla Point, while the Dunree Tower was incorporated into a battery, a redoubt and since 1986 has been a military museum attracting visitors from all over the world.

A Martello Tower at Magilligan Point in Co. Derry complemented Greencastle Fort on the opposite site of the entrance to Lough Foyle. Greencastle Fort has a tower which is very oval and supported five guns. The fort became a hotel in 1921 and, more recently, the grounds of the fort and tower have been the site of a new townhouse and apartment development. The Magilligan Point Tower is built along the lines of the Dublin towers, but was designed to accommodate two guns. Constructed of sandstone ashlar both inside and out, it is currently being renovated and group tours are accommodated by arrangement.

6. Martello Towers around the world

6.1 Scotland

The tower at Leith on the Firth of Forth was built first in 1809. It is a round, elegant tower of cut stone which could accommodate three guns but was never armed. Although it was constructed offshore on rocks, an extension to the port meant that the Martello Tower became incorporated in the breakwater and is now landlocked. It is owned by the Port Authority and is deteriorating.

Two further towers were constructed in 1814 at Hackness and Crockness on Orkney Island. These were both built of sandstone block with an arched head over the door and window opes; otherwise, they were of the English south coast design. The Hackness Tower and its nearby battery are in the care of Historic Scotland, are restored and are open to visitors.

6.2 Jersey and Guernsey

Because the islands of Jersey and Guernsey were so close to France, their fortification against the Napoleonic threat was essential. Twenty three pre-Martello Towers were built on Jersey in the late 1700s. Called Conway Towers, these were taller and narrower than typical Martello Towers. Many still remain in the care of the Jersey National Trust. They are looked after, in good condition and can be hired out for weddings and similar occasions. Eight true Martello Towers were built on Jersey Island, three before 1814 and five more between 1834

and 1837. The three earlier ones are still standing and in reasonable condition. One of the five later ones has been lost, but all of the other four are in good condition and open to the public. Kempt Tower in St. Ouen's Bay, built to an east coast of England tower design to mount three guns, houses an exhibition of the adjacent wildlife conservation area. The tower at La Collette, again designed to mount three guns, has been absorbed into a nearby 19th barracks and workshops and houses a Royal Engineers unit of the Territorial Army. Lewis Tower remains unused but in good condition. The last to be built was Victoria Tower. It is a small tower, but the only one in Jersey to have been built in a moat. The moat is of a depth similar to that at Ringaskiddy, but slightly wider. The is managed by the National Trust, is open to the public, has a working drawbridge and can be hired for special occasions.

Fifteen pre-Martello Towers and three real Martello Towers were built on the island of Guernsey. Fort Houmet and Fort Saumarez both have external stone staircases and Fort Saumarez in addition now boasts a World War II German concrete observation post on top. The third, Fort Grey, was restored in 1976 and houses a museum telling the stories of Guernsey's shipwrecks.

6.3 Spain and Mediterranean

Between 1798 and 1802, the British Navy was based in Minorca. During their time there, the British built 11 Martello Towers in Minorca, modeled on similar towers already built by the Spanish. These were the protypes for all towers constructed thereafter.

Today, 10 of the 11 Minorcan towers remain standing in various states of repair. Five are still owned by the Spanish Ministry of Defence. Four are privately owned and two more are owned by local town councils. Three of the six outside government control are in reasonable condition. The Addaya Tower was restored in 1973 and, since then, the tower at Alcufar has also been repaired. The Island Council of Minorca recognises the heritage value of the towers and has initiated a policy of repairing and restoring them one by one.

With the loss of Minorca in 1802, the British had to move on. By 1810 the Royal Navy had established a new base in Sicily. Between then and 1815, they had built 13 Martello Towers in Sicily. Two at Milazzo were converted from older square towers. Three, those at Messina, Milazzo and Augusto, were modifications of existing round towers. Of five towers in a line of fortifications between Messina and the point of Faro, only one, the Mazzone Tower, remains standing. It is now used to support radio and television antennae. Three were built in Sicily behind the town of Porto San Giorgio. Two of these, the Bentinck and Robertson's Towers, were circular with near vertical walls, similar to the Martello Towers of Cork Harbour. Both were partially destroyed in 1866 in a battle between the Austrians and Italians but the remains of the Bentinck Tower are still evident. The Robertson's Tower has disappeared. The third of these, Fort Wellington, is not typical of Martello Towers and today, like the Mazzone Tower, hosts communications equipment.

6.4 Canada

Of the fourteen Canadian Martello Towers constructed during the early part of the 19th century, three remain. The Prince of Wales Tower at Halifax, built in 1796, is not considered to be a real Martello Tower. It is however of value in its own right, is regarded as a National Historic Site, is part of the Halifax Defence Complex and houses a museum. Three of the

four towers built at Quebec in the early part of the 19th century still stand, are owned by the National Battlefields Commission and are open to the public. Tower 1 on the Plains of Abraham has been restored as a museum which can be visited during the summer. Tower 2 hosts an 1812 Murder Mystery Dinner. Tower 3 had been used as a residence up until the early 1900s but was subsequently demolished. Tower 4 was used as an observatory by the Royal Astronomical Society of Canada between 1941 and 1962 and, although no longer used as such, can still be visited by the public.

Four Martello Towers were built in Canada during the 1845 – 1848 period. These differ considerably in design from those constructed earlier in the century. The Murney Tower along the shores of Lake Kingston is part of a Canadian National Historic Site and, together with Fort Henry, forms part of he Kingston Fortifications World Heritage Site. It has been fully restored and converted to a museum by the Kingston Historical Society. Also part of the World Heritage Site is the Cathcart Tower on Cedar Island, currently unused but open to the public. In 2007, the Canadian government awarded a contract worth $1.4 million for repointing, stone repairs and reconstruction of the tower roof so as to secure its structure. The last two of these more recent Canadian towers are part of Fort Henry. Again, they are part of the World Heritage Site designation, can be seen as part of the Fort Henry complex and one houses a museum.

6.5 South Africa, Sierra Leone and Mauritius

The only Martello Tower in Sierra Leone was incorporated into the Sierra Leone Parliament Buildings and is a National Monument. Of the five in Mauritius, two remain. One of these has been restored by Friends of the Environment in Mauritius and is open to the public, while the other has been taken into care by the Ministry of Arts and Culture.

Two of the three Martello Towers constructed in South Africa remain. That at Simon's Town was constructed in 1796 and is only 26 ft high with near vertical sides. It was fully restored in 1972 and proclaimed a National Monument. Today it houses a museum. The Martello Tower at Fort Beaufort was constructed inland around 1840. It is in excellent condition and used to house a museum, although this has since closed.

6.6 Caribbean Islands and Bermuda

The single tower in Barbuda is still standing and regarded as a tourist attraction. That in Trinidad, Fort Picton, is a National Monument, and also visited by tourists. The Martello Tower in Jamaica, Fort Nugent, can be visited but is in poor condition. The Ferry Point Tower in Bermuda, constructed in a manner similar to the south coast towers in England, is a major tourist attraction. Built in a moat, it was and continues to be, accessed by drawbridge.

6.7 Asia and Australia

The Hambantota Martello Tower in Sri Lanka was restored in 1999 and houses as fisheries museum. And the last Martello Tower to be built was that at Fort Denison, a small island in Sydney Harbour, Australia. Constructed in 1857, it is has been owned by the National Parks and Wildlife Service since 1992, is fully restored and is very much a part of the everyday life of Sydney Harbour. It operates as a harbour navigation facility, with a beacon on top, a foghorn and an automated tide gauge. At 1pm every day, staff fire a cannon which can

be heard all over Sydney Harbour. This practice started in 1906 to enable sailors to set their ship's chronometers correctly. It ceased during World War II, but started again in 1986. Fort Denison houses a museum and café, is used for weddings and corporate events and tourist access is by ferry that runs every 45 minutes, seven days a week.

7. The Ringaskiddy Tower: part of a bigger picture

Some 220 Martello Towers were built worldwide over a 50 year period. Only 120 remain. Of that 120, 52 lie unused and/or derelict. The Ringaskiddy Martello Tower is one of these. It does not deserve to be such.

Whether from a local, national or international perspective, the Ringaskiddy Martello Tower is of immense value. Being a circular tower of vertical wall construction, it is a rare find. The Cork Harbour towers are some of only a handful of Martello Towers which had vertical wall construction. The exception closest to home is the Ilnacullen Tower on Garinish Island. However, this was modelled on the Cork towers. The very large Martello Tower at Leith in Scotland is also of circular, vertical wall construction. Sadly, much of its historical relevance was lost when it became landlocked by the Leith Harbour breakwater. The only other circular, vertical wall towers were the Bentinck and Robertson's Towers in Sicily which were, as we have noted, damaged in battle during the 19th century.

The Ringaskiddy Martello Tower is the only Martello Tower in Ireland to stand in a moat with surrounding glacis. One of the four towers on Bere Island, the Cathcart Tower, also sat in a moat. However, the Cathcart Tower disappeared before the beginning of the 20th century. Of the 120 Martello Towers remaining worldwide, 12 stand in a moat. In three of those 12, the moat has been at least partially destroyed. Of the remaining nine towers, five are in acutely poor condition. One is in private ownership and is used as a domestic dwelling. Two others are publicly accessible and in good condition. One is the Victoria Tower in Jersey; the other is the Ferry Point Tower in Bermuda. Both were built in a design similar to the south coast of England towers. Neither has vertical walls, as does the Ringaskiddy Tower. Both are considerably smaller than the Ringaskiddy Tower: the Victoria Tower is 32 ft in diameter and 33 ft high, while the Ferry Point Tower is elliptical with a maximum diameter of 39 ft and is 34 ft high. We have already noted the Ringaskiddy Tower to be 51 ft in diameter and 40 ft high. Equally, the Victoria Tower was designed to take one 24 pdr gun, while the Bermudan Ferry Point Tower carried one 18 pdr gun. The Ringaskiddy Tower was designed to take two 24 pdr guns. So today, the Ringaskiddy Tower is the largest Martello Tower of any reasonable condition standing in an original moat in the world.

So for its own sake, if none other, the Ringaskiddy Tower is worthwhile. But it is worth even more for the role it plays in the bigger picture of fortifications spanning three centuries. The Ringaskiddy Tower performed its defensive function, not alone, but in conjunction with Forts Camden and Carlisle at the entrance to Cork Harbour, Fort Westmoreland on Spike Island and the Haulbowline Martello Tower. Also related were the 17th century castle on Haulbowline Island, the three Martello Towers on the back of Great Island, the naval stores, guards and governers houses on Haulbowline Island, the two large gunpowder magazines, watch house and guard house on Rocky Island, the gunpowder mills and artillery barracks at Ballincollig, the gun battery at Cobh, the batteries at Roches Point and the 20th century Fort Templebreedy.

Of the 120 Martello Towers remaining, 45 are publicly accessible. Of this 45, only 29 are actively used, whether as museums, restaurants or exhibition centres. But those which prove irresistible to visitors are those which form part of a larger fortification complex. Examples include Dunree Fort on the shores of Lough Swilly, where more than 10,000 visitors every year come to see the Martello Tower, battery and redoubt; the Hackness Martello Tower on Orkney Island and its associated battery; the Prince of Wales Tower in Halifax, Canada, which forms part of the Halifax Defence Complex National Historic Site; and Murney Martello Tower in Ontario, Canada, which forms part of the Kingston Fortifications World Heritage Site.

The Murney Tower is but one Martello Tower included in a fortifications complex included in the list of UNESCO World Heritage Sites. The Quebec Martello Towers and nearby Fort Henry also form a key part of this World Heritage Site. The Ferry Point Tower in Bermuda forms part of the Historic Town of St. George and Related Fortifications World Heritage Site. Other fortifications complexes not including Martello Towers with World Heritage status include the San Juan National Historic Site at Puerto Rico, the Red Fort of Agra in India, the forts of Dubrovnik, the Fortress of Suomenlinna in Finland, the Guia Fortress in Macau and the British-built Brimstone Hill Fortress National Park on the island of St. Kitts in the Caribbean.

The vision for Cork Harbour has magnitude of this status. As a historical attraction in its own right, Fort Westmoreland on Spike Island is comparable in quality to Robben Island in South Africa, Alcatraz in San Francisco and Chateau d'If in France. The Haulbowline Island naval supply depot is the largest of its kind in the country which, together with so many aspects of 19th century naval life illustrated on the island, provides a unique feature. Fort Camden is regarded as the only true Palmerstonian fort in the Cork Harbour defences and one of the finest examples of a coastal artillery fort in the world[1]. Its Brennan Torpedo installation was a system patented in 1884, purchased by the British government and installed with great secrecy at only three other British forts in the world[2]. While each of these sites is of immense historical value in its own right, as a component of a larger picture, their value is magnified several-fold. In January 2009, an application was made to the Department of the Environment, Heritage and Local Government requesting inclusion of Cork City and Harbour in Ireland's list of proposed candidate sites being forwarded to UNESCO for consideration as part of the World Heritage Site programme. The submission accompanying the application has been published at www.corkharbour.ie.

8. Policy support for the vision for Cork Harbour

Far from being a dream of hysterical romantics, this vision for Cork Harbour is firmly grounded in over thirty years of policy at European, national and local level. It is with the support of such policy that World Heritage Status for Cork City and County was applied for earlier this year. It is with the support of such policy that local councillors are seeking National Monument status for Fort Templebreedy. It is with the support of such policy that Cork County Council commissioned an Architectural Heritage appraisal of Fort Camden in late 2008 and that Cobh Town Council commissioned a regeneration masterplan for Cobh. It is with the support of such policy that the Heritage Council and the Irish Naval Service are working together in investigating the establishment of a maritime museum on Haulbowline Island. And it is with the support of such policy that a group under the remit of the Cork Harbour Forum is currently working to establish the baseline data by which the 19th century fortifications of Cork Harbour can be marketed as a unified entity abroad. Cultural,

[1] Palmerston Forts Society; [2]Kerrigan, P. (1995)

architectural and landscape heritage are indivisible and, as reflected by policy, have the potential to make a powerful sustainable economic combination.

8.1 European Charter of Architectural Heritage 1975

The Council of Europe's declared 1975 as European Architectural Year, during which special efforts were made in every European country to make the public more aware of the irreplaceable cultural, social and economic values represented by historic monuments, groups of old buildings and interesting sites in both town and country. Such that all these efforts would be co-ordinated at European level, such that a joint approach to architectural protection and such that the general principles on which concerted action by the authorities responsible and the general public would be based, the Council of Europe drafted the European Charter of Architectural Heritage.

One of the key aims of the Charter is to identify the reasons why value might be attached to architectural heritage. A key message is that "*the past, as embodied in architectural heritage, provides the sort of environment indispensable for a balanced and complete life*". If heritage is not passed on to future generations in its authentic state as an essential part of the memory of the human race, part of man's awareness of his own continuity will be destroyed.

The Charter also recognises the resource that is architectural heritage. It is capital of, not merely spiritual, cultural and social value, but also irreplaceable economic value. It is adamant that architectural heritage is a resource which society must harness: "*far from being a luxury this heritage is an economic asset which can be used to save community resources*".

8.2 Granada Convention 1985

The Convention for the Protection of the Architectural Heritage of Europe, drawn up within the Council of Europe by a committee of governmental experts under the authority of the Steering Committee for Urban Policies and the Architectural Heritage, was opened for signature by the member states of the Council of Europe on 3 October 1985 at the second Conference of European Ministers responsible for the Architectural Heritage.

The Granada Convention is helpful in that it defines architectural heritage as including not merely a building of conspicuously historical, archaeological, artistic, scientific, social or technical note, but also as including groups of buildings of similar note which could form topographically definable units. The Ringaskiddy Martello Tower is, of course, identifiable in its own right as being of architectural heritage merit. However, the Granada Convention recognises the conservation value of the defences of Cork Harbour as a single functioning entity.

It supports the vision for Cork Harbour by encouraging enhancement of the environment generally around individual monuments or groups of buildings.

It furthermore encourages signatory states to make the conservation, promotion and enhancement of architectural heritage a major feature of cultural, environmental and planning policies.

Ireland was one of the Member States represented on the select committee of experts preparing the draft leading to the final text of the Granada Convention which Ireland formally ratified in 1997.

8.3 European Landscape Convention 2000

As confirmed by the Council of Europe, landscape is intimately related to cultural, ecological, environmental and social needs. It sees landscape as being a "*basic component of the European natural and cultural heritage*" and, in that respect, indivisible from it.

The very definition of "landscape protection" as advised by the European Council indicates the symbiotic relationship between cultural heritage and landscape: "*actions to conserve and maintain the significant or characteristic features of a landscape, justified by its heritage value derived from its natural configuration and/or from human activity*".

The Council of Europe further confirms landscape as a valuable resource to be harnessed for economic benefit. It recognises how appropriate landscape protection, management and planning can contribute to job creation. Consequently, the European Landscape Convention obliges all signatories to integrate landscape into their regional and town planning policies and into their cultural, environmental, social and economic policies.

Ireland signed and ratified the European Landscape Convention in March 2002.

8.4 National Heritage Plan 2002

The message from National Heritage Plan in relation to the economic value of Ireland's heritage is clear:

"*Economic considerations primarily influence the choice of location to invest capital and create employment, but our quality of life, the richness of our cultural heritage, and our local environment should not be underestimated in this respect. In this and in other regards, our heritage in all its manifestations is one of Ireland's key assets. The full benefits of investment to achieve economic objectives will not be realised in terms of living standards and life-styles unless accompanied by investment aimed at cherishing the richness and diversity of our cultural heritage and the preservation of our environment*."

While supporting the value of heritage protection for its own sake as being key to the Irish identity, it reminds us that heritage provides resources of tremendous social, educational, recreational and aesthetic value. However, it is most aware of the fundamental importance of heritage to Irish tourism. It notes that a survey carried out in 2000 identified 50% of all overseas visitors to Ireland as having spent at least 50% of their time engaging in cultural or other heritage activities during their holidays. It notes expenditure by the Irish people on domestic holidays as being worth over €1.1 million in that same year alone. Not merely relevant to the tourism product, the *National Heritage Plan* acknowledges the relevance of Ireland's heritage to the film industry, the food and beverages sector and the arts and crafts industry, all of which return valuable revenue to the country.

8.5 South West Regional Authority Regional Planning Guidelines 2004

The South West Regional Development Guidelines clearly identify the tourism sector as playing an important role in the economic life of the South West region. It furthermore links protection of the natural and built environment with enhancement of the tourism product.

The Guidelines notes the need to protect the South West region's rich architectural and archaeological heritage, both for its own sake, for the sake of the people living in the South West region and for the sake of the tourism industry. It recognises tourism and cultural activities as being key ingredients of the future of Cork and recommends the development of an integrated tourism product marketing a mix of culture, entertainment, recreation, accommodation and amenity facilities.

8.6 Architectural Heritage Protection: A Guide for Planning Authorities (2004)

In response to Sections 28 and 52 of the Planning and Development Act 2000, the Minister for the Environment, Heritage and Local Government issued *Architectural Heritage Protection: A Guide for Planning Authorities* in 2004. These *Guidelines* provide a comprehensive reference for the application of planning legislation relevant to the built heritage.

Section 1.1.3 of the *Guidelines* specifically identifies cultural tourism as playing an increasingly significant part in the tourist economy and notes the contribution to employment which the heritage sector makes. It advises promotion of local history for tourism purposes to have genuine economic value. Section 1.1.2 further recommends that sympathetic maintenance, adaptation and reuse of architectural heritage to yield aesthetic, environmental and economic benefits, whether or not the original use is still viable.

8.7 Cork Harbour Integrated Management Strategy 2008

Integrated coastal zone management (ICZM) is a process for the management of the coast using an integrated approach, regarding all aspects of the coastal zone in an attempt to achieve sustainability.

The European Commission defines ICZM as being:

"*a dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones. It covers the full cycle of information collection, planning (in its broadest sense), decision-making, management and monitoring of implementation. ICZM uses the informed participation and cooperation of all stakeholders to assess the societal goals in a given coastal area, and to take actions towards meeting these objectives. ICZM seeks, over the long-term, to balance environmental, economic, social, cultural and recreational objectives, all within the limits set by natural dynamics*."

The value of ICZM to Cork Harbour has been clearly identified by Cork County Council. Objectives RCI 16-1 and RCI 16-2 of the *Cork County Development Plan 2009* specifically support the development of an integrated approach to coastal zone management in conjunction with the "*meaningful participation*" of all stakeholders. Paragraph 4.17.3 of the *County Development Plan 2009* particularly recognises the potential value of ICZM to Cork

Harbour: "*it is recognised that the full potential of the harbour could best be realised through a more integrated approach to its planning and development*.".

A European Community initiative, Interreg IIIB, funded a project called COREPOINT, the objectives of which included establishing NW Europe as a region of excellence in coastal management and furthering the aims of Recommendation 2002/413/EC concerning the implementation of ICZM in Europe. The lead partner in the project is the Coastal and Marine Resources Centre (CMRC) of University College Cork (UCC). Using Cork Harbour as a case study, the COREPOINT partners at the CMRC and the Planning Policy Unit of Cork County Council initiated the Cork Harbour Forum, a collective gathering of stakeholders representative of the multi-faceted uses of Cork Harbour. The Forum met for the first time on 14 March 2006. Further meetings were held on 9 June 2006 and 20 October 2006. At these meetings, stakeholders with interests ranging from politicial, residential, tourism, marine leisure, fishing and shipping, met and worked together to outline their needs, plans and aspirations for Cork Harbour. Arising from the Forum, the first step towards ICZM in Cork Harbour was initiated: the drafting of an Integrated Management Strategy. This Strategy was published in May 2008.

The Cork Harbour Integrated Management Strategy notes Cork Harbour as being "*steeped in maritime heritage*" and particularly naval heritage. It records the common consensus amongst stakeholders involved in the Cork Harbour Forum in relation to the significant potential which the marine recreation sector offers for revenue generation. It also lists one of many concerns expressed by stakeholders to include a lack of identification and preservation of natural and cultural coastal and maritime assets. It identifies good environmental quality standards as being vital if marine tourism and recreational activities are to be further developed. One of the key strategy objectives of the Strategy is to protect the social and cultural assets of Cork Harbour such that the unique identity of the area is maintained and protected.

8.7 Cork County Development Plan 2009

The Cork County Development Plan 2009 clearly recognises the very powerful economic benefits offered by proper conservation of built heritage in its the landscape.

One of the basic tenets of Chapter 7 of the Cork County Development Plan is that "*the conservation and enhancement of biodiversity, natural heritage, landscape and the built environment should be promoted as important elements of the long term economic growth and development of the County*". From the outset, it specifically links the protection of historic buildings as a tangible representation of the County's past to economic growth and regeneration. Paragraph 7.2.2 identifies the landscape resource of County Cork, important not just for its own sake but also for what it can offer to recreation and tourism.

Specifically to furthering this potential, Paragraph 7.2.22 commits to a Historic Character Assessment of Cork County with a specific aim of identifying opportunities for cultural tourism potential.

9. Impact of the proposed development on the Ringaskiddy Martello Tower

Section 16 of the EIS accompanying the planning application states that the proposed development will not directly impact on any architectural heritage. CHEPA disagrees fundamentally with this statement. CHEPA believes that should the proposed development proceed, it will forever irretrievably damage the architectural heritage of the Ringaskiddy Martello Tower. CHEPA further believes that the proposed development would be an irreversible and significant negative impact on the collective cultural heritage of 19th century defence structures in the Lower Harbour.

The EIS explains that the Ringaskiddy Martello Tower stands some 70 m to the south of the proposed development. The walled enclosure marking the bottom of the glacis is 30 m south of the proposed development site. But the proposed development is immediately adjacent to, not within, the grounds of the Tower. Some of the proposed development site is within the Zone of Archaeological Potential of the tower, but this part of the site is considered unlikely to be developed. The waste to energy building and its ancillary structures are proposed to sit directly on top of the 19th century access path to the Tower. But much of this path has already been removed and, in any event, the documentary sources consulted in the preparation of the EIS do not provide evidence of paths being associated with Martello Towers.

But the EIS makes one fundamental omission. It deals with structure alone. It fails to make any real connection between a protected structure and its setting. Section 12.3.7 of the EIS justifies this approach in stating that "*the policy in the CCDP/DCCDP only deals with protection of the structure itself rather than its setting, views or landscape character around it ...*".

Legislation for protection of the built heritage as defined in Articles 57 and 58 of the Planning and Development Act 2000 specifically links a protected structure to, not merely its the character of that structure, but also any element of that structure which contributes to its special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

The indivisibility of structure from character and setting is further reinforced by the architectural heritage protection guidelines issued by the Department of the Environment, Heritage and Local Government. Section 7.2.1 defines conservation as being "*the process of caring for buildings and places and of managing change to them in such a way as to retain their character and special interest*". Section 6.8.7 notes how additions to certain protected structures may not be permitted because of their potential impact on the structure or its setting.

Section 13.6.1 goes further. It links the conservation of a protected structure not merely with its setting and character, but also with its function. It identifies how features of the surrounding landscape can be essential to the function for which a protected structure was designed and, in such cases, the special features of that landscape are "*essential to the understanding of the building*".

Martello Towers were built as coastal defence towers around strategic harbours. The specific function of the Ringaskiddy Martello Tower was "*to prevent an enemy from taking the hill and bringing batteries to bear on Fort Westmoreland, the major fortification on Spike Island*". To this end, the Ringaskiddy Tower sat at the peak of the Ringaskiddy promontory. It provided for defence of the high ground on the western side of the Harbour, had field of fire

over the Harbour to the east and north west and the area west of Haulbowline Island. To enable it to be effective in this wide field of fire, it was designed to mount two 24 pdr guns, each having a range of 1.5 km.

The Ringaskiddy Tower did not work alone. Insofar as possible, Martello Towers and their sister fortifications were built such that their fields of fire overlapped. In the case of Cork Harbour, Forts Camden and Carlisle attended to the Harbour entrance. Any invaders getting past Forts Camden and Carlisle were fired on by the guns in Fort Westmoreland and those on the Ringaskiddy Martello Tower. The Martello Tower on Haulbowline Island was strategically located to tackle areas of the Harbour not visible from Fort Westmoreland or invaders approaching the Upper Harbour from the east.

But it is proposed that the waste-to-energy process building should break the line of Ringaskiddy Hill and, in doing so, block directly the line of sight which the Martello Tower was constructed to defend. If one of the principle specific functions of the Ringaskiddy Martello Tower was the protection of Fort Westmoreland, then its intrinsic function is irretrievably and irreversibly damaged. The network of defence structures, which is at present of international note, will no longer be complete. The EIS states that the "*main process building of the waste to energy facility obscures views of the Martello Tower from Marloag Point*". This very statement indicates the failure of the EIS to fully appreciate the function of this defence structure. It does not matter in the slightest that the Martello Tower would no longer be visible from Marloag Point. But it does matter a very great deal that it would no longer be visible from the sea anywhere between Marloag Point and the middle of the West Channel. And it is of fundamental relevance that it would no longer be visible from Spike Island.

Figure 12.3a of the EIS illustrates what it describes as the existing view from the Martello Tower. In Figure 12.3a, Spike Island cannot be seen and this suggests that there is at present no line of sight from the Ringaskiddy Martello Tower to Fort Westmoreland. But Figure 12.3a was clearly taken from some location adjacent to and on the Cobh side of the tower. It was not taken at the entrance to the tower. When standing on the bridge at the entrance to the tower, Fort Westmoreland is clearly visible. In fact, it is the case that there is still direct line of sight between the Ringaskiddy tower and all the Lower Harbour fortifications with which it was designed to work. I emphasise that these photographs are to demonstrate line of sight rather than relative size; I am simply concerned with the function of the Martello Tower, to which a direct line of sight is intrinsic.

The advice of Section 13.8.3 of the departmental architectural heritage protection guidelines is unequivocal in this regard: "*Large buildings, sometimes at a considerable distance, can alter views to or from the protected structure ... and thus affect their character. Proposals should not have an adverse effect on the special interest of the protected structure ...*".

The mitigation proposals of the EIS involve the construction of an artificial earthen berm to disguise the top of the process building from the Martello Tower. It is proposed that this "*organically shaped mounding*" should be shaped and planted such that it does not "*block wider views of the harbour from this historic view point*". CHEPA cannot understand how a small hill growing out of the descending slope of a larger hill can ever be "organic". Furthermore, the extent of planting seems to us to be of little relevance: if the Martello Tower is sited on the highest point of the Ringaskiddy peninsula at 47 mOD and the ultimate height of the process building of the waste to energy facility is proposed to be at 48.27 mOD, views of the Harbour, intrinsic to the function of the Tower will be blocked regardless of how

organic the mounding or planting. This seems to us a clear case in which note should be taken of the guidance provided in Section 13.8.2 of the Department's guidelines: "*New development both adjacent to and at a distance from a protected structure can affect its character and special interest and impact on it in a variety of ways … A new development could also have an impact even when it is detached from the protected structure and outside the curtilage and attendant grounds but is visible in an important view of or from the protected structure*".

And please, as an aside, let us not forget that when we are speaking of the Ringaskiddy Martello Tower as a protected structure, we are speaking of the only vertically-walled Martello Tower with a dry ditch and glacis remaining in the world.

Does the proposed development fall within the curtilage of the protected structure that is the Ringaskiddy Martello Tower? Section 16.6 of the EIS accompanying the planning application for the development is reasonable in acknowledging that the path identified on maps as once leading from Gobby Beach to the Martello Tower is considered to be a part of the curtilage of the Martello Tower. However, it appears to be contradictory in that Section 16.8 continues to say that "*the documentary sources consulted do not mention paths associated with Martello towers*".

The site for construction of this Martello Tower was purchased in 1812. Subsequent to its purchase, its extent was marked by ordnance stones. This was the general 19th century British practice in delineating military ground. In the case of the Ringaskiddy Martello Tower, the limit of the military ground was marked by 10 ordnance stones. The glacis around the tower extended to the limit of the site and was marked by six ordnance stones. The fifth and sixth performed a dual function in also marking the beginning of the path between the tower and Gobby Beach. Two more ordnance stones marked the line of the path mid-way as it descended down Ringaskiddy Hill, while the ninth and tenth ordnance stones marked its end at Gobby Beach. Several of these ordnance stones are still evident around the Martello Tower, including those marking the beginning of the access path.

As the 19th century British practice of delineating military ground by ordnance stones is well known, the clear identification of ordnance stones on the relevant ordnance survey maps should be adequate evidence of the path's connection with the Martello Tower. However, concrete documentary evidence is provided by a survey undertaken in 1859 on behalf of the British War Office. The survey drawings clearly identify the War Department boundary as including the path running between the Martello Tower and Gobby Beach.

Section 13.1.1 of the Department's architectural heritage guidelines recommends the concept of curtilage to be "*the parcel of land immediately associated with [a protected structure] and which is (or was) in use for the purposes of the structure*". It is therefore clear that the path running between Gobby Beach and the Ringaskiddy Martello Tower is indeed within the curtilage of the Martello Tower.

The EIS is not correct in stating that the Ringaskiddy Martello Tower is the only tower in Cork Harbour to have a path marked by ordnance stones. Rossleague Tower on the northern side of the Great Island also had a path associated with it, connecting it to an adjacent quay. In the early 19th century there was no road to Rossleague and all the construction materials for the Martello Tower had to be brought in by sea.

But of the 52 Martello Towers built in Ireland, the Ringaskiddy and Rossleague Towers are, as far as I am aware, two of only four towers which had paths associated with them. The other two towers are the Ardagh and the Cloughlan Towers on Bere Island. Because Bantry Bay was where the French first attempted an Irish invasion, the British constructed particularly comprehensive defences on Bere Island. These included batteries complementary to and to act in conjunction with the Martello Towers. The paths from both the Ardagh and Cloughlan Martello Towers connected the Towers with their respective batteries.

The function of the path between the Ringaskiddy Tower and Gobby Beach is not clear. At the time the Ringaskiddy tower was built, there was a road only as far as Rock Cottage, although a public path crossed the fields from the village to the tower. So it is possible that construction materials for the tower were brought in by sea. However the line of the path also seems to suggest, as in the case of the Bere Island defences, a direct link between the Martello Tower and the adjacent Fort Westmoreland on Spike Island. It therefore seems reasonable to assume that the path running from the Ringaskiddy Tower to Gobby Beach potentially served a dual function: the movement of construction material and the movement of soldiers from the Martello Tower to the connecting fortification at Spike Island.

To place a structure of the size of the process waste to energy process building directly over the path between the Ringaskiddy Martello Tower and Spike Island would merely serve to compound the proposed destruction of the link between the tower and the fortification it was designed to protect. Section 6.8.13 of the Department's architectural heritage guidelines advises that "*caution should be used when considering proposals to demolish parts of protected ... structures as these parts may be of importance to the cumulative historic interest of a building*". In the case of the Ringaskiddy Tower, the path is an intrinsic part of the protected structure, complementing and assisting the function for which the protected structure was originally constructed. Section 13.5.2 recommends that "*where a formal relationship exists between a protected structure and its ancillary buildings or features, new construction which interrupts that relationship should rarely be permitted*". Whether or not part of that path has been damaged in the past – and it is indisputed that it has at least to some extent – is largely irrelevant. Clearly identifiable sections of it remain both at the south western and north eastern ends and there is equally clear evidence of the public's forging a new and compensatory path close to the track of that which was lost. Being part of the curtilage of the Martello Tower, Section 2.1.2 of the Departmental guidelines instruct that "*the superficial condition of a structure should not rule out its inclusion in the RPS*".

As a mitigation measure, it is proposed that the 200-year old ordnance path should be replaced by a new amenity path skirting the eastern and southern boundaries of the proposed development. It would be bounded by timber fencing on one side and 2.4 m high palisade fencing on the other, hidden a hedge of 1.5 – 2 m in height. On the eastern boundary, the path would be directly adjacent to a clay overburden cliff, clearly subject to considerable erosion. On the southern boundary, the path would be lead along parallel and adjacent to the line of electricity high tension transmission lines running between the pylons along the top of the Ringaskiddy hill. Those walking the path would be subject to noise levels of up to 62 dBA, identified in Section 11 of the EIS, i.e. approaching levels experienced in a noisy urban environment. Regardless of whatever mounding and planting is proposed, there is no avoiding the fact that the amenity user would be immediately and massively impacted by the scale of the 48 m high waste to energy process building, at one point merely 17 m from the amenity path. What is currently a dramatic panorama over Haulbowline Island and Monkstown Bay would be hidden behind the 2.4 m palisade fencing. Although it may, at this close distance, shield those using the amenity path from the process building, it would also completely eliminate the view of the sea which is so relevant to the Martello Tower in its

setting. It is relevant at this point to also note that while Table B of the HAZID accompanying the planning application for this proposed application identifies distances from points on the proposed development site to occupied buildings off-site, it fails to identify the distance from these same points to the proposed amenity path to the Martello Tower, on which people will walk immediately adjacent to the process plant and without the benefit of protection from a building.

10. Conclusion

There is a vision for Cork Harbour. An organic vision from the people for the people. A vision spanning centuries. A vision inspired by place and grounded in policy. A vision for the future inspired by the past.

But the intrinsic function of this past is under threat by a development which is proposed for superimposition upon a topography, a harbour and the curtilage and attendant grounds of a protected structure intrinsic to that vision for Cork Harbour.

When a planning authority dealing with planning applications for works within the attendant grounds of a protected structure, the Department of the Environment, Heritage and Local Government recommends that the planning authority should visit that protected structure, assess the relationship between it and its attendant grounds and ask relevant questions in relation to the proposed development for which planning application is being sought:

- Would the development affect the character of the protected structure?

In the case of the proposed waste to energy facility, the answer is clearly, yes.

- Would the proposed works affect the relationship of the protected structure to its surroundings and attendant grounds?

In the case of the proposed waste to energy facility, the answer is clearly, yes.

- Would the protected structure remain the focus of its setting? For example, a new building erected between a structure and a feature within the attendant grounds will alter the character of both.

In the case of the proposed waste to energy facility, the answer is clearly, no.

- Do the proposed works require an alteration of the profile of the landscape, for example, the creation of a golf course? How would this affect the character of the protected structure and its attendant grounds?

In the case of the proposed waste to energy facility, the works do indeed require an alteration to the profile of the landscape. This renders irrelevant the function of the protected structure.

- Do the proposals respect important woodland and parkland? Do they conserve significant built features and landscape features?

In the case of the proposed waste to energy facility, the issue of important woodland or parkland is irrelevant. However, the topography of the Ringaskiddy hill is a significant landscape feature in the context of the character of the protected structure of the Martello

Tower. The proposed waste to energy facility fails to conserve this.

- Are there important views of or from the structure that could be damaged by the proposed development? Would important vistas be obstructed by new development?

In the case of the proposed development, the answer to both questions is clearly, yes.

- Would distant views of important architectural or natural landmarks be blocked or changed?

In the case of the proposed waste to energy facility, the answer is clearly, yes.

- Would a significant skyline be altered?

In the case of the proposed waste to energy facility, the answer is clearly, yes.

- Even where the proposed development is at a distance from the protected structure, could it still have an impact? This could include tall or bulky buildings interrupting views of or from the protected structure and other features of the designed landscape

In the case of the proposed waste to energy facility, the answer is clearly, yes.

- Where the new works would not be directly visible from the protected structure, would they be visible from the approaches to the structure or from other important sites or features within the attendant grounds?

In the case of the proposed waste to energy facility, the answer is clearly, yes. The new works would be visible both from the protected structure and its approaches.

- What effect would the scale, height, massing, alignment or materials of a proposed construction have on the protected structure and its attendant grounds?

In the case of the proposed waste to energy facility, the answer is clearly and fundamentally negative.

The National Heritage Plan states that:

"*While our heritage is inextricably intertwined with our sense of identity, it also affirms the historic, cultural and natural inheritance which is shared on the island of Ireland. For present and future generations who will live in Ireland that inheritance has the ability to enhance and enrich the context of everyday existence. It has the capacity to vividly convey to visitors and those living in Ireland alike what it means to be Irish. In short, our heritage is a presence which physically expresses the essence and the heartbeat of our collective historical identity*".

On my behalf, on behalf of CHEPA and on behalf of the Passage West Town Council, I therefore ask An Bord Pleanála to refuse the proposed development such that we may be permitted to advance our vision for international recognition of the architectural and cultural identity of Cork Harbour.

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