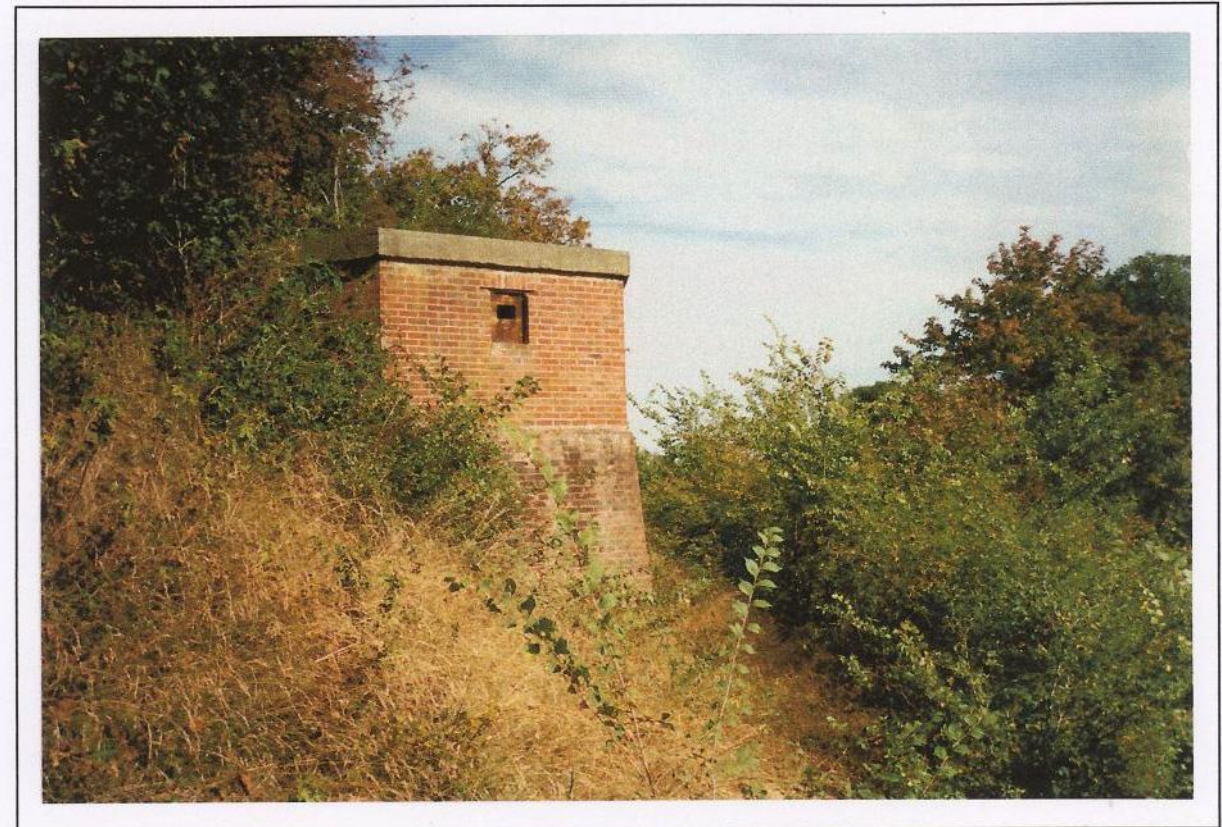


SURVEY OF WORLD WAR TWO DEFENCES IN THE BOROUGH OF COLCHESTER



SMR 20023: Standing high above the railway embankment north of Wakes Colne, this impressive, and unusual, pillbox is one of the hidden secrets of the Borough. Surrounded by trees and bushes, it has survived remarkably well.

INTRODUCTION

In 1993, Essex County Council began a project to locate and record the county's World War Two defence sites with the aim of providing an historical and archaeological database of the sites within the Essex Historic Environment Record (EHER).

By 2004, 1,900 sites had been located, visited, photographed and recorded across the county. In the Borough of Colchester, 279 had been recorded, mostly along the Eastern Command Line, which bisected the Borough, and around Colchester itself. However, it was known that many more remained to be tracked down in the rural areas. These included a range of Home Guard defences, several of the enigmatic British Resistance sites and, importantly, the Borough's World War Two airfields and their outlying accommodation sites

In the latter part of 2004, with the interest and enthusiasm of Colchester Archaeological Group, the completion of the Borough became a possibility. This became reality when the group made a successful application to the Heritage Lottery Fund for grant funding through the Local Heritage Initiative scheme, and with a final funding element provided by Colchester Borough Council a joint endeavour to discover the remaining WWII sites, as a single World War Two Defences in Rural Colchester project, could begin.

The Initiating Phase of the project began in April 2005 followed by the detailed research, location and surveying work over the following 22 months. By April 2007, 109 sites had been located and documented by the project teams. A late discovery brought the total to 110.

During the summer of 2007 the results were compiled and added to the 279 already on the Essex Historic Environment Record. This report, covering all the 389 sites in the Borough, was presented to Colchester Archaeological Group in December 2007.

HISTORICAL PERSPECTIVE

In the summer of 1940 Britain faced a desperate situation. The defeat of the Allies in France and the subsequent evacuations across the Channel from Dunkirk had resulted in over 200,000 men of the British Expeditionary Force escaping from German hands. However, this achievement was not without great cost. Whilst the major part of the army had been saved to fight another day, almost all of their equipment, armour, vehicles and heavy guns had been lost. Faced with the possibility of impending invasion and the prospect of fighting the German armoured divisions with few tanks and little anti-tank capability the problems confronting the Chiefs of Staff were considerable. If German armour was landed on the shores of Britain it would be extremely difficult to contain, let alone destroy.

In those early days, it was thought that an invasion was just as likely to come on the East Coast as the South Coast of Britain. Essex was seen as an inviting target. Like the South Coast counties, it was within fighter and dive-bomber range but, unlike those counties, it offered a short cut to both London and the industrial Midlands through relatively flat countryside, largely free of natural anti-tank obstacles. During the summer of 1940, working around the clock, defences were constructed; multiple lines of anti-tank defence, strong points around towns and villages, pillboxes, gun emplacements, road barriers and anti-aircraft gun sites. Airfields were guarded against paratroop attack, anti-landing ditches were dug across open meadows and minefields were laid.

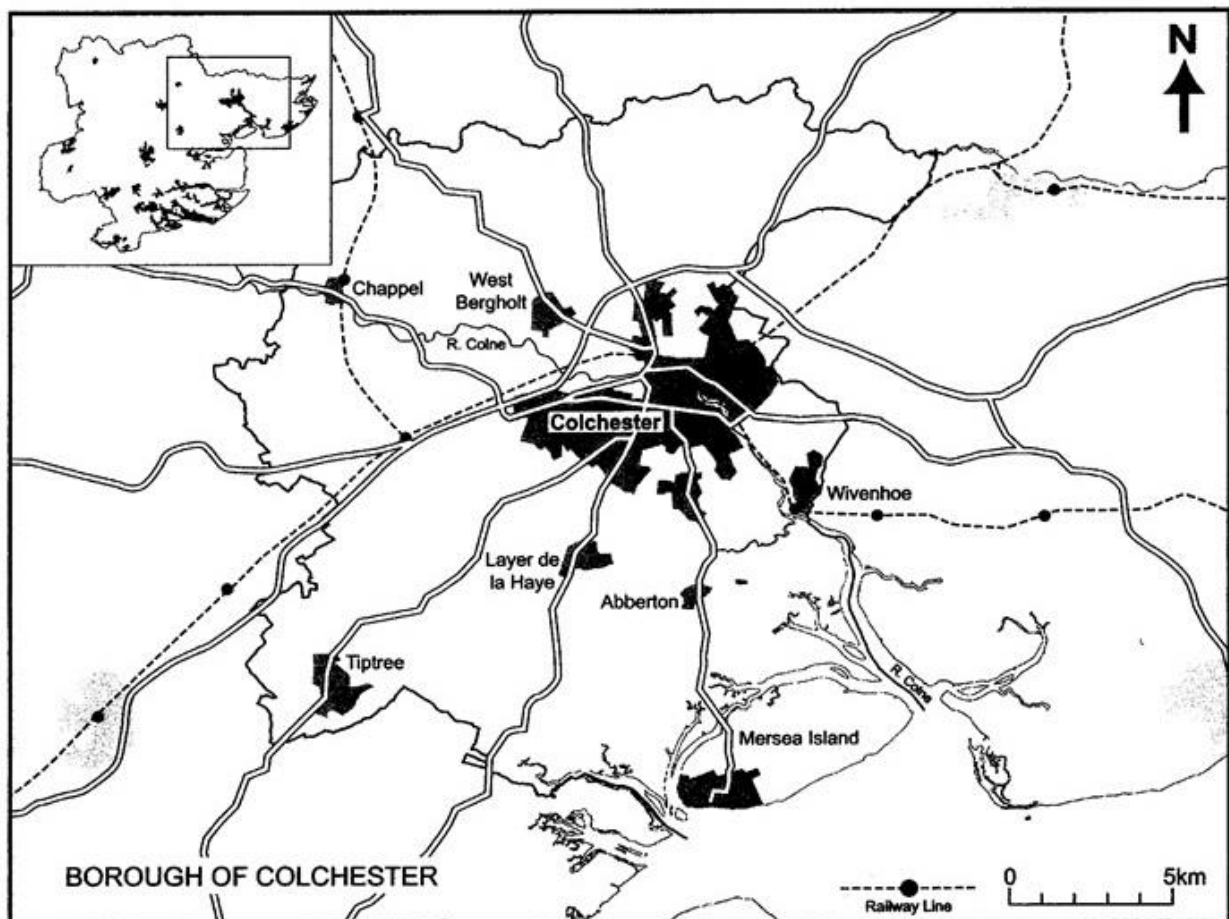
Over sixty years later, it is not known how many defences were built either nationally or locally and, importantly, there is limited information on their current survival. For those that do survive, statutory protection is sporadic. In recent years, certain categories of World War Two sites have become recognised subjects for appraisal as Scheduled Monuments but for the vast majority such protection still relies on the actions of the local planning authority which needs to have access to reliable information on the nature, survival and importance of the sites in its area. This information is provided through the Essex County Council Historic Environment Record.

THE SCOPE OF THE COLCHESTER SURVEY

Geographical Parameters

Roughly rectangular in shape, the Borough of Colchester lies in the north-east part of Essex immediately south of the boundary with Suffolk and west of the coastal District of Tendring. The boundaries are, to a large extent, formed of water courses, the River Stour, the River Colne and the sea and channels around Mersea Island, and it is these natural barriers which gave the Borough its particular significance in the area's wartime strategy.

At its heart, the historic town which gave the Borough its name covers a considerable area. With the major roads, in World War Two, entering the town like spokes of a wheel it effectively blocked any invasion route from the coastal beaches to the east.



Between the River Stour along its northern boundary and Mersea Island to its south, the Borough of Colchester lay directly across any invasion pushing inland from the vulnerable beaches to the east

Timeframe of Recording

The recording of the Borough's WWII defences began in 1993 with those on and around Mersea Island (SMRs 10019 to 10043). In 1997, it continued with those along the Eastern Command Line from Langenhoe, around Colchester, to Mount Bures (SMRs on the Inventory of Sites within the ranges 10731 to 10999 and 20000 to 20037). In 2001, those around the crescent of Colchester's southern defences from Lexden to Berechurch and Old Heath were recorded (SMRs 20494 to 20630). In 1998, the anti-aircraft gun sites at East Mersea, Lexden and Abbey Field were added (SMRs 20117, 20135 and 20136). Finally, from 2005 to 2007 the town and village Home Guard defences, plus the airfield sites, were covered as a single project, World War Two Defences in Rural Colchester (SMR 8913, SMRs on the Inventory of Sites within the range 14284 to 16681 and SMRs 21087 to 21157).

As the sites were visited and recorded over a 14 year period, the text of each record reflects the survival, condition and knowledge at that time. However, in the cases where sites have been revisited or more information has come to light, the record has been updated, with the year of the original entry and the updated entry.

Records not within the numbered 10000, 20000 and 21000 ranges were originally written outside the World War Two Defences in Essex project. The majority of these have been updated, with the appropriate dates added.

Defence Types

The surveying of sites in the Borough of Colchester has concentrated on the types listed in Appendix A. In Essex, the most numerous types are pillboxes, anti-tank obstacles and spigot mortar emplacements. A totally comprehensive survey could include sand-bagged emplacements, field artillery positions, barbed wire entanglements and all the features and structures of a county at war. From the outset of WWII recording in 1993, their inclusion was seen to be quantitatively impracticable. However, as the work has progressed a number of defence types have been added to the 'Included' list. This has been done, almost entirely, to keep the Essex project in line with national recording.

Colchester has been a garrison town for many years, long before World War Two, and as such it is home to a number of army barracks; some dating back to the mid-nineteenth century. As this survey has been concerned primarily with defence works they have not been included in this report. However, a timeline of their construction and to a limited extent their occupation and usage is added as an appendix.

Extant/Destroyed

Both 'extant' and 'destroyed' sites are included in the survey, as gaining the overall picture of defences is dependent on recording all known wartime sites rather than just those that have survived to any one point in time. This is seen as an essential element of the work and one without which, should only surviving sites be recorded, the context and relationship of inter-dependent defences could simply not be built up. This approach, and the comparative data which it produces, also adds emphasis to the importance of those that still survive.

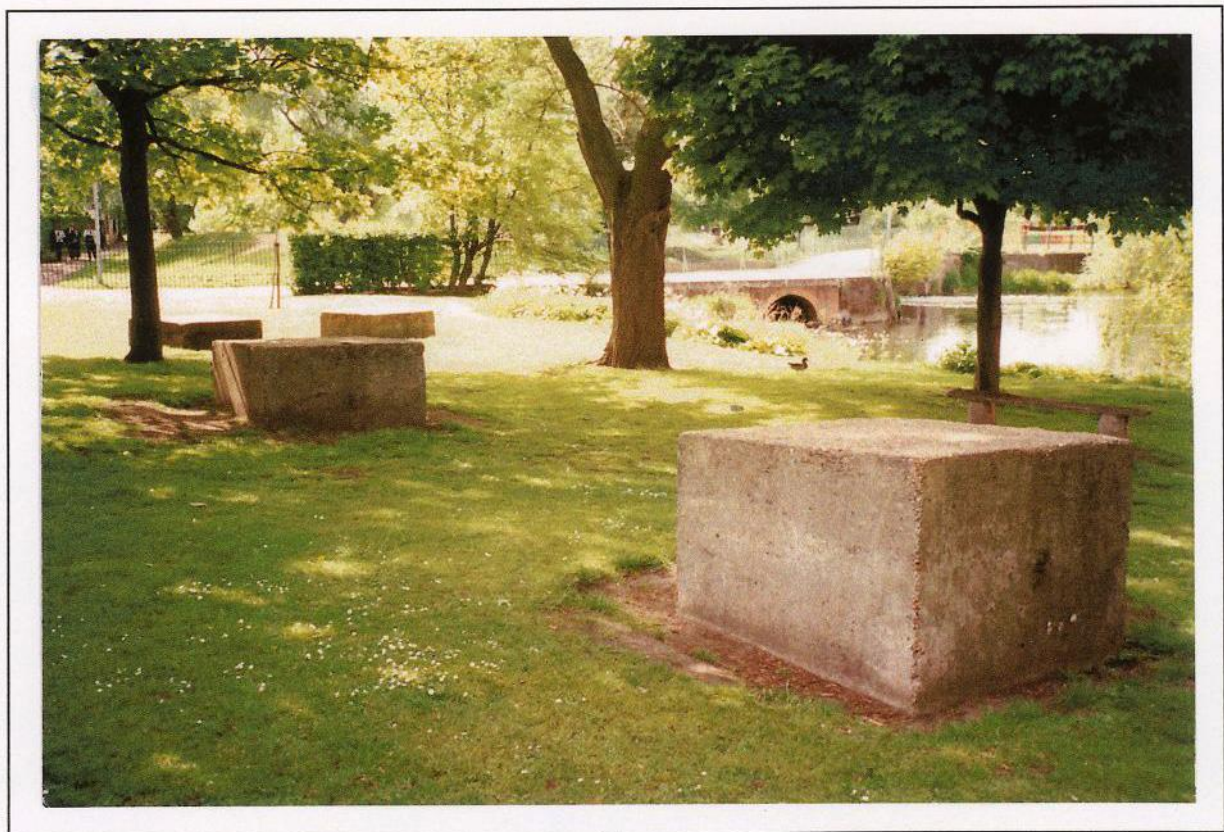
National Grid References

While, on the 'Inventory of Sites' and on the individual site record, the National Grid Reference is absolute for a 'single point' location such as a pillbox or spigot mortar emplacement, there may be variances at 'Area' and 'Line' locations. Thus, the NGR of an airfield may be given at the point where the runways cross or the position of an anti-tank ditch may be given at its approximate central location.

SOURCES OF INFORMATION

Publicity and Local Knowledge

Throughout the 14 years since the inception of the World War Two Defences in Essex project the level of interest among the public has continued unabated. Newspaper reports, magazine articles and feature items on radio and television have ensured that the progress of the work is regularly presented to the public. The response to requests for information has been almost overwhelming. Over 700 letters and communications have been received, each offering details of extant defences or memories of those long gone. Colchester has a major place in this archive with information received from towns and villages across the Borough.



SMR 10912: 1940's aerial photographs show that the River Colne was heavily silted up where it ran through the grounds of Castle Park. To prevent tanks crossing, concrete blocks were erected along the top of the bank, as it then was. Between them, anchored in the concrete, were heavy steel cables stretched tight to present a continuous barrier. Remains of these cables can still be seen.

An article on the defences of the town during World War Two, published in Essex Archaeology, Issue 14, brought in an enthusiastic response from those who remember them being built and later, in many cases, being demolished.

Talks at local societies have always been successful, none more so than in Colchester. The town is famous for its ancient heritage and during the course of the work a number of presentations were given highlighting the 20th century defences complementing those from previous eras.

War Time Contraventions 1968

The discovery of *War Time Contraventions 1968* has been the single most important event of the county project. This possibly unique Essex County Council record is a listing of most of the defence sites constructed on private property during the war. It is in two ledgers, 800 A3 pages, with approximately 8,000 entries. Each entry contains the defence type (eg pillbox), the owner, the location and the wartime Cassini map reference. Around 2,000 of the sites fall within the categories covered by the Essex survey, the remaining 6,000 being the historically valuable minutiae of defensive works, including barbed wire entanglements, hedge clearing to open up fields of fire and sand-bagged defence posts. Despite this number, many sites built on public land – beaches, highways, railways – are not included. Neither are those on military establishments – airfields, army camps, anti-aircraft gun sites. It is thought that the purpose of the document was to record those sites which, of necessity, contravened the various planning acts; acts which had a cut-off point, or were repealed, in 1968. There are 74 pages of *War Time Contraventions 1968* covering the Borough of Colchester. They are listed under the following areas:

Abberton (inc Layer-de-la-Haye)
Aldham (inc Fordstreet)
Birch (inc Heckfordbridge)
Boxted
Chappel & Wakes Colne
Colchester
Dedham Fordham
Great Horkesley
Mersea Island
Peldon Tiptree
West Bergholt
Wivenhoe
Wormingford

These sheets, which cover a great range of defence types from pillboxes to road barriers, weapons pits and spigot mortars, have formed the backbone of the Colchester survey. They are an extremely rare archive of local WWII history and provide a valuable picture of the Borough's defence measures during the wartime years.

Copies of all 74 pages are included as an addendum to this report.

Aerial Photographs

Aerial photographs taken by the RAF in the 1940s provide the historical source which supports, expands and adds detail to *War Time Contraventions 1968*. The study and interpretation of these fine quality photographs not only add locational precision and type of defence to the contemporary record but can, and do, reveal many hitherto unknown sites. This is particularly valuable where road layouts have changed, land has been cleared or the written record is vague. Essex County Council holds copies of many of these aerial photographs, covering perhaps half the county. The major national archive of such images is located at English Heritage's National Monuments Record in Swindon. These date from the early years of aerial photography up to the present day and include photographs taken both vertically and obliquely. Public access to this collection is through the National Monuments Record.



SMR 10039: The 'Two Sugars' beach cafe at West Mersea, formerly a 4.7-inch coastal artillery casemate.

In addition to the study of the aerial photographs held by the County Council, during the course of the surveying work in Colchester the National Monuments Record was visited on eight occasions. In all, using a powerful magnifying glass, many hundreds of aerial photographs, covering every part of the Borough, have been combed.

Ground Level Photographs

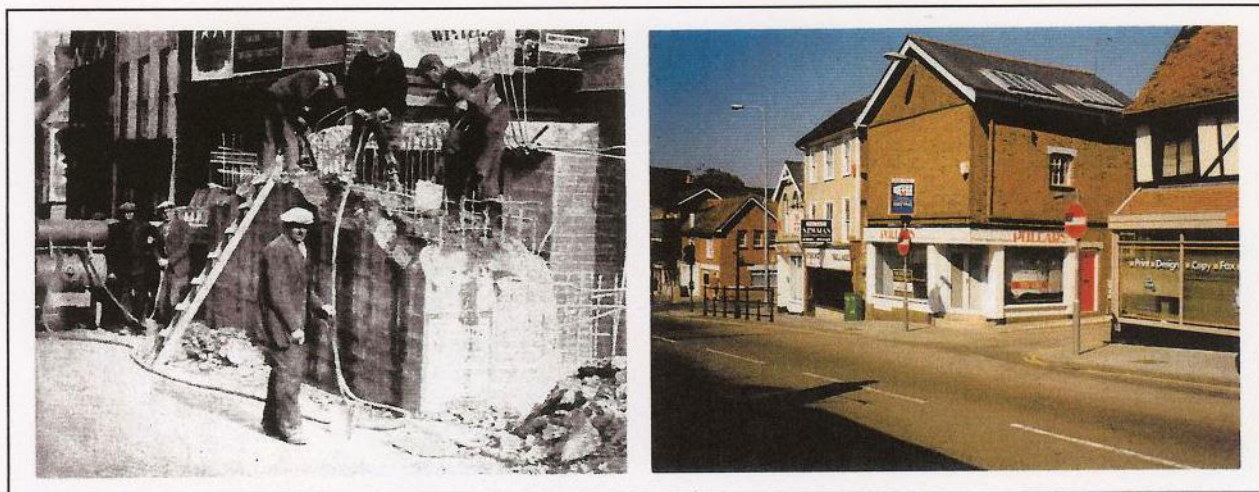
Ground level photographs of identifiable defence sites, taken during the war, are difficult to come by. Despite periodic appeals since the initiation of the county project, comparatively few have come to light. At military sites and in restricted areas, security measures would have clearly precluded the taking of private photographs but on a more local level the

village pillbox or road barrier must have featured in the background of hundreds, if not thousands, of photos taken in the latter years of the war, when the threat of invasion had passed. Such images are particularly valuable to present-day studies of the subject. In the case of sites which have since been destroyed, they offer a prime source of evidence and data. In the case of a site which still survives, there is the rare opportunity for photographic and documentary comparison.

Fortunately, during the course of the Colchester survey, a number of these images have been discovered. At the Imperial War Museum there is a series of fine quality photographs showing the Colchester Home Guard on exercises in August 1942. At least one of the sites, an anti-tank pimple barrier, can be precisely identified.

An American serviceman stationed at Wormingford airfield took an astonishing series of colour photographs in Colchester and the surrounding villages. While these were largely of timbered buildings, street scenes and rural life, in the background of three of them anti-tank barriers can be seen, one outside the siege house in Colchester.

Towards the end of the war, many of the concrete and steel defences which stood at the roadside were clearly a traffic hazard. A pillbox which stood on North Hill, at its junction with Northgate Street, was pictured being demolished by workmen with a pneumatic drill.



SMR 10915: In October 1944, the North Hill pillbox was taken down, the thick walls and steel reinforcement rods clearly presenting problems. In 1997, the location is recognisable from the first floor windows and gable end to the left.

Wartime Plans

RAF Hendon is the repository for plans of Britain's wartime airfields, copies of which may be purchased. The Record Site Plans for the airfields at Birch, Boxted and Wormingford are all dated 1944/1945 and they show, in great detail, all the buildings and other structures at that time, each one identified in a separate 'Schedule of Buildings'. These include not only the regular technical and service buildings, but hangars, dispersal pens and bomb storage bunkers. In addition, each airfield was supported by a number of separate accommodation, or domestic, sites in the fields away from the main complex. Each of these is shown in its geographical location, with huts clearly identified. As an example, at Boxted there were 13 separate sites; over 450 buildings and other structures can be counted.

As a primary source for the identification of surviving features these plans are indispensable, providing information which may otherwise be impossible to obtain.

Previous Studies

Over the years there has been a number of surveys of WWII defence works by both private individuals and groups of people interested in the concrete and steel remains. These date back to at least the 1970s, and probably beyond, and in many cases the results from these surveys still survive in private records. Since the beginning of the Essex project in 1993, a great many of these enthusiasts have been kind enough to forward copies of their records to the County Council for use by the project. These range from lists of perhaps 30 or 40 pillboxes in one specific area to large databases of information covering long sections of a defence line.

Books, Publications

Until the last few years there were few published works on Britain's WWII home defences. The exception is the ground-breaking contribution made by Henry Wills with his book *Pillboxes: A Study of UK Defences 1940* published in 1985. It is probably due to the stimulation provided by this one volume that the interest and impetus of WWII defence recording has reached its current national level. In his quest for information in the 17 years leading up to publication, 2000 appeals were printed in local newspapers throughout Britain. Well over 1,000 people responded with details of more than 5,000 sites, the grid references of which appear in a gazetteer at the end of the book. Five hundred of these sites lie in Essex and it is these that provided both the details of individual sites and the framework of the defence lines in the early stages of the county project. In 1996, Dr Colin Dobinson stated nationally that, 'Without the seedcorn of Wills' book, it is doubtful whether so much of this essential groundwork would have been completed, nor that the statutory protection now under consideration for many categories of site would have reached the stage it has'. (*Twentieth Century Fortifications in England*, vol II, p9)

In researching World War Two defences, the outstanding analysis and gazetteer compiled by Dr Colin Dobinson for the Council for British Archaeology, *Twentieth Century Fortifications in England*, is essential reading. Based on primary documentary sources, these volumes provide fine detail on a range of defence themes from heavy anti-aircraft gun sites to coastal artillery, from bombing decoys to airfield defences.

There have been many books written about Britain's wartime volunteer defence force, the Home Guard. But it is probably not generally known that the first of these was written in 1943, two years before the end of hostilities. As part of this work, the author, Charles Graves, was given approval to write to each of the Home Guard Zone, Group and Battalion Headquarters asking for information on the units under their command together with 'incidents of interest', 'unusual features in the raising of the various units' and details of 'hostile activity'. He received hundreds of replies, some from Essex battalions, and these are reproduced in his historic book, written as it happened, *The Home Guard of Britain*.

Similarly, in subsequent years, a number of books were published based on the records of individual county's Home Guards. In 1951, Peter Finch conducted a survey of the Essex Home Guard battalions from unit records, war diaries and the recollections of the officers and men who served. The result is an astonishing record of the Essex Home Guard, with formation details, personnel, training, command activities, photographs and, most

particularly, with a wealth of anecdotes. Like *'The Home Guard of Britain'*, Peter Finch's book, *Warmen Courageous: the Story of the Essex Home Guard* is available on 'reference only' at those public libraries where it is held.



SMR 20028: At Mount Bures, the anti-tank ditch of the Eastern Command Line 'crossed' from one side of the railway line to the other. Between the two ditch ends, concrete blocks and other obstacles, probably with a removable cable across the lines themselves, maintained a continuous defensive barrier. On the left of the picture, becoming engulfed in thicket and brambles, eight of the original nine blocks still survive.

Museum and Record Office Archives

Local museums and record offices can often prove to be fertile ground in the search for evidence of defence locations. Documentation from local councils, perhaps in the period immediately after the war, can list road barriers or other defence positions to be cleared. Sometimes these may include a rough plan. Occasionally, a record made by the local Home Guard may surface.

METHODOLOGY

At the outset of the project little was known of the defence history of Colchester during World War Two. Thus, working in such a 'greenfield' area it was natural that much of the picture of the Borough's defence measures would emerge as the work progressed. Over the course of the early years, the many sources of information listed in the previous section became apparent and these provided not only a huge amount of detailed data on individual sites, but much of the background information on defence concepts in the area.

It became clear that the survey of hundreds of sites throughout the Borough would be a major task. It was, however, possible to break them down into separate geographical and thematic areas such that the work could be conducted in individual phases over a number of years.

- In general, these can be categorised as:
- The coastal defences of Mersea Island
- The Eastern Command Line, following the River Colne from Fingringhoe around the north of Colchester to Chappel Viaduct, and from there to where it exits the Borough at Mount Bures
- The southern defences around the town of Colchester, to complete the 'anti-tank island' concept
- The 'rural' defences manned by the Home Guard, to include the three airfields and their dispersed sites
- In following this strategy chronologically, in the sequence above, the methodology followed two distinct but related patterns.

1993-2004

From 1993 to 2004, Mersea Island, the Eastern Command Line and the southern defences of Colchester were completed by the Heritage Conservation Branch (now Historic Environment Branch) of Essex County Council, often assisted by local people. During this time the methodology followed the procedure established in other, concurrent, surveys of the World War Two Defences in Essex project (Nash, *Survey of World War Two Defences in the Borough of Brentwood*, 1999, and Nash, *Survey of World War Two Defences in the Borough of Southend-on-Sea*, 2001).

INVESTIGATION AND RESEARCH

All known sources were studied, particularly wartime records, 1940's aerial photographs, contemporary reports etc. Visits were made to records offices, museums, libraries, interviewed wartime residents and former members of the Home Guard.

FIELD LOCATION, SURVEY AND PHOTOGRAPHY

Taking War Time Contraventions as the primary source, each of the entries falling within the category of sites covered by the survey (see Appendix A) was located using wartime Cassini maps, Kelly's Directories, Electoral Registers and 1950/60's 1:2500 Ordnance Survey maps. From 1940's aerial photographs held at County Hall, Chelmsford, a photographic scrutiny of each site was made to verify its location and establish, where possible, its type and any associated structures.



SMR 20030: 'Hairpins' were a common anti-tank device. They were formed from lengths of railway line, cut and bent on site and then either concreted into the ground or dropped into steel sockets. Since World War Two very few have escaped the scrap iron dealer but these, documented in wartime records, still stand at Mount Bures.

Visits to the National Monuments Record at Swindon provided access to aerial photographs of the areas not covered by the ECC archives and added many high-definition pictures taken by low flying aircraft.

All sites identified were marked on modern 1:10,000 and 1:2500 Ordnance Survey maps. Those not identified were marked 'in the area of' and subsequently investigated with the help of local memory, museum records and street plans. Each site was visited to establish any survival and photographs were taken of all extant remains. Catalogued originals of these photographs, together with all negatives, are held in the Essex Historic Environment Record.

COMPILATION OF ESSEX HISTORIC ENVIRONMENT RECORDS

From all the information gathered from documentary sources and the field visit, an individual Historic Environment Record was completed for each site. This includes the historical data from the various sources, the location and configuration details from the aerial photographs and the survival, constructional and other details from the site visit.

By 2004, 279 sites had been visited and recorded.

2005-2007

As a result of a successful application by Colchester Archaeological Group to the Heritage Lottery Fund in 2005, it became possible to undertake the final phase of recording, the 'rural' defences. This would be conducted as a single project, World War Two Defences of Rural Colchester, by members of the group guided by Military Archaeologist Fred Nash.

For the duration of this project, the work would be broken down into three phases, an Initiating Phase, a Location/Survey Phase and a Documentary Phase.

INITIATING PHASE

The Initiating Phase was conducted in-house by the Military Archaeologist during April and May 2005. Guidance seminars covered the background and aims of the project, the Borough's major defence features during World War Two, a review of the extent of previous recording and an assessment of known sources. The structure of recording elements was studied; maps, copies of the relevant sheets from War Time Contraventions 1968 and existing Historic Environment Records from the county database were circulated and analysed.

Three teams were formed, each to work in a different area, with new areas being allocated as each was completed. In order to further familiarise the members with World War Two architecture, a field trip to a known, previously recorded, site at Chappel Viaduct was arranged.

LOCATION/SURVEY PHASE

Before each area was visited the Military Archaeologist met with the team members to go through all the available sources and identify what was known and what might be expected. Maps, copies of the relevant sheets from *War Time Contraventions 1968* and any communications from local people were analysed and distributed. In the main, the field location, identification and mapping of the traced defences within the area was conducted first by the team working as an autonomous unit, followed by subsequent visits with the Military Archaeologist to record, photograph and assess each find, to review its content and association with other sites and to conduct a final sweep of the area.

As each area was surveyed, written reports were completed by the Military Archaeologist as Essex Historic Environment Records. Photographs of extant remains were taken; all sites were plotted onto 1:10,000 maps. In all, 110 sites were tracked down by (CAG)



SMR 10958: There are many pillboxes along the Eastern Command Line which feature an anti-aircraft machine-gun well. The weapon, probably a Lewis gun from the First World War, would have been mounted on the central steel pin.

the Colchester Archaeological Group teams. During the course of the phase, periodic meetings of the entire participating group were held to review the progress and assess the overall picture.

DOCUMENTARY PHASE

On the completion of all site visits, work could begin on the final phase of the project. Each of the 387 sites throughout the Borough was individually assessed as a World War Two heritage monument and a grading from 0 to **** was allocated depending on the survival, condition, rarity, historical connection and group value (see Grading and Site Assessment). Taking the information from the draft records, each site was entered into the Essex Historic Environment computer database, publicly accessible by appointment at County Hall, Chelmsford and via the World Wide Web (<http://unlockingessex.essexcc.gov.uk>). All locations were plotted onto the relevant EHER 1:10,000 Ordnance Survey maps; and all photographs and negatives were filed into the EHER photographic archive.

This report was compiled and produced at County Hall, Chelmsford. Twenty copies were provided to Colchester Archaeological Group for distribution to record offices, museums, libraries and information centres. Further copies were retained by the Historic Environment Branch together with a source copy.

RESULTS

With the evacuation of the army from the beaches of Dunkirk in May/June 1940, the vulnerability of Britain to an invasion became all too clear. Although the greater part of the British Expeditionary Force had been rescued, of necessity almost all of their weapons and equipment had been left behind. Given, particularly, the lack of anti-tank capability, the problems facing the defence planners were considerable as the experience of blitzkrieg techniques on the continent had already shown that once armoured forces had broken through a defence line, they could run rampant across the countryside outflanking all attempts to contain them.

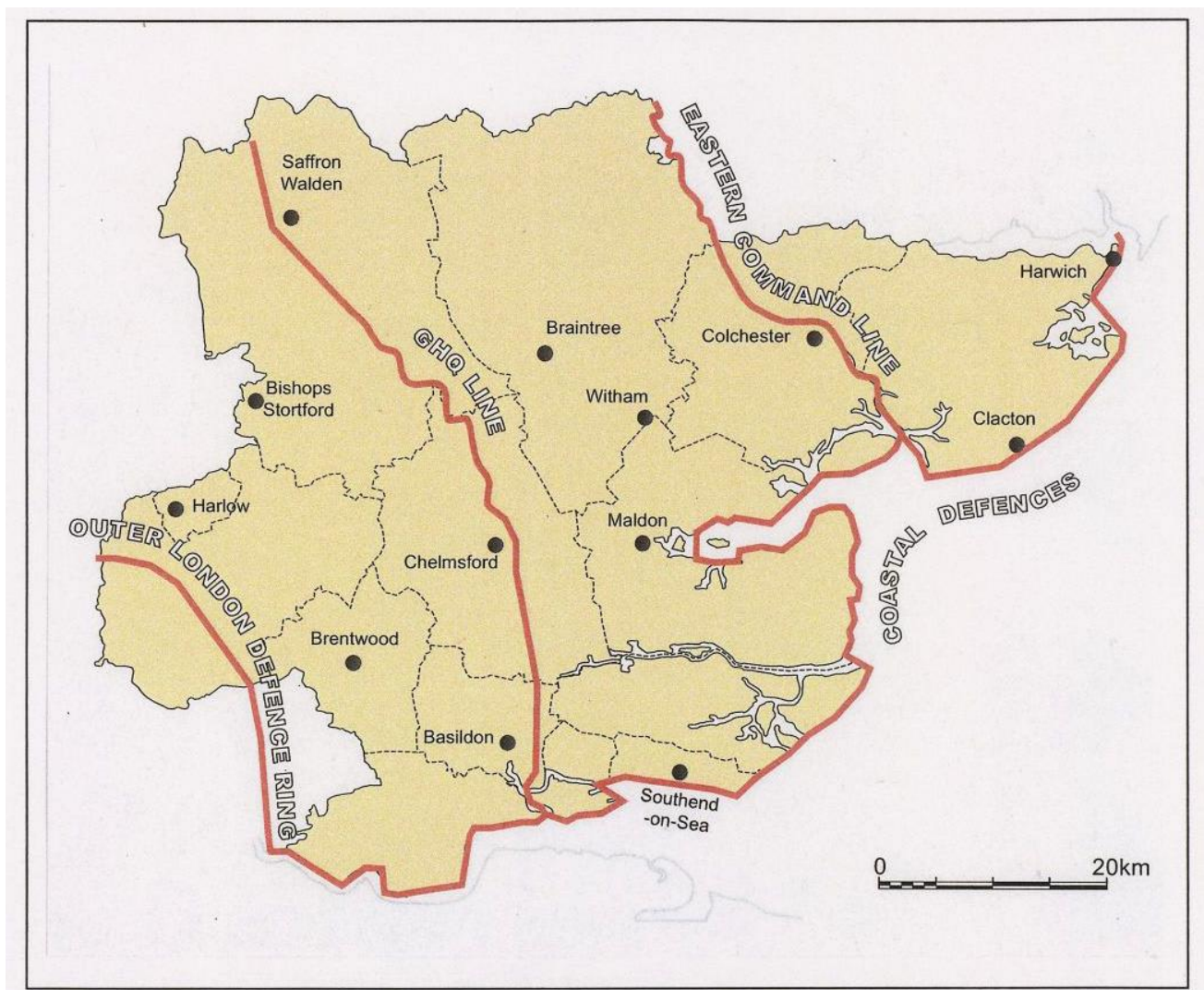
To counter this, behind the coastal defences a system of multiple inland 'stop-lines' was conceived. In the summer of 1940, hundreds of miles of defence lines were constructed, one behind the other. These were based on woods, marshes or rivers as an anti-tank obstacle. Where no natural barrier could be used, miles of anti-tank ditches were dug, up to twelve feet deep and twenty feet across. Supporting the anti-tank defences were pillboxes every 200/300 yards, machine gun positions and infantry trenches. In north-east Essex, a German invasion force pressing inland from the east would first meet the Eastern Command Line, then the GHQ Line and finally the rings of defences around London. In addition, with the continental experience still firmly in mind, all towns and large villages between the lines were fortified with pillboxes and road barriers manned by the Home Guard. This was intended to delay the enemy at every major junction and deny the use of centres of communication to the German armoured divisions.

Colchester during World War Two

The Borough of Colchester lay in an important strategic position. It had been realised early on in the war that the beaches of East Anglia were particularly vulnerable to a seaborne attack, none more so than those on the peninsula between the River Stour and the River Colne, Harwich to St Osyth. Indeed, a list of Britain's twelve most vulnerable coastal towns included both Clacton and Frinton. From this peninsula, the Borough stands four-square across all routes leading west into the heartland of England. A report from the Inspector General of Fortifications, dated 27 June 1940, states that 'Defence against an enemy advance from Harwich can only be considered in relation to the whole peninsula of land between the R. Stour and the R. Colne. The beaches on this peninsula from the Naze to the mouth of the R. Colne are being put into a state of defence on identical lines to those at Felixstowe and Harwich. Once these beach defences go, there is no line on which any enemy could be halted until Colchester is reached. From here to the S.E. the line of the R. Colne forms an obstacle which is completely tank proof and could be held if troops are available. Colchester itself is being protected as a strong point.'

EASTERN COMMAND LINE

Thus it was that the Eastern Command Line was constructed. It arose from the mouth of the River Colne to follow this natural anti-tank barrier northwards around the east and north of Colchester to the great railway viaduct at Chappel. Here, the defence line left the river to continue along the railway embankment, with an anti-tank ditch at its base, to exit the Borough at Mount Bures. Along this entire length, pillboxes were sited every



The four major World War Two defence lines in Essex.

200/300 yards, with a greater concentration around Colchester. Concrete and steel road barriers sealed off all bridges along the route. Machine-gun positions, infantry trenches and barbed wire entanglements protected all possible crossing points.

The town of Colchester, the lynch-pin on which this defence concept hung, was declared an 'anti-tank island' and a four-and-a-half mile anti-tank ditch was dug around the west and south of the town from the river at Lexden, through Shrub End and Berechurch to complete the encircling defences at Old Heath. Again, this stretch of the perimeter was protected by pillboxes, road barriers and infantry positions. At Lexden, a 2,000 year old defence barrier was once more pressed into service, as the military planners took advantage of the surviving ancient dyke at Bluebottle Grove.

TOWN AND VILLAGE DEFENCE

Throughout the Borough, outside the defence lines, many towns and villages were protected by defence works designed to impede enemy progress. Typically, each of the access roads into the town centre would have been cut by a concrete and steel barrier, removable to allow friendly traffic to pass. Infantry positions would have guarded these, sometimes with a pillbox as a strong point.

Unlike the national lines of defence, these town defences would have been manned by the Home Guard. This sometimes under-rated force grew in the four years from May 1940 to become a significant factor in the defence of the country. In addition to local defence, Home Guards manned anti-aircraft guns and coastal artillery batteries. As volunteers, they were enthusiastic and, once the early shortages were overcome, were able to call on a variety of weapons. However, it was not until the end of 1941/early 1942 that they were issued with a gun which could knock out enemy tanks. This was the 29mm spigot mortar, a small artillery piece which could lob a bomb forward with little accuracy but to big effect. It was not without its risks, however, as the instruction manual recommended that fire be withheld until the tank was within 75/100 yards! Although the gun could be deployed on four splayed-out legs, it was more normally mounted in a purpose-designed concrete pit. This had a central pedestal surmounted by a stainless steel pin on which the gun was located. Around the pit, ammunition alcoves held the bombs.



August 1942: Men of Colchester Home Guard on Exercise 'Crack', here manning a 29mm spigot mortar mounted on its concrete pedestal in its purpose-designed pit. (Photograph courtesy of the Imperial War Museum, London. H22518).

In Colchester, the Home Guard became particularly formidable. With a strength of over 2,000, they eventually held no fewer than 22 different types of weapon including Vickers machine-guns, flame-throwers, 2-pounder anti-tank guns and 6-pounder Hotchkiss guns.

ANTI-AIRCRAFT GUN SITES

There were around forty heavy anti-aircraft gun sites in Essex. Four of these were in the Borough, one on Mersea Island and three in direct defence of Colchester town. The site on Mersea Island, 'CI Clacton: East Mersea', is a considerable mystery in that it is known to have existed, although shown in wartime records of 1942 as 'unarmed', but its location remains elusive. 'C6 Colchester: Fridaywood Farm', south of the town, is known to have been armed with four 3.7-inch guns manned by 71 Regiment, 229 Battery. 'C10 Colchester', at Lexden, was, unusually, an anti-aircraft rocket site. This lesser known weapon was deployed at many sites throughout Britain. Tests of rockets as anti-aircraft devices had been carried out early in 1939 and by the end of the following year the design of them, looking something like a six-foot drain pipe with a warhead at one end and four fins at the other, had improved to the point where production could begin and by the latter part of 1941 nearly 2,000 projectors, as their launch cradles were officially known, were available. On site, it was usual for these projectors to be deployed in multiple ranks and, as many types could hold more than one rocket, it would be possible to launch over 100 missiles into the sky at one time to explode in a great cloudburst of steel shrapnel. The site at Lexden, with just six projectors, is known to have been manned, in early 1942, by 84 HAA Regiment 171 ZAA Battery. Other than this, little is known about the site and it is thought that it was used for the formation of the unit which operationally moved to Abbey Field in the autumn of that year.

The fourth anti-aircraft site was the rocket site at Abbey Field, in the centre of Colchester. In December 1942 it consisted of 32 projectors, growing by February 1943 to 48. They were manned by 196 (102 Essex Home Guard) Rocket AA with regulars from 171 ZAA Royal Artillery. On 13 December Brigadier Murray wrote in his War Diary, 'Developments have now reached the stage when operational duties can be carried out. I accordingly authorised manning by a Half-Relief (i.e. 2 troops and 32 projectors each night) to commence on 27th December'.

COASTAL ARTILLERY BATTERIES

The Borough itself has a relatively short coastline, on Mersea Island. During World War Two, this was home to two big-gun coastal artillery batteries, one at each end of the island.

At East Mersea, the site was on the low cliffs on what is now Cudmore Grove Country Park. Two ex-naval 4.7-inch guns faced seawards from large, concrete casemates, guarding against any seaborne threat by German warships. At night, horizontally-aimed searchlights swept the sea from emplacements alongside the guns. A Battery Observation Post controlled the fire from a central tower, while pillboxes guarded the flanks of the site.

At West Mersea, the battery was of a similar configuration, two 4.7-inch guns, coastal searchlight emplacements, a Battery Observation Post and flanking pillboxes. However, from surviving wartime records more is known of this site. These records show that the gun which was mounted in the one surviving casemate (see page 24, Colchester Today) was manufactured in 1918 in Japan

AIRFIELDS

There were over thirty operational airfields in Essex during World War Two. Three of these were around Colchester. Boxted opened in May 1943 as an American airfield equipped first with B26 Marauder medium bombers and then with fighter aircraft.

Only a few miles to the west, Wormingford, originally a World War One landing ground for the Royal Flying Corps, reopened. The base was home to a number of fighter groups, by mid-1944 flying the legendary P-51 D Mustang.



SMR 16679: 'Stanton' shelters were the standard protection against air attack at many airfields and their dispersed sites. Bolted together, the pre-cast panels formed a vaulted chamber with an entrance at one end and escape hatch at the other. When complete, the entire structure was then heaped over with soil.

Birch was built very late in the war and was among the least used of any airfield in Britain. Earmarked first as a Reserve Base for the U.S. Eighth Air Force, it was then handed over to the British 6th Airborne Division for its only operational use, as a base for the Dakotas and Horsa gliders of 'Operation Varsity', the crossing of the Rhine.

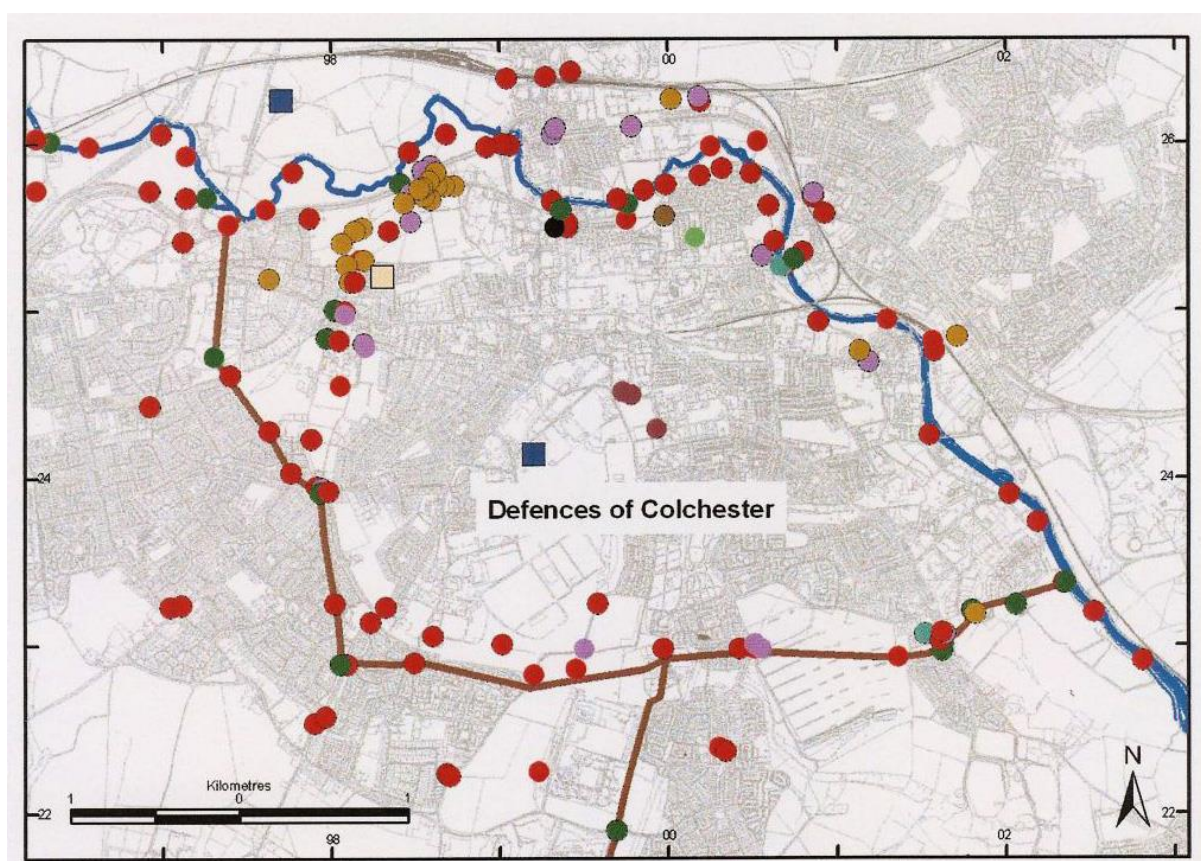
Like most WWII airfields, each of the main sites had a number of satellite areas in the fields and woods nearby. These separate sites contained the accommodation, administration, sick quarters and messing facilities. Each of the three Colchester airfields had 13 or 14 of these sites, numbering hundreds of huts and other facilities.

Colchester Today

It can be seen that the wartime defences of the Borough fell into many categories, the defence lines, Colchester anti-tank island with its encircling defences, the town and village defences manned by the Home Guard, the anti-aircraft gun sites, coastal artillery batteries and airfields. Each of these has a story to tell in its survival or otherwise.

EASTERN COMMAND LINE

During the years of recording in the Borough the entire length of this line has been plotted and walked on the ground. Like all WWII defence lines, the Eastern Command Line followed a major anti-tank obstacle, in this case the River Colne from Fingringhoe to Chappel and from there the railway embankment and man-made anti-tank ditch (SMR 20007) northwards into Suffolk. Around the west and south of Colchester



Designated an 'anti-tank island', Colchester was protected against attack on all sides. See main map for colour key.

another anti-tank ditch (SMR 16485) completed a formidable defensive ring around the town. Every mile of these barriers, whether natural or dug, was overlooked by pillboxes with interlocking fields of fire and supporting defence works.

However, the survival in town and country is very different. Around wartime Colchester 78 pillboxes can be counted of which just 14 still survive. After the war, and in fact during the latter part, there was an understandable urgency to clear away the concrete

and steel from the towns. Access routes were still partially blocked by anti-tank cubes and pimples; pillboxes at the road edge were obvious traffic hazards. In the countryside, these obstacles presented few problems and a great many of them were simply left to grow into the landscape, often covered in brambles or thicket but accepted by farmers and locals as part of the country scene. So it is in the rural areas of Colchester. Along the defence line from Fingringhoe to Mount Bures, excluding the town of Colchester, 68 wartime pillboxes have been recorded. Of these, 42 still survive,



SMR 10947: Beneath the railway viaduct at Seven Arches Farm, this pillbox would have been well protected against air attack.

an astonishingly high proportion. It is a similar story with other ground defences, anti-tank barriers and spigot mortar emplacements; relatively poor survival around the town, relatively good survival in the countryside.

Along these defence lines the pillboxes were sited, not in a straight line, but in depth, with some along the bank of the river or ditch and others further back. Unusually, around much of the town, outlying pillboxes were sited on the approach roads in front of the anti-tank barrier. In surveying defence lines throughout the county, this has rarely been found to have been the case.

It is interesting that during the course of the project two entirely unsuspected lengths of defence line were discovered. One ran between Sheepen Farm and Shrub End Road, cutting off the Lexden part of the outer, more recognisable, corner of the Colchester ring. Oddly, although the pillboxes and road barriers were built, it appears that no anti-tank ditch was dug. Wartime records mention anti-tank scaffolding here and it is probable that this

type of defence barrier was erected as a continuous 'fence' from one end of this line to the other, although why this should have been employed rather than an anti-tank ditch is not known. It is also not known if this line preceded or succeeded the outer route to its west. The second of the newly revealed lines ran from Berechurch southwards to Abberton Reservoir. Contrary to the Sheepen Farm/Shrub End Road line, this defence work comprised an anti-tank ditch (SMR 20550) with road barriers but no pillboxes. Its path can be clearly determined on 1946 aerial photographs. At the north end it joined the Colchester ring ditch, at its south end it abutted the reservoir to form a continuous barrier anchored at both ends. It is probable that this ditch delineated a proposed defence line, subsequently, before the pillboxes were built, deemed to be superfluous.

TOWN AND VILLAGE DEFENCE

In line with national policy that all towns, and many villages, irrespective of whether they stood on a defence line, were to offer an obstacle to an armoured force, the project has found that pillboxes, anti-tank barriers, spigot mortars and ammunition shelters dotted the Borough wherever there was a built-up area, important junction or other 'nodal' point. The larger the town the more defence it offered.

Tiptree was ringed by road barriers on all the approach roads, augmented in 1942 by spigot mortars. Layer-de-la-Haye had a single pillbox (SMR 21100), a survivor from World War One, plus an ammunition shelter (SMR 21099) and no fewer than four spigot mortars (SMRs 21097, 21098, 21101 and 21159). Wivenhoe had two anti-tank barriers to prevent a crossing of the River Colne (SMRs 21144 and 21145), plus a spigot mortar (SMR 21146) and ammunition shelter (SMR 21147). At Fordham and West Bergholt just a single brick and concrete ammunition shelter was built (SMRs 21129 and 21142). All of these defences would have been manned by the local Home Guard.

Survival at these sites is not good. The road barriers, for obvious reasons, were the first to be cleared away, leaving no trace now. Spigot mortar emplacements sometimes remain extant, typically sitting a few yards from the roadside in a front garden but often unrecognised for what they are. Spigot mortar sites were often accompanied by an ammunition shelter in which the 'bombs' were kept. Few of these now remain.

Across the Borough, 50 of these 'town and village' sites have been tracked down of which just four now survive, two spigot mortar emplacements at Wormingford, another at Layer-de-la-Haye, and an ammunition shelter at Heckfordbridge (SMRs 21125, 21126, 21159 and 21096).

However, there is a certain 'blurring' of the survival picture. When spigot mortars were issued, some 18 months after the initial defences were built, many Home Guard units sited the emplacements, with their attendant ammunition shelters, not only as 'blocking' defences in the towns and villages, but also as reinforcements along the defence lines, including around Colchester Town. These sites, Home Guard but on the defence lines, have survived considerably better than the town and village sites.



MR 20519: An example of a Home Guard spigot mortar pedestal sited to protect a defence line. In the corner of a field at Lexden, it would have overlooked a section of the Sheepen Farm/Shrub End Road line.

ANTI-AIRCRAFT GUN SITES

Of the four anti-aircraft gun sites in the Borough very little remains. Despite many attempts to locate 'C1 Clacton: East Mersea' (SMR 20117), including combing through 1940's aerial photographs, it remains hidden. Although the general area of the site is known, and has been walked, the exact position cannot be determined. Nothing, however, can survive now. 'C10 Colchester' (SMR 20135) was a rocket training site at Lexden Lodge. Again, nothing of it remains today. The position of the rocket battery and its accommodation huts at Abbey Field (SMR 20136) has been confirmed from 1947 aerial photographs. These show the site of the rocket bases, newly cleared, and the documented sleeping blocks. However, by 1990 all had been removed.

Only at 'C6 Colchester: Fridaywood Farm' (SMR 16477) does anything survive. Visited in 1998, some of the concrete gun bases can still be seen in the surface of a rough meadow. At least one of these still retains some of its holdfast fittings, the acceptance ring for the mounting plate locating spigot and four of the levelling nuts.

COASTAL ARTILLERY BATTERIES

Coastal erosion has been responsible for the demise of the 4.7-inch artillery battery at Cudmore Grove Country Park (SMRs 10026 to 10033). Both of the gun casemates now lie

as broken concrete at the bottom of the low cliffs, each with its ring of mounting bolts facing the open sky. To one side are the recognisable remains of the Battery

Observation Post and one of the two searchlight emplacements. The second searchlight emplacement still perilously survives as a concrete base on the cliff edge.

However, back from the cliff, one on open grassland and the other at the field edge, two of the site's guardian pillboxes still survive. Somewhat of a feature at the Country Park, one of them forms an immediate focal point between the visitor centre and the sea. In good condition, both have a number of interesting design elements, not the least of which is an anti-aircraft machine-gun well, intended for a World War One Lewis gun.

The second 4.7-inch battery, at West Mersea (SMRs 10037 to 10041), survives in quite a different way. One of the two gun casemates still stands, in its entirety, as the Two Sugars beach cafe. Although altered in its frontage to accommodate its new role, it is essentially complete, immediately recognisable from its unusual shape. Inside, it has been sympathetically maintained to retain some of the original features such as bracing pieces and steelwork. A few yards along the beach, one of the concrete searchlight emplacements still stands, again very recognisable and despite offering itself as a subject for some local artwork, seemingly in good shape.

AIRFIELDS

Visiting the sites of the county's WWII airfields today, it is difficult to picture them as they were during the wartime years, from seething hubs of activity – the noise of aircraft taking off and landing, the hundreds of service men and women going about their work – to the present very often quiet country landscape.

So it is at the Borough's airfields, Wormingford, Birch and Boxted (SMRs 14383, 14284 and 8913). At Wormingford, the site is now used by a gliding club. The runways still survive although they are very much reduced in width. Very few buildings are still there, just three bomb store huts appear to remain. However, around the main site, in the fields and woods, a surprising amount still stands at the Dispersed Sites. Stanton air raid shelters, blast shelters and the C.O.'s house still remain although all of the accommodation huts have gone.

Birch, an airfield which was built with all its Dispersed Sites but hardly used, has now reverted to something close to what it must have looked like pre-war. The scene is one of peaceful agriculture. The runways can still be made out although, like Wormingford, much reduced in width. Two of them are now straight concrete tracks through the corn while the third is a public road, Blind Lane. Of the hundreds of buildings, just the main Technical Stores and the deteriorating C.O.'s house remain. Only with a detailed wartime plan is it possible to identify the Dispersed Sites in the surrounding fields although two of them, in woodland, still retain many of the concrete hut bases beneath the leaf-mould.

It was not possible to visit Boxted airfield nor two of the adjoining Dispersed Sites although it is thought that there is significant survival at each. However, the majority of the Dispersed Sites, south of the path of the present A12, have now been completely obliterated by the construction of Colchester Business Park.

BRITISH RESISTANCE HIDEOUTS

One of the most surprising results of the survey was the discovery of, not one but two, British Resistance hideouts. These underground bunkers were built across the country, in great secrecy, in the early part of the war when an invasion seemed not only possible but very likely. Recruited from the local community, small cells of men, given the innocuous-sounding name of Auxiliary Units, were trained as saboteurs, to stay hidden in their 'operational posts' until the German forces had passed them by. They would then emerge to, hopefully, wreak havoc behind enemy lines.

Their hideouts were usually sited in dense woodland, dug deep into the forest floor and covered over with soil. Entrance was typically through a camouflaged trap door with a crawl tunnel leading to the main chamber, effectively an underground Nissen hut. An escape tunnel would offer a way out in the event of discovery.

There is very little documentary evidence of where these sites were built and tracking them down is almost entirely reliant on accidental discovery or help from the surviving members of this secret army. However, after reports from a local resident in one case and recognition by County Council officers on unrelated work in the other, the clear remains of two of these rarely-found sites have been documented and photographed.

In Gravel Pit Wood, Copford (SMR 21143), the hideout had been known about locally for many years and was photographed in 1974. By that time the entrance tunnel had collapsed and part of the main chamber stood up through the floor of the hollow. Sadly,

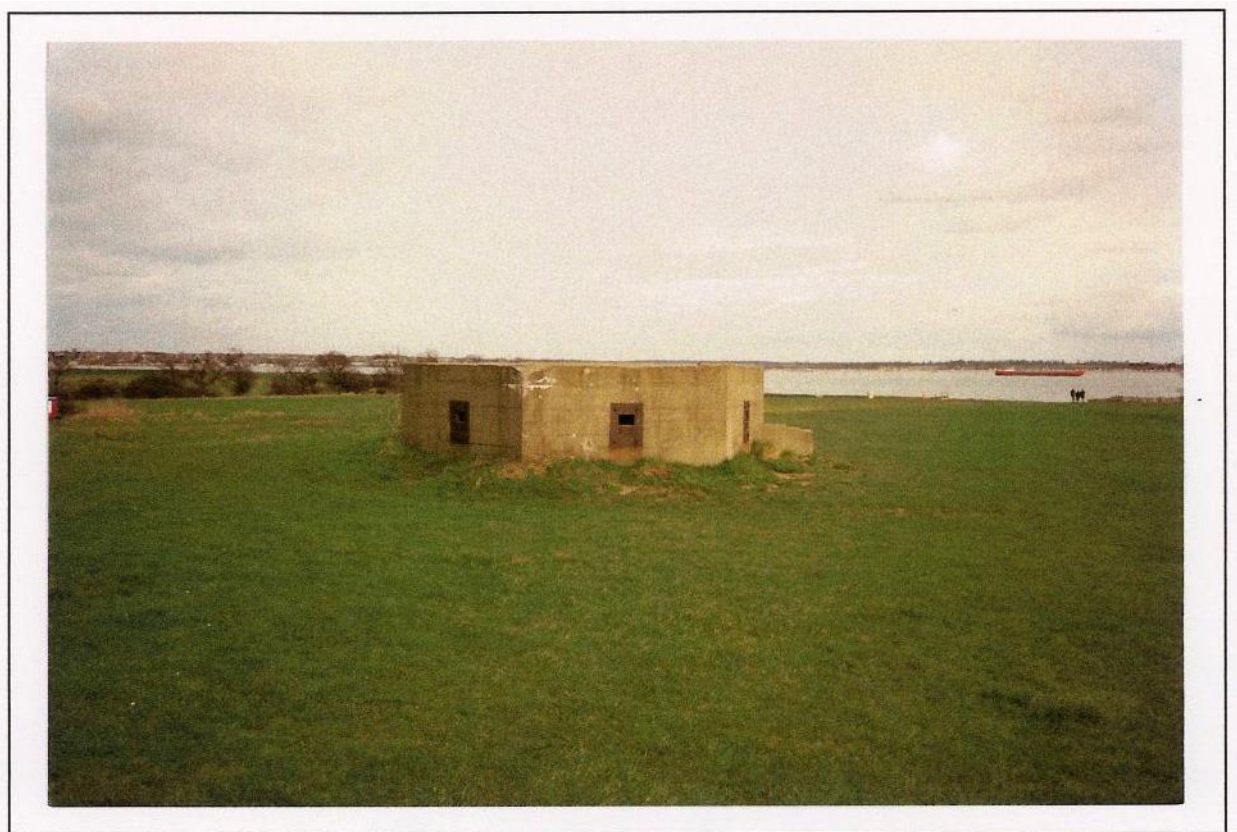


SMR 21143: Gravel Pit Wood, known locally as Pitswood, or just The Pits, is home to the remains of a rare British Resistance 'operational post'. Fortunately, a local resident, aware of its importance, took a photograph as it looked in 1974 (left). Now difficult to recognise (right), the tree provides an excellent reference point. (1974 photograph, Derek Moore)

deterioration since then has accelerated considerably. The chamber has now fallen in and with soil and woodland debris camouflaging the remains it is more difficult to recognise it for what it is. However, parts of the corrugated-iron sheeting of the Nissen hut entrance still remain in the ground. A bonus discovery was a section of clay piping which formed a flue outlet from a small stove in the hideout.

In Chest Wood, Layer-de-la-Haye (SMR 21150), the remains are very similar to those at Copford. Here, part of the entrance tunnel where it joins the main chamber has collapsed revealing the curved corrugated-iron sheeting of the roof still in situ. By shining a torch beneath this it is possible to see that a part of the structure still stands although half-filled with soil. Through the undergrowth and broken ground it is difficult to interpret the exact layout of this site but it is possible that the escape tunnel still survives.

It is also possible, even probable, that there was a third British Resistance site in the Borough, at Wivenhoe Wood (SMR 21148). Wartime records include an 'underground chamber' here. In survey work outside the Borough, near Maldon, this has been found to indicate just such a site and, in such a location, it is difficult to deduce what else this could have been. Listed in the report, it may provide the necessary identification should WWII remains be discovered in the woods in the future.



SMR 10026: In the early days of World War Two, ex-naval guns from old battleships and cruisers were taken out of storage and emplaced around the coast as protection against a seaborne invasion. At East Mersea, two 4.7-inch guns faced out to sea from massive concrete casements, guarded by pillboxes. Two of these pillboxes still survive, at what is now Cudmore Grove Country Park.

ASSESSMENT OF SURVIVING SITES

In total, out of the 389 recorded sites in the Borough, 139 still survive to some greater or lesser extent. These range from a one-star site, perhaps the base of a pillbox or some ruined remains, up to four-star, perhaps a rare type of defence surviving in good condition. Although all extant features are important in telling the story of World War Two defence, a certain measuring standard which considers attributes such as condition, rarity, historical connection or group value is set to enable evaluation to be made for preservation purposes. This is the grading system.

In general, three stars is deemed to be the standard at which every effort should be made to ensure the continued survival of the monument. As an example, a pillbox standing in good condition by the sea shore or at the edge of a field would very likely receive a three-star grading.

Four stars are reserved for those, even more than three-star monuments, which should be protected statutorily. Currently, few World War Two sites are so protected and at the present time statutory legislation is itself being reappraised at a national level. In the meantime only a minimum of sites are being scheduled or listed, most relying for their protection on the local planning system.

Three-Star Graded Sites

The majority of the surviving sites in the Borough are the pillboxes which guarded the Eastern Command Line, the encircling anti-tank ditch around south and west Colchester and the sea shore around Mersea Island. There are a surprising 73, even more so when one considers the many which were demolished around the town itself. Most are in good condition and accordingly have received a three-star rating.

Fourteen spigot mortar emplacements have survived. At the time of compiling this report less than 50 have been recorded as extant in Essex and these are an important addition. Spigot mortar emplacements have a particular resonance among surviving defence types. Built by local contractors and manned by local Home Guard to defend local towns and villages, they, perhaps more than any other defence type, exemplify local WWII heritage.

Anti-tank barriers come in many forms from concrete cubes and 'pimples' to steel 'hairpins' and upright rails. They are not prolific survivors. However, in the Borough of Colchester, seventeen still remain extant, many more than could have been expected. Seven of these have been graded at three stars and seven at four stars. The grading of those in the three-star category reflects, mainly, the rarity of these defences rather than their condition. Thus, three sites of anti-tank rails along the banks of the River Colne (SMRs 10946, 10952 and 10968), chopped off but surviving as stumps in their concrete walling, have been included. Two three-star sites are of a single anti-tank pimple, at Fordstreet and Abberton (SMRs 10978 and 21104), in both cases surviving against all odds in a roadside hedge.

A number of the Airfield Dispersed Sites have received a three-star grading. This reflects the rating of buildings and structures still standing on the Dispersed Site rather than the percentage survival of the entire site. Nowhere does anything like complete

survival still remain; a Dispersed Site could have comprised, say, 30 or 40 structures. Rarely does more than one or two of them still stand.

At Cudmore Grove Country Park is the remains of a 4.7-inch coastal artillery battery (SMRs 10026 to 10033). Although only two pillboxes are still standing, almost all of the significant structures remain, albeit as massive pieces of broken concrete on the sands. Each of the gun casements is still eminently recognisable from its ring of holdfast bolts,



SMR 10030/31: Before coastal erosion caused their demise, the two 4.7-inch gun casemates at East Mersea stood on the cliff edge. They were of the same pattern as the surviving casemate, the 'Two Sugars' at West Mersea. (See photo page 7).

together with the Battery Observation Post and the coastal searchlight emplacements. The importance of the site is in its rarity and group value rather than condition. As such, the two pillboxes have been given a four-star grading while each of the broken structures have received three stars. In due course, the entire site should be protected statutorily.

The two British Resistance hideouts in Gravel Pit Wood, Copford, and Chest Wood, Layer-de-la-Haye (SMRs 21143 and 21150) have each received a three-star grading. Such is the national interest and extreme rarity of these sites that with only slightly more evidence of below-ground survival each would have received a four-star grading and this should be borne in mind if any archaeological excavation is undertaken in the future. Three-star or four-star, both sites should be presented for consideration as scheduled monuments when the opportunity allows.

Four-Star Graded Sites

10026	Pillbox at Cudmore Grove Country Park
10027	Pillbox at Cudmore Grove Country Park
10036	Bombing Decoy 'BR2 East Mersea'
10039	Gun Emplacement No. 2, West Mersea
10041	Coastal Artillery Searchlight Emplacement, West Mersea
10894	Concrete Firing Post, East Bridge, Colchester
10912	Anti-tank Blocks, Castle Park Grounds, Colchester
10939	Anti-tank Rails, Spring Lane, Colchester
10983	Anti-tank Pimples, Bridge House, Fordstreet
10996	Pillbox, S of River Colne, Chappel (Scheduled Monument)
10997	Spigot Mortar Emplacement, Chappel Viaduct (Scheduled Monument)
10998	Spigot Mortar Emplacement, Chappel Viaduct (Scheduled Monument)
20000	Pillbox, Chappel Bridge (Scheduled Monument)
20001	Pillbox, S of Colchester Road, Chappel Viaduct (Scheduled Monument)
20002	Anti-tank Blocks, S of Colchester Rd, Chappel Viaduct (Scheduled Monument)
20004	Pillbox, N of Colchester Rd, Chappel Viaduct (Scheduled Monument)
20005	Anti-tank Blocks, N of Colchester Rd, Chappel Viaduct (Scheduled Monument)
20008	Pillbox, E side of embankment, Chappel Viaduct (Scheduled Monument)
20028	Anti-tank Blocks, E of Thatcher's Arms, Mount Bures
20030	Anti-tank Hairpins, E of Thatcher's Arms, Mount Bures
20031	Pillbox, E of Thatcher's Arms, Mount Bures
20625	6 Military Air Raid Shelters, Colchester Garrison
21090	Royal Observer Corps Post, Great Horkesley

The two pillboxes at Cudmore Grove Country Park (SMRs 10026 and 10027) are the last of the structures from the wartime 4.7-inch coastal artillery battery still standing. The broken concrete of the gun casemates, Battery Observation Post and searchlight emplacements lie in distinctive, easily identifiable piles on the beach and it is the totality of these remains, and the pillboxes, which give the site its integrity. Without the remains on the beach the pillboxes would be standing unrecognisably out-of-context. When the opportunity allows, all of the structures, whole and 'broken', should be protected statutorily. In the meantime, any moves to clear the beach of its wartime remains should be vigorously resisted.

In 2001, Essex was among the first counties in Britain to have a number of Decoy Bombing Bunkers protected by law. These are at Nazeing, Epping Forest (SMR 10107), Fobbing, Thurrock (SMR 10328), Wix, Tendring (SMR 20309) and Kirby-le-Soken, Tendring (SMR 20310). The pattern of the East Mersea decoy bombing bunker (SMR 10036) is probably the same, or very similar, to those at Wix and Kirby-le-Soken, all three being N Series (Naval) decoys controlled from Harwich. While the bunker at East Mersea has been surveyed from the outside it has not been accessed internally. Subject to such an inspection, the bunker should be added to the list of scheduled monuments as soon as possible.

The coastal artillery casemate at West Mersea (SMR 10039) is a finely-surviving example of those which stood at East Mersea. Although the front has been altered to accommodate its new role as a beach cafe, it is instantly recognisable from its distinctive shape. With its accompanying searchlight emplacement some yards along

the beach (SMR 10041), the two structures have survived the years well, standing as now-familiar reminders of West Mersea's defence heritage. On a wider scale, both of these buildings are now very rare; the gun casemate is the last of its type in Essex and only a bare handful of coastal artillery searchlight emplacements still survive. In the top rank of four-star sites, these two buildings should be scheduled or listed, whichever is appropriate, at the earliest opportunity.

The Concrete Firing Post (SMR 10894), Anti-tank Blocks (SMR 10912), Anti-tank Rails (SMR 10939) and Anti-tank Pimples (SMR 10983) all share a particular protection attribute – they are the best of their type in the county. The firing post is effectively a concrete crenellated wall, built along the front boundary of Eastbay House, overlooking



SMR 10894: Documented in wartime records as a 'concrete firing post', this crenellated wall still stands around the garden of Eastbay House, Colchester. From here, infantrymen could fire on to East Bridge, which it overlooks. To camouflage the position, fencing would have been nailed to the horizontal battens.

East Bridge, Colchester. It was constructed to protect a squad of infantrymen, standing behind the wall to fire their rifles through the crenellations in defence of the bridge. Although firing posts are documented in wartime records, this is thought to be the only remaining example in the county.

The anti-tank blocks in the castle grounds, Colchester, were built there to prevent an armoured crossing of the river which runs through the parkland. The river was the major anti-tank barrier of the Eastern Command Line but heavy silting may have allowed enemy tracked vehicles to cross, so the blocks, connected one-to-the-next by heavy steel cable concreted into each, were sited as an additional barrier some yards back from the river bank. Although there are numbers of examples of surviving anti-tank cubes in Essex, nowhere has such cable-connected blocks been found in such good condition, openly

accessible to the public and eminently available as interpretative examples of Colchester's WWII defence preparations.

It is known from wartime records and surviving remains that an alternative defence against tanks crossing shallow, possibly silted-up, rivers was upright lengths of railway line embedded into the top of a broad concrete retaining wall built into the river bank. Examples of this type of barrier still remain along the River Colne but in each case, except one, the railway lines have been cut off at ground level. Close to the road bridge in Spring Lane, Lexden, the original steel rails still remain, standing up out of the concrete retaining wall. Again, this is thought to be the only, certainly the best, example in the county.

The anti-tank pimples at Bridge House, Fordstreet, were sited there to block a wide millrace bridge which crossed the River Colne 50 yards to the west of the main road bridge. Originally there were 17 of these pimples, sometimes called dragons teeth, in three rows. Ten of them still remain in situ although a further two, dug up, stand as sentries each side of the entrance to the driveway. There are various places where anti-tank pimples have survived in situ in the county but more often than not as a single example. Nowhere has more than ten been found.

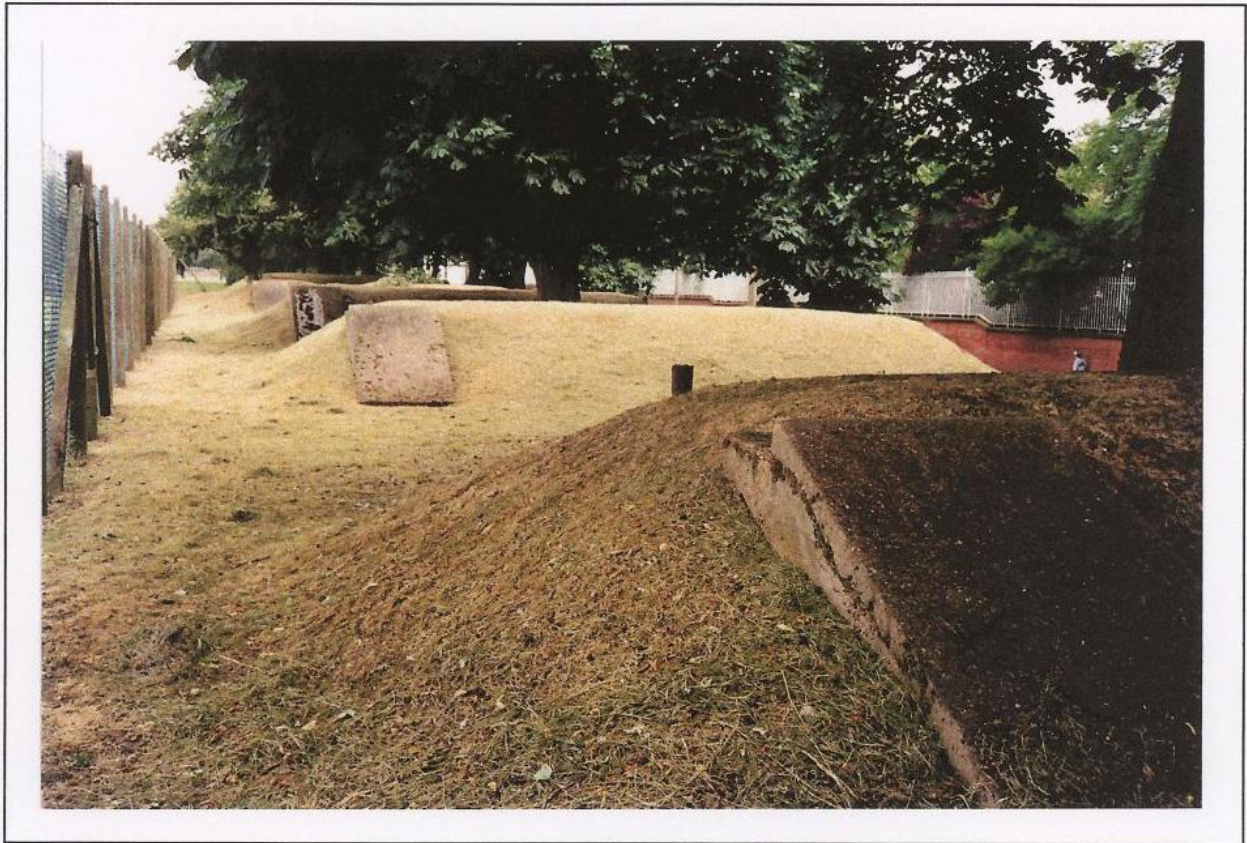
Chappel Viaduct was an important junction in the Eastern Command Line. This was where the defence line left the River Colne to head northwards along the railway embankment. To defend this area, with its potentially vulnerable meeting of river, road and railway, there were no fewer than five pillboxes, two spigot mortar emplacements and at least 38 concrete anti-tank blocks and cylinders. All of the pillboxes, both of the spigot mortar emplacements and most of the anti-tank obstacles still survive (SMRs 10996, 10997, 10998, 20000, 20001, 20004, 20005 & 20008). This is the greatest concentration of multi-type WWII defences in the county and in 2002 all of them received the protective designation of Scheduled Monument.

Survival of a number of defence types at a single site has a particular importance. The inter-relationship between them can be studied and perhaps something approaching the full picture can be built up. In several places the anti-tank ditch of the Eastern Command Line 'crossed' from one side of the railway line north of Chappel Viaduct to the other. To enable the railway to be used up to the moment of invasion, both fixed and removable barriers were employed to breach the gap between the ditch on one side of the lines to its continuation on the other. At Mount Bures, concrete blocks and steel 'hairpins', (lengths of bent railway line fixed upright in the ground) were used. These still survive (SMRs 20028 & 20030) supported by a rare Vickers machine-gun pillbox (SMR 20031), all within a few yards of each other. In the open countryside, all three elements have survived well, rare in the cases of the 'hairpins' and the Vickers pillbox, representing a fine, small-scale, multi-type defence position.

Private air raid shelters, except in very rare cases, are not recorded by the county World War Two Defences in Essex project. There were simply too many of them. However, military air raids shelters, built to a standard pattern at a range of service establishments, are included. Semi-sunken into the ground, pre-cast concrete sections were bolted together to form a long chamber with a vaulted roof. This was then earthed over.

These shelters survive in various parts of the county, typically at ex-army camps (see Shoeburyness Old Ranges). However, the six shelters at Colchester Garrison (SMR 20625), standing side-by-side in a fenced-off compound alongside Mersea Road, represent, with those at Shoeburyness, probably the best 'grouped' military air raid shelters in the

county. As an intriguing extra, the entrances to each have been slabbed over for a great many years, inaccessible to all without heavy lifting equipment. It is not known how long ago this was done, perhaps at the end of the Second World War, and it is tantalising to conjecture what remains inside.



SMR 20625: The six military air raid shelters, in their compound, at Colchester Garrison.

Royal Observer Corp posts have not, until now, been included in the World War Two Defences in Essex project. During WWII most would have been temporary structures built of no more than sandbags. During the Cold War there was a revival of the ROC, which had been disbanded at the end of WWII, and many of the positions established in the 1939-1945 period were upgraded to Nuclear Monitoring Posts. These comprised an above-ground 'Orlit' shelter and an underground living and monitoring shelter. No evidence of such an upgrade has been discovered at Great Horkesley and what is, apparently, the original WWII post still survives. It stands as a brick-built rectangular structure with two chambers, one open to the sky for observing the approach of enemy aircraft and the other roofed-over for shelter and storage. Remarkably, the central steel instrument mounting post still stands erect in the centre of the open enclosure. Equally remarkable, after more than 60 years in the open, the letters 'SW', in white paint, still remain on the wall in the south-west corner.

BOROUGH OF COLCHESTER - ANALYSIS OF SITES RECORDED

	Extant*	Destroyed	Unknown
Pillbox	73	99	
Anti-tank Barrier - Road Barriers, Cubes, Pimples, Rails, Ditches	17	36	
Spigot Mortar Emplacement	14	38	
Infantry Firing Post	1	1	
Loopholes			1
Ammunition Shelter	2	37	
Defended Area		1	
Bunker			1
Observation Post			1
Anti-Invasion Obstacles	1		
Royal Observer Corps Post	1		
Ammunition Dump		1	
British Resistance Hideout	2		1
Heavy Anti-Aircraft gun site	1	3	
Coastal Artillery Casemate	3	1	
Coastal Searchlight Emplacement	3	1	
Battery Observation Post	1	1	
Airfield	2		1
Airfield Dispersed Site	13	23	2
Bombing Decoy	1		
Military Air Raid Shelter	3**		
Private Air Raid Shelter	1		
Prisoner-of-War Camp		1	
Totals	139	243	7

Grand Total 389 sites

Notes :

* Sites are considered to be extant if there are significant remains.

** Nine military air raid shelters on three sites.

SUMMARY

Within the parameters of the types to be recorded, it is thought that the great majority of defences built in the Borough of Colchester during World War Two have been identified by the survey. From the many sources available to the project, including detailed wartime records and aerial photographs from immediately after the war, it is thought that few can have been missed, particularly along the Eastern Command Line where the pillboxes and anti-tank obstacles show up more predictably on the aerial images. However, it is very possible that some of the town defences were not included in War Time Contraventions 1968; this is not unusual and, as those in built-up areas do not show up well on aerial photographs, it is very likely that some will have escaped the survey net.

The 139 extant sites, out of the 389 recorded, represent a 35% survival rate, which is above that recorded in the county as a whole. Generally, the fortifications along defence lines survive well, those guarding towns and villages do not. Overall in Essex, the survival is around 30%.

RECOMMENDATIONS

Protection of Extant Sites

Although in recent years English Heritage have introduced a number of 20th century defence categories as schedulable, it remains the case that nationally relatively few sites have yet received statutory protection. Essex was among the first counties in Britain to have sites protected by law. However, since the first Heavy Anti-Aircraft Gun sites were scheduled in 2000, less than twenty of the county's WWII sites have as yet received such protection, out of an estimated extant population of close to 1,000.

Recently, the legislative procedure for statutory protection has itself come under review and is the subject of a governmental White Paper. -Until the outcome of this is known, the vast majority of World War Two sites, built to protect Britain, must now look to the local planning system for their own protection. Planning authorities may wish to include World War Two sites on their 'local lists'. While not scheduled or listed, such sites are nevertheless historically important. In this way, sites affected by development proposals can be clearly 'flagged up' and the appropriate action taken.

Spigot Mortar Emplacements

Spigot mortars were issued to the Home Guard in the early part of 1942. This anti-tank weapon could be deployed in two ways, either on splayed-out legs on the ground or, more commonly, in a purpose-designed concrete pit with a central mounting pedestal. Thousands of these pits were constructed all over the country and some still survive, often filled-in. Fifty-two former sites have been recorded in the Borough, with fourteen surviving to the present day. However, unlike the obvious presence of, say, a pillbox, spigot mortar emplacements often remain extant beneath ground level. Any revealed in

Colchester in future years would constitute important additions and serious consideration should be given to their protection.

Information Boards

The growing use of information boards at historical sites throughout Britain are indicative of the public interest in the country's surviving monuments. It is hoped that it will be possible for such boards to be mounted at some selected WWII defence sites in the Borough. This would be particularly appropriate at the coastal artillery site at Cudmore Grove Country Park, together with its counterpart at West Mersea, the anti-tank blocks in the grounds of Colchester Castle Park and the scheduled defences at Chappel Viaduct. At each of these places there is ready access for the public and the addition of an interpretative board would complete what is already an impressive heritage site.

Anti-Invasion Obstacles, West Mersea

Paralleling the beach at West Mersea, some 30/40 yards out on the mudflats, is a long row of WWII anti-invasion obstacles. Each consists of a short length, 3 to 4 feet, of railway line embedded in a large footing of concrete. The bottom of each of these stakes has a steel cross-piece for better anchorage in the concrete, the top of each has been cut off at an angle to present a sharpened point. There are approximately 22 obstacles in total, stretching for 100 yards. Over the years, the footings have all come adrift from the mud. They, with their steel stakes, have then fallen over such that in each case the bottom of the concrete base now faces the beach while the stake points out to sea.

This type of anti-invasion obstacle in the sea is now very rare. No others are known to still exist in Essex. However, there is little doubt that they could present a danger to wind surfers, jet skiers and swimmers. A tall steel post with a warning triangle has been erected at each end of the line but there is no indication of what this means nor that a potentially dangerous obstacle lies hidden between the posts at high tide. It is strongly recommended that a more explanatory warning sign be erected on the beach, possibly combined with an information board on the World War Two heritage of Mersea.:

'There'll Always be an England'

In 1940, the songwriter Ross Parker, then in his mid-twenties, was stationed at Roman Way Camp. The previous year, together with Hughie Williams, he had written 'We'll Meet Again', which was to become a wartime favourite, sung by Vera Lynn. Now he was in the throes of composing a new song, one which was, like his previous hit, particularly redolent of the times. It was 'There'll Always be an England'. Unable in the noisy barracks to find the peace and quiet he needed to continue his work, he regularly retired to the one place he could be alone – the local pillbox. There is every chance this very pillbox still survives. All the wartime defence sites in the area have now been recorded and the three most likely candidates still exist, all close to the barracks, SMRs 20546, 20547 & 20548. It would be a fitting tribute to both the composer and to Colchester's World War Two heritage if a 'There'll Always be an England' plaque could be erected at one of these three sites.

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APPENDICES

**A. Defence Types included in the World War Two
Defences in Essex Project**

B. Glossary of Defence Types Recorded in Essex

C. Colchester Garrison

Outline Chronology

Broad Historical Context

Barrack and Army land c. 1953

APPENDIX A: Defence types included in the World War Two Defences in Essex Project

Included

Pillboxes
 Anti-tank obstacles
 - cubes, pimples, rails, hairpins, sockets,
 ditches, cables, walls, scaffolding,
 road barriers, railway barriers
 Coastal artillery casemates
 Coastal artillery searchlight emplacements
 Battery Observation Posts
 Beach scaffolding
 Spigot mortar emplacements
 Prepared rifle emplacements
 Alan-Williams turrets
 Pickett-Hamilton forts
 Tett turrets
 Ammunition shelters
 Bombing decoys
 Battle headquarters
 'Mulberry' manufacturing sites
 'Pluto' manufacturing sites British
 Resistance hideouts Heavy anti-
 aircraft gun sites Heavy 'Diver' gun
 sites
 Light anti-aircraft gun sites (some)
 Observation posts (some)
 Minefields
 Military air raid shelters
 Ammunition and Bomb Dumps
 Prisoner-of-War Camps
 Military Camps (some)
 Royal Observer Corps posts (some)

Not Included

Military hospitals
 Cenotaphs and memorials
 Air raid shelters (private)
 Aircraft crash sites
 Manufacturing sites
 Field artillery positions
 Light 'Diver' gun sites
 Anti-aircraft searchlight positions

APPENDIX B: Glossary of Defence Types Recorded in Essex

Alan-Williams Turret	Steel rotating dome set into the ground as a strong point. Manned by two infantrymen with a mounted machine-gun
Ammunition Dump	Area, probably with a number of Ammunition Shelters, where large quantities of ammunition could be stored
Ammunition Shelter	Small one-roomed building, commonly rectangular of brick or nissen-type, used to store small arms ammunition, spigot mortar bombs, etc
Anti-Invasion Obstacle	Stakes or other obstacle intended to impede an enemy landing
Anti-Tank Ditch	Primary anti-tank obstacle, dug where no river or other natural obstacle was available
Anti-Tank Obstacle	Generic term for concrete cubes, pimples, cable barriers, hairpins, scaffolding etc, erected to block routes vulnerable to enemy armour
Battery Observation Post (B.O.P.)	Central Command Position for a Coastal Artillery Battery
Battle Headquarters	Command bunker for the ground defence of a military establishment
Beach Scaffolding	Long, unbroken line of steel scaffolding erected below the high water level as an anti-invasion barrier
Bombing Decoy	Site laid out to replicate an airfield or other possible target
Boom	Compound naval barrier erected across a river estuary. Could comprise piers, boats, anti-submarine netting etc
Boom Pier	Fixed element of a boom, built out from the shore to meet the boat line
British Resistance Hideout (or Auxiliary Hide)	Secret Underground quarters for a section of 'Auxiliary Unit' members
Casemate	Concrete bunker built to house a coastal artillery piece
Coastal Artillery Searchlight Emplacement (C.A.S.L. or DEL)	Small, one-roomed building housing a horizontally aimed searchlight, to illuminate enemy surface raiders
C.A.S.L. Engine Room	Small building housing the power source for a coastal artillery searchlight
Cube/Block	Concrete anti-tank obstacle 3-5 feet square
'Diver' Site	Anti-aircraft gun site set up along the coast to counter V1 flying bombs

Floodlight	Experimental fixed searchlight developed in the late 1930's/early 1940's to 'floodlight' the sky
Hairpin	Length of girder or railway line bent and inserted into a socket in the ground. Laid in patterns as an anti-tank barrier
Heavy Anti-Aircraft Gun Site	Usually a half-battery of four or six 3.7-inch, 4.5-inch or 5.25-inch guns in concrete emplacements
Home Guard Observation Post	Any designated position, including loopholed concrete bunker, from where the Home Guard could observe enemy forces
Infantry Firing Post	Constructed firing position for a section of infantry. For example, crenellated wall
Light Anti-Aircraft Gun Site	Quick-firing Lewis guns, Bren guns, Bofors, etc, employed as a defence against low flying aircraft. May be in concrete or sandbagged emplacement
Loopholes	Pre-formed firing embrasure in a pillbox or wall
Minefield	Mines laid in a pattern as an anti-tank or anti-personnel barrier
Observation Post	Position from where enemy dispositions could be seen
Phoenix Caisson	The deep-water outer-wall element of a Mulberry Harbour
Pickett-Hamilton Fort	Small, retractable pillbox designed for airfield defence
Pillbox	Concrete strong point built in many types and variations to accommodate a section of infantrymen or an artillery piece
Pimple	Concrete, conical anti-tank obstacle, 2'6" high, laid in patterns
Prepared Rifle Position	Concrete firing emplacement, wall or enclosure for a section of infantrymen
Pyramid	Concrete anti-tank obstacle, laid in patterns. Similar to pimple but flat-sided
Rail	Upright length of girder or railway line inserted into a socket in the ground as an anti-tank obstacle. Laid in patterns
Road Barrier	Anti-tank barrier built in many types, often concrete cubes or pimples on each verge with moveable cable or hairpins across road
R.O.C. Post	Shelter or other emplacement from where members of the Royal Observer Corps could monitor enemy aircraft
Spigot Mortar Emplacement	Octagonal, concrete pit with central mounting pedestal. Built to house a Home Guard 29mm spigot mortar
Tett Turret	Small rotating concrete dome mounted on underground chamber. Manned by two men with machine-gun

APPENDIX C: Colchester Garrison

Extract of report compiled for RMPA Services Limited by Ingram Consultancy, October 2000. (Courtesy of RMPA Services and Ingram Consultancy, November 2007)

Outline Chronology

(Military events recorded in italics)

Late C17 Onwards	Troops billeted in and near the town but no permanent barracks
1741	Military camp established on Lexden Heath for troops en route for Continent – continued in intermittent use for rest of C18 alongside billeting
<i>1745-1746</i>	<i>The Forty-Five Rebellion</i>
<i>1775-1786</i>	<i>American Revolution War</i>
<i>1792-1815</i>	<i>French Revolution and Napoleonic Wars</i>
1793	20,000 assembled for disastrous campaign in Netherlands
1794	Innkeepers' petition for barracks; first infantry and cavalry barracks (wooden) on 4 acres to SE
1797 and 1799	Additional infantry and cavalry barracks on 21 acres adjoining, bordered by Magdalen St. (later Barrack St.) to N, Port lane to E and Wimpole Lane to W
1797	20 th Foot (later Lancs. Fusiliers) arrived from campaigning in Holland after heavy losses
By 1803	4 brigades of infantry camped on Lexden Heath
By 1805	Site could accommodate 7,000 men and 400 horses
<i>1807-1814</i>	<i>Peninsular War</i>
1809	28 th Regiment (later North Glos) and 43 rd Regiment (later 1 st Battalion Royal Green Jackets) returned from Antwerp/Flushing Expedition struck down by Walcheren fever
1815	Troops returned from Waterloo
1816 onwards	Disposal of barracks and related land and buildings (for technical reasons not completed until 1846) but Barrack Field of 23 acres and Ordnance Field of 32 acres between Military and Mersea Roads both retained
1843	<i>British Conquest of Sind</i>
1845-1846	<i>First Sikh War</i>
1848-1849	<i>Second Sikh War</i>
1854-1856	<i>Crimean War</i>

1855-1856	Construction on Ordnance Field of wooden huts intended as temporary infantry barracks for 5,000 men (Colchester Camp)
1856	Church built on land in Military Road bought in 1804 for military burial ground
1857	Middlewick Farm of 167 acres south of barracks bought for rifle range and drill ground – later substantially extended
1857-1858	<i>Indian Mutiny</i>
1866	Creation of Eastern District with HQ at Colchester
1860 acres	Purchase of St John's farm and Abbey Gardens added 156 acres
1862-4	Brick Cavalry Barracks built in Butt Road – garrison doubled in size
1862	Permanent married quarters built on extra 18 acres south of Abbey Gardens
c.1862	Gymnasium built
1875	Field artillery barracks built, later called Le Cateau
1879	<i>Zulu War</i>
1880-1881	<i>First Boer War</i>
1883-1896	<i>Sudan Campaigns</i>
1884	Adult school constructed at Royal Field Artillery barracks
1885	Scarlett's estate to south of recreation ground rented for GOC Eastern District
1886	Old Barrack Field, parade ground of Napoleonic garrison, leased to town as recreation ground
1889-1902	<i>Second Boer War</i>
1891	Additional gun shed constructed in RFA barracks
1891	Church restored – slate roof possibly replaced by tarred felt
1896	New brick-built hospital of 5, blocks for 221 patients opened south of Abbey Field
1896-1904	Old wooden huts on Ordnance Field replaced by brick buildings of Hyderabad and Meanee barracks
1900-1902	Goojerat and Sobraon barracks built to south on part of 19 acre Barn Hill farm acquired in 1899
1904	785 acres of Reed Hall and Beehive farms purchased
1914-1918	<i>First World War</i>

1914	30-40,000 men accommodated in wooden huts at Reed Hall camp
1930's	Kirkee and McMunn barracks built at Reed Hall and Roman Way, and Cherry Tree camps established south east of the main camp
1939	Emergency barracks on various garrison sites
1939-1945	<i>Second World War</i>
1947	Camp of Nissen huts at Berechurch Hall used for WW2 POW's became Military Corrective Training Camp
1950's	Roff Marsh's plan to concentrate barracks to south of Abbey Fields
1950-1953	<i>Korean War</i>
1958-1961	Hyderabad and Meanee Barracks modernised
1962	Roman barracks built alongside Roman Way camp to south
1962	Demolition of Le Cateau and Cavalry barracks planned
1970-1975	Goojerat barracks rebuilt and became HQ of 19 th Airportable Brigade
1971	Sobraon barracks demolished
1974	Victoria House staff residential block added to hospital
1978	Hospital closed
1982	<i>Falklands War</i>
1985	Church restored and slate roof reinstated
1988	New prison built

The Garrison in a Broad Historical Context

Colchester was selected alongside York and Edinburgh in Dietz's (ed) *Garrison: Ten British Military Towns* to represent garrisons which are important for their historic and political role. Other garrisons were selected for different reasons. Aldershot, for example, was unknown until the Crimean War created the need for large new permanent camps between London and the south coast. But in the comparatively short time since it has become 'the home of the British army'.

York and Colchester, by contrast, show evidence of a military presence stretching back into prehistory and have significant Roman remains. The considerations which led to a Roman garrison at these places continued to be valid until at least the second World War. Both still have geographical and political reasons to justify a military area headquarters and a modern garrison, albeit scaled down to the needs of the post-World War era.

Colchester itself has been a military garrison town for nearly 2000 years, quartering Roman legionnaires, the Danish Great Army, troops of William the Conqueror and soldiers who fought at Blenheim, Waterloo, Mons and Alamein. The Normans built a castle here bigger than the White Tower in London, with a keep the largest of its kind in Europe. King John visited it five times, then besieged it when the garrison went over to the rebel barons.

But Colchester was, of course, far from being the only, or even the most important garrison at any particular moment in British history. Other key strategic and coastal locations had their castles from earliest times. Other major Norman fortifications survive today, from London to York, Berwick and Edinburgh. Indeed, Colchester's military significance declined in later medieval and Tudor times. The castle became a jail; it fell into decay in the seventeenth century (when it played little part in the Civil War siege of the town in 1648) and was partly demolished, to be restored and beautified in the eighteenth century.

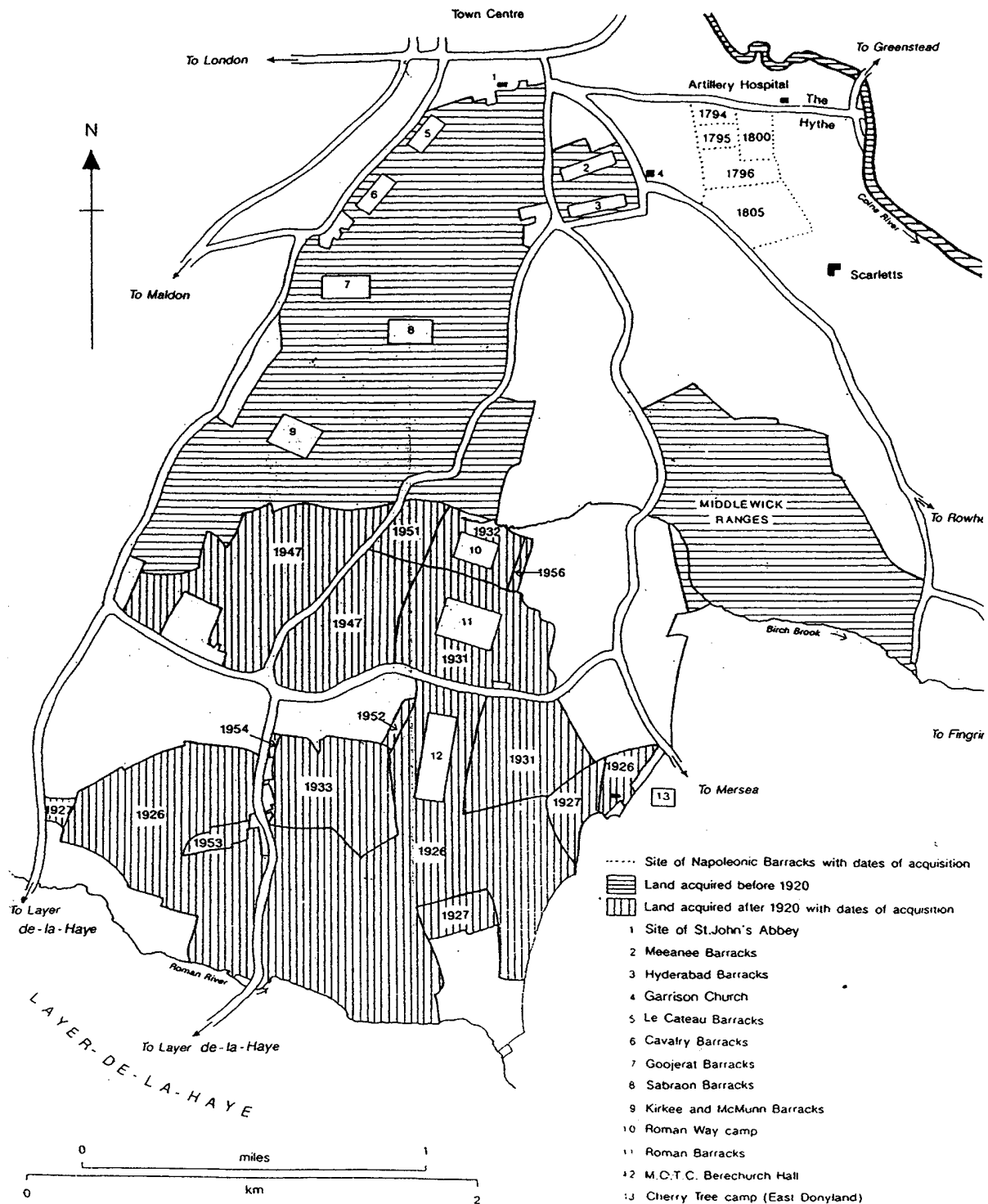
Even when the late seventeenth century wars with the Dutch re-established Colchester's military importance as a staging post for troops en route to the continent via Harwich it was only one of some 40 places in England (and many more in Ireland) where troops were billeted. That situation, of course, continues up to the present. By the end of the nineteenth century the number of other barracks in England had risen to well over 60.

Moreover, permanent barracks were constructed at Colchester later than at many other garrisons. Throughout the continental wars of the eighteenth century troops were accommodated either through local billeting or in temporary camps, especially at Lexden Heath on the western outskirts of the town. Even the permanent barracks built here, as at many other places, in the great surge of barrack building during the French Wars of 1793-1815 were disposed of after the war, unlike those at Edinburgh, for example. The Foot Guards' barracks and guardrooms at Hampton Court date to an even earlier period; built in 1689 they are the earliest purpose-built barracks to survive today.

None of this, however, detracts from Colchester's importance as one of Britain's oldest military centres. A long and varied list of regiments, of cavalry, infantry, artillery, engineer, militia and yeomanry, has served here. In the time since Colchester has had permanent barracks the list stretches from the 11th Regiment (North Devonshire) in 1796 during the French wars and again in 1856 after the Crimean War, to the Highland Brigade, the Black Watch, the 11th Hussars, and Australian, Canadian, American and Indian troops in the Second World War. Troops returned to Colchester in disaster and in triumph from the French Wars (Walcheren, Corunna, Waterloo); occupied the new emergency hutments built for the Crimean War; set off for the South African War in 1899; and trained here in vast numbers for both World Wars, including the great build-up to D Day in 1944.

Colchester is certainly not the only major British garrison, nor the most important. But it does stand in the front rank for its key part in so many great events over the whole span of British history.

BARRACK AND ARMY LAND WITHIN THE BOROUGH c.1953



GRADING AND SITE ASSESSMENT

In order to facilitate protection considerations, each of the sites recorded in this survey has been given a grading, from 0 to ****. The criteria for this grading are based on the survival, condition, rarity, historical connection and group value of each site. This can be broadly summarised as follows:

0	nothing remaining, minimal if any evidence surviving
*	some remains, but ruined/derelict
**	single or multiple buildings or structures, not well preserved
***	original buildings, structures or features, largely complete or of specific interest. Good example of type, or of good group value
****	rare or important defence type, particularly if historical provenance is known. Possibly maintained, may have associated group value

Until national figures and comparisons, detailing the survival of each type and variation of structure, become available, perhaps years in the future, 'rarity' has been based on rarity in Essex.

In addition to the grading system each site where there is particularly significant survival has been annotated with a written 'Site Assessment' on the Essex Historic Environment Record. This amplifies the considerations which have led to the grading and makes recommendations on the site's future protection.

COLCHESTER HISTORIC ENVIRONMENT RECORD

INVENTORY OF SITES

SMR No	NGR	Site Name	Grade
8913	TM 0161 3030	Boxted WWII Airfield	
10019	TM 0159 1231	Pillbox base on beach at West Mersea	*
10020	TM 0184 1240	Pillbox (destroyed), corner of Willoughby Avenue, West Mersea	0
10021	TM 0202 1240	Pillbox (destroyed), E of coastal artillery site, West Mersea	0
10022	TM 0323 1253	Pillbox on sea wall by Waldegraves Farm	***
10023	TM 0406 1304	Pillbox (destroyed), Youth Camp, Mersea Island	0
10024	TM 0546 1398	Pillbox (destroyed) at Hall Farm, East Mersea	0
10025	TM 0564 1378	Pillbox on beach by Coopers Beach Holiday Park	***
10026	TM 0675 1469	Pillbox at Cudmore Grove Country Park	****
10027	TM 0692 1486	Pillbox at Cudmore Grove Country Park	****
10028	TM 0667 1449	Searchlight emplacement at Cudmore Grove Country Park	***
10029	TM 0678 1459	Battery Observation Post at Cudmore Grove Country Park	***
10030	TM 0682 1464	4.7-inch Gun Emplacement at Cudmore Grove Country Park	***
10031	TM 0684 1465	4.7-inch Gun Emplacement at Cudmore Grove Country Park	***
10032	TM 0688 1467	Pillbox (destroyed) at Cudmore Grove Country Park	0
10033	TM 0696 1475	Searchlight Emplacement at Cudmore Grove Country Park	***
10034	TM 0720 1500	Pillbox (destroyed) NE of Cudmore Grove Country Park	0
10035	TM 0733 1543	Pillbox at extreme end of Mersea Island	***
10036	TM 0555 1560	WWII Bombing Decoy, "BR2 East Mersea", Essex	****
10037	TM 0183 1236	Searchlight Emplacement (destroyed) at West Mersea	0
10038	TM 0191 1238	Gun Emplacement No. 1 (destroyed) at West Mersea	0
10039	TM 0195 1238	Gun Emplacement No. 2 at West Mersea	****
10040	TM 0198 1241	Battery Observation Post (destroyed) at West Mersea	0
10041	TM 0209 1238	Searchlight Emplacement at West Mersea	****

10042	TM 0136 1522	Pillbox on sea wall N of Pyefleet Channel	***
10043	TM 0149 1538	Pillbox on sea wall N of Pyefleet Channel	***
10731	TM 0105 1538	Pillbox (destroyed), The Strood, Peldon	0
10732	TM 0291 1644	Pillbox, sea wall, Langenhoe	***
10733	TM 0353 1662	Pillbox, sea wall, Langenhoe	***
10734	TM 0423 1677	Pillbox, sea wall, Langenhoe	***
10735	TM 0505 1681	Pillbox, sea wall, Langenhoe	***
10736	TM 0573 1634	Pillbox, sea wall, Langenhoe	***
10737	TM 0593 1634	Pillbox, sea wall, Langenhoe	***
10738	TM 0586 1664	Pillbox, sea wall, Langenhoe	***
10877	TM 0401 2127	Pillbox, west bank of the River Colne, opposite Wivenhoe	***
10878	TM 0373 2135	Pillbox (destroyed), W bank of River Colne, opposite Wivenhoe	0
10879	TM 0318 2161	Pillbox (destroyed), Rowhedge Quay	0
10880	TM 0281 2291	Pillbox (destroyed), Hythe Marshes, Colchester	0
10881	TM 0252 2320	Pillbox (destroyed), Hythe Marshes, Colchester	0
10882	TM 0234 2337	Pillbox (destroyed), Sewage Works, Hythe Marshes	0
10883	TM 0235 2337	Anti-Tank Obstacles (destroyed), Sewage Works, Hythe Marshes	0
10884	TM 0219 2373	Pillbox (destroyed), Nr Malthouse Arms, Hythe	0
10885	TM 0202 2390	Pillbox (destroyed), near Malthouse, Hythe	0
10886	TM 0155 2425	Pillbox (destroyed), King Edward Quay, Hythe	0
10887	TM 0158 2475	Pillbox (destroyed), Hawkins Road, Hythe, Colchester	0
10888	TM 0157 2481	Pillbox, Hythe Station	***
10889	TM 0119 2469	Spigot Mortar Emplacement (destroyed), Hythe Hill, Hythe	0
10890	TM 0130 2494	Pillbox, Bank of the River Colne, North of the Hythe	***
10891	TM 0089 2493	Pillbox (destroyed), Moors Dump, Colchester	0
10892	TM 0069 2526	Pillbox (destroyed), East Bay Mill, East Street, Colchester	0
10893	TM 0067 2526	Pillbox (destroyed), Eastbay House, East Bridge, Colchester	0
10894	TM 0067 2526	Concrete Firing Post, Eastbay House, East Bridge, Colchester	*** *
10895	TM 0080 2534	Pillbox (destroyed), Rose and Crown Hotel, East Street, Colchester	0

10896	TM 0056 2532	Spigot Mortar Emplacement (destroyed), behind garage, East Hill, Colchester	0
10897	TM 0063 2541	Pillbox (destroyed), NE of recreation ground, East Street, Colchester	0
10898	TM 0093 2557	Pillbox (destroyed), St Andrew's Ave,	0
10899	TM 0086 2567	Pillbox (destroyed), Ipswich Road, Colchester	0
10900	TM 0086 2569	Spigot Mortar Emplacement (destroyed), Ipswich Road, Colchester	0
10901	TM 0053 2600	Pillbox, Cowdray Avenue, Colchester	***
10902	TM 0060 2562	Pillbox (destroyed), R. Colne, NE Colchester	0
10903	TM 0049 2581	Pillbox (destroyed), R.Colne, NE Colchester	0
10904	TM 0032 2584	Pillbox (destroyed), R.Colne, NE Colchester	0
10905	TM 0025 2597	Pillbox, River Colne, NE Colchester	***
10906	TM 0019 2580	Pillbox (destroyed), R. Colne, NE Colchester	0
10907	TM 0019 2624	Pillbox (destroyed), Gordon Works, Colchester	0
10908	TM 0018 2627	Spigot Mortar Emplacement (destroyed), E of Masons Arclight Factory, Colchester	0
10909	TL 9999 2575	Pillbox (destroyed), Castle Park boundary, S of R. Colne, Colchester	0
10910	TL 9986 2571	Pillbox (destroyed), Castle Park Grounds, S of R. Colne, Colchester	0
10911	TL 9975 2554	Pillbox (destroyed), junction of Northgate St/Maidenburgh St, Colchester	*
10912	TL 9976 2563	Anti-Tank Blocks, Castle Park Grounds, Colchester	****
10913	TL 9970 2566	Pillbox (destroyed), Middle Mill Bridge, R.Colne, Colchester	0
10914	TL 9978 2609	Spigot Mortar Emplacement (destroyed), Cowdray Ave, Colchester	0
10915	TL 9940 2549	Pillbox (destroyed), Junction of North Hill/Northgate St. Colchester	0
10916	TL 9940 2552	Pillbox (destroyed), 3 Middleborough, Colchester	0
10917	TL 9931 2605	Spigot Mortar Emplacement (destroyed), Junction Cowdray Ave/N. Station Road, Colchester	0

10918	TL 9933 2608	Spigot Mortar Emplacement (destroyed), Albert Hotel, Cowdray Avenue, Colchester	0
10919	TL 9942 2642	Pillbox (destroyed), North Station Car Park, Colchester	0
10920	TL 9927 2639	Pillbox (destroyed), Railway Bridge, North Station	0
10921	TL 9904 2638	Pillbox (destroyed), Colchester Station	0
10922	TL 9931 2565	Pillbox (destroyed), W of North Bridge, Colchester	0
10923	TL 9906 2598	Pillbox (destroyed), Colne Bank Avenue, Colchester	0
10924	TL 9901 2599	Pillbox/Gun Emplacement (destroyed), Colne Bank Avenue, Colchester	0
10925	TL 9892 2597	Pillbox (destroyed), N side of Cymbeline Way, Colchester	0
10926	TL 9868 2605	Pillbox (destroyed), Cymbeline Meadows, Colchester	0
10927	TL 9846 2594	Pillbox (destroyed), Sheepen Bridge,	0
10928	TL 9859 2586	Spigot Mortar Emplacement (destroyed), E of Water Lane, Colchester	0
10929	TL 9854 2583	Spigot Mortar Emplacement (destroyed), W of Water Lane, Colchester	0
10930	TL 9841 2576	Anti-Tank Obstacles/Road Barrier (destroyed), Cymbeline Way, Colchester	0
10931	TL 9847 2569	Spigot Mortar Emplacement (destroyed), S of Cymbeline Way, Colchester	0
10932	TL 9847 2553	Spigot Mortar Emplacement (destroyed), Hilly Fields, Colchester	0
10933	TL 9834 2547	Pillbox (destroyed), Hilly Fields, Colchester	0
10934	TL 9817 2530	Pillbox, Hilly Fields, Colchester.	***
10935	TL 9787 2555	Pillbox (destroyed), S of Cymbeline Way, Colchester	0
10936	TL 9777 2582	Pillbox (destroyed), Cymbeline Meadows, Colchester	0
10937	TL 9761 2560	Pillbox, North of Cymbeline Way, Colchester	***
10938	TL 9739 2551	Pillbox, North of Cymbeline Way, Colchester	***
10939	TL 9726 2567	Anti-Tank Rails, Spring Lane, Lexden	****
10940	TL 9714 2567	Pillbox (destroyed) W of Spring Lane, Lexden, Colchester	0
10941	TL 9692 2571	Pillbox (destroyed), Malting's Farm, Lexden, Colchester	0
10942	TL 9714 2592	Pillbox, South of the River Colne, Baker's Lane, Lexden	***
10943	TL 9699 2605	Pillbox (destroyed), R. Colne N of Malting's Farm, Lexden, Colchester	0
10944	TL 9656 2597	Pillbox, River Colne, North of the A12, Lexden	***

10945	TL 9625 2571	Pillbox, Seven Arches Farm, Lexden	***
10946	TL 9633 2600	Anti-Tank Rails, Seven Arches Farm, Lexden	***
10947	TL 9625 2602	Pillbox, under viaduct, Seven Arches Farm, Lexden	***
10948	TL 9601 2640	Pillbox, West bank of the River Colne, Seven Arches Farm, Lexden	***
10949	TL 9587 2627	Pillbox (destroyed), Seven Arches Farm,	0
10950	TL 9567 2663	Spigot Mortar Emplacement, E of New Bridge, Seven Arches Farm, Lexden	***
10951	TL 9559 2662	Pillbox (destroyed), New Bridge, West	0
10952	TL 9560 2667	Anti-Tank Rails, New Bridge, West Bergholt	***
10953	TL 9551 2665	Pillbox (destroyed), W of New Bridge, West Bergholt	0
10954	TL 9551 2666	Spigot Mortar Emplacement (destroyed), W of New Bridge	0
10955	TL 9543 2683	Pillbox, west of New Bridge, West Bergholt	***
10956	TL 9508 2679	Pillbox, West of Newbridge, West Bergholt	***
10957	TL 9501 2661	Pillbox, Argents Lane, Eight Ash Green	***
10958	TL 9475 2661	Pillbox, North of Argents Lane, Eight Ash Green	***
10959	TL 9477 2703	Road Barrier (destroyed), Cook's Mill, Fordham Heath	0
10960	TL 9474 2703	Pillbox, Cook's Mill, Eight Ash Green	***
10961	TL 9437 2735	Pillbox, Great Porters Farm, Fordham Heath	***
10962	TL 9401 2712	Pillbox, Great Porters Farm, Fordham Heath	***
10963	TL 9391 2736	Pillbox, Great Porters Farm, Fordham Heath	***
10964	TL 9350 2743	Pillbox, Great Porters Farm, Fordham Heath	***
10965	TL 9347 2720	Pillbox, Great Porters Farm, Fordham Heath	***
10966	TL 9322 2735	Pillbox, Great Porters Farm, Fordham Heath	***
10967	TL 9298 2712	Spigot Mortar Emplacement, East of Fordham Bridge	***
10968	TL 9293 2709	Anti-Tank Rails, Fordham Bridge	***
10969	TL 9290 2711	Road Barrier (destroyed), Fordham Bridge	0
10970	TL 9292 2707	Pillbox, Fordham Bridge	***
10971	TL 9287 2699	Pillbox (destroyed), NW corner of Fiddler's Wood, Fordham Bridge	0
10972	TL 9281 2713	Spigot Mortar Emplacement, west of Fordham Bridge	***
10973	TL 9272 2680	Pillbox, field junction south of Fordham Bridge	***
10974	TL 9253 2712	Pillbox, South bank of River Colne, Fordstreet	***

10975	TL 9225 2662	Pillbox, East of Fordstreet Hill	***
10976	TL 9199 2692	Anti-Tank Ditch, Fordstreet	0
10977	TL 9214 2679	Road Barrier (destroyed), Fordstreet Hill	0
10978	TL 9189 2674	Road Barrier/Anti-Tank Pimple, New Road, Fordstreet	***
10979	TL 9217 2665	Pillbox (destroyed), W of Fordstreet Hill, Fordstreet	0
10980	TL 9202 2659	Pillbox, West of Fordstreet Hill	***
10981	TL 9186 2672	Pillbox (destroyed), S of New Road, Fordstreet	0
10982	TL 9201 2706	Pillbox (destroyed), Bridge House, Fordstreet	0
10983	TL 9196 2708	Anti-Tank Pimples, Bridge House, Fordstreet	****
10984	TL 9195 2709	Spigot Mortar Emplacement, Bridge House, Fordstreet	***
10985	TL 9162 2693	Pillbox, Mill Race Nursery, Fordstreet	****
10986	TL 9147 2699	Pillbox, South Bank of the River Colne, Fordstreet	***
10987	TL 9139 2686	Pillbox, track, west of Fordstreet	***
10988	TL 9119 2725	Pillbox (destroyed) , river bank W of Fordstreet	0
10989	TL 9102 2746	Pillbox, River bank west of Fordstreet	***
10990	TL 9097 2699	Pillbox (destroyed), NE of Wick Farm	0
10991	TL 9046 2713	Pillbox (destroyed), NW of Wick Farm	0
10992	TL 9012 2737	Pillbox, North-east of Bacon's Farm, Chappel	***
10993	TL 8971 2745	Pillbox, Bacon's Farm, Chappel	***
10994	TL 8998 2781	Pillbox, Bacon's Farm, Chappel	***
10995	TL 8976 2810	Pillbox, Bacon's Farm, Chappel	***
10996	TL 8977 2832	Pillbox, South of the River Colne, Chappel	****
10997	TL 8965 2838	Spigot Mortar Emplacement, Chappel Viaduct	****
10998	TL 8964 2839	Spigot Mortar Emplacement, Chappel Viaduct	****
10999	TL 8951 2855	Spigot Mortar Emplacement (destroyed), Watch House Farm, Wakes Colne	0
14284	TL 9175 1975	Birch WWII Airfield.	***
14383	TL 9205 3055	Wormingford WWII Airfield	***
16477	TL 9825 2115	WWII HAA Gun Site "C6 Colchester: Fridaywood Farm", S of Colchester	**
16485	TL 9805 2295	Anti-Tank Ditch and Defence Line, Lexden to Hythe	0
16489	TL 9065 1865	Birch WWII Airfield - No. 3 Dispersed Site	**
16490	TL 9017 1897	Birch WWII Airfield - Dispersed Site No. 5	0

16491	TL 9017 1877	Birch WWII Airfield - No. 6 Dispersed Site	**
16492	TL 9038 1871	Birch WWII Airfield - Dispersed Site No. 7	0
16493	TL 9100 1879	Birch WWII Airfield - No. 2 Dispersed Site	*
16494	TL 9142 1852	Birch WWII Airfield - Dispersed Site No. 12	0
16495	TL 9047 1815	Birch WWII Airfield — Dispersed Site No. 8	**
16496	TL 9102 1830	Birch WWII Airfield — Dispersed Site No 11	**
16497	TL 9043 1931	Birch VVWII Airfield — Dispersed Site No 14 (Sewage Works)	0
16508	TM 0200 2945	Boxted WWII Airfield — Dispersed Site No. 4 (Sick Quarters)	0
16509	TM 0130 2925	Boxted WWII Airfield — Dispersed Site No. 5	0
16510	TM 0210 2910	Boxted WWII Airfield - Dispersed Site No. 6	0
16511	TM 0165 2880	Boxted WWII Airfield - Dispersed Site No. 7	0
16512	TM 0122 2910	Boxted WWII Airfield — Dispersed Site No. 8	0
16513	TM 0186 2920	Boxted WWII Airfield — Dispersed Site No.3 (Mess Site)	0
16514	TM 0175 2952	Boxted WWII Airfield — Dispersed Site No.2 (Communal Site)	
16515	TM 0115 2889	Boxted WWII Airfield - Dispersed Site No. 9	0
16517	TM 0157 2910	Boxted WWII Airfield — Dispersed Site No. 11 (W.A.A.F. No. 1)	0
16518	TM 0150 2896	Boxted WWII Airfield — Dispersed Site No. 12 (W.A.A.F. Site No. 2)	0
16669	TL 9317 3000	Wormingford VVWII Airfield - Mess Site	***
16670	TL 9335 3026	Wormingford WWII Airfield - Communal Site	***
16671	TL 9296 2977	Wormingford WWII Airfield - Sick Quarters	***
16672	TL 9322 2969	Wormingford WWII Airfield - No.2 Dispersed Site	***
16673	TL 9346 3057	Wormingford WWII Airfield - No. 8 Dispersed Site	*
16674	TL 9370 3012	Wormingford WWII Airfield - Unused Dispersed Site	0
16675	TL 9380 3038	Wormingford WWII Airfield - No.1 Dispersed Site	0
16676	TL 9405 3028	Wormingford WWII Airfield - No.4 Dispersed Site	0
16677	TL 9410 3000	Wormingford WWII Airfield - No.5 Dispersed Site	0
16678	TL 9425 2974	Wormingford WWII Airfield - Sewage Works	0
16679	TL 9350 2970	Wormingford WWII Airfield - No.3 Dispersed Site	***
16680	TL 9346 3000	Wormingford WWII Airfield - No.6 Dispersed Site	***
16681	TL 9374 2985	Wormingford WWII Airfield - No.7 Dispersed Site	***

20000	TL 8952 2847	Pillbox, Chappel Bridge	****
20001	TL 8966 2841	Pillbox, South of Colchester Road, Chappel Viaduct	****
20002	TL 8967 2842	Anti-Tank Blocks, S of Colchester Road, Chappel Viaduct	****
20003	TL 8968 2845	Road Barrier (destroyed), Colchester Rd, by Chappel Viaduct	0
20004	TL 8967 2846	Pillbox, north of Colchester Road, Chappel Viaduct	****
20005	TL 8968 2849	Anti-Tank Blocks, N of Colchester Road, Chappel Viaduct	****
20006	TL 8971 2846	Anti-Tank Block (destroyed), Viaduct Cottages, Wakes Colne	0
20007	TL 9014 3112	Anti-Tank Ditch, Eastern Command Line, Chappel Viaduct to Bures	0
20008	TL 8971 2851	Pillbox, E side of Railway Embankment, north of Chappel Viaduct	****
20009	TL 8980 2880	Pillbox, E side of Embankment, Chappel and Wakes Colne Station	***
20010	TL 8967 2881	Pillbox (destroyed), Meadow W of Chappel and Wakes Colne	0
20011	TL 8967 2889	Road Barrier (destroyed), opposite Chappel and Wakes Colne Station	0
20012	TL 8987 2901	Pillbox (destroyed), S of Spring Gardens Road, Wakes Colne	0
20013	TL 8988 2905	Anti-Tank Block (destroyed), Spring Gardens Road, Wakes Colne	0
20014	TL 8981 2915	Pillbox (destroyed), Oldhouse Farm, Wakes Colne	0
20015	TL 8990 2920	Pillbox (destroyed), E of Railway Embankment, N of Spring Gardens Road	0
20016	TL 8993 2941	Pillbox (destroyed), E of Railway Embankment, SW of Thornfield Wood	0
20017	TL 8993 2946	Railway Barrier, SW of Thornfield Wood, Wakes Colne	***
20018	TL 8991 2959	Pillbox (destroyed), W of Railway Embankment, Wakes Colne	0
20019	TL 8995 2976	Pillbox (destroyed), W of Railway Embankment, Wakes Colne	0
20020	TL 9004 2996	Road Barrier (destroyed), Janke's Green Railway Bridge, Wakes Colne	0
20021	TL 9003 2998	Pillbox (destroyed), Janke's Green Railway Bridge, Wakes Colne	0
20022	TL 9025 3040	Pillbox (destroyed), W side of Railway Embankment, N of Janke's Green Railway Bridge	0

20023	TL 9042 3066	Pillbox, W side of Railway, N of Janke's Green Railway Bridge	***
20024	TL 9056 3098	Pillbox, W side of Railway, N of Janke's Green Railway Bridge	***
20025	TL 9063 3120	Pillbox, south of Nortons Railway Bridge, Mount Bures	***
20026	TL 9067 3134	Road Barrier (destroyed), Nortons Railway Bridge, Mount Bures	0
20027	TL 9070 3151	Pillbox, W Side of Railway, N of Nortons Railway Bridge	***
20028	TL 9077 3178	Anti-Tank Blocks, E of Thatcher's Arms, Mount Bures	****
20029	TL 9078 3178	Railway Barrier (destroyed), E of Thatcher's Arms, Mount Bures	0
20030	TL 9079 3178	Anti-Tank Hairpins, E of Thatcher's Arms, Mount Bures	****
20031	TL 9078 3179	Pillbox, east of Thatchers' Arms, Mount Bures	****
20032	TL 9081 3224	Pillbox, east of Mount Bures Hall	***
20033	TL 9065 3268	Spigot Mortar Emplacement (destroyed), field SW of Mount Bures level crossing	0
20034	TL 9066 3270	Pillbox (destroyed), field SW of Mount Bures level crossing	0
20035	TL 9064 3272	Spigot Mortar Emplacement (destroyed), Broomfield Cottage, Mount Bures	0
20036	TL 9064 3272	Anti-Tank Blocks (destroyed), Broomfield Cottage, Mount Bures	0
20037	TL 9072 3272	Road Barrier (destroyed), Near level crossing, Mount Bures	0
20117	TM 0525 1365	WWII HAA Gun Site "Cl Clacton: East Mersea," East Mersea	0
20135	TL 9770 2625	WWII Anti-Aircraft Rocket Site, "C10 Colchester", Lexden, Colchester	0
20136	TL 9920 2414	WWII Anti-Aircraft Rocket Site at Abbey Field, Colchester	0
20494	TL 9873 2574	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20495	TL 9867 2574	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20496	TL 9863 2574	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20497	TL 9862 2582	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20498	TL 9859 2566	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0

20499	TL 9858 2577	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20500	TL 9855 2568	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20501	TL 9854 2573	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20502	TL 9852 2572	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20503	TL 9843 2564	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20504	TL 9818 2549	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20505	TL 9814 2547	Ammunition Shelter (destroyed), "Sheepen Hill Estate", Lexden, Colchester	0
20506	TL 9806 2540	Ammunition Shelter (destroyed), 'Seed & Trial Grounds', Lexden, Colchester	0
20507	TL 9819 2530	Ammunition Shelter (destroyed), 'Sheepen Hill Estate', Lexden, Colchester	0
20508	TL 9763 2519	Ammunition Shelter (destroyed), Westacre', Lexden Road, Lexden, Colchester	0
20509	TL 9830 2520	Kingswode Hoe defended area, Sussex Road, Lexden, Colchester	0
20510	TL 9809 2527	Ammunition Shelter (destroyed), 'Rutland House', Lexden, Colchester	0
20511	TL 9811 2517	Ammunition Shelter (destroyed), 'Rutland House', Lexden, Colchester	0
20512	TL 9814 2517	Pillbox (destroyed), Rutland House, No. 121 Lexden Road, Lexden, Colchester	0
20513	TL 9802 2500	Road Barrier (destroyed), Lexden Road, Lexden, Colchester	0
20514	TL 9808 2499	Pillbox (destroyed), Rutland House, No. 121 Lexden Road, Lexden, Colchester	0
20515	TL 9808 2497	Spigot Mortar Emplacement, 38 Lexden Road, Lexden, Colchester	***
20516	TL 9797 2483	Road Barrier (destroyed), Park Road, Lexden, Colchester	0
20517	TL 9804 2482	Pillbox (destroyed), Park Road, Lexden, Colchester	0
20518	TL 9819 2480	Spigot Mortar Emplacement (destroyed), Park Road, Lexden, Colchester	0
20519	TL 9820 2478	Spigot Mortar Emplacement, sports ground, Park Road, Lexden, Colchester	***

20520	TL 9805 2455	Pillbox, S of Colchester County High School for Girls	***
20521	TL 9788 2423	Pillbox (destroyed), E of The Philip Morant School, Colchester	0
20522	TL 9712 2541	Pillbox (destroyed), Spring Lane, Lexden, Colchester	0
20523	TL 9730 2472	Anti-Tank Cubes, Lexden Park, Colchester	**
20524	TL 9692 2443	Pillbox (destroyed), junc. Heath Road/Church Lane, Lexden, Colchester	0
20525	TL 9740 2461	Pillbox (destroyed) N end of Bluebottle Grove, Lexden, Colchester	0
20526	TL 9763 2428	Pillbox (destroyed) S end of Bluebottle Grove, Lexden, Colchester	0
20527	TL 9776 2403	Pillbox (destroyed), field OS No. 1312, N of Shrub End Road, Colchester	0
20528	TL 9791 2395	Pillbox (destroyed), Allotments, Shrub End Road, Colchester	0
20529	TL 9794 2394	Spigot Mortar Emplacement (destroyed), Shrub End Road, Colchester	0
20530	TL 9793 2391	Road Barrier (destroyed), Shrub End Road, Colchester	0
20531	TL 9798 2392	Pillbox (destroyed), Shrub End Road,	0
20532	TL 9704 2323	Pillbox (destroyed), "The Leather Bottle", Shrub End Road, Colchester	0
20533	TL 9711 2324	Pillbox (destroyed) Allotments opposite "The Leather Bottle", Shrub End Road, Colchester	0
20534	TL 9802 2325	Pillbox (destroyed), fields between Shrub End Road and Layer Road, Colchester	0
20535	TL 9832 2323	Pillbox (destroyed) W side of Layer Road, opposite Reed Hall Avenue South, Colchester	0
20536	TL 9823 2314	Pillbox (destroyed), E side of Layer Road, Colchester	0
20537	TL 9809 2289	Pillbox (destroyed), overlooking anti-tank ditch, Layer Road, Colchester	0
20538	TL 9805 2289	Anti-Tank Barrier (destroyed), W of Layer Road, Colchester	0
20539	TL 9790 2254	Pillbox (destroyed), W side of Layer Rd, N of Berechurch Hall Road jcn	0
20540	TL 9796 2258	Pillbox (destroyed), Layer Road, N of Berechurch Hall Road junction, Colchester	0
20541	TL 9849 2290	Pillbox (destroyed), overlooking anti-tank ditch between Layer Road and Berechurch Road, Colchester	0
20542	TL 9860 2306	Pillbox (destroyed), between Layer Road and Berechurch Road, Colchester	0

20543	TL 9901 2301	Pillbox (destroyed), between Layer Road and Berechurch Road, Colchester	0
20544	TL 9868 2224	Pillbox (destroyed) nr 'Rosary', west side of Berechurch Road, Colchester	0
20545	TL 9870 2223	Pillbox (destroyed) nr 'Rosary', east side of Berechurch Road, Colchester	0
20546	TL 9920 2283	Pillbox, overlooking anti-tank ditch, W of Berechurch Road, Colchester	***
20547	TL 9923 2225	Pillbox, S of Roman Way Camp, Berechurch, Colchester	***
20548	TL 9945 2286	Pillbox, N of Roman Way Camp, Berechurch, Colchester	***
20549	TL 9997 2298	Pillbox (destroyed), between Berechurch Road and Mersea Road, Colchester	0
20550	TL 9982 2097	WWII Anti-Tank Ditch, Berechurch Ramparts, Colchester	0
20551	TL 9969 2190	Road Barrier (destroyed), Berechurch Hall Road, Berechurch, Colchester	0
20552	TM 0030 2239	Pillbox, Stansted Road, Berechurch,	***
20553	TM 0034 2237	Pillbox (destroyed), Stansted Road, Berechurch, Colchester	0
20608	TL 9958 2325	Pillbox (destroyed), E of Berechurch Road, Colchester	0
20609	TM 0042 2298	Pillbox (destroyed), W of Mersea Road, Colchester	0
20610	TM 0051 2298	Pillbox, Middlewick Ranges, E of Mersea Road, Colchester	***
20611	TM 0051 2301	Spigot Mortar Emplacement, Middlewick Ranges, Colchester	***

20612	TM 0055 2298	Spigot Mortar Emplacement, Middlewick Ranges, Colchester	***
20613	TM 0025 2387	Spigot Mortar Emplacement (destroyed), N of Cemetery, Mersea Rd, Colchester	0
20614	TM 0136 2293	Pillbox, Middlewick Ranges, W of Old Heath Road, Colchester	***
20615	TM 0152 2307	Concrete Firing Post (destroyed), Old Heath Rd, Colchester	0
20616	TM 0162 2297	Anti-Tank Obstacles (destroyed), 287 Old Heath Road, Colchester	0
20617	TM 0163 2301	Anti-Tank Cubes, 370 Old Heath Road, Colchester	***
20618	TM 0161 2303	Pillbox (destroyed), W side of Old Heath Road, Colchester	0
20619	TM 0164 2307	Spigot Mortar Emplacement (destroyed), Old Heath Road, Colchester	0
20620	TM 0162 2308	Pillbox (destroyed), E side of Old Heath Road, Colchester	0

20621	TM 0180 2321	Two Anti-Tank Cubes (destroyed), Sewage Works, Old Heath, Colchester	0
20622	TM 0182 2319	Ammunition Shelter (destroyed), Place Farm, Old Heath, Colchester	0
20623	TM 0206 2324	Anti-Tank Cubes (destroyed), Sewage Works, Old Heath, Colchester	0
20625	TL 9993 2429	Six Military Air Raid Shelters, Colchester Garrison, Colchester	****
20626	TL 9973 2451	Two Military Air Raid Shelters, Napier Road, Colchester Garrison	***
20627	TL 9978 2449	One Military Air Raid Shelter, Napier Road, Colchester Garrison	***
20628	TL 9933 2549	Underground "Bunker", Cistern Yard,	
20629	TL 9998 2556	Ammunition Dump (destroyed), Roman Wall, Holly Trees Meadow, Colchester	0
20630	TM 0016 2543	World War Two Air Raid Shelter, 27 Roman Road, Colchester	***
20824	TL 9950 2298	Spigot Mortar Emplacement, N of Roman Way Camp, Berechurch, Colchester	***
21087	TL 9600 3197	Ammunition Shelter (destroyed), Hall grounds, Little Horkesley	0
21088	TL 9780 3073	Spigot Mortar Emplacement (destroyed), Police Station, Great Horkesley	0

21089	TL 9788 3051	Ammunition Shelter (destroyed), Woodlands Farm, Great Horkesley	0
21090	TL 9868 3258	Royal Observer Corps Post, Boxted Church Road, Great Horkesley	****
21091	TL 9897 3338	Spigot Mortar Emplacement (destroyed), Burnt Dick Hill, Boxted	0
21092	TM 0015 3184	Spigot Mortar Emplacement (destroyed), Straight Road, Boxted	0
21093	TM 0016 3192	Ammunition Shelter (destroyed), Boxted Lodge, Boxted	0
21094	TL 9460 2186	Spigot Mortar Emplacement (destroyed), S of Gol Grove, Heckfordbridge	0
21095	TL 9465 2172	Spigot Mortar Emplacement (destroyed), Birch Road, Heckfordbridge	0
21096	TL 9465 2197	Ammunition Shelter, The Bungalow, Heckfordbridge, Colchester	***

21097	TL 9634 1894	Spigot Mortar Emplacement (destroyed), Wigborough Road, Layer-de-la-Haye	0
21098	TL 9667 2004	Spigot Mortar Emplacement (destroyed), Brickwall House, Layer-de-la-Haye	0
21099	TL 9672 2018	Ammunition Shelter (destroyed), school grounds, Layer-de-la-Haye	0
21100	TL 9678 2004	WWI/WWII Pillbox (destroyed), Forge Garage, Layer-de-la-Haye	0
21101	TL 9684 2015	Spigot Mortar Emplacement (destroyed), N of "Mustows", Layer-de-la-Haye	0
21102	TL 9965 1895	Anti-Tank Pimples, NE side of Abberton Reservoir, Colchester	**
21103	TL 9992 1932	Road Barrier (destroyed), Rectory Lane, Abberton	0
21104	TL 9996 1954	Road Barrier, Oxley Hill, Abberton	***
21105	TM 0043 1910	Spigot Mortar Emplacement (destroyed), The Gate Poultry Farm, Abberton	0
21106	TM 0043 1913	Ammunition Shelter (destroyed), The Gate Poultry Farm, Abberton	0
21107	TM 0065 1918	Spigot Mortar Emplacement (destroyed), Front garden, 3 Hillcrest Cottages, Abberton	0
21108	TM 0071 1917	Spigot Mortar Emplacement (destroyed), Rear Garden, 4 Hillcrest Cottages, Abberton	0
21109	TL 9894 1678	Observation Post, Peldon Church Tower	

21110	TM 0064 1593	Ammunition Shelter (destroyed), behind Rose Inn, Peldon	0
21111	TM 0051 1232	Anti-Invasion Obstacles, West Mersea	***
21112	TM 0052 1238	Pillbox base, St Peter's Well Beach, West Mersea	*
21113	TL 9112 1900	Birch WWII Airfield – Administrative Site	0
21114	TL 9056 1897	Birch WWII Airfield – No 4 Dispersed Site	0
21115	TL 9073 1836	Birch WWII Airfield – Dispersed Site No.9	0
21116	TL 9086 1810	Birch WWII Airfield – Dispersed Site No.10	0
21117	TL 9072 1897	Birch WWII Airfield – Dispersed Site No.13	0
21118	TL 8903 1560	Road Barrier (destroyed), Maldon Road/Station Road, Tiptree	0
21119	TL 8928 1673	Road Barrier (destroyed), Maypole Road/Kelvedon Road, Tiptree	0
21120	TL 8902 1672	Spigot Mortar Emplacement (destroyed), Vine Road, Tiptree	0

21121	TL 8934 1651	Spigot Mortar Emplacement (destroyed), "Milldene", Tiptree	0
21122	TL 8941 1662	Spigot Mortar Emplacement (destroyed) at rear of the windmill, Tiptree	0
21123	TL 9026 1605	Road Barrier, Chapel Road/New Road, Tiptree	*
21124	TL 8994 1570	Road Barrier (destroyed), Factory Hill, Tiptree	0
21125	TL 9341 3287	Spigot Mortar Emplacement, Bowdens Cottage, Wormingford Bridge	***
21126	TL 9341 3293	Spigot Mortar Emplacement, Bowdens Cottage, Wormingford Bridge	***
21127	TL 9328 3232	Ammunition Shelter (destroyed), Church Hall, Wormingford	0
21128	TL 9321 3037	Road Barrier (destroyed), Fordham Road, Wormingford	0
21129	TL 9286 2870	Ammunition Shelter (destroyed), near Post Office, Fordham	0
21130	TL 9300 2696	Ammunition Shelter, Fiddlers Wood, Fordham Bridge	**
21131	TM 0569 3343	Spigot Mortar Emplacement (destroyed), Dedham Mill, Dedham	0
21132	TM 0570 3343	Ammunition Shelter (destroyed), Dedham Mill, Dedham	0
21133	TM 0578 3344	Spigot Mortar Emplacement (destroyed), track E of Mill Lane, Dedham	0
21134	TM 0576 3344	Ammunition Shelter (destroyed), Dedham Mill, Dedham	0
21135	TM 0572 3348	Spigot Mortar Emplacement (destroyed), island, Dedham Mill, Dedham	0

21136	TM 0425 3348	Road Barrier (destroyed), Stratford St. Mary bridge, Dedham	0
21137	TM 0365 3240	Spigot Mortar Emplacement (destroyed), E of Ipswich Road, Dedham	0
21138	TM 0333 3130	Ammunition Shelter (destroyed), Birchwood House, Ipswich Road, Dedham	0
21139	TL 8951 2862	Ammunition Shelter (destroyed), W of Watch House Farm, Chappel	0
21140	TL 8942 2841	Ammunition Shelter (destroyed), Bridgewick Hall, Chappel	0
21141	TL 9207 2704	Ammunition Shelter (destroyed), Smithy, Fordstreet	0
21142	TL 9596 2835	Ammunition Shelter (destroyed), The Bakery, West Bergholt	0
21143	TL 9311 2339	British Resistance Hideout, Gravelpit Wood, Copford	***
21144	TM 0393 2142	Anti-Tank Cubes (destroyed), The Quay, Wivenhoe	0
21145	TM 0396 2142	Anti-Tank Cubes (destroyed), The Quay, Wivenhoe	0

21146	TM 0412 2287	Spigot Mortar Emplacement (destroyed), Colchester Road, Wivenhoe	0
21147	TM 0392 2281	Ammunition Shelter (destroyed), Tower Road, Wivenhoe	0
21148	TM 0350 2195	British Resistance Hideout, Wivenhoe Wood, Wivenhoe	
21149	TL 9441 1881	Loopholes, "Hare and Hounds", Birch Green	
21150	TL 9635 2096	British Resistance Hideout, Chest Wood, Layer-de-la-Haye	***
21151	TL 9790 2715	Prisoner-of-War Cage (destroyed), Achnacone Grounds, Braiswick	0
21152	TL 9937 2560	Road Barrier (destroyed),...North Bridge, Colchester	0
21153	TM 0075 2531	Road Barrier (destroyed) outside Siege House, Colchester	0
21154	TM 0002 2626	Ammunition Shelter (destroyed), Arclight Works, Colchester	0
21155	TM 0114 2476	Ammunition Shelter (destroyed), The Old Rectory, Colchester	0
21156	TM 0172 2484	Ammunition Shelter (destroyed), Hythe Station Road, Colchester	0
21157	TM 0163 2970	Boxted WWII Airfield – Administrative Site	
21159	TL 9742 2081	Spigot Mortar Emplacement, Nightingale Corner, Layer-de-la-Haye	***

MAP OF DISTRIBUTION OF WWII DEFENCE SITES

