

‘Land for military purposes’

The development of the military estate in Britain 1790-1914.

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School of History

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Part One - Thesis

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Declaration

I hereby declare that this thesis has not been and will not be submitted in whole or in part to any other University for the award of any other degree.

A handwritten signature in black ink that reads "Fred Corbett". The signature is fluid and cursive, with a long horizontal line extending from the end of the "t" in "Fred" to the end of the "t" in "Corbett".

Frederick Corbett

Abstract

The literature on British military landscapes is dominated by geographers whose interest emanates from the massive acquisition of land resulting from the two World Wars. That literature focuses on land management, environmental impact and redesignation. This thesis focuses on land acquired for military purposes in the century and a quarter before the First World War. This gradually became what is known as the military estate or the Defence Estate, one of the largest landowners in Britain.

The most visible monuments to that estate are the numerous barracks that remain extant across Britain and Ireland. The thesis acknowledges the influence of the earlier development and accommodation of a standing army in Ireland. It explains how the distribution and functions of barracks shaped the early military estate. It also shows how some of the largest military sites were developed for training soldiers. The thesis examines how the political, economic environment and technology changed the demand for military land at home from 1790 to 1914. These factors, along with an almost constant fear of invasion helped identify the priorities to be set for the military. The demand for land also responded to concerns about the performance of the army in major conflicts in the nineteenth century and in preparedness for European war. The thesis shows how responses to these concerns meant that eventually the British military required more land to meet new demands to recruit an army of sufficient size, to train it and ensure that it was better prepared for European war and not just colonial expansion and home defence.

Over the course of the nineteenth century, the amount of land controlled by the military at home increased substantially and the infrastructure of the estate itself became more diverse and permanent. This development is mapped and the chronology of legal, military and political actions that led to this position is examined. How this became a managed military estate is explained. The thesis examines this through detailed case studies of northern and eastern England. These were used to map and set out a comprehensive explanation of the origins of the demand for land for military purposes and how these played out in the regions and countries of Britain in different ways.

Dedication

My father, Edmund Corbett was a reserve officer in the Irish Defence Forces for the first ten years of my life and created, for me, a strong interest in all things military. My paternal grandfather Edmund Corbett D.C.M., signed his Attestation Papers on 20th September 1914, in Dublin, at the age of seventeen. Two days later he travelled, via Newry Barracks (Armagh) to Caterham Barracks (Surrey), where he joined the Irish Guards. Within days he was at Warley Barracks (Essex) for training. Seven months later he joined the British Expeditionary Force (BEF) in France to fight to defend his homeland. Having been wounded three times he eventually transferred to the Guards Machine Gun Regiment and on 12th October 1917, for his bravery in action at Ypres, he was awarded the Distinguished Conduct Medal.

Discovering his story many years later inspired me to research interests in the military. I dedicate this work to their memory.

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Conventions and List of Common Abbreviations used

Capitalisation – The thesis uses the following standard approach

military – lower case

army – lower case except where The British Army or the Regular Army

volunteer(s) – lower case unless Volunteer Corps or a named Corps

militia – lower case unless referring to a particular unit

Numbers - integers or words – while there is often a convention that numbers below 30 are written as words. Where numbers refer to a measure, area, distance, monetary value then integers are used. Percentages are treated as a measure and therefore the integer and symbol are used.

Measures – area, distance and monetary value are expressed in imperial units.

For ease of conversion an acre is 4,046.86 square metres or 0.047 hectares

1 mile is 1.61 kilometres

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ADS.	Archaeology Data Service	JBS	Journal of British Studies
BHO	British History Online	JEH	The Journal of Economic History
C-in-C	Commander-in-Chief	JHA	Journal of the Historical Association
CC	County Council	JSTOR	Journal Storage – digital library online
CBA	Council for British Archaeology	Lt.	Lieutenant
Col.	Colonel	MOD	Ministry of Defence
CUP	Cambridge University Press	NAM	National Army Museum
EHR	Economic History Review	NCO	Non-Commissioned Officer
EH	English Heritage	ONS	Office of National Statistics
GB	Great Britain	OS	Ordnance Survey
Gen.	General	PP	Parliamentary Papers
HA	Historical Association	RA	Royal Artillery
HCdeb	House of Commons debate	RAMC	Royal Army Medical Corps
HLdeb	House of Lords debate	RE	Royal Engineers
HO	Home Office	RHS	Royal Historical Society
HOC	House of Commons	RIA	Royal Irish Academy
HMSO	Her Majesty's Stationery Office	RIBA	Royal Institute of British Architects
IBG	Institute of British Geographers	SAHR	Society of Army Historical Research
IHR	Institute for Historical research	SLS	Society for Landscape Studies
JAABE	Journal of Asian Architecture and Building Engineering	TNA	The National Archives
		WD / WO	War Department / War Office

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The years of research and construction of a thesis do not just happen as a result of personal dedication and a reclusive lifestyle. I really could not have done this without superb support and guidance, not least during the period of Covid lockdowns, which affected my research through the closure of archives and museums and additional difficulties in carrying out fieldwork, especially in Ireland. I want to identify a few of the army of supporters and challengers I am indebted to. My early geography teachers and lecturers imprinted the notion that you learn about places through your feet and that desire to explore the environment has remained with me. Fieldwork in so many corners of the British Isles has been one of the many benefits of the methods I have used in this research. The team who ran the MA in Landscape History at UEA stimulated my desire to better understand the landscape of Britain and the human interactions that have shaped it. Professor Robert Liddiard, an expert interpreter of Second World War home landscapes, shared his enthusiasm for the military and for the landscape that was hugely supportive throughout. His challenge as a supervisor has been an invaluable aid to me completing this work. His ability to make you feel good even about your mistakes and imprecise writing has changed my work to something I am proud of. Of course, any remaining errors are my responsibility. My family, as always, has been a great support and helped me maintain a clear sense of perspective. “Tell them the short version,” has been a frequently heard cry from my grown-up children when someone has asked me to explain what my research is about, but I also know they are quite proud of their old dad really. However, Carolyn, my wife has been a godsend, not only in keeping refreshments flowing at critical times but also as a ‘research assistant’ on several archive visits and allowing most of our holidays in recent years to have a significant field work component. Carolyn and my friend Diana Conney have been invaluable in pushing me to be clearer in my writing, consistent and correct. To all who have kept me grounded and supported, my sincere thanks.

Chapter 1: - The Need for Land for Military Purposes

To understand how the Ministry of Defence (MOD) became such a huge landowner, we need to rewind to the trenches and battlefields of the First World War. In wartime, the state has often resorted to seizing land for military use.¹

1.1 Introduction; a military estate in Britain

By the second decade of the twenty-first century the MOD had become one of Britain's major landowners. In 2021 the Defence Estate contained 575,495 acres with accommodation, stores and services on 900 sites across 186,313 acres and a mainly rural training estate of 389,182 acres.² That land was located in 13 national parks, 33 areas of Outstanding Natural Beauty and 11 National Scenic Areas. The Defence Estate also had access rights to a further 274,775 acres giving it direct access to, and impact on, 1.5% of the UK landmass.³ This is a slight reduction from the position at the end of the twentieth century when it covered 599,200 acres of land and more extensive access rights.⁴ The current estate is 68% rural and includes ranges and training facilities. Six percent is used for barracks and camps, 7% airfields, 3% storage and supply and 12% is used for research and development.⁵ In recent years this estate has become of research interest to human and cultural geographers and to the heritage and environment sectors.⁶ Surprisingly, it has seen little focus from historians.

¹ Guy Shrubsole, *Who Owns England?* (London, 2019).

² HOC Committee of Public Accounts, *Optimising the defence estate*, 20th September 2021.

³ National Audit Office, *Optimising the defence estate*, 11th June 2021:
<https://whoownsengland.org/2016/08/14/mod-land/> includes maps of current land holdings.

⁴ Rachel Woodward, *Military Geographies*, (Newcastle, 2004) p.56.

⁵ 17% of the Defence Estate is in Eastern England and 24% in the North of England.

⁶ Rachel Woodward, Military landscapes, (Vol. 38, *Progress in Human Geography*, 2014), pp.40-61; Chris Pearson (edited volume), *Militarized Landscapes – From Gettysburg to Salisbury Plain*, (London, 2010); John R. Gold & George Revill, Landscapes of Defence, (Vol. 24, No. 3, *Landscape Research*, 1999), pp. 229-239.

There is a common misunderstanding that it was the First World War that set the emergence of a military estate in train. This is understandable as that was the first period of mass recruitment to the Regular Army in Britain and it created the need to accommodate and train millions of men. But as this thesis sets out, the roots of the military estate lie in an earlier period. It shows how the changing priorities and the needs of the British Army shaped the nature of the land acquired. There had obviously been military sites across parts of Britain for centuries, mainly in the form of forts, coastal defences and accommodation for those guarding the monarch. However, the first planned accommodation for a standing army was in Ireland in the early eighteenth century⁷ and in mainland Britain from the 1790s.⁸ It was the following century and a quarter that saw the large-scale acquisition of land for military purposes. This thesis is concerned with that process from the 1790s through to the First World War when the acquisition of land accelerated to meet the needs of the Defence of the Realm Act and the new demands of airfields for the Royal Flying Corps.⁹

The thesis examines how the changing priorities expected of the military influenced where it should be located and trained. It traces the factors which influenced the location and organization of the army at home through the growing acquisition of land for military purposes. It sets out how the military estate, at the beginning of the twentieth century, became significantly different to that of a century before.¹⁰ Throughout the period studied here, this thesis uses the term military estate to refer to land used for military purposes under the ownership or leased by, and managed through, the War Office.¹¹

⁷ <https://www5.open.ac.uk/ireland/news/ou-research-looks-uncover-story-army-barracks-across-ireland>.

⁸ PP, Fourth Report of the Commissioners of Military Enquiry, C.99. (1807).

⁹ Gregory Hynes, *Defence of the Realm (DORA) 1914*, https://encyclopedia.1914-1918-online.net/article/defence_of_the_realm_act_dora.

¹⁰ No direct references have been found, during the course of this research, to a 'Military Estate' as an entity. Childs uses the term 'military estate' interchangeably with 'defence estate' but refers to the land prior to 1911 as 'the estate': John Childs, *The Military Use of Land*, (Berne, 1998), pp. 192-193, 211-212. The current nomenclature of a Defence Training Estate is a mid-twentieth-century construct when the separate offices in The Army, The Royal Navy and The Royal Airforce were combined in the MOD.

¹¹ In the original sources this is referred to as 'land for military purposes', WD land, army land, Ordnance Department or War Office land.

Central to the thesis is an analysis and mapping of the land acquired. It examines ways in which geography and topography determined aspects of the distribution of military land but it also examines how technology and military strategies led to the need for extensive areas for training. This research provides a comprehensive mapping of the national distribution of the land that was acquired for the army. The factors determining this distribution are examined in greater detail through two case studies which exemplify how regions varied in the way influences combined to produce regional differences in the military estate's development. The research explores two central questions:

- How did the military estate develop in the 125 years leading up to the First World War, and what land was acquired for what military purposes?
- How did changing views and policy on military priorities affect the location of military sites across Great Britain and Ireland and why did significant regional variations emerge?

This chapter identifies the main factors that influenced the acquisition of land for military purposes and sets out the approach used in the thesis to research the way those factors played out in the landscape of Britain. This provides an overview of the developments in the British military at home that led to the growing need for land for military purposes. Many military historians examine the development of the army around its major overseas conflicts, both European and colonial.¹² While these provide a useful structure for analysis much of the literature on the military relating to the early decades of the study period focuses on campaigns and military leaders, with the exception of a few that focus on society and recruitment.¹³ At the end of the study period is an extensive literature on the First World War including accounts of battles

¹² J.W.F. Fortescue, *Military History*, (Cambridge, 1914); Correlli Barnett, *Britain and Her Army 1509-1970*, (London, 1970); David Chandler and Ian Beckett, *The Oxford History of the British Army* (Oxford, 1994).

¹³ Kevin Linch, *Britain and Wellington's Army: Recruitment, Society and Tradition, 1807-'15*, (Hampshire, 2011); Evan Wilson, *The Horrible Peace: British Veterans and the end of the Napoleonic Wars*, (Massachusetts, 2023).

and guides to the landscape of war.¹⁴ However, there is also a small, but significant literature on the army at home.¹⁵ This tends to focus on organizational matters, recruitment, reforms and the relationship with society. As an adjunct to the campaign literature there are excellent studies of the home defences.¹⁶

By 1914 there was already an established estate owned, used for military purposes and managed through the War Office Lands Branch. Other than the expansion of air defences, the origins of a planned military estate can be traced to the acquisition of land for military purposes at the end of the eighteenth century. Between 1790 and 1914 the military use of land changed significantly from temporary use on commons, coastal dunes and beaches as well as the use of land on some large aristocratic estates. Through the purchase or leasing of land it became an estate within the War Office, it transformed from a network of fortifications and camps, frequently temporary and mainly concentrated in Southern England and Ireland, to a complex managed estate, that this thesis shows, had reached almost 200,000 acres by 1914.

These developments have been underplayed in the literature on the British Military. The work of a small number of other scholars, examined below, has focused on the important influence of training and manoeuvres.¹⁷ However, even for these scholars it is interesting that questions about how, where and when this land was acquired, has largely escaped attention. Central to understanding the acquisition of land for military

¹⁴ Martin Evans, *Passchendaele: The Hollow Victory*, (Barnsley, 2005); David Stevenson, *1914-1918 The History of the First World War*, (London, 2004); Peter Barton, *The Battlefields of the First World War*, (Imperial War Museum, 2008).

¹⁵ Edward Spiers, *The Late Victorian Army 1868-1902*, (Manchester, 1992); David French, *Military Identities, The Regimental System, the British Army & the British People 1870 – 2000*, (Oxford, 2005); David Morgan-Owen, *The Fear of Invasion 1880-1914* (Oxford, 2017); Timothy Bowman and Mark Connelly, *The Edwardian Army: Recruiting, Training and Deploying the British Army, 1902-1914* (Oxford, 2012).

¹⁶ Norman Longmate, *Island Fortress, The Defence of Great Britain 1603 – 1945* (London, 2001); Ian Hogg, *Coast Defences of England and Wales 1856-1956*, (Newton Abbot, 1974); Michael Partridge, *Military Planning for the Defense of the United Kingdom, 1814-1870*, (Connecticut, 1989); Lt. Colonel Dirom, *Plans for the Defence of Great Britain and Ireland*, (Edinburgh, 1797).

¹⁷ Edward Spiers, *The Late Victorian Army*, (Manchester, 1992); David French, *Military Identities*, (Oxford, 2005); David Morgan-Owen, (Oxford, 2017); Timothy Bowman and Mark Connelly, *The Edwardian Army*, (Oxford, 2012); Simon Batten, *Futile Exercise? 'The British Army's Preparations for War 1902-1914*, (Warwick, 2018).

purposes is an appreciation of the need for that land, the importance of location, understanding its ownership and the legal mechanisms required for its acquisition. It is also important to understand the nature of the land and the reasons why certain kinds of land tended to be acquired by the military.¹⁸ The studies by Childs¹⁹ and Douet,²⁰ along with those of Spiers²¹ and French²² have been more influential in framing the focus and approach for this thesis. Their wider explorations of the political, social, economic and technological contexts for the development of the British Army provide valuable insights through which the changes in the army and the impact on the landscape can be examined. The study period was also one of overlapping influences on military priorities from changes in technology, political and social reform set within a period of challenging economic fluctuations that affected the willingness to invest in the army and created the priorities for the military.

John Childs' seminal work on international Defence Estates, while only briefly commenting on the position in Britain during the nineteenth century, is the main source acknowledging the emergence of a military estate before the First World War. His work notes the importance of military land in the nineteenth century, but he only references the extent of the estate with data from the first decade of the twentieth.²³ He identifies five main purposes for military land: defence infrastructure including fortifications; training; manoeuvres; education and accommodation. Childs stresses that, prior to the nineteenth century, land for training was always rented, not purchased: in 1778, an acre could be hired for £6, a battalion of foot requiring 10.5 acres, and compensation was paid for damage.²⁴ Despite the land being in temporary control of the military and mainly rented during wartime, Houlding points out that the land became semi-permanent venues, stripped of hedges and buildings, and the land disturbed by

¹⁸ One of the few studies of individual military sites that examines the nature of land ownership and the land itself is Con Costello's history of the Curragh, *A Most Delightful Station*. (Dublin, 1999).

¹⁹ John Childs, *The Military Use of Land*, (Berne, 1998).

²⁰ John Douet, *British Barracks 1600-1914: their architecture and role in society*, (London, 1998).

²¹ Spiers, *The Late Victorian Army*. (Manchester, 1992).

²² French, *Military Identities*, (Oxford, 2005).

²³ Childs, *The Military Use of Land*, pp.192-193.

²⁴ Ibid. p.112.

diggings for trenches, drains and latrines.²⁵ Most training was either on the parade ground and land adjacent to barracks for drill, on deployment in the colonies or on common or moorland. Until training land was purchased in the middle of the nineteenth century nearly all of the military estate was identifiable through the barracks and fortifications owned by the War Department or Ordnance Department.

Defence fortifications also provided locations for drill and gunnery practice. This frequently occurred on the restricted land within fields of fire of fixed fortifications and limited the demand for ranges until the second half of the nineteenth century.²⁶ Child's identified the importance of the mid to late nineteenth-century acquisition of land at Aldershot and on Salisbury Plain providing access to large areas for training.²⁷ It was this acquisition of land on a more permanent basis that he indicates gave rise to the military estate.

Whereas Childs' focus was on the Defence Estate, the other main work on the pre-1914 military infrastructure is Douet's encyclopaedic work on the history of the architecture of British barracks, which focuses almost entirely on the history of accommodation for Britain's army at home.²⁸ Barracks were an important but neglected part of British social, political and military history yet they provide witness to domestic instability and the threat of invasion.²⁹ The study of barracks provides the details of military sites in terms of location and the extent of land required. It is, therefore, an important surrogate for the military estate until censuses of military land were carried out systematically from the middle of the nineteenth century.³⁰ While soldiers needed accommodation near defence fortifications or close to royal palaces many soldiers were billeted on private citizens prior to the nineteenth century. Douet's maps of the distribution of barracks across the British Isles provide a key starting point

²⁵ J. Houlding, *Fit for Service: the training of the British Army, 1715-1795* (Oxford, 1985) pp. 322-46.

²⁶ Ibid., p.111.

²⁷ Childs, *The Military Use of Land*, (Berne, 1998), pp.118-119.

²⁸ Douet, *British Barracks 1600-1914*, (London, 1998).

²⁹ Ibid., p. ix.

³⁰ See the analysis of Lands and Tenements Returns in section 1.4 Sources.

in identifying the pattern of distribution of military sites in different parts of Britain and Ireland. The distribution in the early eighteenth century is stark in its illustration of the difference between Ireland, the first area in the British Isles to accommodate a standing army, and mainland Britain. Douet identified 74 sites in Ireland illustrating the early growth of a military presence in garrisoning the country during a period of actual and potential conflict.³¹ In contrast only 5 sites are in Scotland and 31 in the south of England. The remaining 11 sites are spread across the rest of England.³² By 1792 the equivalent distribution was 33 in Ireland (though many of the other forty-one smaller sites were still available if required), 12 in Scotland and 35 in England.³³ It was Douet's assessment of the influences on barrack developments that identified the early 1790s as the starting point for this thesis. He sets out clearly the importance of both accommodation for the Napoleonic defences but also the transforming impact of a Barracks Department managing the expansion of accommodation across the country.³⁴ Douet's analysis illustrates the way design responded to the challenging problems of inadequate military accommodation, referred to in the Defence Estate as the built estate. However, factors identified below that improved the built estate, accommodation for married couples and created more sanitary living conditions also created demand for training and exercise, referred to as the training estate.³⁵ This thesis combines these two categories, the built estate and the training estate into an integrated study of the whole military estate by examining all acquisitions of land for military purposes.

³¹ However, the project led by Charles Ivar McGrath, *Our Shared Built Military Heritage*: The online mapping inventorying and recording of the Army Barracks of Ireland 1690-1921 shows that the total number was far in excess of Douet's mapping. <https://historyhub.ie/our-shared-built-military-heritage-the-online-mapping-inventorying-and-recording-of-the-army-barracks-of-ireland-1690-1921#:~:text=Army%20Barracks%20of%20Ireland>.

³² Douet, *British Barracks 1600-1914*, (London, 1998) p.15. Distribution as in 1704-1708 of the main barracks Jacinta Prunty's analysis identifies 107 not including multiple barracks in large towns and cities. *Military Barracks and Mapping in the Nineteenth Century: Sources and Issues for Irish Urban History*, Surveying Ireland's Past: eds. Clarke, Prunty & Hennessy. (Dublin, 2004) pp. 477-534.

³³ Douet, *British Barracks*, p.61.

³⁴ Ibid., p.76.

³⁵ Currently managed by The Defence Infrastructure Organisation (DIO), currently owns a diverse estate for the MOD. Much of the land is designated as environmentally sensitive and requires specialist expertise to manage it.

<https://www.gov.uk/government/organisations/defence-infrastructure-organisation>.

1.2 Military or army?

'British military terminology is cursed by words that have multiple or imprecise meanings, and none more so than the term regiment.'³⁶ However, the words 'British Army' can be just as difficult to understand particularly as it applies to its organisation during the nineteenth century.³⁷ In the first half of the century, The Royal Artillery and Royal Engineers were answerable to the Board of Ordnance rather than the War Office. The East India Company was founded in the seventeenth century and by 1803 its private army, carrying out duties for the British and British Indian Governments, had headquarters at Warley Barracks in Essex and was transferred into the British Army in 1858.

The growth of volunteer forces continued through the eighteenth century but after the reduction in external threat in 1815 the militia was brought under the same legal framework as regular troops through the Articles of War and the Mutiny Acts.³⁸ As recruitment became more difficult the militia became an important source of recruits.³⁹ They could be deployed outside their own area and during the Napoleonic Wars it became the *de facto* reserve for the Regular Army.

In 1805 there were 87,000 regulars, roughly the same number in the militia but Volunteer companies contained nearly four times as many men as the Regulars. However, by 1813 most Volunteer Corps had been disbanded or absorbed into the militia regiments.⁴⁰ While the volunteers were a prominent part of the military throughout most of the nineteenth century they had, in the main, a temporary impact on the extent of land acquired for military purposes. The lifespan of use for their ranges

³⁶ French, *Military Identities*, (Oxford, 2005) p.7.

³⁷ The Army is summed up humorously, even today, by senior officers, as, 'We have the Royal Navy and the Royal Air Force but "The Army"..... which is a loose collection of regiments and corps which come together by common accord to fight the Queen's enemy' (pers. comm. with Lord Dannatt in 2022).

³⁸ A standing army was prohibited during peacetime without the consent of Parliament. The Articles of War continued to govern military forces overseas while the annual Mutiny Acts imposed military law on forces in peacetime Britain until 1879; Ian Beckett, *The Amateur Military Tradition, 1558-1945*, (Manchester, 1991)

³⁹ Kevin Linch, *Britain and Wellington's Army*, (Hampshire, 2011).

⁴⁰ David Chandler and Ian Beckett, *The Oxford History of the British Army*, (Oxford, 1994).

was about 30 years from 1860.⁴¹ In addition to ranges most towns had Volunteer Drill Halls, often small or leased buildings and had little impact within the total military estate.⁴² In a few locations the Drill Halls are identified in the military estate usually if there was mixed use with the militia or Regulars. The Yeomanry Cavalry was an aristocratic British construct, fairly autonomous from the 1740s when an Act was introduced to authorize the use of volunteers who did not want to join the standing army or militia. The Yeomanry were frequently used when the military was asked to assist the civil power between 1815 and 1850. In 1888 they became liable for service anywhere in the United Kingdom in case of invasion and in 1908, along with the volunteer infantry battalions, they were reorganized into the Territorial Force under Haldane's reforms.⁴³ By 1914, after several periods of reform, the army structure was more coherent with a Regular Army and a reserve.⁴⁴ Therefore this research included all of these branches in the identification of military land acquired prior to 1914.⁴⁵

The literature on the acquisition of land for military purposes is thin but there is an extensive literature on the British Army and the auxiliary forces. While these do not deal directly with land issues they do provide insights into the factors which influenced why land was needed, its extent and distribution. The following two sections identify those key factors. Section 1.3 provides an overview of literature, up to the middle of the nineteenth century, on the British Military at home as it affected decisions about the need for and acquisition of land for military purposes. It shows how the military operated within a period of challenging political attitudes and beliefs about the size and role of the state. In essence this promoted concepts and actions around, cheap, good government and that the state should stand aside wherever possible and leave

⁴¹ Herefordshire CC, *An archaeological survey of a Rifle Volunteers range on Bromyard Downs, Report No. 356 EHE 80171*', (Herefordshire, 2013).

⁴² Mike Osborne, *Always Ready: The Drill Halls of Britain's Volunteer Forces*, (Essex, 2006).

⁴³ 200 Yeomanry units in 1805 and 66 in 1850, brought under Crown control in 1871. 39 units by 1885 rising to 53 regiments in Haldane's Territorial reforms of 1908.

⁴⁴ Harold Raugh, *The Victorians at War, 1815-1914*, (California, 2004); Mike Osborne, *Always Ready*, (Essex, 2006); David French, *Military Identities*, pp. 203-231.

⁴⁵ Harold Raugh, *The Victorians at War*, p.237 & 333; Ian Beckett, *Territorials: A Century of Service* (2008), pp.1-24; Edward Spiers, *The late Victorian Army, 1868-1902*, (Manchester, 1992), pp.19-20,127-129.

public action to the individual and voluntary associations.⁴⁶ At the same time Britain was actively expanding its Empire and this required military action to acquire lands and protect them as a stimulus for trade and economic development. This in turn stimulated significant changes at home.

1.3 Late eighteenth to mid-nineteenth century; accommodating a standing army, economic pressures and defence.

Despite colonial and overseas military success there was considerable antipathy to a standing army in Britain.⁴⁷ While Ireland was already extensively garrisoned during the eighteenth century,⁴⁸ the constitutional settlement of 1688 meant that soldiers could not be concentrated in England, Scotland and Wales for fear of them being misused by political, military, and royal leaders.⁴⁹ Therefore, soldiers were dispersed across the country and billeted. While soldiers could be thought of as part of local communities it put significant social pressures on citizens in some areas. The first Mutiny Act, 1689, made it illegal to quarter a soldier on a private citizen in England but this in turn put more pressure on innkeepers and kept the army in small detachments across the country in the first half of eighteenth century.⁵⁰

Military conflict had such an important impact on the cultural, economic and political history of Britain. The period from 1745 to 1815, could more accurately be named the ‘The Seventy Years War’.⁵¹ From spring 1778 camps were constructed for militia and regulars to train together. These camps were large in number and some extensive in area, but they left little long-term impact on the landscape, though for several, as in

⁴⁶ Correlli Barnett, *Britain and Her Army 1509-1970* (London, 1970), p.19.

⁴⁷ M. Cooper, *Reasons for building of Barracks; disencumbering The Inn-Keepers and Publicans; restoring discipline to the army*, (London, 1756); Lt. Gen. G.A. Kemphorne, *Historical notes on Barracks – Scottish Command*, (Army Medical Corps, 1937), p.24.

⁴⁸ <https://barracks18c.ucd.ie/author/barracks18c>.

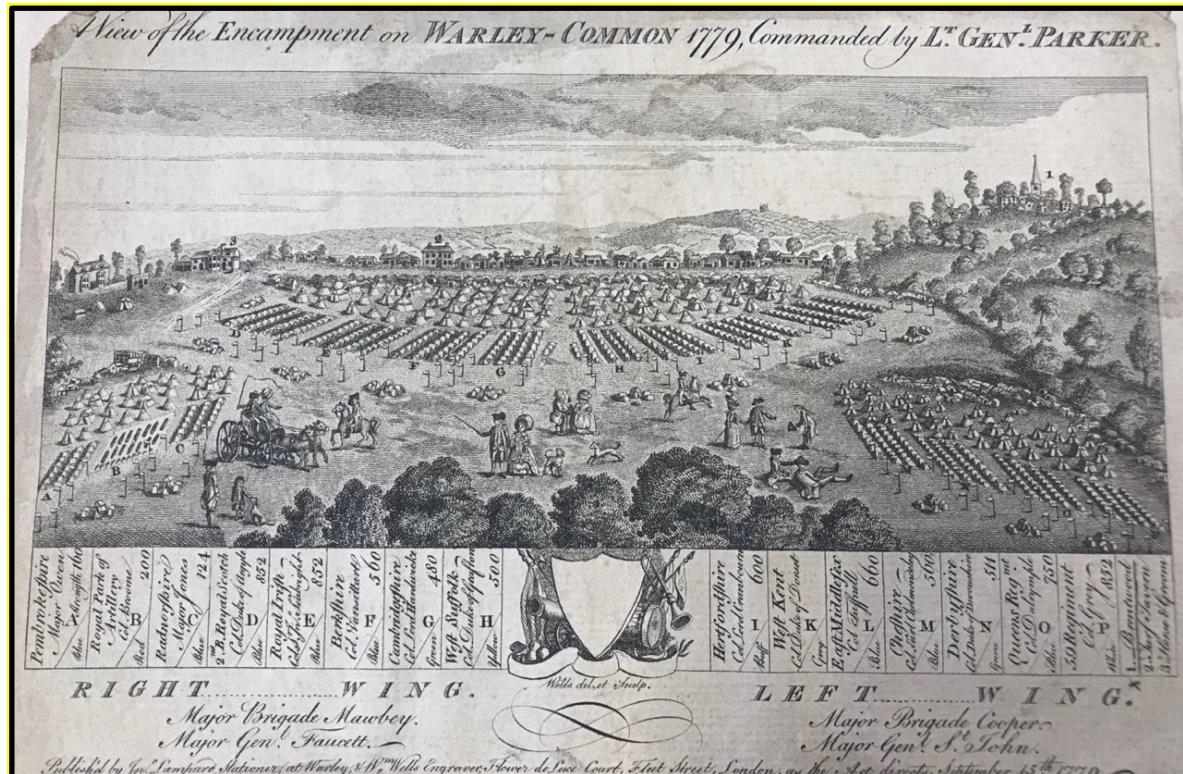
⁴⁹ Lord Thring, *History of Military Law*, pp.7-18, *Manual of Military Law*, (London, 1894).

⁵⁰ Sir H. Jenkyns, *History of the Military Forces of the Crown*, pp.212-256.

⁵¹ Anthony Page, *Britain and the Seventy Years War, 1744-1815*, (Tasmania, 2015).

the cases of Warley (Figure 1.1) and Colchester, permanent military sites emerged in the same vicinity.⁵²

Figure 1.1:- Encampment on Warley Common 1779



The sites developing in Ireland and Scotland such as in Dublin, Athlone, Berwick and Inverness can be seen as the seedbed of a more permanent military estate that grew rapidly from the end of the eighteenth century. The growth in the number of soldiers at home and the change of policy to create a standing army were key drivers in establishing a demand for land for accommodation and training. Between 1793 and 1805 military strength grew from 40,000 to 245,443 (including 94,000 militia). Of these 57,678 were in England, Scotland and Wales (plus 70,386 militia), 8,408 in the Channel Islands and 34,087 in Ireland (plus 19,423 militia).⁵³ At the beginning of the period there was only accommodation for 20,000 in 43 fortresses and garrisons in mainland Britain, so in 1793 a new Barrack Department was established for all military sites other than where there were artillery defences, which remained with the

⁵² J.A. Houlding, *Fit for Service*, (Oxford, 2000).

⁵³ David Chandler and Ian Beckett, *The Oxford History of the British Army*, (Oxford, 2003) p132; J.W.F. Fortescue, *Military History*, (Cambridge, 1914); Ron McGuigan & Robert Burnham, *The British Army Against Napoleon: 1805-1815*, (Barnsley, Yorkshire, 2010); Tom Rutherford, *Social and General Statistics* (HOC Library).

Ordnance Board.⁵⁴ The work of the Barrack Department represented an important shift in government policy but the response was frequently the establishment of temporary camps rather than permanent constructions. There were, in addition, 55 locations where barracks or fortifications were used by the Artillery. These were constructed to contain 18,762 officers and men, 1,007 hospital beds and 6,474 horses but in 1816 they only housed 7,090 officers and men, 193 hospital beds and 2,911 horses.⁵⁵

The functions of barracks were to recruit, accommodate, train, gather forces prior to forwarding to war and in the event of invasion as a rallying point for the co-ordination of defence.⁵⁶ But they also had a defence role when required; this is seen particularly in Ireland or where barracks developed as garrisons for fortifications. Garrisons were either located within a previous defence structure, as at Tilbury Fort, Chester, Carlisle and Scarborough Castles or adjacent to it, as at Landguard Fort. However, there were still large temporary camps as at Colchester where between 1794 and 1799 a mainly huddled camp pre-empted Aldershot as the largest focal point for the army. In addition to new buildings the Barrack Department leased warehouses, factories and barns such as the Royal York Crescent in Bristol, though never used, and The Linen House in Dublin.⁵⁷ This was predominantly a period of temporary military impact on the English landscape. Most of the permanent sites were in London, across Ireland and near the coast where naval dockyards were heavily protected. This reflected the mainstream of military and political thinking which continued to place the navy as the front-line in Britain's defences. In Ireland the pattern of barracks was more permanent and dispersed, as it responded to external defence needs, as well as the requirements of colonial control.⁵⁸ However, some exceptional permanent military sites also emerged at that time.

⁵⁴ PP, Fourth Report of the Commissioners to enquire into the Public Expenditure in the Military Departments – Office of the Barrack Master General (C.99, 1806); Major General Charles Callwell and Major-General Sir John Headlam's *History of the Royal Artillery* (1931).

⁵⁵ Major General Callwell and Major General Headlam referring to return of artillery barracks 8th April 1816.

⁵⁶ Trevor May, *Military Barracks*, (Oxford, 2002). p.5.

⁵⁷ Douet, *British Barracks 1600-1914*, (London, 1998). Chapters 1-3.

⁵⁸ Trevor May, *Military Barracks*, (Oxford, 2002). p.6.

The Ordnance Board built at Woolwich Common, a façade of just under 333 yards making it the longest residential building in Georgian Britain, on land extending to some 145 acres. When occupied in 1808 it accommodated 3,500 men and 1,700 horses.⁵⁹ The Board also built Brompton Barracks in Chatham and Wyvern in Exeter but much of their work was focused on coastal defences including 121 Martello Towers.⁶⁰

Figure 1.2:- The façade at Woolwich Barracks



This period was dominated by rapid industrialization and urbanization, which had differential regional impact, as Britain strengthened its position as the world's leading manufacturing economy. This led to rapidly changing social circumstance especially in the English Midlands, Lancashire and Yorkshire. Not only did this increase demands for a military presence; it often meant that earlier military sites became constrained by urban growth.⁶¹ Power struggles between the traditional rural landed gentry and the new property-owning elite of industrialists created tensions in economic, social and political thinking. Land ownership and competition for land were dominant themes in debate but little real reform of land was introduced until late into the nineteenth century.⁶² These conflicting demands for land are examined in chapter 6.

Economic pressures had a continuous impact on the decisions to invest in the military and to acquire land. Examining the financial allocation to different parts of the military

⁵⁹ Survey of London, *The Royal Arsenal Woolwich*, (English Heritage, 2012), Chapters 3&7.

⁶⁰ Major General Forbes, *History of the Army Ordnance Services*, (London, 2010), pp.170-207.

⁶¹ Just over a third of Britain's population was urban in 1801 and by 1841 nearly a half, fuelling rapid urban growth, creating competition for land near towns and cities.

⁶² Martin Hewitt (ed.), *The Victorian World*, (Oxford, 2012), pp.10-11.

and in various locations helps identify political and military priorities. In the eighteenth century there emerged a peculiarly British version of the fiscal military state, more accurately a fiscal naval state, complete with large naval capacity, industrious administrators, high taxes and huge debts.⁶³ By 1815 Britons were paying three times more tax *per capita* than the French; and the burden of public debt was 15 times larger.⁶⁴ Heavy and inequitable taxation carried with it the threat of unrest and revolution. In real terms taxation was around £10.8 million in 1795 and £28 million in 1815.⁶⁵ Most of Britain's military effort during the previous 70 years was funded by borrowing. By 1815, fifty per cent of tax revenue was committed to paying interest on the national debt. The threat of invasion frequently had an adverse effect on financial confidence. Pitt proceeded to increase the indirect taxes on luxuries and then struck at the heart of English notions of privacy and private property with the introduction of income tax. Yet it was accepted as an emergency measure and, despite widespread evasion, yielded significant revenue that enabled Britain to continue fighting, borrowing, and subsidising allies until Napoleon was defeated.⁶⁶

After 1815, politicians moved rapidly to reduce the size of the state, hoping to avert criticism and maintain aristocratic support. There was a strong and influential belief that the state only needed to be large during wartime. This had a significant impact on the acquisition of land and the development of accommodation or training space for the next 35 years. The architects of Britain's fiscal naval state worked to shrink it to an efficient and limited *laissez-faire* state in the relatively peaceful nineteenth century.⁶⁷ The notion of 'Pax Britannica', however, must be viewed as problematic. There were at least 196 'little wars' that helped quadruple the size of the empire during the nineteenth century.⁶⁸ It seems that as imperial expansion was a core belief of both

⁶³ John Brewer, *The Sinews of Power: War, Money and the English State 1688 to 1783*, (1989).

⁶⁴ Anthony Page, *The Seventy Years War, 1744-1815, and Britain's Fiscal-Naval State*. Vol.34 No.3 (War & Society, 2015), pp.162-186.

⁶⁵ Page, *The Seventy Years War, 1744-1815*, p.162-188.

⁶⁶ Daunton, *Politics of British Taxation, Rise of Fiscal States*, ed. Yun-Casalilla and O'Brien, p112.

⁶⁷ Page, *The Seventy Years War, 1744-1815*, pp.162-186.

⁶⁸ Michelle Tusan, Papers and Responses from the Thirteenth Annual Conference – (Vol. 58, No. 2, *North American Victorian Studies Association*, Indiana, 2016), pp. 324-331.

main political parties, albeit for different reasons, there was a perception of peace portrayed so long as European threats were kept in abeyance.

Military numbers fell dramatically in 1815 from 233,592 to 87,933 rising again to 120,644 in 1848, with only 49,832 of those in England, Scotland and Wales and 29,770 in Ireland.⁶⁹ The perceived threat of invasion declined in the decades immediately after the end of the Napoleonic Wars. The sacrifice the soldiers had made and the acclaim given to leaders such as Wellington made the early decades of the nineteenth century a period of relative popularity for the army in terms of public perception. This did little to ameliorate the criticisms of the heavy tax burden:

No man possessing an ordinary understanding can entertain a doubt that the cause of our present suffering is the enormous amount of taxes which the government compels us to pay for the support of its army, its placeman, its pensioners etc. and for the payment of its interest on its debt.⁷⁰

The military was reorganised several times in the nineteenth century, principally in terms of structure and governmental control. The Home Office was responsible for military forces until 1794 when most of its responsibilities transferred to the Secretary of State for War. However, the Home Secretary's demands had a significant influence on the deployment of troops until there was a more widespread development of police forces. The Home Office retained some specific responsibilities in relation to support for the civil power, especially in relation to the auxiliary services.⁷¹ During the period from 1815 to the 1850s one of the army's main functions at home was to feed trained manpower into Britain's overseas commitments as the Empire expanded. The period is often seen 'as a period of stagnation in terms of army reform other than the reorganisation following the Militia Act of 1852'.⁷² Strachan, however, identified the

⁶⁹ Herbert Sidney, *Royal Commission to Inquire into the Sanitary Condition of the Army*, (London, 1861).

⁷⁰ Rohan McWilliam, Performance of Citizenship, an 1838 Manchester Union address. *The Victorian World*, (ed.) Martin Hewitt, (Oxford, 2012), pp.367-372.

⁷¹ Responsibility for the Yeomanry and Militias only transferred to The War Office in 1855.

⁷² Hew Strachan, *From Waterloo to Balaclava*, (Cambridge, 1985).

period from 1830 to 1854 as one of the army being reformed or reforming itself, but these reforms had little impact on increased land requirements.

Throughout this period the military was also required to provide support for the civil powers in dealing with disturbances. In rural England, volunteers or militia, responded, but it was the growing unrest in industrial areas in the two decades after 1830 that influenced deployment of the military at home and the location of some military sites. Public disorder was heavily influenced by issues such as, 'elections, religion, politics, recruiting, and enclosures'.⁷³ Food riots were related to periods of serious harvest failure or trade depression.⁷⁴ Particularly in the era before organised police forces, too often the authorities marshalled military power to 'quell their own fears, or to lend moral support to the police in the execution of their duty'.⁷⁵ It was this attitude that frequently meant that disturbances could quickly lead to a demand for troops.⁷⁶

The Yeomanry, officered by the gentry and aristocracy, was armed and trained and operated as a cavalry at home. They were directly linked through the Lord Lieutenants and magistrates to the Home Office and not usually at the disposal of the military commanders. They were frequently manned by tenant farmers who were needed for food production and were not popular with local people, especially after Peterloo in 1819.⁷⁷ So, pressure fell on the Regulars and support for the civil powers remained a top priority for political leaders for most of the century.⁷⁸ It was the establishment of borough police forces in 1839 and county police forces in 1855 that created the

⁷³ R. Quinault and J. Stevenson, 'Food Riots in England 1792' in *Popular Protest and Public Disorder*: (London 1974) p.33.

⁷⁴ Ibid., pp. 33–74.

⁷⁵ Frederick Mather, *Public Order in the Age of the Chartists*, (Manchester, 1959).

⁷⁶ H. Palmer, *Police and Protest in England and Ireland 1780–1850*, (Cambridge, 1988), pp. 56–69.

⁷⁷ Peterloo Massacre. In August 1819 a political rally in St Peter's Fields, Manchester, demonstrating against industrial depression and high food prices. The magistrates ordered the military to arrest the speakers but the poorly trained Manchester Yeomanry attacked the crowd, killed 11 and injured several hundred, (Encyclopaedia Britannica).

⁷⁸ Correlli Barnett, *Britain and Her Army 1509-1970*, (London, 1970); Edward M. Spiers, *The late Victorian Army 1868-1902*, (Manchester, 1999), p.274.

circumstances whereby the army ceased to be the main prop in dealing with public order.⁷⁹

Despite the impact of providing aid for the civil powers that is discussed in Chapter 4, there was little land acquisition for the military between the end of the Napoleonic Wars in 1815 and the 1850s.⁸⁰ The Duke of Wellington was respected for his military success but he was generally against reform in the army. He was a formidable commander and spokesman but his conservative leanings were seldom successfully challenged by civilian administrators and politicians.⁸¹ His death in 1852 paved the way for reforms covering most aspects of the army, its leadership, structure, training, deployment and location. The innovative camp and exercises at Cobham in 1853 led to Aldershot and The Curragh being acquired and developed between 1854 and 1861,⁸² but there were no military manoeuvres in Britain between 1853 and 1871.⁸³ Strict control of the amount of land and the cost of practice hindered the tactical expertise of the army.

The middle decades of the century saw further political tensions as Liberalism shifted to a more interventionist position in foreign policy. The willingness to implement a more assertive position from Palmerston culminated in the policies that eventually led to Britain's ill-prepared engagement in the 1853 to 1856 Crimean War.⁸⁴ The army deployed to Crimea showed that all was not right with the expeditionary force of 1854. Significant soul searching was necessary then as critics of Britain's poor performance gained extensive public exposure through the newspapers at the time. The shortcomings were an understrength army, managing to deploy only 26,000 to Crimea.

⁷⁹ Edward M. Spiers, *The late Victorian Army 1868-1902*, (Manchester, 1999), pp.274-279.

⁸⁰ PP, Return of purchases of Land or Tenements by Government since 1830, in Parishes Part of or adjoining Her Majesty's Dockyards (1858) identified 11,00 acres.

⁸¹ Peter Burroughs, 'An Unreformed Army 1815-1868?', *The Oxford History of the British Army*, eds. David Chandler and Ian Beckett, (Oxford, 2003), p. 162.

⁸² Con Costello, *A Most Delightful Station*. (Dublin, 1999) pp.69-71 for a full quote of the March 1857 rationale for Aldershot and The Curragh by HRH The Duke of Cambridge.

⁸³ Ian F. W. Beckett. *Victorians At War*, (Vol. 81, No. 328, JSAHR, 2003), pp. 330-338.

⁸⁴ David Brown, *Palmerston and the Politics of Foreign Policy*, (Manchester, 2002).

Possibly the greatest concern focused on the health of the troops as well as inadequate supply chains and poor leadership.⁸⁵ Strachan put it in forthright fashion, 'the army thought small because it fought small.'⁸⁶

The hierarchical nature of the army reduced the impact of reform until there was public concern about Crimean War casualty figures.⁸⁷ The response from women like Mary Seacole and Florence Nightingale and some liberal political voices created the circumstances whereby the army medical officers could voice their concerns about the way soldiers were treated and especially the quality of their accommodation. The evidence concerning death rates in the peace-time barracks in Britain was in many ways the most influential factor in changing the way soldiers were accommodated and treated in the second half of the century.⁸⁸ This led to larger demands for land in and around barracks, for living space and exercise.

In the following decade Palmerston's policy reinforced a consistent line characterised by; the avoidance of war; management by an informal concert of great powers; modest support for British trading interests; resistance to Russian expansion in the near and Middle East and support for the extension of liberal regimes in Europe.⁸⁹ The army continued to operate within an environment of challenging economic limitations. These economic pressures were a constant impediment to rapid improvement in facilities for the military, including improving sanitary conditions and the health of the soldier. This in turn, suppressed the demand for land for the military's needs.

Newspaper reports from conflicts and seeing and hearing from returning soldiers helped shape attitudes in the population at home. But the literature also highlights the

⁸⁵ PP, Select Committee investigating the supplies of the army in Crimea, (April 1855); Correlli Barnett, *Britain and Her Army 1509-1970*, (London, 1970), p.286.

⁸⁶ Hew Strachan, *From Waterloo to Balaclava*: (Cambridge, 1985), pp.267-272.

⁸⁷ PP, Select Committee investigating the supplies of the army in Crimea, (April 1855). Mortality was reported as 35% of the active strength of the army.

⁸⁸ The Marquess of Anglesey, *A History of the British Cavalry, 1816 to 1919*, Volume I. 1816 to 1850, (London, 1973).

⁸⁹ Martin Hewitt, et al. *The Victorian World*, (Oxford, 2012), pp.19-20.

boredom and associated ill-health of military life in the periods between conflicts. It illustrates the impact on women associated with the soldiers, either as family members or in their role as camp followers.⁹⁰ Soldiers' behaviour, especially in relation to drunkenness and prostitution, in no small way influenced public and political perceptions of the army at home. In many towns this was a significant factor in opposition to acquiring land to accommodate the military.

The army, despite eventual success in Crimea, was damaged by the lack of tactical expertise and training. Addressing these became part of the biggest shift in demand for military land. Land was acquired for the great training camps of the 1850s and 60s and nearly all were rebuilt in permanent materials by the end of the century. Schofield has identified the importance too of militia camps, of well-built wooden huts intended to train a battalion and the role of previously existing camps, which had militia-type huts added during the major conflicts.⁹¹

The shame brought about by health concerns for the nation's soldiers were major influences on the distribution, form and function of the accommodation made available. But the soldier needed more than just better accommodation. To be effective and fit he needed access to land for practice and exercise. This was important, but limited in areal terms, despite the need for military land for gymnasiums, hospitals in barracks and sports exercise grounds. A health-driven response was slow to materialize because of the strength of Lord Palmerston's belief in the emerging threat to Britain from Europe and the reinforcement of the South of England's fortifications. These became a major factor in shaping the distribution and extent of the military estate.

In many ways the financial controls necessary well into the nineteenth century to pay for the conflicts of the previous century set the tone for a tight economic environment for any reform and development of the country's military. When combined with the low esteem soldiers were held in when not at war, a political class still uncomfortable at

⁹⁰ Myna Trustram, *Women of the regiment: Marriage and the Victorian Army*, (Cambridge, 1984).

⁹¹ John Schofield, *England's Army Camps*, (York, 2006); English Heritage, *Military Sites Post – 1500, Designation Scheduling Selection Guide*, (Swindon, 2013); John Schofield et al, Thematic characterization: recording England's army camps, 1858-2000; *Remapping the field: New Approaches in Conflict Archaeology*, eds. John Schofield et al. (English Heritage, 2006), pp. 58-63.

least about a standing army and a public reticence about paying for state control, the recipe for a difficult time for the expansion and development of a reformed military was firmly set.

1.4 Mid-nineteenth and early twentieth centuries; the influence of reform and conflict.

After the middle of the nineteenth century, the military's needs for healthy accommodation and measures to improve recruitment and the effectiveness of the soldier, became of greater concern. Much of the literature on this period focuses on the lessons learnt from responses to changing technology and the military's performance in South Africa. This affected strategies and tactics, influenced priorities and increased significantly the demands for land.

French's seminal exploration of the Cardwell-Childers Reforms examined the need for reform in detail.⁹² He analysed the health and sanitary environment of the soldier, with drunkenness and venereal disease being a greater killer than other enemies the British soldier came across. He identified the importance of sport in relation to soldiers' fitness and preparedness for fighting as well as cementing the sense of regimental belonging. He also provided a detailed description of the role of women in the lives of soldiers, the strict rules relating to permission to marry and the way in which women were drawn into the regimental system. While French acknowledged that making life better for married soldiers had a significant cost, he placed little emphasis on the physical changes in barracks as accommodation for married soldiers was expanded. Trustrum's graphic depiction of life for married soldiers and their families, helps explain why barracks needed to develop better facilities for service families. This eventually led to the expansion of barracks with new accommodation in married quarters, barrack schools, washing facilities and shops. Women had a significant role in the development of barrack life, entertainment and welfare support for soldiers.⁹³

⁹² French, *Military Identities*, (Oxford, 2005), p.103.

⁹³ Trustram, *Women of the regiment*, (Cambridge, 1984).

These reforms, often called the Cardwell Reforms though the implementation extended over several decades, led to an expansion in the land requirements for the military.⁹⁴ They were part of the Localisation Acts of the 1870s which changed much about the British Army at home.⁹⁵ There is some disagreement amongst historians as to the long-term success of the reforms in terms of the effectiveness of the army in South Africa at the turn of the century.⁹⁶ This thesis examines the impact the reforms had on the demands for land and how that related to the effectiveness of the military. The reforms had four main focuses. Firstly, they had to address the inefficiencies of structure. Different parts of the state's governance made decisions about the size of the army, its deployment, its priorities, its structure and how its resources were acquired and managed. As General Napier put it:

The Ordnance alter your barracks, yet I know nothing of it, because we belong to separate armies: - one commanded by the Master General of the Ordnance, the other by the Master-General of the Infantry and Cavalry. Then comes a third:- the Master-General of Finance. Last, not least, the Master-General of the Home Office, more potent than all..... God help the poor English Army among so many cooks.⁹⁷

The second focus for reform was the constant drive to save money. Cardwell's Reforms started from the premise that several million pounds could be cut from the Army Estimates and while the reforms created more demand for military land the lack of a clear financing structure delayed implementation over the next 20 to 30 years.⁹⁸ The reforms set out to save money by having a cheaper, more efficient and militarily

⁹⁴ Edward Cardwell, Secretary of State for War 1868-1874, introduced his reforms in the early 1870s, but it was Hugh Childers (Sec. of State 1880-1882) who saw through much of the implementation after concerns about the cost and effectiveness of reforms. Therefore, while they are popularly called the Cardwell Reforms they are also referred to as the Cardwell-Childers reforms.

⁹⁵ PP, Military Forces Localization Act (C.32. 1872-92); PP, Depot Centres proposed Organization of Military Land-Forces, (C.93. 1872); PP, Defraying Expenses of building Barracks, providing for Localization of Military Forces, (C.222. 1872) .

⁹⁶ Spiers, *The Late Victorian Army 1868-1902*, pp 170-175; Ian Beckett, Timothy Bowman and Mark Connelly, *The British Army and the First World War* , (Cambridge, 2017), pp,34-35.

⁹⁷ Strachan, *Wellington's legacy*, (Manchester, 1984), pp.235-236.

⁹⁸ Spiers, *The Late Victorian Army*, pp.2-9.

effective army. This was part of a wider political and social programme where the government wanted regular soldiers to be seen as respected members of the community to integrate the working class into the mainstream of political thinking.⁹⁹

The first two focuses had the effect of dampening the demand for land but the third focus was the need to find better ways to recruit suitable manpower, to reduce the loss of men and improve the calibre of recruit.¹⁰⁰ These challenges had to address the appalling sanitary conditions that had become a major source of dissatisfaction in the army and with the army.¹⁰¹ Addressing this led to demands for new barracks in parts of the country, redevelopment of older barracks and improved facilities. These were important for the image of the army and had some impact on the demand for land but the economic pressures delayed this development for many years.

An analysis of the distribution of the £3.5 million allocated to the Localization Act, gives a clear indication of the priorities seen by the politicians and military at the time. Depots were allocated 47% of the funds and 29% for the replacement of accommodation taken for Depot Centres. Just under 16% was allocated to the purchase of land of which two thirds was to be used for a metropolitan exercising ground and a tactical training station, examined in the case studies (Chapters 4 and 5). The remainder was set aside as contingency.¹⁰²

In 1872 the press noted that the Cardwell reforms were more than the development of Regimental Depots, they also placed a significant focus in the estimates for training.¹⁰³ The fourth focus of reform was the need to improve the effectiveness of the soldier, ensure they were healthy and fit and capable of fulfilling the objectives agreed for the

⁹⁹ French, *Military Identities*, pp.25-26; Alan R Skelly, The tragedy of British military education: the Cardwell reforms, 1868-74, (Vol. 3.2, *Journal of Educational Administration*, 2006).

¹⁰⁰French, *Military Identities*, pp.13-16, 34-35 and 57-58.

¹⁰¹ Peter Burroughs, 'An Unreformed Army? 1816-1868', in Chandler and Beckett, *The Oxford History of the British Army* pp.172-174.

¹⁰² PP, Military Forces Localization.(1872).

¹⁰³ *Naval & Military Gazette and Weekly Chronicle of the United Services*, Saturday 16.03.1872.

military. This meant that the main measure of success for the reforms should be that the military was trained and ready for action in whatever sphere it was deployed within. This drive was a major factor in creating greater requirements for military land.¹⁰⁴ A conservative estimate of the land requirements for these reforms identified around 700 acres needed for new Depots and a further 400 acres for adaptations to existing barracks. However, the development of Strensall as a training venue, discussed in the Northern case study, showed that it alone expanded the military estate by over 1,800 acres. The militia were included in the Cardwell reforms where larger units became, in effect, the reserve battalion of the county regiment by 1882.¹⁰⁵ The Localization Act also transferred responsibility for the militia and volunteers from Lords Lieutenant to the Crown.¹⁰⁶ This meant the development of new accommodation in some counties and the incorporation of older militia barracks was to be included in the military estate.

But the reforms were also centrally about the calibre and effectiveness of the British soldier. The need to understand the personal lives of the soldier has been the focus of several studies in recent years.¹⁰⁷ The background of and attitudes to the soldier influenced military structures and the relationship between military leaders and politicians. These studies show that military life was seen as a possible solution to outbreaks of hooliganism but with the failures in the first Boer War, the British soldier developed a potentially unreliable persona. At times soldiers were viewed as slaves in red coats but also tools of oppression against their own people. Their coarse, often drunken behaviour, and brawls with civilians and each other were viewed as a widespread problem. Many were despised as lazy outcasts and dregs of society; the officers were often viewed as violent, drunken scoundrels and arrogant snobs, and all

¹⁰⁴ Albert Tucker, *Army and Society in England 1870-1900*: (Vol. 2, No. 2 *JBS*, 1963), pp. 110-141.

¹⁰⁵ Robert Stoneman, *The Reformed British Militia, c.1852-1908*, (PhD, University of Kent, 2014).

¹⁰⁶ Militia training was criticised (Norfolk Report 1904) and led to a Territorial force in 1908 when units transferred into Special Reserve.

¹⁰⁷ Edward Gosling, *Tommy Atkins, War Office Reform and the Social and Cultural Presence of the Late-Victorian Army in Britain, c.1868-1899*, (Doctoral Thesis, Plymouth University, 2015); Patrick Bracken, *The Growth and Development of Sport in Co. Tipperary, 1840-1880* (PhD thesis, De Montford University, 2014); Michael Hales, *Civilian soldiers in Staffordshire 1793-1823*, (Doctoral Thesis, Sheffield Hallam University, 1995); Robert Stoneman, *The Reformed British Militia, c.1852-1908*, (Doctoral Thesis, University of Kent, 2014).

ranks had a reputation as unprincipled seducers. Gradually, however, the military built good relationships with local communities but the rehabilitation of the public image of the British soldier was a gradual process. Slowly, military service was linked to sober British values and to ideals of patriotism.¹⁰⁸ The way the men were perceived and led influenced the way they were treated, the space they had available to live in and even the kind of weapons they could be trusted with.

The defeat of France in the Franco-Prussian war of 1870-71 greatly complicated British international relations. The shock of Prussia's victory re-energised the British penchant for perceived invasion threats, but government continued to follow the established tenets of British policy around detachment. In the nineteenth century the history of the British Army [as a whole] is the history of British colonial policy and British involvement overseas.¹⁰⁹ This priority continued to dominate the expectations placed on the military at home. One of its key roles was to ensure recruitment could continue to provide sufficient manpower to meet the overseas operations. Public attitudes to the army oscillated from rage at incompetence, 'when the army, they neglected and never joined, suffered some disaster,' to pride, 'in victories won despite their indifference.'¹¹⁰ More efficient recruitment became a driving force for change in the military and yet the public attitudes made it more difficult to increase expenditure on facilities for accommodation or training.

The strains being created by the mounting costs of naval expenditure and Imperial defence were apparent in the 1890s. Continental tensions, particularly the ambitions of Germany, were once again a threat to Britain's world position, prompting the ending of diplomatic isolation and the stoking of an Anglo-German arms race. Above all, the First Boer War convinced many of the need for a greater Imperial solidarity and cast doubt on the blue water policy, based on naval supremacy, as capable, in itself, of

¹⁰⁸ John Bolt, Was the Victorian Soldier a 'Hooligan?' Social Anxiety, Fair Play, and Military Service in Victorian Britain. *Owlcation.com* accessed 09.02.2021; Stephen Attridge, *The Soldier Society; Images in late Victorian Society, Images and Ambiguities*, (PhD thesis University of Warwick, 1993).

¹⁰⁹ Correlli Barnett, *Britain and Her Army 1509-1970*, (London, 1970), pp. 260-270.

¹¹⁰ Ibid., p.273.

defending Britain.¹¹¹ The changing attitudes to the army increased the demand for land for defence and for training.

The disappointing performance of the British Army in South Africa was pivotal in a re-evaluation of its effectiveness. Harries-Jenkins was scathing in his view that no one was prepared to admit that the real reason for the failure of the military was that it had become, by 1900, an anachronism.¹¹² Its social structure, education and professionalism at the end of the century contributed to that poor performance. Whatever the various reforms during the nineteenth century had achieved, both the military and the politicians had failed to grasp that what should have been developed in the latter half of the century was 'a powerful professional army rather than a small colonial force protected by a large navy.'¹¹³

The Cardwell-Childers reforms took a long time to become embedded in the way the military system operated. It was mainly achieved through the drive of Richard Haldane that in effect ensured the 'fundamental principles of 1872' were in place and operational.¹¹⁴ The reorganization of the army and its training in the first decade of the twentieth century meant that the four drivers for reform were being addressed if not yet having the desired impact. Of these the focus on training had the greatest influence on land acquisition.¹¹⁵

Haldane's establishment of a more co-ordinated structure to the army with an integrated leadership was not merely a political response. In the first decade of the twentieth century, senior military officers engaged in detailed analysis of the problems they faced in South Africa, the emerging efficiency of the French and German military

¹¹¹ David Morgan-Owen, *The Fear of Invasion 1880-1914*, (Oxford, 2017); Martin Hewitt (ed.) et al. *The Victorian World*, (Oxford, 2012), p.41.

¹¹² Gwyn Harries-Jenkins, *The Army in Victorian Society*, (London, 1977), p.279.

¹¹³ Ibid.

¹¹⁴ PP, Army council on the existing army system and the present state of the military forces in the UK. (C.187, 1909).

¹¹⁵ See Case Studies in Chapters 4 and 5.

and the lessons from the war in Manchuria.¹¹⁶ The outcome of these analyses lent strong, though not unanimous, support for better co-operation between various branches of the military and a greater focus on preparedness for war.¹¹⁷

With the complexities of Britain's military structures, it comes as little surprise that continental military leaders were sceptical about its effectiveness. The Victorian Army was unique for a number of reasons; it was smaller than most; it garrisoned an empire; it was an all-volunteer force and 'it had a system of officer commissions and promotions dominated by purchase'.¹¹⁸ Flint puzzled why an organization that promoted leaders by the size of their purse and not ability, became the most successful military force of the nineteenth century. This somewhat generous conclusion is unlike the perspective of both Skelley and Harries-Jenkins who concluded that despite the major reforms:

The Boer War pinpointed faults in training and organization which revealed that the army was unprepared for the type of war it was required to fight. The majority of these faults were only apparent under active service conditions and were not particularly a feature of the home army in peace.¹¹⁹

If reform was to be successful significant areas of land needed to be acquired for both new and expanded accommodation but also to provide training grounds beyond the concept of drill grounds. It is the acquisition of land to enable soldiers to be effective that follows in the subsequent chapters.

¹¹⁶ Timothy Bowman and Mark Connelly, *The Edwardian Army*, Chapter on Training and Doctrine (Oxford, 2012).

¹¹⁷ Major General Charles Calwell and Major General Sir John Headlam, *History of the Royal Artillery* (Vol.II 1931), pp.128-205.

¹¹⁸ Erik W Flint, *Queen Victoria's Army*, (Hampshire, 2006).

¹¹⁹ Alan Skelley, *The Victorian Army at Home*; (Montreal, 1977), p.301.

1.5 Research approach

The nature and effectiveness of the Victorian Army have been much discussed and the broad contours of its development are well known.¹²⁰ This thesis takes a different perspective to that of the mainstream literature on the development of the military from 1790 to 1914, in that it analyses the acquisition and use of land for military purposes. The previous two sections have identified the context and the main themes that influenced the expansion of the military estate during that period. The thesis examines the impact of those developments through the extent to which land was required to support changes in military organization, recruitment, strategy and tactics in the context of economic pressures. Focusing on the decisions made about investing in the military's need for infrastructure to support the expectations made of it, provides insight into the way the military changed, how it was judged and how it developed into one of the major landowners in the country.

Other than some excellent contributions through the stories of individual camps and barracks, there is no comprehensive study of the development of militarized landscapes in the nineteenth century; their often temporary nature; and how and why some became permanent features of the urban and rural landscapes across Britain and Ireland.¹²¹ The thesis moves the discussion about military sites away from these local isolated case studies to take a more regional comparative approach within the national context.

Chapter 2 sets out the chronology of how the military estate grew before the First World War. It analyses the legal development of the powers underpinning the state's acquisition of land and identifies what military purposes mean in relation to land use. Crucially the chapter illustrates that the concept of a military estate includes the acquisition of the land but also its stewardship and the chapter examines the changing views as to where that

¹²⁰ Spiers, *The Late Victorian Army*; Skelley, *The Victorian Army at Home*, (Montreal, 1977); Barnett, *Britain and Her Army 1509-1970*, (London, 1970); Harries -Jenkins, *The Army in Victorian Society*, (London, 1977); French, *Military Identities*, (Oxford, 2005).

¹²¹ Con Costello, *Curragh of Kildare, Ireland, 1855-1922*, (Cork, 1996); Henry Buckton, *Salisbury Plain: Home of Britain's Military Training* (2015); Denis Carroll, et al, *Images of Sarsfield Barracks*, (Dublin, 2008); Paul Vickers, *Aldershot's Military Heritage*, (Amberley, 2017); *Weedon Royal Ordnance Depot*, (Weedon Bec History Society, 1996).

responsibility should lie.

Chapter 3 charts how the legal framework was used to acquire land across Britain. The chapter maps the location of military sites but uses the Land and Tenements Returns, discussed below, to analyse the areal extent of the military estate. The chapter explores in detail how recording military sites is a useful surrogate for the military estate as a whole but it is not until the area of land being used is examined that a full understanding of the estate is possible. The national position is discussed, examining both the development of the built estate and the training estate. The patterns of development are looked at in Ireland and mainland Britain but the research examples are mainly drawn from northern and eastern England. These are examined in detail in chapters 4 and 5.¹²²

The two regions were chosen to exemplify ways in which different levels of demand for defence, aiding the civil powers in relation to internal security and preparation for overseas service created different distributions of military land-use. Detailed regional analysis is an important aspect of landscape history. While national distributions are important to understand, it is at the regional and local levels that the detailed story of the interplay between national policies, local needs and opposing views are played out in the acquisition of land for military purposes. The nature of the land and conflicting views about its use can best be understood at the level of specific locations. The national context is clearly important, but its significance:

is usually discussed in terms of how they are mediated, directly and indirectly, by the regional context to understand how they are played out in local communities.¹²³

The thesis takes into account major national and international events of the time. But the development of a military estate and its influence on the British landscape is best understood through the way the laws, policies, reforms and technology shaped the demand for land. It was this that resulted in a managed military estate with significant

¹²² The planned case study of nineteenth-century Ireland was hindered by the Covid pandemic and therefore only part of Ireland from The Curragh to Limerick and Galway was examined in detail.

¹²³ Robert Liddiard & David Sims, *A Very Dangerous Locality*, (Hertfordshire, 2018), pp.1-3.

regional variations. Understanding the impact of these factors forms a central theme of the thesis.

Chapters 6 brings the thesis to a conclusion, building on the national evidence and the detailed examination in the two case studies. It examines the notion of military priorities, regional variations in the way those priorities created different land demands as well as examining the issue of contestability and the nature of the land acquired. Through these analyses the two main research questions have been thoroughly addressed and the origins of and changes in the military estate are set out in ways not previously examined in detail.¹²⁴

The research methods are informed by a number of different methodological approaches aimed at answering a series of linked questions. Why was the location chosen? How was the land acquired for military use and what was the legal underpinning for such acquisition? How was the land managed and how were decisions made about continuing use or disposal? Central to this thesis is the key question as to how the acquisition of land for military purposes developed and transformed into a stewardship role, thereby creating a military estate. The thesis is, therefore, rooted in historical methods of archival research but its additional strengths come from using a targeted interdisciplinary landscape history approach. This is characterised by an eclectic use of source material including, documentary material, archaeological evidence, cartographic material, topographical interpretation, and the stories of those who lived in or used the area which help our understanding of the use of military landscapes.¹²⁵ In addition the approach is strengthened by drawing from concepts of historical geography in emphasizing the influence of the past in shaping geographies of the present.¹²⁶

¹²⁴ Details of the sites examined in England and Ireland are set out in a detailed gazette of sites in the Appendix B iv and C attached to the thesis.

¹²⁵ Liddiard & Sims, *A Very Dangerous Locality*, pp.1-3.

¹²⁶ Mike Heffernan, Historical Geography: the changing face of the profession in Britain, (*Institute of Historical Research*, 2008) accessed at https://archives.history.ac.uk/makinghistory/resources/articles/historical_geography.html

This multi-disciplinary approach adds strength to our understanding of the complex web of influences that shape our relationship with the landscape. The material and cultural evaluation of the use of the land and our attempts to find a deep understanding of landscape change over time is crucial to the approach.¹²⁷ This involves seeking to understand the nature of the landscape before or as change factors influenced it. It also requires understanding how human influences on the landscape brought about permanent change, either deliberately or coincidentally. As the location and distribution of land used for military purposes is the focal point the information gathered, its analysis and presentation is best supported by cartography. As a result, extensive use has been made of Geographic Information Systems (GIS) as a powerful set of tools to aid the research methodology. GIS enables the analysis of large datasets, the overlay of layers of information on base maps to create accurate distribution maps and detailed plans. This kind of analysis would have been prohibitive in manual forms.

1.6 Sources

Sources for the study of the military estate are extensive. Parliamentary Papers (PP) and War Office records (TNA, WO) provide the main sources in establishing the strategic and legal chronology for the acquisition of land for military purposes.¹²⁸ These include reports on the performance and requirements of the military and the relevant bills and acts within the House of Commons and House of Lords Papers. Of particular significance amongst the PP are the Annual Army Estimates, a number of reports from Commissions and a series of barrack returns. These Estimates provide a commentary on the levels of investment and the changing priorities for organizing and accommodating the military. Reports of commissions set up to investigate issues of concern to and about the military, and especially those focused on Barrack Accommodation,¹²⁹ major re-organisations, reforms and political oversight, are

¹²⁷ Della Hooke, *The Appreciation of landscape history*, (Society for Landscape Studies, 2000), pp. 143-156.

¹²⁸ British Library Collection Guide to UK parliamentary publications:
<https://archives.parliament.uk/online-resources/parliamentary-papers/>;
<https://www.nationalarchives.gov.uk/information-management/producing-official-publications/parliamentary-papers-guidance/types-parliamentary-paper/>; Examples of the detail that was extracted from these sources are illustrated in Appendices Ai-Aviii attached to the thesis.

¹²⁹ PP, Barrack Accommodation for the Army, (C.405, 1855).

particularly informative.¹³⁰

Early barrack returns, such as those for 1810, 1822, 1831, 1853, and 1857, listed each individual barracks and its capacity or the number of men actually accommodated.¹³¹ These are the main source for developing the early distribution of the developing military estate. By listing where the resources were to be used in priority order, the objectives and priorities of both the military leaders and politicians can be discerned. However, because a project had been prioritised was not always a guarantee that it was implemented. Therefore, it is essential to track developments over a period of time and check for evidence of completion. Such a detailed use of sequences of Parliamentary Papers on military matters helps change perceptions of major reforms. Some of the literature on reforms, for example, those relating to the Cardwell Reforms of the 1870s, give the impression of a single event. Scrutiny of the full range of Reports show that the Reforms took several decades and the geography of regimental depots was not the result of one single plan.¹³²

Out of the many hundreds of Parliamentary Papers, the mapping of the emerging military estate rests on three key documents. The Lands and Tenements (L&T) returns for 1862, 1878 and 1900 provide the only comprehensive record of the extent and history of the sites owned by the state for military purposes across the whole of Britain.¹³³ These are records of the land owned and rented by the War Office for military purposes across the whole of Britain. A detailed analysis of each of them has

¹³⁰ TNA WO32/ 7189, Report of the Committee on the Local Administration of War Department Lands, (Lucas Commission 29/5/1911); PP, New Forest Rifle Range, (Pelham Report 1892).

¹³¹ TNA WO55, Barrack Returns, Ordnance Office and War Office; TNA WO44, Ordnance Office and War Office: Barracks, Ireland (Transfer Returns); TNA WO 78/6010, Great Britain, ordnance stations, barracks and depots, 1810; PP, Number of Officers, Men and Horses at each Barracks in GB, (C.188, 1821) ; PP, Places for barracks for Ordnance in UK. (C.330, 1822); PP, Return of Barracks fit for Troops, (C.227, 1831/32); PP, Cavalry and Infantry Barracks in United Kingdom, (C.176 ,1857).

¹³² PP, Military Forces Localization Act, (C.31. 1872-'94); PP Reports relating to Army Organization , (C.2792.1881); PP, Military works, to make further provision for defraying expenses, (C.283. 1901).

¹³³ PP, Military Stations in United Kingdom and Lands, Tenements and Appurtenances held by Military or Ordnance Depts. C.305 (1862); PP, Lands and Tenements purchased or rented in the United Kingdom and Channel Islands by the War Department. (C.402 1878); NAM. 2011-11-24-9, War Department Lands at home, 31st March 1900.

been carried out here at a national and regional level to enable an evidence-based approach to mapping the origins of the military estate. The growing political interest in land ownership and stewardship during the nineteenth century led to developments such as the Land Registry. At the time the military were exempt from such records but the Annual Army Estimates required increasingly detailed information about new developments and sites that were no longer used.¹³⁴

After the reform of military structures and the incorporation of the Ordnance Department's functions into the War Office, increasingly accurate records of military land holdings became necessary. The details for Ireland were first set out in 1860 and updated in the 1862 return. The 1862 Return sets the context for these land censuses with clear parameters for inclusion of land in the return.¹³⁵ This also identifies some of the limitations. The L&T were a return of the names of all military stations in the United Kingdom, including the Channel Islands, and all Lands, Tenements, and Appurtenances whatsoever, at present or within the last 12 years held by the Military or Ordnance Departments. In other words, land used between 1850 and 1862. The same instruction appeared for the 1878 return which was created as an updated version of the 1862 return. By including land owned or leased but no longer used the returns provide a useful detailed census of military land as well as active current use at the time of the census. The 1900 L&T return was similar, other than the period covered was land purchased or leased for more than 21 years. These three returns provide the most comprehensive listing, with associated information, of all military land held by the relevant State Departments. They are a rich source of information, not only about location, cost and previous owners but importantly about extent.

¹³⁴ TNA - War Office Army Estimates. - These forecast army expenditure annually by the WO for Parliamentary approval. The Mutiny Act preamble required this to be repeated annually until the Army Act of 1881 which secured the constitutional principle of control of the army by government. This annual focus on the army was a feature which ensured that the finances of the army, as well as its functions, were under constant political scrutiny. Creating the arguments for the funds was hard fought and generally created a conservative environment for the development of military facilities.

¹³⁵ PP, L&T return (C.305, 1862), a record of land holdings in a tabular form, the County; Name of Station, acreable extent of each. Tenure, whether Fee or by Lease, from whom Purchased or rented, date of acquisition, amount of Purchase Money or Rent, and for what Term, if sold, or Occupation Discontinued, Date of to whom Sold or Surrendered.

However, the time frames of 12 and 21 years for ownership and use of the land limited the recording of some important sites used by the military. This included some militia barracks and the development of volunteer drill halls and rifle ranges. Estimates of the possible extent of land used for these purposes have, however, been included in the analysis that follows. Because the records did not include land used for short periods for manoeuvres and camps the overall impact of the military on the land was not recorded. But the L&T returns, nevertheless, provide a reliable record to set out the impact on the landscape and the emergence of a managed estate of land used for military purposes.

Whereas the L&T reports provide the national picture, it is the site plans of barracks and ranges, mainly produced by surveyors from the Royal Engineers, that provide detailed information about the layout of individual barracks and training facilities.¹³⁶ While some of these show the original design of the facility, they were more commonly re-produced when changes to the site were needed and identified changes in function and form. They are drawn to precise scale and enable detailed analysis of each site. Several iterations of plans show the changes and improvements to that site over time and provide a detailed insight into the functions carried out. These documents enable a study of the accommodation provided, the size of the site, the elevation of the buildings and identify the services provided to enable the military community to function.¹³⁷ Ordnance Survey (OS) maps show the overall extent of a site and its situation within a wider geography. The first edition county surveys of the Ordnance Survey of Britain and Ireland were carried out between the 1860s and 1880s with some maps in Lancashire and Yorkshire commencing in the 1840s.¹³⁸ The first revisions were predominantly in the 1890s.¹³⁹ The Ordnance Survey of Ireland completed the

¹³⁶ TNA WO 78 records created or inherited by the War Office, Armed Forces, Judge Advocate General and related bodies.

¹³⁷ Available at TNA and some Regimental Museums; for Ireland on the Óglaigh na hÉireann site: <https://www.militaryarchives.ie>.

¹³⁸ First and revised edition OS maps through Edina Digimap, coverage of Ireland at TNA and University College Dublin.

¹³⁹ <https://maps.nls.uk/os/county-series/dates-england-and-wales.html>.

first large scale survey of a country between 1829 and 1842.¹⁴⁰ OS maps have a high level of accuracy in terms of scale, location and extent. The military links through the Ordnance Department mean that the topographical information provided was initially relevant to military planners and officers. This is a rich source for reconstructing the morphology of sites. Different editions of maps show the changing environment of sites where urban growth and competing land use can be identified. The OS maps (1st revision) prove particularly useful in establishing the location and extent of Volunteer rifle ranges after the 1860s. These provide a valuable complement to the L&T returns which do not hold information on these, usually, short-leased facilities. Their limitation for some military sites, defence structures and weapon manufacturing and storage is that in various editions the sites are left blank for security reasons. Good examples of these blanked out sites are at Tilbury Fort and Waltham Abbey Gunpowder stores and manufacturing during the nineteenth century.

While the Parliamentary Papers, and especially the L&T returns form the core of the source material analysed, the picture of the developing military estate they portray has been complemented by a number of other sources which illustrate the military using the land acquired. Changes in the British military during the nineteenth century are also illustrated through soldiers' voices as reported in their stories in newspapers, studies and biographies.

The biographies of a small number of soldiers and attestation papers exemplify the journeys around the military estate during their service. For example, George Calladine's long, world-wide military story starts in 1810 in the Midlands of England and ends with ill-health retirement from the army in 1837, returning from Ireland to his beloved Derbyshire.¹⁴¹ These provide an important link to non-material culture that puts people into what could have been devoid of human impact other than through politicians and military leaders. Newspapers are a rich source of local commentary on

¹⁴⁰ <https://www.arcgis.com/home/item.html?id=4c4af6485786491491b8f1c0a0e8aa94>; <https://www.irelandxo.com/ireland-xo/history-and-genealogy/timeline/first-ordnance-survey-ireland-begins>.

¹⁴¹ Maj. M.L. Ferrar, *The Diary of Colour-Sergeant George Calladine, 19th Foot, 1793-1837*. (London, 1922); See also William Surtees, *Twenty-five years in the rifle brigade*, (London 1833 / 1973).

developments in an area, sometimes covering long periods from a journalist's report on plans for an event or installation to providing evidence that it was in use. While a cautious approach is needed in terms of the accuracy of such reports, newspaper evidence is particularly useful in tracking the competition for land, local disputes and reports of resolution. Such evidence has limitations because of bias or inaccuracies but also the limitations of geographic spread. Newspapers are obviously more freely available in the growing urban settings. This does lend itself to bias through political or commercial pressures that may influence any proprietor to support or challenge a development.

Google Earth was used as a tool for the initial scanning of known locations that helped frame fieldwork. It aided the identification of the 177 sites examined ranging from a few acres for small barracks as at Great Yarmouth and Stockport, or batteries at Tynemouth to Otterburn's 57,000 acre training facility. The quality of images, especially in 3D vary considerably but they provide an excellent resource for preparation for field work through the initial analysis of sites in the current landscape. The ability to measure reasonably accurately on a plan of a site and gain elevation information provides a helpful resource in carrying out initial examinations of sites and assessing both site and situation.

Regimental pride and attachment to place was reinforced by the late nineteenth-century reforms. Since then, many regimental histories have been archived and protected in regimental museums and archives. These provide an additional source in directing attention to local studies. Barrack and regimental service orders and histories, as well as soldiers' papers, letters and diaries help place real individuals within the bricks and mortar and open fields of their accommodation and training, focusing on military purpose from the soldiers' perspective.¹⁴²

¹⁴² e.g. Edward Foster 1st/14th Bedfordshire regiment and 1st/14th Buckinghamshire regiments 1803 - 1826 (File 76c - 112 Regimental Museum York); Diary of James Edwin White 6043 1st Battalion East Yorkshire Regiment 1899-1907, (Regimental Museum York).

1.7 Conclusion

This chapter has set out the research focus, methodology and sources used to provide a detailed analysis of the influences on the growth and extent of land used by the military during the hundred and twenty-five years up to the First World War. The monuments that remain, provide evidence of where soldiers were accommodated, trained and deployed at home. Together with the maps, plans and documents they provide a powerful combination of sources that have enabled a mapping of the origins and changes in the military estate in a way not seen before.

This thesis shows that the origins of the military estate certainly go well back into the nineteenth century to the Napoleonic War and some of the sites had their origins in the centuries before. The detailed mapping illustrates how the factors influencing the need for military land played out differently in different regions. The military estate in southern England is well documented and several studies of the defence of the south have been published.¹⁴³ This study focuses on the lesser studied regions of eastern and northern Britain. Before the case studies can be properly examined the development of the legal infrastructure for acquiring land for military purposes has to be understood and it is to the archival search for clarity about the relationship between the military, land ownership and stewardship that we now turn.

¹⁴³ John Gooch, *The Prospect of War, Studies in British Defence Policy 1847-1942*, (London, 1981); Ian V. Hogg, *Coast Defences of England and Wales 1856-1956*, (Newton Abbot, 1974); John Goodwin, *The Military Defence of West Sussex*, (Brighton, 1985).

Chapter 2: - An Emerging Military Estate.

Two new circumstances have contributed to the present result. One is the rapid spread of the population in many parts of the country, and the manner in which areas which not long ago were comparatively waste-places have been built over. In the second place, there is the greater strictness of inspection which now prevails. There is no doubt that in old days the inspection of the small local ranges was of an extremely easy character; a thorough overhauling has now taken place.¹

2.1 Land acquisition for the military.

A military estate is more than how the land is used for military purposes. It includes how land was acquired, landowners treated and whether on-going access was to be available. The estate also identified where responsibility for the land should lie on behalf of the Crown and set out responsibilities for disposal as well as acquisition. In other words, a managed system of land for the military. This chapter explores the growing demand for land for military purposes and the legal mechanisms for acquisition. It identifies factors which had the most impact in creating and controlling the demand for military land. Besides a list of Acts in the Appendix of the 1882 Lands Committee,² this study sets out for the first time the political and legal foundations for the military acquisition of land from the beginnings of the Barrack Department in Britain in the 1790s to the work of the Lands Committee in the War Department immediately before the First World War. While it is acknowledged that the examination of acts and legal powers is not the most riveting story, it is worth persevering with and following through its chronology, in order to understand the reasons for change. In short, it is fundamental to understanding the genesis of what became a major landowner in Britain in the twenty-first century.³ It also sheds light on the military's position in society and how the needs of the military and attitudes to it changed.

¹ Hansard - HL Deb 17 July 1899 vol. 74 cc977-8 (Volunteer Rifle Ranges). [Secretary of State for War responding to a question about finding safe ranges].

² TNA WO 33/39 (f503), Lands Committee Report, Appendix K.

³ <https://abcfinance.co.uk/blog/who-owns-the-uk/>
<https://www.lovemoney.com/gallerylist/72713/the-uks-50-biggest-landowners-revealed>, accessed April 2018.

The Crown estate was the basis of Royal income and power from the Middle Ages. It once owned up to a third of England. Over many years this reduced considerably as much of it was passed to private landowners and by the seventeenth century most of the Crown lands had been sold off. By the beginning of the eighteenth century this became a source of concern as parliament was worried by the gifts of land they thought William of Orange had made to his supporters.⁴ As a result, the Crown Lands Act was passed in 1702 to prevent the monarch from disposing of any Crown or government land. The Acts that followed sought to clarify how the monarch's interests in land acquired were protected and managed. The complex legal position can be thought of as ensuring the state had sufficient land for military purposes vested in the monarch's ministers and not adding to the complexities and suspicion of land becoming solely a resource of the Crown. Some of the land acquired for military purposes was itself Crown land, particularly where some fortifications were incorporated into the Crown estate from as far back as 1427.⁵

In the last quarter of the eighteenth century the land owned by the state for the use of the military in mainland Britain was limited, in the main, to coastal defences and facilities for ensuring the safety of the monarch. The first barrack-building programme of any great significance in England occurred with the distribution of cavalry barracks in the 1790s. It was generally accepted that land was needed near the coast of Britain for defence infrastructure and across Scotland and Ireland for the purposes of internal control. The provision of permanent military sites was reluctantly accepted as barracks were built in increasing numbers in the nineteenth century, especially where the troops were needed to aid the civil powers, recruit for colonial service, man coastal defences and for the defence of London. The aftermath of the major conflicts in Crimea and South Africa later in the nineteenth and early twentieth centuries transformed, albeit slowly, views about tactics, strategy and training. This created the impetus for large scale demands for land which could not be achieved without enabling legislation.

⁴ Christopher Jessel, *A Legal History of the English Landscape*, (London, 2011), pp. 116-117.

⁵ TNA WO 33/39 (f503), Lands Committee Report, Appendix K.

2.2 Political interest in land ownership.

One of the characteristics of the military attitude to land was an increase in bureaucracy and the use of statistics in line with the growth of state control.⁶ This requirement for greater factual accuracy to support policy developments mirrored wider attempts by the state to clarify who owned what land and the birth of land censuses and regular returns made by various governmental agencies. Many of these, however, were partial and lacked universal coverage. J.S. Mill described this as the vulgar empiricism of Victorian Britain, the belief of practical men that knowledge could be achieved by the accumulation of information.⁷ This thinking had a significant influence on the political leadership of the military which responded to enquiries and planning with statistical information including, head counts, accommodation returns and health information to influence the annual financial estimates. Recognition also grew that the land itself, as an important resource, would benefit from careful management. This required detailed information on extent, tenure, rental values and links to other landowners. This analysis became increasingly important from the 1850s and especially when the War Office took on greater responsibilities for land vested with it.⁸

This changed emphasis was influenced by a general 'Victorian' political environment that affected the government's investment in the military and hence in its land holdings. In relation to the physical environment there was concern about the enclosure of commons that, in part, created a growing interest in rural access as country walking became an important leisure pursuit and developed a powerful sense of place for many. For the military the enclosure of commons would limit their free access to training grounds and camps when required. There were emerging debates about rights of access to land and the provision of water supply, especially for rapidly

⁶ J. Bartlet Brebner, 'Laissez Faire and State Intervention in Nineteenth-Century Britain.' (Vol. 8, *JEH*, Cambridge, 1948), p.59-73.

⁷ *Ibid.*

⁸ *Ibid.*

expanding northern manufacturing towns. These themes of contestability in the use of the landscape frequently affected the acquisition of land for the military.⁹

Land remained a dominant theme in nineteenth-century political debate but it created little practical output. Land reform possesses few monuments recording its later success, yet in its day it was worthy of considerable debate.¹⁰ Thompson does not dismiss land as an irrelevance in British thinking, rather he seems to compliment nineteenth-century politicians for their tactics in deceiving the reformers 'into fruitless expenditure of their energies'.¹¹ The land debates raged for many decades, predominantly about the law of primogeniture. There was fear that frustration would build with the lack of meaningful reform and changes would be forced by violent action. Changes did take place around less expensive land transfer, protection for tenant farmers, greater economic freedom for owners of settled estates, or creation of facilities for establishing small holdings. However, despite being important these did little to reshape the social structure and alter the balance of political power, which were the higher order objectives.¹²

The accuracy of information as to who owned what land became a growing area of interest during the century. The proposed survey of land under the Tithe Commutation Act (1838) necessitated the development of accurate surveying techniques leading to correct plans on a sufficient scale. The creation of local taxation based on land holdings gave landowners and occupiers, an interest in the accuracy of such surveys.¹³ In 1857 detailed returns for parishes in different counties listed the number of tenements and the amount of rate for the relief of the poor. A year later there was a survey of Government property and the military estate was no exception. The return listed the main sites and properties and what contribution those properties paid to the Poor Rate. It identified almost 11,000 acres of military land acquired between 1828

⁹ William Taylor, The culture of 'environmentality' and the exceptionality of the countryside. Martin Hewitt (ed.), *The Victorian World*, (Oxford, 2012), pp. 270-271

¹⁰ F. M. L. Thompson, Land and Politics in England in the Nineteenth Century, (Vol 15, RHS, Cambridge 1965), p. 23.

¹¹ Ibid., p.32.

¹² Ibid., pp. 32-33

¹³ PP, Proposed Survey of Lands under the Tithe Act, (C103, 1837), p.3.

and 1858 with the largest land holdings around the major dockyards.¹⁴ Such an interest in information about land and its value led in 1859 to proposals for the establishment of a Land Registry in England.¹⁵

HM Land Registry was established in 1862 under the Land Registry Act and amended under the Land Transfer Act 1875. The intention was to enable landowners to register the title to their property, thereby creating certainty in ownership and making dealings in land simple and economical. The 1875 Act absorbed the previous registry and instituted new procedures for the voluntary registration of properties not already registered under the earlier act, but it was not until 1925 that registration became compulsory. Unfortunately, it is a poor source for details of military land, though clearly records were kept within the War Office.¹⁶

While the military was exempt from registering its land, it is reasonable to assume that the general interest in land ownership, extent and cost, suited nineteenth-century bureaucratic minds and prompted the Government Departments themselves to account more accurately for their land. With Annual Army Estimates any possibility of acquiring new land for whatever purpose was likely to be challenged particularly if The War Office was unable to provide detailed statistics about its needs.

The nineteenth-century interest in land ownership issues is neatly illustrated by the debate in the House of Lords in February 1872. The Earl of Derby acknowledged that the Government was to proceed with a land ownership census (subsequently popularly called the Second Domesday). The return of Owners of land in 1873 listed the owners of one acre or more, and 'an estimate of the extent of commons and waste lands in each county.'¹⁷ The census did, however, indicate that about half the land was owned by only 4,000 landowners. At the time the 'census' did not show the impact of

¹⁴ PP, Return of purchases of Land or Tenements by Government since 1830, in Parishes Part of or adjoining Her Majesty's Dockyards, (1858).

¹⁵ PP, Registry of Landed estates, (Land Registry Act, 1859).

¹⁶ PP, Work under the Land Transfer Acts, 1875 and 1897, the Land Registry Act, 1862, (1900, Return No. 306).

¹⁷ England and Wales (Metropolis) 1873 Return of Owners of Land, (1875).

Government but clearly there was a growing expectation that Government Departments would account more accurately for their land holdings. Figures 2.1 and 2.2 illustrate the records drawn from the War Office Lands Branch files. These illustrate that details were kept in ledgers and gradually the land was registered and re-registered and deeds filed with the Land Registry, but this took many decades to complete.

Figure 2.1: Examples of early military land records (TNA WO 332/11 Lands Branch - Index to deeds: barracks; Book1, 1646-1846).

Reference to Deposit of Deeds in Strong Room	Date of the Deed by which the Property is held, and also of the Title Deeds connected therewith	From whom Purchased,— Description of Property, &c	Norwich.	
			Bundle	Book
10. 26	13 rd June 1793	Jemshong Hennista to The Right Honble Sir		
C.	A. H. F. 24/1/59.	George Young—Assignment of a piece of Land held of Dean and Chapter of Trinity Church in City of Norwich on lease to Buxham Cutting dated 1 st December 1789 for 21 years and by the heirs of Buxham Cutting, assigned to Hennista Jemshong 21 st May 1793 containing by estimation 10. 1. 3 In consideration of		
		A. H. F. 1 st September 1785.	Puc. W ^m to Francis Fourger Lease of premises in Hamlet of Packthorpe in City of Norwich from 10 th October 1785 for 4 years. Expiry 10 th October 1799. Cancelled	

In Figure 2.1 the examples show the agreements in 1785, 1793 and 1826 with the Dean and Chapter in Norwich for the Cavalry Barracks in the City.

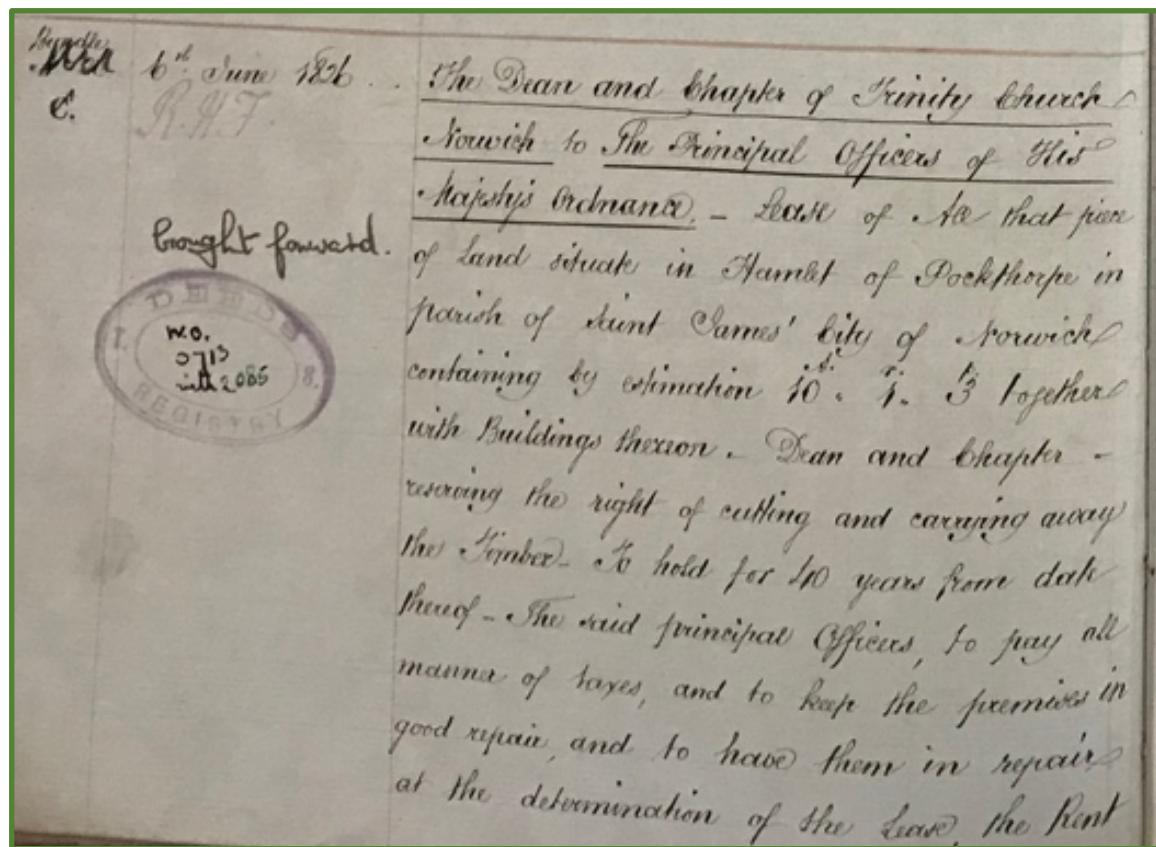


Figure 2.2:- Examples of military land agreements in East Anglia in 1883. (TNA WO 332/34 Lands Branch Register of deeds. 1857-1889)

Date of the Deed by which the Property is held.	DESCRIPTION OF THE PROPERTY.	Custodian	Fees which taken or purchased.	Amount of Purchase Money.			Amount of Rent.			Reference to the Deed.	REMARKS
				£	s.	d.	£	s.	d.		
21 30 June 1883	Lease of part of Alcear Ryley for a Bakery		Part of Sefton.	100	-	-	366	-	-	RE-REGISTERED No. 1855/51	Annul from 2 July 1883
17 2 July	Deed: Agreement as to formation of a New Road at Neffley.		Part of York.	366	-	-	100	-	-	100	1855/51
26 13 "	Agreement for letting Rifle Range at Orchard Bottom, Somerset.		Col. H. B. Patten.	45	-	-	366	-	-	102	Term 5 years from 1 st April 1883
20 "	License to use Rushmore Heath, Ipswich for Military Exercises.		Marquis of Bute.	-	5	-	366	-	-	103	Agreement dated 1883 in Book 5.
23 Aug.	Lease of Militia Depot at Ely		Clerk of Peace County of Cambridge	200	-	-	366	-	-	104	Term 99 years from 10 April 1883 RE-REGISTERED No. 1858/51

2.3 Responsibility for military land 1790-1855.

The previous sections have outlined the importance of land ownership and the wider political context for creating detailed records of land ownership. The following sections provide the detailed chronology of how responsibility for military land developed. The

current Byelaws team's response to a query, from this author, about where the terms 'Military Estate' or 'Defence Estate' came from, was that they were not aware of any formal meaning surrounding these terms. Their view was that the starting point was the 1964 Defence Act. Prior to that:

there were separate Ministries and their associated land was referred to as, for example, Army Department land and War Department land. After the creation of the MOD the former names remained but people also called the areas MOD land, MOD estate and Defence estate generally depending on how they felt on that particular day.¹⁸

The 1964 Act charged the Secretary of State for Defence with the general responsibilities for defence and created a defence council with an Admiralty Board, an Army Board and an Air Force Board under it. This led to the incorporation of the Secretary of State for Defence and vesting in that office a range of property rights and liabilities. In setting out the detail of what the Act transferred by way of those land rights and responsibilities it noted that it included the responsibilities under the Defence Acts of 1842 to 1935 and section 7 of the Land Clauses Consolidation Act as amended in 1860 for all aspects of military land as now vested in the Secretary of State.¹⁹ The byelaws created to make the estate secure and control public access came from, 'provisions of the Military Lands Act 1892 (s14), [under which] the Secretary of State for Defence is empowered to make byelaws to regulate the use of land being used for military purposes.'²⁰

It could reasonably be argued that the military estate, as a managed entity, came into being with the passing of the earliest of those defence acts in 1842. It provided the legal underpinning for military land acquisition by the state. Others may place a claim on the abolition of The Board of Ordnance in 1855 when responsibility transferred to the Department of the Inspector General of Fortifications within the War Office. This

¹⁸ Pers. Comms - Byelaws Team MOD. December 2019.

¹⁹ PP, Defence (Transfer of Functions) Act, (1964, Ch15).

²⁰ www.gov.uk/ministry-of-defence/byelaws-review-2019.

thesis argues that it was in effect before that period, from the 1790s, but the process was one of gradual amendment, refocusing, consolidation and changed responsibilities rather than one single event. What is clear is that by the middle of the nineteenth century there was a substantial military estate to be organised, managed and developed. This was something that the legal powers of land acquisition underpinned.

Artillery fortifications built in the fifteenth and sixteenth centuries were mainly attached to coastal towns, often integrated into subsequent urban development.²¹ The Ordnance Department was the first arm of the state to have responsibility for military land. It was only manned by a small number of officers and gunners across the country.²² Up to the middle of the eighteenth century, gunpowder was made solely under contract by Monday Hortons who had established a powder mill at Faversham. In 1759 the magazine which existed at Greenwich was taken down and erected at Purfleet.²³ What had been private industry providing such an important part of military supplies was eventually brought into the control of the Ordnance Department. However, during the eighteenth century the Department attracted continuous criticism with accusations of mismanagement and corruption. Parliament became more concerned about the rising national debt and scrutinised the various military departments in greater depth. This continued for the rest of the century and Edmund Burke singled out The Ordnance for special criticism about its accounting.²⁴ With such a poor reputation amongst politicians, and some military commanders, its responsibilities for the wider estate were diluted. In 1792 legislation was introduced setting up a Barrack Department in Britain as part of the army and The Ordnance lost responsibility for barracks.²⁵ A year later a Commander-in-Chief (C-in-C) was

²¹ Andrew Saunders. *Fortress Britain; Artillery Fortification in the British Isles and Ireland*, (Hampshire, 1989).

²² George Raudzens, The British Ordnance Department, 1815-1855, (Vol.57, No. 230, SAHR 1979), pp.88-107.

²³ PP, Purfleet Act 33Geo.II.C.XI.

²⁴ Major-General Forbes, *History of the Army Ordnance Services*, (London, August 1929), Part 3, pp. 170-175.

²⁵ Douet, *British Barracks 1600-1914*, p.68 'The Barracks Department took a strategic view of the accommodation needs of National Defence, the acquisition of land required and the building of permanent barracks.' A Barracks establishment was set up in Ireland in the early 1700s.

appointed and under the stresses of The French Revolutionary Wars the Ordnance failed to supply enough weapons, munitions, engineers, and artillery experts. In desperation the Duke of York (C-in-C) created a rival engineering branch in 1799, the Royal Staff Corps, and the Treasury, Horse Guards and East India Company all developed independent munitions factories.

Between 1790 and 1795 thirty-three Cavalry and six Infantry Barracks were planned and construction began, costing £457,277, but only six percent of that was for land purchases as land was frequently leased from the Church or the aristocracy in the initial phase of development. A further £277,500 was needed to complete the barracks. These accommodated 43,748 men and 2,966 horses in 65 temporary barracks which had cost almost £250,000 during the same period.²⁶ From 1793 to 1804, £4.15 million was spent on buildings for the purpose of barracks for the army in Britain and the Channel Islands with 38% spent between 1793-1799 and 62 percent in the next five years to 1804.²⁷ While land use and sites were being recorded and plans drawn there is little evidence that the nature of the military estate itself was under overall management. While the land was acquired through the Barracks Department each site was managed as an individual entity.

In 1804 an Act was passed to secure Chatham and for the use of His Majesty's Ordnance at Warley Common and Woolwich. The Act set out in detail the transfer of each piece of the Commons or waste land to the Trustees.²⁸ It shows that at this stage the land required by the military was subject to individual agreements and transfers even though these were incorporated into one overall Act which specified those allocated the responsibility to look after the land for the monarch.

By 1815 The Ordnance Department was so discredited that it was only saved by the ending of the war with France. All land and property occupied for the Barrack Service was vested in the Comptroller of the Barrack Department in 1817 authorising the

²⁶ Account of money used by the Barrack Master General, (1796, University of Cambridge Library).

²⁷ PP, Fourth Report of Commissioners to enquire into the Barrack Department, (C315, 1806).

²⁸ PP, Act to vest certain Messuages, Lands, Tenements and Hereditaments in Trustees, (1804).

Barrack Master General to purchase land and sell redundant land with the consent of the Lord Commissioners of the Treasury. This tidied up permissions that had come through from a similar Act in 1808 but vested in the head of the Barrack Department so that he 'should be enabled to maintain and defend actions and suits, in relation to all contracts made for the service of the Barrack Department, or in any manner relating thereto.'²⁹ In other words, there was one point of contact in terms of military land. This could have been the beginnings of a co-ordinated management of land for military purposes had it not been for a final resurgence of the Ordnance Department.

Despite his earlier anger with the Department,³⁰ Wellington gave it a new lease of life supported by a further Act in 1821.³¹ This clarified the management of the military land. All previously acquired lands, and all in the future, were to be purchased for the service of the Ordnance and vested in its Principal Officers as well as the permission to sell or change lands in future. Receipts from sales were to be paid into the Treasury of the Ordnance in the Tower of London. However, much of the act dealt with the proper accounting for the funds spent and raised and tried to ensure proper auditing of funds rather than specifically identifying the future need for land, its management, stewardship and development.

The Ordnance Department was responsible for the supply of arms and munitions to the army and navy, and also for the construction and maintenance of military buildings. All too often their efficiency was diminished by disagreements over authority, especially where construction sites and works were controlled by other departments. Engineers and artillery officers were often employed by other departments or companies responsible for projects. The 1821 Act conveyed possessions to the principal officers of the Ordnance for the time being in trust for His Majesty and his successors. This meant that only the Department was authorised to protect military properties from trespass, sell property and land surplus to requirements and purchase

²⁹ PP, Act Vesting all Estates and Property occupied for the Barrack Service, in the Comptroller of the Barrack Department, (1817).

³⁰ Jacqueline Reite, 'As far as the Ordnance Department is concerned', (*Vol. 100 No 402, SAHR, Autumn, 2022*), pp. 174-194.

³¹ PP, Act Vesting all Estates and Property, occupied for the Ordnance Service, in the principal Officers of the Ordnance, (1821).

new sites for fortresses, barracks, and other defence installations.³² As Wellington, who took over as Master General of the Ordnance in 1819, put it:

I cannot, however, but be of the opinion that great advantage would be derived to the public interest by placing not only barracks at home and abroad, but all military works in the colonies, under the immediate superintendence and direction.³³

This act, therefore, encompassed the whole empire and went into force in the British Isles immediately. Barracks were now built and maintained by Ordnance personnel and therefore ought to have been under the management of the officers who incurred the largest responsibility for them.

After the 1821 Act clarified the responsibilities for military land there was a series of detailed returns on the barracks in Great Britain and Ireland over the next decade, showing the size of barracks by accommodation space and the level of occupancy for men and horses.³⁴ Some returns also focused on the costs associated with each barracks and the repairs that were required. However, separate reports were made in relation to Ordnance Land services though these did not always include defence fortifications.³⁵ Between the two main sources the relative size, condition and costs of repair can be deduced but unfortunately it is only from the study of the plans for individual barracks that the amount of land used by the military can be estimated. These returns enable a detailed mapping of military sites set out in Chapter 3 (Figure 3.1) but the extent of military land, at this time, can only be estimated. Even if the land allocated to a barrack site was, on average, ten acres the total acreage used by the military at the time would still have only been in the order of two or three thousand acres and no formal census of military land acreage has been found for that period.

³² PP, *Act Vesting all Estates and Property*, (1821).

³³ George Raudzens, *The British Ordnance Department, 1815-1855*, (Vol. 57, No 230 SAHR, 1979), p.95.

³⁴ PP, *Return of Barracks, January 1822: The Expense in supporting each Barrack*, (January 1822).

³⁵ PP, *Estimates of the charge of the office of Ordnance for Great Britain*, (1823).

The Ordnance Department's responsibility for military land management was further strengthened in 1832.³⁶ This built on the previous legislation and focused on 'copyhold or customary or ancient demesne tenure' in Britain (including Ireland) which had been purchased or taken into trust by the Ordnance Department or Barrack Department 'for His Majesty or His Royal Predecessors, and His or their Heirs and Successors'. All rights were to be vested in the principal Officers of His Majesty's Ordnance for the time being and their Successors in the said Office.³⁷

The Ordnance Department's responsibilities for military land were finally consolidated in the 1842 Defence Act. This gave clarity about the purpose of military land and the responsibilities of senior officers in the Ordnance Department. The Act gave the Secretary of State the power to acquire land compulsorily for the defence of the realm but he could not, under these powers, acquire land compulsorily for barracks as these were not considered an emergency feature in defence infrastructure.³⁸ The act meant that, 'all messuages, buildings, castles, forts, lines or other fortifications, manors, lands, tenements and hereditaments,' which had been placed with the Ordnance or Barrack Departments or any others in trust for Her Majesty and her predecessors, for the use of the departments or for defence, were now vested with the Principal Officers of Her Majesty's Ordnance. These officers could enter into contracts to acquire land but it should be taken with the consent of owners where possible. If that could not be achieved or where there was an urgent need the Officers could get agreement from the Lord Lieutenancy or equivalent for the area or from a warrant issued by the Commissioners of Her Majesty's Treasury or 'unless the enemy shall have actually invaded the United Kingdom at the time when such lands, buildings or other hereditaments shall be so taken.'³⁹

³⁶ PP, Act to extend and render more effectual Two Acts respecting the Estates thereby vested in the principal Officers of the Ordnance, (1832).

³⁷ PP, 1842 Defence Act, Vesting and Purchase of Lands and Hereditaments for those Services, and for the Defence and Security of the Realm, (C.94, 1842).

³⁸ Ibid., para. XIX.

³⁹ Ibid., para. XXIII.

Shortly after the Defence Act, Parliament passed the Inclosure Act of 1845 which was designed to tidy up the enclosure processes and improve Commons and land held in common. It also sought to remove defective or incomplete executions of land transfer and to clarify the need for general or local Inclosure Acts. 1845 was also the year of the Land Clauses Consolidation Act which was designed to consolidate in one act provisions usually inserted in individual acts authorizing the taking of Lands for Undertakings of a public nature. It set out the process by which compensation was paid in respect of common lands whether held by a manor or not and how meetings of interested parties should be convened to agree compensation. Importantly, the Act made clear that upon payment of compensation, 'all such commonable and other rights shall cease and be extinguished'.⁴⁰

While it was not directly concerned with the army, the passing of the 1845 Land Consolidation Act was something of a watershed in the acquisition of land for military purposes. The Act was specifically referred to in subsequent legislation where the acquisition of Commons was required, as at Strensall in Yorkshire.⁴¹ This enabled the permanent use of Common land building on the long relationship the military had with commons for camps and training. Land acts had flooded Parliament in the late eighteenth and early nineteenth centuries as every canal, railway line, turnpike and later military site required separate acts. The drafting of these was often poorly constructed and written in impenetrable language. Ten years earlier Bentham had tried to simplify this and his ideas were incorporated into Symonds' 'Mechanics of Law Making' in which he humorously illustrated the contorted language of transfer by using half a page to set out the lawyers' version of a simple action such as, 'I give you this orange.' It would start with, 'I give you all and singular, my estate and interest, right, title, claim and advantage of and in that orange, with all its rind, skin, juice, pulp and pips, and all right and advantage therein.'⁴² The need for clarity had been recognised in the 1801 Inclosure Act after defects in drafting had been highlighted from 1796 but little had changed in subsequent decades. Reference to this Land Consolidation Act

⁴⁰ PP, Land Clauses Consolidation Act - section XCIX, (1845).

⁴¹ See Chapter 4.

⁴² Frank A Sharman, History of the Lands Clauses Consolidation Act 1845 (Vol. 7, No. 1, *Statute Law Review*, 1986).

is seen frequently in subsequent military land acquisitions where common land was involved.

A further Defence Act was introduced in 1854 to facilitate the purchase of common, commonable and other rights. It enabled officers to use all the powers and provisions contained in the 1845 Land Clauses Consolidation Act whenever common land was acquired for military purposes. In other words, all the powers and provisions in the Land Consolidation Act were to be treated as if they had been contained in the 1842 Defence Act.⁴³ As the legal position became more enabling for military leaders, concern continued amongst politicians about the efficiency and effectiveness of the Ordnance Department and in 1849 a Commission of enquiry was set up to investigate its running.

It was only in the year before Crimea that the first attempt at anything like large scale combined training since the Napoleonic Wars was undertaken at Cobham Common in 1853. This was a significant prompt for the military leaders and politicians to consider the need to acquire greater areas under their control for military training which led to the acquisition of substantial parts of Hampshire for what became known as Aldershot Camp. The British Army was found to be ill-prepared to face active service particularly in the campaign against Russia in 1854 to 1856.⁴⁴ It was examples of just how poor the equipment of the British soldier was on arrival in Crimea that finally rang the death knell for the Ordnance Department. From a lack of greatcoats and disintegrating boots, to fifty-year-old camping equipment which rotted or broke, the condition of the equipment provided for the British soldier on active duty was inadequate in the early stages of the conflict. Even when the equipment was ordered the supply chain was inefficient and tents arrived with no poles and the supplies for the horses were as bad. Eventually the politicians and military addressed most of the issues. The supply and logistics units were drawn together in the field and at the same time that this took place in the theatre of war there was a similar consolidation at home where the Ordnance became responsible for providing all stores and equipment.⁴⁵ The mismanagement of

⁴³ PP, Defence Act, (1854, C.67).

⁴⁴ Major-General A. Forbes, *History of the Army Ordnance Services*, (London, August 1929), p.257.

⁴⁵ Ibid., pp.267-273.

supplies created the environment for a series of major reforms in 1855. The officer structure of responsibilities for army administration was reorganised. The Secretary of State for War was made responsible for all civil work connected with the army. He took over militia business from the Home Secretary and absorbed the office of Secretary at War. The Master General and Board of Ordnance, which for centuries had played such an important part was abolished. As a result, all civil and supply services were consolidated under the Secretary of State for War, accompanied by a great extension of the activities of the Ordnance Department, which became a servant of the whole army.⁴⁶

2.4 Responsibility for military land 1855-1914

The 1855 Act transferred the estates and powers vested in the Ordnance Principal Officers to the Principal Secretaries of State. In a few words the whole structure of management of the embryonic military estate was shut down and transferred to new political oversight. The wording of the Act made clear that it was the transfer of responsibilities for all land previously vested in the Ordnance 'for the Defence and Security of the Realm.'⁴⁷ This not only dealt with logistical issues but enabled the military to influence more directly their requirements for training and exercise. The following year the first operations under that transfer was to extinguish some rights of way and to stop up certain roads and paths near the Camp at Aldershot, actions not previously permitted legally.⁴⁸ This was followed by the first return of all the land holdings at Aldershot and the costs of the purchase. It also included details of the troops stationed there each year. The total at that time was reported as just under 7,063 acres at a cost then of [£]131,4451s.4d with [£]486,50 12s 6d spent between 1854 and July 1856 on huts and barracks. In 1855 12,245 troops were stationed there

⁴⁶ PP, Act transferring to Her Majesty's Principal Secretaries of State the Powers and Estates vested in the Principal Officers of the Ordnance, (C.117, 1855).

⁴⁷ Ibid.

⁴⁸ PP, Act to extinguish certain Rights of Way near Aldershot, (1856).

and the following year this had grown to 28,181 indicating how important Aldershot had already become in the geography of the British Army at Home.⁴⁹

The 1857 return while only covering the management of land purchased since 1830,⁵⁰ was a forerunner of the important Land and Tenements Returns.⁵¹ It listed 13 Admiralty locations, 59 sites across Britain and 27 across Ireland. In total some 11,621 acres were listed including almost 500 acres in Ireland and 186 acres bought for the Admiralty and with Aldershot taking up 57 percent of the total.⁵² Of course, this did not provide information about land acquired before 1830 but it does serve to illustrate that for the first time the land extent and value is shown indicating a different approach to managing Government Land within the War Office. In 1859 the provision to purchase common and other rights was amended to ensure that it did not prevent the erection of barracks on any lands taken.⁵³ In 1860 it became possible for the Secretary of State to acquire land by agreement, but not necessarily compulsorily, 'any land wanted for the service of the War Department, or for the defence of the realm'.⁵⁴ This extended the legal definition of land for military purposes to include barracks and any other use defined by the War Department.

The next decade brought about significant changes to the demand for, and management of, military land.⁵⁵ The 1860 Defence Act was a rapid response to the coterminous report of the Commissioners who examined the defences of the United Kingdom. This focused on the examination of how to make the dockyards and

⁴⁹ PP, Return showing the total number of acres purchased by the Nation at *Aldershot*, and the Total Cost, (1856).

⁵⁰ PP, Return showing all purchases of land or tenements made by Government since 1830, (1857).

⁵¹ The first L&T Return was published 5 years later.

⁵² *Ibid.*, (1857).

⁵³ PP, Further Provision for the Purchase of Common and other Rights by Her Majesty's Principal Secretary of State for the War Department. (1859)

⁵⁴ PP, Lands Clauses Consolidation Act (1845) Amendment. (1860).

⁵⁵ PP, Defence of the Realm Act (The Defence Act 1860).

estuaries more defensible within as short a period of time as possible. For the first time state reports recognised the crucial importance of there being sufficient land for the military to operate effectively. The report noted the importance of the acquisition of land and the expenses incurred. The Act identified that the plans would require the purchase of about 10,500 acres, while the space actually occupied by the defence buildings would not exceed 1,500 acres. The majority of the land which was necessary and needed to be kept free from obstructions but may have a revenue value of about [£]25,000 per annum when leased to farmers.⁵⁶

Therefore, this Act, recognised that some land in the vicinity of a fortification, which may not be required for the construction, should be kept free from buildings and other obstructions. This was so that the defence installations themselves could be defended. This introduced the notion of 'clearance rights' which in subsequent surveys added significantly to the land within the military estate. The series of photographs in Figure 2.3 illustrates the concept of Clearance Land overlooking Portsmouth. The Defence Act (1860), emphasised that the powers within the 1845 Land Clauses Act provided most of what was required to act quickly and arrange the necessary compensation.⁵⁷ The land was to be vested in the Secretary of State and provided him with the power of entry. It is worth quoting in full to illustrate how strictly the land use was to be controlled by the Secretary of State and influenced the appearance of a large swathe of the landscape adjacent to the more prominent defence installations, particularly in the Thames Estuary and at the major ports along the south coast:

From and after the Service of such Notices as aforesaid in relation to any lands required to be kept free from buildings and other obstructions, the following restrictions, powers, and consequences shall attach with reference to such lands: No building or other structure (other than barns, hovels, or other like structures of wood,) shall be made or erected thereon.⁵⁸

⁵⁶ PP, Report of the Commissioners appointed to consider the defences of the United Kingdom, (1860).

⁵⁷ Ibid., para. 29.

⁵⁸ PP, Defence of the Realm Act, (The Defence Act 1860).

Figure 2.3: Fortifications overlooking Portsmouth illustrate the concept of 'clearance land'



Looking south across Portsmouth Harbour where front facing armaments in the string of forts along Portsdown Hill were constructed to defend Portsmouth



Two of the forts, Nelson (left) and Southwick, illustrate the orientation of the fortifications.



North facing armaments at Fort Nelson looking across 'clearance ground'

The Act gave the Secretary of State the power to pull down buildings or structures and to cut down or grub up trees, and

to remove or alter all or any of the banks, fences, hedges, and ditches thereon, and to make underground or other drains therein, and generally to level and clear the said lands, and do all such acts for levelling and clearing the same as may be deemed necessary or proper by the said Secretary of

State, but in such manner, nevertheless, that evidence of the boundaries of the lands held by different owners may be preserved.⁵⁹

The Act provided powers to divert, stop up or alter, 'the level of any highway, way, sewer, drain, or pipe over, through, under, or adjoining any lands comprised in any such declaration as aforesaid.' In addition, it was lawful for him to alter the power or course and level of any river or watercourse that was not navigable.⁶⁰ In other words, the 1860 Defence Act not only provided quick access to the land required for the defence sites themselves, but provided wide ranging powers to shape the local landscape. In the 1862 L&T returns no land was designated as having been acquired for 'clearance rights' but by 1878 the L&T return showed 13,562 acres so designated though there was a reduction of just over fifty percent by 1900 when the coastal defences had a declining role and a landward field of fire for defensive purposes was much reduced.⁶¹

While the 1860 Defence Act focused on the southern defence sites, smaller, but not insignificant amounts were made available for projects commenced under the Ordnance at Colchester, Pembroke, Shoeburyness, Shorncliffe, Hythe and Fleetwood, all of which expanded the size of the land holdings as well as making previous accommodation in huts more permanent and in some cases new barracks were constructed.⁶² Building on the work carried out in Ireland in 1860, the first full census of land and tenements under the jurisdiction of the Secretary of State was carried out and reported in 1862. It listed the area of land owned, leased or hired for military purposes. This return provides something of a baseline of known land within the control of the military across the whole of Britain and is discussed in detail in the following chapter.⁶³

⁵⁹ PP, Defence of the Realm Act (The Defence Act 1860) paragraphs 40 and 41.

⁶⁰ Ibid., (1860).

⁶¹ See, L&T returns 1862, 1878 and 1900.

⁶² PP, Estimates for the purchase of land, and for the erection of permanent barracks and temporary huts, at each military establishment, (1861).

⁶³ PP, L&T Return of all military stations in the UK (incl. Ireland) and Channel Islands, (1862).

The 1870s military reforms, introduced in Chapter 1, made demands on the acquisition of land to build new regimental depots or expand existing sites for that purpose, and to develop regional training camps. The costs of Cardwell's reforms and how the expenses of the new Depots could be defrayed and provided for were set out in the 1872 Act.⁶⁴ The Act gave permission for the Secretary of State for the War Department to acquire lands and build on it as he saw fit. All lands acquired for the purposes of the Act were vested in the Secretary of State on behalf of Her Majesty. In purchasing land under the Localisation Act, the Lands Clauses Consolidation Acts, 1845, 1860, and 1869, referred to as "The Lands Clauses Consolidation Acts" were incorporated into this Act.⁶⁵ The Act also made it possible for the justices of any county and the council of municipal boroughs to transfer any barracks, storehouses for arms or ammunition, or other buildings or land held by the County Property Acts, 1858-1871. In a number of cases, such as Norwich, this part of the Act was used to enable the local City Council to make land available on Mousehold Heath for the development of the Regimental Depot and later to make land available for the relocation of the cavalry barracks that never came to fruition. This enabled local politicians to play a significant role in attracting military land developments to their area where they saw economic benefits.

Besides the focus on recruitment and infrastructure, the reforms in the 1870s also changed the responsibilities for the military estate with the subordination of the Commander-In-Chief to the Secretary of State for War, and the creation of a Surveyor General of Ordnance. At the same time a measure of decentralisation was attempted by attaching to each military district a representative of the surveyor general with the title of Comptroller.

The following thirty years of legislative control focused on three main themes. Firstly, the development and safety of sites for training and ranges such as at Strensall, Aldershot, Hythe, Millbrook, Shoeburyness, Middlewick, Landguard and along the foreshore of the Wash. The second theme was to continue the improvement of barrack

⁶⁴ PP, Provision for defraying Expenses of building Barracks - Localization of Military Forces, (C.222, 1872).

⁶⁵ Ibid., (1872).

accommodation and finally the legislation continued the clarification of responsibility for land acquisition and use.

In the last two decades of the nineteenth century responsibility for the large number of rifle ranges that had emerged since 1859 for the Volunteer Corps became clearer with increased involvement of the War Department. The ability of the Secretary of State to access Volunteer Rifle Range land if the owners transfer it to him rather than to the Volunteer Corps itself was made possible by the 1886 Drill Grounds Act. Where land was granted under the Act such purposes were deemed to be military and byelaws could be made accordingly. The Act clarified the position as follows:

it is proposed that the Secretary of State should without prejudice to his powers under the Defence Act, be empowered to acquire land, under the Land Clauses Acts practically for any military purposes, subject to the important restriction that he is not exercising compulsory powers under these Acts, without the special sanction of Parliament.⁶⁶

The 1890 Barracks Act extended these powers. It made provision for building and enlarging barracks and camps and amended the law for acquiring land for military purposes. It also enabled the Secretary of State to sell land no longer required.⁶⁷ Importantly, it made £4.1 million available to construct and re-construct camps, to enlarge barracks and build quarters for married soldiers and a further £0.25 million to purchase more land for these purposes.

Two further pieces of legislation and a restructuring of responsibilities to govern and manage a rapidly expanding military land portfolio are central to understanding the growth of the military estate. The Military Lands Act of 1892, still quoted on byelaws notices today, incorporated the Land Clauses Acts and set out three clear permissions. Firstly, the Secretary of State could purchase land in the United Kingdom under this

⁶⁶ PP, Drill Grounds Act - Grounds for Drill and other military purposes, Enactments relating to the Acquisition and Regulation of Rifle Ranges, (1886).

⁶⁷ PP, Barracks Act, provision for building and enlarging Barracks and Camps in the UK, to amend the Law relating to the acquisition of Land for military purposes, (1890).

Act, for the military purposes of any portion of Her Majesty's military forces. Secondly, a volunteer corps, could be given permission by the Secretary of State to purchase land for military purposes and thirdly, a county or borough council of a county could purchase and hold land on behalf of a volunteer corps for military purposes.⁶⁸

The Act stated that any land leased under the Act would be deemed to have ceased to be used for military purposes if there has been no military use in the previous twelve months and set out how footpaths which ran inconveniently or dangerously near military land could be stopped up or diverted. The byelaws sections were strict in their nature making it clear that they should be used to regulate the use of the land for the purposes to which it is appropriated, and to secure a safe environment for the public.⁶⁹ They also included the permission given to the public to use the land when not used for military purposes. In this Act the expression "military purposes" was defined as, including rifle or artillery practice, the building and enlarging of barracks and camps, the erection of butts, targets, batteries, and other accommodation, the storing of arms, military drill, and any other purpose connected with military matters approved by the Secretary of State.⁷⁰ Amendments from 1897 and 1898 were consolidated in the 1900 and 1903 Military Lands Acts which enabled any county or borough holding land for a volunteer corps to lease the land to any corps for military purposes for up to ninety-nine years. In addition, it defined 'land' to include, 'the bed of the sea or any tidal water, and also any right to interference with the free use of any land.'⁷¹

The second area of legislation related to military manoeuvres. These were covered by a series of reports and Acts which allowed certain districts to be proclaimed for military manoeuvres and troops were allowed to traverse all ground.⁷² No area could be

⁶⁸ PP, Military Lands Act 1892, to Consolidate and amend Enactments relating to the Acquisition of Land for Military Purposes.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ PP, 1900, Military Lands Act - to amend the 1892 Military Lands Act.

⁷² PP, Report by the Quartermaster-General and Inspector-General of Fortifications relative to the proposed Camp of Manoeuvres (July, 1871); PP Military Manoeuvres Act (1882), amended (1897, 1905).

subject to military manoeuvres more than once in every five years and manoeuvres could not last for longer than three months. Designated areas had to receive six months' notice, reduced to four in 1911. Private property was declared sacrosanct and full compensation had to be paid for damage. The first such manoeuvres at home were held on Salisbury Plain in 1898.⁷³

The third aspect, clarifying responsibilities for military land management is necessarily more complicated and is set out in the section below.

2.5 Emerging governmental oversight of military land.

The Inspector General of Fortifications was responsible for the administration of lands belonging to or in the charge of the War Office, including inspection; leasing, purchasing and selling; rates, taxes and tithes; the preparation of byelaws for rifle ranges, artillery ranges and camps; claims in respect of damage to roads, bridges and adjoining property. This section examines the debate about where this responsibility should reside that led to the eventual transfer of these responsibilities to the Lands Branch in 1908.⁷⁴

Within a few years of responsibility for land being transferred to the Secretary of State in the War Office there was growing evidence of concern about how the increasing area of military land was being managed. At the heart of the politicians' concerns was the extent to which the Royal Engineers Officers should be involved in the process of acquisition, leasing agreements and removal of surplus land. This coincided with the growing interest in developing effective land registration and pressure by land owning politicians who felt that the professionalisation of decisions, using qualified land agents, would bring about greater efficiency in the system. The counterbalance to this was the localisation of responsibilities in military commands that wanted to ensure that military land was first and foremost suitable and available for military use when required.

⁷³ PP, An Act to Facilitate Military Manoeuvres, (1897); Childs, *The Military Use of Land*, (Bern, 1998) p.119; Simon Batten, *Futile Exercise? 'The British Army's Preparations for War 1902-1914'*. (Warwick, 2018), pp.19-54.

⁷⁴ TNA-WO Records of the Land Branch 1893-1996. Directorate of Lands 1917-1933.

Coinciding with the first return of land and tenements in 1862 was a report from the Herbert Committee which considered the measures that should be adopted to improve the system under which all works and buildings connected with the War Department were constructed and maintained.⁷⁵ Fortifications continued to be the responsibility of the Inspector General for Fortifications. The Royal Engineers were responsible for barrack buildings from 1822 and they were often supported by civilian clerks. The duty of the staff in the Districts was mainly the preparation of plans, specifications, and estimates. In addition, they were responsible for the superintendence, measurement of new works and repairs, the examination of accounts and the custody of all WD property.

The Committee concluded that the construction and maintenance of works and buildings should continue to be conducted by the Royal Engineers as a Military Corps.⁷⁶ Prior to 1855, the charge of all lands and buildings belonging to the Ordnance Department devolved to the board of “respective officers”, which consisted of the commanding officer Royal Artillery, the commanding Royal Engineer, and the Ordnance Storekeeper. This process of managing the use of the land by tenants and maximising the rental continued to be a source of discontent over the years for some politicians.

The combination of having detailed returns on all War Department land, the growing number of ranges being developed for the Volunteers and most importantly the impact of the 1860 Defence Act led to views best captured by the following note from the Inspector General of Fortifications, Sir J.F. Burgoyne on the 20th February 1864:

We are coming somewhat suddenly into the possession of considerable quantities of land, in consequence of the national defences, which will require to be let under varying systems of tenure, and under some nicety of management; and on trial an arrangement made at one station (Plymouth) for

⁷⁵ TNA-WO 32/716, Works and Buildings: General (Code 61(A)): Report of Herbert Committee, (1862).

⁷⁶ Ibid., Herbert Committee 1862.

this management has proved more favourable than an old one previously existing at Portsmouth.⁷⁷

For the next six years the debate about how to manage the growing military estate continued but with pressure to locate responsibility in the hands of the most appropriate state officials. By 1866 Colonel Jervois urged caution about setting up another Department with all its associated expenses. In 1867 a note from a Captain Galton to Burgoyne favoured the transfer of responsibility to the Office of Woods especially where it was possible to earn rental income from military land. The issue of a more intensive use of land agents emerged more strongly and remained under consideration over the next forty years. On the 16th January 1867 the Under Secretary of State set out the position clearly:

In the abstract, the best mode of managing large and scattered estates would be by a professional agent in London, with sub-agents, where necessary, under his orders.

But he underlined the difficulty in that, recognising that the War Department lands are held subject to certain or uncertain military requirements, of which the local military authority should be the judge.⁷⁸ Therefore, the argument was strong in supporting the direct involvement of the military in the control of their lands as they had been acquired for military purposes, and, 'the object should rather be to convert them to the greatest possible military advantage than to show a profit.'⁷⁹ In the end the decision to change things was put off and the system continued with the Engineer Department, assisted, where necessary, by a competent land agent taking the lead responsibility. At the time the War Department had records of more than one thousand encroachments on its land and to prevent the establishment of rights or claims against the War Department,

⁷⁷ TNA-WO 33/39 (503), War Department Lands Committee Report. The minutes from the 1860s appendix to the 1882 Committee Report.

⁷⁸ Ibid., TNA-WO 33/39 minutes.

⁷⁹ Ibid.,

the Under Secretary concluded that no major changes in the management of land were required.⁸⁰

However, almost two years later at the end of 1869 Sir H. Storks raised the whole question again claiming that there was no subject which requires more careful consideration and more precise regulation than that of what is called War Office property. He noted the continuing growth of the estate and felt that a transfer of responsibility to the Office of Woods where there was obvious land expertise. Jervois firmly rejected this.⁸¹

In classic bureaucratic decision-making Cardwell set out that he agreed that the disposal and management of War Department Lands was important and should be considered by Lord Northbrook's Committee looking into the organisation of the Works Branch of the office. And thus it disappeared until 1882 with the report from the War Department Lands Committee. The committee was appointed to inquire into the system for the charge and management of War Department Lands at home. It focused on, 'the sites and environments of fortifications, barracks, camps, army manufacturing establishments, storehouses, magazines, and military exercising grounds.'⁸² This report built on the 1878 Land and Tenements report. The first detailed recording of all the War Department land in 1862 was subject to a comprehensive review during 1877 showing that land management was centralised in Ireland and Scotland,⁸³ but for all the other stations individual surveys were carried out indicating that the management of the land resources was predominantly treated as an individual station responsibility. The 1862 land was identified on maps and changes by 1877 were marked in a separate colour on Ordnance Survey maps. These details were incorporated into the 1878 Land and Tenements (L&T) return. By 1882 there were some additions and sales of surplus land that were identified and hence the 1878 L&T return and the 1882 Committee report vary slightly in detail but the order of magnitude of land holding is

⁸⁰ TNA-WO 33/39 (503), War Department Lands Committee Report (1882).

⁸¹ Ibid., 1882.

⁸² Ibid.,

⁸³ TNA MPH 1/461 Scotland AND MPH 1/462 Ireland.

much the same.

The 1882 Committee Report was the most comprehensive overview of the War Department's responsibilities for military land. It set out the legal powers for the land vested in the Secretary of State. Responsibility was carried out by the Inspector General of Fortifications who was charged with the conservation of all lands granted or used for military purposes together with the preservation and maintenance of the fabric of all military buildings. The Commanding Officers, Royal Engineers still carried out their responsibilities to care for the local stations and for turning surplus lands to best account. This was carried out by fourteen District and twenty Sub District Commanding RE Officers with their responsibilities enshrined in Queens Regulations. At a few stations the RE Officers were assisted by local land agents as at Portsmouth and Devonport. The land of Strensall Common in Yorkshire was temporarily managed by a professional land agent receiving [£]25 per year. A Land Agent was employed by the War Department to advise on the purchase of land for military purposes. When land was sold as surplus to requirements it was usually done by public auction or by a valuation set by a valuer employed by the WD.⁸⁴

The Report made clear that only when the proper military objectives for the land were considered would it be legitimate to dispose of unoccupied lands in any military district. It would clearly be absurd, it stated, 'to restrict, for monetary profit, the use by the troops for parade or exercising grounds or practise ranges.'⁸⁵ Grasslands on ranges were usually grazed by sheep as this kept the grass in good order and provided some income from rental for the state. Despite the Committee's detailed analysis it found it difficult to improve the land management process. Their conclusions were in some ways typical of political bureaucracy in that their first recommendation was that a 'report upon the WD land property should annually be prepared under the authority of the Inspector General all Fortifications'. They pressed forward with an enhancement of roles for professional land agents by establishing an inspection process to be carried out by professional land agents, practising in London and acting as advisors to the District Commanding Officer Royal Engineers and local agents, and reporting

⁸⁴ TNA-WO 33/39 (503).

⁸⁵ Ibid.

to the Inspector General of Fortifications. Yet again, this time under the then Secretary of State, Arnold-Foster, the politicians initiated another review leading to the Esher Report 1904. This grew out of military performance in South Africa and concern that Britain was ill prepared for engagement in mainland Europe. The report's remit was put quite bluntly in the presentation of the report as follows.

We have been directed to make recommendations for the reconstitution of the War Office. Our task, as we understand it, is especially difficult from the fact that for many years this Department of State has been administered from the point of view of peace.⁸⁶

Esher acknowledged that the Hartington Commission's Report in the 1890s had urged drastic measures of reorganisation but no action was taken. The conclusion was that the model of the Admiralty was one to copy with the Secretary of State on the same footing as the First Lord of the Admiralty. An Army Council should be established with a majority of senior military officers but with expert civilian involvement in the proportions 7:3, civil members focusing on financial and business matters, including aspects of the military estate. But they also accepted that there should be effective decentralisation, acknowledging that the effective training of the troops demanded the establishment of administrative districts to which a large portion of the business of the War Office could be delegated. Depots were to continue under Regimental Officers and five Districts should be created under the leadership of Major Generals as District Commanders. They would cover mobilisation arrangements; rifle ranges and training grounds; barracks, including construction and maintenance; lands administration, supply, transport, hospitals, stores, the posting of officers and appointments of adjutants and quartermasters.⁸⁷

While the reorganisation of the army was still under consideration Lord Donoughmore set up a committee to look, yet again, at lands and buildings owned by the War

⁸⁶ PP, War Office (Reconstitution) Committee, (Part 1, C1932; Part 2, Cd1968; and Part 3, Cd 2002, 1904).

⁸⁷ Ibid.

Department.⁸⁸ This was the first formal investigation during the twentieth century into the military estate in Britain. The inquiry was commissioned by the War Office to discover how the military estate might be reduced in order to save money. It advocated selling off certain redundant properties such as remaining Martello Towers and disused barracks in Burnley, Bradford, Leeds and Edinburgh. Donaghmore urged the War Office to be cautious in selling additional acreage as it had been found by experience that land sold was often needed at a later date and could then only be repurchased at higher prices. The doctrine that it was a false economy to sell defence lands, even when demand appeared to be low, dates from early in the twentieth century.⁸⁹ Yet again the outcome of review was unexceptional concluding that 'The committee are of opinion that the present procedure with regards to WD lands and buildings is in the main correct.'⁹⁰ This led to what was titled the, Fourth and Final Report of the Lands Committee in 1908 which made thirteen recommendations but at the heart of it was maintaining the position that,

The general management of lands locally should be vested in chief engineers of commands and defence areas, assisted by land agents. Commanding RE should be furnished with full particulars of properties of which they are the local custodians.⁹¹

The recommendations refocused attention on more organised and urgent attention to land that was no longer required. Lucas was keen that the rental of land by sports clubs for polo and golf should be at a market value rent unless it was a military club. The WD was criticised for taking out short leases for rifle ranges and encouraged to take a longer-term view of the principles of hiring land for seasonal training. Local Commanders should have up to date information on land leases and pay urgent attention to rationalising the land needs in their area. One would imagine that with

⁸⁸ TNA WO 32/7177, Enquiry into disposal or appropriation of WD lands. 1904.

⁸⁹ TNA WO 32/7178, Report of Lord Donoughmore's Committee on lands and buildings owned by the WD, (1905)

⁹⁰ *Ibid.*,

⁹¹ TNA WO32/ 7189 referred to in Report of the Committee on the Local Administration of WD Lands (Report of Lucas Commission 29/5/1911)

nearly fifty years of “to and fro” discussions about responsibility for the military estate that the Fourth and Final Report of 1908 would be just that. However, with Haldane’s drive for greater clarity of organisation, an emphasis on training and manoeuvres and the constant pressure to get the most economic return for land rental and disposal of surplus land The Lucas Committee set out the new structure for the management of the military estate, a structure that was strengthened during the First World War and served well the early decades of the twentieth century.⁹²

The terms of reference were, to consider what measures could usefully be taken to strengthen the elements of expert knowledge and continuity in the local administration of lands questions in the Home Commands, with special reference to the recommendations in paragraph 7 of the Final Report, 19th of October 1908, of the Lands Committee.⁹³ Unlike the findings previously, Lucas was critical of local land administration. It stated that the whole of the evidence taken lent strong support to the view that:

the efficiency of the local lands administration is seriously prejudiced by the lack of continuity in the supervision by the responsible RE officers, and by the absence from the local administrative staff of any permanent and fully qualified advisers on technically agricultural or general estate questions.⁹⁴

Paragraph four emphasised the lack of technical support, poor local relationships and lack of knowledgeable challenge in local disputes especially in agricultural considerations. There was a strong feeling that the assessment of compensation for damage to a property or loss of amenity arising out of military occupation might be avoided or economically adjusted at an early stage by the advice and mediation of an expert civilian land agent. There was also concern about the financial disadvantage the WD was at through lack of effective and expert local administration.

⁹² TNA WO32/ 7189, (Report of Lucas Commission 29/5/1911)

⁹³ Ibid.

⁹⁴ Ibid.

The solidarity of local agricultural interests was perceived to destroy effectual competition and made it impossible under the system to obtain adequate rentals for grazing. This was important as there was a high proportion of military land suitable for that purpose. The main concern was that the WD ended up paying inflated prices for local lettings. The committee were impressed by the centralization of responsibility for expert advice and management of lands transactions that had been adopted in the case of the very extensive and scattered properties of the department in Ireland.

The chief engineer of the Command was already governed by the regulations for engineer services, which made that officer the local representative of the Secretary of State as landlord of all lands, works and buildings, the property of the WD in the command, as well as the sole channel of communication for all proposals requiring War Office sanctions. Paragraph 26 provided detailed duties for Land Agents to be employed. This seemed to satisfy both military and political voices. Strong, expert civilian advice and management was available to ensure that the growing military estate would be managed in a way suitable to the military but it also satisfied political demands for efficiency and greater control of costs.

2.6 Conclusion

This detailed discussion of the legalities involved in land acquisition by the military might at first seem little more than a list of legislative acts but is nonetheless crucial to this thesis. The cumulative effect was to transform the way in which the military could acquire land and how this land was managed and perceived.

By the end of the nineteenth century the military leaders were in a stronger position, compared to a hundred years previously, to identify the land required to accommodate their needs at home, as they were seen at the time. They had access to more permanent sites and larger areas for training and exercise. However, the detailed legislative structure also created even closer scrutiny of those needs and especially the cost of implementing and maintaining the infrastructure required. Despite improvements there was still dissatisfaction with the quality of accommodation in many of the country's barracks and a lack of suitable land to mount large scale exercises and to create a sufficient number of safe, effective ranges. The acreage of land in the hands of the military had increased dramatically throughout the nineteenth century

and the management of those lands required significant legal change and greater organisation to manage the resource effectively.

The evolving legal framework for the acquisition of land for military purposes has been set out chronologically and illustrates the changing context in which the emerging military estate was formed. An examination of the land actually acquired is set out in detail in the next chapter which discusses the distribution and development of the military estate in the different regions of the country.

Chapter 3: – Mapping Land Acquired for Military Purposes

Excepting immediately under the fire of Dover Castle, there is not a spot on the coast which Infantry might not be thrown on shore, with any wind and in any weather.¹

3.1 Introduction

This chapter maps the land within the responsibilities of the War Office that developed as a result of the policies and legal framework set out in the previous chapter. The Duke of Wellington's comment to Sir John Burgoyne in January 1847, quoted above, captures the atmosphere of almost continual fear of invasion that underpinned much of the early decision making about the military acquisition of land. The demand was in part driven by the need to accommodate the home army but also by technical and tactical changes. These are examined to explain why the demand for land rose rapidly in the second half of the nineteenth century when all parts of the military required greater 'ground' to practise their skills, create inter-unit cooperation and make best use of the developing sophistication of their weapons. While the militia and volunteers made little impact on the requirement for accommodation, they were influential when it came to the development of ranges. They also had some impact on the acquisition of land for exercises particularly where they, or their officers and supporters, had a history of use of commons, coastal open spaces and land loaned to them by landowners with an affinity to volunteer corps.² The military sites of the nineteenth century did not, however, just 'appear' during that century as if there was a blank military canvas. Antecedent sites remained influential throughout the next century.³

3.2 Mapping sites for accommodation and defence

The maps in this section use the returns listing the military sites still being used by the military. Up to the 1860s these were mainly identified in the barrack returns which provide a reliable surrogate for the military estate in the years prior to the L&T returns.

¹ David Morgan-Owen, *The Fear of Invasion* (Oxford 2017) p.13, footnote 4.

² e.g. Exercises and reviews on Salisbury Plain, (*Salisbury and Winchester Journal* - Saturday 13 May 1848, the review of the Royal Wiltshire Yeomanry Cavalry), and Tedworth House was owned by cabinet ministers and wealthy engineers before the War Office purchased it in 1897, (*Hampshire Advertiser*, 15 April 1899 and *The Salisbury Times*, 21 April 1899).

³ Details of the sites analysed is set out in Appendix B.

Martello Towers, Coast Artillery sites and Ordnance Depots are also included but some unmanned coastal batteries under the Ordnance Department were not included in returns and are not included in this mapping.⁴ The military estate, prior to the later development of training camps and ranges was mostly made up of the built estate of barracks with some drill and exercise land attached. The small number of batteries and stores were important militarily but not major contributors to the extent of the military estate.

The Revolutionary and Napoleonic War years was a period of heightened public and political belief that an invasion of Britain was likely. Landings on British soil were not unknown, the Spanish landed over 3,000 men at Kinsale in Ireland as early as 1601 and the Dutch landed briefly at Landguard, Suffolk, in 1667. However, the greatest impact on the perception of invasion at the beginning of the nineteenth century was that of the landing of the French Expedition to support the United Irishmen in rebellion against Britain in 1796 and 1798 and the threats of invasion in 1803-1804.⁵ The central tenet of British defence thinking continued to be the assumption that the navy would be strong enough to resist as the first line of defence, and coastal fortifications were enhanced to add a second line of defence. These supported and protected the navy and its strategically important ports and docks.⁶ Figure 3.1 shows the concentration of Ordnance facilities in East and South East England, closest to the French coast. This remained a key feature of the national distribution of land for military purposes throughout the study period and beyond.

⁴ Col. K.W. Maurice-Jones, D.S.O., *The History of Coast Artillery in the British Army*, (Woolwich, 1957); Major-General A. Forbes, *History of the Army Ordnance Services*, (London, 1929), pp.290-291.

⁵ TNA WO 30/100, Reports on measure of Defence. Eastern District, 1797-1805; Lt. Colonel Dirom, *Plans for the Defence of Great Britain and Ireland*, (Edinburgh, 1797), pp. 9-81.

⁶ David Morgan-Owen, *The Fear of Invasion* (Oxford 2017), p.13.

Figure 3.1: Ordnance sites in 1810. (TNA MPH 1/272 Map of Great Britain shewing the Ordnance Stations, 1810-1814)

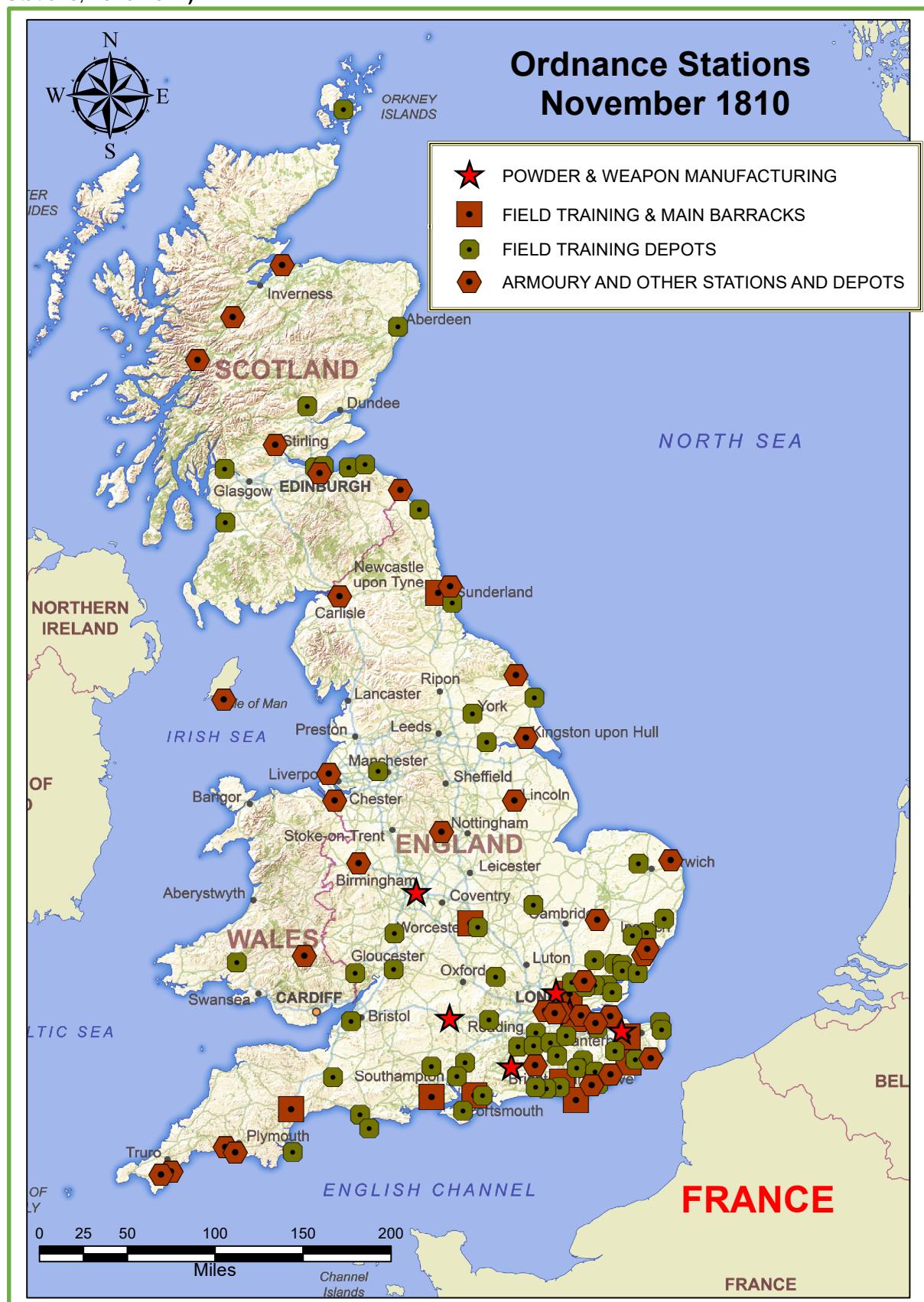


Figure 3.2 shows that the sites remaining after the Napoleonic Wars left a pattern of distribution that already exhibited clear regional differences. Ireland stands out with military sites across the whole island. It is a clear reminder of the impact of seventeenth and eighteenth-century garrisoning of the country which became the inherited pattern at the time of the Act of Union in 1801. However, this development was not without objections to cost and the role of a standing army.⁷ The other dominant locations in mainland Britain are the coastal areas from Essex in the east, along the Thames Estuary, coastal Kent and stretching along the Channel coast to Plymouth and the Channel Islands. The mainly eighteenth-century distribution along the Great Glen and between Glasgow and Edinburgh are clear in Scotland and the line of sites from Liverpool to York pick out the rapidly growing manufacturing towns in the north of England. The distribution of Ireland's military sites was underpinned by the need for national defence and fear of uprising by a disaffected population. Economic and social factors, driven by a strong sense of loss of self-determination led to a general atmosphere of unrest. The distribution of military sites was mainly shaped by this colonial relationship with Britain. The establishment of a standing army to garrison Ireland created the strategic environment for the establishment of such a dense distribution of military sites. The rest of Britain eventually came to terms with the need for a standing army but struggled with the concept of separating army accommodation from the populace for fear that this would divorce the army from the people.⁸

Three factors combined to change opinion concerning barracks at the end of the eighteenth and early nineteenth centuries. These were the well-documented reaction by some communities, and inn landlords, who protested against the problems billeting caused.⁹ Secondly, military views from generals like Wellington and Napier, who argued that bringing troops together in barracks would make them safer and better trained. Thirdly, the army's experience of garrisoning Ireland provided a model for the expansion of barracks in England from 1793.¹⁰

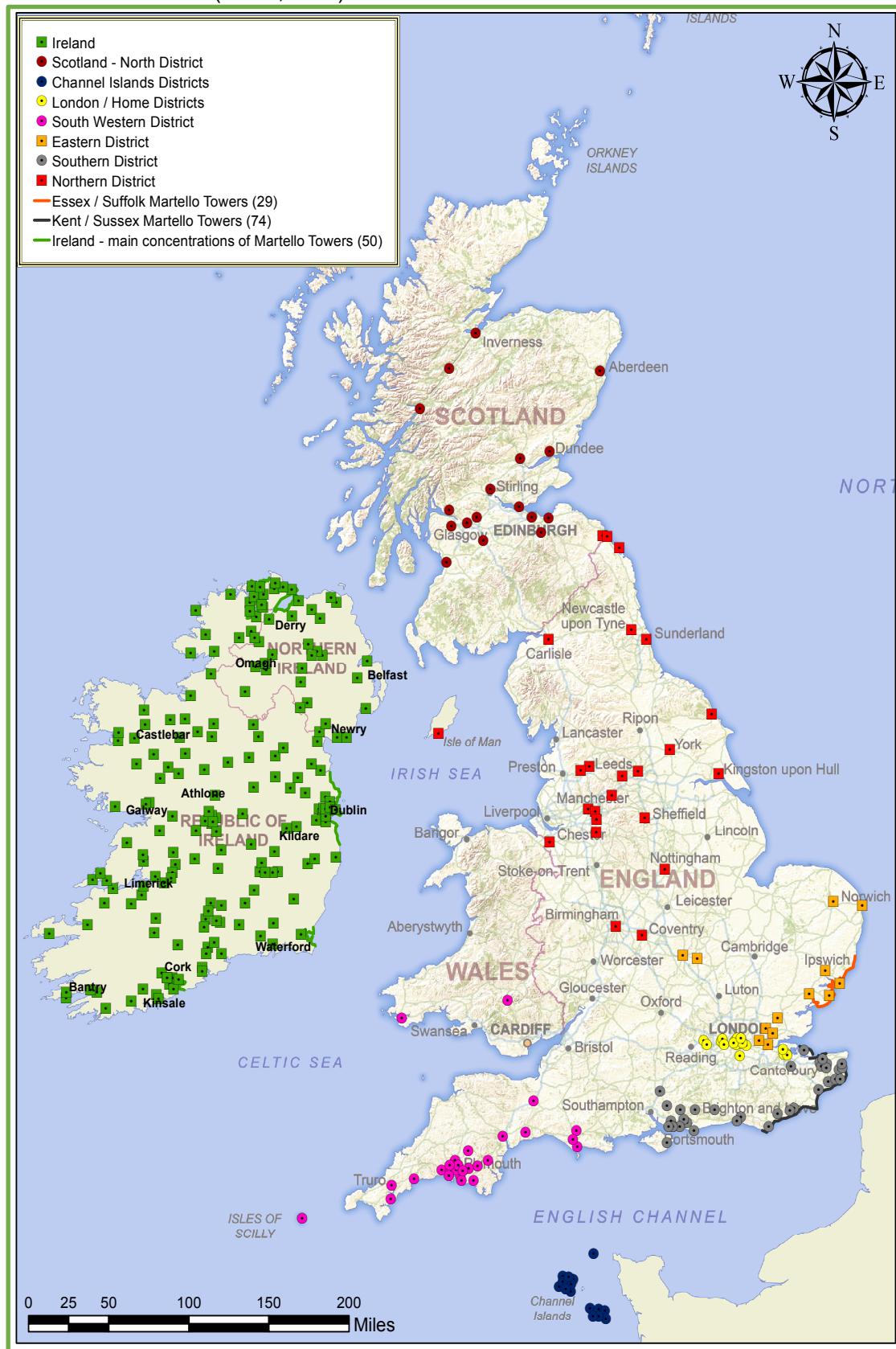
⁷ Henry Brooke. *The secret history and memoirs of the barracks of Ireland*, (London, 1747), pp. 55-75

⁸ Anonymous contributors, *Reasons for building barracks: disencumbering the inn-keepers and publicans: restoring discipline to the army*: (London, 1756), pp. 1-23

⁹ Charles McGrath, *Ireland and Empire 1692-1770*, (London, 2012), Chapters 4 to 6.

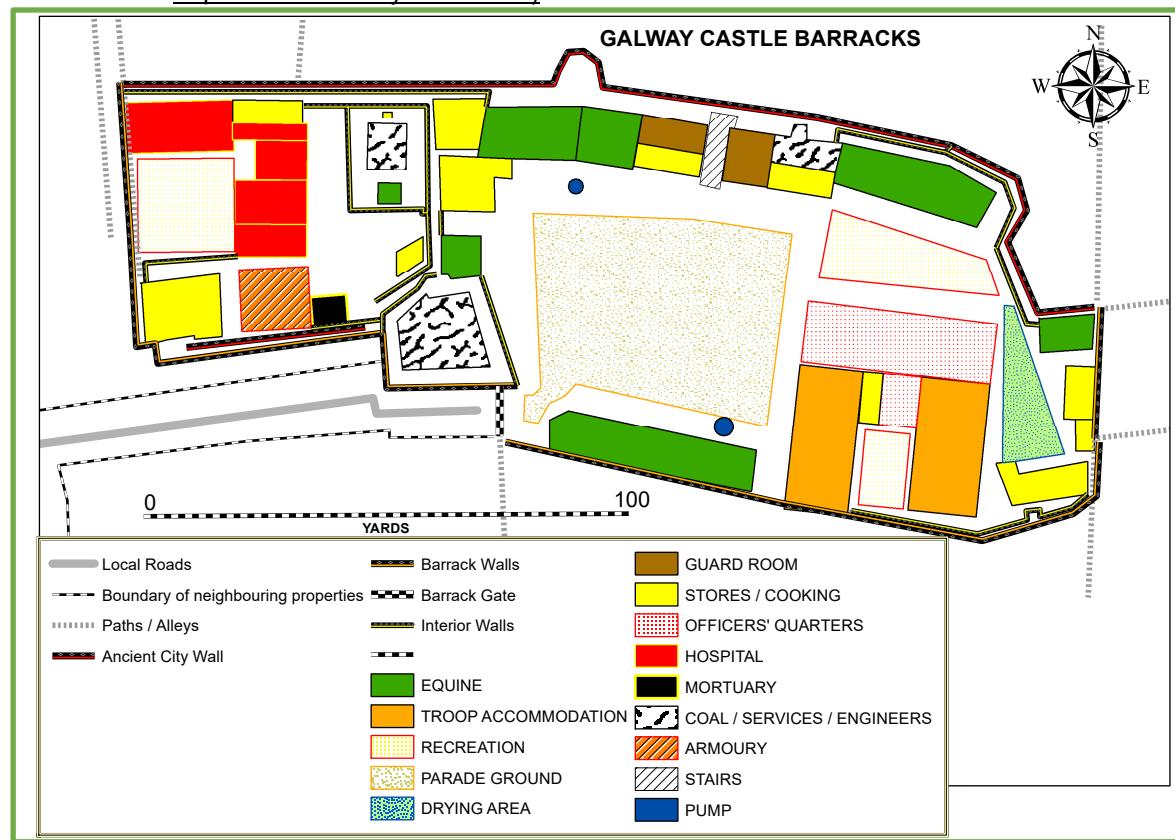
¹⁰ See also discussion in Chapter 4.

Figure 3.2: Distribution of Military sites in 1821. (created from the following Parliamentary Papers, Return of Number of Officers, Men and Horses at each Barrack in Great Britain, (C.188, 1821): 1820 Return of Barrack Office Establishment in Great Britain, (C.386, 1820) and Return of Barracks Establishments in Ireland (C.291, 1821).



A brief examination of some of the military sites in Ireland at the time provide the caution that at this stage the military estate is mapped in terms of locations as points on the map and do not give accurate information about the areal extent of the estate.

Figure 3.3: Galway Castle Barracks early 19th Century. (TNA WO 78/2305 Maps/Plans; Óglaigh na hÉireann site: <https://www.militaryarchives.ie>)



The Castle Barracks (3 acres) was one of three small barracks within Galway's city walls. These were eventually condemned as inadequate and a new barracks was built nearby at Renmore in the 1870s. They accommodated a garrison for the city and units and regiments were frequently moved between the various barracks across Ireland. Gort Barracks, 17 miles from Galway City, also at just over three acres, provided more pleasant accommodation and even had married quarters nearby. It was more typical of the small barracks dotted all over Ireland from the eighteenth-century garrisoning. It was smaller barracks like these that were closed or mothballed and accounted for much of the reduction in the number of sites in Ireland even as the areal extent increased.

Figure 3.4: Gort Barracks. (TNA WO 78/2305 Maps/Plans; Óglaigh na hÉireann site: <https://www.militaryarchives.ie>).

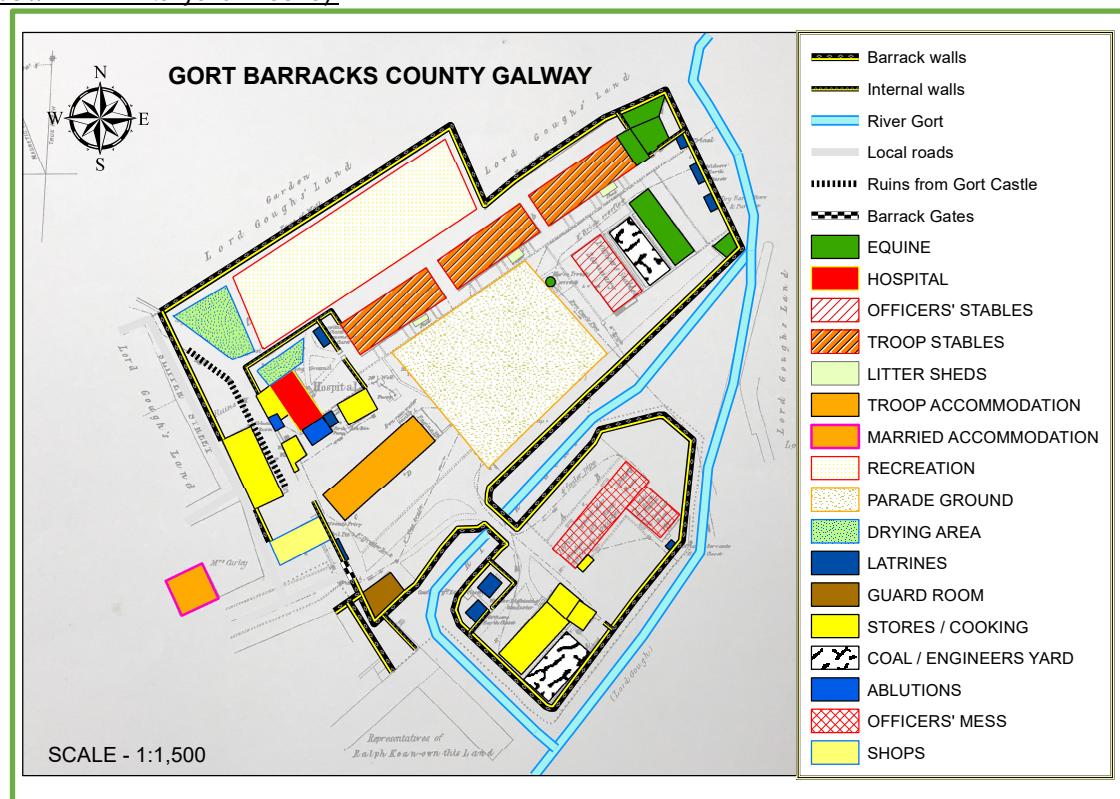
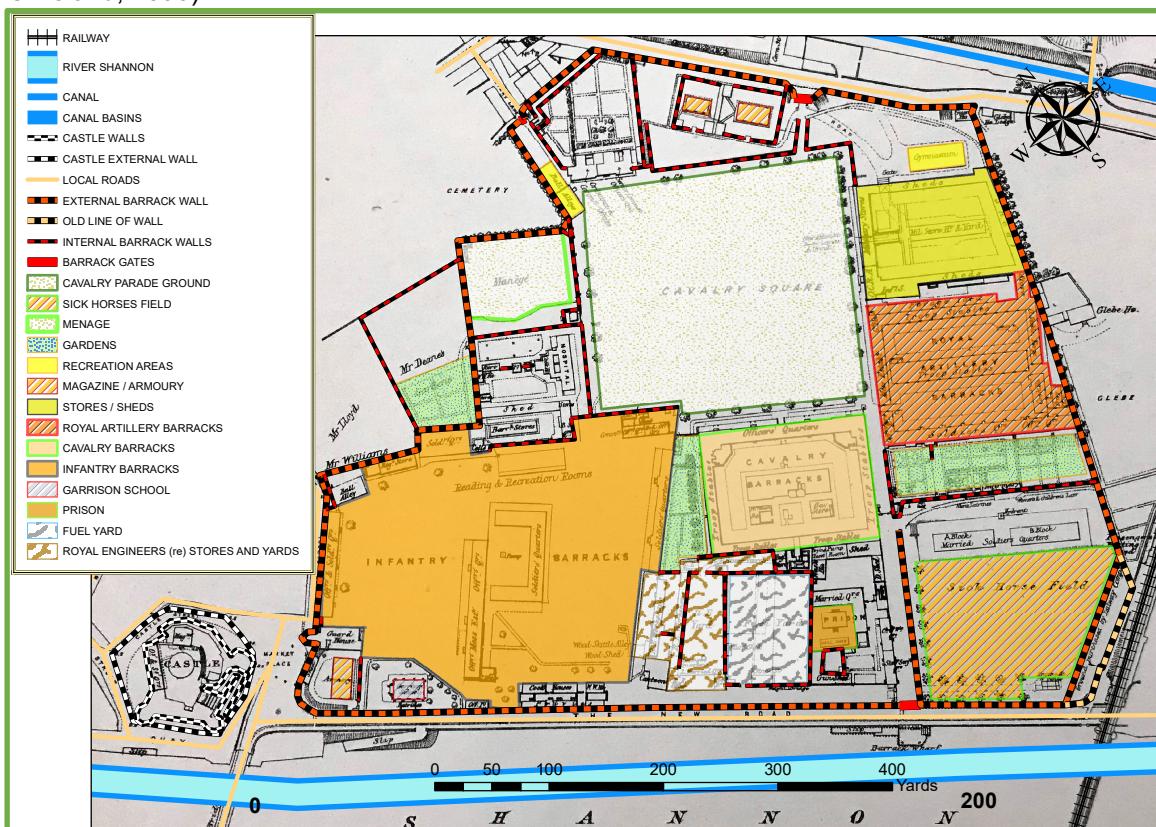


Figure 3.5: Athlone Barracks from the early eighteenth century. (TNA WO 78/2305 Maps/Plans: WO Ireland, 1890).



Athlone Barracks, the oldest continuously used barracks in Britain, was a large regional military centre covering an area of almost 50 acres with a further 103 acres nearby for exercises and practice.¹¹ There were several sites like this, and Clonmel (Figure 3.6), in the military estate in Ireland by the early nineteenth century.

Figure 3.6: Clonmel Barracks, (TNA WO 78/2305 Maps/Plans: WO Ireland, 1890). A large regional garrison covering 25 acres with a further 97 acres nearby for exercise and practice.



¹¹ <https://www.athlonecastle.ie/custume-barracks-centenary-100-years-of-service-to-the-state/>;

These were very large permanent sites that frequently combined infantry, cavalry and artillery barracks. It was these larger sites that became the most important nodes in the distribution of the military estate and along with training centres close to the larger barracks that account for the growing size of the estate while the number of sites declined.

The other main factor that influenced permanent barrack developments in Britain during the Napoleonic Wars was the development in the 1790s of a network of permanent cavalry barracks across the country. Two examples are shown here as illustrative of the type of barracks established through that programme. As a major development the cavalry barracks building programme had an important impact on the development of the military estate with Col. DeLancey (Barrack Master General) and a network of Barrack Masters responsible for the building and maintenance of the whole estate.¹²

What the precise purpose was in dispersing the cavalry in this way is unclear. Thirteen of the barracks were too small to accommodate forces likely to repel a landing, and they were too widely spread to create a concentrated larger force. They may have been planned more for anti-smuggling operations as their frequency along the Devon and Dorset coastline would indicate. The provision of barracks in some of the inland towns in Scotland, Northern England and the Midlands appears to be a continuation of the pre-war policy of policing unrest and isolating the troops from seditious influences. Those located in the South and East of England were part of a coastal ring of barracks contributing to the defence against invasion.¹³

¹² PP, Account of all Sums of Money that have been issued by the Barrack Master General, for the erection of barracks in *Great Britain* specifying the places in which such Barracks have been raised, from the 1st Day of January 1790 to the 1st day of December 1795s (© University of Cambridge).

¹³ Douet, *British Barracks*, (London, 1998), p.69.

Figure 3.7: Ipswich Cavalry Barracks (TNA WORK 43/438/1-52 53 prints Barracks in Eastern District, 1867) Constructed in the 1790s covered an area of almost 10 acres and a further 18 acres for drill and practice nearby.

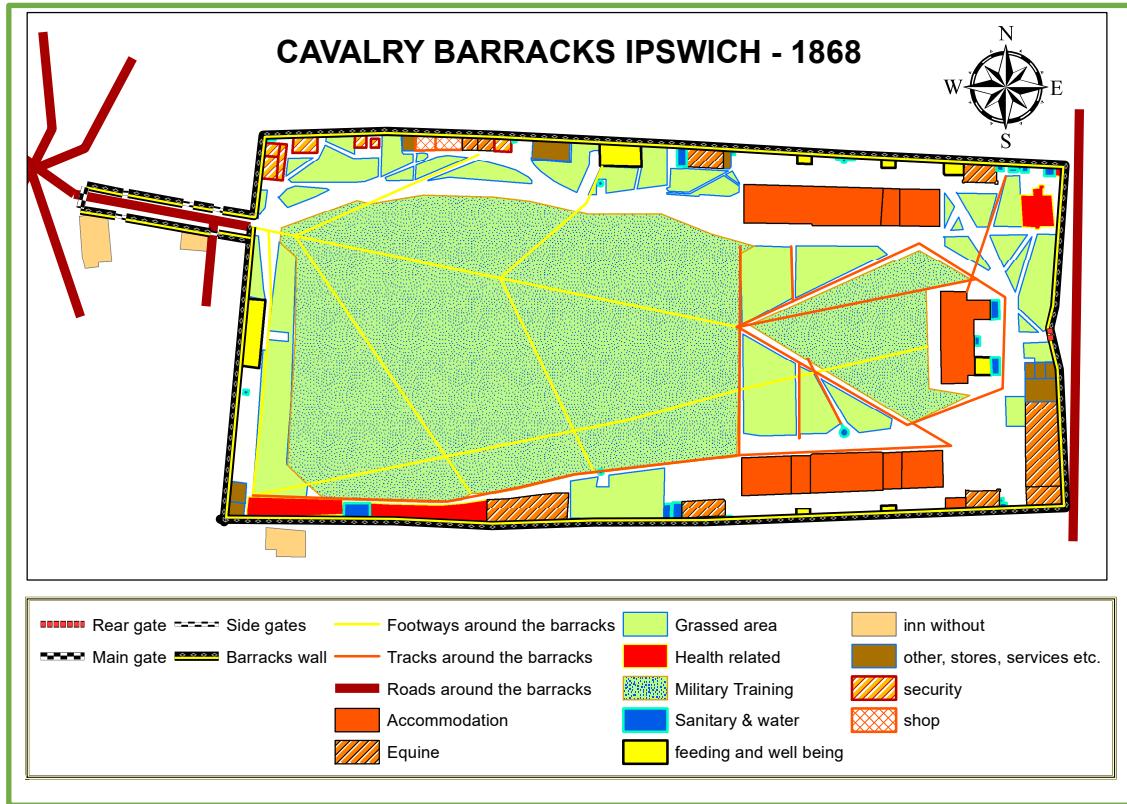


Figure 3.8: Norwich Cavalry Barracks (TNA WORK 43/438/1-52 53 prints Barracks in Eastern District, 1867) built in the 1790s covers an area of just over 10 acres with a further 80 acres of practice and drill land nearby.



Sixteen of these barracks did not survive into the 1860s. Many were too small and the rationale for the location of some barracks to support internal security or aid the customs officers to defeat smugglers was no longer a sufficient priority to maintain small barracks in locations in the south west and north of England. Critics complained that the barracks had been hastily planned and repeated errors in design. Despite several planned barracks either failing to be constructed or hurriedly converted to temporary status they represented a change in the country's attitude towards its soldiers, and provided the basis for housing some of the home forces until the Cardwell reforms of the 1870s.¹⁴

The period to the middle of the century saw a consolidation of the estate rather than expansion. The 1821 distribution of over 300 sites, with 57% of them in Ireland, still had a relatively small footprint on the British landscape covering less than 6,500 acres.¹⁵ The distributions in the succeeding periods from 1848 and 1857 show a decline in the number of sites to 227 by 1848 (118 permanent sites in mainland Britain and 109 in Ireland, and a further 27 temporary or rented quarters) and 203 by 1857. The percentage of those in Ireland declined from 48 to 35%. The early and middle part of the nineteenth century continued to be heavily influenced by, 'navy first', as central to Britain's defences. Many small barracks and defensive sites transferred to the new Coast Guard and in Ireland to the Royal Irish Constabulary.¹⁶ Where new barracks were built they were to accommodate the Guards and cavalry in London and in the areas of civil unrest where troops were mainly accommodated in the 1790s cavalry barracks. In Ireland, unrest in the 1830s and '40s led to construction or adaptation of larger barracks in a line from Cork to Derry in the west of the country.¹⁷ The northern region case study in Chapter 4 sets out the changes in that area brought about by the response to civil unrest in the period up to 1848. Small barracks were closed but new barracks were added in, Preston (Fig 3.9), Sheffield (Figure 3.10), Bury (Figure 3.20) and Ashton Figure 4.12). A further three were built in other areas of unrest at Bristol, Brecon (Figure 3.11) and Newport.

¹⁴ Douet, *British Barracks 1600-1914*, p.69.

¹⁵ Author's estimate based on an average allocation of 20 acres per site.

¹⁶ Douet, *British Barracks 1600-1914*, p.104.

¹⁷ PP, Barracks (Ireland) Expenses for fortifications, (1844, C.94).



Figure 3.9: Fulwood Barracks Preston on a 60 acre site- built 1843-1848.



Figure 3.10: Hillsborough Barracks Sheffield on a 20 acre site – built 1847-1854.



Figure 3.11: Brecon Barracks on a 6 acre site with training land nearby, built in 1840.



Figure 3.12: Distribution of Military sites in 1848. (Created from TNA WO 334/15, Military depots and garrisons, recruiting districts 1847-1848 and PP, Return of Amount expended on Barracks in United Kingdom, 1820-53 C.59 1853; PP, Committee on barrack accommodation for army, C.405 1854-'55).

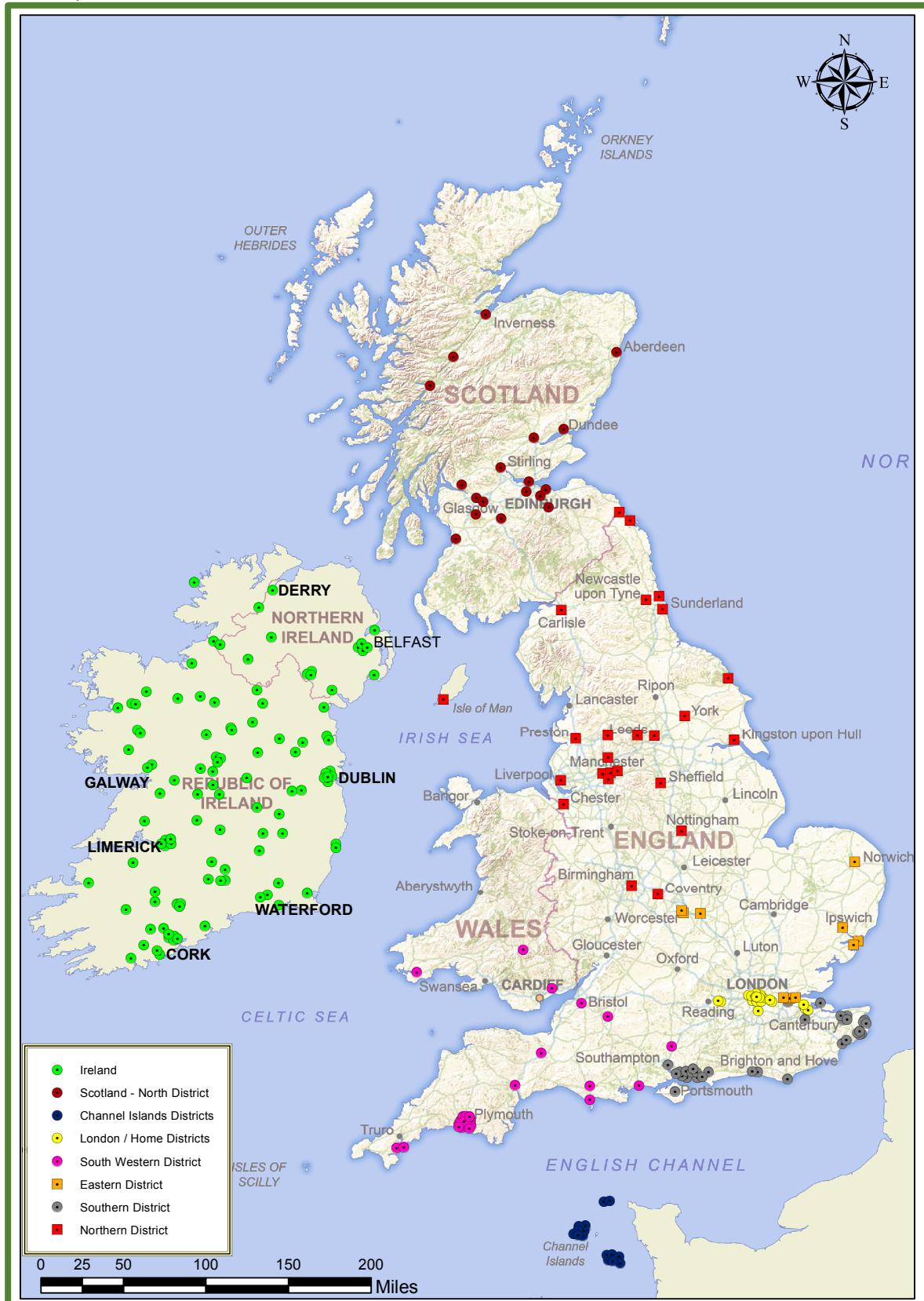
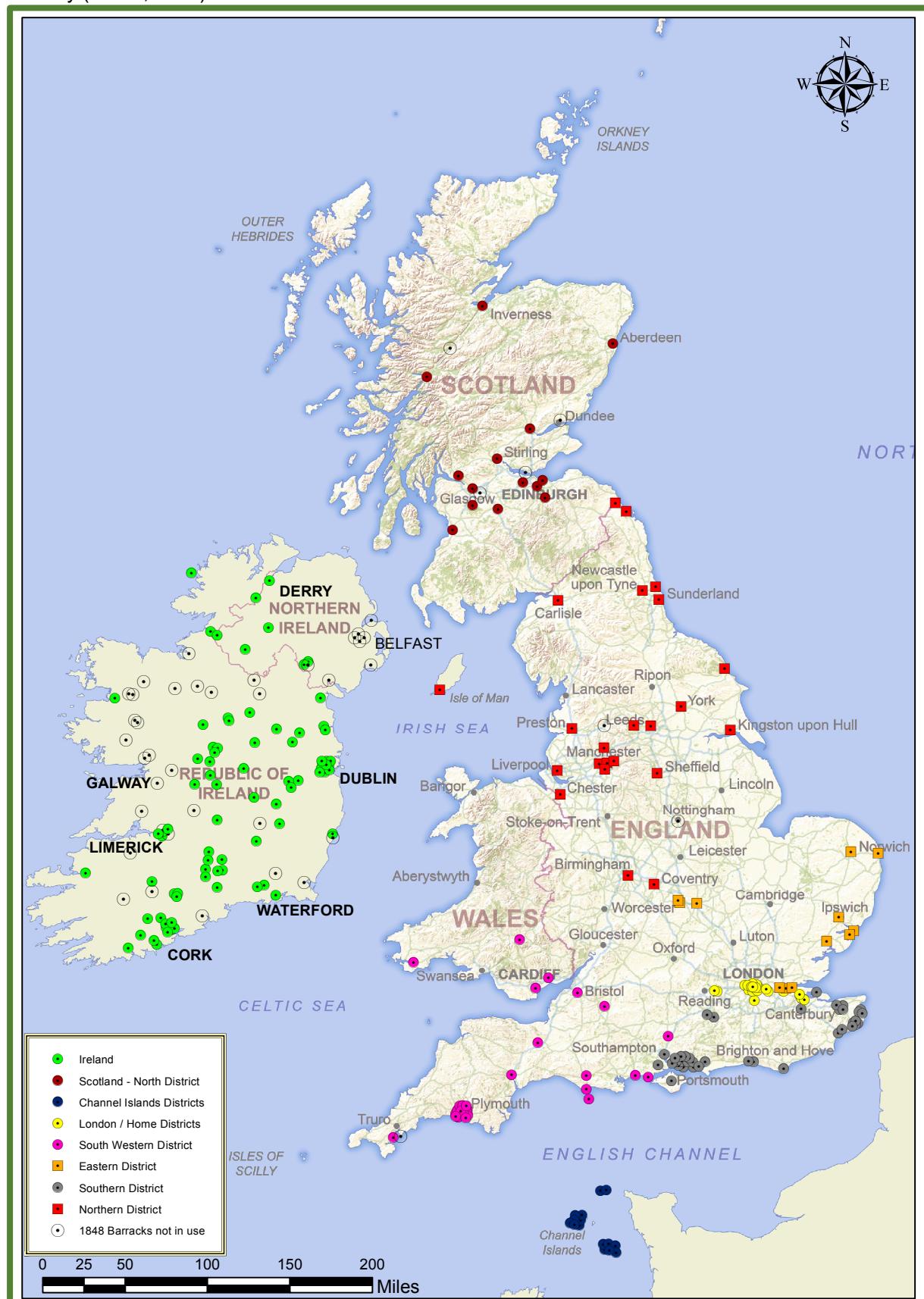


Figure 3.13: Distribution of Military sites in 1857. (PP, Barracks and Encampments occupied January (C.165, 1857).



The 1847-48 Returns showed that the built estate of barracks was in a poor state of maintenance and many were considered insanitary.¹⁸ Reconstructing the estate was not a political priority in the first half of the nineteenth century and living conditions were not a priority for some of the most influential military leaders. Water supply was poor in 63% of the barracks and 60% had no covered ablutions and 74% had nowhere to wash clothes.¹⁹ Many barracks were poorly lit, heated and ventilated. Pressure by reformers started to influence new barrack designs and some expansion of facilities started to appear with improved space, hospitals, education facilities, libraries, chapels, ablution blocks and exercise land and facilities such as a cricket ground and fives courts.

By the time of the 1857 return several factors affected the distribution of the built military estate. Small barracks continued to be closed or transferred to other use, a new emphasis on barrack design was introduced,²⁰ and large-scale camps with several barracks were developed at Aldershot, Colchester, Shorncliffe and Hythe (Kent), Pembroke and The Curragh in Ireland. The musketry training centre at Fleetwood was extended and Shoeburyness was developed for the School of Gunnery. This led to considerable annual funding in the late 1840s and throughout the decade up to 1860.²¹ These developments, though few in number had considerable impact on the amount of land acquired that was reflected in the 1862 L&T returns. Figure 3.14 shows the distribution of land acquired for the military as recorded in the 1862 Land and Tenements Return. It takes the same principle as the previous distribution maps and at this stage merely shows the locations of sites recorded in the Return; it does not show the extent of land. The locations are shown in detail in Appendix Biv and the areal extent is discussed in detail in section 3.3 below. The barrack returns provide a good surrogate for the military estate it was clear that with the expansion of camps, ranges and land for fortifications the military estate's

¹⁸ PP, Return for each Barracks in the UK, (C.147, 1847).

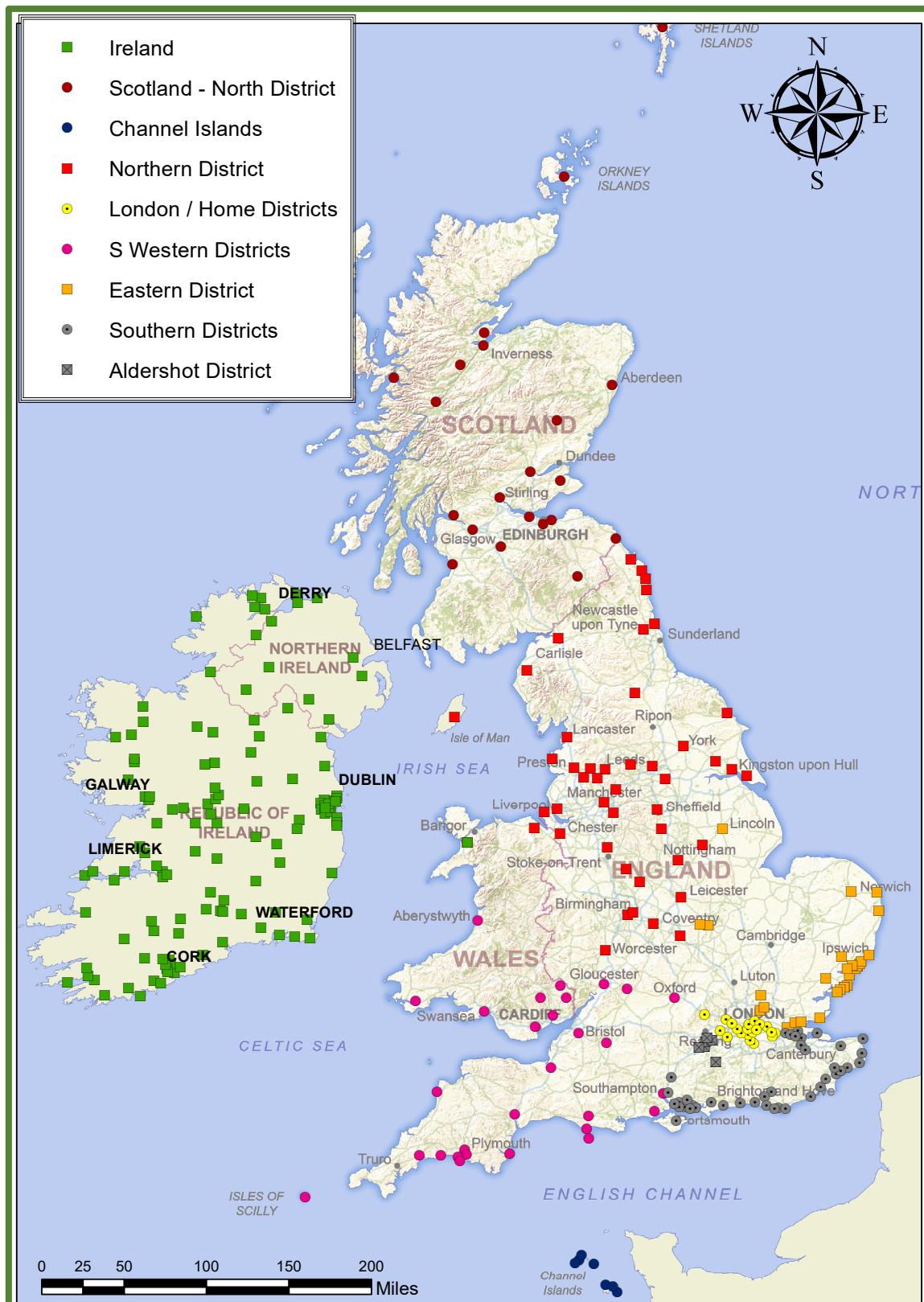
¹⁹ PP, return 1948 discussed by Douet, in *British Barracks*, p.116.

²⁰ PP, Report of the Committee on Barrack Accommodation, 1855.

²¹ PP, Estimates for the purchase of Land, erection of Permanent Barracks at Colchester, Shorncliffe, Hythe, Shoeburyness, Pembroke, and Fleetwood, (C.456, July 1861).

distribution and extent becomes more accurately analysed after 1860 in terms of its areal impact.

Figure 3.14: The Distribution of military sites – Land and Tenements Return 1862 (Return of all Military Lands, Tenements, and Appurtenances 1862).



The mapping in Figure 3.14 shows the location of military sites from the 1862 L&T Return which focused on all WD land and not just the built estate. Therefore, a comparison of the distribution in 1857 (Figure 3.13) shows that five years later the L&T return identified 67 more sites. The fact that Ireland still accounted for 57% of the British sites in the L&T Return (the same as in 1821) but only 10% of the military land illustrates the importance of using the L&T information of areal extent to get a truer picture of the land acquired for the military as the estate for training grew in importance from the middle of the nineteenth century.

Despite these expansions of the military estate, the Navy was almost always assured of more public support and favour.²² Richard Cobden qualified his own assaults on power politics and arms extravagance by insisting that in a crisis he would support whatever funds were required to maintain British naval supremacy.²³ The long history of dependence on 'navy first' continued to have a significant impact on the distribution of military land as the British military struggled to get the two services to work together effectively.²⁴ The combination of a mid-century dip in confidence in the navy and growing fears of external threats created the political environment for two developments that had an impact on military land acquisition.

Firstly, the 1850s saw a revived Militia Service with the requirement placed on Lord-Lieutenants to find a storehouse to secure the militia's arms, clothing and other equipment as well as provide barrack accommodation for a sergeant major and at least six NCOs. The barracks were also required to have a parade ground. In most cases these barracks were about 2 acres in size and added large numbers of military sites, if not many acres of land. These did not show up on the L&T returns until 1878 when they were incorporated into WD land. Figure 3.15 illustrates the impact of the militia barracks on the overall military estate.

²² Christopher Bartlett, *Defence and diplomacy, Britain and the great powers 1815–1914*, (Manchester, 1993), pp.1-5.

²³ Ibid., pp.16-21.

²⁴ David Morgan-Owen, *The Fear of Invasion: Strategy, Politics, and British War Planning, 1880-1914*, (Oxford, 2017), p.3, pp.6-13, 14-18 and 77-90.

Figure 3.15: The Distribution of militia barracks, 1867. (PP, Number of Barracks and Military Stations in Charge of each Barrack-Master, C.330, 1867).



Figure 3.16: The Distribution of Palmerston's new and enhanced coastal fortifications in the 1860s. (<https://www.palmerstonfortssociety.org.uk> and David Brown, *Palmerston-A Biography* (Yale, 2010); [The hexagonal symbols identify the major projects undertaken while the circles represent projects to enhance the existing fortifications and improve armaments.]



Secondly, Palmerston convinced parliament of the need to create stronger coastal defences and to provide better protection for the navy's harbours and dockyards and during the 1860s military spending was prioritised to new and improved fortifications. This led to further large acquisitions of land as discussed in Chapter 1 but also had the effect of reducing the urgency of expanding and improving the built estate of barracks so strongly criticised, as insanitary, in the previous two decades.

Cardwell's reforms in the 1870s established depots in the counties, each representing two battalions, which brought the regular army into permanent association with the militia and volunteers. The Governor of the Royal Military Academy, General Adye, had long been a critic of the weaknesses in the unity and elasticity of the system with the army, the militia, the pensioners, and the volunteers having distinct organizations which often seemed to be rivals rather than part of a single unified military force.²⁵ He had felt that this had failed to create an effective reserve army. He noted that Cardwell had emphasised the desirability of combining the standing army, with its glorious history and memories, with the militia and volunteers, 'who have most of the attributes of military life, and all the independence of the most perfect civil freedom.'²⁶ The desire for a central regular army to provide a strong basis for the military but supported by effective voluntary forces was a long-standing belief in what the military should look like.²⁷ This rationalisation had a significant impact by drawing in some of the local ranges and exercise grounds into the military estate, land that in the mid-nineteenth century was generally outside the calculation of what counted as military land.

The 1872 Localisation Act placed regular battalions and militia battalions into new regiments within sixty-six infantry districts, twelve artillery regiments and two for the cavalry. Depot barracks were identified as the regimental home in nearly all counties of England. In Scotland, Wales and Ireland, where populations were sparse, counties

²⁵ General Sir John Adye, *Recollections of a Military Life*, (London, 1895) pp 266-267.

²⁶ Ibid.

²⁷ Hansard3 / 214 / 866 ,Cardwell quoting Pitt from 1803 – 'The army must be the rallying point; the army must furnish example, must furnish instruction, must give us the principles on which that national system of defence must be formed; and by which the voluntary forces of this country, though in a military view inferior to a regular army, would, fighting on their own soil, for everything dear to individuals and important to a State, be invincible.'

were grouped around an identified depot. Depots were to be the administrative, recruitment and initial training centre for each regiment. The training aspect is frequently omitted from discussions about Cardwell's reforms, but it became a significant impetus for the acquisition of land for the military. This is discussed in greater detail in the case studies in Chapters 4 and 5.

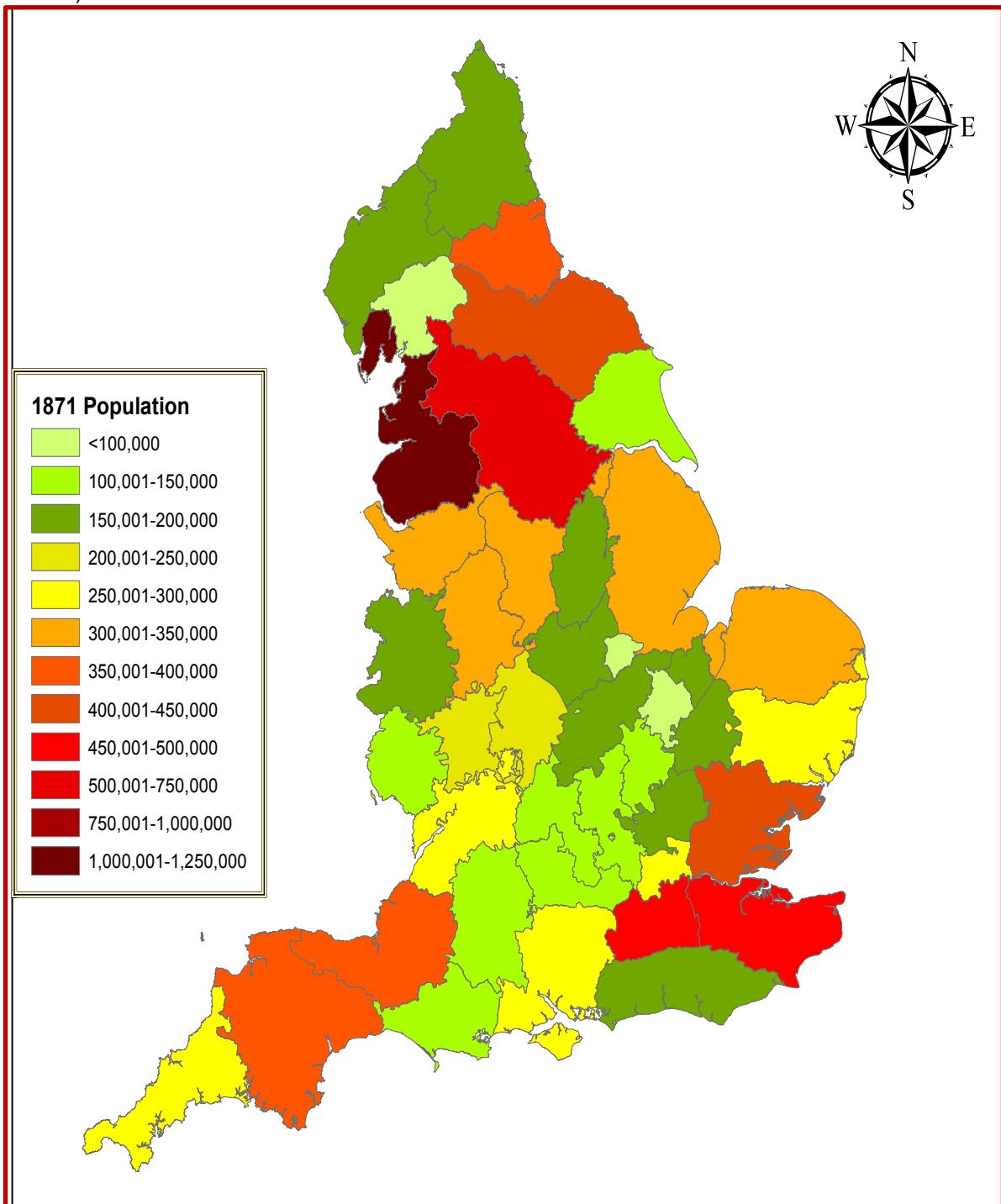
The depot's training focus became an important land use issue as greater demand was placed in these locations for camping land, sports facilities and ranges. Recruitment remained a problem, however, and the system was soon thrown out of balance again by demands for more battalions overseas. The linking did not generate harmony, the strength of the regimental system derived in part from robust independence rather than collaboration.²⁸ Cardwell set to locating the depots in places where recruitment was likely to be enhanced. Understandably, he looked to where there was a sufficient population to feed recruitment drives.

The map showing the population in 1871 (Figure 3.17) goes some way to explaining the distribution of Cardwell Depots. The locations were predominantly urban or close to urban centres with good rail access and therefore the large numbers of stations around London and in the industrial centres of northern England come as no surprise. In addition to changing population the landscape was dotted with an existing pattern of military bases accommodating troops across the British Isles. Instead of decisions to locate barracks being based on some notions of defending Britain, or deploying troops to support the civil powers, Cardwell set to locating the Depots in places where recruitment was likely to be enhanced. While Cardwell demonstrated political skills in introducing reform and cost cutting he was probably hindered in the pace of change by a conservative officer class which 'placed the military only just behind politics as the most aristocratic profession in Britain at the time.'²⁹

²⁸ French, *Military Identities*, (Oxford, 2005), p.5.

²⁹ Alan R Skelly, The tragedy of British military education: the Cardwell reforms, 1868-74, (*Vol 3, No.2 JEA*, 2006), p.23.

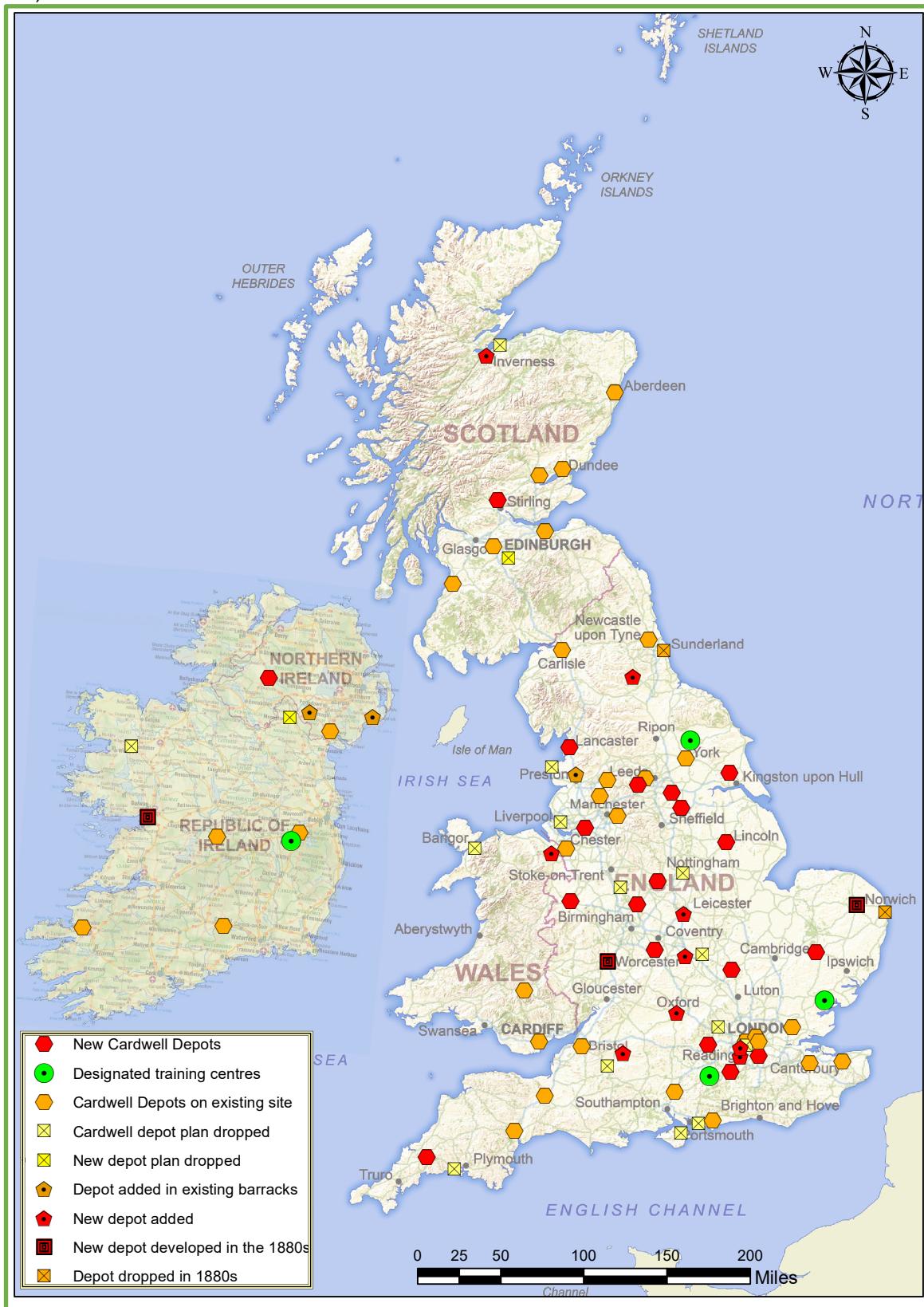
Figure 3.17: English County Populations 1871. (TNA RG10, General Register Office: 1871 Census Returns).



The reforms demanded more land for the military. By 1880 there were twenty-two new depots with a further twenty-eight extended to take on the new role.³⁰

³⁰ PP, Committee report of General and other Officers on army Re-Organization, (1881).

Figure 3.18: The 1880s Distribution of Cardwell – Childers Depots (Created from the following Parliamentary Papers; Maps of UK showing Depot Centres proposed in Report of Committee on Organization of Military Land Forces (C.93 1872); Committee on Organization of Military Land Forces. (C.588 21st February 1873); Number of Depot Centres fully and not fully constituted (C.283, 1875); Report, Committee On The Organization Of Military Land Forces Of The Country. (C.712, 1875).



The Director of Design Branch, Major H.C. Seddon (RE), assisted by a team of civilian architects, worked out a series of standard designs or 'Types'. The Guards depot at Caterham, home for four regiments each with three battalions was the only Type 1 depot in the country. Winchester was a triple, Type II; Lichfield, Preston and Pontefract were Type III, double depots, and all the single depots were Type IV. The elevations were sent out to the local Commanding RE officer in the districts, who made alterations according to the situation of their depot and the local building materials.³¹ Continuing financial constraints influenced Childers' decision to proceed with reforms as he introduced new service conditions.³²

The Airey Commission (1879-1880) rescued the Cardwell reforms and provided Childers with the groundwork for his next stage of reform. His reforms were a series of schemes intended to humanise the service and encourage a higher class of recruit. The investment already made into land for Cardwell's schemes for new and expanded depots made them almost impossible to scrap leaving Childers with little option but to take the reforms one stage further by territorialising the regiments. The bricks and mortar of the reforms, embedded in the landscape, became the cornerstones of the reforms. The regiments linked by Cardwell were given county titles officially and their number designations removed.³³

The impact should not be seen merely as the new distribution of barracks in late nineteenth-century Britain. They were an important re-organisation and redistribution of recruitment and training with the sixty-six depots linked to many more barracks, training centres and ranges. The reforms, in landscape terms, had the least impact in Ireland and across south-east England where the previous concentration of military sites left little need for new buildings to be established. Where new barracks were constructed, thirty-one by the end of the 1880s, the impact was significant and these sites contain some of the most noticeable monuments to the nineteenth-century military estate extant in the landscape of twenty-first-century Britain. In total, additional

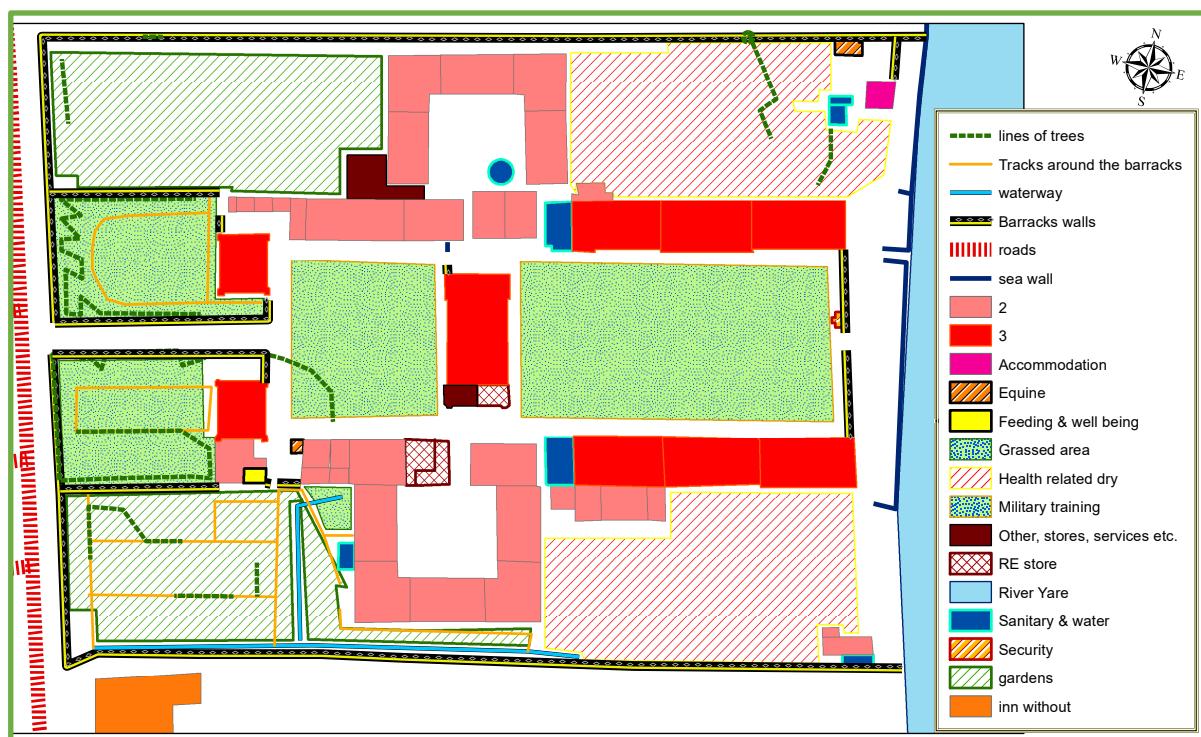
³¹ Douet, *British Barracks*, (1998), p.170.

³² PP, *Memorandum on Principal Changes in Army Organization from July 1881*, (C.2826, 1881).

³³ French, *Military Identities, C1870 – 2000*, (2005), p.24.

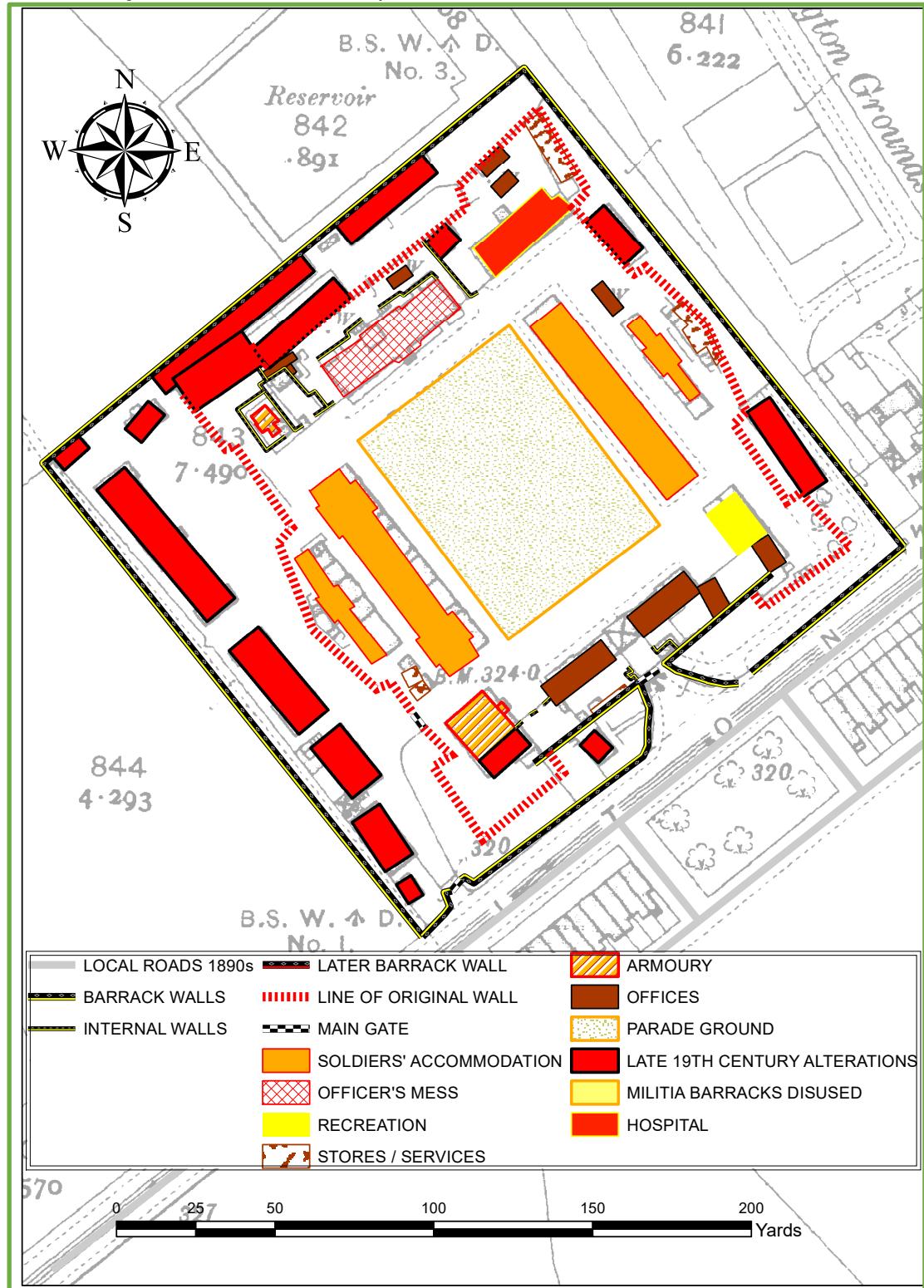
accommodation for 13,350 men, 2,014 married soldiers and 542 officers was created. At the time it was still the practice to have a Barrack Hospital and the reforms created an additional 977 bed places. With improved design in the barracks the death rate fell from 17.5:1,000 in 1857, to 8.4:1,000 in 1870s and 3.42:1,000 by 1897. The following three examples illustrate the variety of barracks that were identified as Cardwell Regimental Depots.

Figure 3.19 Great Yarmouth Southtown Barracks. (TNA WO 78/4566, Armoury Barracks, South Town, Great Yarmouth).



Southtown was built in the early 1800s as a naval armoury. It became the Norfolk Regimental Depot under Cardwell but was cramped despite 2 and 3 storey barrack blocks. Measuring 110 yards wide by 155 long, it covered just 3.6 acres. It was replaced by Norwich in 1883 on a site of over 20 acres.

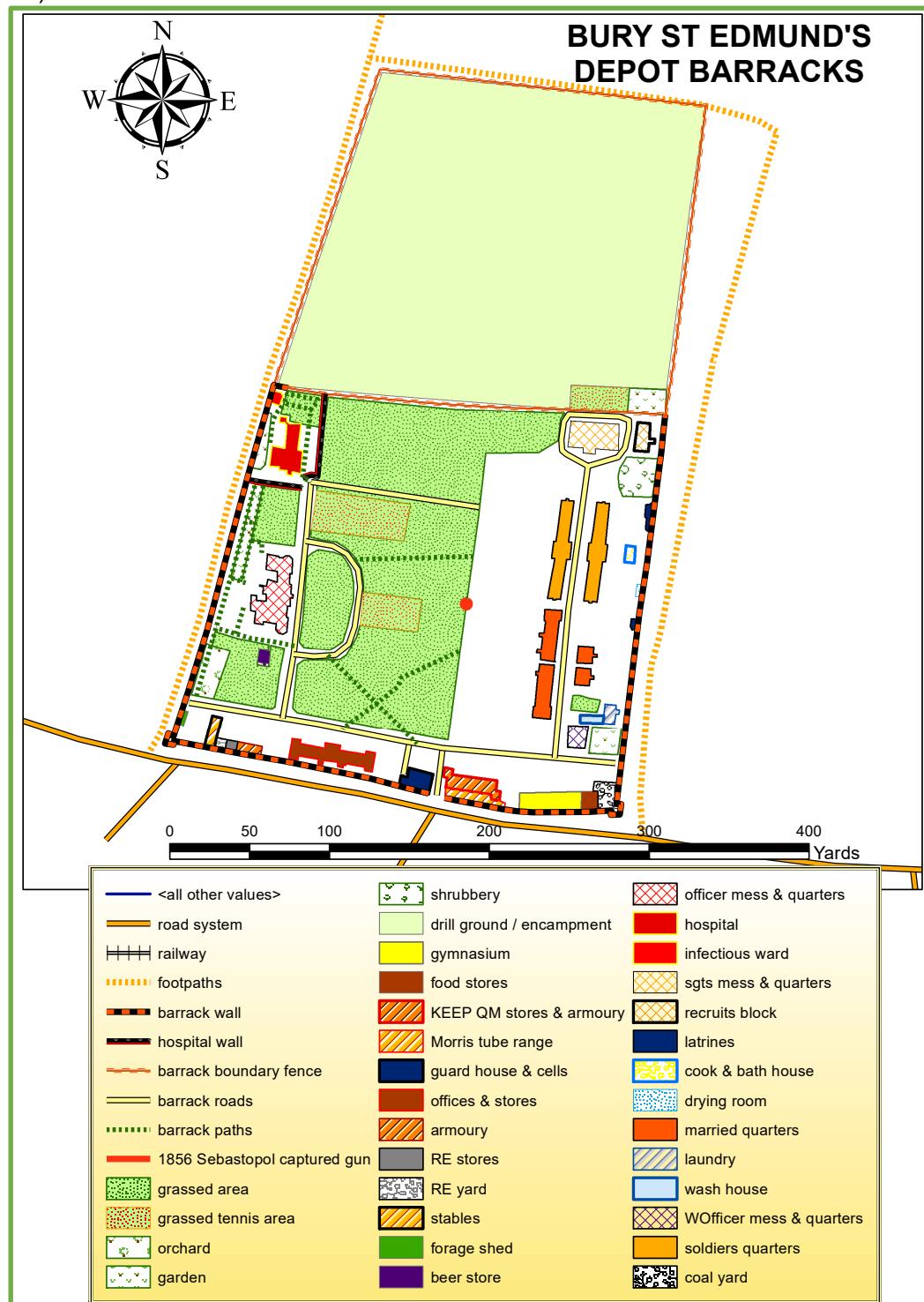
Figure 3.20 Bury Barracks Lancashire. (TNA WO 44/64 MFQ1/830/166, Lancashire Plan at Bury)



Bury Barracks were built as a defensible barracks in the 1840s and covered an area of 5 acres but expanded to 8 acres when it became a Regimental Depot in 1873 for the 20th East Devonshire Regiment and the 7th Royal Lancashire Militia and in 1881 became the Wellington Barracks for the Lancashire Fusiliers.

Thirdly, the new Depot at Bury St Edmunds (Gibraltar Barracks) for the Suffolk Regiment opened in 1878. It provides an example of one of the purpose-built Depots with an imposing trademark Keep, hospital, married quarters and integrated exercise land. All within a form that sought to meet the standards expected to improve sanitation and the living space for soldiers within its 24 acres of WD land.

Figure 3.21: Bury St. Edmunds Depot Barracks (TNA WO 78/3390, Depot Barracks, Bury St. Edmunds).



Between 1890 and 1914 the number of sites declined as barracks were consolidated into larger regimental depots, many smaller fortifications were mothballed or sold and ranges and training sites became larger. Ranges and training camps accounted for almost a quarter of military sites and for much of the exponential growth in acreage held by the military. The number of sites fell significantly in Ireland but it became the main training and exercise location outside southern England.

The distribution in the early 1900s (Figure 3.22) illustrates how the antecedent structure remained a strong influence on the locations of military sites but also how new demands spread the military influence across more of the country. The distribution in Ireland reduced considerably into three main areas; one in Ulster, a midland grouping from Dublin to Athlone and Galway and thirdly, in the southern province of Munster focusing on Tipperary and Cork. The pattern in Scotland remained fairly static and in the east of England there was marginal growth in terms of the number of sites. The most significant changes were in the Midlands and North where the new depots pick out the centres of population that grew in the nineteenth century.

The number of sites increased across London, the Thames Estuary and the southern home counties especially in Surrey and further south and west in Hampshire and Wiltshire. The continuing influence of coastal garrisoning for defence remained a major factor with the Severn Estuary and South Wales growing in prominence. The importance of Aldershot and Salisbury Plain is signified by both being identified as separate districts.

To date, studies of military sites, such as the detailed analysis of barracks by Douet, have understandably used distribution maps showing location as points on a map. This provided important analysis of location and the relationships between sites in examining distributions. But this invariably meant that the nature of the site, its size and linked areas of land for training, drill and exercise are often under-represented. In the second half of the nineteenth century the area of land became a more important measure of the size and value of the estate than the number of sites. The following section examines the growth in land used for military purposes by a detailed analysis of the Land and Tenements returns.

Figure 3.22: The Distribution of military sites – The Land and Tenements Return1900. (NAM. 2011-11-24-9 War Department Lands at home, 31st March 1900).



3.3 The growth in military land acquisition

The 1862 L&T return identified 31,502 acres of War Department land across the British Isles. Eighty-five percent of the land was in England and Wales; 9.8% in Ireland and the remaining 5% in Scotland and the Channel Islands.³⁴

Figure 3.23: War Department Land in acres for each region and country in the British Isles ³⁵

Region / Country	1821 acres	1862 acres	1878 acres	1900 acres	1911 acres
Southern England	1,500	20,266	40,442	44,380	105,700
Western England and Wales	720	3,330	7,109	49,002	
Eastern England	360	2,672	8,932	23,573	39,000
Northern England	480	701	3,435	4,001	22,700
England & Wales total	3,060	26,969	59,918	120,956	167,400
Ireland	2,370	3,080	4,563	7,389	8,000
Scotland	510	732	718	720	8,000
Channel Islands	330	721	944	800	800
British Isles total	6,270	31,502	66,143	129,865	184,200

In England and Wales 24.5% of the military land was used for barracks and barrack land or acquired for future development. The same amount was used for defence installations, fortifications, or as land earmarked for defence use. However, almost the same area as both combined (48%) was acquired for ranges and military exercise. The remaining 2% was used for a variety of purposes from military prisons to access roads, or land adjacent to defence sites for safety or field of fire reasons. The picture in Ireland was different with a larger percentage of land used for barracks (38%) and less for ranges and exercise (39%).

³⁴ L&T return, (1862).

³⁵ The 1821 figures are taken from PP 1821 Return of Number of Officers, Men and Horses at each Barrack in Great Britain, c.188: PP 1821 Return of Barracks and Barrack Establishments in Ireland, c.291; The figures for 1862, 1878 and 1900 are taken from the L&T returns for those years and the 1911 figures have been extracted from TNA WO32/ 7189 Lucas Commission 29/5/1911.

Figure 3.24: WD Land in 1862. (L&T return 1862)

District	1862 total	Barracks / land	Ranges / exercise	Other / clearance	OTHER / defence
Aldershot	9,473.85	1723.0	7750.85	0	0
Home / London	1,133.05	105.65	949.5	76.65	1.25
S. Thames / N. Kent	3,384.80	1019.3	1,400.6	23.45	941.45
S. Kent / Dover	2,233.45	391.6	599.0	23.2	1,219.65
Sussex / Portsmouth	4,040.87	1,951.87	266.95	28.0	1794.05
Eastern	2,671.7	371.75	1,589.35	268.15	442.45
Northerrn	701.45	213.5	262.9	0	225.05
Western / Portland	2,499.1	509.7	247.35	0	1,742.05
Salisbury Plain	0	0	0	0	0
South Wales	830.75	334.6	16.4	0	479.75
ENGLAND WALES TOTAL	26,969.02	6,620.97 (24.6%)	13,082.9 (48.5%)	419.45 (1.6)	6,845.7 (25.4%)
Ireland	3,080.35	1,158.55 (37.6%)	1,209.9 (39.3%)	21.25 (0.7%)	690.65 (22.4%)
Scotland	731.75				
Channel Islands	721.35				
BRITISH ISLES TOTAL	31,502.47				
England & Wales	85.6%				
Ireland	9.8%				

The 1878 return showed that the military estate had more than doubled since 1862 with 66,144 acres acquired across the British Isles. 90.6% was in England and Wales; and 6.9% in Ireland with the remaining 2.5% in Scotland and the Channel Islands.³⁶ The amount of land used for the different military purposes increased over the sixteen years between the two returns in England and Wales but only 19% of that land in 1878 was now used as barrack land. A slightly lower percentage was used for defence installations, fortifications, or was land earmarked for defence use. Thirty-six percent was used for ranges and exercises but this masks the fact that the extent of land used for these purposes rose from 13,000 acres to just under 22,000 acres. However, now that parliament had made it possible for clearance land to be acquired near defence or other military sites 16,000 acres,³⁷ (18%) of the land under military control was used for that purpose and a further 10,000 acres (15%) was used for a variety of purposes from military prisons to access roads. The picture in Ireland was different with a larger

³⁶ L&T return 1878.

³⁷ PP, Defence of the Realm Act, (The Defence Act 1860).

percentage of land still used for barracks (29%), but the largest growth in land used for the military was for ranges and exercise (52%). Virtually no land was acquired for clearance rights around the defence installations as their siting made attack from the rear unlikely.

Figure 3.25: WD Land in 1878. (L&T return 1878)

District	1878 total	Barracks / land	Ranges / exercise	Other / clearance	OTHER / defence
Aldershot	18,711.25	4,261.65	13,427.6	1022.1	0
Home / London	1,271.95	220.2	1,049.45	0	2.2
S. Thames / N. Kent	6569.15	2,783.5	566.8	1,972.35	1,247.05
S. Kent / Dover / Shorncliffe	5,069.05	580.6	942.15	1,283.55	2,262.75
Sussex / Portsmouth	8,820.8	647.0	1,191.1	2,344.85	4,637.65
Eastern	8,932.27	352.27	891.05	7299.7	389.2
Northern	3,434.9	927.0	2,418.6	6.5	82.8
Western / Portland	5,748.55	1,060.45	1,046.1	1,604.9	2,037.1
Salisbury Plain	0	0	0	0	0
South Wales	1,360.55	660.45	303.25	393.45	3.4
ENGLAND WALES	59,918.47	11,493.12 (19.2%)	21,836.10 (36.4%)	15,927.4 (26.6%)	10,662.15 (17.8%)
TOTAL					
Ireland	4,563.81	1,324.56 (29.0%)	2,376.25 (52.1%)	25.5 (0.6%)	837.5 (18.3%)
Scotland	718.27				
Channel Islands	942.75				
BRITISH ISLES					
TOTAL	66,143.3				
England & Wales	90.6%				
Ireland	6.9%				

The 1882 Lands Committee Report updated the L&T information showing a continuing, but small growth in land acquired and provided valuable analysis of the regional distribution of land.³⁸ Of the total cost of the land acquired, the Committee noted that while land in England was just over 90% of the area it was only 87% of the cost. In most regions the costs were in line with the areal extent but while Aldershot took up 27.2% of the total military land it only cost 7.9% of the budget that had been spent on land acquisition whereas the rest of the Southern District accounted for 15% of the land but 24% of the cost.³⁹ Land in Ireland and the Channel Islands had cost

³⁸ TNA WO 33/39 (503), War Department Lands Committee Report, 1882.

³⁹ Paul Vickers, *Aldershot Military Town*, (Aldershot Military Museum. 2011) - Reigate was selected as the best strategic location close to London but was in prime agricultural land that was too expensive. Lord Hardinge suggested Aldershot Heath as land was cheaper, but still in a good strategic position.

slightly more as a percentage than its areal extent. London (23%) and Ireland (45%) were the two areas where most of the small rental budget of £28,000 was used.

Figure 3.26: WD Land in 1900. (L&T return 1900)

District	1900 total	Barracks / land	Ranges / exercise	Other / clearance	OTHER / defence
Aldershot	19,799.9	2,530.25	16,240.65	0	1,029.0
Home / London	996.55	362.05	539.2	0	95.3
S. Thames / N. Kent	8,959.05	1,297.8	941.2	3,739.1	2,980.95
S. Kent / Dover	6,255.4	135.65	3,705.05	907.45	1,507.25
Sussex / Portsmouth	8,368.35	825.45	1,046.25	1,882.05	4,614.6
Eastern	23,572.85	551.6	6,237.8	14,520.9	2,262.55
Northern	4,001.35	804.15	2,975.3	0	221.85
Western / Portland	6,293.15	155.8	2,632.6	1,792.5	1,712.25
Salisbury Plain	41,516.00	0	41,516.0	0	0
South Wales	1,193.75	71.75	5.75	356.75	759.5
ENGLAND WALES	120,956.30	6,734.5 (5.6%)	75,839.8 (62.7%)	23,198.75 (19.2%)	15,183.25 (12.5%)
TOTAL					
Ireland	7,389.0	1,109.4 (15.0%)	4,910.4 (66.5%)	429.45 (5.8%)	939.75 (12.7%)
Scotland	720.0				
Channel Islands	800.0				
BRITISH ISLES					
TOTAL	129,865.3				
England & Wales	93.1%				
Ireland	5.7%				

The 1900 L&T return amounted to just under 130,000 acres across the British Isles. This is double that of eighteen years previously and shows the continuing rapid growth in land acquired for military purposes. Now 93% of the military land was in England and Wales while Ireland represented 5.7% of the military land and the remaining 1.3% was in Scotland and the Channel Islands.⁴⁰

By this time land used for barracks in England and Wales was still significant at nearly 7,000 acres but it was now only 5% of the total estate. More than double that amount was used for defence installations, forts, some of which were garrisoned or was land earmarked for defence use (11%). However, now the training estate, with 76,000 acres was becoming by far the most dominant in terms of military land use with 59% of the land used for ranges and exercise. The remaining 33,000 acres (25%) was used for a

⁴⁰ L&T return 1900.

variety of purposes from military prisons to access roads, or land adjacent to defence sites for safety or field of fire. This land acquired for clearance rights was declining from 1878 but was still a substantial feature in the military landscape. In Ireland the land used for barracks remained more important proportionately than in England but even there the percentage had declined to 15% but as in mainland Britain the land used for ranges and exercise represented the major growth in land acquisition rising to almost 5,000 acres or 66% of the military land use in Ireland.

No further L&T returns were presented to Parliament but in 1911 the Lucas Committee contained a summary of most of the land under the control of the various Military Commands in Britain.⁴¹ This showed a significant growth in acquired land to the north of the Thames where 34% of the military land was located compared with only 20% in the 1880s and 13% in the 1860s. Ireland now only accounted for just over 4% of the Home Army's land compared to 7% thirty years previously and 10% in 1862. The dominance of the south of England and Wales for military land remained high with 63% of the military land acreage in locations spread south of a line from the Thames Estuary to the Severn, but this had declined from 73% in 1878 and 76% in 1862. The growth in several areas, not least in northern England was due, in the main, to the demands for greater range in artillery live firing areas such as Redesdale (Otterburn) described in detail in Chapter 5.

This is the first time this analysis of land used by the military in the century before the First World War has been set out in detail. It means that location, extent, the nature of the land acquired and the pace of growth in the military estate can be assessed. The analysis in this thesis adds significantly to Child's outline of the large purchases of land by providing information about the size of all the acquisitions, their prominence in the landscape and the way they changed the provision regionally.⁴²

But as the land recorded in L&T returns had to be in use for up to twenty-one years, in most cases the land acquired for use by volunteers was not registered in the returns unless it was also used by regular units or had been transferred to the War Office. In

⁴¹ TNA WO32/ 7189, Report of the Committee on the Local Administration of War Department Lands, [Lands in Military districts, 29/5/1911].

⁴² Childs, *Military Use of Land*, (1998), pp.191-193.

the last two decades of the nineteenth century ranges were often used for only a few years as Volunteer Units declined in importance and the land for ranges was often hired on a short-term basis. Therefore, it is important to understand the changes in the use of ranges and their impact on the total extent of land used for military purposes.

3.4 Land for ranges.

Whereas the development of barracks to accommodate the soldier created the need for the greatest *number* of military sites across Britain, it was changes in the requirements for more extensive and safer ranges, and ground to practise the use of weapons in simulated battle conditions, that led to the greatest expansion in the *acreage* of land acquired. Technological improvements in heating, lighting, ventilation and water supply all had an impact on the design, location and land needed for barracks, camps and ranges. Improvements in transporting people and equipment liberated planners from the need to locate barracks, defence supplies and training sites in places based on marching times. The nineteenth century also saw a movement from simple shooting grounds with temporary targets to sophisticated safe environments to cope with the changes from muskets to rifles and cannons to rifled artillery.⁴³

The British Army of the eighteenth and early nineteenth centuries depended mainly on the musket with lines of soldiers firing rapid volleys. The volunteers in those early decades depended on temporary ranges and ad hoc training arrangements often on country estates.⁴⁴ Muskets were considered not very accurate beyond about 80 yards. The introduction of the rifled barrel gradually replaced the musket from around 1830 but it was only from the middle of the century that rifles were bought in sufficient number to warrant the development of a larger number of rifle ranges capable of supporting the longer range required.

The 1859 regulations for musketry instruction are illuminating in how much detail is provided for relatively temporary ranges. The regulations emphasized the interplay

⁴³ Adjutant General's Office, *Regulations for conducting the musketry instruction of the Army*, Part IV and Part IX, (Horse Guards 1.03.1870).

⁴⁴ Kevin Linch, 'Creating the Amateur Soldier; The Theory and Training of Britain's Volunteers' in Catriona Kennedy and Matthew McCormack, *Soldiering in Britain and Ireland, 1750-1850* (Basingstoke, 2013), pp.200-219.

between target practice and drills, ‘the more carefully the latter have been performed, the better will be the result of the ball firing.’⁴⁵ The targets were to be 6 feet in height and two in breadth, made of iron and sufficiently thick to be bulletproof. These were rested on a stone or wooden platform 20 feet by 9 inches laid at right angles to the line of pegs setting out the distances from the firing point. They were coloured white with the bullseye in black.⁴⁶

The nature of the ground for ranges is even more instructive about the need to find suitable space but this would not necessarily require permanent sites and the criteria could be fulfilled near training camps or on active service. The specification required a trench to be dug for the markers about 15 yards to the front and to one side of the targets. About 80 yards in rear of the markers, a smaller trench, capable of holding two men was to be made on every range, so that ricochets that may hit the target could be signalled. Practice ranges with butts for the targets to rest against and work to level out irregularities in the ground were to be executed by fatigue labour of troops.⁴⁷

The 1860 Volunteers Grounds Act created the environment for many landmarks across mainland Britain. It set the legal framework for Volunteer Corps to purchase land for rifle practice.⁴⁸ Purchases required the assent of the Secretary of State for the War Department, but the land responsibilities were vested in the Commanding Officer of the Corps. Suitable land had to include safety and convenience for the public. While accessibility for the volunteers was not mentioned in the Act it was frequently commented upon as an issue both in terms of time taken to get to the ranges and the cost. The Act specified a maximum size of four acres for any land granted as a gift.⁴⁹

⁴⁵ Regulations for conducting the musketry instruction of the of the Army, Adjutant General's Office, Horse Guards, (1859), p.51.

⁴⁶ Ibid., 1859 regulations, pp. 52-59.

⁴⁷ Ibid.

⁴⁸ PP, Rifle Volunteers Grounds Act, (c.294, 1860).

⁴⁹ Ibid.

Sites for target practice were to be established in every locality where companies of volunteer rifleman were formed.⁵⁰

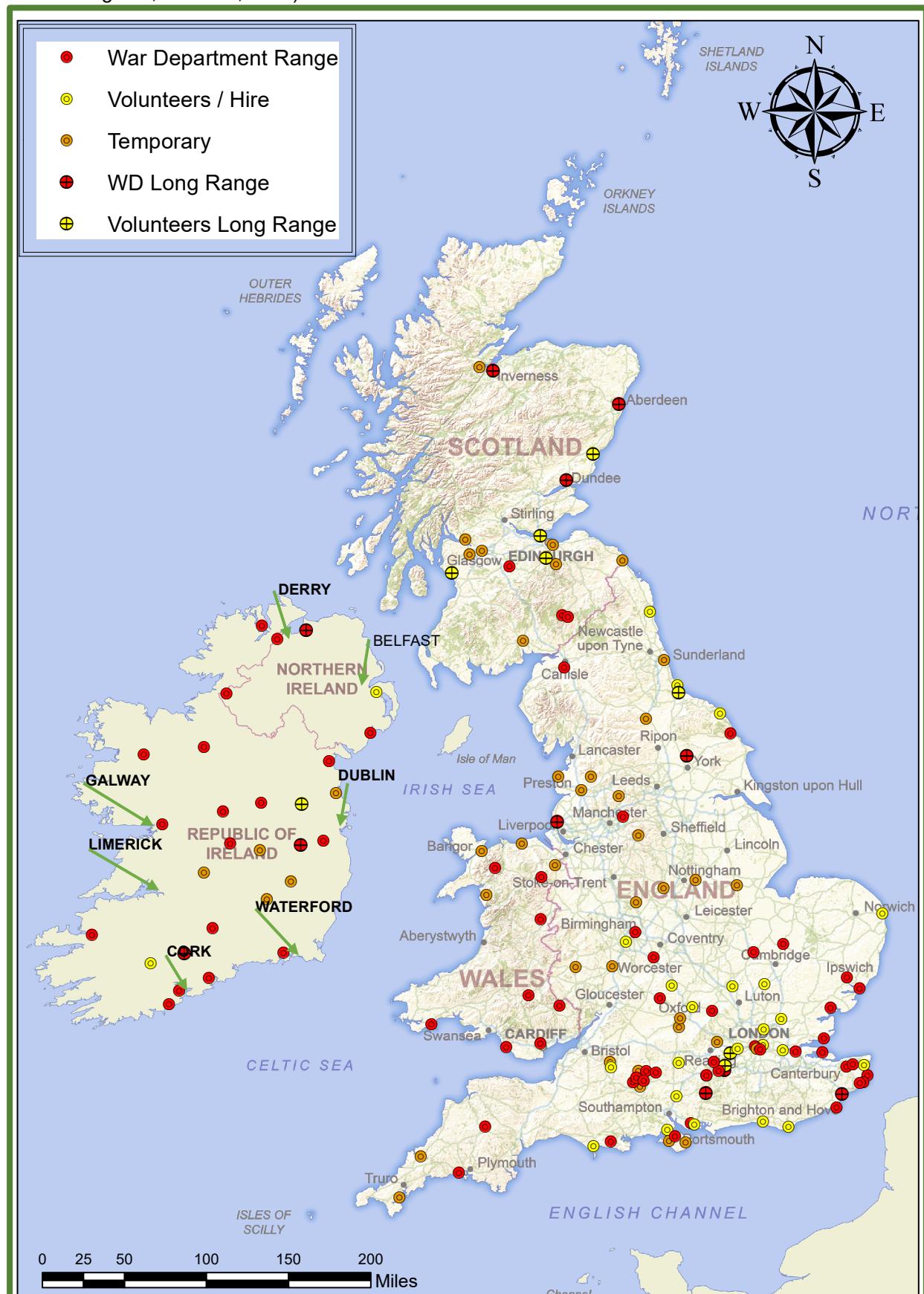
Therefore, with almost 20,000 square yards available as gifts, ranges of about 400 yards by almost 50 yards wide to 800 yards by 25 yards, became features in the landscape across many commons and on farmland. These ranges were often in prominent semi-public locations as at; Mousehold Heath Norwich; Beccles Common, Suffolk; Wimbledon Common and Wormwood Scrubs in London; Lincoln South Common, and the New Forest in Hampshire. More frequently in lowland Britain they were tucked away in farmland, usually where there was a slope in the land so that semi-natural butts were available when firing uphill as in the cases near Bury St Edmunds, Suffolk and Warley in Essex. Where coastal locations could be used the foreshore or the ability to fire seawards were favoured locations as at Great Yarmouth in Norfolk, Lowestoft and Landguard in Suffolk.

Only where Volunteer Ranges were available and used by regular army and auxilliary battalions was the land incorporated into L&T Returns. However, based on the details set out in the 1891 Report on Ranges there was an underestimate, calculated here to be in the region of about 2,000 acres, not recorded as part of the War Departments' responsibilities that could reasonably be added to the L&T totals. This includes an estimate of the number of ranges on short leases which would not have appeared in any of the returns. The volunteers' facilities were not included in WD returns but would, certainly between 1860 and 1900, have been a source of a more widespread public perception of militarisation in many parts of Britain.⁵¹

⁵⁰ Lt. Col. Michael Cook, *Altcar, The story of a rifle range*, (NW of England Territorial, Auxiliary & Volunteer Reserve Association, 1989).

⁵¹ See 1st Edition Ordnance Survey.

3.27: Location of ranges from 1903 report. (PP, Return of the number of Rifle Ranges in the United Kingdom, Cd 1777, 1903).



3.5 Changing landscape of ranges.

The greatest impact on the extent of land required came about as a result of the development of powerful magazine rifles such as the Lee-Metford in 1879. This and the adapted version of the Lee-Enfield in 1895 replaced the Martini-Henry and became the basis of the standard arm of the British soldier for much of the next century. The Lee-Metford had an effective range of 800 yards and a maximum range of 1,800 yards. This created considerable safety issues for the existing ranges and before embarking for the Boer War, soldiers were taken to artillery ranges to zero their rifles at these extreme ranges of up to 3,500 yards. However, the rifle was generally thought to be most reliable and accurate at ranges of about 400 to 500 yards. From availability to adoption the decision to use magazine rifles took just over a decade and split the various factions within the military itself. The magazine rifle provoked serious argument among various groups within the War Office, which made it extremely difficult to agree on what ought to replace the Martini Henry.⁵²

It was the adoption of the magazine rifle that established the notion of the need for an optimum range length of 4,000 yards to ensure safety. The 1891 Select Committee on rifle ranges concluded that only 42 of the 160 ranges nationally, for regular and militia units, were safe for the use of the magazine rifle.⁵³ Submissions by General Baker reinforced the ideal of:

acquiring in each command ground, in a central position where troops may be brought together for the purpose of carrying out range practice and field firing and the great importance of having the ranges near the barracks.⁵⁴

Concern was expressed about finding such land close to the rapidly expanding towns in a large number of places in England. Besides safety and the conditions that were desirable for a clear strategic distribution of ranges the report also revisited the

⁵² Matthew Ford, *The British Army and the Politics of Rifle Development 1880 to 1986*. (PhD Thesis Kings College London, 2008); Matthew Ford, Towards a revolution in Firepower? Logistics, Lethality, and the Lee-Metford. (*War in History*, 20(3) 2013), pp. 273-299.

⁵³ PP, Select Committee on Rifle Ranges, (C.223, 1891).

⁵⁴ PP, Select Committee on Rifle Ranges, (C.223, 1891) evidence from Major General Sir Thomas Baker K.C.B. (Quarter Master General of the Army).

regulations and strategies the military wished to cement into the army through exercise, drill and practice. In particular field firing was emphasised as part of a soldier's training by several submissions.⁵⁵ General Baker claimed that it was impossible to carry out this exercise in England because of the limited extent of land and that soldiers really only experienced this training on tours in India. A field range was defined as a rifle range on which a considerable number of men can fire simultaneously at unknown distances. Others noted that rifle target practice is only about familiarity with the weapon but that field firing was needed to train the army.⁵⁶ There was a strong plea for the establishment of a field firing range in each District in the Kingdom and that these need to be available to both the militia and the auxiliary forces as well as to the regular army.

The challenges the military faced to meet the competing demands for the land is well illustrated through the enquiry into a proposal for a new range in the New Forest. The enquiry under the Honourable T.E.W. Pelham reported on the suitability and safety of the rifle range proposed to be established, shortly after the select committee report. The issue of safety focused on what suitable ground was and the amount of clearance there needed to be behind the targets. Proposers and commoners agreed to the suitability of the 800 acres identified in military terms but the opposition from the commoners revolved around the incompatibility with the uses the New Forest Parliamentary Act set out in 1877. There were already 4 ranges for volunteers in the New Forest but on a much smaller scale than the new proposals.⁵⁷ Each range was about 800 yards, with few targets and only in use by the volunteer corps for a few decades at the end of the nineteenth century.

The opposition to the proposed rifle range and camp won the argument and the development was made exempt in the 1892 Military Lands Act. The principal rights of common were agreed to add greatly to the value of the holdings and the commoners' prosperity was only underpinned by their rights of pasture over the common land. The

⁵⁵ PP, Select Committee on Rifle Ranges C.223 1891, paragraphs 162-168.

⁵⁶ Ibid., submissions by Slade and Buller paragraphs 140-141, 807-816, 856-864 and 921-923.

⁵⁷ 1st Administrative Battalion Hants Rifle Volunteers was created to establish uniformity in training amongst the six independent companies that had come into being in the Winchester area.

1877 Act stated that the common was to remain open and unenclosed and it was argued that the opening of the range on the scale proposed would 'materially change the aspect of the forest' and the quotation from the late Mr. Henry Fawcett before the New Forest Committee of 1875, struck a chord:

You may preserve every tree, but if you take away the heaths and the glades, though the trees might be left, the forest would virtually be gone.⁵⁸

Figure 3.28: Landscape of the New Forest enquiry



At the beginning of the twentieth century half of the 160 ranges were owned or leased by the WD; 48 were hired on a temporary basis. Volunteer Ranges used by the Regulars numbered just 17 and a further 15 were hired as required. Only 66 of the ranges could offer field practices and field firing, 58 had ranges of 1000 yards but only 20 provided ranges of over 1000 yards. Nine of these were coastal and seven were in upland or heathland locations. Thirteen of the locations with the longest range were temporary hired facilities at the time of the 1903 survey. The number of targets available limited the number of troops able to practice at any time and 108 of the ranges had fewer than ten targets.⁵⁹

⁵⁸ PP, New Forest Rifle Range, (Pelham Report, 1892).

⁵⁹ PP, Volunteer rifle-ranges, (Cd.1503, 1903).

Large areas of land had to be available as safety zones and, as some of these ranges were combined with space for training or manoeuvres, the demand for land was considerable. Despite the Rifle Ranges Act in 1902,⁶⁰ the need for high quality ranges became a critical factor as the army sought to increase its effectiveness. In 1903 an allocation of £170,000 was made for the purpose of helping volunteers in connection with expenditure on Rifle Ranges. Sixty-two percent of that went to 6 new projects, £91,000 of it going into the development of ranges at Rainham, adjacent to the Purfleet Barracks in Essex.⁶¹ The area of land allocated to ranges varied widely as the following sample, drawn from the 1900 L&T return shows.

Figure 3.29: Table showing the large variation in size of rifle ranges in four regions of Britain.

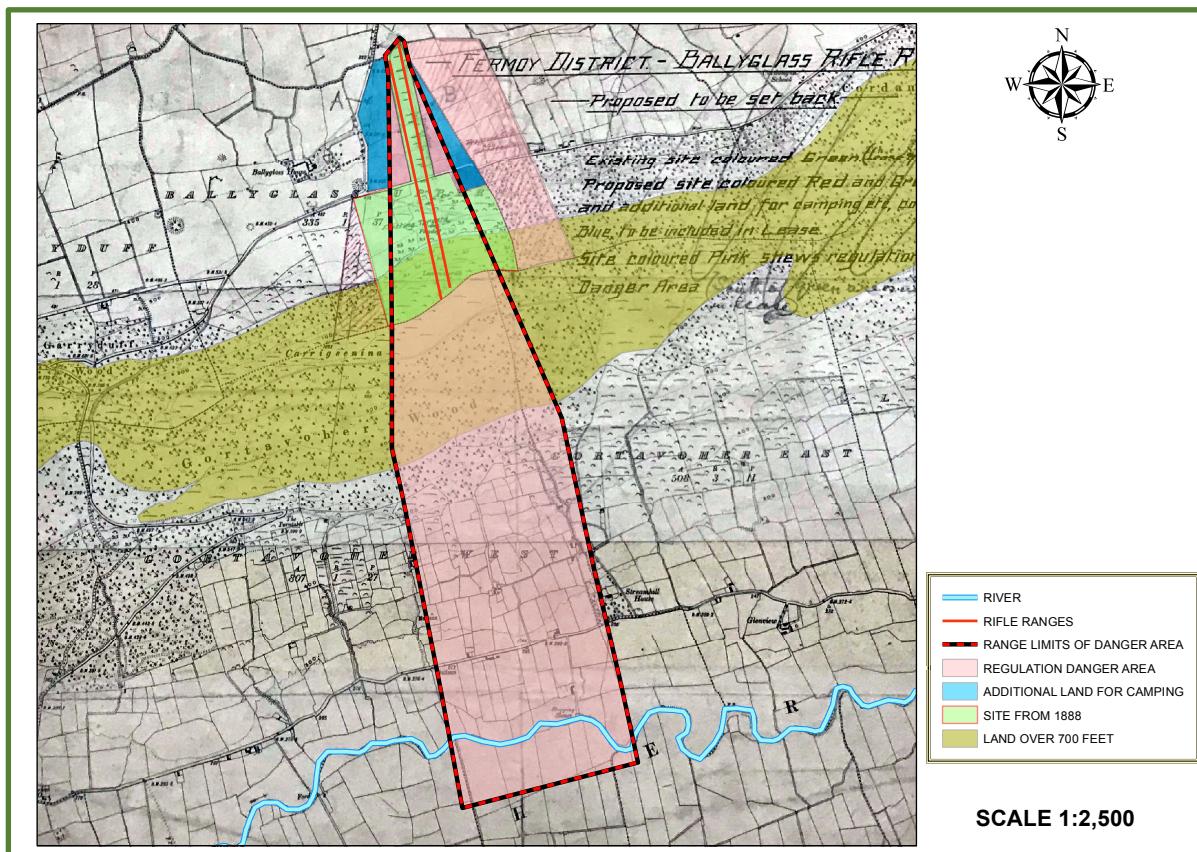
IRELAND	NORTHERN ENGLAND	SOUTHERN ENGLAND
Londonderry 21 acres	Fleetwood 22 acres	Wormwood Scrubs 30 acres
Newtownards 27 acres	Scarborough 26 acres	Pirbright 61 acres
Mullingar 47 acres	Chipping 100 acres	Shornemead 122 acres
Kings Island 89 acres	Strensall 615 acres	Bisley 160 acres
Youghal Ball Practice 135 acres	EASTERN ENGLAND	Hythe 275 acres
Kilworth 331 acres	Lincoln 13 acres	Chalk 321 acres
Curragh 463 acres	Bedford 30 acres	Aldershot 325 acres
Ballyshannon 731 acres	Shoeburyness 157 acres	Lydd 2,440 acres
Kilbride 1,567 acres	Middlewick Colchester 303 acres	
	Milton 444 acres	

The following examples illustrate the extent of land required for ranges at the turn of the century and the safety margins that were being constructed. They also illustrate the variety of range developments and the factors that influenced range developments.

⁶⁰ PP, Rifle-ranges acquisition. A bill to facilitate the acquisition of rifle-ranges, (C.42, 1902).

⁶¹ PP, Volunteer rifle-ranges, (Cd.1503, 1903).

Figure 3.30: Ballyglass Rifle Range



Accommodating new requirements and expanding boundaries is clearly shown in the case of the range at Ballyglass, Fermoy,⁶² which provided a facility that could be hired as needed. The whole site illustrates the expansion required to meet new safety requirements compared with the site as it was in 1888.

The development of Ranges at Kilworth in Cork was on altogether a different scale and long-term impact. The ranges were opened on Saturday 11th May 1896. Kilworth was just north of the large Barracks at Fermoy and within easy reach of Cork, Tipperary and Limerick. It had been used for manoeuvres in the 1890s and a large area of moorland was available to be developed as a major training venue to complement the developments at The Curragh. The land, owned by Lord Mountcashel, had been poorly managed and the sale was welcomed by him. An area of around 14,000 acres was available. The area then had a permanent camp built

⁶² TNA HO 45/9845/B11963, Petition of Right Mulcahey of Ballyglass V War Office for damage and loss, (1892).

which remains today as accommodation for troops training in the hills and on the many ranges. The ranges, of over 300 acres, were able to accommodate distances in excess of 1,000 yards and were used intensively during the Boer War and again in the First World War.

Figure 3.31: Kilworth Ranges 1890s. (TNA WO 78/2265/1, Kilworth Rifle Ranges 1910; TNA WO 78/2265/2, War Department Property Kilworth 1914)

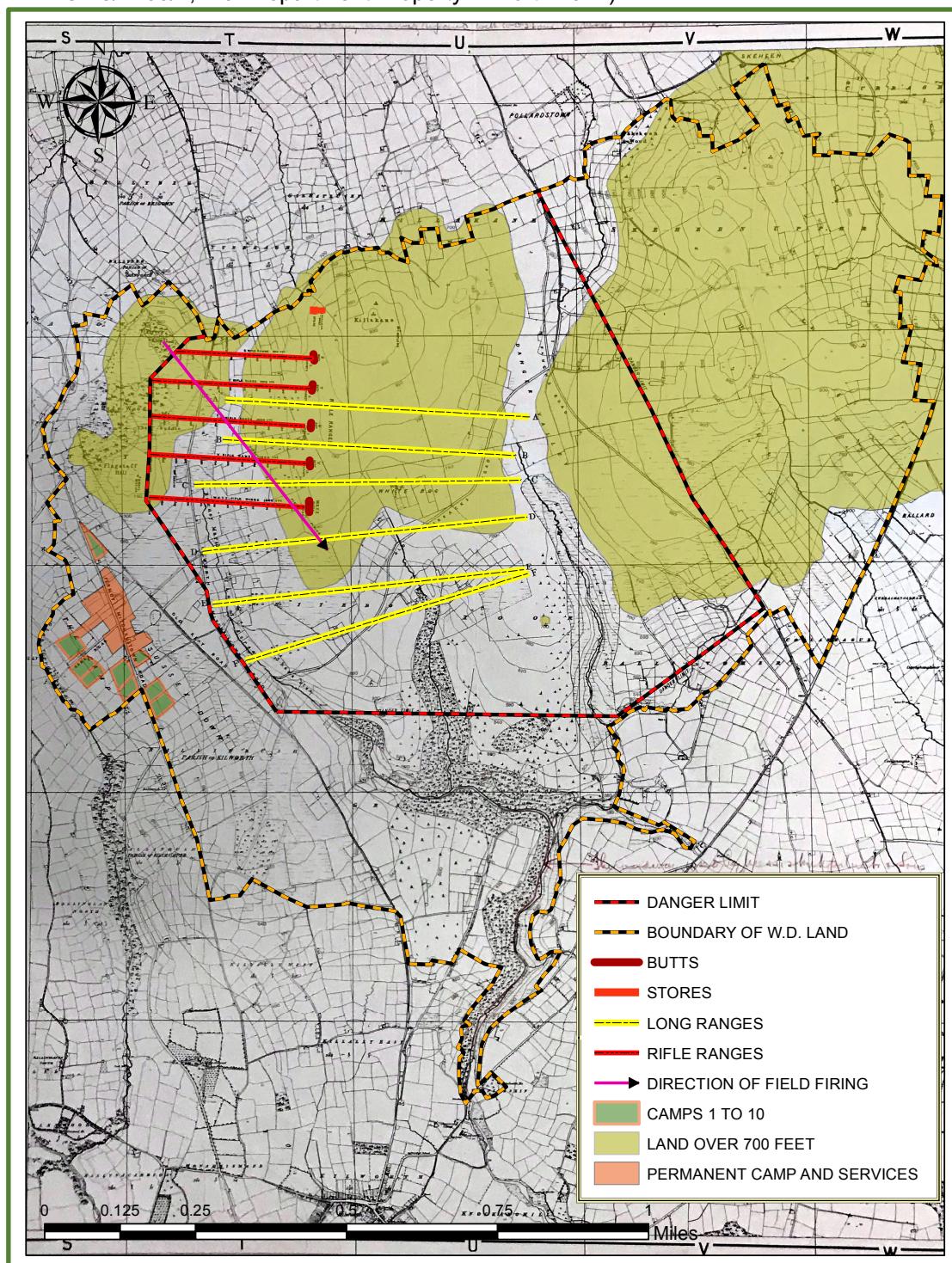
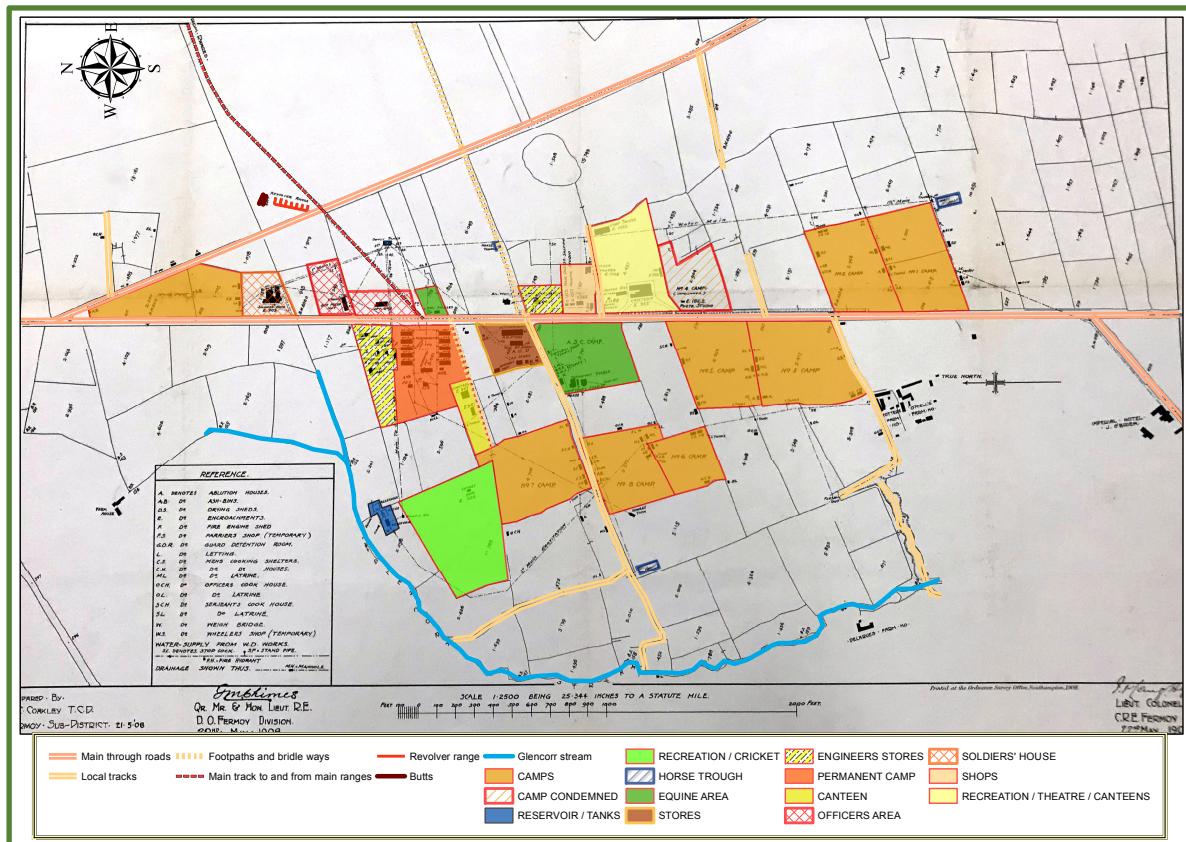


Figure 3.32: Kilworth Camp 1900. (TNA WO 78/3560, Kilworth Ranges Plan of Lands)



The challenges of using grazing land adjacent to large and expanding urban areas are exemplified by the developments at Gravesend in Kent. The ranges at Milton were enhanced significantly in the late nineteenth century and illustrate the extent of land that was required for an intensively used facility serving a wide area. By 1900 Milton had 517 acres of military land 444 acres of which was for the ranges.⁶³ This range was used by soldiers from the Thames Estuary military sites, South Essex, London and Kent. It was constructed on flat marshy grazing land next to the River Thames and required large scale adaptation to ensure greater safety for the new rifle with more secure markers huts and larger butts.

63 L&T Return 1900.

Figure 3.33: Milton Ranges. (TNA WO 78/3504, Milton Rifle Range, Gravesend Plans and sections of range for Lee Metford Rifle, 1895).

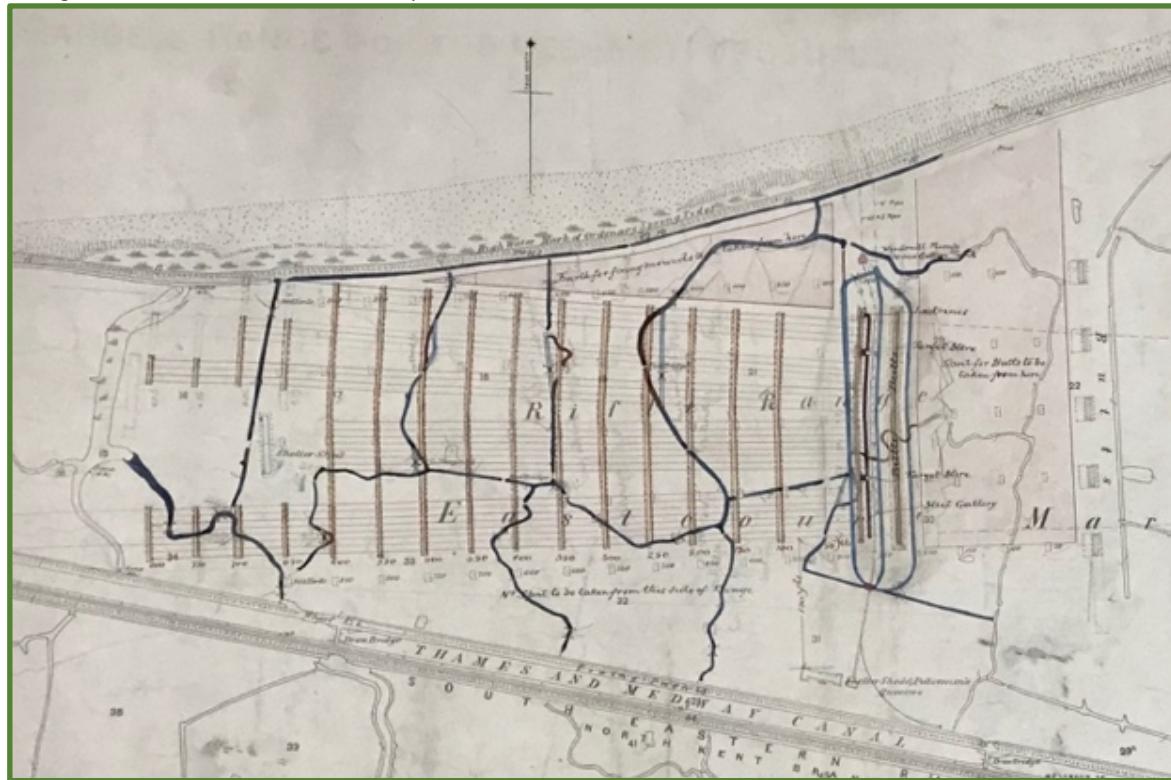
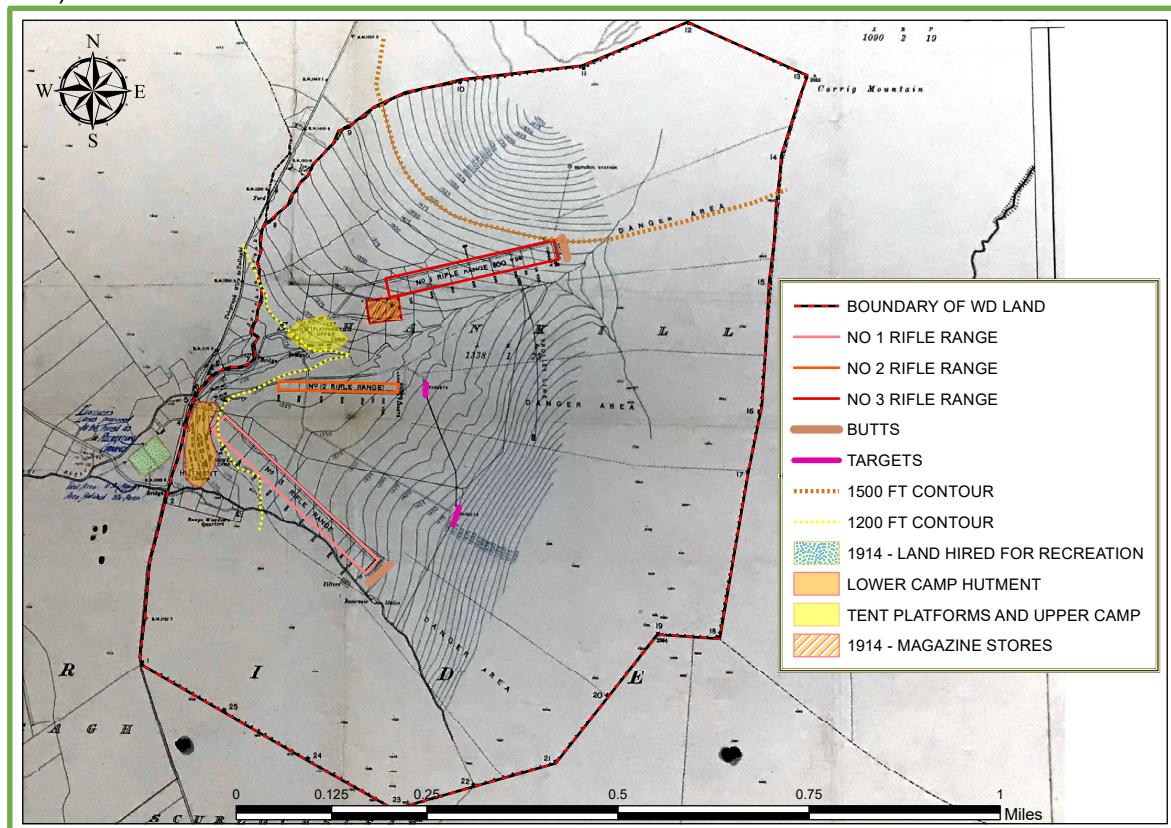


Figure 3.34: Kilbride Ranges. TNA WO 78/3598, Plan of Kilbride Rifle Range and WD property (1904).



Large scale development to include field firing and encampments also required more land in mountainous areas. The Kilbride Ranges near The Curragh (Figure 3.34) illustrates well the extent of the land required for the post-magazine rifle era. The fixed ranges of 800 yards require up to a 1,000 yards safety zone (danger area) and the smaller range has the capacity, using a pulley system, to have moveable targets instead of field firing as such. Including the hutment areas, a small barracks and an adjacent recreation area, the range required about 1,500 acres in total.

By 1909 there were a large number of ranges but still insufficient to meet the demands from the military, much as it had been six years previously, and the competing priorities for land remained a pressure point. The Army Council was well aware of the issues though they recognised that conditions varied in different parts of the country. They recognised that only about half of the Infantry units of the Territorial Force possessed adequate range accommodation:

Nearly all have miniature ranges and in one battalion, the 6th Battalion Essex Regiment at West Ham, I saw a very good 100 yards underground range. I have seen enough to feel absolutely sure that very much more might be done in extending range facilities in places where they are either very deficient or do not exist at all.⁶⁴

When it came to the further development of military ranges Haldane was quite acerbic in his comments on what appeared a classic land-use conflict:

As to ranges, our position is very difficult. I am sorry to say the requirements of the military are rather in conflict with the requirements of a very powerful body, namely, the golfers. (author's emphasis) We are suffering seriously from the difficulty of getting extended accommodation for ranges, but we are buying wherever we can.⁶⁵

He confirmed that several contracts were out at the time and was confident the

⁶⁴ PP, Army Council memo. on the existing system and present state of the Military Forces in the UK, (CD4611, 1909).

⁶⁵ HC Deb. Hansard vol 22, (cc2071-185, 14th March 1911).

situation would be alleviated. He admitted that, where Territorial battalions did not shoot their musketry courses, it was almost invariably because there was no range available to accommodate them.⁶⁶

3.6 Strategic military and tactical drivers.

In the first half of the nineteenth century training was mainly seen as drill or was carried out on common land or with the agreement of landowners where they had a militia or volunteer attachment.

Figure 3.35: The barrack parade ground was a focal point for drill. (Kings Own Borderers at drill on the Barrack Square, Berwick in 1883. – From the display in the Military Museum at Berwick).



However, the changing importance of both exercise and training combined with advancements in weapon technology led to large-scale acquisitions of land for those purposes particularly in the second half of the nineteenth century. But it was not merely a cause-effect relationship between technology and land requirements. A complementary influence was the strategy and tactics evolving in the army throughout the century. Col. David Dundas set the parameters for military training for half a century, though revisions were made as a result of experience in the Peninsula War.

⁶⁶ HC Deb. Hansard vol 22, (cc2071-185, 14th March 1911), Mr Haldane's Statement.

These were developed and implemented by General Moore at the new training facility at Shorncliffe, where 229 acres had been purchased in 1794. Further revisions were made in 1824, 1833 and 1852.⁶⁷ It was acknowledged that drill had two major roles. Firstly, soldiers needed to understand the movements from one position to another in an orderly and practiced fashion and secondly, they inculcated unswerving obedience. There was also growing criticism that the drills were not suitable for landscapes that were broken, mountainous or wooded. In addition, The Rifle Brigade complained that they were spending too much time training as line infantry and not as marksmen. Drill in separate companies and battalions was criticised as it did not always lead to efficient working together when very large numbers of troops were required in the field together. The army did carry out large scale practice in theatres of war prior to impending battles.⁶⁸ Large-scale manoeuvres were, however, not a significant part of the soldiers' training experience until the beginning of the twentieth century.⁶⁹

The detailed general Order issued on the 1st September 1870 made clear that the revised version of the 'Field Exercises and Evolutions' were to be obeyed without deviation by all 'Officers of the Army'.⁷⁰ These orders set out in detail the expectations for virtually every move a recruit or squad could make. It also set out the company drill, battalion formations and evolutions and finally the formations and movements of Brigades. While the individual and company drills could be practiced on drill grounds and some of the exercise grounds attached to barracks such as Preston, Warley, Limerick, Athlone, York, Lincoln and Bedford, the opportunities for battalion and certainly Brigade practice was very limited at home. Using the Field Exercises Orders, a Battalion would require approximately 100 acres to deploy before it even started an evolution. Assuming a battle practice across a mile of land, even in a straight line, would require approximately 210 acres of land to accommodate one battalion in straight line advance skirmishing. Therefore, if there were to be manoeuvres for a

⁶⁷ Col. Dundas, *Principles of Military Movements chiefly applied to Infantry*, (London, 1788).

⁶⁸ Piers Macksey, *British Victory in Egypt, 1801: The End of Napoleons Conquest*, (London, 1995).

⁶⁹ Simon Batten, *Futile Exercise? The British Army's Preparations for War 1902-1914*, (Warwick, 2018).

⁷⁰ *Field Exercises and Evolutions of Infantry*, revised by Her Majesty's Command, (London, 1870), pp. 205-231.

Brigade of about 3,500 men then the minimum training space required would be about 800 acres just to practise one simple advance. With the complexities of field manoeuvres the land requirements soon mount up to very large tracts of land.⁷¹

The field artillery's manual of exercises, 1875, attempted to standardise parade ground movements. They had little opportunity to practise tactics in massed formations and lacked a sizable training facility until the acquisition of Okehampton in 1877. There were few ranges suitable for artillery use and much practice was from fixed positions in the coastal defences where firing was out to sea. The Artillery Act of 1882 created the extended use of foreshore between high and low water at Maplin and Foulness and at the time this acquisition in Eastern England was the largest in Britain. In 1885 the regulation of artillery and rifle ranges was brought together under one Act.⁷² The 1886 amendment extended the remit of the Act to cover land used for 'drill and other military purposes.'⁷³ As weapons became more effective in terms of accuracy, range issues of safety became more dominant.

Cavalry recruits spent six to eight months in preliminary drill, first on foot then in riding drill. In the winter months cavalrymen were trained in riding and dismounted duties and undertook musketry practice in the summer. Each regiment had to send officers and NCOs on the pioneer course at Chatham, the musketry course at Hythe and to the veterinary and signalling schools at Aldershot. They also sent sergeants and corporals to be trained as riding masters at the riding school at Canterbury.⁷⁴ Spiers noted that the training of each branch of the service had suffered from the shortages of men and horses, from the lack of space, and even more from the lack of regular large-scale manoeuvres. Only after the government had purchased 41,000 acres of Salisbury Plain in 1897, was the army able to carry out manoeuvre at Corps level.⁷⁵

⁷¹ See Appendix Bii.

⁷² PP, Artillery and Rifle Ranges Act 1885.

⁷³ PP, Artillery and Rifle Ranges Act, 1885, (byelaws under that Act may be made accordingly).

⁷⁴ Edward M Spiers, (Manchester, 1992).

⁷⁵ Chris Pearson, et al. Militarized Landscapes in, *From Gettysburg to Salisbury Plain*, (London, 2010), pp. 1 – 20.

Between 1897-1909 the army developed a more tactical approach for major warfare.⁷⁶ There was improved training at Aldershot and some decentralisation had occurred but these measures were inadequate judging by performance in South Africa. The British emphasis on control, dense formations and fire-tactics centred on volleys, weakened initiative and was unsuited to the dispersed warfare which modern weapons demanded. Contemporaries noted that close-order prevented individuals from using cover effectively, while fieldcraft training was poor.⁷⁷ Training was dull, uninteresting, and impractical; money was too frequently withheld for manoeuvres. India had many advantages over Britain; there was more land for exercises, more frequent manoeuvres and more chances of action and for juniors to use initiative.⁷⁸

The breadth of the army's remit meant there was no way of simplifying its approach to war and express it through training of its officers. Compared with continental armies, the British had a tiny force with very little prospect of a significant increase in its size, equipment levels, or standard of facilities.⁷⁹ Military technology was also changing rapidly, but in a very uneven manner. The training and preparation of the British Army for war, for both its officers and men were challenging tasks indeed. These changed requirements for effective training contributed greatly to the demand for more land for the military that led to a 60% increase in the military estate in the first decade of the twentieth century, mostly in the north of England.

A significant step forward for the cavalry was the establishment of the Netheravon cavalry school on Salisbury Plain in 1904. Somewhat ironically, given the insistence on getting men used to life in the field, the South African war had revealed a shocking level of riding and horse care skills across both cavalry and mounted infantry. It was the recognition of such shortcomings that contributed to the significant increase in land

⁷⁶ Nick Evans, *From Drill to Doctrine. Forging the British Army's Tactics 1897-1909*, (PhD Thesis Kings College, 2007).

⁷⁷ Col. Verner, A French View of Our Army in South Africa, (MM 86,1902), p 387; AND Akers-Douglas Report (1902), p 50.

⁷⁸ Ibid., Akers-Douglas, pp. 50-51.

⁷⁹ Timothy Bowman and Mark Connelly, *The Edwardian Army: Recruiting, Training and Deploying the British Army, 1902-1914*, (Oxford, 2012), Chapter 4 on Training and Doctrine.

being acquired in the early decades of the twentieth century. The government gradually recognised the need for extensive acquisitions of land for military purposes at Okehampton, The Glen of Imaal in Ireland, Trawsfynydd in Wales, Stobs in Scotland and eventually Otterburn.

Land acquired for military purposes as recorded in the L&T returns and for the Lucas Committee showed that the military estate was six times greater in area by 1911 than fifty years previously. This growth was shaped by a combination of technological, strategic and tactical changes. Technology and combat experience forced the issue that the well drilled red line or square was no longer adequate to face European aggressors and increasingly insufficient even in Colonial control and conflict.

Interestingly, in early memoirs and diaries from soldiers in the late eighteenth and early nineteenth centuries there is little emphasis on training but much on the generally poor barrack accommodation and barrack life, long marches and boredom.⁸⁰ However, Edward Foster did mention how he reduced his drill time by getting one of the old soldiers to instruct him in the firelock exercises so that he got pretty well up on all the firelock manoeuvres before he reached his journey's end.⁸¹ In the late nineteenth century, regimental newsletters and soldiers letters commented increasingly on training and pride in marksmanship but were also critical of the training facilities available. However, late in the nineteenth century the emphasis changed. The 7th Dragoons complained that the Inspector General of cavalry had found fault with the size of their drill grounds. They claimed that this could be vastly improved by the levelling of the hedges on each side of Catton Road:

We trust they (the City Fathers) will take the matter in hand at once before the spring drills commenced, for an adverse report at headquarters might be the means of just turning the balance against Norwich as a cavalry station, and then great would be the weeping and wailing throughout the service.⁸²

⁸⁰ Maj. M.L. Ferrar, (editor), *The Diary of Colour-Sergeant George Calladine, 19th Foot, 1793 – 1837*. (London, 1922); William Surtees, *Twenty-five years in the rifle brigade*, (London 1833).

⁸¹ Edward Foster 1st/14th Bedfordshire regiment and 1st/14th Buckinghamshire regiments 1803 -1826, File 76c - 112 at York Regimental Museum.

⁸² Princess Royal's Dragoon Guards, (*7th Dragoons Journal*, January 1896).

The Dragoons also complained that there was no range nearer than Landguard, 60 miles away, and it was a pity to see the shooting of the regiment go down for want of range accommodation. 'It is rumoured that next year we shall fire at Yarmouth' (22 miles). A year later they reported that they had had a busy summer with manoeuvres on Salisbury Plain, and a fortnight by the sea at Yarmouth to wind up with:

We had a truly awful fortnight at Yarmouth, to which place we proceeded on August 23rd to go through our annual musketry course this year. Went on the North Denes, a sandy and unpleasant spot, and the weather although it was the sultry month of August, most of the time, was simply shocking, it rained and blew hard every day we were there you may be sure we took the earliest opportunity of marching back to barracks. The day after we left, the ground our horses had been standing on was two inches deep in water.⁸³

The perceptions of the individual soldier were also quite different to the early part of the century but some aspects remained. The diary of James White, in the East Yorkshire Regiment, provides an evocative image of army life. His barracks were described as austre and there was a feeling of lack of privacy and personal security, especially for personal belongings. Drill was still a dominant part of the recruits' life. Drill in the Depot was at:

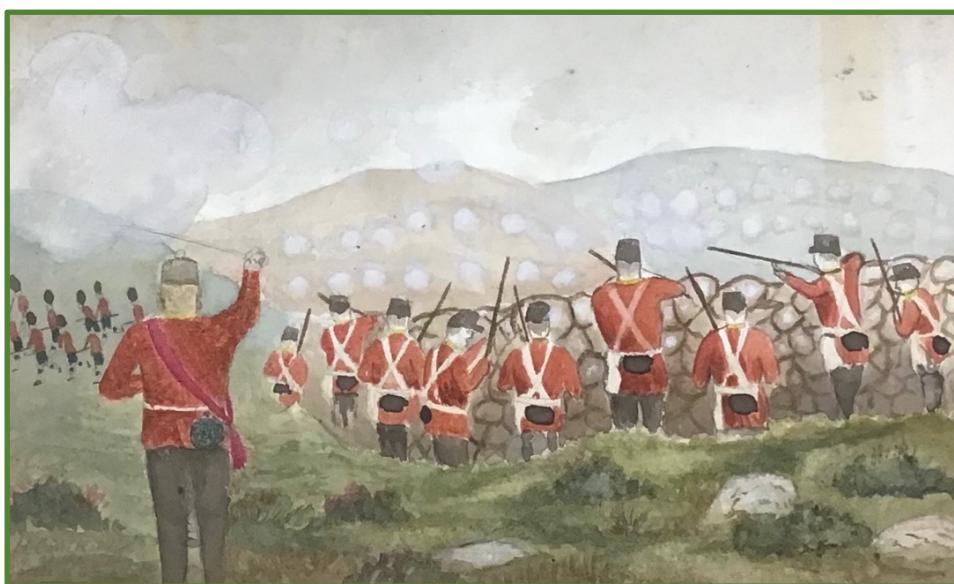
06.30 to 07.30, 0900 to 10.00, 10:30 to 11:30, 1400 to 1500, so our time was fully occupied. Then life was about drill, drill, drill and food. Issue of a rifle and bayonet, an hour each day in the gymnasium. In two weeks we started to learn drill with the rifle and with three hours a day and drill of one hour in June we soon began to get licked into shape. This sort of life went on for 12 weeks and by that time we were a very efficient squad of recruits.⁸⁴

⁸³ Princess Royal's Dragoon Guards, (*7th Dragoons Journal*, January 1896).

⁸⁴ Diary of James Edwin White 6043 1st Battalion East Yorkshire Regiment 1899-1907, (diary held at the Regimental Museum York).

James then transferred to Ireland and at the end of August they went to Kilworth Camp for training. Here they remained about three weeks, spending the whole time on musketry practice and the spare hours rambling around the country, watching birds nesting, blackberrying and visiting the soldiers' home. Kilworth, he described as a very nice place with splendid mountainous scenery.⁸⁵

Figure 3.36 (a and b): Norfolk Regiment on Dartmoor for exercises. (Watercolours from album of memories of the Norfolk regiment – Captain HA Armitage 1873-1882, NWHRM:992 page 36).



⁸⁵ Diary of James Edwin White 6043 held at the Regimental Museum York.

Detailed histories of the large training camps at Aldershot⁸⁶ and The Curragh⁸⁷ place these soldier and regimental memories and views in the context of detailed histories of the two earliest, large-scale camps that played fundamental roles in the development of training for British soldiers for the sixty years following Crimea. The development of ranges and exercise facilities with large areas of land for field firing was a particular feature of the late nineteenth-century ranges in a few locations. The Curragh, for example, developed several areas for field firing and sought to give a more realistic fluid movement for troops thought to be the way in which warfare would develop, having moved away from the rigid squares so prevalent in military art-work from that century (Figure 3.36). Little did the planners know that within twenty years they would require trenches and all that the First World War changed by way of mobility in warfare.⁸⁸

3.7 Introducing the case studies

After victory at Waterloo the British Army experienced a century of being too small for the range of expectations placed on it, and for most of that period there was uncertainty as to what the priorities were for the army to fulfil. From 1689 the priority in the annual Mutiny Act stated that the army existed to preserve the balance of power in Europe. This was deleted in 1868 and since then army leaders requested clarity about the expected priorities. Eventually, in 1888 there was an articulation of the nation's expectations of the role of the army set out in what became known as The Stanhope Memorandum,⁸⁹ discussed in Chapter 6. Varying emphasis on priorities at different times led to changes in organisation and deployment that in turn influenced the distribution of the military estate across Britain. This affected the regions of Britain differentially and led to significant variations in regional military landscapes. The thesis so far has focused on setting out the national picture in the development of a military estate, but there were also important regional factors at work. Although military

⁸⁶ Jacqueline Tivers, The Home of the British Army: the iconic construction of military defence landscapes" (Vol. 24, No.3, *Landscape Research*, London, 1999), pp. 303-319.

⁸⁷ Con Costello, *A Most Delightful Station – The British Army on the Curragh of Kildare, Ireland, 1855-1922*, (Cork, 1996).

⁸⁸ Ibid.

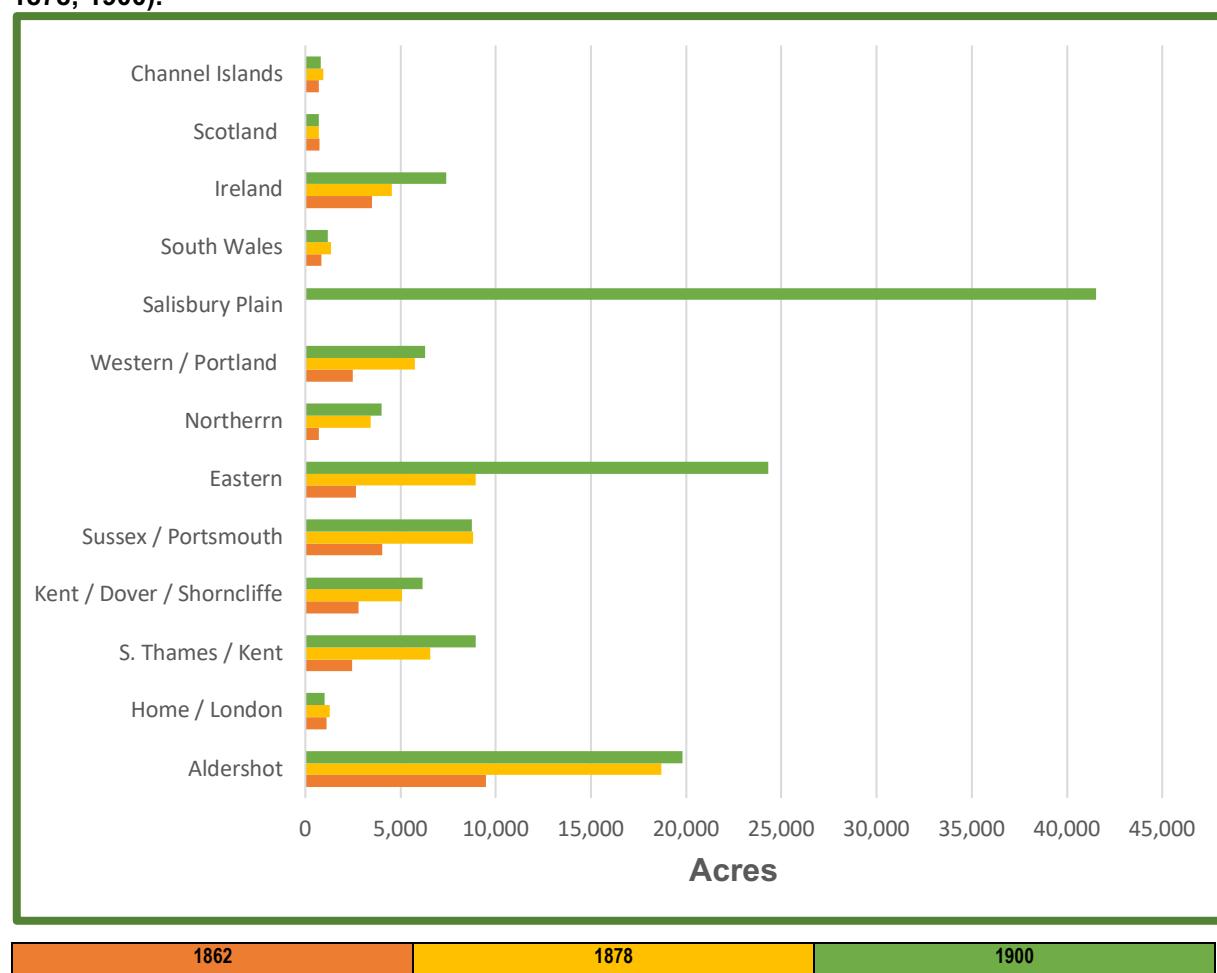
⁸⁹ Correlli Barnett, *Britain and Her Army 1509-1970*, (London, 1970).

reforms and directives were top down, they played out differently in different areas. They did not operate across an undifferentiated landscape. While nationally there were clear themes that influenced the acquisition of land for military purposes, comparison of regions shows there were points of contrast that were more a reflection of specific local circumstances and local implementation of national priorities.

The land used for military purposes did not grow significantly during the study period in the Channel Islands and the military estate there remained small. That does not, however, mean it was insignificant. The Channel Islands had large numbers of relatively small defence sites of great importance during the many years of threat from France but once that threat subsided later in the nineteenth century there was neither the space nor need for further military installations. In Scotland sites reached their zenith in the eighteenth century and because it was not a centre of concern for invasion there was little impetus for growth until the decade before 1914 when its topography made large scale training locations a possibility. South Wales saw some growth in the nineteenth century when the coast was vulnerable to attack and significant defence installations were made in Pembrokeshire. As with the Channel Islands, the diminishing French threat reduced the demand for the expansion of sites in this region.

The London and Home region grew slightly in provision in the early and middle part of the nineteenth century and was a focal point for defence infrastructure. But with London expanding rapidly as a large urban area and little available land for new developments most of the investment went into improving existing sites rather than expansion. The defence of London shifted emphasis to the Thames Estuary and Aldershot, leading to growth in the adjacent counties of Kent and Essex as well as along the south coast, with continuing growth in Kent/Dover/Shorncliffe and in Thames-Medway Estuary. The rapid growth, prompted by mid nineteenth-century investment in south coast defences, shows in Sussex/Portsmouth and Western/Portland regions with less growth in the last two decades of the century.

Figure 3.37: Land used for military purposes by region. (Taken from the L&T returns 1862; 1878; 1900).



What stands out from Figure 3.37 is the huge impact of Aldershot, and in the last two decades of the century, Salisbury Plain. By 1900 these two developments accounted for 47% of the land recorded in the WD returns, but only 29% in 1862 and 1878. Despite its history of large-scale barrack development and the garrisoning of the country, Ireland only had 3,080 acres in military use by 1862 but that more than doubled by the end of the nineteenth century. The very large number of military sites in Ireland, many dating back into the eighteenth century, required relatively modest land acquisition, had a small military estate but a highly visible one. The significant growth in land used occurred as the number of sites reduced and during the second half of the nineteenth century Ireland had one of the most iconic military camps, at The Curragh as well as ranges and training facilities that were used by many British Regiments during their tours of duty in Ireland. This specific part of the military estate is worthy of detailed investigation. Unfortunately, the impact of the Covid Pandemic

hindered that planned investigation in this thesis. Figures 3.38 and 3.39 show the growth in military land in each region from 1862 and includes the figures from the 1911 Lucas Report. Though the figures are smaller, the changing demand for land in two regions stands out as worthy of more detailed investigation. This shows that while the military land in the East grew significantly from 1878, the biggest impact of new training requirements after the Boer Wars brought about the greatest growth in the acquisition of military land in Northern England.

Figure 3.38: Military Land, case study regions compared to the rest of Britain, 1862-1911

Region / Country	1862 acres	1878 acres	1900 acres	1911 acres
Northern England	701	3,435	4,001	22,700
Eastern England	2,672	8,932	23,573	39,000
Western England and Wales	3,330	7,109	49,002	
Southern England	19,867	40,442	44,380	105,700
England & Wales Total	26,570	59,918	120,956	167,400
Ireland	3,080	4,563	7,389	8,000
Scotland	732	718	720	8,000
Channel islands	721	944	800	800
British Isles Total	31,103	66,144	129,865	184,200

Figure 3.39: Military land showing significant growth in the estate 1878-1911⁹⁰

Region	Military land in 1878 L&T returns as a percentage of British Isles Total	Military land under the War Office – Lucas Committee 1911	Change in percentage of military land holding in British Isles in each Region 1878-1911
Northern District	5.2	22,700	+ from 5.2 to 12.3
Eastern District incl. London	13.5	39,000	+ from 13.5 to 21.2
Western District and S. Wales	10.9		
Southern District	61.0	105,700	- from 71.9 to 57.4
England and Wales Total	90.6	167,400	+ from 90.6 to 92.0
Ireland District	6.9	8,000	- from 6.9 to 3.9
North Britain District (Scotland)	1.1	8,000	+ from 1.1 to 3.9
Channel Islands Districts	1.4	800	- from 1.4 to 0.4
British Isles Total acreage	66,144	184,200	

⁹⁰ TNA WO32/ 7189, Lucas Committee, (29/5/1911).

The Northern Region, with an areal extent of 14.6 million acres, was twice the size of the East Region and 3 million acres larger than London and the whole of the Southern Region. It contained a large number of growing industrial towns and a large number of barracks.⁹¹ Yet land for military purposes only covered 701 acres in 1862, slightly less than that in the Channel Islands. However, the military estate in the region grew 32 times larger in the next fifty years. The definition of the Northern Military District changed several times during the nineteenth century, so for the purposes of this case study the area is defined as from the Scottish border to the Humber and extending further inland to include Nottinghamshire, Leicestershire and Warwickshire on the eastern side of the district. On the west it extends south to the Mersey, through Cheshire, Staffordshire, Worcestershire, Shropshire and Clwyd in North Wales. In modern regimental terms the area is seen as the home of The Duke of Lancaster's, The Yorkshire and the Mercian Regiments. A distance of approximately 250 miles north to south and 125 miles east to west. It covers just over (20,000 square miles or just under thirteen million acres) and in 1801 had a population of 3.251 million, 7.343 million in 1851 and 14,869 million in 1901.

The second area worthy of further investigation is the Eastern Region, always relatively small in numbers of troops stationed there, a coast not facing France and little by way of urban growth during the industrial revolution. However, it protected London's north and east flank. There was a steady increase in military land and then exponential growth driven by the artillery ranges and facilities moving from Woolwich to Shoeburyness developing into a militarised landscape greater in area than at Aldershot. The definition of the Eastern Military District changed several times during the study period, therefore, for the purposes of this case study the area is referred to as The Eastern Region. This is delineated as the area stretching south from the Humber Estuary, to the Wash, across East Anglia to the north bank of the River Thames, a distance of 150 miles. The eastern boundary is the North Sea coast with its naval harbours at Yarmouth and Harwich, but the western edge is more difficult to define and has been chosen to include the counties south of Lincolnshire; Cambridgeshire; Northamptonshire; Bedfordshire and Hertfordshire, to where the

⁹¹ Land measurements calculated from ONS statistical data (2019) - https://lginform.local.gov.uk/reports/lgastandard?mod-metric=232&mod-area=E92000001&mod-group=AllRegions_England&mod-type=namedComparisonGroup.

River Lea joins the Thames.⁹² This gives an east to west distance of just under 120 miles. It covers 7.2 million acres (11,250 square miles or just over seven million acres) and had a population of 1.34 million in 1801, 2.31 million in 1851 and 3.44 million in 1901.

Figure 3.40: Location of the North and East Region case study areas.



The areas covered by the case studies are almost coterminous with the military districts as they became at the time of the Cardwell Reforms in the 1870s as shown with the red boundaries in Figure 3.40, but prior to that the North was split into Northwest and Northeast Districts.

⁹² This area is mostly coterminous with counties served by the regiments of East Anglian Brigade, the Royal Anglian Regiment from 1964.

These two case studies illustrate the major factors affecting the changes in the British military and its land requirements in the period between the Napoleonic Wars and the start of the First World War. Each study examines the factors previously identified in explaining the national distribution of land for military purposes. They each examine how defence and internal security priorities changed over time; the influence of accommodation for soldiers; the impact of military reforms, their recruitment and training; and the way technological factors and military strategy influenced the need for exercise and training land. Through a series of detailed local examples, the regional case studies illustrate how national priorities were changed by geographical, social and political local issues. They also set out how the combination of these influences changed differentially over time.

Chapter 4: - Northern England: Security, Recruitment and Training

The soldier has all the responsibility, while, at the same time, no precise power is confided in him, no line of conduct defined for his guidance. . . .

His thoughts dwell upon the (to him) most interesting questions, 'Shall I be shot for my forbearances by a court-martial, or hanged for over-zeal by a jury?¹

4.1 Introduction

This case study examines the factors that shaped the development of the military estate in the northern counties of England. The estate had large numbers of military sites throughout the nineteenth century, but its areal extent was small until the decade before the First World War. The development of a military estate in the north had two main phases, one relating to internal and external security, and the second the development of recruitment and training. The defence of the coast was important in locating early military sites from the years of the Revolutionary and Napoleonic Wars to the middle of the nineteenth century, when there was a resurgence of interest in the viability of coastal defences from fears of French invasion. However, the topography of the Northern Region influenced the pattern of industrial and urban growth, more than any other part of the country and this led to a period of influence on the location of many military sites relating to internal security. It was the military's responsibility to support the civil authorities that was the driver for much of the military strategy, and deployment of troops in the midlands and north in the first half of the nineteenth century.² In the second half of the nineteenth century the additional acquisition of land for military purposes was limited to relatively few geographic locations that became heavily militarised. The major factor driving the areal extent of the demand for such land was not in the end the accommodation of the several thousand troops located in the region, but the need to train soldiers to meet the changing demands of weapons technology, military strategy and government priorities.

¹ Anthony Babington, *Military Intervention in Britain*; (Routledge, 2015) – quoting Sir Charles Napier.

² Ibid., Babington - see Chapters 2, 3 and 4.

PART A – Defending the North

4.2 Pre-Waterloo influences (1790-1815)

The defences in the north of England at the end of the eighteenth century focused on defending the largest ports and the crucial supply of coal. The French landings in Ireland showed that even the west coast was vulnerable. Militia deployments during the Revolutionary War show just three companies in North Wales plus eight near the ports and coalfields of Westmorland. A reserve of twelve companies was available in the northwest and these also had emerging policing roles in the rapidly developing manufacturing areas of Lancashire. Large numbers of militia companies also remained in the north Midlands and the more vulnerable northeast coast had thirty companies in reserve in Yorkshire, plus twenty-seven companies focused on the defence of the coast from The Humber to The Tyne.³

In March 1795 General Grant's report for the Duke of York set out the arrangements and precautions to be made for the safety and protection of the North East District.⁴ The report focused on the importance of the Rivers Tyne and Wear because the supply of coal made Newcastle a prime target. (Figure 4.1) An attack on that area was more likely since the French were then in possession of Holland. Grant's report noted that many places between Hinder Bay, near Sunderland, and Alnwick were possible landing places for the enemy. As the French force would need to have ten to fifteen thousand troops, a request was put in for more troops to supplement the local forces that could be raised. Most troops were within two ordinary marches of Newcastle. The next nearest troops were within five days march at York, Penrith, Whitby and Carlisle. He requested an additional regiment of light Dragoons and eight battalions of infantry and bridges of boats to be thrown across the Tyne, Blyth and Wansbeck and to have four gun-boats at Shields.⁵ The letter ends with a blunt assessment:

I have not touched upon the Defence of Yorkshire as this part of the country seems so much more important. – yet as Hull is a place in which there is much

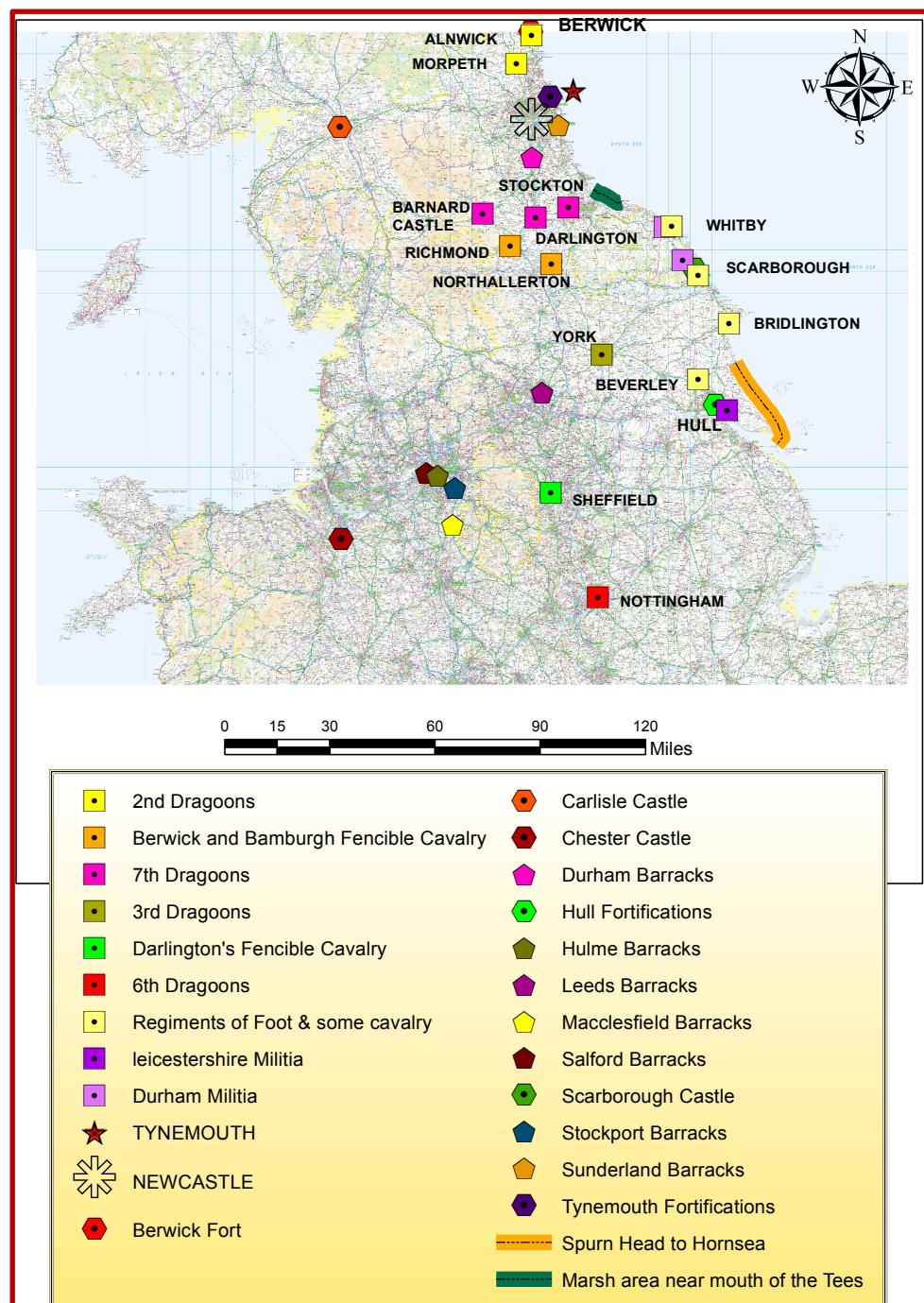
³ Royal Collection Trust - RCIN 734032, Daniel Paterson, *Encampments 1778 to 1782*, (c.1784-91).

⁴ TNA WO 30/61, Military Reports-Scotland, Northern, North Western and York districts, 1795-1805.

⁵ Ibid.

wealth and extensive trade, I would humbly propose the addition of two Battalions for its protection.⁶

Figure 4.1: The Defence of the North – General Grant's Defence Plan 1795.



This reinforced the defence priorities, the coast must be defended and inland was only important as a holding area for reinforcements and therefore, the military estate at the time clustered along the northeast coast.

⁶ TNA WO 30/61, Gen. Grants Report of Places within his District most exposed to sudden attack, (13th March 1795), pp. 20-23

The protection of the North East was to be enhanced by the construction of six temporary barracks at Warkworth, Creswell, Newbiggin, Blyth, Hartley and Whitley. Ten Regiments of infantry and eighteen troops of cavalry were also to be quartered and barracks erected at Tynemouth, South Shields, Whitburn, Sunderland, Durham, Chester-le-Street, Newcastle, Morpeth, Alnwick, Berwick and the batteries at Tynemouth were to be improved.



Figure 4.2: Ravensdowne Barracks Berwick in 1799⁷



Figure 4.3: The Barracks at Berwick

The permanent estate at the time was mainly formed by sites from the first half of the eighteenth century. Berwick barracks were built by the Board of Ordnance between 1717 and 1721 as a result of the 1715 Jacobite uprising. They were the finest and most ambitious barracks built in England in the early eighteenth century. Built for 600 men and 36 officers, they rarely accommodated that number.⁸ Barracks also developed in the older castles and fortifications at Chester, Carlisle, The Humber, Scarborough, Tynemouth and the Mersey Estuary. While the military presence in Carlisle Castle was originally focused on being a stronghold on the Scottish border and was besieged in 1745 it had become a retirement home for army pensioners and a base for militia during the Napoleonic Wars. Political unrest in the first half of the nineteenth century provided the impetus for renovating and extending the barracks within the walls.⁹

⁷ Paul Pattison, *Berwick Barracks and Fortifications*, (English Heritage, 2011), p.10.

⁸ Ibid., pp.5-10.

⁹ Henry Summerson, *Carlisle Castle*, (English Heritage, 2008), pp.3 and 34-36.



Figure 4.4: Mid nineteenth-century barracks still in part-time use within Carlisle Castle.

The coast had always been a location for defensive sites and these have left a significant legacy of early antecedent developments in several locations around the coast of Britain as illustrated by Tynemouth Fort. Dating back to 1539, the buildings were quickly turned to defensive use to control the entrance to the Tyne. These defences remained important well into the eighteenth century and became a base for the militia during the Revolutionary and Napoleonic wars.

Figure 4.5: Tynemouth Fort. (Google Earth)



After Waterloo the coastal defence was significantly reduced and in 1824 only one master gunner and an assistant maintained the Tynemouth guns. While Tynemouth's origins as an important military site predate the study period, it is a good example of an antecedent development that was active throughout the nineteenth and twentieth centuries as part of the military estate.¹⁰



Figure 4.6: Symbolic armament from the mid-19th Century.

Figure 4.7 Castle Yard, Tynemouth about 1895 – ammunition magazine centre right; governor's house, lighthouse and barracks to the left.¹¹

Col. De Lancey's Barrack Department's plans in the 1790s discussed in Chapter 3 added permanent cavalry barracks into the North's estate. M.A. Taylor, a vociferous critic in parliament, censured William Pitt for, 'secretly causing barracks to be erected and separating the soldier from the citizen,' which he claimed was contrary to eminent authorities.¹² He and others tried again in 1795, opposing the granting of funds to erect barracks, arguing that it was a mere pretence that it would ease the difficulties for inn-keepers but it would 'convert the government of the country into military despotism'.¹³ On each occasion Taylor lost in parliament by a large margin. By 1796, the accounts presented to Parliament showed that between January 1792 and December 1795, new permanent cavalry barracks in the north were built at Birmingham, Coventry, Manchester, Nottingham, Sheffield and York plus infantry barracks at Sunderland and temporary cavalry barracks at Chester Le Street, Morpeth

¹⁰ Grace McCombie, *Tynemouth Priory and Castle*, (English Heritage, 2008), pp.32-38.

¹¹ Ibid.

¹² *Norfolk Chronicle* 02 March 1793.

¹³ Ibid., 12 December 1795.

and Newcastle.¹⁴ Interestingly the distribution of barracks played very little role in Dirom's plans for the defence of Britain, other than feeling that if they were needed they should be in reserve positions away from the coast.¹⁵

As most sites took up no more than twenty acres the total estate purchased in the North was unlikely to be more than 140 acres. Why the cavalry barracks were dispersed around the country is open to interpretation. Emsley emphasized the policing role in creating this distribution.¹⁶ Lord Anglesey stressed the influence of both the defence role and internal security as drivers behind the location of the new barracks.¹⁷ However, he acknowledged other factors, such as to combat smuggling, also influenced the decision. Other permanent stations came into being in areas where serious rioting had taken place.¹⁸ In the pre-railway age, the movement of horses and men was a complex issue and having them located long distances from potential invasion sites made their use less effective. Having cavalry within a day's ride of those sites gave some immediate response to invasion threats. The cavalry barracks in Northern England were clearly in places where they could support coastal defences but their location in the larger emerging industrial towns suggests a rationale for location more to do with having sufficient numbers of mobile troops to combat internal disruption.

4.3 Supporting the civil powers (1815-1860s).

After the Napoleonic Wars through to the middle of the nineteenth century the military estate in the North of England was shaped more by support for the civil powers than any other part of Britain other than Ireland. Civil disturbances in rural England frequently required local volunteers or militia to respond but it was the growing

¹⁴ PP, Account of sums of money issued by the Barrack Master General, for the erection of Barracks, 1790-1795, (3rd February 1796, University of Cambridge).

¹⁵ Lt. Colonel Dirom, *Plans for the Defence of Great Britain and Ireland*, (Edinburgh, 1797), pp. 9-41.

¹⁶ Clive Emsley, *The English Police: A Political and Social History* (New York, 1991); The Military and Popular Disorder in England 1790 –1801, (Vol.61, Nos. 245 and 246 JSAHR, 1983).

¹⁷ Lord Anglesey, *A History of the British Cavalry 1816 –1919*, (Leo Cooper edition, Barnsley, 1998) vol. 1, part 1, sections I and II.

¹⁸ Ibid.

manufacturing unrest in the middle of the nineteenth century that had an impact on the location of some military sites. Public disorder, especially up to 1818, was heavily influenced by issues such as 'elections, religion, politics, recruiting, and enclosures'.¹⁹ Food riots were related to periods of serious harvest failure or trade depression.²⁰ Riots and disturbances were nationwide with 122 between 1795-1801 with only 15% in the north. From 1810-1818 there were 55 disturbances with 43% in the north.²¹ Especially in the earlier period, soldiers frequently contributed to food disturbances rather than being major upholders of the peace. This was because their deployment put extra pressures on the supply of food in an area that traditionally would have been expected to house and feed them.

Civil unrest in the industrial towns could have spilled over into insurrection similar to events in mainland Europe but there is no evidence of significant foreign interference in the disturbances in mainland Britain. There was fear that those leading some of the unrest may have been in touch with, or influenced by, revolutionary thinking and actions in various parts of Europe and close geographical links between northwest England and Ireland meant that continental influences on Irish nationalism were seen as a fairly constant threat. This was especially so when the unrest in the north was influenced by the large Irish population that had migrated to the northern cities. While it was often the volunteers that had a role in supporting the civil power the concern about disturbance becoming insurrection led to clear plans for the regular army to be housed in such a manner as to be able to respond quickly. For some time, in the early nineteenth century, there appeared to be a 'soft' garrisoning of the northern industrial towns. Military involvement in civil matters had a clear geographic clustering. The following analysis of the 1856 Parliamentary Return shows that while troops were called upon in rural areas of the East and South West the major clusters were in the Midlands and North West.²² Figures 4.8(a) and 4.8(b) show the fifty-eight occurrences of military aid being provided in the ten-year period up to 1855.

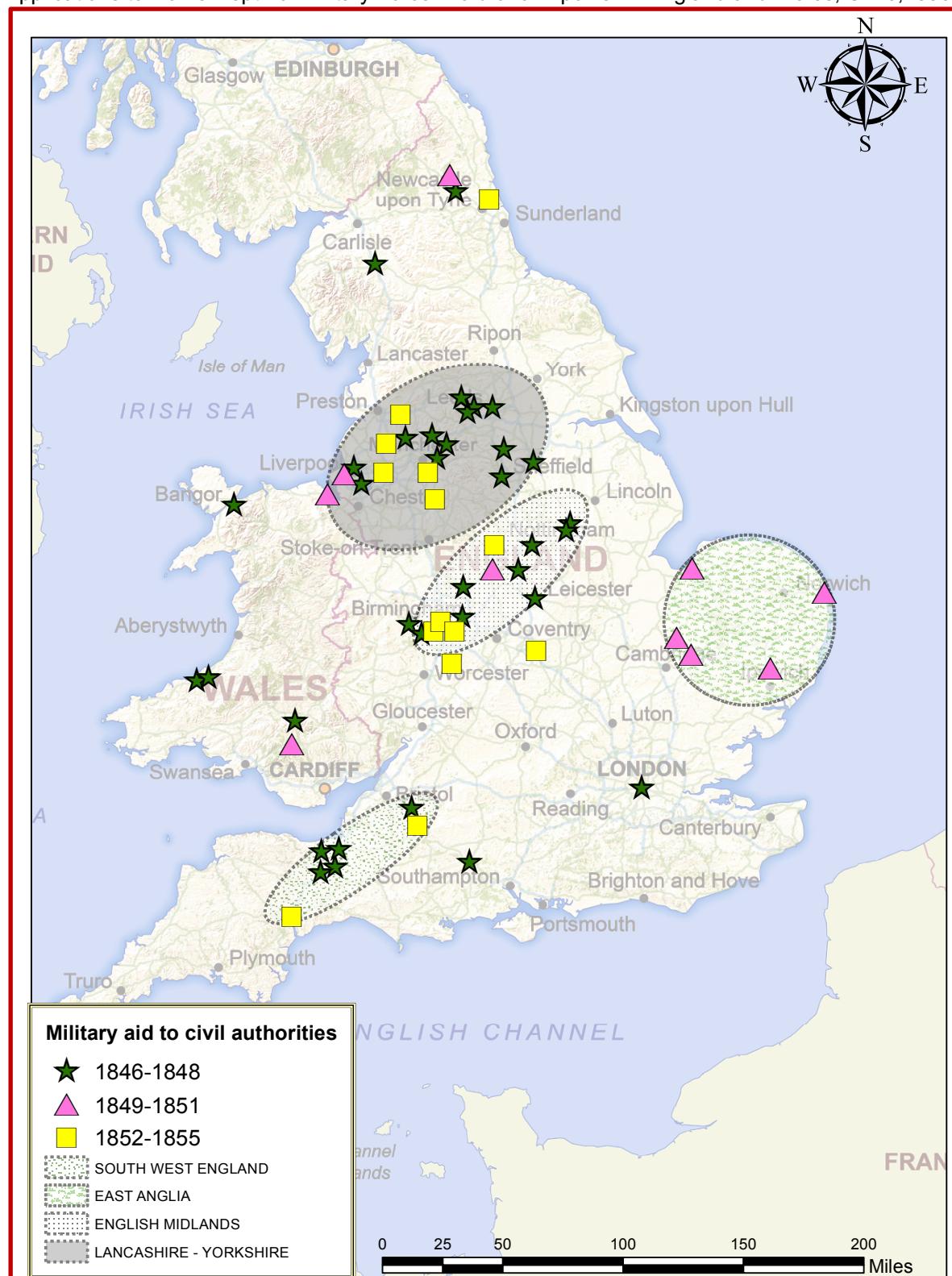
¹⁹ R. Quinault and J. Stevenson, *Popular Protest and Public Disorder*, (London 1974), p.33.

²⁰ Ibid., pp.33–74.

²¹ Ibid., p.36.

²² PP, Return of Applications to Home Dept. for Military Force in aid of civil power in England and Wales, (C126,1856).

Figure 4.8(a): Military aid to the civil power, England and Wales 1846-1855. (PP, Return of Applications to Home Dept. for Military Force in aid of civil power in England and Wales, C126, 1856)



While all military districts needed to be able to respond to requests from the civil authorities, the use of the military was much more extensive in Lancashire and

Yorkshire in particular and in the industrial Midlands. The total for the Northern Region accounted for 60.5% of the recorded applications.

Figure 4.8(b): Military aid to the civil power in England and Wales 1846-1855 (PP, Return of Applications to Home Dept. for Military Force in aid of civil power in England and Wales, C126,1856).

Year	South West England (7) 12%	East Anglia (5) 8.5%	Midlands of England (15) 26%	Lancs / Yorks (20) 34.5%	Elsewhere in England & Wales (11) 19%
1846			1		2
1847	4			1	1
1848	1		8	12	4
1849		1			
1850				2	1
1851		4			
1852			1	1	1
1853			1	2	
1854	2		2	1	2
1855			2	1	

The need to be able to respond quickly to these requests became a significant factor in the location and design of barracks in the North. In response to the increased demand for military aid, new barracks developed in Bristol and Cardiff but most significantly across Lancashire and West Riding with five additional barracks brought into use or built compared with the position in 1822. The report mapped here only covered responses from England and Wales, but the requests for such engagements were often greater in Ireland, and rural in nature.

The magistrate was responsible for local civil order and it was his decision, based on local intelligence, to call on the military for support and determine the extent of the action they were to take. This relationship was frequently marked by tensions between the magistrate and officers, particularly in the era before organised police forces.²³ It was not merely the lack of police forces but the variability and predilections of the magistrates that led to situations where, too often, the authorities marshalled military power to 'quell their own fears, or to lend moral support to the police in the execution of their duty.'²⁴ It was this attitude that frequently meant that disturbances could quickly lead to a demand for troops.²⁵

²³ Frederick Mather, *Public Order in the Age of the Chartist*, (Manchester, 1959), pp. 141–82.

²⁴ *Ibid.*, p.141.

²⁵ H. Palmer, *Police and Protest in England and Ireland 1780–1850*, (Cambridge, 1988), pp. 56–69.

Dependence on the military was exacerbated by the slow development of local police forces in England and the relative complexity, and variable perception, of the elements that constituted 'the military'.²⁶ The Yeomanry, officered by the gentry and aristocracy, operated as a cavalry at home. They were directly linked through the Lord Lieutenants and magistrates to the Home Office and not usually at the disposal of the military commanders. They were frequently made up of tenant farmers who were needed for food production and The Yeomanry was not popular with local people especially after Peterloo in 1819. They also varied considerably in strength in different parts of the country. Enrolled Pensioners could provide valuable local capacity, but they were small in number and had difficulty with storing weapons safely.²⁷ The militia, for most of the first half of the nineteenth century had been allowed to atrophy. Therefore, the pressure fell on the regular army but that created three main difficulties: firstly, there were frequently insufficient numbers; secondly, they were often in the wrong place and poorly accommodated; and thirdly, the policing role was unpopular with many soldiers and their officers where their functions were unclear.

The military resented their use as a glorified police force and the lack of clarity about the regulations surrounding their operations. The most renowned criticism came from Sir Charles Napier.²⁸ He gave an example of the ludicrous position in which troops on civil duties were sometimes placed. During the Burdett riots he had heard a magistrate directing an officer to disperse a mob but forbidding the loading of muskets or the fixing of bayonets.²⁹ The officer enquired how he was to set about the task, and the

²⁶ Evan Wilson, *The Horrible Peace: British Veterans and the end of the Napoleonic Wars*, (Massachusetts, 2023), pp.140-147.

²⁷ Ibid., pp 170-180.

²⁸ TNA HO 50/451, War Office and Chelsea Hospital, correspondence, Napier's report on troop distributions in Northern District 1840; Edward Beasley, *Charles James Napier*, (Oxford, 2017) pp.136-150. In 1839 General Napier, after successful service in Greece and the colonies was given command of the Northern Districts and set the task of defending the area from civil disturbance especially linked to the growing Chartist movement.

²⁹ TNA PC 1/3912, Sir Francis Burdett: riots in London occasioned by his arrest and imprisonment, (1810).

magistrate replied, 'That is your business not mine. Do it as you like, only you must not fire or use your bayonets'.³⁰

Eventually, in 1835, orders were laid down on what an officer and his men could legitimately undertake. Troops called upon had to be accompanied by the magistrate and they were not to use their weapons unless specifically ordered. Eventually these orders were incorporated into the Queen's Regulations and became the official policy of the army. This did not stop several occasions when troops opened fire on the public, as at Bossenden Woods, Kent in 1838,³¹ Newport in 1839,³² Preston in 1842,³³ Belfast in 1886,³⁴ Featherstone in 1893³⁵ and Tonypandy in 1910.³⁶

The pressures exerted on the military are clear in the correspondence on behalf of the local Mansfield magistrates. They wrote to the Secretary of State for the Home Department seeking support in putting pressure on General Napier. The letter explained that gatherings of 300 took place in Mansfield and a further 500 in Sheffield:

I was near to the latter meeting several times. It was held at nine o'clock at night and was attended by a sort of chanting Preacher who after giving out a Hymn, preached to them for more than an hour holding up the aristocracy and middle classes to destruction, and drawing parallels from the scriptures which he stated to be applicable to the present circumstances of this country.³⁷

³⁰ Anthony Babington, *Military Intervention in Britain : From the Gordon Riots to the Gibraltar Incident*, (Routledge, 2015), Chapter 2.

³¹ P. G. Rogers, *Battle in Bossenden Wood*, (Oxford University Press, 1961).

³² David Jones, *The Last Rising: The Newport Chartist Insurrection of 1839*, (University of Wales Press, 1999).

³³ *Preston Chronicle*, 13th August 1842.

³⁴ PP, Royal Commission on Belfast Riots, (C.4925, 1887).

³⁵ TNA TS18/1407, Featherstone Riots Inquiry, 7th of September 1893.

³⁶ David Smith, 'Tonypandy 1910: Definitions of Community'. (Vol. 87, *Past & Present*, 87, 1980), pp.158–184.

³⁷ TNA HO 40/47, Letter to the Home Office 16th July 1839 from Edward [Sherwin?] JP, pp. 321 to 324.

While the meetings dispersed quietly, informants claimed that they were only waiting for their marches to break out into violence. There was such a feeling of alarm amongst the peaceable inhabitants that they thought it right to send a request, signed by all the respectable inhabitants and persons of property in the town, to Sir Charles Napier to send a military force immediately. 'This requisition will be backed by the Magistrates themselves, and they earnestly hope it will be attended with success.'³⁸

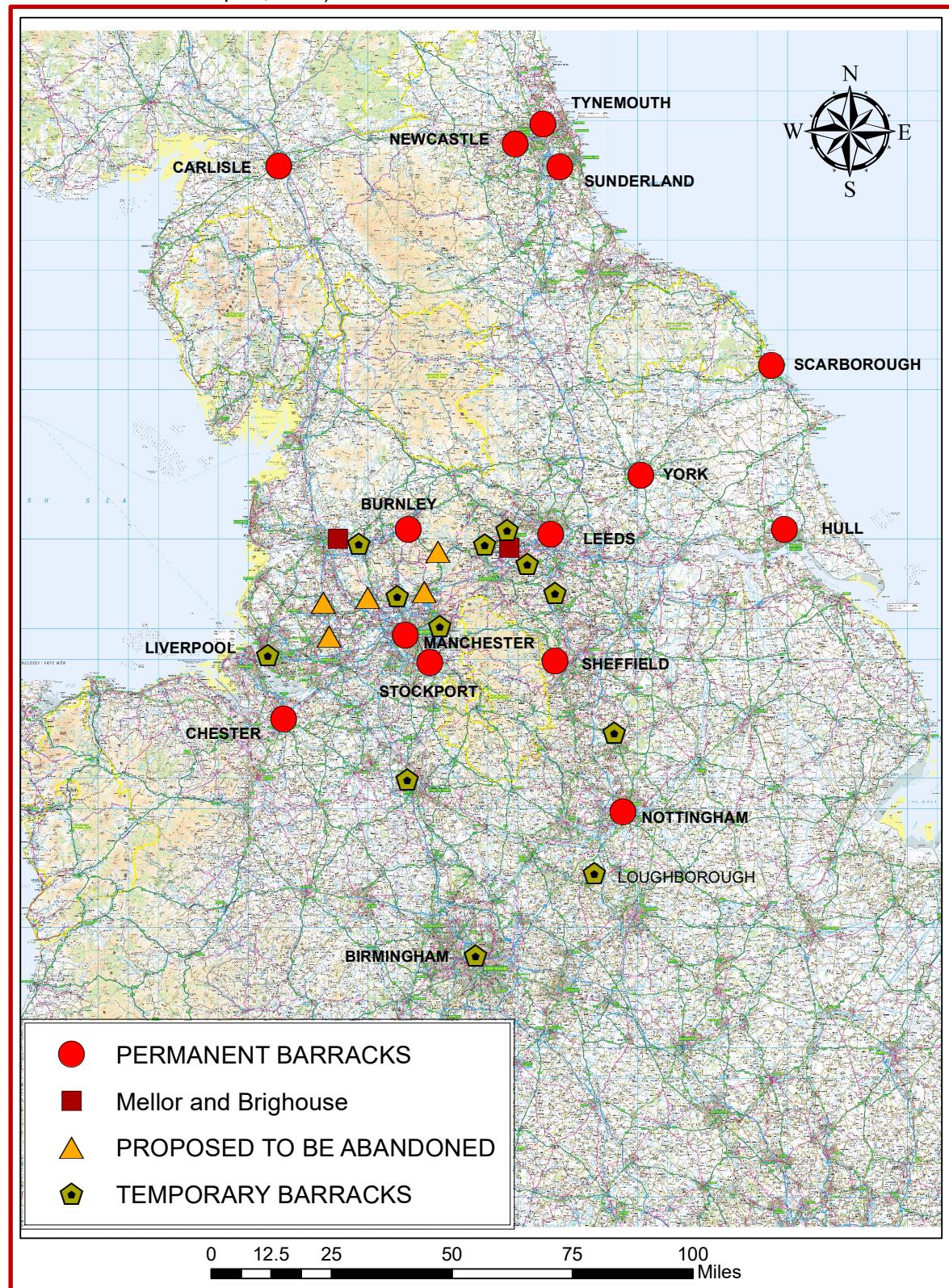
While the military's aid to the civil power continued throughout the nineteenth century it diminished in regularity as the developing police forces became more effective. The most influential period for army involvement reached its peak in northern England during the first half of the nineteenth century and was particularly important in shaping military deployment during the 1830s and 1840s. The clearest illustration of this can be seen in General Sir Charles Napier's analysis of the most effective way the military could carry out its duties in dealing with civil unrest. His famous sketch map has received some attention from historians, but probably in most detail from Douet whose analysis provides a useful overview of the strategy Napier proposed.³⁹ Douet identified an interesting feature brought into the design of some barracks that was lost in later designs. It is worth setting out Napier's views at length as they illustrate a central tenet of this case study; that the northern distribution of military sites varies significantly from other parts of Britain because of a diminished influence from defence factors but a strong influence from the responsibility to control civil unrest. Napier presented his plan to the government, summarised in map form (Figure 4.9) apologising for his 'rude sketch'.⁴⁰ Georeferencing shows that the positioning of the towns is remarkably accurate with the east west dimension being slimmed and current day Cumbria truncated considerably.

³⁸ TNA HO 40/47, Letter to the Home Office 16th July 1839 from Edward [Sherwin?] JP, pp. 321 to 324.

³⁹ Douet, *British Barracks*, (1998), pp.111-114.

⁴⁰ TNA HO 50/451, War Office and Chelsea Hospital – military correspondence 1840, Napier's report on troop distributions in the Northern District - *'This rude sketch will serve to show the general position of the troops; but it has been hastily taken from a bad map and is very inaccurate as regards the distance of towns. I only thought of making it at the last moment and by writing down the distances in figures I have, inserted such and corrected the inaccuracies'*.

Figure 4.9: Napier's Planned distribution of military sites 1840. (based on TNA HO 50/451 War Office and Chelsea Hospital, 1840).



The distances Napier put on his map are also remarkably accurate for such a 'rude sketch'. Taking a sample of ten distances between towns across the map gave an average error of only 4.5 percent out of a total distance of 437 miles.

Napier was proposing a radical solution for a home army. Instead of merely accommodating soldiers, he examined the topography of the north of England along with his analysis of likely points of conflict. He was looking at the military estate as part of a plan to garrison the area as in a field of operation. It was the first plan of a large part of the military estate since the 1790s. He asked his officers for comments on what was omitted and one experienced officer raised a query about closing Todmorden in the light of recent rioting. His comment is instructive: 'it goes to prove that troops are required in every town in England, for every town is liable to rioting.' A second response emphasised the problems with the geographical extent of the region under consideration; he complained that he had to transfer troops on some occasions from Hull, a distance of sixty-four miles when requests came in late.⁴¹

Napier acknowledged that his expenditure requirement might be considered high and he offered savings at seven locations. If Chartist disturbance should again take place, he identified that it would have an adverse impact on the discipline of troops and the property of the inhabitants.⁴² Significantly, Napier did not ask for more troops, just a more efficient deployment of them and better conditions for his men. He argued that the force required should remain at its current strength because disturbances were still likely and the force

ought to be barracked ready for it; because the state of disturbances which demands the assembling of so many troops is that in which it is impolitic to place them in billets.⁴³

⁴¹ Edward Beasley, *Charles James Napier*, (Oxford, 2017), pp.140-147

⁴² Ibid.

⁴³ Ibid.

Napier split his review into east and west of the Yorkshire Hills (Pennines) and collected analyses from all his commanding officers on the state of accommodation in their area. The east of the Yorkshire Hills included the older coastal defences and the newer barracks at York. His officers liked the old defensive forts as easier to defend in case of insurrection. Their main criticism was that the West Riding was without infantry other than two companies in Halifax while the 'population of this district is manufacturing and so dense being, like Lancashire, always liable to ferment.'⁴⁴ The officer noted that 'the narrow streets of the Yorkshire slopes of the Westmoreland and Derby Hills make the use of cavalry difficult and because of the changed tactics of rioters infantry are needed.'⁴⁵ His conclusion about the benefits of the area sum up in a few words the influence of landscape and technology as he concludes, 'countryside healthy, good water, far from the larger towns so as to keep soldiers out of mischief. Railways close by.'⁴⁶

The North had a population of 1.4 million in 1840 and 53% of the people lived in the industrial towns between Liverpool and Stockport and north to a line from Burnley to Preston.⁴⁷ It was dealing with this growing hotbed of manufacturing power, increasingly prone to world economic fluctuations and a focus for large scale Irish immigration of the predominantly economically poor that created the cocktail of unrest that placed Napier's troops under so much pressure. He dealt with this in terms not dissimilar to the garrisoning of Ireland but on a smaller geographic scale. He wanted large, safer, defendable barracks in locations near the new centres of population and quickly identified the potential for the new railway network to aid him in moving troops to where they were needed.⁴⁸ Significant concern was raised about the state of the

⁴⁴ TNA HO 50/451, WO correspondence (1840) Eastern side barrack reports, No 1 of 14.

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Edward Cheshire, 'The Results of the Census of Great Britain in 1851', (Vol 17, No1, *Journal of the Statistical Society of London*, 1854), p. 58.

⁴⁸ Edward Beasley, *Charles James Napier*, pp. 144–147.

⁴⁸ F.C. Mather, 'The Railways, the Electric Telegraph and Public Order during the Chartist Period, 1837 – 48', (Vol 38, No 132, *HIS*, 1953), pp.46-49; Edward M. Spiers, *Engines for Empire: The Victorian Army and its Use of Railways*, (Manchester, 2015), pp. 1–16.

barracks, established for the cavalry from the 1790s. In Leeds, despite its excellent location for dispatching troops to other locations, the barracks remained a concern throughout the century and never became a regimental depot. Similar barracks in Sheffield were considered very old and 'in a bad state'.⁴⁹ Rooms were small and with very poor sanitation and there was little room to expand or modify the site. But its location was ideal as a node of links between Manchester, Nottingham and Leeds. Napier drew up proposals to improve the barracks but these were later rejected and extensive new barracks were built, but not without criticism as discussed below. The site was replaced by the Hillsborough barracks later in the 1840s.⁵⁰

The main focus of Napier's plan was the rapidly growing industrial heart of Britain, especially Lancashire, which was in a relatively volatile state. Similar social and economic pressures focused on towns from Leeds south to Nottingham. While Napier was not really in favour of either temporary or small barracks, he accepted the need to maintain some intermediary accommodation between the four large towns of Nottingham, Chester, Sheffield and Leeds. Many of these intermediary locations did not develop later as military sites such as at Loughborough, Mansfield, Barnsley and Dewsbury despite having garrisons and temporary accommodation at the height of the civil unrest.

A small number of temporary barracks had to remain as there were insufficient funds made available for wholesale rebuilding. Five locations were closed at Haydock Lodge, Wigan, Rochdale, Todmorden and Bolton because replacement was too expensive or alternative sites provided better strategic locations, enabling wider areas to be defended more efficiently. There was considerable debate about whether Bolton should lose its barracks, or rather whether it should get a new one. In the debate in March 1843 one of the local MPs noted that there was a need for a barracks and that the government had been requested to station troops there and build a barracks. But when the proposal was sent to the magistrates at Bolton various resolutions were supported by the principal ratepayers stating that no military force was necessary.

⁴⁹ TNA HO 50/451, WO correspondence, (1840) No 5 of 14.

⁵⁰ Historic England, <https://historicengland.org.uk/listing/the-list/list-entry/1246504>.

They returned to the anti-standing army views of the turn of the century, viewing the proposals as ‘an alarming indication of the intention of Government to bring the country under a system of military despotism.’⁵¹ While there were local objections to this view, it seemed to contribute to the decision not to build permanent barracks there. However, from a military perspective the closeness of Bolton to other barracks meant that there was no need for a large barracks there as well as at the preferred location for expansion, at Bury. Manchester became the focus for planning along with barracks on its perimeter and a further line of barracks along the northern fringe of Lancashire’s industrial towns. The barracks in Salford were considered for expansion and Napier drew up detailed plans for improvement but these were not carried out as they were already known to the government as requiring improvement. They, along with the cavalry barracks at Hulme, less than a mile away across the Irwell river, accommodated almost 1,000 soldiers between them with a further 500 in temporary accommodation for two years at Tib Street.⁵² These barracks were seen as the hub for deploying troops as required. The population was described by Napier’s officers as ‘one that pours into disturbances,’ and therefore, the larger size of garrison enabled the barracks to be defended.⁵³ As Napier put it in his report:

there is no better military school for officers and privates than a large garrison, and in these times, it is perhaps wise to keep the soldiers together as much as possible.⁵⁴

From the Manchester hub the three locations at Stockport, Ashton and Bury were seen as important. Stockport was considered in good condition but too small and with little room for expansion.⁵⁵ Despite concerns about the radical nature of the local

⁵¹ PP, ‘Barracks at Bolton, Volume 67: debated on Monday 13 March 1843’.

⁵² Robert Bonner, Hulme Cavalry Barracks, Manchester, (Vol. 91, No.367, JSAHR, 2013), pp. 206-225.

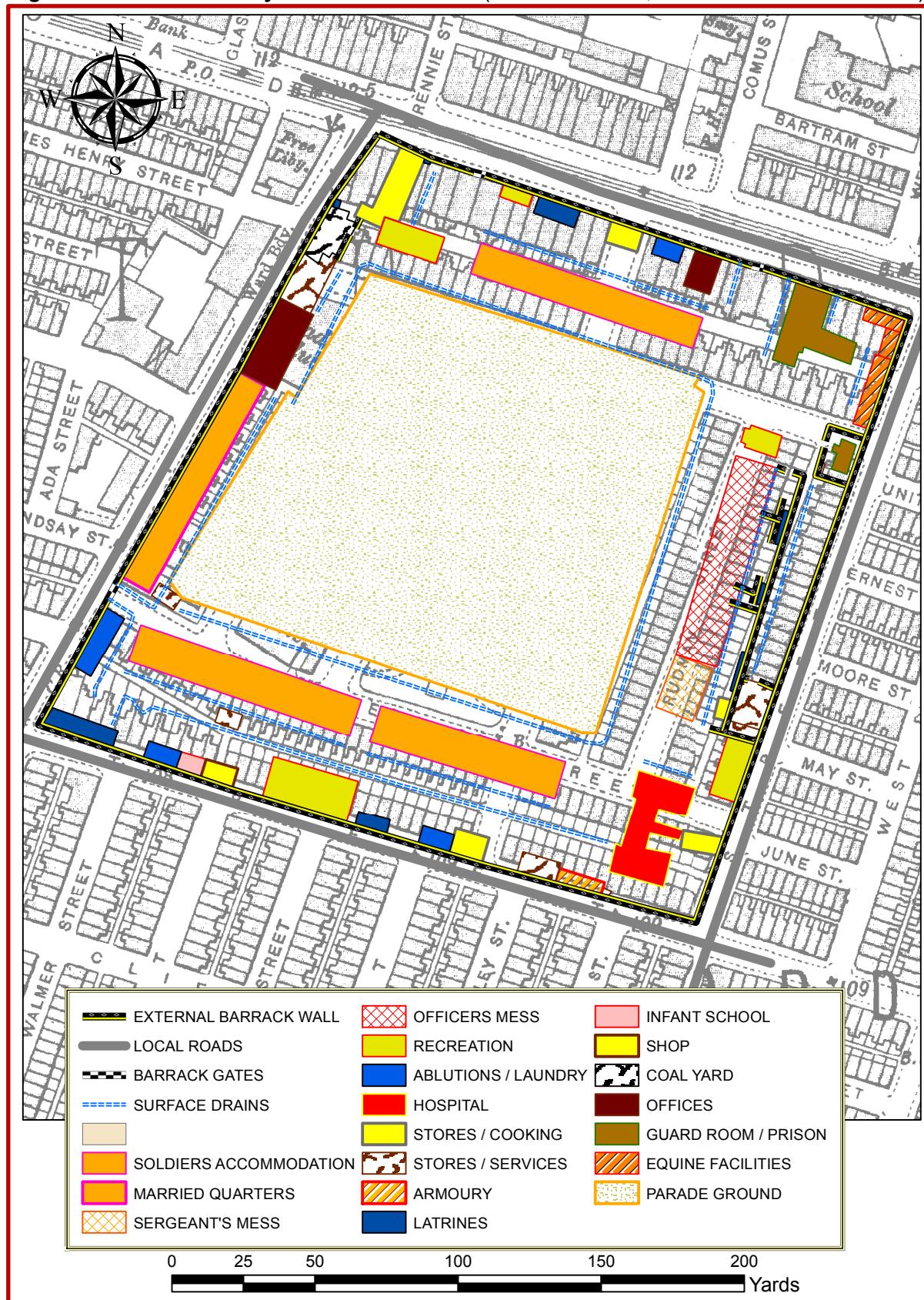
⁵³ TNA HO 50/451, War Office Military correspondence (1840) Western side barrack reports, No 1 of 13 on Manchester.

⁵⁴ Ibid.

⁵⁵ TNA HO 50/451, War Office Military correspondence (1840) No 2 of 13 on Stockport.

population, Ashton became the more important military site taking over from Stockport and eventually becoming a Cardwell depot.

Figure 4.10 Salford Infantry Barracks from 1819. (TNA WO78/3333, Salford Barracks Plans 1888).



The local population was described as having 125,000 in the vicinity and 'the people are generally dissatisfied and have a liking for violence.'⁵⁶ While there was government land available at Oldham, the Royal Engineers advice was that it was too difficult to build on. The report on Bury described it as not bad but not suitable for permanent barracks with poor water supply. But its location was considered strategically very good as between Manchester and Burnley / Blackburn and able to protect Rochdale and other barracks which were identified for closure as Bury expanded. In addition, unlike the Bolton reaction, local representatives agreed to pay for upgrading the temporary barracks as they saw the barracks as part of an income for the town as well.⁵⁷

Burnley was considered a good barracks for two troops of horses and two companies of Foot (about 270 men) but not good enough for HQ or Regimental expansion. It was a constrained site but with excellent rail links and its own station. The debate about location had ranged across several decades. In November 1819 a meeting, with Colonel Hargreaves in the Chair, listed seventy-three people offering subscriptions to build a barracks in the Hundred of Blackburn. This was because of the 'present state of the Hundred, and the frequent disturbances which have happened there within a few years past.'⁵⁸ They estimated the cost to be about £5,000 and had already raised £2,478 from their subscribers including Sir Robert Peel, several clergymen and other titled subscribers, but most were local business owners. It took another ten years for their wish to be granted, albeit temporarily.⁵⁹

The development of the military sites at Blackburn and Burnley is a good example of how land available and constricted sites affected the functions a barracks could fulfil. While local attitudes to a barracks and the extent and location of a site influenced the siting or further development of a barracks, it was the strategic purpose that finally

⁵⁶ TNA HO 50/451, War Office Military correspondence (1840) Western side barrack reports, No 6 of 13 on Ashton.

⁵⁷ Ibid. No 5 of 13 on Bury.

⁵⁸ DDW / 3/115, Minutes of meeting at Gardiner's Arms, Whalley, for raising subscriptions towards barracks in Blackburn. (Lancashire Record Office, 1819).

⁵⁹ Ibid.

affected the decision to invest in a site or not. Blackburn was the preferred location for the development of a permanent barracks but its temporary barracks, on an Ordnance site was near timber yards and in a cul-de-sac. This was viewed as dangerous in case of disturbance, as it could easily be set on fire. A detailed letter from Major Rivers (R.E.) in 1840 to Major General Napier, a few weeks after his report had been submitted, examined various possible barrack site developments in the industrial belt of towns in central Lancashire north of Manchester. Of specific interest were plans, submitted by a Mr. Hopkins, for barracks to be developed at Ribbleton Moor, to enhance the protection of Preston. Rivers compared this with the existing proposed site at Mellor just three miles west of Blackburn after it was clear that the Ordnance site in Blackburn was not suitable and the Burnley site was too small and constrained. Mellor was only seven miles from Preston and could afford that town protection as well as protecting Blackburn. 'The ground at Ribbleton Moor does not appear to present any particular objection as a site for building a barrack upon.'⁶⁰ It had good drainage, water supply and open unenclosed land of up to 70 acres suitable for exercising. While the nature of the moorland soils might make the site unhealthy, the main problem identified was that the Moor had several owners and the purchase could be difficult for barrack purposes and so might drive up the price of the land. Major Rivers then identified national security as the prime mover in the deployment of troops. Establishing barracks at Preston was a new proposal and added a fresh feature in the strategy for the protection of manufacturing districts.⁶¹ While the policing role was the push for the new barracks, the legal and organisational context had become more enabling with the decision to clarify the Ordnance Department's responsibilities for military land in 1842 through the Defence and Security of the Realm Act.⁶²

The Mellor site, on the Blackburn to Preston Road, could be obtained on very favourable terms. Its location was 'highly commanding, central, with roads radiating from it in all directions and in every way [is] most superior.' The question about the best location came down to the key strategic decisions. Should the decision be to

⁶⁰ TNA HO 50/451, War Office, military correspondence, (9 June 1840).

⁶¹ Ibid.

⁶² PP. Defence Act. (C.94, 1842).

protect Preston and Blackburn alone, or to do that and also the adjacent manufacturing towns collectively and the surrounding country within a system of proper communications.

Napier noted that Major Rivers seemed to ignore the fact that Preston was where many railroads united and therefore it was advantageous to have troops adjacent to the station not four miles away at Mellor. Napier in his obvious attraction to mathematical logic noted that it would take two hours for troops to get to the station from Mellor but only thirty minutes from Preston. The hour and half savings could mean that in an emergency the troops were already thirty miles on their journey to where they were needed. However, Napier still agreed to Mellor as the solution as the difficulties of accessing the Preston site could delay the build-up of the co-ordinated response his plan was seeking to create. However, in the event neither Mellor nor Blackburn were developed and eventually Fulwood, on Ribbleton Moor Preston, was built. It was partly a defensible barracks with some elements of bastions in each corner of the barrack site and is the only barracks, located in direct response to Chartism, to still stand today.⁶³

Napier's analysis and planning was meticulous but of necessity amended by pragmatism. He understood both the local and national situation and fought hard for his men. His push for better living conditions was influential in the development of the new, more spacious barracks in the 1840s in locations such as Preston, Sheffield and Birmingham. He created the infrastructure to contain Chartist disturbances but as in many cases of planned change for the British military implementation was slow and delayed by the sort of local influences outlined in the northern towns above. His leading role in the North ended, after just under three years, in 1841 when a lucrative posting to India came his way.⁶⁴ He was succeeded by Major General Gomm for a brief period. Then General Thomas Arbuthnot, who the Duke of Wellington admired for his judgement and efficiency, was selected for the crucial command of the North in 1842.⁶⁵

⁶³ Due to close during the 2020s.

⁶⁴ Beasley, *Charles James Napier*, (Oxford, 2017).

⁶⁵ *Dictionary of National Biography*, 'Arbuthnot, Thomas', (1885-1900, Vol 02).

Napier's plans were implemented by General Arbuthnot though the detailed requirements were changed by the greater use of the emerging rail network to move troops rapidly instead of building new barracks. Arbuthnot had a crucial role, and was used by Sir James Graham, the Home Secretary, to implement his policy against the Chartist. Arbuthnot retained the post until his death, aged seventy-two, at Salford on 26th January 1849.⁶⁶ A new strategy emerged in the late 1840s focused on establishing a rapid military response to civil unrest by complementing the two Manchester barracks with defensible barracks at Ashton, Bury and Blackburn. Douet noted that:

for the first time in an English civil disorder context, the barracks were defensible, being surrounded by a wall with corner bastions from which the garrison could fire on an attacking force.⁶⁷

The barracks were not designed to withstand artillery but to protect soldiers from a relatively poorly armed crowd. The layout of accommodation and parade ground continued that established by the Barracks Department. But the external walls were derived from late fifteenth-century *trace italienne*, which was outdated for fortress design at least a century beforehand. What drove the Royal Engineers to recreate such a fortress style is probably more to do with promoting an image of control than for the design to be necessary for protection as most barracks had a substantial external wall and large defended gates. The plans of Ashton (Figure 4.11) and Bury (Figure 3.20 in Chapter 3) show that the defensible walls were in the main demolished by the time of the expansions during the 1880s. The western half was demolished at Ashton and new accommodation was built outside the old defensive site.⁶⁸ While barracks, as accommodation, remained in these locations for more than a century the

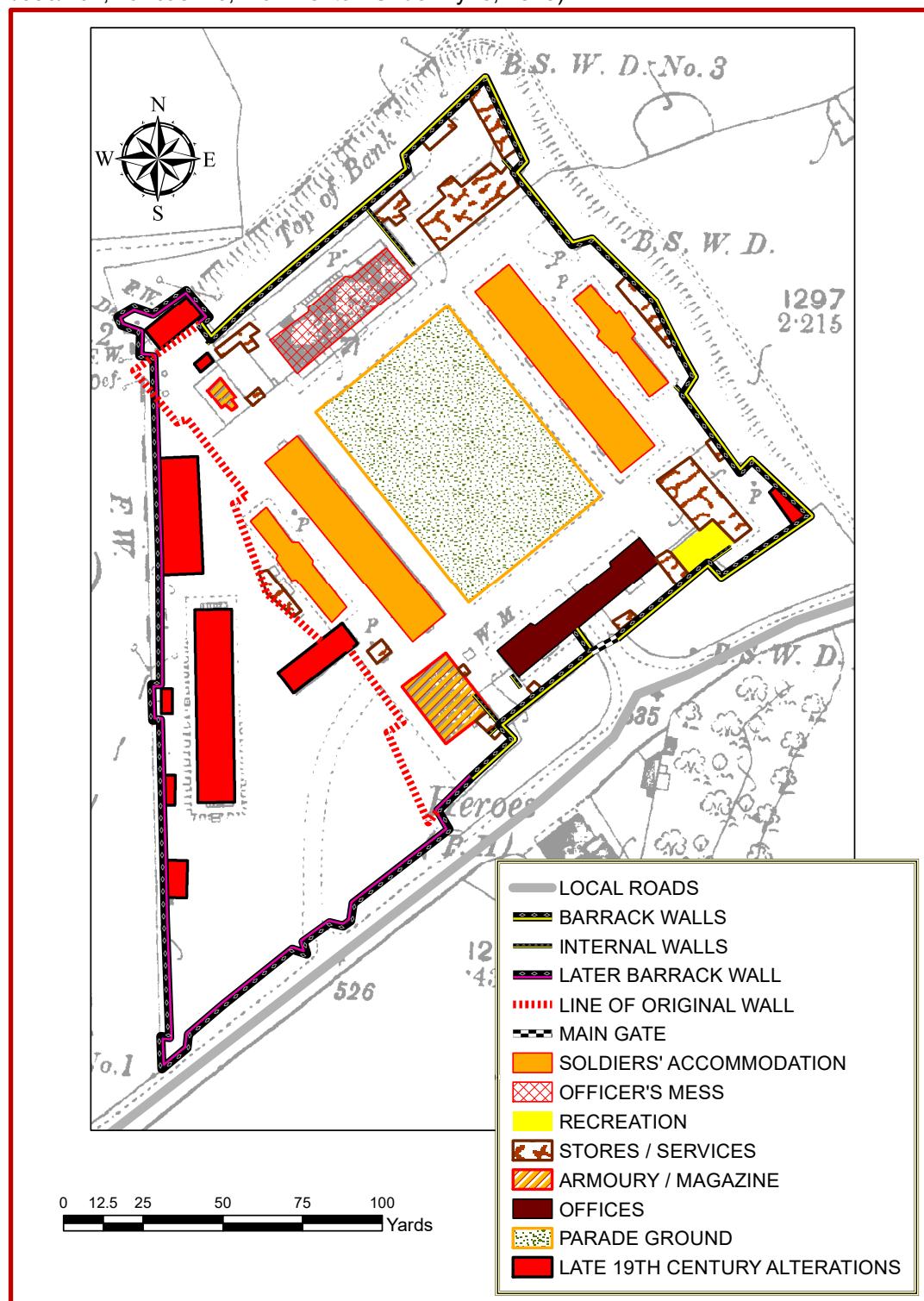
⁶⁶ J. Haydn, *The book of dignities*: Annual Register, (1890); F. C. Mather, Public order in the age of the Chartists, (*History*, 38, 132, February 1952), pp.46-49.

⁶⁷ Douet, *British Barracks*, (1998) p.114

⁶⁸ TNA WO 33, 44, 55, 78, 192, Bradford and Sheffield barracks had elements of the same design in their external walls: Bull Point Barracks, Devonport and Pembroke Dockyard are also excellent examples <https://historicengland.org.uk/listing/the-list/list-entry/1390866>.

notion of defensible barracks at home was short-lived. These are sometimes called, somewhat confusingly, 'police barracks' in some English Heritage publications.⁶⁹

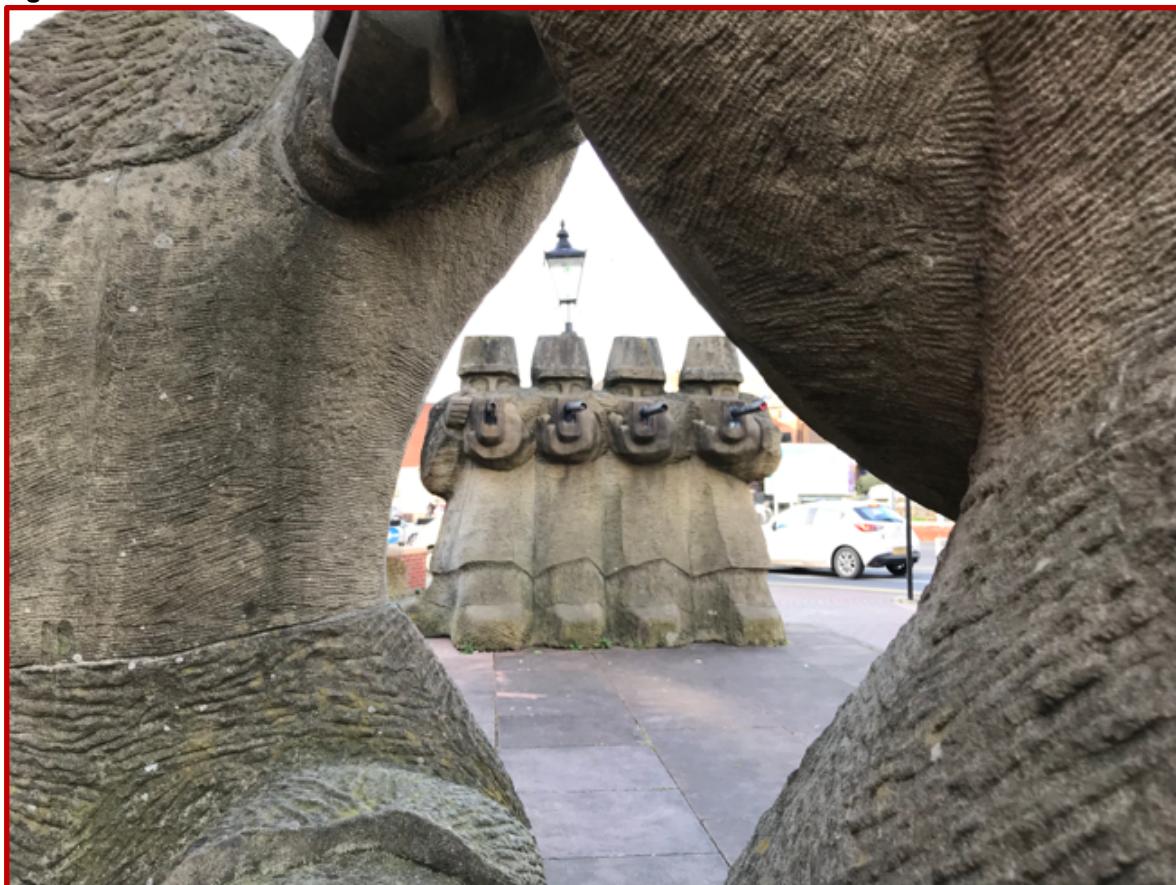
Figure 4.11 Ashton Under Lyne (Ladysmith Barracks), Lancashire, 1850s-1890s. (TNA WO44/64 MFQ1/830/164, Lancashire, Plan Ashton-Under-Lyne, 1848).



⁶⁹ Defensible barracks at <https://historicengland.org.uk/listing/the-list/list-entry/1390866>; <https://www.victorianforts.co.uk/pdf/datasheets/defensiblebarracks.pdf>.

The volatility of the situation in Lancashire started to be controlled under Napier's planned response but it did not disappear. Before the permanent barracks were built, Preston was the location for one of many tragedies when troops from the 72nd Highlanders opened fire on local strikers. There is a prominent monument to the 1842 victims in Preston to remind citizens and visitors today about the struggles in the 1840s and the relationship between the military and civil society (Figure 4.12).⁷⁰ The year 1842 was a particularly violent year with further riots in Stockport where the workhouse was attacked by a mob estimated to be as large as 20,000. A combined force of police, yeomanry and regular infantry dispersed the mob and captured the ring leaders.⁷¹

Figure 4.12: Preston – monument to the victims of the Preston riot 1842



⁷⁰ Preston Riots. Firing on the people. *Preston Chronicle* 13th August 1842 'order to 'fire' was given, and several were wounded... We hear that eight have been wounded – five mortally. Notice has been posted on the walls that the Riot Act has been read.'

⁷¹ T.D. and Naomi Reid, 'The 1842 "Plug Plot" in Stockport', (*International Review of Social History*, April 1979), pp.55-79.

The 72nd Highlanders were also involved in another incident in Blackburn when five young men hatched a plan to unplug boilers along Darwen Street. The magistrate rode to Preston to seek the aid of the military and the Highlanders quickly deployed to Blackburn. After a struggle the five boys were arrested, tried and sentenced to death. This was commuted and they were transported to Tasmania where they died from exhaustion just five weeks into their sentence. The so called 'Plug Plots' sparked considerable unrest across Lancashire, Yorkshire, the Midlands and even spread into Scotland.⁷² While this happened at the height of the Chartist calls for reform, the main driver of unrest during the Plug Plots was wage cuts and recession in the textile industry.

The 1844 annual report from the 6th regiment (later the Royal Warwickshire's) provides insight into deployment in the Region. Their headquarters were Chester Castle, having just moved there from the Portsmouth / Gosport area. The regiment accommodated 1056, made up of 39 officers, 854 men, 61 women and 102 children. They were distributed to stations as follows. Chester (309), Preston (189), Stockport (99), Wigan (164), Liverpool (96), Newtown Montgomery (84), Isle of Man (81) and Holywell Flintshire (34).⁷³ While the barracks within the castle provided good secure, accommodation and a very good hospital across the road, the conditions for washing are criticised in the report:

There is a sad want of means for the personal ablution of the men here, there is no trough or anything of the kind. Men are obliged to take out basins to the pump, [the latter is exposed without either shed or covering of any kind] and there wash themselves which is attended with great discomfort and more particularly during the winter months. During the summer months the river affords every facility for bathing.⁷⁴

⁷² The name emanated from the practice of removing plugs from boilers to bring factory machinery to a halt.

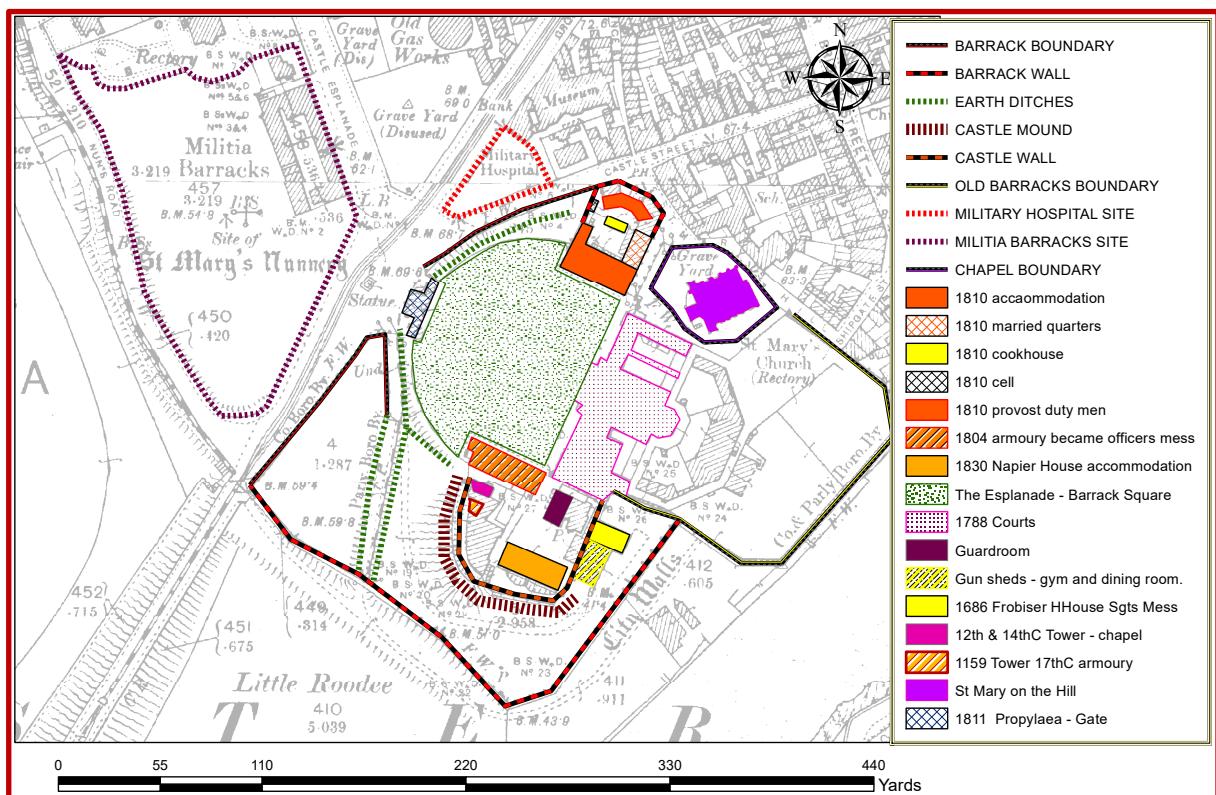
⁷³ Cheshire Archives and Local Studies Service, DDX600 Annual Report of the 6th Regiment. Year ending 31st of March 1844.

⁷⁴ Ibid.

Figure 4.13: Chester Castle Barracks within the Castle Walls



4.14: Chester Military sites



On the other hand, the report on the temporary barracks in Preston, while adequate, the image of the accommodation underlines why new barracks were necessary. The

barrack was an old factory 'fitted out well enough', with a ground floor and two stories. The two stories were occupied by the troops, the ground floor used for stores only. Four large rooms occupied by the men were ample for 130 with about 125 on average living in them. The upper rooms in summer were said to be hot. A part of the building had been converted into an hospital with five wards, a surgery and a hospital sergeant's room, situated on the first and second floors. The ground floor also had a kitchen, storeroom and wash house.⁷⁵

Despite the internal threats to the stability of the country, the eighteenth-century arguments about expanding the military estate were still very much alive four decades later, as the cost of barrack building became more apparent through the annual estimates. The proposed increased expenditure and raised taxation aroused 'the Manchester Party, headed by Cobden, to the most violent opposition.'⁷⁶ Cobden had launched a strong opposition to military expenditure in a pamphlet several years previously, though he supported naval expenditure to protect trade.⁷⁷ In February 1848 Lord Russel proposed to commission the militia and increase the size of the Regular Army to meet concerns about external threats that could compound the pressure of dealing with internal unrest. The *Manchester Times* picked up on the anti-militarism feelings in a scathing attack which commended the nation's religious energies in spreading peace but launched into:

the Government of England for erecting inland fortresses, called barracks, to perpetuate the existence amongst us, in the very bosom of society, of bodies of men armed for the purpose of killing their fellow-creatures, thus neutralising the influences of religion.⁷⁸

The paper singled out for criticism the new barracks being developed in Sheffield, costing, it calculated, as much as 2,500 labourers' cottages, Birmingham's £80,000

⁷⁵ Cheshire Archives, Annual Report of the 6th Regiment, 1844.

⁷⁶ Major-General Whitworth Porter (RE), *History of the Corps of Royal Engineers*, Vol. 2. (Institute of RE, Chatham, 1889)

⁷⁷ Richard Cobden, *The Political Writings of Richard Cobden* (London, 1903) p. 3.

⁷⁸ *Manchester Times*, Saturday 4 October 1848.

barracks and, 'Preston's splendid barracks, when there is already one at Blackburn'.⁷⁹ The article also launched a tirade against the costs of the expansion of barracks in the Manchester area. This needs to be set against the fact that the Chartist movement probably posed the greatest internal security threat in England in the first half of the nineteenth century. It was this movement that was perceived as taking the step from protest and disturbance to possible insurrection. Chartist protests declined after 1848 but civil unrest did not disappear. However, the extent to which the military were involved reduced as police forces became more prevalent and effective.

The local Sheffield newspaper identified two attractions to the location of a military site locally. There was partial funding from the government for the new barracks and there was a local desire to become the most important barracks and therefore the Headquarters. The mess and officers' barracks were to be completed by the 1st May 1849, at a cost of about £15,000. For the rest of the building being contemplated, the money had not yet been granted by Parliament. The papers expressed the pro-barracks argument as one of economic advantage, with the hope that when the plans had been fully carried out, they would benefit from the advantage of having the barracks made the headquarters of any troops that may be stationed there with all the kudos that would bring.⁸⁰ The importance of the railways was clear to the public by the 1840s, as the paper put it succinctly:

The Government appears to be quite alive to the fact, that the railways will make Sheffield an important military station. Situated upon the most direct east and west trunk line; with easy access to Lancashire and to the east coast; with ready communication into the heart of the West Riding, or with the Midland counties; troops stationed here will have all the facilities of movement that could be desired.⁸¹

⁷⁹ *Manchester Times*, Saturday 4 October 1848.

⁸⁰ *Sheffield Independent*, Saturday 06 November 1847.

⁸¹ *Ibid.*

Despite these advantages, however, Sheffield did not become one of the later Cardwell regimental HQs because preference was given to Doncaster and Pontefract to cover recruitment in that area.

Figure 4.15: The Distribution of barracks in the Northern Region in 1848. (PP, Report of the Commissioners appointed to inquire into the regulations affecting the sanitary condition of the army. Houses of Parliament, C.238, 1861, pp. 439-442).



The 1848 distribution of barracks (Figure 4.15) is a good surrogate for the extent of the military estate at the time. Despite all the strategic planning by Napier the distribution of permanent sites remained very similar to that of a quarter of a century beforehand. It was the improvements and enlargement of barracks that made them more secure for their garrisoning role but it was really only the developments at Preston, Bury, Ashton and Sheffield, plus redevelopments in Manchester that added significant facilities to the North's somewhat slim military estate at the time. It is clear that the impact of support for the civil powers, while important in individual localities, was only a temporary factor in shaping the overall military estate.

4.4 Supporting the civil powers after 1860

The 1840s was a peak decade for civil unrest and shaped the home army's plans for dealing with internal security. However, the role of supporting the civil powers continued, despite the gradual improvements in the police forces, and the link with the Home Office remained strong. In January 1861 Secretary Sir George Lewis directed that a letter be sent to Lt. General Sir Geo. Wetherall K.C.B, Manchester informing him that:

for many years it has been the practice of the officer who has preceded you in the Command of the Northern District to make a monthly Report to this office, which afforded valuable information as to the state of Trade, the employment of the Operatives and the general condition etc. etc. in the principal manufacturing Districts. Sir G. Lewis is not aware of the reasons which have induced you to discontinue this practice, as it is desirable that Her Majesty's Government have this valuable intelligence.⁸²

In other words, the Home Office believed that part of the military duties to be carried out was a monthly intelligence report on disturbances or poor economic conditions that could lead to disturbances. Reports then ensued, starting from February 1861 with information such as 'In this city [Manchester] trade, though not so active as it was a

⁸² TNA HO 45/7172, Disturbances: Military reports on the state of Northern and Midland districts (draft letter 1861).

few months since has, generally speaking, been good, and the operatives have been fully employed.⁸³ It goes on to collate the views of officers commanding in the principal manufacturing Districts: 'In Newcastle Upon Tyne the working classes generally are now fully employed, but great distress existed during the late severe weather.'⁸⁴ In Halifax, trade was described as 'rather slack', Sheffield had a large number of operatives out of work because of the disruption to cotton imports as a result of the American Civil War, but Preston was flourishing. In Bolton, despite trade being prosperous many mills had some appearances of slackness and some commenced working half-time. Liverpool's trade was not considered overactive. Stockport reported that trade among the working class was brisk. Nottingham and Birmingham reported on the recent impact of the bad weather, for Leicester the picture was of trade much depressed among the frame knitters of the town and villages and Coventry had no report. The only additional comment was that with the poor weather the demand for coal was extraordinary and therefore there was full employment for the colliers throughout the district.⁸⁵

By April of that year the reports focused on strike action around Ashton, Hyde Dukinfield and Stalybridge, and marches on Stockport to get wider support, but no request had been made for military assistance and the police seemed to be in control of the situation. The reports do identify varying economic success between different towns. Liverpool seemed to have trade considered 'dull' and there was no want of work for the labouring population! Nearly all manufacturing districts were described as tranquil. By November, however, reports identified the closure of mills in the vicinity of Burnley and that 'disturbances are currently expected, and the demeanour of the people, even at present, is far from satisfactory.'⁸⁶

The continuous unrest and rebellion in Ireland spread into several parts of England. Military sites and the police became new targets. Irish nationalism was stirred by the

⁸³ TNA HO 45/7325, p.3 Manchester Report.

⁸⁴ Ibid., p.3 Newcastle Upon Tyne Report.

⁸⁵ Ibid., p.7 reports from several locations.

⁸⁶ ibid.

action to release Fenian prisoners in what became known as the Manchester Martyrs in 1867. The Fenian actions came to a head in the 1880s and focused on areas with large Irish immigrant populations. Besides London, the North of England became an area of active military activity. Bombs exploded at Salford and Chester Barracks and several bomb attacks and finds of explosives occurred in and around Liverpool and Bradford in 1881.⁸⁷

The military was required at large scale events which threatened the public peace as at the mass meetings of the unemployed in 1887 when two squadrons of Life Guards and several hundred infantry were used to restore order. These requirements had little impact on the distribution of military accommodation or training, mainly because by then the railway network and speed of travel was such that troops could be moved more easily around the country as required from their existing accommodation. ⁸⁸

Even as late as 1891 troops from the First Battalion of the Durham Light Infantry were called upon to assist the police in Bradford during the Manningham Mills riots.⁸⁹ One of the most tragic interventions by the military was at Featherstone Colliery, where my great grandfather-in-law worked. On 7 September 1893 a crowd confronted the pit manager and would not leave, despite warnings. Then local magistrate, Mr. Hartley, called on troops to disperse the crowd with warning shots. They fired straight into the crowd and eight were hit with two bystanders dying from their wounds. Over a period of three days several hundred infantry and cavalry were called out from nearby barracks.⁹⁰

⁸⁷ <https://www.theirishstory.com/2012/02/13/one-skilled-scientist-is-worth-an-army-the-fenian-dynamite-campaign-1881-85/>; Joseph McKenna, *The Irish-American Dynamite Campaign: A History, 1881-1896* (2012)

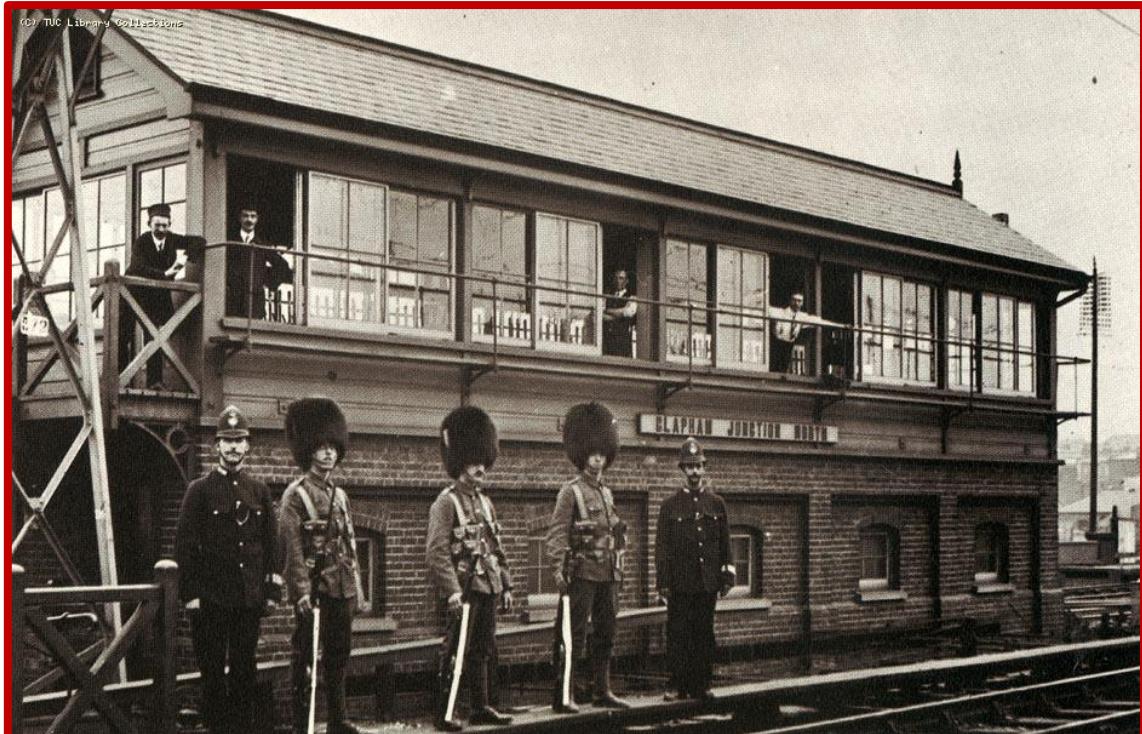
⁸⁸ Helen Groth, *Bloody Sundays: Radical rewriting and the Trafalgar Riot in 1887*, (Oxford, 2023), pp.56-70

⁸⁹ Robert Bonner, 'Hulme Cavalry Barracks', (Vol. 91, No.367, *JSAHR*, 2013), pp. 206-225.

⁹⁰ Robert Neville, 'The Yorkshire Miners and the 1893 Lockout: The Featherstone Massacre', (Vol. 21 No.3 *IRSH*, 2008) pp. 337-57.

The last major use of military aid to the civil power before The First World War was to keep the trains moving during the great rail strike of 1911.⁹¹ Starting in Liverpool it quickly spread across England and Wales. While the scene in Figure 4.16 might look somewhat incongruous the military intervention was at times violent and resulted in six deaths at Llanelli.

Figure 4.16: Guards at Clapham Junction 1911.(© TUC Library Collections, London Metropolitan University)



Aid to the civil powers remained as a priority for the military throughout the second half of the nineteenth century but this was not a key factor in the growth in the military estate in the North. The deployment of troops from the national distribution of barracks was relatively easy with the widespread and effective railway network. The factors influencing the growth in land for the military in the North of England is examined in the second half of the case study.

⁹¹ PP, Employment of military during railway strike, (HC c.323, 47), 22 November 1911.

Part B - Recruitment and training.

4.5 Growth in military land acquisition

In 1862 the Northern Region recorded a total of only 701 acres of land in military ownership (Figure 4.17),⁹² just 2.2 percent of the total of recorded military land for Britain at the time. Most of this land use was in medium and small-scale barracks dotted across the towns of the north. The only locations with greater than fifty acres of military land were at Scarborough and on the Humber which represented a mix of long-term coastal defences and a barracks and range nearby. The largest area of land was taken up by the training facility and ranges developed in the 1860s at Fleetwood. Despite a priority to aid the civil power the soldier, nevertheless, had to practice essential skills of marksmanship. Several of the sites identified as 'not in use at this time' were left over from the Napoleonic accommodation of troops and temporary barracks from the Napier era. Most of the ten locations where acreage was not recorded were relatively small militia barracks or stores.⁹³

By the end of the first phase of the Cardwell reforms in the 1870s the military land area in the North had increased fivefold to 3,435 acres, now 5.3% of the national total (Figure 4.18). The biggest areal impact was the further development of training and ranges at Strensall and Lichfield. In addition, the newer or expanded barracks as part of the Localisation reforms were developed with 20 to 30 acres of land available for each. Thirteen sites no longer used, or used for short periods by the Volunteers, did not record the acreage used and a further ten sites were no longer used. By the end of the century land use by the military had expanded only marginally to just over 4,000 acres which was now only 3.1% of Britain's military estate. (Figure 4.19) Nearly all of this growth was represented by the development of Strensall, which was consolidated as the main training site in the North, and the emergence of the ranges and training facility at Chipping. This was on a long-term lease from Earl Stanley on land on the edge of the Forest of Bowland and was a significant factor in the expansion of the overall military estate by the end of the nineteenth century. There were still twenty-

⁹² PP, Return of Names of Military Stations in United Kingdom and Lands, Tenements and Appurtenances held by Military or Ordnance Depts. (C.305, 1862)

⁹³ Ibid.

four sites not in use or used for only short periods of time, these are discussed in the section below on ranges and volunteers.

Figure 4.17: Acreage of military land in the North, 1862. (PP, Return of Lands, Tenements, C.305, 1862).

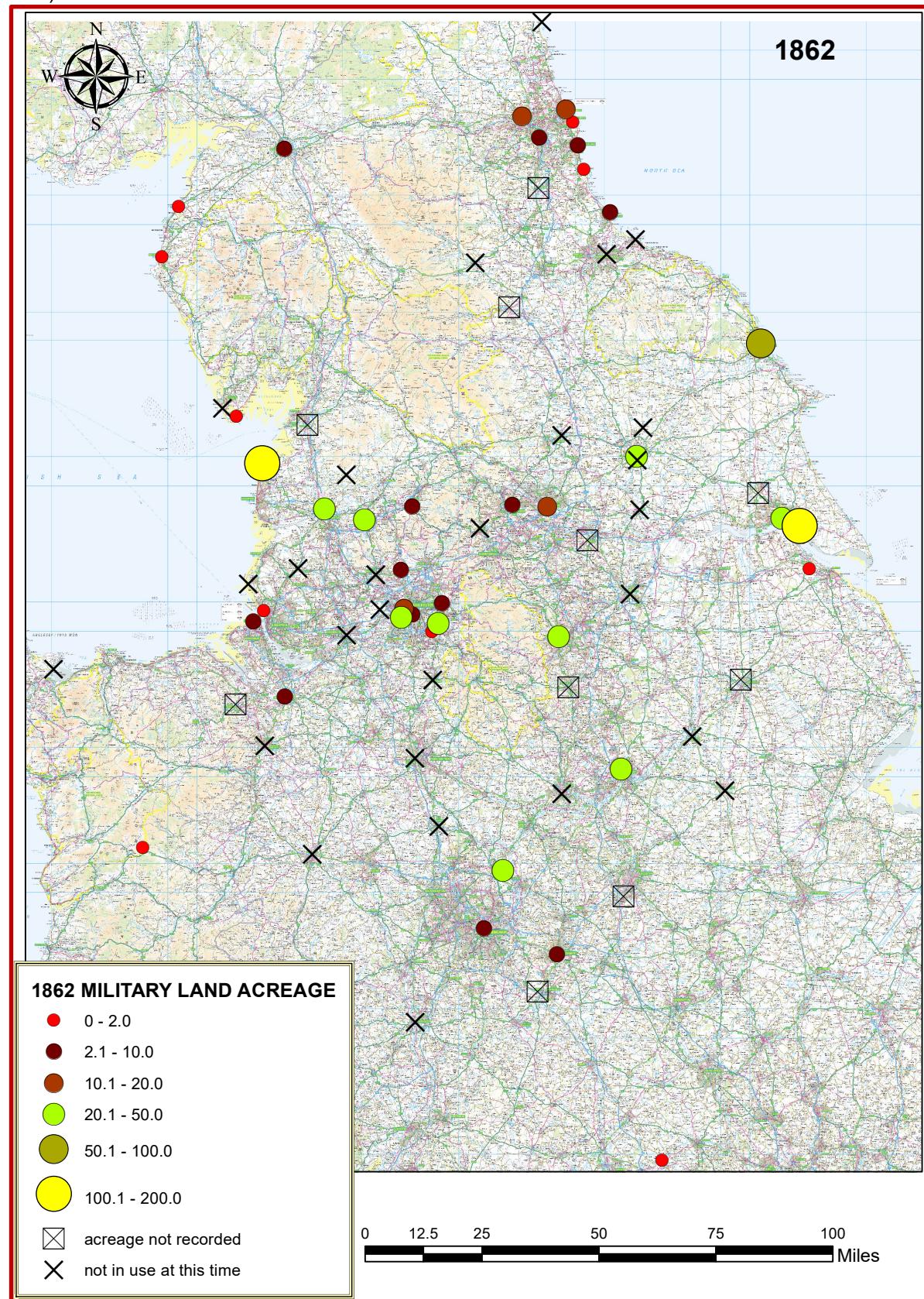


Figure 4.18: Acreage of military land in the North, 1878 (PP, Return of all Lands and Tenements purchased or rented by the War Department, C402. 1878).

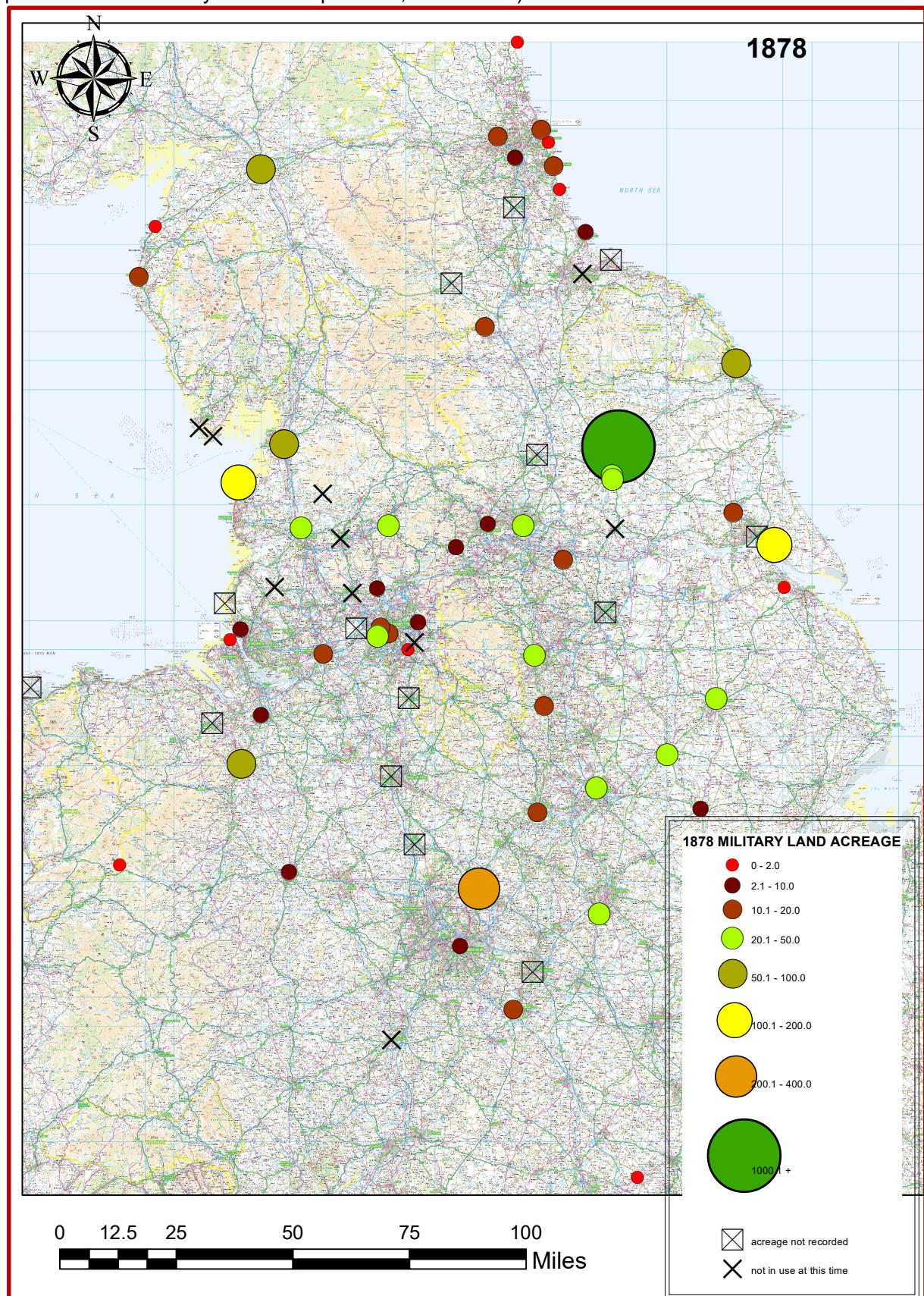
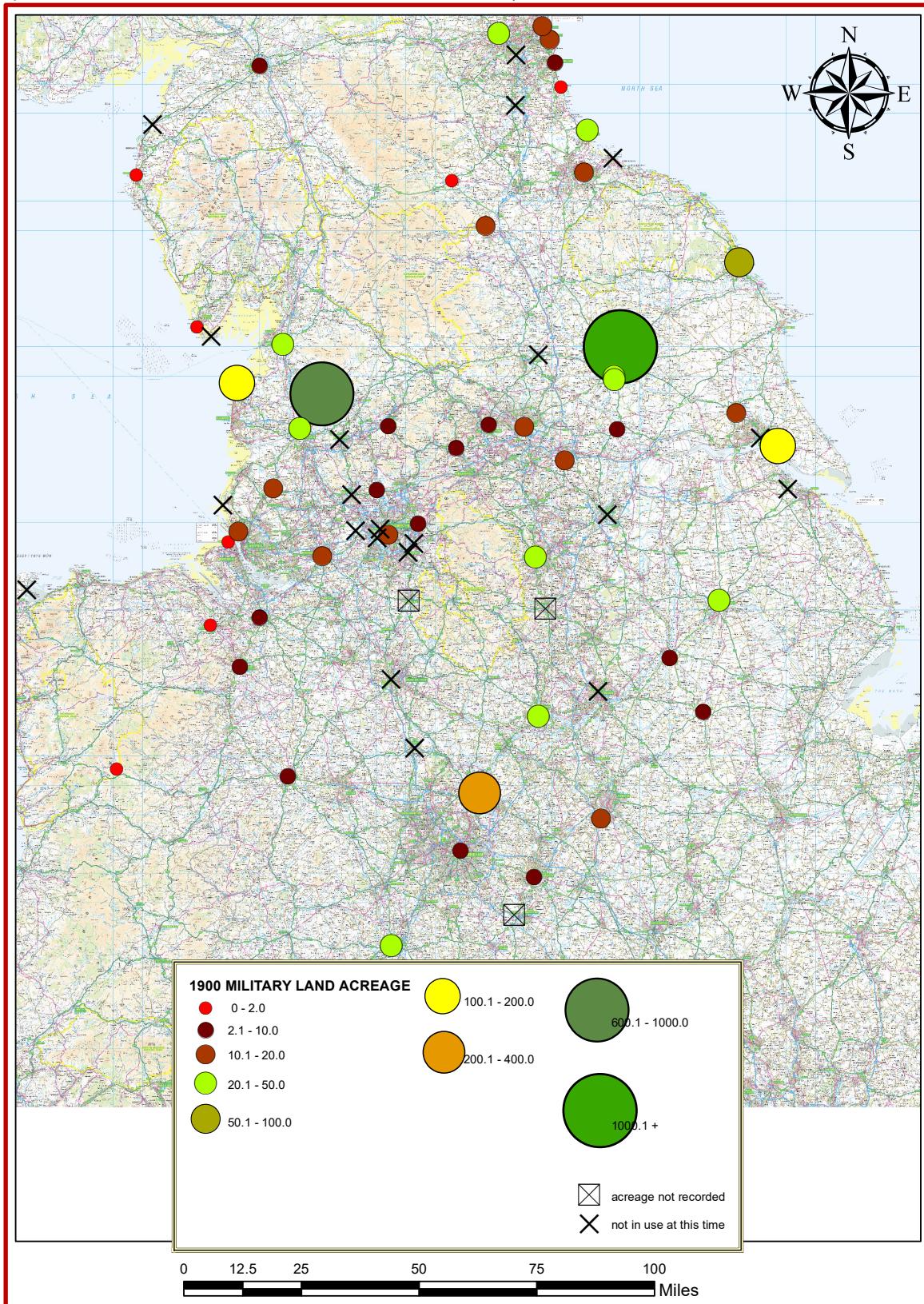


Figure 4.19: Acreage of military land in the North, 1900. (NAM. 2011-11-24-9, Return of War Department Lands at home stations on 31st March 1900).



The military estate in the North, illustrated through the three L&T Returns examined here, shows growth from a mainly built estate of barracks and fortifications to an estate

which housed more men but also required land to train them and ensure they had land on which to practice. Localisation, discussed below, not only reinforced the importance of the North in accommodating troops but it also led to the development of the military estate as one principally, of training land and ranges with over 70% of the estate used for those purposes. The evidence from the 1911 Lucas Report showed that the North's estate had grown fivefold in the eleven years since the 1900 L&T Return, almost entirely driven by the training estate as discussed at the end of section 4.7.

Figure 4.20: Land in the Northern Region used for Barracks, ranges and defence as in the three L&T Returns

Region / Year	Total acres	Barracks / land	Ranges / exercise	Other / clearance	OTHER / defence
Northern 1862	701.45	213.50 (30.5%)	262.9 (37.5%)	0	225.05 (32%)
Northern 1878	3,434.90	927.00 (27%)	2,418.6 (70.4%)	6.5 (0.2%)	82.80 (2.4%)
Northern 1900	4,001.35	804.15 (20.1%)	2,975.3 (74.4%)	0	221.85 (5.5%)

4.6 The impact of military reforms

Besides the antecedent defence infrastructure and the military's 'policing role' the third main influence on the development of the North's military estate came from a succession of reforms to the structure and priorities of the military at home. The five decades after the Crimean War were dominated by military reforms. These re-shaped the military estate in the North of England, distributing the infrastructure to a pattern more closely correlated to the main centres of population. While some scholars question the success of these policies, what the reforms undoubtedly did was make the military estate more visible to the population as a whole and helped integrate the military into local communities.⁹⁴ The first main reform to have an impact on the military infrastructure, especially in the North of England, was the re-emergence of the militia. Britain's militia owed its mid nineteenth-century revival to both the political zeal for reforming antiquated institutions and the influence of increasing tension with France.⁹⁵

⁹⁴French, *Military Identities*, (Oxford, 2005) p.5; Albert Tucker, Army and Society in England 1870-1900: A Reassessment of the Cardwell Reforms, (Vol. 2, No. 2, *JBS*, 1963), pp. 110-141.

⁹⁵ Mark Bennett, Portrayals of the British militia, 1852-1916, (Vol. 91, No. 252, *Historical Research*, May 2018), Pages 333-352.

Their three main tasks were to protect Britain from invasion, to garrison Britain's Mediterranean possessions and, as the Crimean War progressed, to provide casualty replacements for the regulars. Their role remained focused on these objectives until they were reformed into the army reserve under Haldane's reforms in the early twentieth century.⁹⁶ The decade after Crimea was the period when militia barracks were at the peak of their use and many new stores and barracks were constructed during the 1860s. The barracks were generally small in area as they were used mainly for storage, weapon stores, drill, meeting areas and accommodation for a small number of permanent staff.

Figure 4.21: Macclesfield Militia Barracks (1859), currently a residential development.



For example, Macclesfield's striking chateau-style barracks only required 2.25 acres, Stockport Armoury 1.5 acres and Carlton Barracks, Leeds, about 4 acres. Occasionally, as in Richmond, Yorkshire, militia barracks were built within the walls of medieval castles, but even then, the space available amounted to only 2.5 acres. Similar developments occurred at Carlisle, Scarborough and Tynemouth. With 34 militia barracks in the Northern District and a usual size of around 2.5-3 acres, these sites only added about 90-100 acres of land to the military estate.

⁹⁶ Robert Stoneman, *The Reformed British Militia, c1852-1908*, (PhD, University of Kent).

Despite the relatively low level of impact on the overall extent of the military estate, the Militia Barracks were often prominent buildings and played a key role in the image of the militia and the visibility of the overall estate. The buildings themselves as in the examples in Figures 4.22-4.24, were marks of the importance placed on this branch of the military which was later incorporated into the army following the Cardwell Reforms.

Figure 4.22: Chester Nuns Field Militia Barracks (1858-'59), demolished in 1950s
<https://chesterwalls.info/gallery/langford/nunsfld.html>

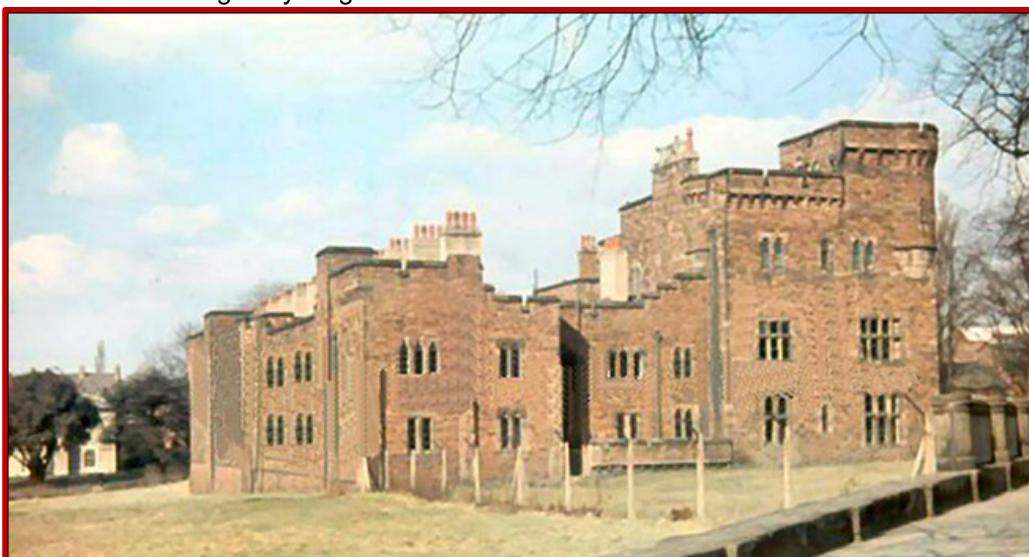


Figure 4.23: Richmond Yorkshire Militia Barracks (1855), fortress style within the walls of the castle, demolished in 1931. <https://www.richmondshiretoday.co.uk> 28.07.2018



Figure 4.24: Stockport Volunteer Armoury (1862), army reserve centre.



The second main period of reform was in the 1870s and 1880s when the Localisation Acts were introduced, commonly called the Cardwell Reforms as outlined previously in Chapters 1 and 3. Reports of Prussian military success led to renewed interest in their approach to localized recruitment. This was a contributory factor to the introduction of the 1872 Military Localisation Bill.⁹⁷ The reorganization of barracks in the North, in the 1840s by Napier, analysed the need for troops in areas based on the size of local working populations. However, the Localisation proposals were the first widespread analysis of the whole system of distributing the home army based on potential recruitment populations. The prominence given to the rail network on the planning maps presented to parliament leads one to assume that this was also a contributing factor in the proposed location of depots.⁹⁸

Localisation also laid the foundation for later reform to create more integrated reserve forces and brought the needs of the volunteers and militia more clearly into the remit of the War Office to ensure that land for military purposes was available for all the forces. This was the real start of the territorial system, with county names beginning to replace the old regimental numbers, and the new depots, though unfortified,

⁹⁷ Douet, *British Barracks*, (1998), pp167-169.

⁹⁸ PP, Maps of United Kingdom showing Depot Centres proposed in Report of Committee on Organization of Military Land-Forces, (C.93 , 1872); PP, Committee on Organization of Military Land Forces, (C.588 21st February 1873); PP, Report, Committee on The Organization of Military Land Forces Of The Country, (C.712, 1875).

provided obvious rallying points for resistance if required.⁹⁹ This sense of a rallying point may go some way to explaining the castle like, fortified appearance of most of the highly visible Cardwell Depot Keeps.¹⁰⁰

The localisation notion seems to have created very strong local loyalties that persist even today. This can be seen all over the country, even where regiments have disappeared, through memorials and regimental museums which occur in many of the counties and often adjacent to the former regimental depot.¹⁰¹ The militia had been an important source of recruits for the regulars, as the men were already hardened to military discipline and found the camaraderie appealing. It made sense to align the Regulars and the militias as closely as possible as, up to then, the regular regiments were rarely stationed in their nominal county and had to drum up recruits where they could. Some of the linked battalions found their homes in imposing fortresses; the 34th(Cumberland) Regiment and the 55th(Westmoreland) were linked by a depot in Carlisle Castle and the 22nd(Cheshire) along with the 1st and 2nd Cheshire Militia were located at Chester Castle.

An enquiry into the new depot system in March 1876 reported that of the 70 proposed Brigade Depots only eight had been completed and a further fifty-four were in progress but a further eight had not yet commenced though the land had been acquired.¹⁰² The recommendations helped make the Localization Act work more effectively. Despite Cardwell's professed desire to reduce expenditure, the criticism later was that the resources available made it difficult to achieve the desired efficiencies in the army:

We have not made the foregoing recommendations in this Report without the knowledge ... that they must lead to a large increase of expenditure; but we think that, the country having deliberately decided upon the system, for the army

⁹⁹ Norman Longmate, *Island Fortress, The Defence of Great Britain 1603 – 1945* (Pimlico, 2001), Chapter 27.

¹⁰⁰ English Heritage nomenclature, <https://www.heritagegateway.org.uk/Gateway/Results>.

¹⁰¹ See Barracks at Lichfield, Preston, Richmond and Lancaster.

¹⁰² PP, Committee to inquire into questions with respect of militia, and Brigade Depot System, (C1654, 1877).

at large, of small cadres, it is our duty to frame our recommendations with a view to rendering those cadres as effective as possible.¹⁰³

Most of the recommendations were about structures but they also focused on the need for Depot Barracks to be larger to incorporate the militia, to ensure better facilities, and the need to reduce the need for separate barracks and the reliance on the militia being in temporary camps. Napier objected to some of the findings. He felt that removing the training of recruits was wasteful as:

they have been prepared at a great national expense, there is much that is satisfactory in their construction and arrangements, and they have never, it appears, had a fair trial in the manner intended.¹⁰⁴

He argued that there was no reason why recruits should not be sent to the brigade depots of their regiments and trained there. Napier also picked up on aspects of the issues relating to rifle ranges which became influential subsequently. He acknowledged that there was a lack of effective rifle ranges and a scantiness of parade grounds, but he stated that these issues could be addressed without the expense of an entirely new sort of training depot.¹⁰⁵

While some scholars have been right to critique the reforms in terms of whether the army could fulfil its core function of fighting, the criticisms of Cardwell in particular fail to recognize the wider impact of localization.¹⁰⁶ In particular the changing form and functions of barracks in the new depots, the improvements made in many existing barracks and the demand for land to train and exercise is missing from much of the literature. Yet these were in many ways the most visible feature of the reforms, monuments in the landscape still evident in many places a hundred and fifty years later. Monuments of a time when local, particularly civic, attitudes became much more

¹⁰³ PP, Committee to inquire into Questions with respect to Militia, and Brigade Depot System, (C.1654, 1877).

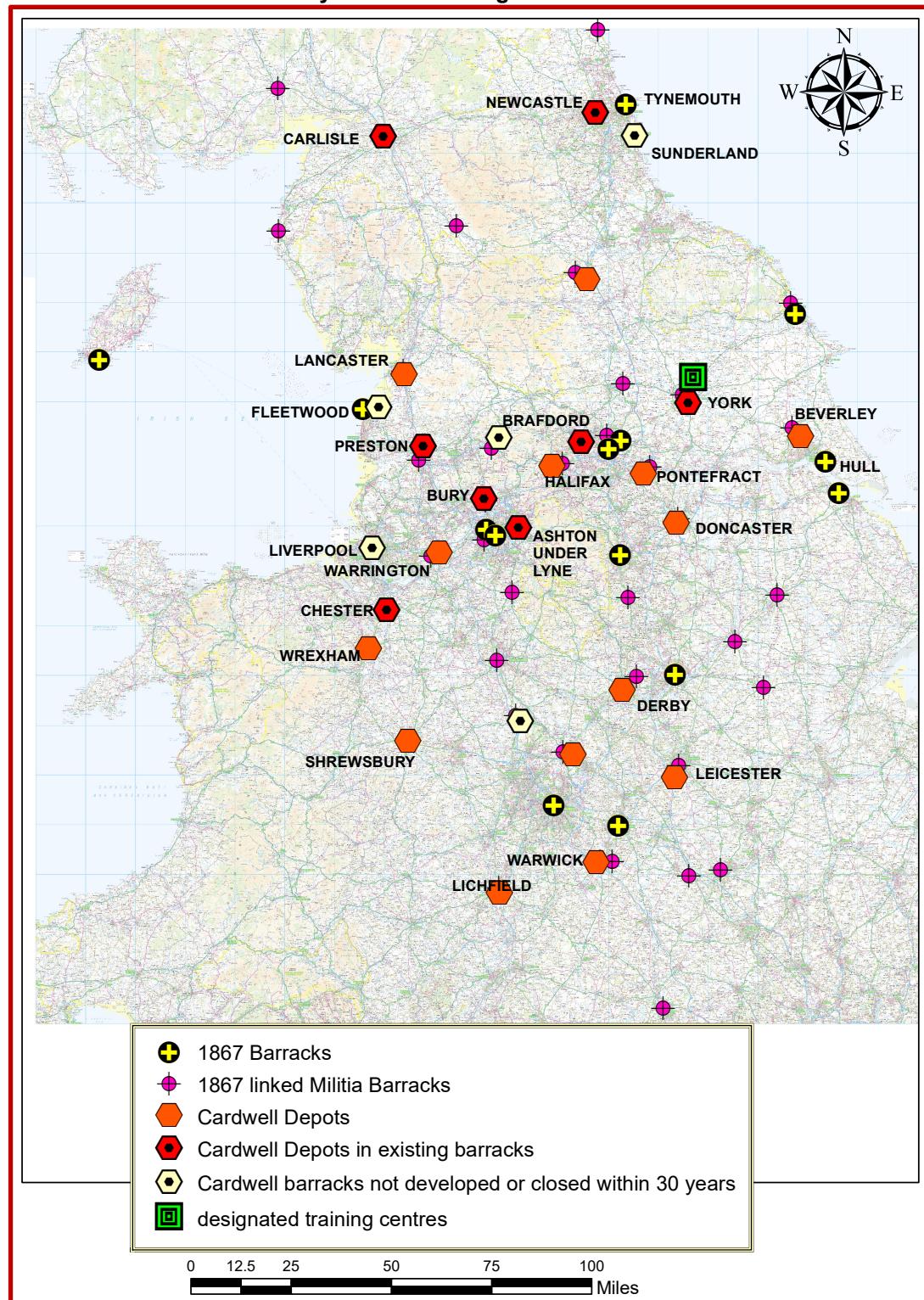
¹⁰⁴ PP, Committee report of Generals and other Officers on Army Re-Organization, (1881).

¹⁰⁵ *ibid.*

¹⁰⁶ French, *Military Identities*, (Oxford, 2005), pp.13-25.

attuned to the benefits of a close relationship with the military and monuments to a time when there was a greater visibility of the military as a major landowner operating alongside civic organisations. Figure 4.25 maps the extent to which the reforms influenced the military estate in the North of England.

Figure 4.25: Distribution of military sites emanating from the Localisation reforms of the 1870s.



The Reforms may not have achieved an immediate direct influence in altering public perceptions of the soldier. However, indirectly, they encouraged greater engagement with the soldier in public discourse.¹⁰⁷ The iconic nature and location of many Depot Barracks, with imposing crenellated keeps drew soldiers located there and local communities closer together.¹⁰⁸

Allan Mallinson claimed that the linking of regiments to local depots changed the face of many British towns, as well as that of the army. Regimental pride suited the mood of mid-Victorian Britain and 'many a prominent architect enthusiastically drew up grand designs for the new depots barracks in his county town, and regimental bands were applauded at the county fairs.'¹⁰⁹ The reforms, to improve how the military should be organised, accommodated, trained and equipped created thirty new barrack depots and many more were adapted. The North of England provides an excellent example of how these national reforms panned out in different regions based on local priorities, needs, existing infrastructure, demography and suitable land being available.

Despite variation in design during the period, attributable to what was called the 'non-hierarchical planning of Cardwell depots', the barracks of this period also have an unmistakable fingerprint of the reforms.¹¹⁰ The style and location of officers' accommodation was still dominant in each plan of barracks and the 'Keep' invariably dominated the site. They were highly visible military buildings and emulated traditional views of strength and dominance drawn from perceived views of medieval structures, with height, crenellations, towers and turrets exuding imagery of power and importance. Rich tones of red dominated the brick work in many of the Cardwell Keeps (Figures 4.26-4.29).

¹⁰⁷ Edward Gosling, Tommy Atkins, War Office Reform and the Social and Cultural Presence of the Late-Victorian Army in Britain, c.1868-1899, (PhD, Plymouth University, 2015)

¹⁰⁸ Many regimental magazines illustrate this relationship, for example, 'The Snapper', a monthly Journal of the 2nd Battalion, East Yorkshire Regiment; The 7th Dragoon Guards Journal, The Princess Royal's. (February 1895, Regimental Museum York).

¹⁰⁹ Allan Mallinson, Echoes of the past, (*Daily Telegraph* London, 08 July 2012).

¹¹⁰ Douet, *British Barracks*, (1998), pp.170-171.

Figure 4.26: Pontefract Barracks (1879), Pontefract Business Centre.



Figure 4.27: Norton Barracks Worcester (1874-'77), now housing development



Figure 4.28: Copthorne Barracks Shrewsbury (1877-'81), new housing development.



Figure 4.29: Hightown Barracks Wrexham (1877) – still in military use.



However, local bricks were also used which led to a variety of colours as seen in the Wellesley Barracks, Halifax (Figure 4.30) and Lancaster (Figure 4.31). These illustrate

the Victorian fashion of using different brick shades and patterns to make the most important part of the building stand out even more with decoration. Despite the use of local stone instead of brick at Wellesley and Bowerham Barracks they still have the unmistakable fingerprint of the Cardwell Keep.

Figure 4.30: Wellesley Barracks Halifax (1881) – now part of The Halifax Academy.

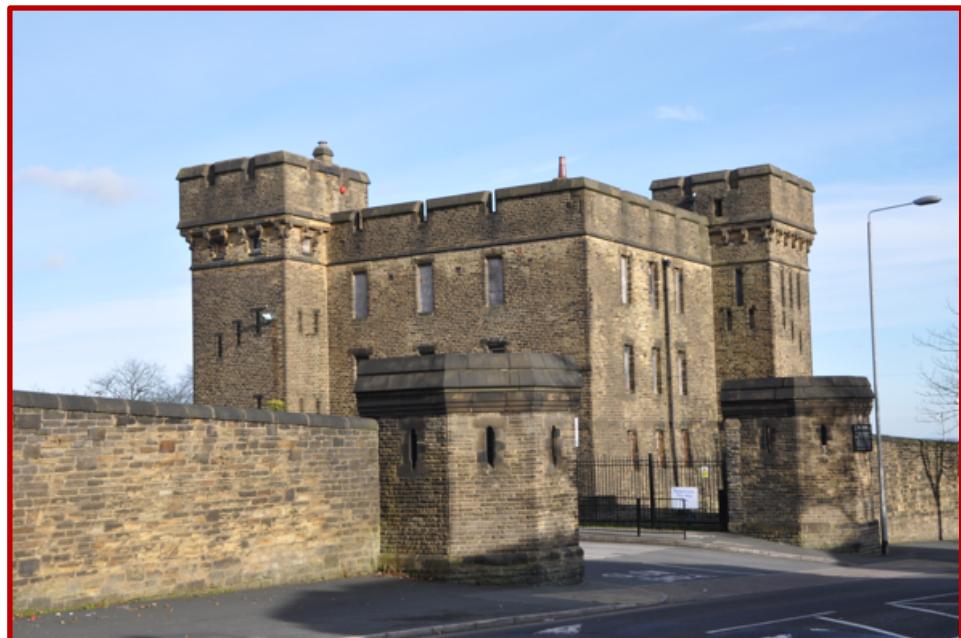


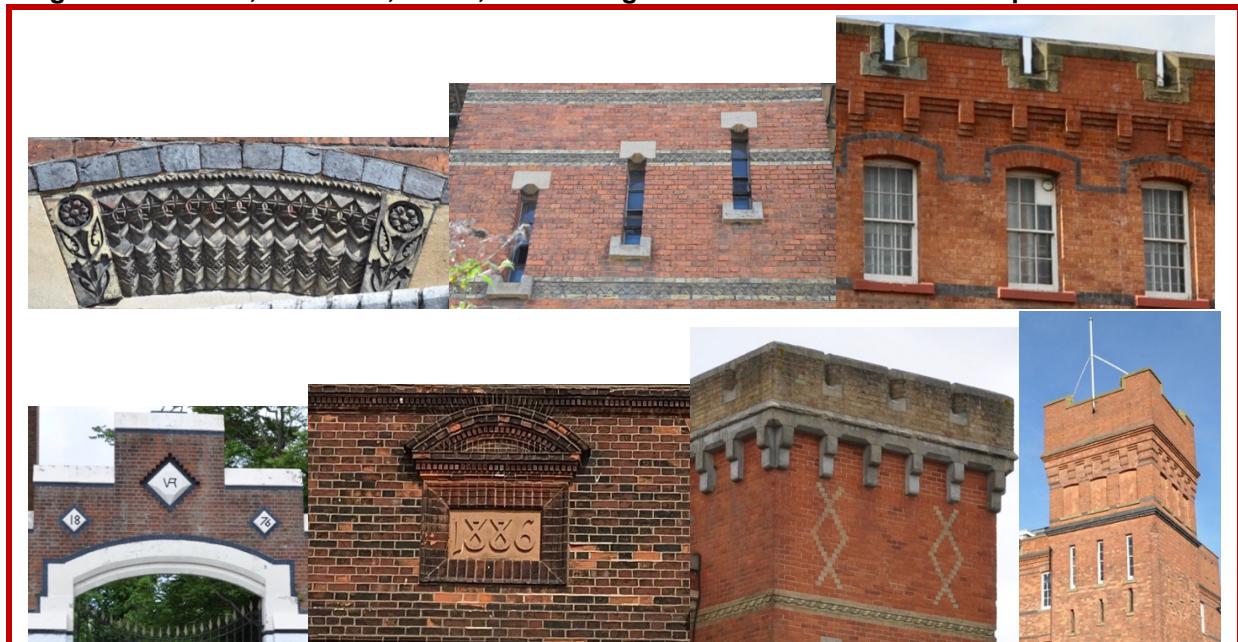
Figure 4.31: Bowerham Barracks Lancaster (1876-'80) – part of University of Cumbria.



The 'Keep' acted as a physical recruitment poster. In other words, the nature of the architecture acted as a deliberate focus for the recruitment drive at the heart of the Cardwell reforms. It created a sense of lineage and local belonging even when antecedent regiments or battalions were located to new counties. However, as Pevsner noted that the one universal quality in architecture of the Victorian era was, historicism, in other words that serious architecture must be inspired by styles of the past.¹¹¹ Therefore, to the architectural historian, the design of barracks was more to do with general influences on public architecture at the time in copying a military, defensive appearance.

Dixon and Muthesius also noted that a legacy of the Gothic Revival was the interest in exploiting the qualities of different materials. This is demonstrated through a very large variation in the use of brick, stone, terracotta, half-timbered work, slates and tiles.¹¹² This variation is evident in many of the Cardwell Keeps.

Figure 4.32: Brick, terracotta, slates, tiles – images from various Cardwell Keeps



A significant proportion of Cardwell barracks were a new feature in the landscape in or near several British towns. Their impact is most noticeable in the central belt of England from the Midlands to the northern industrial towns, in Derby, Leicester,

¹¹¹ Nikolaus Pevsner, *Seven Victorian Architects*, (ed. by Jane Fawcett, London, 1976).

¹¹² Roger Dixon and Stefan Muthesius, *Victorian Architecture*, (London, 1978).

Lichfield, Shrewsbury, Wrexham, Lancaster, Pontefract, Halifax, Beverley and later at Warwick, Worcester and Richmond in Yorkshire; locations that had not been part of the military estate before, or only to a limited extent.¹¹³ At the same time many other sites that had previously been part of the military estate were identified as depots for their area, such as those at; Bury, Ashton-Under-Lyme and later at Preston in Lancashire; York, Newcastle-Upon-Tyne, and Chester and Carlisle castles.¹¹⁴

After the initial plan was published the locations were subject to significant scrutiny and several important amendments were made.¹¹⁵ It was argued that the formation of two double depots at Bradford and Doncaster, in place of four single depots at Bradford, Halifax, Doncaster, and Pontefract, was recommended on economic grounds. As Bradford was so near to Halifax, and Doncaster to Pontefract, separate depots at those places would be unprofitable. In the end as there was a barrack available at Bradford capable of extension and local pressure to develop both Halifax and Pontefract, these became the main regimental depots in the area.

But the decision to locate the depot in a particular town was sometimes met with strong but mixed feelings. Halifax illustrates well the ambivalent responses. A petition, signed by 4,664 residents and supported by the Borough Council, was presented to Edward Cardwell stating that the selection of Halifax as a military centre was contrary to the wishes of the inhabitants and such centres should not be established in prosperous industrial districts.¹¹⁶

Cardwell commented that their fear seemed to be that the depot would compete with the manufacturers in the labour market. He had received a deputation from Halifax, headed by Col. (Lord) Akroyd, approving of military centres that he claimed would

¹¹³ PP, UK showing Depot Centres proposed in Report of Committee on Organization of Military Land-Forces, (C.93. 1872).

¹¹⁴ PP, Provision for defraying Expenses of building Barracks and providing for Localization of Military Forces, (C.222. 1872).

¹¹⁵ PP, Number of Depot Centres fully and not fully constituted, (C.283. 1875); PP, Committee to inquire into questions with respect to militia and Brigade Depot System, (C.1654. 1877)

¹¹⁶ *Leeds Mercury*, 27 March 1873.

introduce industry and discipline into the district.¹¹⁷ With strong business leader and landowner support the local petition was waved aside. Despite the political and military arguments that won the day, the reaction from local populations demonstrated that despite a greater acceptance of the idea of a standing army the insertion of a large number of young men in uniform was not always met with widespread joy. Land for the barracks was donated by Charles Musgrave on 20th March 1874, so despite local opposition the forces of power and economic opportunity won the day.¹¹⁸

Preston was substituted for Fleetwood because it was the headquarters of a militia regiment, and there was a barracks available. This did not, however, involve any change in the arrangements proposed originally for the training of militia battalions at Fleetwood. The formation of a double brigade depot at Warrington in place of single depots at Liverpool and Warrington, was recommended on economic grounds. Warrington, being only fourteen miles from Liverpool in effect served the same recruiting area, and the only site that could be obtained at Liverpool was expensive and six miles from the city. In either case special recruiting parties would have to be detached to Liverpool. The substitution of Wrexham for either Denbigh or Bangor was recommended, because Wrexham was considered a better recruiting ground than either of the other two and possessed superior facilities for the exercise of troops. Lichfield was chosen to have a double depot in place of single depots at Lichfield and Stafford as they were only ten miles apart in the same county. Critically, the necessary land could be acquired at small cost at Lichfield. It was proposed that this should also be the proposed location for the annual camp for exercise for the Midland counties, and where the militia of the surrounding counties could be trained in association with regular troops.

Of two alternative places mentioned as sites for brigade depots in the First Report, the Committee now recommended the selection of Nottingham or Leicester. Nottingham, on the grounds that the WD already possessed a site which would be available for the brigade depot, which would save the cost of acquiring the necessary land elsewhere.

¹¹⁷ *Leeds Mercury*, 27 March 1873.

¹¹⁸ The Duke of Wellington's Regimental (West Riding) Museum – <http://www.dwr.org.uk/museum/> accessed 03.12.2019.

But it was decided to sell the Nottingham site and defray the cost of purchasing at Leicester. Leicester became the favoured location because of the three Line Battalions to be localized there, two already had the title of 'the Leicester'. Interestingly the Committee gave considerable weighting to the militia in their decision as two of the three militia Battalions which would be linked in also carried the name, 'the Leicester'. They already had Headquarters at Leicester, while the Notts Militia had their headquarters, not at Nottingham, but at Newark.¹¹⁹

Figure 4.33: Troops stationed in the Northern Region 1810-1904¹²⁰

Year	1810 militia	1810 regulars	1820	1822	1848	1857	1900	1904
East Region	7,556	13,003	4,464	2,594	1,697	5,604	6,459	12,474
Northern Region	4,020	4,192	5,839	3,778	7,221	7,397	14,831	28,974

An examination of the troop numbers accommodated in the North shows that, certainly compared with the East, the region maintained large numbers of troops, doubling between the 1820s and 1850s. It doubled again by 1900 and again in the next four years as troops returned from South Africa.

The final reform, brought in by Haldane in the first decade of the twentieth century, set the pattern of the country's military estate before the impact of the First World War. The reforms did much to improve the conditions for the British soldier but many were still accommodated in older, pre-reform barracks such as those in Newcastle, Liverpool and Sunderland. The debate on quality and health continued well into the twentieth century. As late as 1911 Walter Long summarised the argument in Parliament about the quality of barracks. He pressed for loans to be used to ensure that all of the poor accommodation was removed from the estate. He argued that if

¹¹⁹ From various PP reports - Committee on Organization of Military Land Forces. Supplementary Report, (C.588, 1872); (C.283, 1875); Final Report, (C.712, 1875); (C.420, 1876); Army Brigade Depôts) (1879).

¹²⁰ Troop numbers have been calculated from Barrack Returns and Army Estimates where troop numbers for each site have been identified, the dates indicating significant events – 1810 mid Napoleonic War, 1820 post Napoleonic, 1822 decline, 1848 mid-century focus on health concerns and detailed returns for each month from 1857, culminating in detailed Army Estimates 1900 and 1904 after the Boer Wars.

barracks were properly built they would probably last for one hundred years at least. He acknowledged that the government had improved some barracks but he knew that there were others, 'in which soldiers ought not to be put, and, if you put them there, you will not encourage men to remain in the British Army.'¹²¹

A further debate emanating from Cardwell's original proposals was also prominent in the early decades of the twentieth century. At the end of Cardwell's presentation to the Commons in a review of the Localisation Act he commented at some length on the impact of the Autumn Manoeuvres leading to a stronger focus on the need to find suitable land for such events. He spoke enthusiastically about the Aldershot Manoeuvres and how well they were received by the local population as well as the military, and how low the bill for damages was. However, the lack of suitable locations, in many districts, for such activity was a major cause for concern. Cardwell admitted that he did hope that manoeuvres could be held in Ireland and Scotland, but found that when held on such a large scale, it was impossible to hold them in the thickly populated parts of either country, or in the North of England:

We have made a proposal in the Estimates for having Manœuvres this autumn; but whether they will be on the same scale as last year, or whether the same number of men will be divided so as to give Ireland, Dartmoor, and the North of England an opportunity of seeing the Manœuvres gone through by smaller bodies of men, has not been determined.¹²²

This desire for training and manoeuvres to take place in the North of England became a constant theme over the next forty years and is explored in the following sections. The Cardwell-Childers reforms created a new geography of the military estate across Britain and especially in the North of England. While the acreage for the barracks was always relatively modest, mostly requiring around twenty to thirty acres for the core development but these did create new locations for the military in a dozen places in the south of the region from Warwick to Wrexham and across Yorkshire and

¹²¹ Hansard, Vol. 22 cc2071-185, Commons sitting, The Army Estimates, Mr. Haldane's Statement, (14 March 1911).

¹²² Hansard series 3, Vol. 214 Column 880 Cardwell's speech to Supplies Committee, (February 1873).

Lancashire from Beverley to Lancaster. This consolidated the north as a location for large numbers of men now accommodated across the Region and the need for land for training and practice that sparked the greatest demand for land for military purposes in the last few decades of the nineteenth century. It was this demand for land that led to the large-scale growth of the military estate in the north in the thirty years prior to the First World War.

4.7 Technology and strategy

Besides the occasional use of commons, heaths and moors, as had been the norm for the militia and volunteers during the Napoleonic period, there was generally a lack of dedicated facilities for military training and exercise in Britain, especially in the first half of the nineteenth century. This was particularly acute in Northern England. Until the middle of the nineteenth century most training occurred on the parade ground or, for any large-scale practice, on active duty overseas. The innovative camp and exercises established at Cobham in 1853 led to land being purchased around Aldershot between 1854-1861, but there were no more large scale military manoeuvres in Britain until 1871, and thereafter none between 1875 and 1898.¹²³ As well as being a driver of change in the functions and location of barracks, the Localization Act in 1871-72 also generated interest in the creation of a large training centre in the north.¹²⁴ Expenditure between 1872 and 1893 on the Military Forces Localization Act amounted to £2.3million with 53.13% of it spent in the northern region.¹²⁵ The Heads of proposed expenditure in 1872 had identified the purchase of land for a tactical training station as a high priority.¹²⁶ The training barracks identified was to be Fleetwood and the place of training was to be at or near York. This spawned much interest in the newspapers, especially in the north and Scotland when the *Manchester Guardian*'s correspondent reported:

¹²³ Spiers, *The Late Victorian Army*, (Manchester, 1999), pp. 262-63.

¹²⁴ PP, Military Forces Localization (Expenses), (C.222, 1872).

¹²⁵ PP, Accounts under the Military Forces Localization Act, 1872 to March 1893, (C645,1893).

¹²⁶ PP, Localization, (C.222, 1872), p.7.

Unless, therefore, Government is prepared to give fancy price, it is to be feared that the north will still remain without its Aldershot and must fain be content with limited training ground for its militia and volunteers.¹²⁷

It was within the reporting over the following years, especially in the *York Herald* that the tactical station for the north was referred to as 'the Aldershot of the North of England.'¹²⁸ This was eventually concluded with the purchase of Strensall.¹²⁹

The negotiation for the purchase of commoners' rights in connection with Strensall Common, it is understood, are satisfactorily progressing. This large common is intended to be utilised as a northern tactical station, in modern military phraseology a camping ground, where for two months in each summer and autumn 10,000 men may be encamped under canvas. A northern camping ground has long been felt to be a desideratum by the Government.¹³⁰

The original preferred site was Rombalds Moor near Ilkley, but this was abandoned after opposition from up to eighty people with shooting rights over it as well as residents in Ilkley. The government then tried to purchase Knavesmire, near York, but it was too expensive. Eventually it was proposed to purchase the Commoners rights at Strensall as the best option. It could accommodate up to two army corps for summer and autumn manoeuvres.

This camping station will be the only one in the north of England, and the only one in the country actually belonging to the Government. Salisbury Plain has been used as a tactical station at intervals since 1871, but in each instance when it has been used compensation has been paid.¹³¹

¹²⁷ *Edinburgh Evening News*, Tuesday 20 January 1874.

¹²⁸ *York Herald*, Thursday 16 July 1874; Saturday 24 October 1874; Wednesday 8 March 1876; Saturday 15 June 1878.

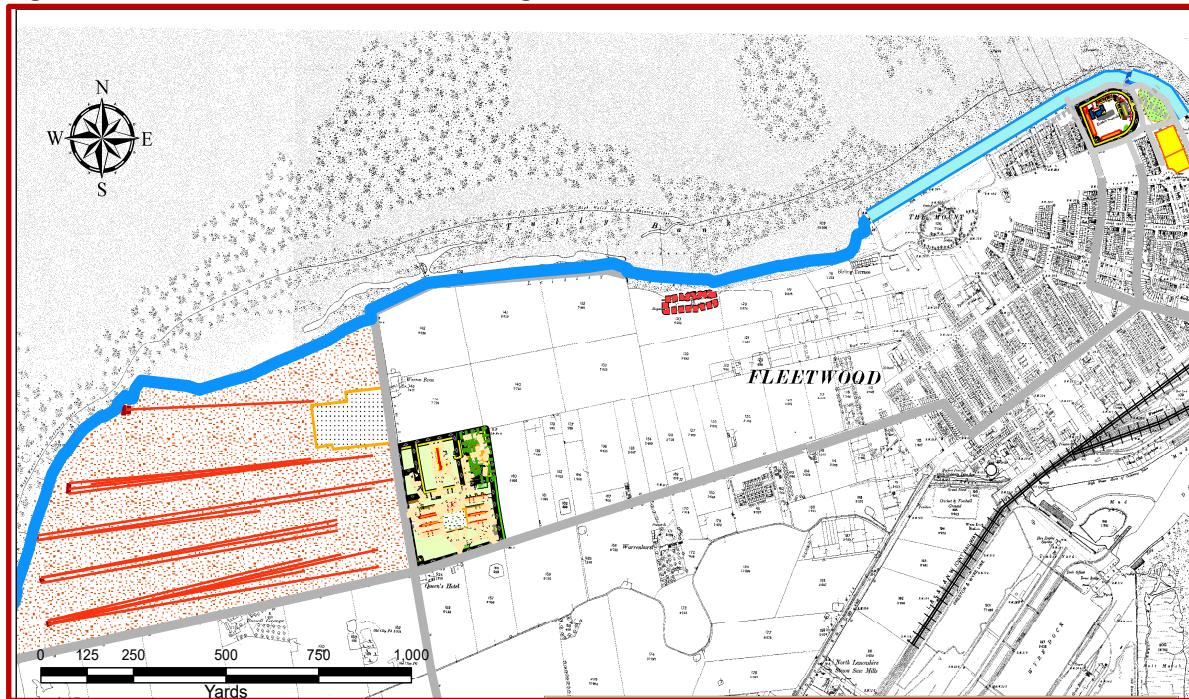
¹²⁹ PP, Strensall 1884 – minutes of evidence.

¹³⁰ *Richmond and Ripon Chronicle*, Saturday 17 March 1877.

¹³¹ Ibid.

Despite training becoming more important away from the parade ground, there were serious challenges to the army's effectiveness and company level training, for home battalions, was hindered by lack of space. In 1875 exercises with artillery were standardized but these tended to be based on parade ground movements.¹³² Only after the government had purchased 41,000 acres of Salisbury Plain in 1898, was the army, at home, able to manoeuvre army corps against each other.¹³³ It was only when part of the Redesdale Estate (Otterburn) was purchased, a few years before the First World War, that there was an equivalent facility in the North. Across the northern counties, ranges were sometimes in prominent public locations or they were tucked away in farmland. They were often located on sloping land so that semi-natural butts were available when firing uphill. Where coastal locations could be used, the foreshore or the ability to fire towards the sea were favoured locations (Scarborough and Altcar). In upland areas, moorland locations or scarp slopes were favoured as at Crowden and Hawksworth Moor.¹³⁴ Where possible, military land already acquired was used flexibly rather than being closed and sold.

Figure 4.34: Fleetwood Barracks and ranges 1888

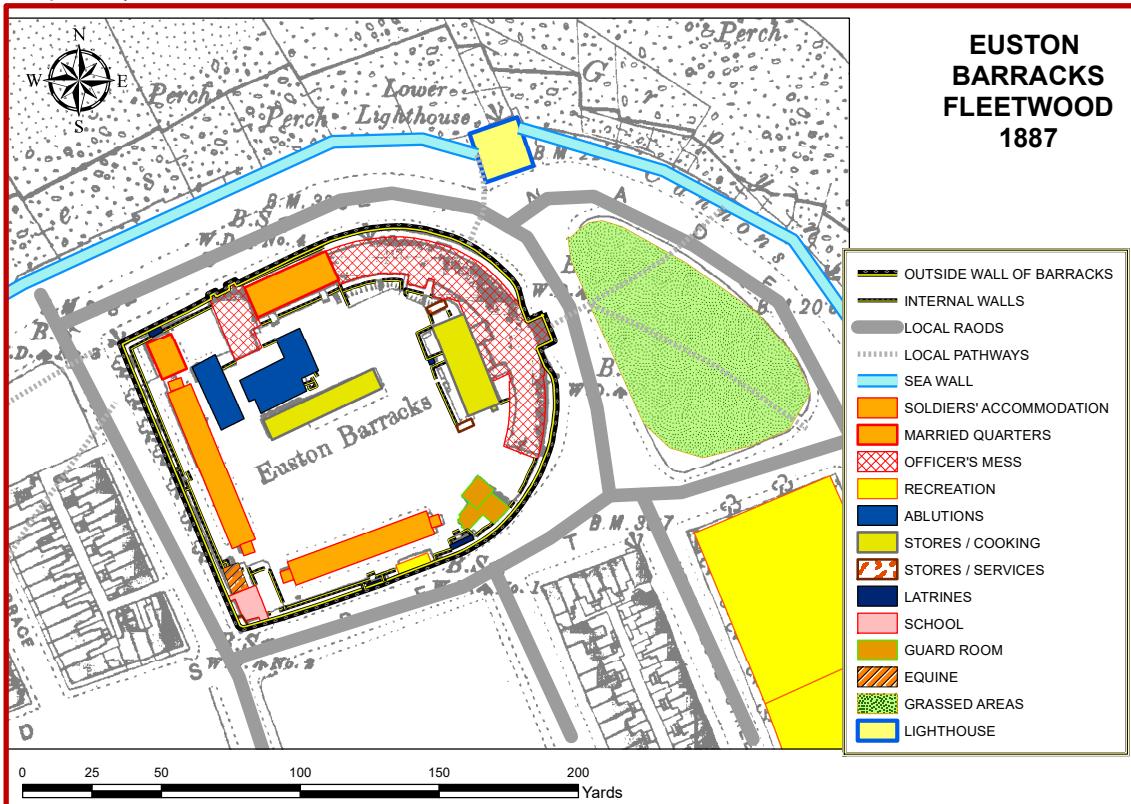


¹³² Spiers, *The late Victorian Army 1868–1902*, pp. 260–65, referring to the manual of exercises issued in 1875.

¹³³ Ibid., p. 263.

¹³⁴ S. Riches, Hawksworth Moor Rifle Range, *Otley Local History Bulletin*, (18 April 2020).

Figure 4.35: Plans of the Euston Barracks at Fleetwood. (TNA WO 78/3358, Fleetwood hut encampment).

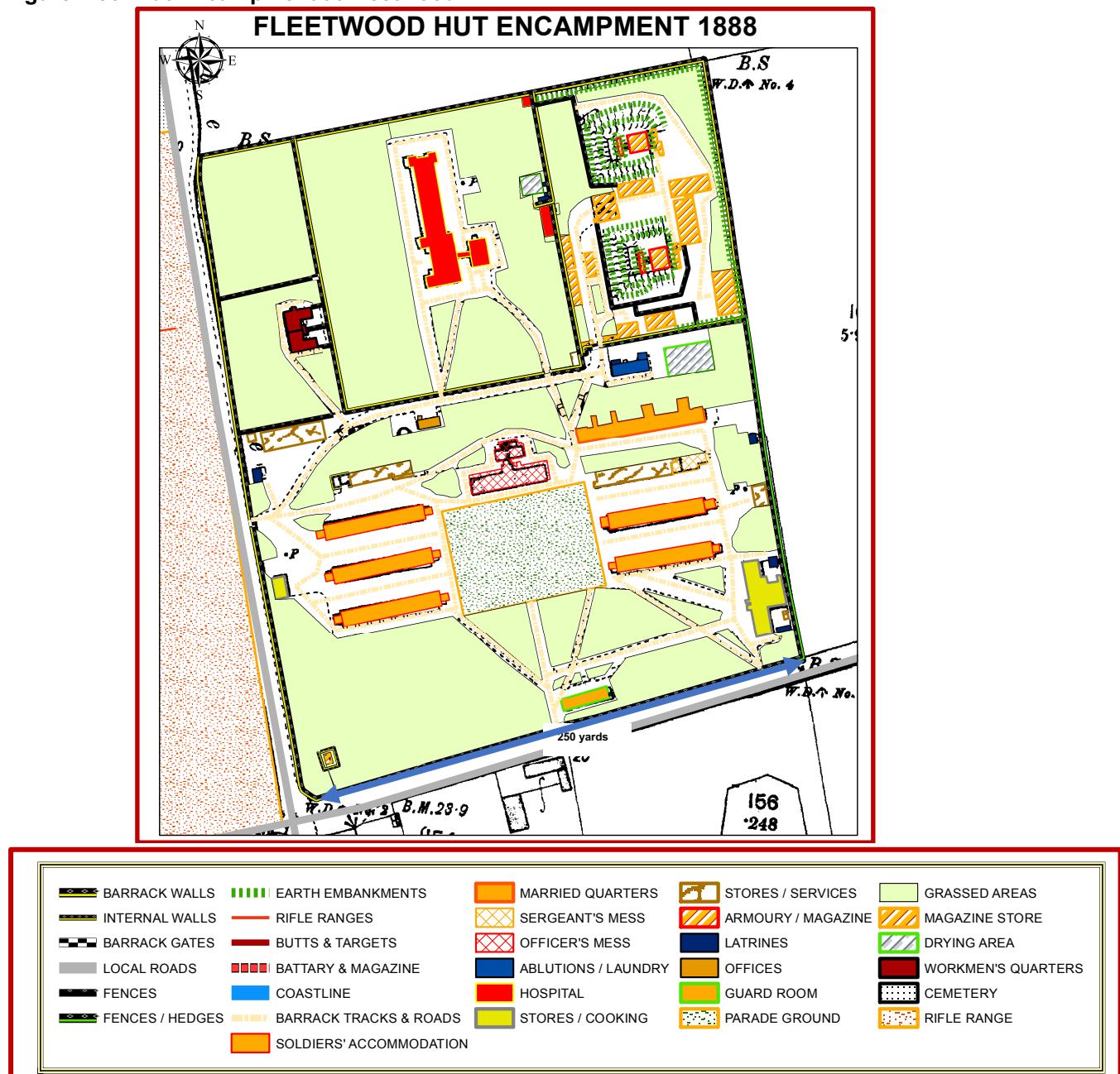


The barracks at Fleetwood were considered too small to be a Cardwell Depot but provided a better location for the development of rifle training based on the previous musketry school based at The Euston Barracks during the 1860s, and the hatted area adjacent to the coastal rifle ranges a mile to the west. The terminus of the west coast railway was at Fleetwood and this influenced the early thinking about developing that location.¹³⁵ The hatted encampment provided a semi-permanent barracks for the large numbers of troops from across northern England who made their way to Fleetwood to complete their training in musketry and other forms of marksmanship (Figure 4.35-4.36). The Euston Barracks only covered just under 3 acres of land while the encampment and rifle range, purchased from Sir H. Fleetwood in 1859 and 1861, covered 136 acres. A further 22.5 acres of the rifle range was leased for 99 years from the Trustees of the Fleetwood Estate in 1859. In addition, an undisclosed portion of the Foreshore was leased from the Duchy of Lancaster also for 99 years.¹³⁶ The main building of the Euston Barracks is now a hotel.

¹³⁵ before it returned to Hythe in Kent.

¹³⁶ NAM. 2011-11-24 – 9, Return of War Department Lands at home stations on 31st March 1900.

Figure 4.36: Hut Encampment at Fleetwood.



Fleetwood remained an important range for many years but its primacy was reduced by the further development of Fulwood Barracks at Preston (9 miles south east) as the main Depot in the area and by the establishment of the training facilities at Chipping just 9 miles north east of Preston. While the development of Chipping added significantly to the military land holding in the north of England, it never developed as the permanent training venue originally planned for by the Earl of Derby and his neighbouring landowners in the area.

Chipping Camp opened in 1892 providing 1,300 acres leased from Lord Derby, for a camping-ground and firing range for the North (Figures 4.37, 4.38). The camping facilities were greatly improved by the erection of corrugated iron shed outhouses, while all the roadways in the camp were laid with gravel, and the roads in the neighbourhood were metalled.¹³⁷ Regular troops ran the camp and gave instruction to the volunteers and militia. Over the summer each year trainees were accommodated in tents, a few hundred at a time for up to a fortnight. It was originally hoped that the camp might become the northern centre for training but difficulties with rail access and inadequate local roads made the location inappropriate.

Figure 4.37: The moorland near Chipping used as a military camp and ranges in the first decade of the twentieth century.



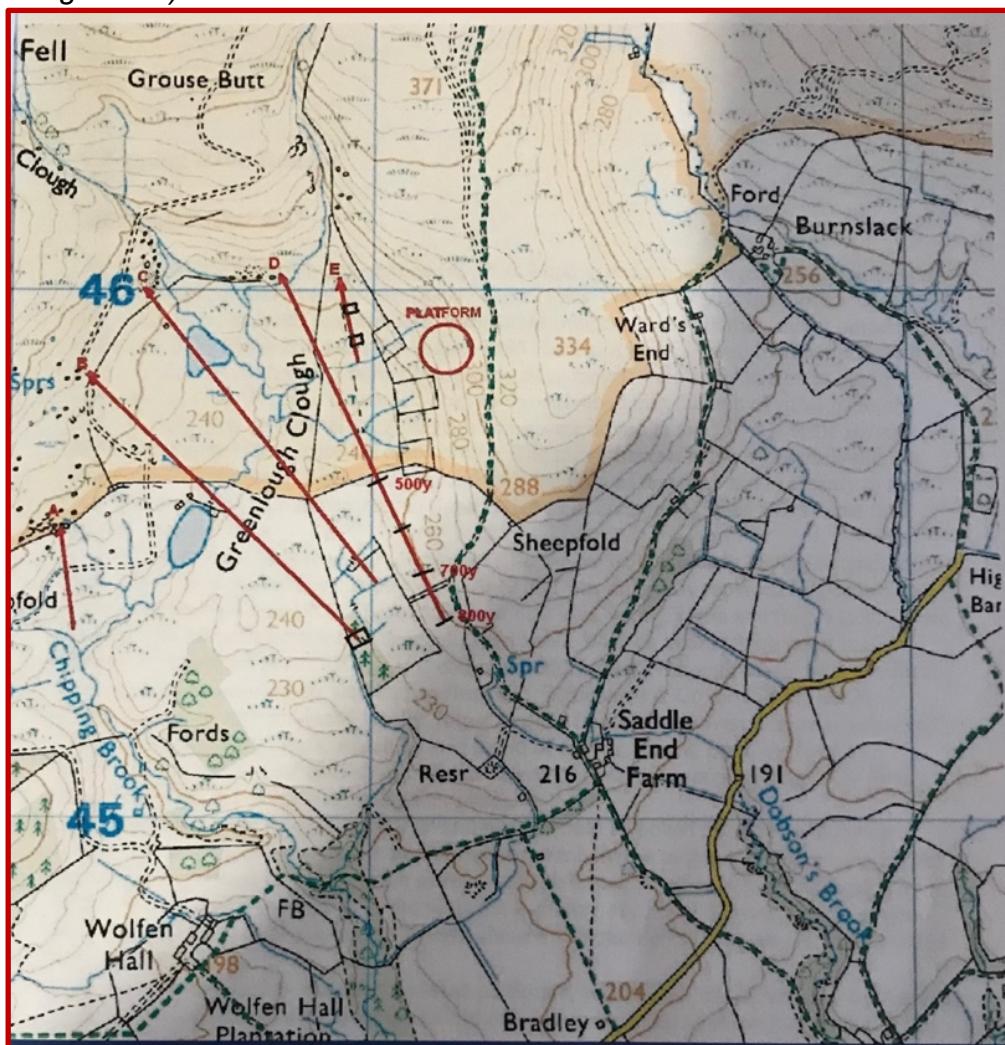
Some small-scale manoeuvres took place in 1892 for up to 1,000 men, but the area failed to become the major training site originally hoped for. The main issues of accessibility were compounded by the wet conditions that made the ground waterlogged around some of the firing points and the ground near the camp made manoeuvres very difficult. In 1897 the lease was confirmed for 99 years,¹³⁸ but by 1910 it appears that the ranges were no longer used.¹³⁹

¹³⁷ Bill Flentje & Geoff James, *Chipping Local History Magazine relating to Chipping Rifle Ranges* (May 2008).

¹³⁸ NAM. 2011-11-24 – 9, L&T Return 1900.

¹³⁹ Bill Flentje & Geoff James, *Chipping Local History Magazine*.

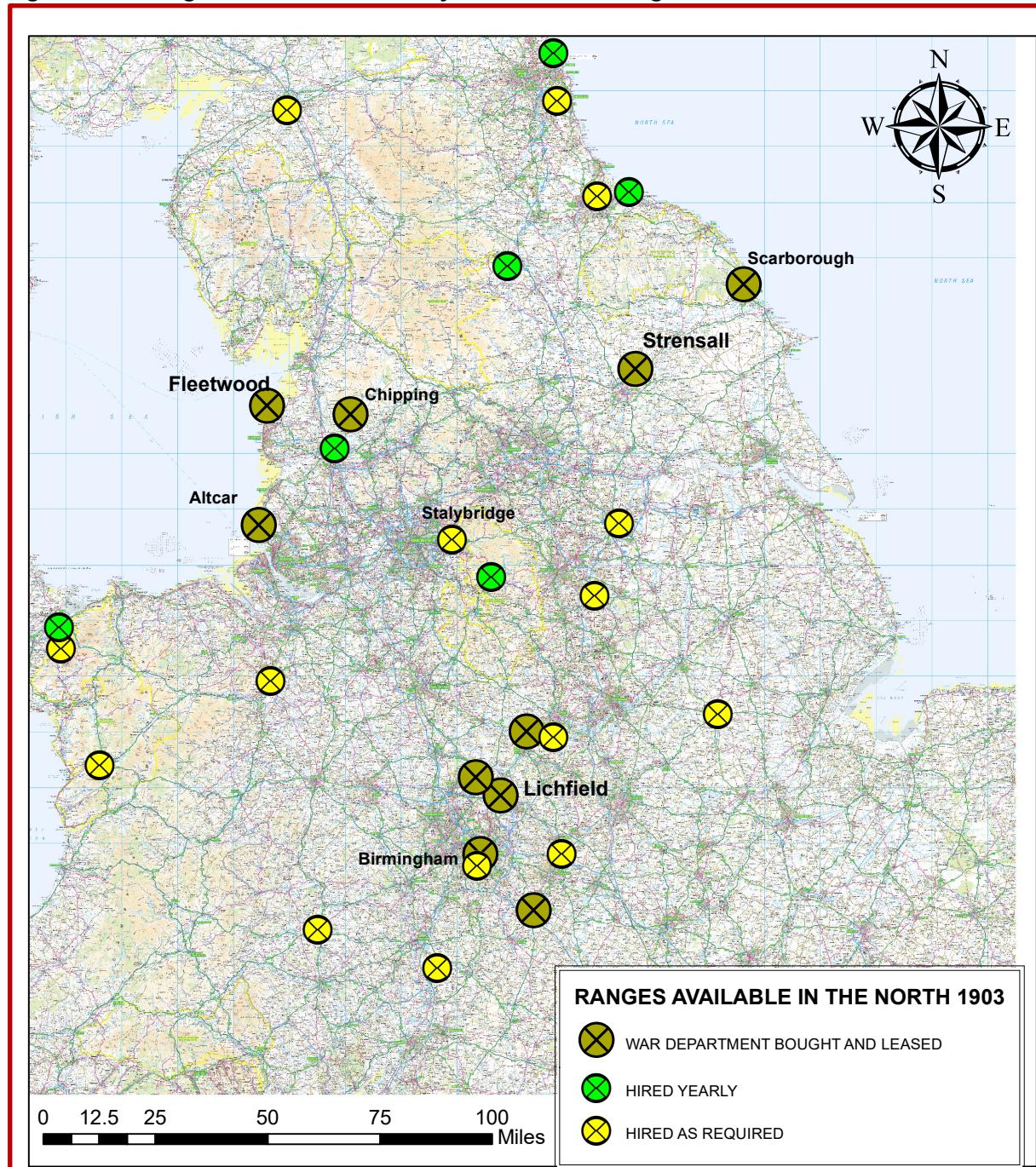
Figure 4.38: Land allocated to training at Chipping, location of ranges. (Chipping Local History Magazines)



By the end of the nineteenth century Northern Command had 34 ranges available and one under construction (Figure 4.39). Of these 29 were on WD land and 9 of the ranges had range lengths of 1,000 yards, 22 were small with less than 10 targets but 14 could offer field firing.¹⁴⁰

¹⁴⁰ PP, Return of Purchases of Land for Rifle Ranges by County or Borough Councils or Volunteer Corps, under the Ranges Act of 1891, (C. 129 1900).

Figure 4.39: Ranges available to the army in the Northern region in 1903



This expansion of ranges was in part to alleviate the kinds of difficulties raised in Parliament by William Tomlinson, MP for Preston, in June 1894. He stated that there was a range within six miles of Preston which was reasonably safe until the Martini-Henry rifle was introduced. He observed that there was an excellent range within 11 or 12 miles of Preston at Chipping, but there was great difficulty to get over the 5 miles which intervened between the railway terminus and the range in time to get the

shooting done before dark.¹⁴¹ Many of the ranges available to the military were developed by the Volunteer Corps over the second half of the nineteenth century. These ranges were an important part of the military presence in the landscape and some were incorporated into the military estate when the Auxiliary Forces were reorganised into the Territorials in the early years of the twentieth century. The following examples illustrate how the ranges developed and became part of the military estate.

Ranges and Volunteer Corps

The introduction of the Volunteer Corps' requirements for rifle ranges from the 1860s created demands for land in every volunteer area. In Lancashire alone there were 50 Corps. Most of the ranges were either set up as required each time, or through short term leases on land owned by a local landowner involved with the volunteers, or later provided by some local authorities.¹⁴² They were infrequently included in military land counts as they were not owned by the War Department. This accounts for the absence of Altcar, an extensive area of ranges north of Liverpool, from the land returns as it was owned by the volunteers.¹⁴³ Requirements for ranges, set out in 1870, illustrate just how far expectations had risen in terms of effective practice. The regulations stressed that, officers should survey the ground with extreme care, in order to protect the public from danger. It also emphasised the need to prevent unnecessary expense.¹⁴⁴ The regulations made it clear that at least 300 yards length was required, with safety emphasised for all concerned, and it was most important that the ground behind the target should be safe for look-out men. Ranges were to be established in pairs, with at least 10 yards between each and at least 40 yards at the sides. The biggest challenge was set by the safety margins around the range. The space behind the targets on level ground should be about 1,500 yards but a lesser distance would

¹⁴¹ *Manchester Courier and Lancashire General Advertiser*, Thursday 14 June 1894.

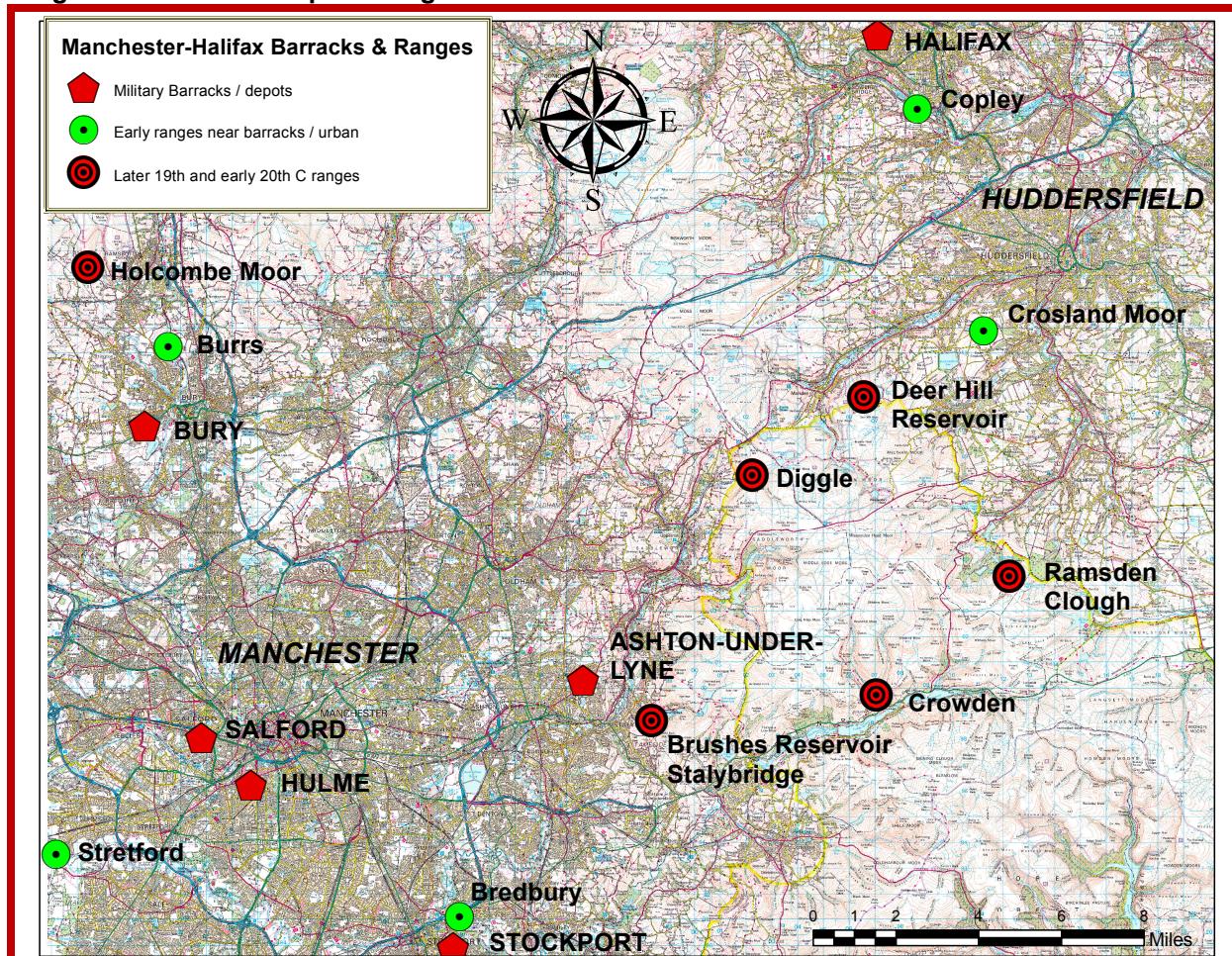
¹⁴² 1859, Regulations for conducting the musketry instruction of the of the Army, Adjutant General's Office, Horse Guards, p.51.

¹⁴³ Colonel Michael Cook, *Altcar, The Story of a Rifle Range* (Territorial, Auxiliary & Volunteer Reserve Association for NW England & Isle of Man, 1989). It was marked in the L&T returns but either as not in use or no acreage reported.

¹⁴⁴ Regulations for conducting the musketry instruction, (March,1870), p.108.

be allowed if there was a steep hill behind the targets. The regulations stated strictly that 'before steps are taken to procure ground for ranges, it is essential to secure the right to fire over the land behind the targets to the extent required.'¹⁴⁵ The Ranges Act of 1891, facilitated the acquisition of land by Volunteer Corps and for councils to purchase and hold lands on behalf of Volunteer Corps for military purposes.

Figure 4.40: A landscape of ranges in the West Pennines.



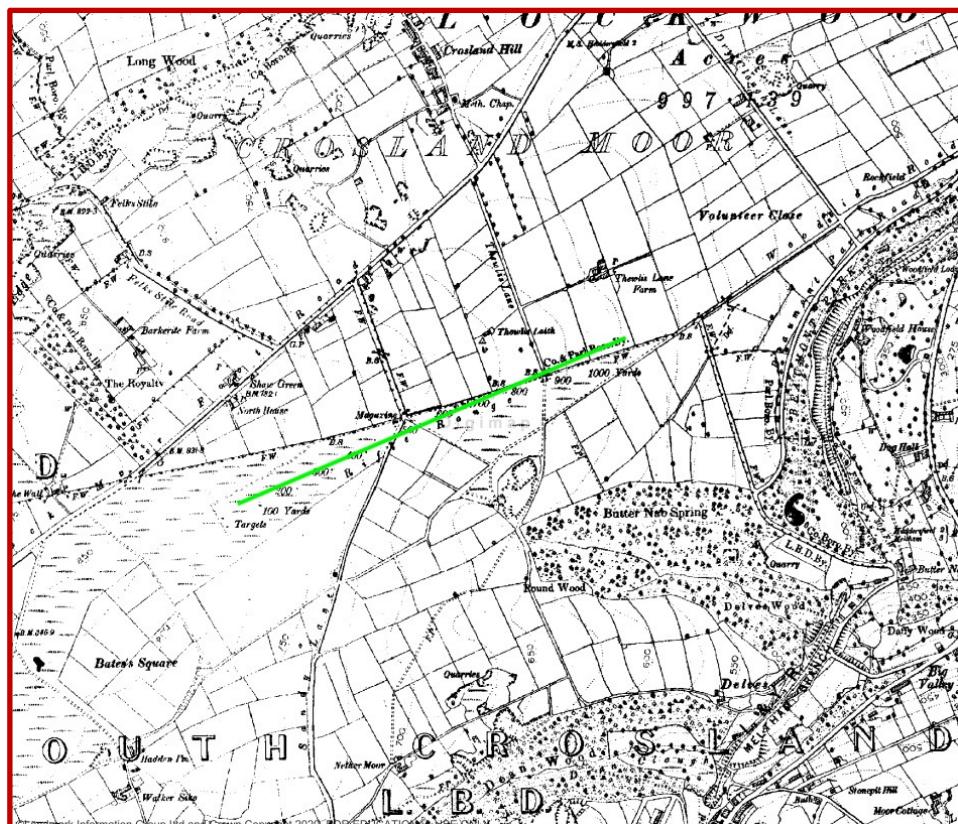
The impact of these changes can be illustrated by developments in the area between Huddersfield and Manchester (Figure 4.40). The volunteer and militia movements, while not accessing large scale permanent sites, created a significant mark on the landscape. Though this was often not recorded in the L&T returns when leases were short term, large numbers of 'Rifle Ranges' were identified on the First Edition of the OS maps. Many did not require large areas of land until new safety requirements were

¹⁴⁵ Regulations for conducting the musketry instruction, (March, 1870), p.108.

set towards the end of the nineteenth century. Manchester's military importance gradually declined when the Cardwell depots at Bury and Ashton Under Lyme became the focal points for recruitment and initial training.

In Halifax, Edward Akroyd (1810-87), a local mill owner and philanthropist helped to form the Volunteer Rifle Corps and was appointed senior captain. He was promoted to Lt-Colonel in 1861, and in 1870 a Drill Hall was built for the use of the Volunteers. In Huddersfield a local land-owner, Henry Frederick Beaumont, was elected as the Corps' captain and decisions on the uniform and arms were made: Beaumont subsequently made land available at Crosland Moor for use as a 1,000 yard rifle range which became known locally as Rifle Butts.¹⁴⁶

Figure 4.41 Crosland Moor, Huddersfield OS map 1870s – Green line (Range) is 1000yards



Crosland Moor Range south west of Huddersfield was in use by the local Volunteer Rifle Corps as early as 1870 and was situated on moorland at the boundary of South Crosland, Lockwood and Linthwaite. Almost immediately the competition for alternative land use came into play. In 1879, the landowner offered to donate

¹⁴⁶ He was able to do this under the Rifle Volunteers Grounds Act, (PP c.294, 1860).

around 30 acres of Crosland Moor to Huddersfield Corporation for the purpose of creating a public park. According to newspaper reports, this area included the rifle range. As the land was felt unsuitable, Beaumont was instead persuaded to donate land at Dungeon Wood which was converted into Beaumont Park. The range continued to be used for about thirty years until new ranges developed a few miles further to the south west at Deer Hill.¹⁴⁷

From 1883 the local volunteer battalion was officially associated with the Duke of Wellington's Regiment and the title was changed to the 2nd Volunteer Battalion Duke of Wellington's Regiment. The Battalion recruiting area then extended from Mirfield, through Huddersfield and the Colne and Holme Valleys, taking in Holmfirth and Meltham, then crossed the Pennines between Marsden and Diggle to Mossley. Huddersfield created its own monument to its military involvement. In 1899 the Foundation Stone of the new Drill Hall at St Paul's Street was laid by Field Marshal Lord Roberts of Kandahar. The money had been raised by holding a Military Bazaar and by public subscriptions.¹⁴⁸

Figure 4.42: 1870s Halifax Drill Hall (Google Earth)



Figure 4.43: Huddersfield Drill Hall 1901 (Google Earth)



Manchester's enthusiasm for the Volunteer movement, and its close working with regular NCOs, is clearly seen in the rapid recruitment and formation of companies from individual volunteers to employees in single firms such as Westhead & Co. (Cotton and Silk Trimmings) who equipped their whole company. The Headquarters of the 1st Manchester Rifle Volunteers opened in Hopwood Avenue, its members drilled in

¹⁴⁷ *Huddersfield Chronicle*, 18th June and 17th December 1859.

¹⁴⁸ Ibid. 17th December 1859.

various warehouses and at the Cavalry Barracks in Hulme. A 6th Company followed and by November 1859 enthusiasts living in Hulme, Moss Side, Combrook and Stretford formed a 7th (Old Trafford Company) of the 1st Manchester's. They commenced drill parades at the nearby Pomona Gardens and later at the Salford Infantry Barracks under the guidance of Regular Army staff sergeants of the 96th Regiment.¹⁴⁹

Drill and rifle practice occurred on larger scale ranges at Fleetwood, on the Lancashire sands at Southport and Altcar, all over 40 miles away. Therefore, there was a need for local ranges too and usually within a short march from barracks and close to the centres of population where men worked and lived. The barracks at Salford, Hulme and Stockport supported large numbers of Regular troops, militia and volunteers. This placed great pressure on ranges close to the rapidly growing urban area. Ranges were available close to the larger rivers at Bredbury and Stretford. Even with the development of new ranges the barrack depots at, Halifax, Bury and Ashton-under-Lyne needed local ranges within a short march of the Depot. Halifax Barracks used a range beside the railway and the River Calder two miles south east of the barracks. This was a small 400-yard range with natural butts in the steep sided river cliff in North Dean Wood. At Bury a 300-yard range for the local barracks was north east within a meander in the river with butts located in an old river cliff. It was adjacent to the railway line and required a march of less than two miles.

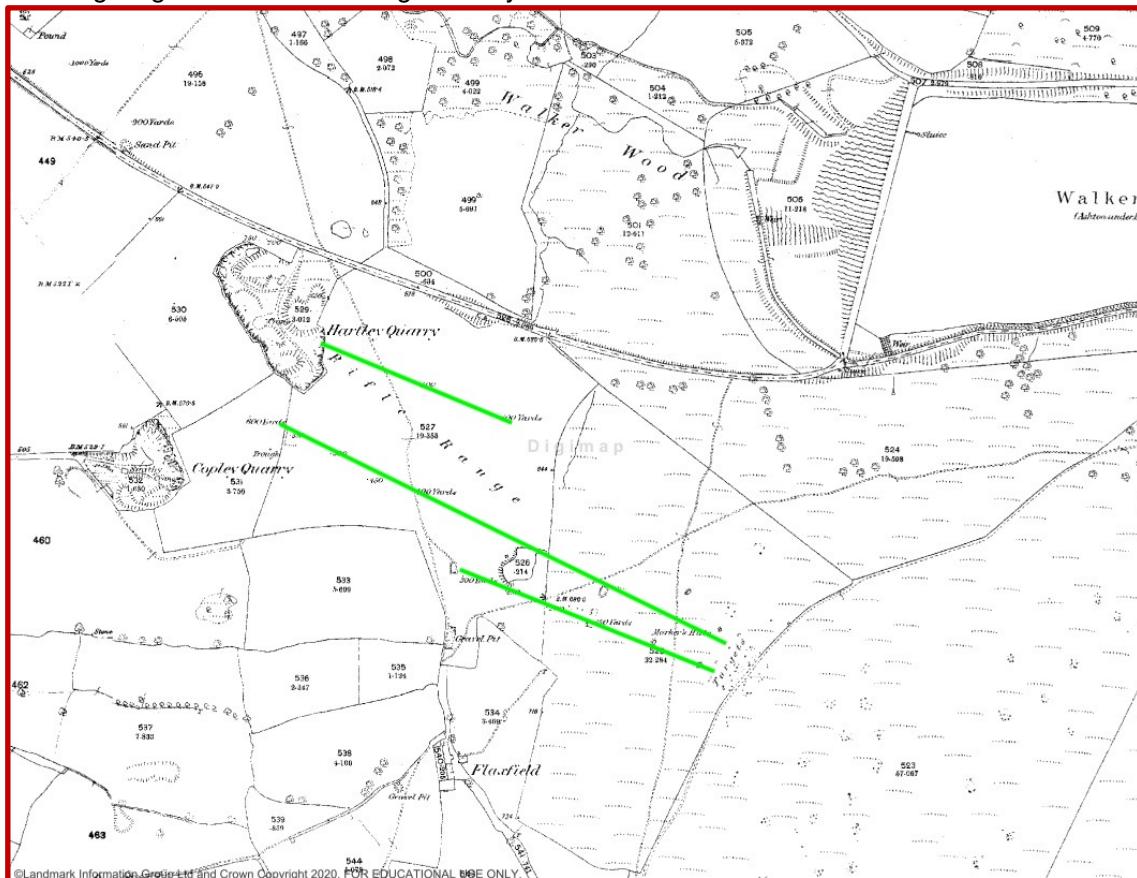
The ranges near Walkerwood Reservoir (Figures 4.44 and 4.45), adjacent to Stalybridge Country Park provide an excellent example of relic ranges from the late nineteenth century. They were the nearest location for musketry / rifle practice to the large depot at Ashton-under-Lyne, a three-mile march away. Developed in the 1860s the ranges were located on high ground above the reservoir with quarries behind them, a short range of 100 yards and two ranges of 400 and 600 yards were created. Firing points are still in evidence as are the raised butts where the line of targets was located.

¹⁴⁹ Capt. Robert Bonner, *The Development of the Rifle Volunteer Movement in Manchester*, (Vol. 86, No 34, SAHR, Autumn 2008), pp.216-235.

Figure 4.44: Stalybridge (for Ashton Barracks) - Walkerwood Reservoir 1870s (Google Earth)



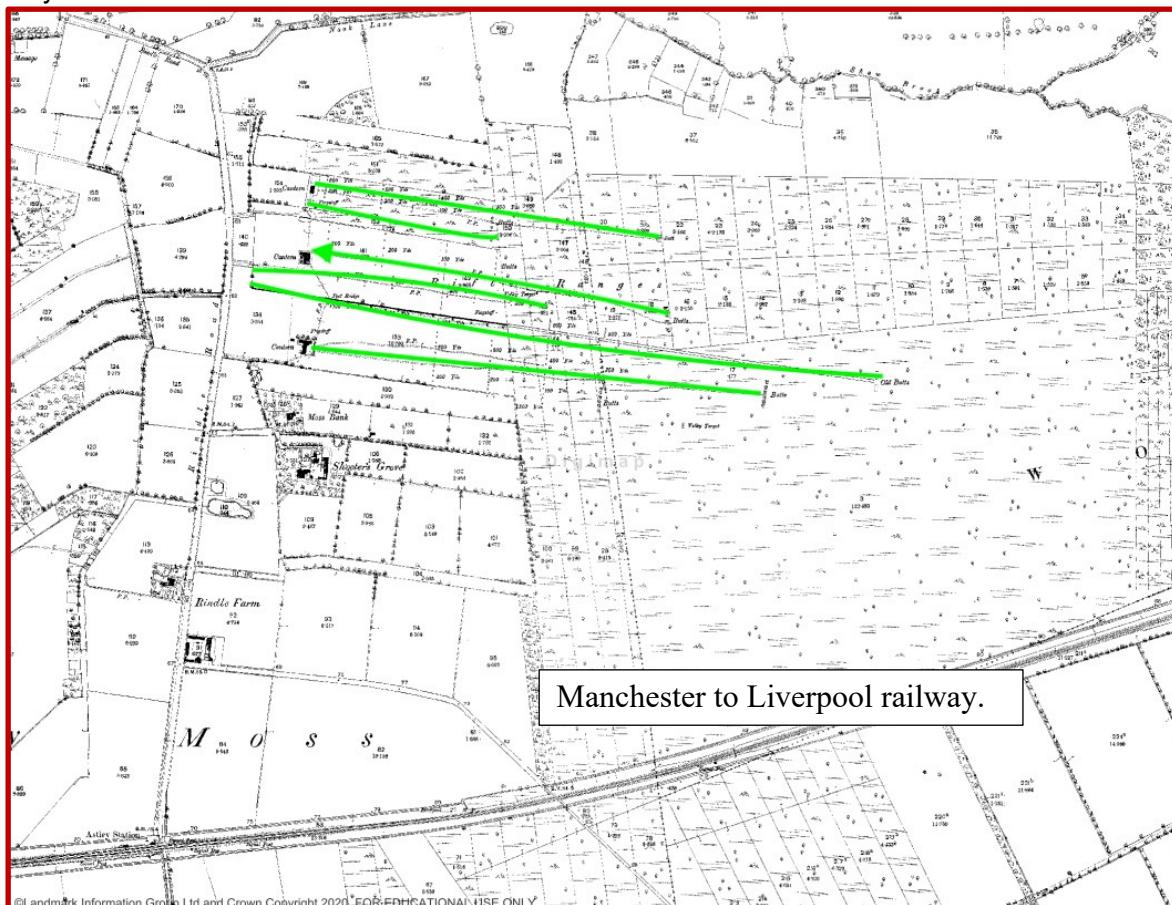
Figure 4.45: Stalybridge (for Ashton Barracks) - Walkerwood Reservoir 1870s OS 1st revised edition longest green line for the range is 600yards



The position of ranges within and adjacent to agricultural, transport or residential land use became an increasing source of complaint about safety. This increased significantly as urban areas grew and the railways were used more frequently. Additionally, the land on much of a range and certainly adjacent to it was still used for grazing or for crops. This juxtaposition of uses created the environment for conflicting needs. Something of the military / civilian tensions over land use is provided by the reported safety issues at Barton Cross, four miles west of Salford Barracks:

A great deal of speculation has been rife in volunteer circles in this city during the past few days with reference to the issue of a general order by Major-General Cameron, commanding the Northern District, directing that for the present and until further orders, the 3rd Manchester Rifle Volunteers must cease rifle practice at their range at Barton Moss. The result of this extraordinary order will be to put the regiment to serious inconvenience and loss.¹⁵⁰

Figure 4.46: Barton Moor near Salford around 1890 OS 1st revised edition – longest green line is 800 yards



¹⁵⁰ Manchester Times, Saturday 20th August 1881.

Probably in response to such concerns a high embankment was constructed on the northern and eastern sides of the range to prevent a recurrence of the complaints from the London and North-Western Railway Company, farmers and other local residents. The complaints of farm labourers were ignored until on the next shooting day observers noticed that fields and hedgerows from 530 to 630 yards distant from the targets were torn up and cut with bullets. The 3rd Manchester Rifles were helped by Lt. Colonel Scott, who made the range of the 2nd Manchester Rifle Volunteers at Astley (1.5 miles away near Wigan) available so that the men of the 3rd could complete their class firing within the prescribed period.¹⁵¹

With rapidly growing urban settlements and improved rifles requiring greater distances the solution in the Manchester-Huddersfield area was to look for suitable land in the valleys and moors of the Pennines. A set of orders was laid clarifying the requirements for the Range Acts to be implemented so that they were consistent with what was seen as the dominant land use for the area in providing a safe catchment for a healthy water supply. The Orders made it clear that:

No land works right or easement now vested in the Manchester corporation shall be required by virtue of this order except by agreement with the corporation but only a right of using for military purposes to such extent as hereafter mentioned, such rights shall not be left to other persons but shall be confined to the 4th and 5th Volunteer Battalions Manchester Regiment and the 3rd Volunteer Battalion Lancashire Fusiliers.¹⁵²

The specification was strict with strong environmental protection. The meaning of 'military purposes' was confined to the establishment and use of rifle ranges as set out on the plans and also any required buildings for shelter and sanitary conveniences. Each Corps was required to keep the land used for rifle ranges free from trespassers. No permanent residences were to be established in connexion with the rifle ranges

¹⁵¹ *Manchester Times*, Saturday 20th August 1881.

¹⁵² PP, Provisions in the Military Lands Act Orders for the Protection of the Corporation of Manchester. Schedule to Order No1, (C 255, 1896).

except for a residence not exceeding two caretakers. Earth closets and urinals were to be placed to meet the convenience of the range with a construction approved by the corporation. Water tanks were to be constructed for the reception of all liquid sewage with arrangements for conveying the sewage to the tanks by cast iron pipes to avoid leakage. All sewage was to be carried away from the ground by properly constructed vehicles to some place below the works of the Corporation. In the event of inattention to remove sewage when required the Corporation was empowered to do the work and charge the cost against the purchasing Corps. The Corporation had full power to inspect and to make sure that all sanitary arrangements were as required. The Corps had to inform the Corporation of the dates and times when any rifle ranges were to be used. All damage had to be repaired or paid for and the purchasing Corps, 'shall prevent the water supply of the Corporation being polluted.'¹⁵³

The Corps had to apply to the Secretary of State to sanction byelaws enabling them to prosecute trespassers. The Corps could prevent the members, under the rank of a commissioned officer from leaving the ranges for any purpose except to travel back to Manchester. The Waterworks Acts related to all the local acts authorising the Manchester Corporation to create reservoirs and provide water.¹⁵⁴ It was clear that the Waterworks Acts and bylaws were more powerful than the Military Lands Act in terms of controlling the use of military land when also used for water catchment.

Many small and medium sized reservoirs dot the landscape of the Pennines especially between the large and rapidly growing cities of Manchester, Leeds and Sheffield. The building of the 27 reservoirs in the Huddersfield Waterworks area between 1827 and 1922 was shaped by three factors. High, reliable rainfall on the Pennines, the sites were close to the centres of population and therefore distribution was manageable. Thirdly, the 9 collecting reservoirs were at varying altitudes as high as 1,268 feet OD and needed Break Pressure Tanks and 18 Service Reservoirs at lower altitudes to manage water flow.¹⁵⁵ Despite strict controls the reservoirs provided a significant

¹⁵³ PP, Provisions in the Military Lands Act Orders Schedule to Order No1, (C 255, 1896).

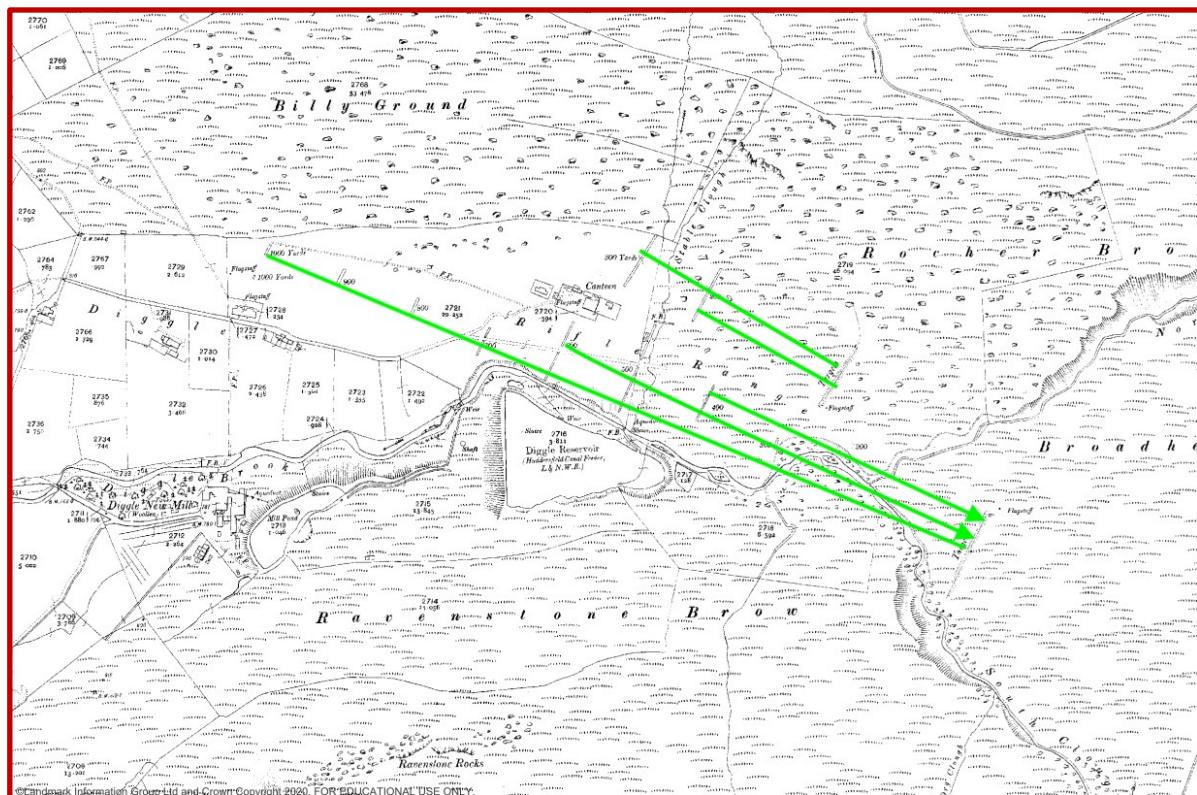
¹⁵⁴ Ibid. Section 20 (C255, 1896).

¹⁵⁵ T.W Woodhead, *History of the Huddersfield Water Supplies*, (Huddersfield, 1939); Provision of a water supply to Saddleworth. (*Institute of Municipal Engineers*, No. 103, 1994), pp.203-214.

advantage to the military, in that the construction and maintenance of the reservoirs created an access infrastructure of roads and ready-made water supply, making the positioning of ranges in the locality of a reservoir easier.

Besides suitable land being available, the development of ranges was underpinned by legislation as discussed in Chapter 2. Section Two of the Military Lands Act 1892 enabled the construction of two much needed ranges in the area to the east of Manchester. The 2nd and 6th Volunteer Battalions, Manchester Regiment, purchased the land for ranges in 1896 at Diggle in the parish of Saddleworth in West Riding.¹⁵⁶ It also led to the development of the Crowden Rifle Ranges.¹⁵⁷

Figure 4.47: Diggle Ranges 1900s OS 1st revised edition – longest green line (Range) is 1,000 yards



¹⁵⁶ PP, To Confirm certain Provisional Orders under the Military Lands Act 1892, (C255. 1896).

¹⁵⁷ Ibid.

Figure 4.48: Diggle Range, butts, target sites and firing points still extant in the landscape.
(Google Earth)



Figure 4.49: Firing points and concrete butts on the hillside.



Figure 4.50: Diggle Range firing points on the 1890s range.



The 5th Ardwick Volunteer Battalion, Manchester Regiment, purchased the land at Crowden for the provision of rifle ranges. The land area included for the development of the ranges was about 400 acres and was of sufficient length to accommodate a range of 1,000 yards. The range was reported as complete on the 23rd of March 1899 and was certified by general officer commanding as being in accordance with the approved plans on the 5th of December 1899. The cost of acquiring the site was £4,850 and construction was £5,380 plus legal expenses £640. The funding was provided through loans from the Public Works Loan Board to the Volunteer Regiments concerned.¹⁵⁸ These important military sites did not register on the War Department returns and were transferred to the War Department at the start of the First World War.

¹⁵⁸ TNA WO 78/3432, Crowden Nr. Manchester, Map showing position of rifle range, (1899).

Figure 4.51: Crowden Ranges approved in the late 1890s.¹⁵⁹

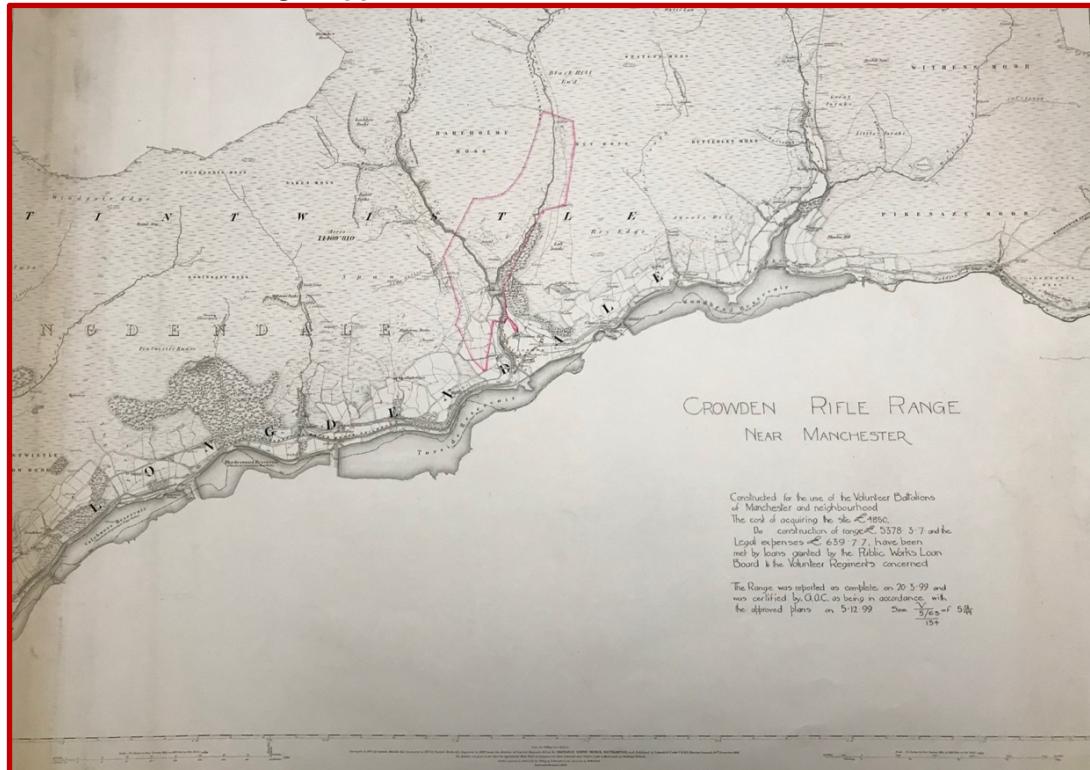
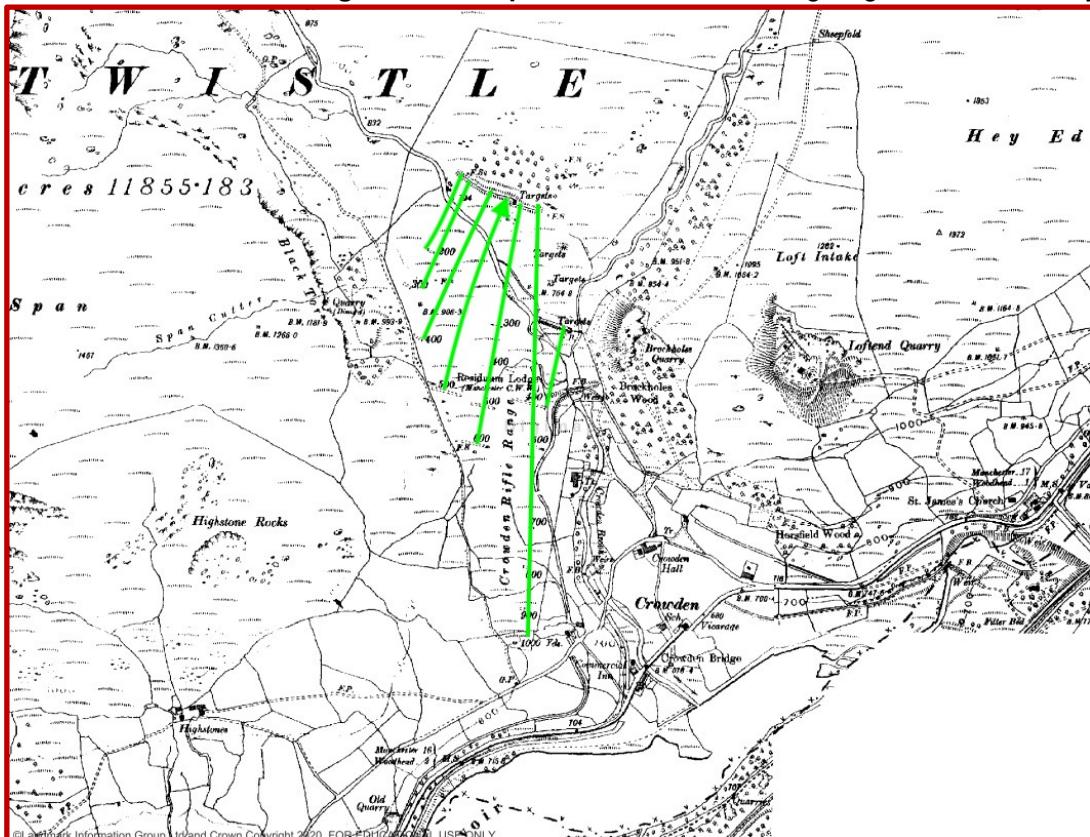


Figure 4.52: Crowden Rifle Range Nr. Glossop – OS1st rev. edition, longest green line is 1,000 yards



¹⁵⁹ TNA WO 78/3432, Crowden, (1899).

Figure 4.53: Crowden Ranges firing points



The building shown in Figure 4.54 is now an outdoor education centre owned by Rotherham Metropolitan Borough Council. Part of it was a section of the barracks that had a temporary accommodation in huts adjacent to it. The original range stretched from the bottom of the line of trees to the right rising to the targets (Figure 4.53) where the photograph was taken.

Figure 4.54: Crowden Ranges – site of barracks



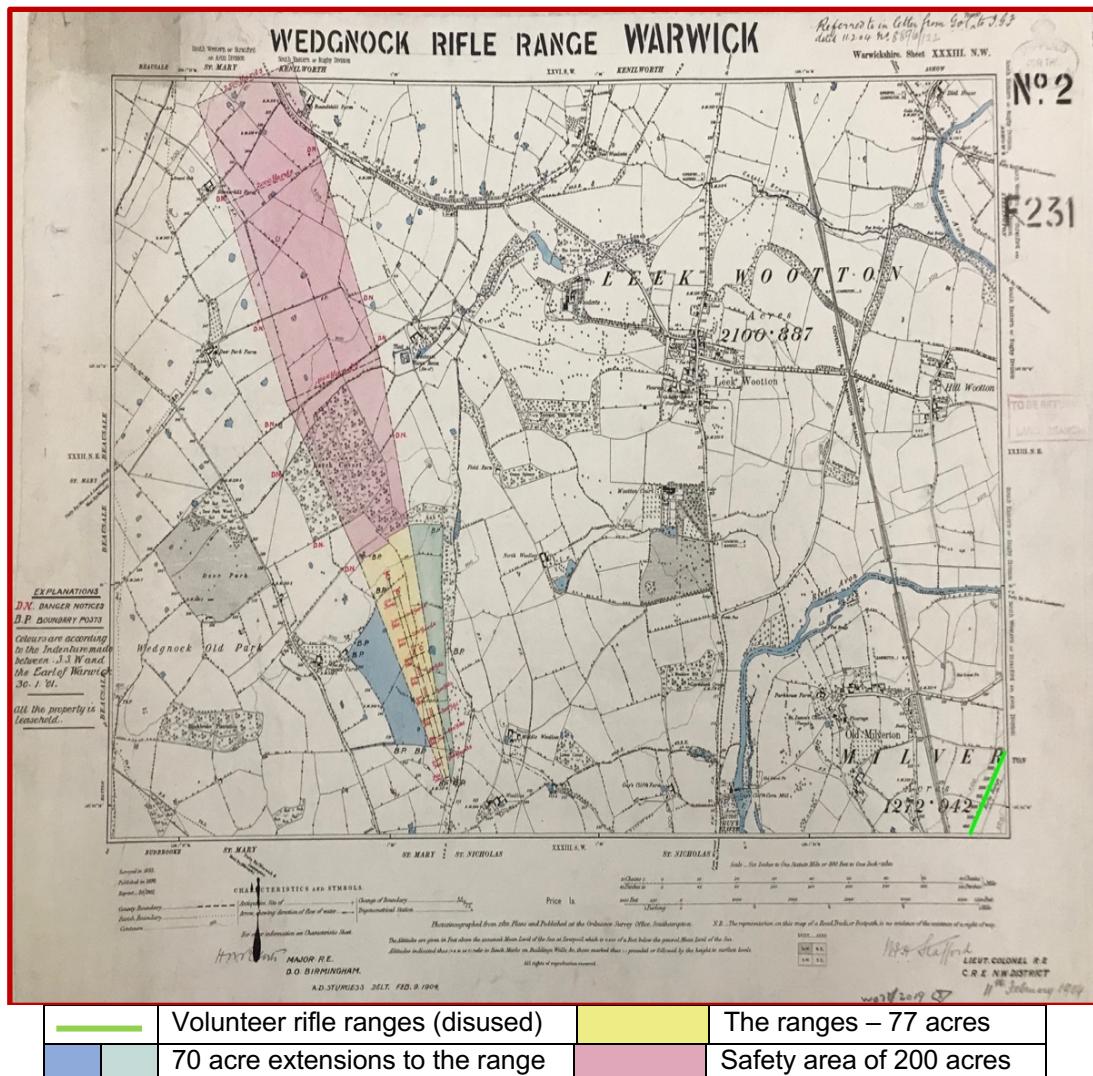
In all of these cases the development of ranges to suit the needs of the military was paramount; their requirements drove the search for suitable sites. However, matching their needs to a view as to what 'suitable land for ranges' was, continued to be a major problem. The most challenging criteria for suitable land can be seen in the views of Col. Locock (Deputy Inspector General of Fortifications) and Col. Vetch in their contribution to the 1891 Committee on Rifle Ranges. They highlighted the difficulties of acquiring land of sufficient extent with ranges needing to be 4,000 yards long and having a minimum breadth of 520 yards and up to 1,200 yards wide. In other words, an areal extent of between 400 and 1,000 acres, depending on the number of troops to be served. This was likely to be the ideal, not a description of what the ranges were like at the time and included a large clearance area beyond the butts for safety purposes. The key conditions for the siting of a range were identified as being centrally situated in terms of travel distances for the troops and close to a railway station. The ground should be healthy for camping with good water supply and well drained. The firing requirements should be a line of sight from firing points to the targets with a clear sight of the land between and behind the targets, and there should be sufficient land in the danger zone.¹⁶⁰ The Colonels acknowledged that these conditions were very difficult to fulfil in a closed country. In an unenclosed country, or common, the difficulties were in the safeguards on commoners' rights. While on moorlands even if all other conditions are satisfied, 'the moors are subject to weather in the shape of mist, and rain, and winds which would deprive the range of its value for half the year.'¹⁶¹

Figure 4.55 illustrates an attempt to meet these requirements near the Cardwell Depot of Budbroke, Warwick on the southern edge of the Northern Region. A leasehold agreement was reached with the Earl of Warwick in 1901 for the development on his land, less than a mile and half from Warwick station. Surprisingly in the area, the military secured 3,650 yards of land with an average width of over 500 yards on average giving a site of 347 acres altogether.

¹⁶⁰ PP, Select Committee on Rifle Ranges ,(1891), para.423.

¹⁶¹ Ibid.

Figure 4.55: Wedgnock Rifle Range Warwick 1904¹⁶²



Concern about a lack of a suitable number of safe ranges continued well into the first decade of the twentieth century. Politicians and military leaders were concerned about the lack of practice space compared with other countries. They accepted that the nature of the land was not as accommodating as South Africa, in terms of extensive open space, nor Switzerland in terms of mountainous terrain providing scarcely populated area with natural butts. These two countries were of interest in terms of how the Boer opponent produced such expert marksmen and Switzerland had a name for marksmanship in sport. Parliamentary debates acknowledged the two biggest difficulties. The nature of the new rifles required greater distances for firing and the

¹⁶² TNA MPH1/329/2, OS Revised New Series Wedgnock Rifle Range.

country was becoming more populated. The Government apologised for having to shut so many ranges as unsafe but stressed the difficulty in finding suitable land.¹⁶³ The Government had tried to deal with the issue at the end of the nineteenth century by making funds available:

for the provision of ranges in central positions where the Regular forces and the militia could be trained in musketry, and where it was also hoped large numbers of volunteers might also be trained.¹⁶⁴

The development of ranges at Deer Hill (Figures 4.56, 4.57) is an example of the response that was made for the volunteers, albeit a decade later. A bill was presented in 1912 to confirm a provisional order of the Secretary of State for War made under the 1892 Military Lands Act, authorising the purchase by the territorial force association of the Western Riding of County of York of land for the provision of rifle ranges and for other military purposes. These were defined in the act as any land for rifle practise, the building and enlarging of camps, the erection of butts, targets and batteries and military drill, and any right of firing over lands or other right of user.¹⁶⁵ The ranges are still used by a sister shooting club to the club at Diggle but on a smaller scale.

For half a century the establishment of local rifle ranges was an important part of the landscape in most parts of Britain. As towns and cities grew the location of these ranges moved more to marginal land in the moors, marshes and commons of Britain. They were rarely of sufficient quality for the regulars to use them as well, as at Altcar, and their temporary nature meant they rarely entered into the census of military land and became part of the military estate until the reform of the Auxiliary Forces early in the twentieth century.

¹⁶³ PP, 1901 Volunteers and Rifle Ranges, Earl Spencer, (vol 91 cc1267-90, HLDeb.), 26th March 1901.

¹⁶⁴ Ibid., (Lord Raglan).

¹⁶⁵ PP. Military Lands Order - a provisional order 1892 authorising the purchase by the territorial force York of land for the provision of rifle Range and for other military purposes, (Bill 197.1912).

Figure 4.56: Deer Hill Reservoir NW of Holmfirth, range with imposing natural butt.



Figure 4.57: Deer Hill Ranges (Google Earth)



At the same time as the safety and nature of rifle ranges was being reconsidered towards the end of the nineteenth century, military strategy and tactics created greater demands on the need for integrated training and exercises where infantry, cavalry and

artillery could interact effectively. The next section examines the landscape impact of the search for and development of artillery ranges and full-scale training areas.

Fulfilling the needs of the Artillery; search for a ‘Northern Aldershot’.

Even in an environment of squeezing the public purse, money was made available for barracks, stores and training over the four decades after the 1872 Act. Provision was made for counties to transfer land, barracks stores or other buildings, with or without payment, to the Secretary of State to support the needs of the military. Land was acquired to improve training and especially for a tactical training station.¹⁶⁶ The idea of a ‘large tactical station in the North of England, where troops of all arms will be stationed’ was embedded into military and political thinking.¹⁶⁷ The Localization Act shifted the national training focus to the existing tactical stations at Colchester and Shorncliffe, expanded Chatham to be a full brigade centre and these were to complement the already developed and expanding Aldershot and Curragh facilities. The Localization Act stated that these training centres were not going to be Regimental Depots and identified the strategic importance of Fleetwood, Warley, Lichfield, a centre in the southern belt of Scotland near Glasgow and that some development was also needed in the vicinity of Belfast.¹⁶⁸

Finding an area of land large enough for a training centre was more complex than merely finding ‘waste land’ as the local papers identified as early as 1874:

Since 1872 the War Minister and his subordinates have been unceasing in their efforts to secure, for the purpose of military tactical station, some 1,500 or 2,000 acres of the numerous large tracts of moorland in Yorkshire and on the eastern borders of Westmoreland at something like a reasonable price, but without avail..... Unless the Government is prepared to give a fancy price, it is to be

¹⁶⁶ PP, Memorandum on Proposal of Secretary of State for War for Organization of Military Land Forces, (1872): PP, Money raised under Military Forces Localization Act, (1872-'94).

¹⁶⁷ PP, Committee on Organization of Military Land Forces, (1873, C.712).

¹⁶⁸ Ibid.

feared that the north will still remain without its Aldershot and must fain be content with limited training grounds for its militia and volunteers.¹⁶⁹

The Government had partly recognised the value of the suggestion for a Northern Arsenal by deciding to build an establishment of that character in York, in conjunction with the small Tactical Station at Strensall Common.¹⁷⁰ Lord Eustace Cecil had explained that the Arsenal would not be for manufacturing purposes, but a central depot in the north of England would provide the military with all the extra stores likely to be required in ease of an emergency or an invasion.¹⁷¹ His view was supported by all the military authorities which had considered the matter of having a manufactory in addition to that at Woolwich and small manufacturing establishments at Plymouth and Portsmouth.

The proposed York Arsenal was considered sufficient for all purposes. 'The arsenal will, of course, have its railway connections, be protected from a *coup de main*, and always under military guardianship and control.'¹⁷² The press hoped that such a development would lead to growth in the military forces of the city in addition to the regiments at Strensall Camp for special training. It was hoped that when these arrangements were in place that the headquarters of the Northern District would transfer from Manchester to York.¹⁷³ That transfer did take place and a separate headquarters was opened in 1878 north of the York barracks, close to the City Centre (Figure 4.58).

¹⁶⁹ *Edinburgh Evening News*, Tuesday 20th January 1874 reporting its Manchester correspondent.

¹⁷⁰ *York Herald*, Monday 10 April 1876

¹⁷¹ *Ibid.*

¹⁷² *Ibid.*

¹⁷³ *Ibid*



Figure 4.58: Headquarter Building - Northern Command, York

In 1882 a Bill was presented to Parliament to ascertain any Rights of Common or other rights in or over Strensall Common, to calculate the acquisition and compensation of such rights and to set out the use of the Common and adjoining land for military and other purposes. The War Department had purchased the soil in the common known as Strensall Common under the 1872 Military Forces Localisation Act.¹⁷⁴ This provided 1,080 acres for military training and stores of ammunition as well as setting out rifle ranges and a camp. The Act gave the Secretary of State all commonable and other rights existing over the Common and set out the process of appeal for aggrieved parties. It also gave permission to divert and alter public or private roads. Officers commanding military operations had the right to restrict access and stop traffic as necessary. The Act also gave the Secretary of State permission to drain and build on land for the purposes of rifle butts, magazines, houses, stores, works and gardens but for this not to exceed 250 acres.¹⁷⁵ The rest of the Common, referred to as the open portion of the common, 'to be used for such military purposes, whether camps, reviews, drills, training, exercising, firing, rifle ranges, or other whatsoever, and at such time or times and during such periods as he from time to time directs.'¹⁷⁶

¹⁷⁴ PP, To provide for ascertaining Rights of Common in Strensall Common, in N. Riding of County of York, for Acquisition and Compensation of such Rights, and Use of Common for Military Purposes, (C.266, 1884).

¹⁷⁵ Ibid.

¹⁷⁶ Ibid.

Figure 4.59: The area under The Strensall Common Act, 1884

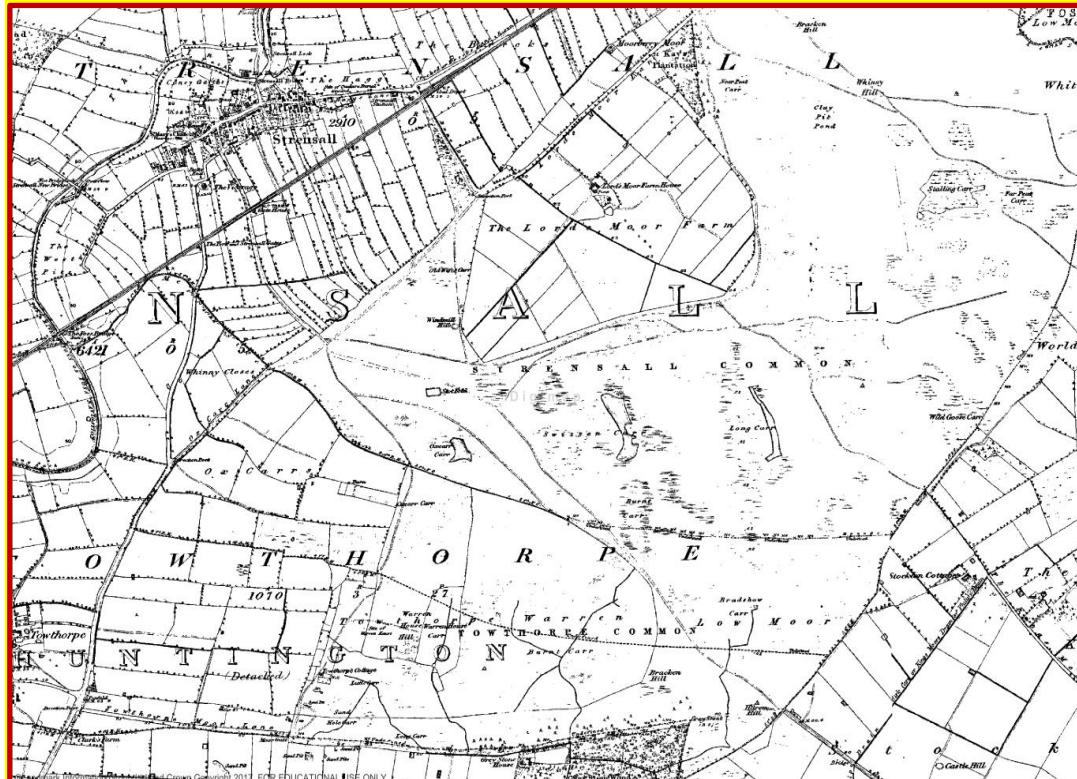
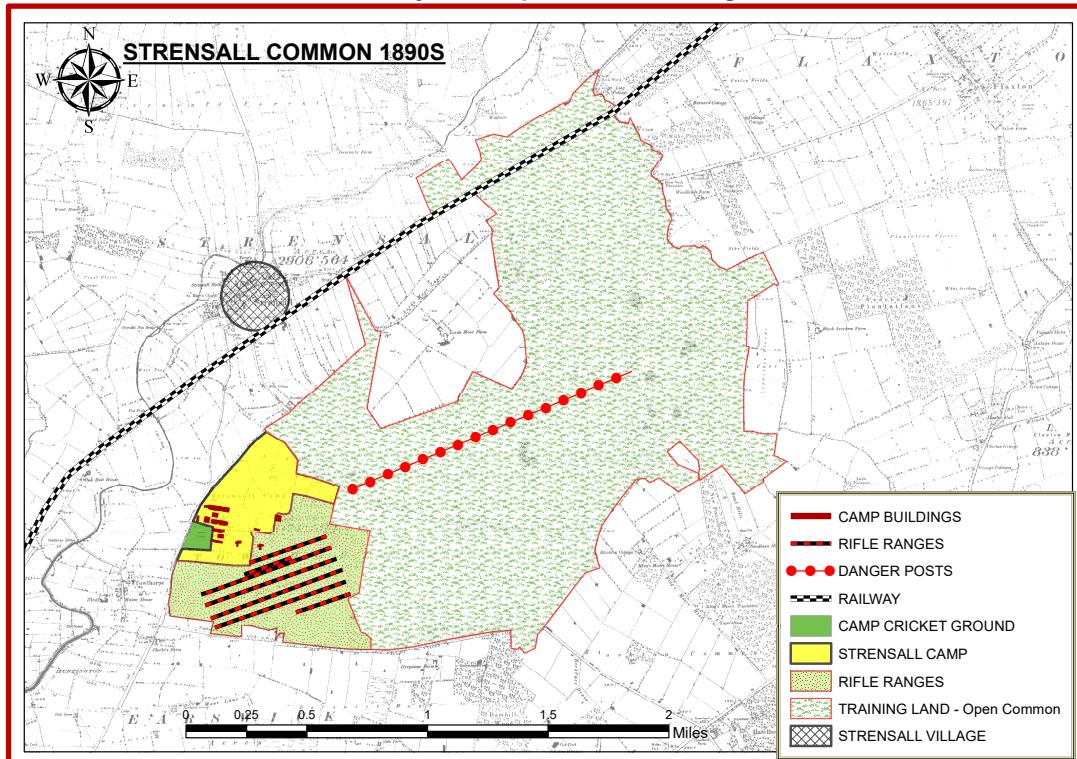


Figure 4.60: Strensall Common military developments following the 1884 Strensall Common Act.



In 1888 the Strensall Camp quartered between 4,000 and 5,000 men from eight militia

regiments and nine volunteer battalions from Derbyshire and Staffordshire.¹⁷⁷ Two years later the newspapers reporting on the camp for battalions from Yorkshire and Lincolnshire emphasised the huge logistical exercise involved in providing the stores required for exercise having been shipped from Woolwich.¹⁷⁸ Newspaper reports provide images of the camp in operation:

The proverbial sunshine, after the rain of the previous night, came yesterday and all looked bright and fair at the Camp at Srensall. The military were astir early, and while the militia battalions went on with their daily exercises, the 3rd Battalion of the Yorkshire Regiment and the 3rd Battalion of the Lincolnshire, made ready for the inspection by Major General Wilkinson, commanding the North-Eastern Division. On the preceding day, Thursday, another grand display took place, when the troops under canvas, numbering, perhaps, 3,000 or more, had a sham fight. The attacking force consisted of the 2nd Cheshire Regiment, 1st West Riding Regiment, 3rd Lincoln Regiment, 3rd West Yorkshire Regiment, 3rd Yorkshire Regiment, and four guns of the Royal Artillery.¹⁷⁹

When the common was not being used for military purposes it could be used, by Her Majesty's subjects, for exercise and recreation.¹⁸⁰ Figures 4.59 and 4.60 show how Strensall developed into a major training camp though the concept of a Northern Arsenal was relatively short lived. Further development was affected by the demands for accommodation and training in the north led to the creation of Catterick near Richmond.

To complement the development of the tactical training centre at Strensall the Localization Plan had also identified other training depots to be expanded. In the Northern Region, Lichfield was one of those large Depot developments and the barracks were built on Whittington Common. Lichfield's wider role was slow to develop and gradually further land was acquired to the north east of the barracks where suitably

¹⁷⁷ *Derbyshire Advertiser and Journal*, Saturday 24 March 1888.

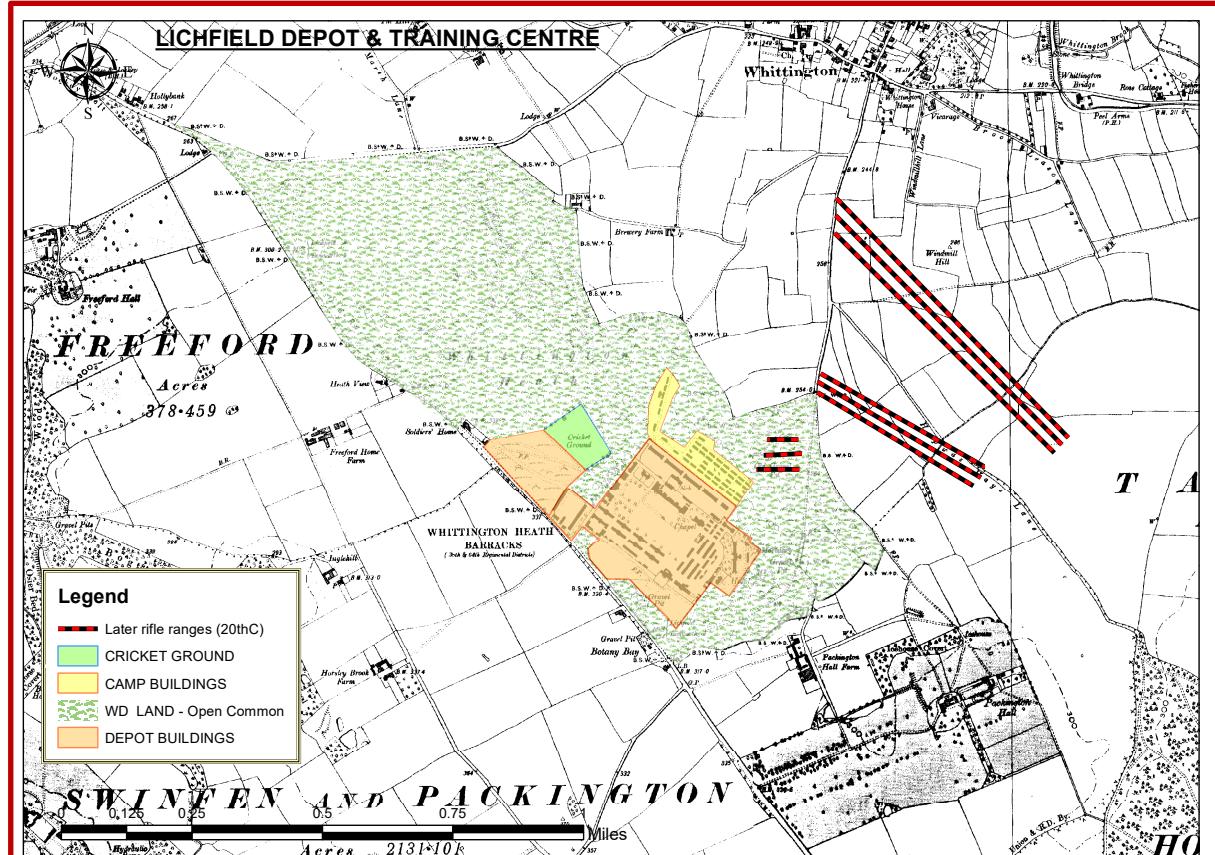
¹⁷⁸ *Richmond and Ripon Chronicle*, Saturday 19 April 1890.

¹⁷⁹ *York Herald*, Saturday 06 June 1891.

¹⁸⁰ PP, To provide for ascertaining Rights of Common in Strensall Common, Purpose, (C.266, 1884), para.9.

rolling topography enabled the development of rifle ranges in a safe environment. Three hundred and thirty acres of Common land had been acquired in 1876 from The Marquess of Anglesey and the following year the common rights were made extinct under the Lands Clauses Consolidation Act of 1845 having been purchased from the Commoners of the Manor of Langdon Over.

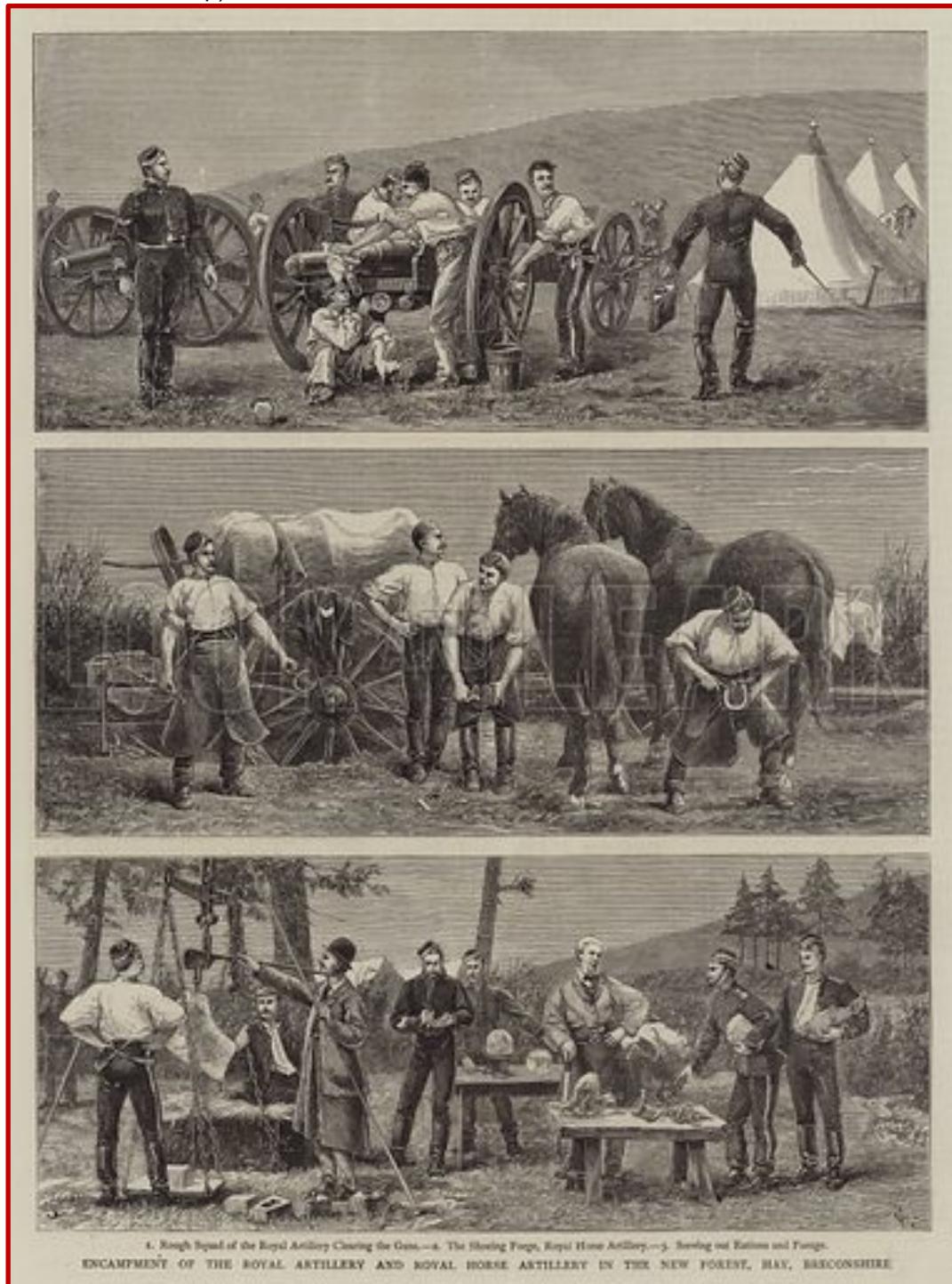
Figure 4.61: Development of Lichfield Depot and training on Whittington Common



Despite the success of Strensall the search continued for larger training areas, especially one capable of meeting the growing demands of field artillery. On a visit to Fifeshire in 1908, Haldane commented on the emerging success of recruiting to the new Territorial Force and the new field artillery. Training was difficult because of the lack of ranges where they could fire long distances of up to 5 miles. The government had authorised the purchase of two new artillery ranges for the field artillery. One of these they had determined must be where they could train the artillery of the Midlands, the South of England and London, but another range for training the Scottish field artillery and the artillery of the territorial force in the north of England and upper Midlands was wanted. 'He did not care whether that range was in the south of Scotland

or in the north of England, so long as it was somewhere near the border and in a convenient place.¹⁸¹

Figure 4.62: Artillery Camp at Hay around the 1880s (The Graphic 5th September 1893 images from London News Group)



¹⁸¹ *The Manchester Guardian*, 10th October 1908.

Up to this point artillery ranges had been developed at Woolwich and Shoeburyness from the middle of the nineteenth century and further developments occurred on Dartmoor in 1875 and the Okehampton Camp was built in 1893. Aldershot had camps for artillery instruction between 1877 and 1882 and land was rented in Hay (on Wye) for an annual artillery camp in the late 1870s. Trawsfynydd and Ryayader in Wales and The Glen of Imaal in Ireland all provided much needed facilities for the artillery. While the images in Figure 4.62 are from the camp at Hay, they are indicative of the temporary artillery camps that were set up at various sites.¹⁸² Salisbury Plain had been purchased in the 1890s and the first practice firing took place there in 1899. There were no similar facilities in the North of England. Regular troops were catered for through these facilities and when on tours of duty in Ireland or India. With so few suitable ranges and mainly in the west of England and Wales, the journey on foot and with horses took a matter of weeks. In 1897 a new departure was made in sending the batteries to practise by train.¹⁸³

Figure 4.63: Artillery camp, Hareshaw Common around 1900.



¹⁸² <https://www.lookandlearn.com/history-images/U216360/Encampment-of-the-Royal-Artillery-and-Royal-Horse-Artillery-in-the-New-Forest-Hay-Breconshire>.

¹⁸³ Major-General Sir John Headlam, *The History of the Royal Artillery Vol. 1, 1860-1899*, (1931), p. 234.

Training camps for the artillery companies in the militia and volunteer units in northern counties were held on the commons between the Redesdale River and the North Tyne River near Bellingham. Hareshaw Camp seems to have been an active artillery camp for several years around the turn of the twentieth century. When Redesdale Camp opened, Hareshaw was used as an induction camp and then soldiers moved on to Redesdale for their more intense training.

The military underwent a significant heart-searching, especially in relation to the effectiveness of artillery in the first decade of the twentieth century. The Boer War, the advances made by French and Prussian military and the Manchurian War all provided an impetus for more carefully co-ordinated artillery and infantry training and manoeuvres. This required large areas of training land, or 'ground' as the Artillery officers called it.¹⁸⁴

Hugely influential in the thinking of military strategists were the French manoeuvres in Picardy in 1910. It was on a practice ground far superior to anything in Britain and it was in this context that Redesdale in Northumberland was identified as the much-needed large scale development that started to meet the Territorials' needs but also created better integrated ranges to simulate the rapidly evolving technology of fire power. With Lord Redesdale as a willing landowner and Haldane as an ambitious Secretary of State the recipe for a successful development was formed. However, it also required a suitable landscape, few people and while isolated was also accessible. Initially Redesdale Camp was a summer camp, occupied between Easter and October 1911. In 1912 new regulations for the Royal Artillery were introduced emphasising issues around working co-operatively with the infantry, the need for open and hidden firing points, distance and pinpoint accuracy as well as group firing to disrupt enemy advances and their defences. The headquarters of the school finally moved to Larkhill on Salisbury Plain. In 1913 the staff was increased to allow for an instructor to be sent to each camp including the new one at Redesdale (Ad Fines¹⁸⁵). This was the genesis of what is now the Otterburn Training Area. It now consists of 56,587 acres owned by

¹⁸⁴ Major-General Sir John Headlam, *The History of the Royal Artillery Vol.1, 1860-1899*, (1931), p.218.

¹⁸⁵ Ad Fines name on OS maps for Chew Green.

the MOD which was about 10% of the total Defence Estate in 2022. It is the largest single firing range in the UK.¹⁸⁶

Figure 4.64(a): Otterburn ranges in May 2022 - The tank Range north of Silloans.

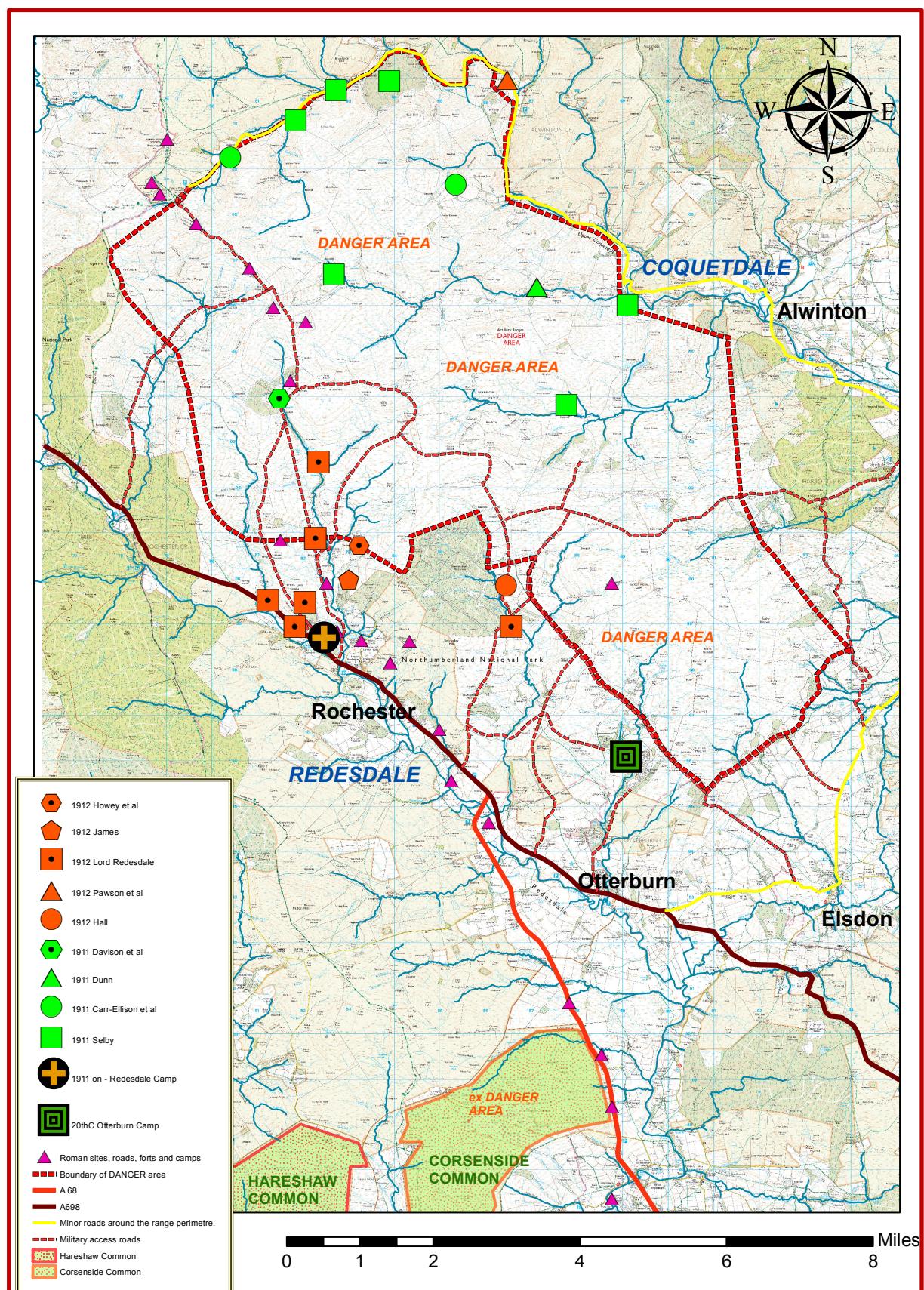


Figure 4.64(b): Otterburn ranges in May 2022 - Dere Street looking south.



¹⁸⁶ <https://www.gov.uk/ministry-of-defence-estate>.

Figure 4.65: – The Otterburn Ranges location and the original farms sold.



The camp was generally welcomed by representatives of the local community. Mr. Holt, MP for Hexham, acknowledged that the Artillery service must have proper ranges to practise. He sought reassurance on behalf of the local people recognising the nuisance likely to be caused to people to have so much land taken for this purpose. In answer to his query about what the Government's intentions were for the development the Financial Secretary to the War Office emphasised the need for good roads to the site of the Range stating that:

if it were to become a question of the appropriation of any further land for the making of roads, we shall have to pay compensation accordingly. The total area we are purchasing is about 19,000 acres.¹⁸⁷

He stressed that great care had been taken and many inspections were made during several months to find a suitable site for an Artillery Range anywhere in the north of England and the site selected was found to be the most suitable. The land sloped gradually from the Valley of the Rede for about 7 miles in a northerly direction and it was probably the best site for an Artillery Range in the country. Great concern was expressed for the sheep and he assured the MP, acknowledging that there would be some disturbance but it was not intended to have troops in the area all the year but, 'they will be there for practice purposes only in the summer months, ... The question of compensation to farmers has not been left out of the reckoning in the price that we have to pay.'¹⁸⁸

The Redesdale Camp became a reality in 1911, when the War Office completed the purchase of Featherwood Farm. The rest of the Sills Burn Valley, owned mainly by Lord Redesdale, was purchased in March 1912. Initially the range was used by the Royal Artillery so accommodation was necessary for the soldiers but also, importantly, for their horses. Troops and their officers were billeted in tents on Birdhopecraig (Burdhopecrag on 1st Edition OS) but once the camp became permanent, the first buildings to be erected were stables for the horses. A wooden hut served as a military

¹⁸⁷ *Hexham Courant*, Saturday report from the House of Commons, (25th March 1911).

¹⁸⁸ Ibid.

hospital. All the catering was done by cooks from the units who were using the training area. The troopers mess was a large marquee. Birdhopecraig Hall, the old shooting box of Lord Redesdale, was the officers mess.

Figure 4.66: Redesdale Artillery Camp 1911- from old postcard



Figure 4.67: The Redesdale Camp in 1913 – based on OS maps from 1890 and 1922.

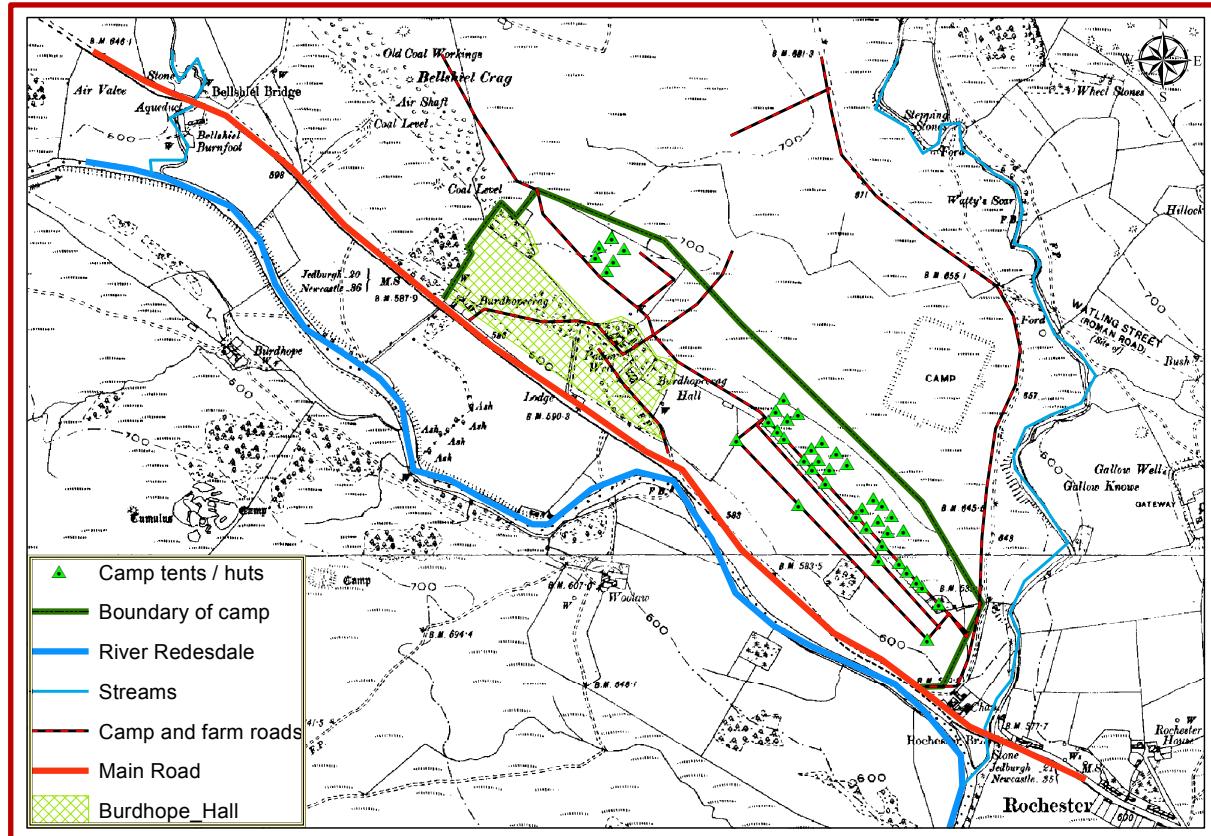
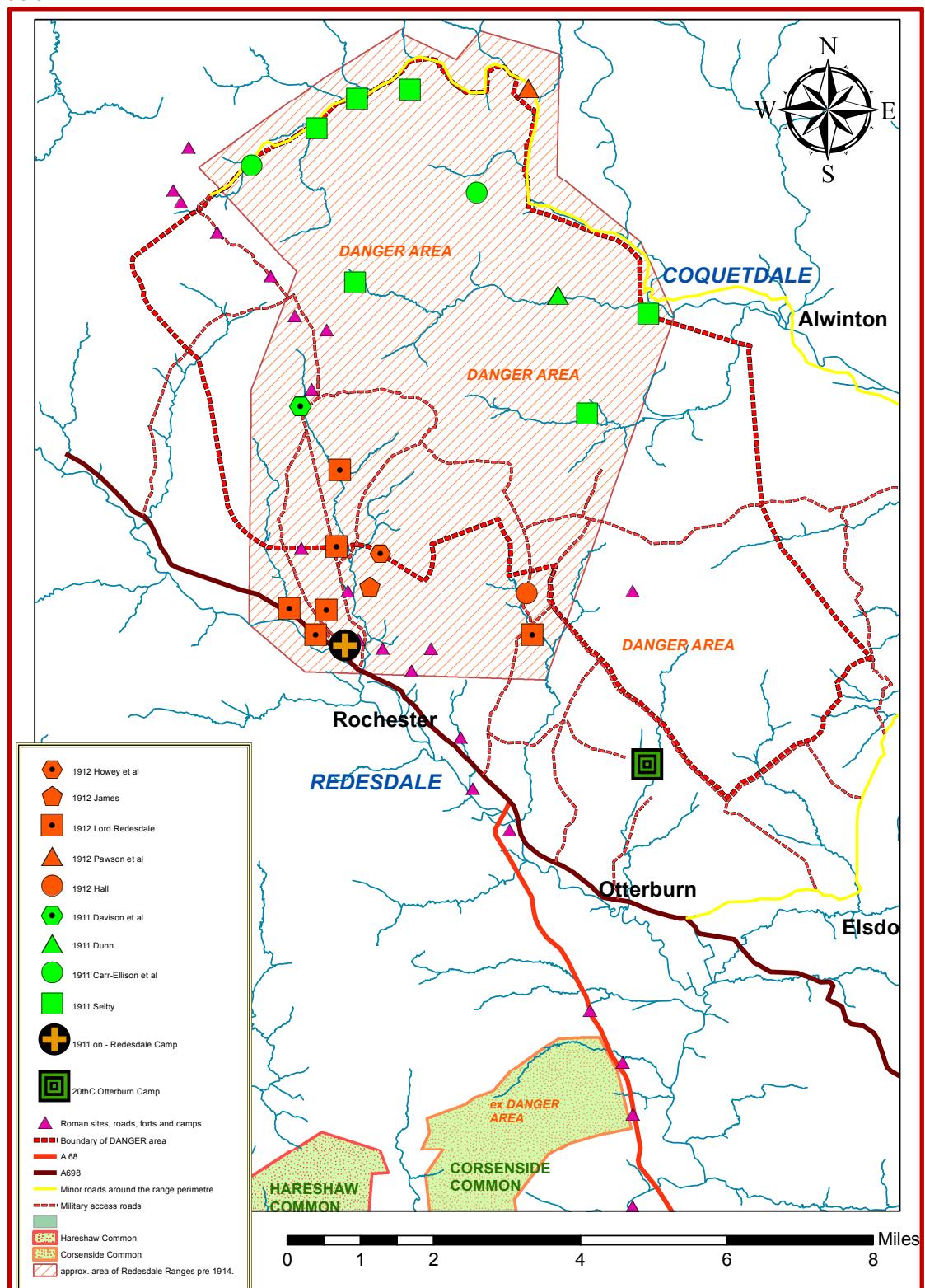


Figure 4.68: – The original extent of the Redesdale / Ad Fines ranges compared with the current situation.



After almost a year of no firing after the summer camps of 1911, building work on the camp and road improvements were complete. The local newspaper reported that firing recommenced on Tuesday morning 11th June 1912, firing was commenced for the

first time on the artillery range at Rochester with brilliant weather marking the event. The new camping ground had been constructed by the Royal Engineers. 'The camp has lately increased in numbers considerably and the past few days have seen a great influx of horses and artillery men into this quiet Redesdale valley.'¹⁸⁹ The camp at the time accommodated about 1,000 officers and men in tents.

What had initially seemed like a temporary or seasonal camp quickly grew into a major permanent training camp. Further detailed improvements in road making, drainage, erecting shelters and stables continued throughout 1913 and the ranges were fully ready for a significant role from 1914. Drains were put in and roads made. Shower and foot baths erected, drying rooms and a hospital. Shelters with concrete floors were erected for 600 horses.¹⁹⁰

4.8 Conclusion

The Northern Region was an area with widespread and in places intensive military activity over many centuries. Its geographical position, with North and Irish Sea coasts and a land border with Scotland, meant it has long had important defence functions. While the northern coastline was considered less vulnerable than the South and East coasts, which were closer to Europe, it was nonetheless in need of extensive protection.

This case study examined over 70 sites where military land was developed between 1790 and 1914. (see Appendix Ci). The examination of these has shown how responses to external threats led to an important development of military sites, a few of which predate the late eighteenth century and several were enhanced during the Napoleonic Wars. However, the major expansion in the military estate occurred during the nineteenth century and certainly in areal terms in the four decades before the First World War. The case study has shown that the creation of the military estate in the northern region was initially driven by defending its perimeter and by internal security, particularly the military's policing role. Growth in the military estate was further driven by the changing demands to accommodate the military, to enhance the health of the

¹⁸⁹ *Hexham Courant*, Saturday 15th June 1912

¹⁹⁰ *Hexham Courant*, Saturday report from House of Commons Saturday 2nd May 1914

soldier and improve recruitment. While these priorities created many iconic military sites they had relatively modest spatial impact in terms of the area of land acquired.

The decades after Crimea had three interlinked drivers that eventually led to more land being acquired for military purposes that continue to have a landscape impact today. These drivers related to the gradual increase in demands for more skilled volunteer corps that eventually became part of the reserve forces. Secondly, the changing technology of both rifles and artillery and the related changes in strategies adopted by military leaders. The third factor, already mentioned in the previous sections on reforms related to the need to find large areas of land in the north that could accommodate manoeuvres, field firing and large-scale practice in combat environments, frequently referred to in newspapers as the search for the Northern Aldershot. The developments in ammunition and weapons created and shaped the distribution and size of ranges. It was these that created the important rifle ranges and ultimately the large training areas of Strensall and Otterburn. The latter led to a five-fold increase in the size of the military estate in the decade leading up to 1914. This laid the foundations for the shift in importance of the north as a military focal point through the establishment of Catterick during and immediately after the First World War.

Despite a slow pace to the development of the military estate there were 46 active military sites listed in the north in the 1900 L&T return. Thirty per cent of these were in use in 1821 but this increased to 72% of the 1862 sites. However, as the sites took up only a small amount of land and were mainly defence fortifications and barracks, of the 4,000 acres of land used for military purposes in 1900 only 18% was in military use in 1821 and in 1862. While the North's military estate had several antecedent locations many of these were temporary in nature and the more permanent growth in the estate occurred in the four decades after the Cardwell Reforms of 1872. The pattern of development in the East, subject to examination in the following Chapter provides a different profile but both regions differ from the growth pattern in the South and in Ireland which is set out in Chapter 6.

Chapter 5: - Eastern England: Defence, Technology and Reform.

The Co{m}p{an}y was then lying at Colchester, and my father having had a good education for those days was soon made a Corporal as he was a smart young fellow. My Mother who was also young (neither of them being quite 18) often went up to Colchester to which place I remember being taken when not three years old by my mother to stop at Colchester for a few weeks, then she would return to Norwich, and so to weaving and earn some money, and away to Colchester again till the Co{m}p{an}y was removed too far off to visit travelling by wagon.¹

5.1 Introduction

This case study focuses on the factors that shaped the military estate in the East of England. It examines the same questions and similar sources to those used in the study of Northern England but it also benefits from a series of East Defence Plans. Both regions had the same national priorities influencing military strategy but the geography and local developments changed the weighting given to different priorities and ultimately led to significantly different contributions to the military estate. Each of the defence plans, in particular, illustrate the importance of topography and how that influenced the decisions of military leaders. It is clear from these that the physical landscape of Eastern England had a strong influence on the defence strategy and ultimately the development of military sites. The Northern case study demonstrated an important defence influence, particularly along the northeast coast but it was not as dominant a factor as in the east. Conversely, while the northern estate was strongly influenced by internal security and aid to the civil powers, the same responsibility had virtually no direct impact on the East's military estate. This case study also shows a contrasting impact of the military reforms with their focus on recruitment and accommodation, which in the East only created a limited number, important nonetheless, of prominent locations requiring the acquisition of land for military purposes. The Eastern Region's military estate grew exponentially in the second half of the nineteenth century. This growth was limited to relatively few locations, one being

¹ Norfolk Museums; Obadiah Short (1803-1886), manuscript 1861, (NWHCM ,1964,590.2) .

connected with the significant, but largely unknown, decision in Cardwell's Reforms not to make Colchester a Regimental Depot but to develop it as a regional training centre. Additionally, despite the perceived vulnerability to invasion, the East was also developed as the main artillery training location at Shoeburyness and the East became a focal point for weapons development and storage. Similar to the Northern Region, the major factor driving the demand for land for military purposes was not the direct defence infrastructure but the need to arm the troops well and train them for ever changing demands of warfare.

This case study identified fifty-seven locations where there was military land use during the nineteenth century and a further thirty-one locations where land was used at some time for rifle ranges.² Two of these locations represent twenty-nine Martello Towers along the Essex and Suffolk coasts. These were built between 1808 and 1812 and took up about 120 acres of land in total. Despite their iconic image of the defence of Britain's coast they have not been a major focus in terms of land acquisition and are adequately written up elsewhere.³

PART A - Defending the East

The Dutch landing of 1,500 men at Landguard, Suffolk, in July 1667 occurred a month after the Dutch navy had demonstrated the vulnerability of British defences in the attack on the Medway. Despite the evidence that the coast of East Anglia and the Thames Estuary could be attacked the defences of the region were given little investment compared with the south coast and Chatham.⁴ However, compared to the south coast the East had few large coastal towns, docks and important naval centres other than Harwich and to a lesser extent Great Yarmouth. The south coast was considered the most vulnerable because of the short sea crossings and large number of potential landing points. However, the defence of the capital was key to shaping the military estate of Britain. As the threat of invasion from mainland Europe moved from

² See Appendix Cii.

³ Jonathan Millward, *An Assessment of the East Coast Martello Towers*. (English Heritage, 2007); Bill Clements, *Martello Towers Worldwide* (London, 2011), appendix 5.

⁴ Julian Foynes, 'East Anglia against the Tricolour 1789-1815' (2016); J D Wilson, Later nineteenth-century defences of the Thames, (Vol .41, No. 167, JSAHR, September 1963), pp.141-158.

across the English Channel to the German (North) Sea the strategic importance of the East changed.

5.2 Pre-Waterloo influences (1790-1815)

From the eighteenth century the region played two complementary roles in national defence. The first was as an important flank in the defence of London, the seat of government. The region's military sites along the north bank of the Thames worked in consort with those on the south bank and around the Medway to defend access to the capital. The second was to foil any invasion force from landing and creating a bridgehead. The most likely East coast invasion objective was thought to be Harwich, using its deep-water harbour as a base from which shipping could be interrupted and a thrust south could be made to London.

The long period of threat of invasion in the last quarter of the eighteenth century led to large training camps being established in strategically important locations, mainly in the south, near the ports of Portsmouth, Plymouth, Chatham and inland at Winchester and Salisbury. In the East a camp for the cavalry was constructed at West Stow, near Bury St. Edmunds, and a large camp was developed at Warley. These camps enabled troops to undergo training and be deployed as required to invasion points. Further camps were established the following year at Cavenham Heath (Newmarket, Suffolk) and to protect London, in Kent and at Tiptree Heath (Colchester) and Danbury in Essex.⁵ In 1782, the Dutch threat to the east coast increased and further camps were developed at Yarmouth (Norfolk) and Beccles (Suffolk). These early military sites were chiefly temporary features of the landscape though their influence on future permanent sites and future defence plans cannot be ignored and they provided the blueprint for defence locations and exercises throughout the following century and a half or more.⁶

However, at all times it was the coast itself and the navy's defence of the seaward side

⁵ Stephen Conway, *Locality, Metropolis and Nation: The Impact of the Military Camps in England during the American War*, (HA, Oxford, 1997), pp. 547- 562; J.A. Houlding, *Fit for Service, The Training of the British Army, 1715-1795*, (Oxford, 2000), pp. 322-346.

⁶ John Barney, *The Defence of Norfolk 1793 – 1815*, (Norfolk, 2000); Royal Collection IN 734032 - Daniel Paterson (1738-1825), *Encampments in South-Britain from 1778 to 1782*, (c.1784-91).

that formed the first stop line. At various times there was fear that the navy might fail to stop a landing of enemy forces and contingency plans were drawn up. The 1797 Defence Plan summarised in Figure 5.1 identified potential landing areas along the Suffolk and Essex coastlines with Harwich as the likely target. General Moore also mapped out a line of defence, called the interception line, about 5 to 10 miles inland from north of Norwich to the Thames. Moore calculated that there would be too few defenders to defend the whole coast and if an enemy landed it would be best to regroup land forces and defend about five miles inland and concentrate effort on an interception line as shown on Figure 5.1.⁷ Across the study period the history of defence fortifications and weapons is a story of each outstripping the other in effectiveness and generally land-based fortifications, with the benefit of hindsight, being a waste of national investment. However, several sites remained as important parts of the military estate throughout the nineteenth century.

Figures 5.1 and 5.2 show the areas where troops were concentrated in 1797 and again in 1803 when the perceived threats of French invasion were heightened.⁸ Militia were drawn from units as geographically spread as Yorkshire and Shropshire as well as counties across the East of England. For a few years the areas, where these regiments of regulars and militia camped and trained, became significant military sites though little of the land was actually owned by the military at that time. In 1797 the Eastern District HQ was moved from Norwich to Wivenhoe Park Colchester, to be in a more central location in relation to the most likely invasion points. This coincided with more regular regiments arriving in the East instead of the previous reliance on the militia. In October of that year a detailed survey of the area was carried out under the direction of Brigadier-General Moore and Major Hay (RE).

⁷ Foynes, *East Anglia*, pp.78-83; This approach matched closely the principles set out in Lt. Colonel Dirom's, *Plans for the Defence of Great Britain and Ireland*, (Edinburgh, 1797).

⁸ Ibid., Foynes, *East Anglia*, pp.105-117.

Figure 5.1: Map illustrating the 1797 Defence Plan, based on Sir John Moore Defence Plan and Onslow's Naval Defence Plan. (TNA WO 30/67; Foynes, *East Anglia*, pp.83-84; TNA WO 30/100, Reports on Defence. Eastern District. (1797-1805).

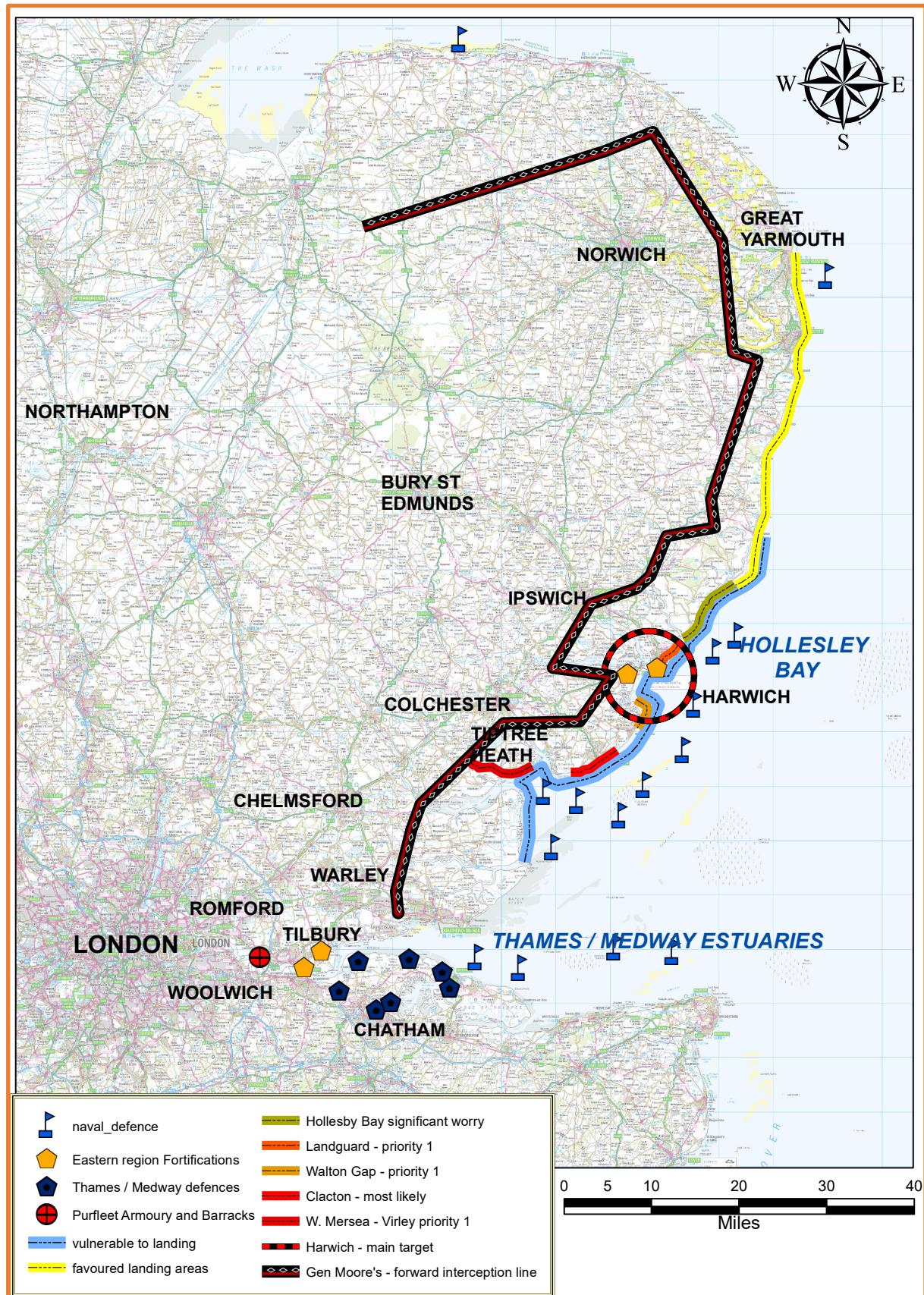
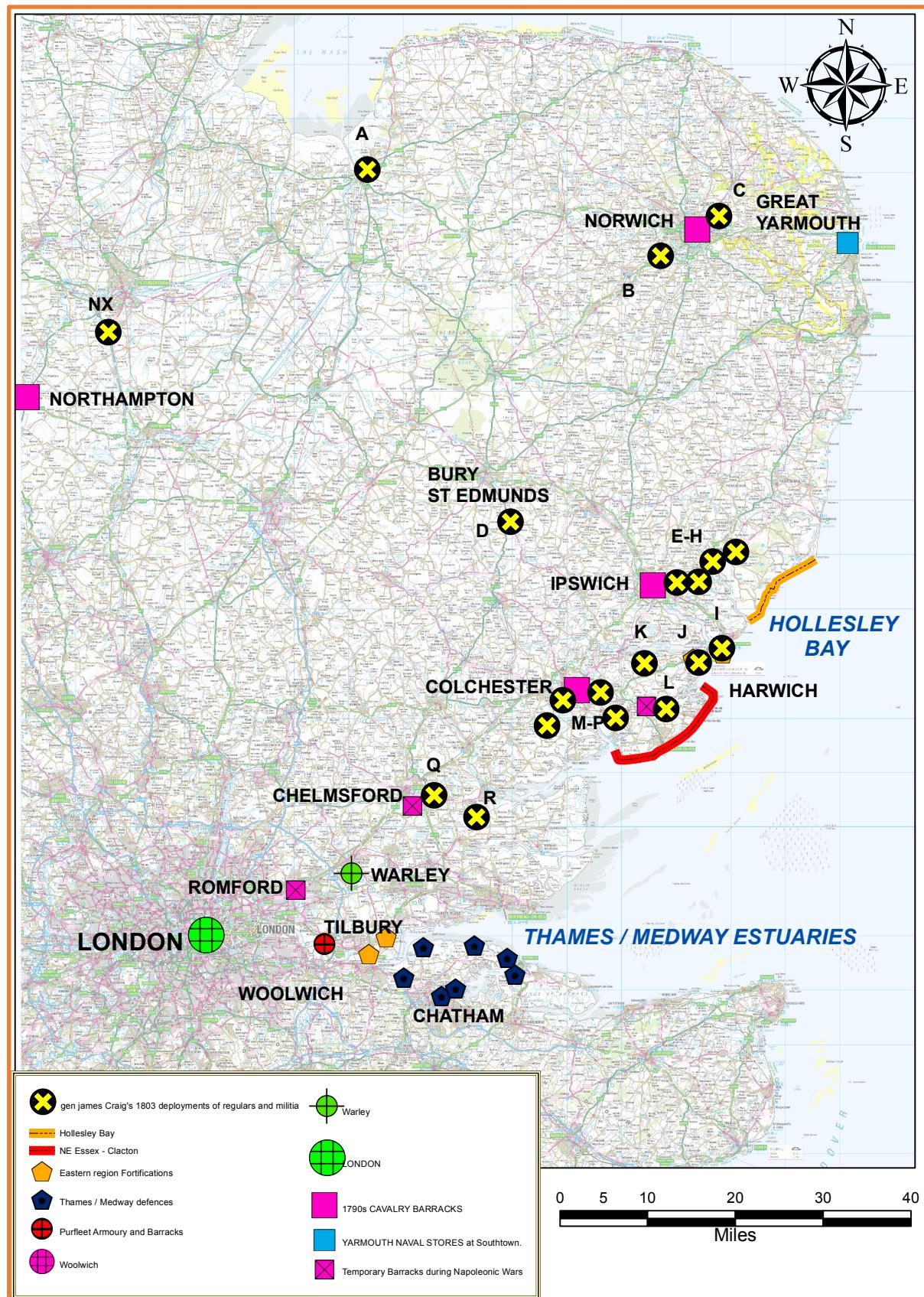


Figure 5.2: General Sir James Craig's Eastern District order of Battle, July 1803 (TNA WO 30/100, Reports on measure of Defence. Eastern District, 1797-1805),



1803 brought about the most serious threat of invasion as Britain was again at War with France. General Craig took over command of the Eastern District and quickly set out his plans for defence (Figure 5.2).

Key to Figure 5.2 -

Code letter on Map.	Area of the East where Camp was located and area of defence responsibility.	Unit / Regiment showing home area.	Size of military units
A	Kings Lynn	Rutland Militia regiment.	
B	Norwich - Thetford	6 th Dragoons	1 battalion 1 horse regiment and 1 squadron
C	Norwich – Gt Yarmouth	Shropshire militia Artillery	1 horse squadron 1 Brigade
D	Bury St Edmunds – Sudbury and Needham Market	7 th Dragoons	1 horse squadron
E	Bromeswell Heath (E of Woodbridge)	53 & 69 regiments of Foot	2 battalions
F	Woodbridge	Paget's Brigade Dragoons	1 squadron
G	Ipswich	Paget's Brigade Dragoons Royal North Lincs; West Essex and Herts Militias Light artillery	5 squadrons 3 battalions 1 brigade
H	Foxhall Heath	North Yorks Supplementary Militia	1 battalion
I	Landguard Fort	Herts Militia Invalids	1 company 1 company
J	Harwich	Royal Buckinghamshire Militia	1 battalion
K	Bradfield Heath - Tendring	24 th Foot 30 th Regiment of Foot	1 Brigade 2 battalions
L	Weeley - Tendring	42 nd Regiment 92 nd Highland Regiment Paget's Brigade Dragoons	2 battalions 1 battalion 1 squadron
M	Colchester	West Norfolk; East Norfolk and South Lincs Militia Regiments. 2 nd Light Dragoons Light artillery	3 battalions 1 squadron 2 troops
N	Abberton Green - Colchester	Cheshire Regiment Paget's Brigade Dragoons	1 battalion 1 squadron
O	Elmstead Heath - Colchester	1 st & 3 rd West York and East York Militia Regiments	2 battalions
P	Thorrington Heath - Colchester	West Suffolk Militia Regiment	2 battalions
Q	Chelmsford	Brigade of Guards 1 st & 3 rd Coldstream Guards and 83 rd and 85 th regiments of Foot (Lord Cavan)	2 battalions
R	Purleigh Heights – South Essex	Two Regiments of Lord Cavan's Brigade	2 battalions
NX	Norman Cross prisoner of war camp near Peterborough.	Infantry	2 battalions

While Craig, like most of the political and military leaders, felt that Kent was the most likely invasion point, he stated emphatically that the coast a few miles north and south of Harwich would be the next most likely target for the expected French invasion. He quickly set to deploying 25,000 men (90 percent of the East's troops) between the Rivers Crouch and Alde.⁹ Figure 5.2 summarises the key elements of the defence plans drawn up as a result. It was felt that the coast south from Yarmouth was vulnerable and the coastal artillery badly sited as many guns pointed straight out to

⁹ Foynes, *East Anglia*, pp.109-114.

sea instead of being capable of enfilading along beaches. While Hollesley Bay was a major concern as a potential landing site, the most likely invasion points were thought to be along the north-east coast of Essex, to enable the capture of Harwich. The landscape inland in Tendring Hundred was described as:

for an enclosed country the most possible one in all England. The nature of the roads is particularly favourable to military movements. Both the leading and crossroads are remarkably broad.¹⁰

The men were in large camps, initially with a shortage of tents, the ground became muddy and Thorrington Heath, near Colchester, was described as 'spongy and rotten'.¹¹ The threat of invasion throughout the Napoleonic period appeared real. The newspapers stirred up such a level of alarm that the Volunteer Corps rapidly expanded with some 15,000 recruits in the region. A new Defence of the Realm Act came into force which could increase the number of volunteers five-fold but was not enacted. The coast artillery was enhanced but General Craig also focused his attention inland with a large defence fortification started at Chelmsford to defend the road from Harwich to London but it was not completed until 1806 when the greatest threat had already passed.¹² Work also commenced on building several temporary wooden barracks at Colchester (for 6,600), Ipswich (5,800), Woodbridge (2,000), Harwich (2,500) and Weeley (1,700).¹³ More than 4,000 soldiers were based in Weeley from 1803-1814 to defend the coast and provide garrisons later for the chain of Martello Towers from St Osyth (Essex) to Alburgh in Suffolk. With victory at Waterloo the large mainly wooden barracks were considered redundant and demolished.

While this would have been a very visible and active area of military manoeuvring during the time of the fear of invasion it had limited permanent impact on the land held for military purposes other than to reinforce the role of Colchester as a focal point for

¹⁰ TNA WO 30/67, Military Report-Eastern District 1797.

¹¹ Ibid. p.112 report from General Moore.

¹² Foynes, *East Anglia*, pp.112-114.

¹³ Oxford Archaeology, Exceptional insight into Napoleonic barracks in Weeley, Essex, (March 2022) - <https://www.oxfordarchaeology.com/news/exceptional-insight-napoleonic-barracks-weeley-essex>.

military training and co-ordination of the region's defences. The excavation at Weeley uncovered sixteen buildings, roadways, drainage systems and an array of military finds.¹⁴ Mary Ann Grant, wife of Captain James Grant of the 42nd Regiment of Foot, also known as the Black Watch, kept a diary and wrote about arriving to a collection of tents and unfinished roads and accommodation blocks. A watercolour painting of Weeley Barracks made by Captain Durrant shows a more established settlement with several building types with different coloured roofs.

Figure 5.3: Weeley Barracks – a temporary part of the military estate around 1809.¹⁵



An advert selling the barrack furnishings was published in newspapers in 1815. The list of items for sale included bedsteads, officers' mess tables, washing tubs, kitchen ranges and even chamber pots. As well as the contents, the bricks and tiles of the buildings were also auctioned off.¹⁶ The land reverted to agriculture and the footprint

¹⁴ Clacton Gazette, 7th March 2022; <https://oxfordarchaeology.com/news/970-exceptional-insight-into-napoleonic-barracks-in-weeley-essex>.

¹⁵ ©Supplied by Hampshire Cultural Trust 2023 – Weeley Barracks 1809, Capt. Durrant.

¹⁶ Oxford Archaeology, Exceptional insight into Napoleonic barracks in Weeley, Essex, (March 2022) - <https://www.oxfordarchaeology.com/news/exceptional-insight-napoleonic-barracks-weeley-essex>.

disappeared from the military estate after less than two decades.

A key difference between the position of General Moore's plan in 1797 (Figure 5.1) and General Craig's in 1803 (Figure 5.2) was the introduction of the planned distribution of cavalry barracks commenced during the 1790s under the direction of the Barrack-master General (discussed in Chapter 3).¹⁷ By the early 1800s these were complete and occupied and became focal points for the regular forces deployed within the plans for defence. The camps were located, in the main, on heathland and commons. This proved to be a precursor to the acquisition of thousands of acres of such land for more permanent military use in the following century.

The landscape of the east contains a few monuments to provide a visible legacy of military activity during the Napoleonic period. These include military sites such as the cavalry barracks at Ipswich, Northampton, Colchester and Norwich, the naval store and hospital in Great Yarmouth, Harwich Redoubt, the Martello Towers on the Suffolk and Essex coasts and the ammunition stores at Weedon. In addition, the Landguard and Tilbury defences that pre-date the Napoleonic period remained as important permanent military sites throughout the study period. Forty-five per cent of the military estate in the Eastern Region in 1900 were in military use during or before the Napoleonic Wars. This compares with 28% of Northern sites and illustrates the importance of the Napoleonic period and its antecedent sites in shaping the overall estate in the East of England.

The long period of war and threat of invasion left a strong imprint on the perceptions of many who directly experienced them or whose families were directly affected.¹⁸ A Suffolk farm labourer provided some insight into the effects of military activity through his memories of his grandfather's stories of 'Boney' and 'war fever' in the first decades

¹⁷ PP, Account of all Sums of Money issued by the Barrack Matter General, for the erection of Barracks in Great Britain, 1796.

¹⁸ Evan Wilson, *The Horrible Peace: British Veterans and the end of the Napoleonic Wars*, (Massachusetts, 2023).

of the nineteenth century.¹⁹ He commented on the constant fear of an invasion and a feeling of lack of security and that,

many men slept under arms. Towns and districts enrolled volunteers; country gentlemen stirred up their tenants and servants to join these local bodies, so as to be ready to aid the Regular Army in time of need.²⁰

He remembered large groups of soldiers being stationed along the coast, signal stations being set up and the steeple at Rushmere Church being used as a watchtower. From there it was possible to see the coast from Harwich to Aldeburgh. In an interesting reflection on the inter-relationships between the army and the economy he remembered how “The Ballot” was used to select able-bodied men to join up. He noted how substitutes could be purchased, ‘for twenty and even five-and-twenty pounds’. This attracted many labourers and led to shortages of manpower on the farms. He mentioned the irony that, ‘farmers in our parish had to apply to the officers at Ipswich Barracks for men of the regiments to help in getting in the harvest.’²¹

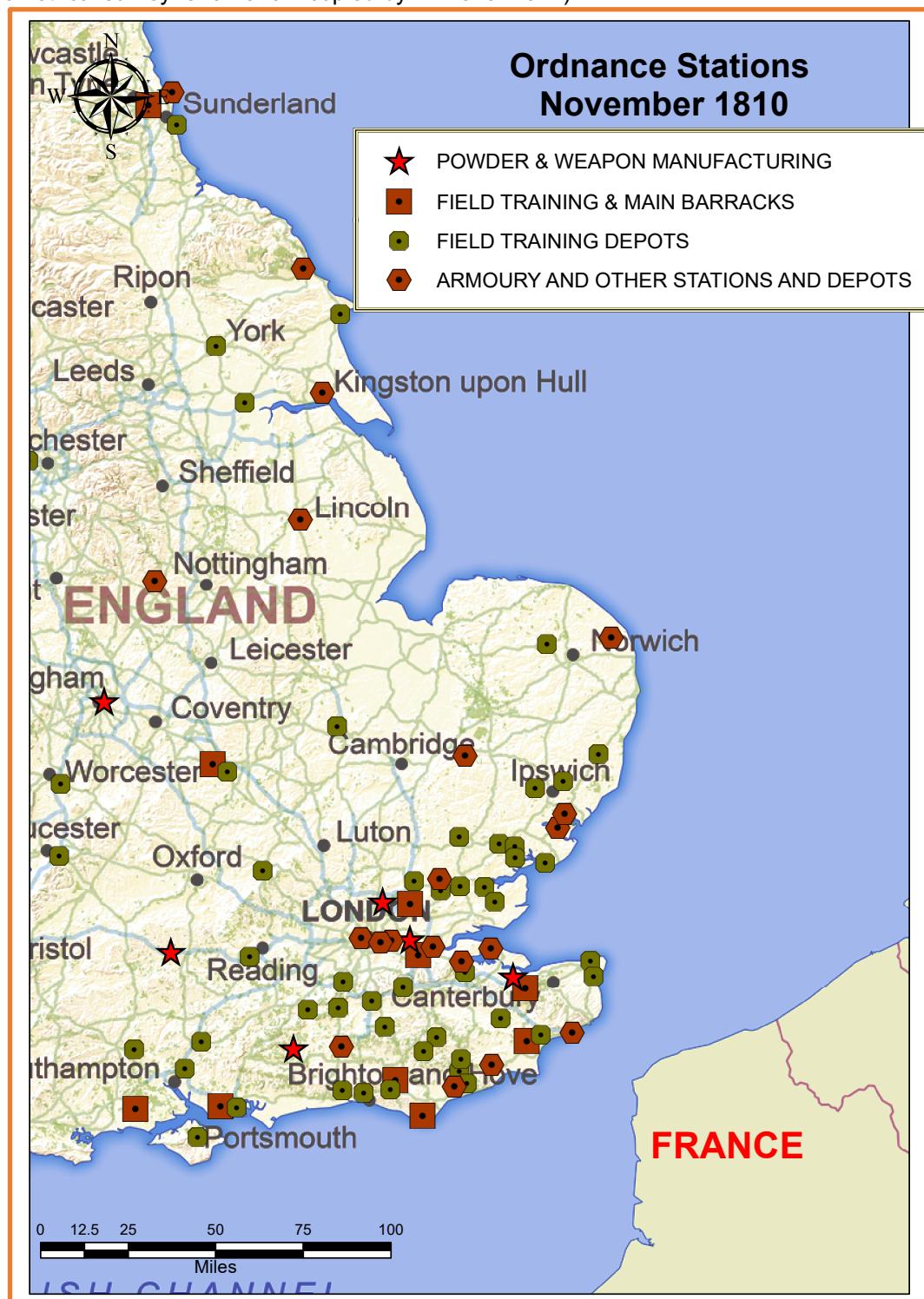
The locations of military activity in the early nineteenth-century landscape focuses, predominantly, on the same important strategic sites that form the military locations identified in the more co-ordinated Defence Scheme, discussed below. The temporary sites for camps were in strategically important locations but are only known through their documentary sources. Unsurprisingly and unlike the distributions in the north, as defence was the dominant priority in both the eighteenth and nineteenth centuries, most of the east’s nineteenth-century military sites had been used for military purposes at some stage during the previous century. The landscape of the region, was, in many ways, the prime determinant in the distribution of the main military locations. The nature of the coast, the fluvial landscape, the ease of traversing the landscape, even where enclosed, and proximity to London all shaped the defence planning on land while the proximity to the northern European coast influenced the ebb and flow of threats as French power spread.

¹⁹ Suffolk Local Studies, Acc. No. 62449 Class No.qS942.0. *The Autobiography of a Suffolk Farm Labourer*, (1816 to 1876).

²⁰ Suffolk Local Studies, Acc. No. 62449.

²¹ Ibid.

Figure 5.4: Distribution of Ordnance Stations in South and East England – 1810. (TNA – MPH
1/272, Outline Map of Great Britain shewing [sic] the Ordnance Stations – map relating to the
trigonometrical survey 1810-1816 – copied by T. Fisher 1814).



What is stark about the 1810 distribution of military sites is the large number of military installations, under the Ordnance Department, clustered across south east England in a line from Harwich to Portsmouth. The main permanent sites on the 1810 map (Figure 5.4) continued for the next century as key anchors for the whole distribution of military

installations in locations that became the focal points for subsequent militarized landscapes.

Figure 5.5: The military estate in the East by the end of the Napoleonic Wars (Based on Julian Foynes, *East Anglia against the Tricolor, 1789-1815. - An English Region against Revolutionary and Napoleonic France*. (Norfolk, 2016).

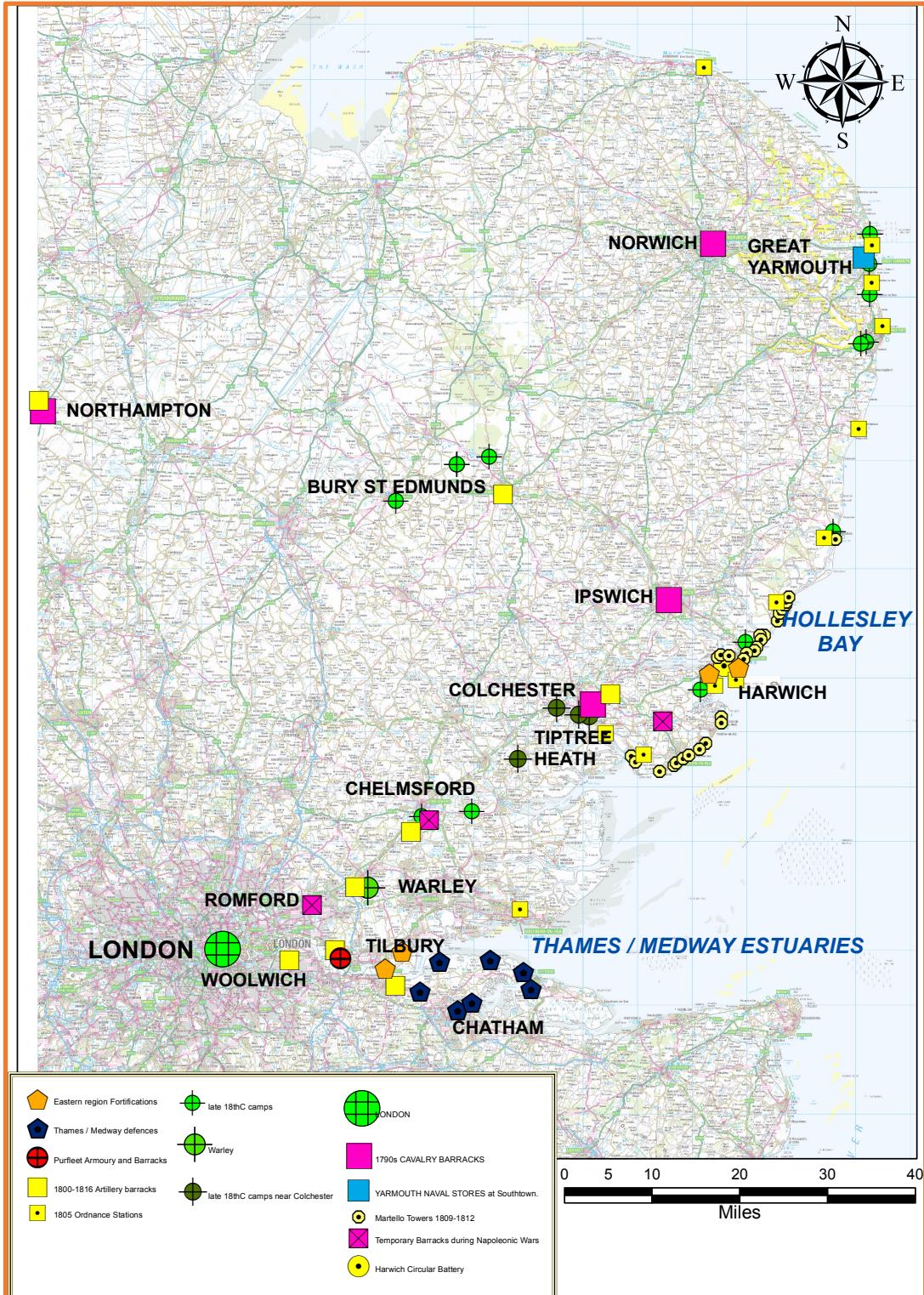


Figure 5.5 shows the military sites that were a legacy of past military needs prior to 1820. The Eastern Region's emerging military estate was strongly shaped by defence

needs as the example of the Harwich area below, illustrates. The large temporary barracks at Weeley, Chelmsford, Romford and, surprisingly, Colchester, became unused and surplus to requirements in the early nineteenth century, though Colchester saw a resurgence of use later in the century as examined below. We get a glimpse of the busy but relaxed nature of one of these barracks from Calladine's reflections of a stay at Chelmsford in 1810. His first journey after enlisting in Derby took him southeast to Essex where he was based at Chelmsford for a month. There is little evidence of what accommodation was at Chelmsford. It was a large temporary base on the way to Harwich but also a defensive base in the protection of London from possible Napoleonic landings. Despite Army Returns showing a capacity of 884 soldiers and officers, Calladine says that three or four regiments were stationed there in two large temporary barracks called the old and new at either end of the town with a breast work built as a protection from an enemy landing. This was a few hundred yards from the barracks on the London side and seems to equate to defensive earthworks identifiable around Galleywood on later O.S maps. His description is of a fairly relaxed environment with plenty of games of cricket.²²

As with the Northern Region (Chapter 4), the military did have a responsibility to support civil powers when there was significant unrest. In the East this was mainly from rural unrest in the late eighteenth and early nineteenth centuries.²³ It had little impact on locating military sites as there were already barracks in or close to all the main centres of population. In the period immediately after the Napoleonic Wars the impact of the Corn Laws led to significant civil unrest and the use of the army to restore peace adversely affected civil military relationships. Obadiah Short remembered being sent into Norwich market with a parcel and to his surprise the market was full of people and the German Cavalry unit the Black Brunswickers. Short describes in detail how the Mayor and the corporation came down from the Guildhall to read the Riot Act and the people were told to disperse but they loudly refused:

²² Maj. M.L. Ferrar, (editor), *The Diary of Colour-Sergeant George Calladine, 19th Foot, 1793 – 1837*. (London, 1922).

²³ Evan Wilson, *The Horrible Peace: British Veterans and the end of the Napoleonic Wars*, (Massachusetts, 2023), pp.203-210.

The Mayor told the German commander to fire on the people but the commander told the Mayor he dare not do any such thing that it was more than his place was worth – no sooner had the Mayor said these words than the mob went in a body through London Street to the Mayors House in St. Saviours Church Lane, and stopping in front of the Mayors House, in one minute all the windows were smashed in.²⁴

Despite the troops being located for defensive purposes the need to support the civil power was never far from the possible demands placed on them, though in the East a relatively infrequent activity.

The emergence of the military estate in the Harwich area.

The geography of the East made it a key communication route to continental Europe through the port of Harwich. While an invasion was thought possible through the Harwich area it was more important strategically as a launch pad for European actions whenever it was felt that either a European expeditionary force or more full-blown land action was required. Harwich became a prime embarkation point for campaigns during the eighteenth and nineteenth centuries.²⁵ Tilbury also fulfilled a similar role at times but had a more fundamental role as a defensive location protecting the Thames Estuary approaches to London.

It was in this sense of both a defensive buffer and a spearhead into Europe that we see the coordinated deployment of military forces in the East during the whole study period. Across mainland Britain, most of the defence focus was on the major ports, defending and supplying the navy as well as the major towns and cities. As Britain created a more co-ordinated land defence and the potential for collecting together larger forces to send to mainland Europe, the location of large camps became a significant but short-lived military priority. Colchester was identified as the collection area for transporting troops to campaigns in Flanders and the Netherlands through Harwich. Therefore, defences around Harwich Harbour were strengthened and the

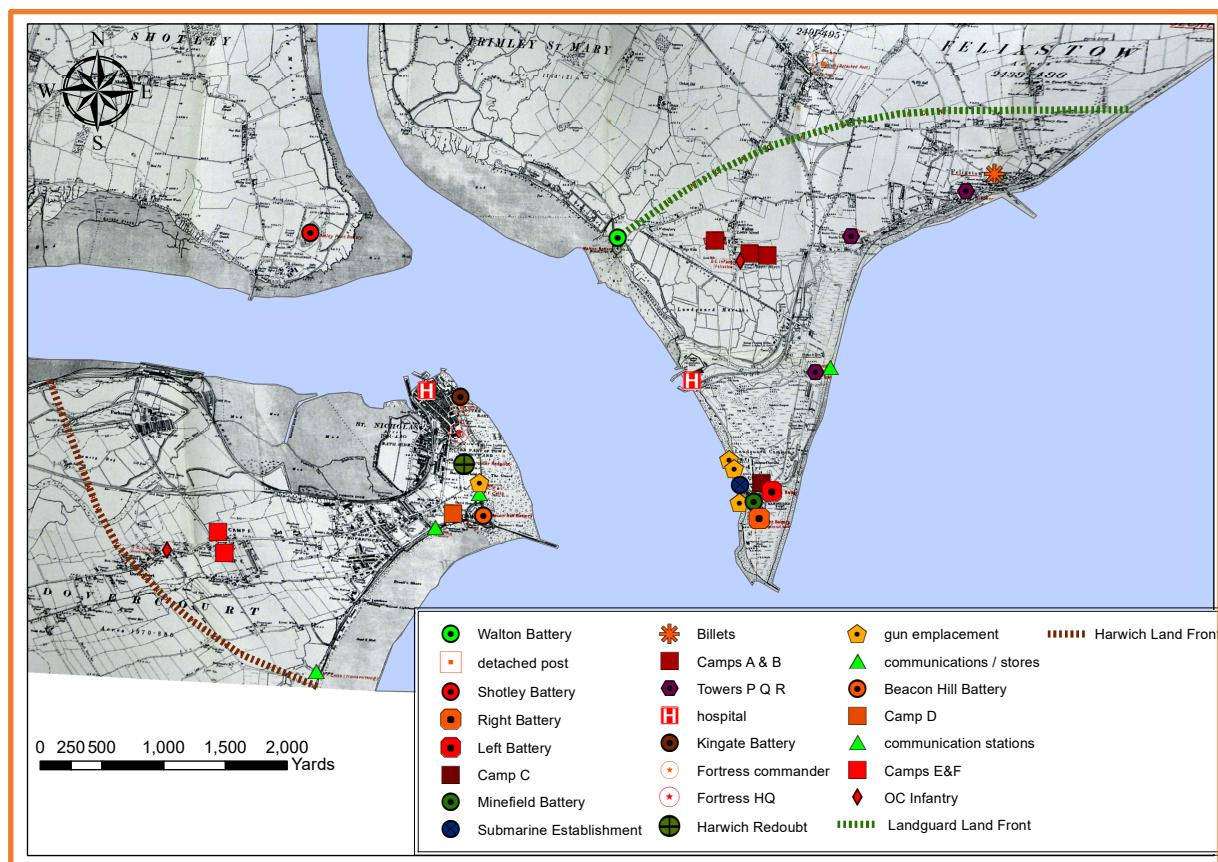
²⁴ Norfolk Museums Service, Manuscript of Obadiah Short (1861).

²⁵ Victoria County History of Essex, Vol XIII: Harwich and Dovercourt, 1714-185. <https://www.history.ac.uk/research/victoria-county-history/county-histories-progress/essex-vol-xiii-harwich-and-dovercourt>.

route from London to Colchester was strongly defended with the camps at Warley, Chelmsford and around Colchester, especially on Tiptree Heath. However, most of the defence investment at the end of the eighteenth and early nineteenth centuries went into Thames fortifications, the infrastructure along the south coast of England and a string of Martello towers along the south and east coasts.

As has been seen so far in this Chapter, the various defence reports and schemes identified Harwich as the focal point for defence in the East. The coast north and south of Harwich was seen as likely invasion points and in a successful landing it was considered that the capture of Harwich Harbour could provide a bridgehead for a move south on London. Throughout the nineteenth century the area was a prominent military landscape with a large number of sites focused on defence, many incorporating antecedent structures that dated back to the sixteenth century.

Figure 5.6: The Harwich Harbour Defences



The only current physical evidence of this period of military activity is in the almost complete Redoubt in Harwich (Figure 5.7), the remaining Martello Towers, the remains

of Shotley naval station and Landguard Fort. While the area south of the Landguard Land Front and north of the Harwich Land Front could be considered under military control, the actual ownership of land by the War Department was relatively small, 54 acres in 1862. The expansion of the site on Landguard Common and on Beacon Hill, Harwich added over 200 acres in the 1870s.

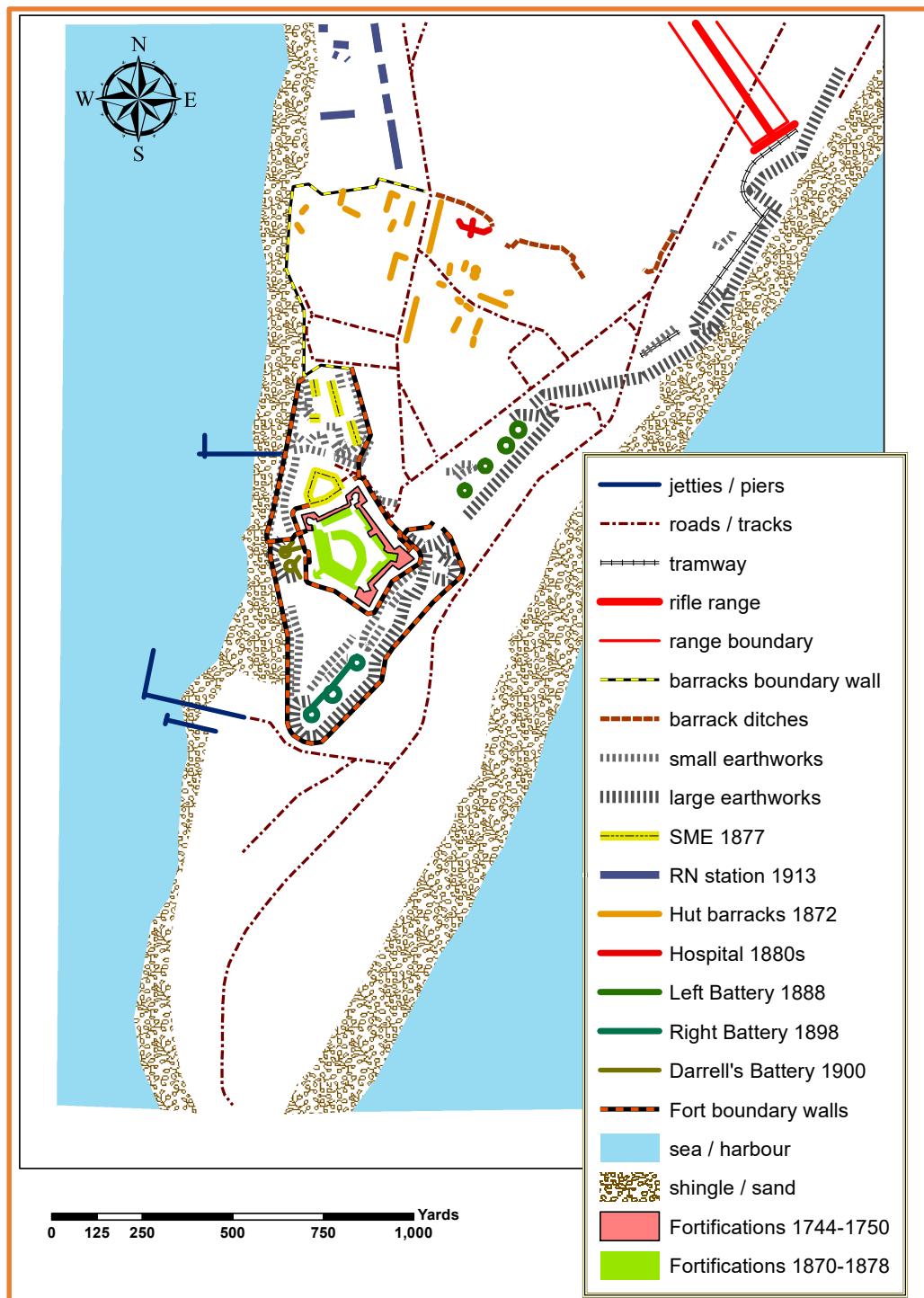
Figure 5.7: Harwich Redoubt Fort from 1808. (Google Earth image 2022)



Landguard Fort required re-building several times and is one of the few British defence structures which was attacked by an enemy before the First World War.²⁶ The site covered almost 70 acres, so even dating back to the seventeenth century there were ordnance sites requiring a substantial area of land. Figure 5.8 shows the militarised landscape around Landguard in the nineteenth century, one that evolved over a period of three centuries. Even today this is a landscape that is clearly shaped by its previous military importance. As is shown in Chapter 6 some of the developments were not without local opposition.

²⁶ The Dutch attacked in 1667 from the landward side.

Figure 5.8: Landguard, developments of its military functions

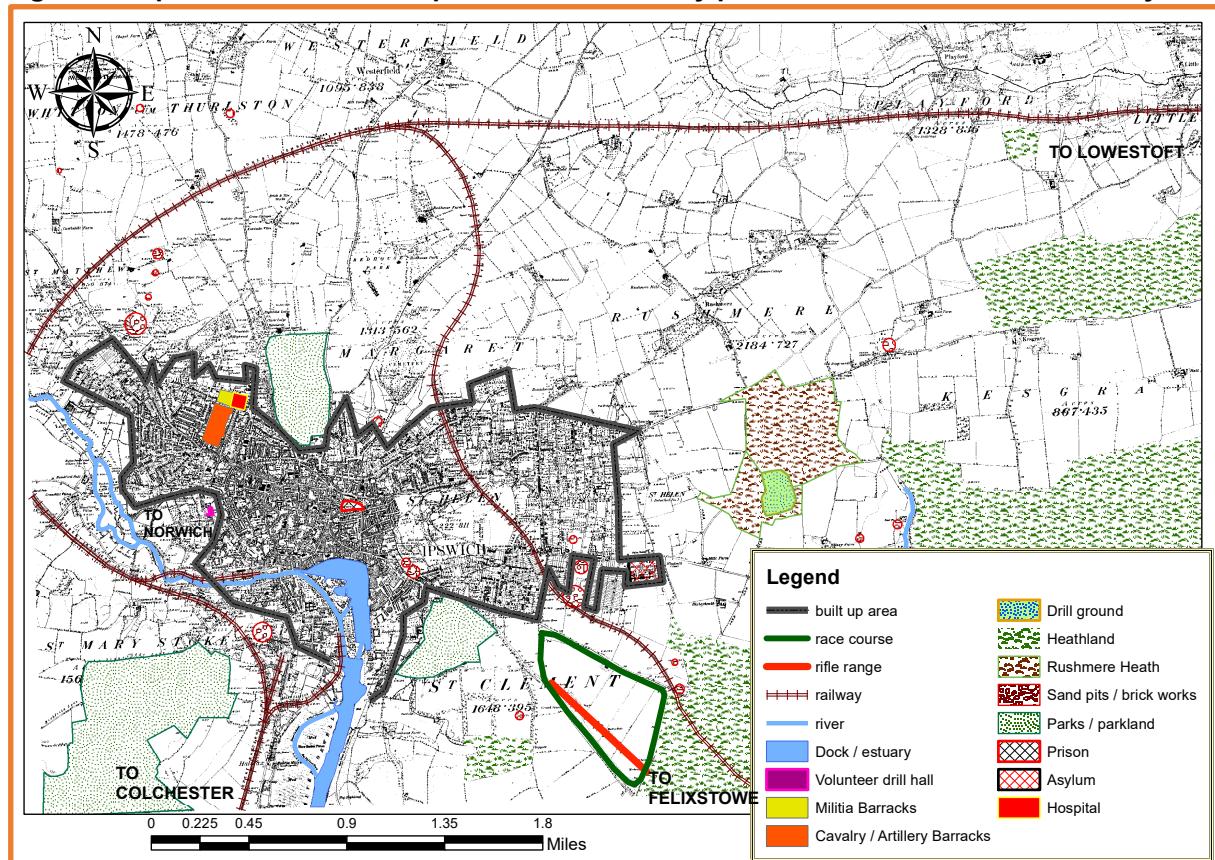


However, Harwich's strategic importance meant that both Ipswich and Colchester were drawn into its sphere of influence militarily as the best location to provide both a reserve garrison if an attack was launched and also, especially for Colchester, as a staging post for troops transferring to active engagement in continental Europe. Ipswich had a strong military presence throughout the nineteenth century but like

Norwich it gradually lost its importance to the rapidly growing Colchester (as discussed below in section 5.6).

Ten miles upriver from Harwich, the Ipswich cavalry barracks was built in 1796 and housed up to 1,500 men. Located on 9.25 acres of land in St. Matthews Parish, it was bordered by St Matthew's Street to the south, Anglesea Road to the north, Berners Street to the east and Orford Street to the west. This was part of the first phase of barrack building redistributing the cavalry troops around the country at strategically important locations where they could be a rallying point when troops were required to support coastal locations under threat. As with other cavalry barracks, to aid drainage with a large number of horses accommodated there, these were on a site sloping down 8 metres from the northern corner towards the valley of the Gipping.

Figure 5.9: Ipswich – and the components of its military presence in the nineteenth century.



In trying to get the Ipswich Barracks completed men were drawn in from all over the country and nearly 2,000 were at one time working on the building. 'Mr. Owen Roe, originally a poor man, who afterwards lived at Rose Hill, Ipswich, and was known

locally as 'Ready-money Roe' made his fortune out of the construction project.²⁷ The militia barrack site is on slightly higher land to the north.

The first regiment to be stationed at the barracks was the Queen's Regiment of Dragoon Guards. Later the cavalry made way for artillery units of both the Royal Field Artillery and the Royal Horse Artillery stationed there into the twentieth century when the site was sold to Ipswich Corporation in 1929 for housing development. The barracks left its footprint in the landscape of the town with roads around Barrack Lane following the shape of the barracks and the rear walls of most of the houses contain large parts of the boundary wall of the barracks and the entrance still has the W^D markings on the former gateposts.

Figure 5.10: W^D Posts in Barrack Lane. Figure 5.11: Barrack wall as boundary to local gardens



Other elements of the military land-use have disappeared other than the open area that was used for drill on Rushmere Heath. Fear of invasion during the second half of the eighteenth century, saw the establishment of temporary barracks for up to 8,000 men near Round Wood on either side of Rushmere Lane with manoeuvres on Rushmere Heath. With a military population at times almost equivalent to the town's population of around 11,000, there were times when the area had the appearance of a garrisoned military landscape. The camp was used as a military hospital for men returning from the Napoleonic Wars. A report from 1809 showed 600 reaching the hospital where, 'every patient had a separate bed with comfortable bed clothing, and the attendance was entirely adequate'.²⁸ The common had been used by the military

²⁷ Acc.No. 62449 Class No.qS942.08 Suffolk Local Studies Collection.

²⁸ Suffolk Local Studies Collection – Rushmere Common History.

on many occasions and as far back as 1804, Sir James Craig had 11,000 men under arms there.²⁹ At the time two other temporary barracks were adopted in the town at Stoke Bridge Maltings and at a large wooden huttet camp known as St Helen's Barracks, where only local road names maintain a link with that period through Parade Road and Brunswick Road. Of all of Ipswich's active military engagement during that time it was only the land of the cavalry barracks that was recorded as military land in the L&T returns in the second half of the nineteenth century.

5.3 Coastal defence plans 1815-1870

The thirty years after the Napoleonic Wars saw a significant decline in the use of the military estate in the east with no additional acquisitions. The 1820 return of Barrack Office establishment and the 1822 return of barracks kept for the Ordnance Department show that only 13 military sites were still part of the military estate in the east at the beginning of the 1820s. The four Ordnance Barracks of Harwich, Purfleet, Warley and Weedon, however, showed that the accommodation was only operating at 49% capacity and that was really only maintained by the importance of Weedon. The total number of regulars in the Region in 1822 was only 20% of that recorded in 1810 (Figure 5.12).

Figure 5.12: Numbers of troops in the Eastern District at each of the dates of barrack returns.³⁰

Year	1810 militia	1810 regulars	1820	1822	1848	1857	1900	1904
East Region	7,556	13,003	4,464	2,594	1,697	5,604	6,459	12,474
Northern Region	4,020	4,192	5,839	3,778	7,221	7,397	14,831	28,974

The Barracks return for 1831 showed that a decade later only 10 of the barracks remained operational and even those that were open were only just over 47% full. Again, it was the prime importance of Weedon as a central store for weapons and a location from which troops could be deployed north, south or east that kept the total number of troops relatively high.

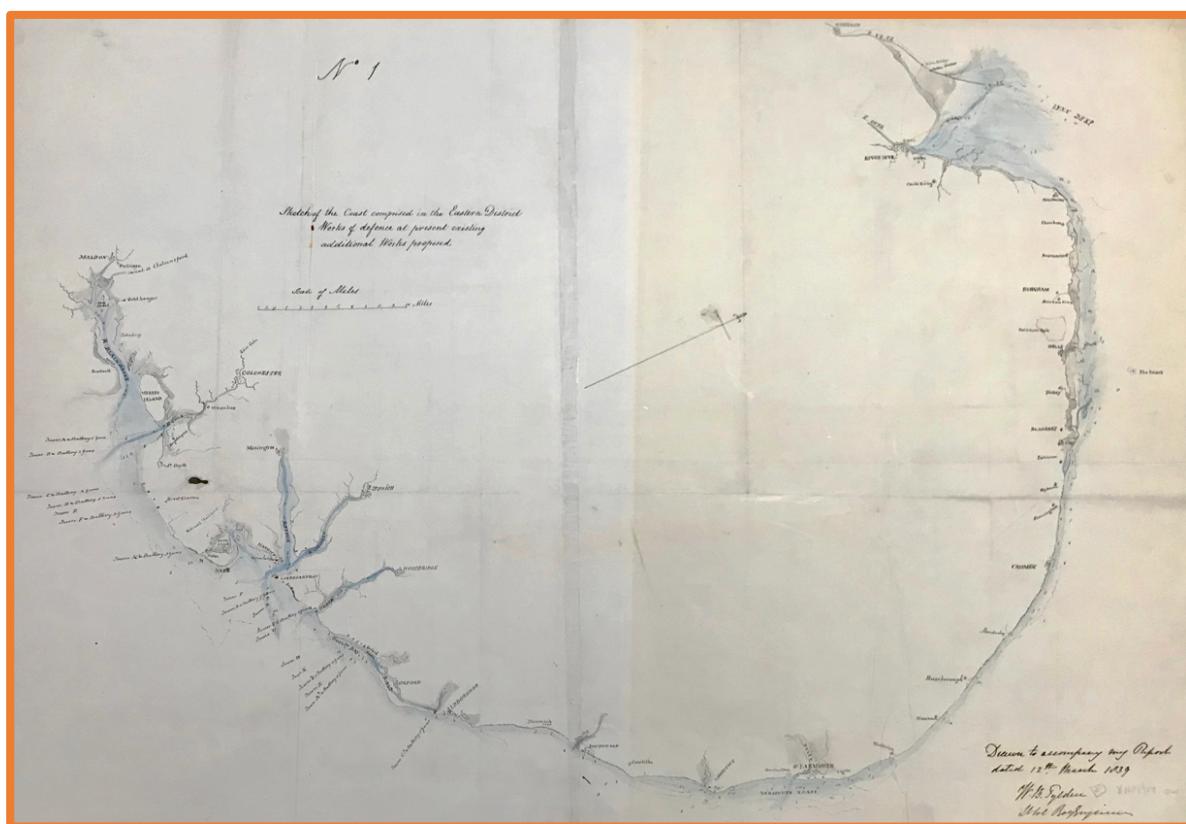
²⁹ Suffolk Local Studies Collection – Rushmere Common History.

³⁰ Troop numbers have been calculated from Barrack Returns and Army Estimates as for Fig. 4.33 in the previous chapter.

Unlike the mainly urban, industrial focus for the military estate in the Northern Region, which did not see the same decline in military numbers during this time, defence maintained a firm grip in the east. This continued to affect the distribution of military sites. The review of coastal defences initiated by Lt. General Vivian's inspections in 1838 and those of Wellington himself through to 1845, only served to confirm him in his gloomy prognosis and prompted him to the view that his legacy should be:

a well-considered plan for the organisation and prompt augmentation of a sufficient army – and substantial military work to aid the endeavours of the troops and give solidity to the system of defence.³¹

Figure 5.13 – Lt General Vivian's survey of coastal defences in Eastern England. – 1839



A further detailed review of defences along the coast was carried out in 1839. This appears to have been a military exercise rather than driven by any particular political

³¹ Hew Strachan, *Wellington's legacy: The Reform of the British Army 1830-54*, (Manchester, 1984), p.197.

need or immediate external threat and resulted in a report and set of maps. Figure 5.13 identifies the main ports and towns that it was felt ought to be better protected.³²

The map shows that most of the thinking related to naval action rather than landings or troops invading. The recommendations focused on the construction of towers akin to strengthened Martello Towers. Additional gun batteries were recommended at all the ports from Kings Lynn, Blakeney and Cromer to Great Yarmouth, Harwich and south to Maldon.³³ There is no evidence of funding being made available for this and none of the enhanced batteries were constructed. While no direct coastal threat can be discerned at this time it may be that the fear and inconvenience created by privateers during the Napoleonic conflicts was still in the military thinking and they wanted each port or trading town to be defended.

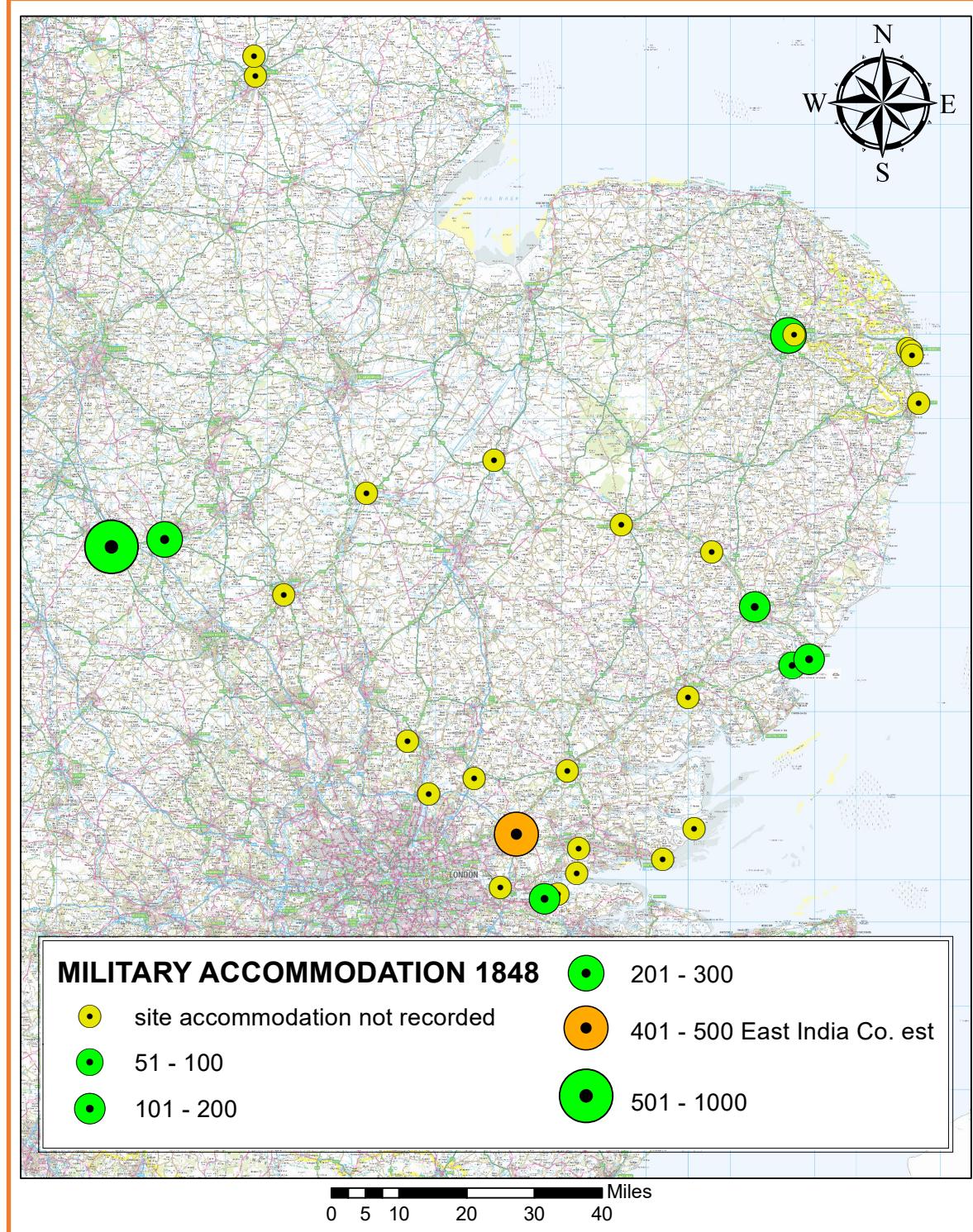
The only practical changes that had an impact on East Anglia's landscape throughout this period was the enhancement of defences in the Woolwich District. These included Purfleet and the development of Shoeburyness as an artillery range and training centre from 1847 (see section 5.7 below). This was as a result of the ranges at Plumstead and Woolwich being considered inadequate as the range of artillery expanded beyond the 1,500 yards available at Plumstead Common. The Woolwich range required firing across the maritime routes on the Thames and for obvious reasons this became difficult to sustain as firing practice was interrupted on a regular basis.³⁴

³² TNA MPH 1/1098, 39 items from WO 55/1548. Coastal defences, 1839.

³³ Ibid., TNA MPH 1/1098; John Gooch, *The Prospect of War*, (London, 1981).

³⁴ Strachan, *Wellington's legacy*, (1984), p.158.

Figure 5.14: Military sites in 1848 showing the number of soldiers accommodated at each site.



In the middle of the century, prior to the Crimean War, there was a strong sense of stagnation in terms of military impact in the region. Only Weedon had a sizeable military force partly as a result of its central position and key gunpowder and weapons

store but also because it bordered on the Northern Region. It was garrisoned to both protect it from internal disturbance and the possibility of its weapon store becoming accessible to discontented sections of society. The cavalry barracks at Northampton, Norwich and Ipswich were still prominent both as potential sources of support for the civil powers, if required, but also as a focal point for regular troops as part of continuing concerns for the defence of the realm. Harwich and Tilbury retained a role in coastal defence but most military sites had only a holding presence or were mothballed.

The development of artillery fortifications emanating from the 1859 Royal Commission shows the significant impact on the south of England.³⁵ Palmerston's energetic fight to create an integrated coastal defence for Britain, later given the unfortunate nomenclature of being 'Palmerston's Follies', had little direct landscape effect on the Eastern Region but its consequences were that little funding was available throughout that period to invest in other military infrastructure.³⁶

Burgoyne's pessimistic analysis of the possible results of a war with France set off the first Victorian panic and led to the claims for a substantial increase in military numbers and equipment.³⁷ His vision impressed Palmerston and public anxiety was heightened when the Duke of Wellington wrote, in agreement with Burgoyne, that other than adjacent to Dover Castle the whole British coastline was vulnerable to an enemy landing.³⁸ For a brief period of a few years, 'land defences were thus firmly established in the minds of both government and public as the best way to meet the threat.'³⁹ In 1860 Burgoyne agreed that it was reasonable to assume no formidable invasion would be possible while the navy held the Channel. However, he believed that France could mount a well-supplied invasion force of 20,000 men and that the principal Naval arsenals could be under significant threat. He focused on four south coast arsenals

³⁵ Timothy Crick, *Ramparts of Empire: The Fortifications of Sir William Jervois. 1821-1897*, (Exeter, 2012); Michael Partridge, *Military Planning for the Defense of the UK, 1814-1870*, (Connecticut, 1989).

³⁶ Andrew Saunders, *Fortress Britain; Artillery Fortification in the British Isles*, (Hampshire, 1989), pp.153-155, 161, 171-175.

³⁷ John Gooch, *The Prospect of War – Studies in British Defence Policy 1847-1942*, (London, 1981), p.2 – 4.

³⁸ *Morning Chronicle*, (January 1848).

³⁹ Gooch, *The Prospect of War*, p. 4.

plus Pembroke as suitable for improved defences.

Burgoyne's analysis identified that the amount of land required would be significant including up to 5 miles from each arsenal because of improvements in rifled artillery. He also recognised that other ports were also of strategic importance and required defending, especially along the Kent Coast and at Harwich. He argued, that throwing up entrenchment immediately round the precincts of London would be ineffective and he favoured a defence line from 30 to 40 miles away from the capital.⁴⁰ His comments provide an interesting precursor to the Scheme for the Defence of London later in the century which reinforced the importance of Tilbury, Warley and North Weald within a defence-line some 20 miles from Central London.

The 1861 Barrack Estimates contained a report to the Secretary of State for War, in the last two days of Sidney Herbert's tenure, as Sir George Cornewall Lewis was taking over. Westmacott's detailed analysis of the coasts of Great Britain and Ireland focused on the defence of the key ports and harbours where occupation would be advantageous to an enemy.⁴¹ This and previous reports from 1856-57 noted that in the 300 miles from the Thames Estuary to the Firth of Forth the only existing defensive works were at Harwich Harbour, with unarmed towers and the dismantled batteries at the mouth of the Tyne. The report acknowledged that Yarmouth and Lowestoft had great advantages in having a smooth beach with good anchorage and tidal harbours.⁴² The Wash was not considered to be vulnerable to attack because of difficult approaches from the sea, despite the small ports at Boston, Lynn and Wisbech. In addition, the inland landscape would make it too difficult for an enemy to achieve penetration into England without considerable difficulty. The report intriguingly stated that the landscape itself was the best defence. Along the North Norfolk coast the report noted that local opinion perceived that the area was suitable for landings but this analysis of the coast felt that it was not particularly vulnerable as the shoals and dangers outside the good anchorage made it an undesirable location to disembark an

⁴⁰ TNA WO 33/9 ,Parts I and II of Barrack Estimates,1860-'61 – Papers between J.F. Burgoyne at the War Office and the Secretary of State for War, Mr. Sidney Herbert. 5th March and 3rd August 1860.

⁴¹ TNA WO 33/10, Detailed abstract of parts II and III of Barrack Estimates, 1861-1862, pp.3-57.

⁴² Ibid., TNA WO 33/10.

invasion force and the small harbours were not thought to be strategically important despite good access inland. However, the analysis continued east and with echoes of the Napoleonic defence plans, identified the area from Winterton to the Thames as an area demanding particular attention because several locations could be capable of accommodating hostile operations on a large-scale.

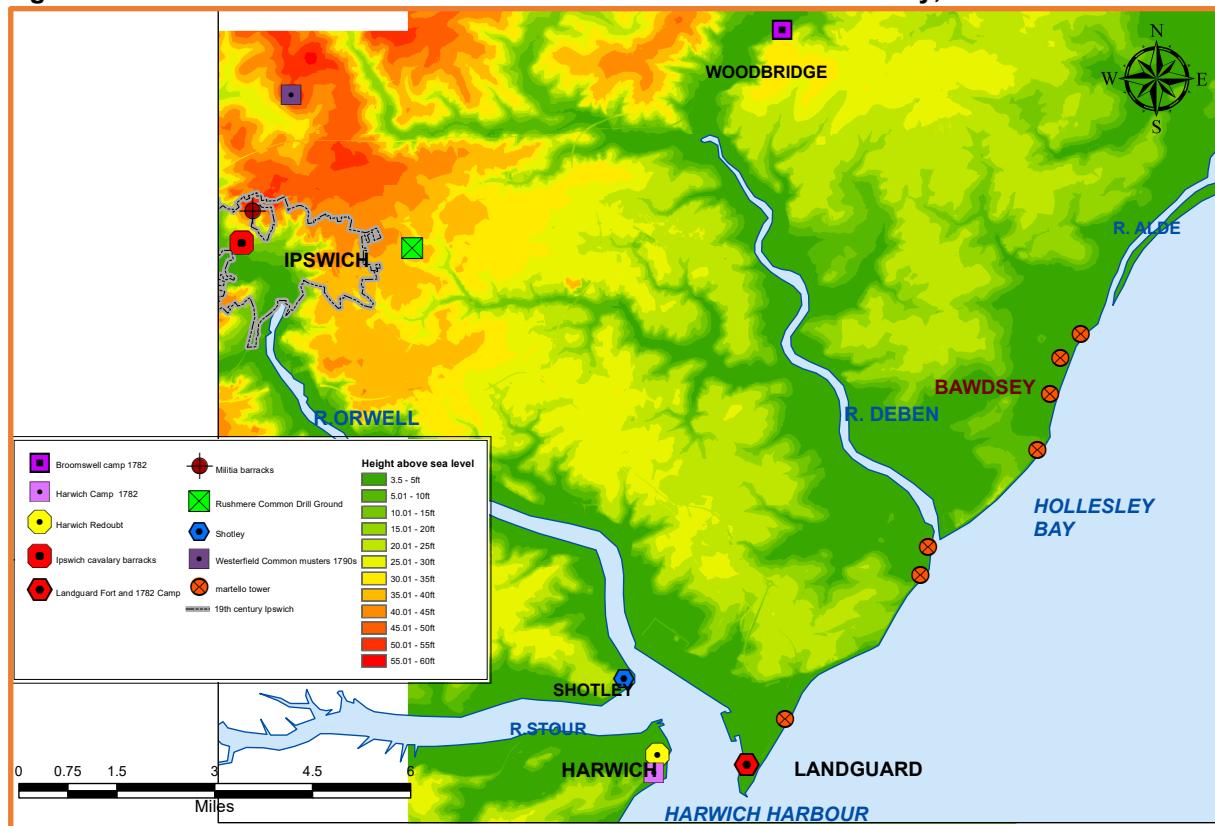
The analysis of the inland areas ruled out a push across Norfolk and therefore the most likely direction of attack would be south and southeast. It noted that the nature of country inland varied. In the north, the Rivers Bure, Yare and Waveney drained a low marshy district which was crossed by several roads, but contained large areas of water wastes, and would, be a difficult country to take by force.⁴³ By contrast the landscape south of the Waveney led more or less directly to London and therefore, needed a more co-ordinated defence plan. With Harwich's defences being upgraded the report called for some attention to be given to Yarmouth. In addition, defences at Lowestoft, while not as urgent as those at Yarmouth needed addressing as it would make an excellent subsequent target if an attack on Yarmouth was being withheld.⁴⁴

Further south the attractiveness of the topography of Hollesley Bay again identified it as one of the prime locations for any landing by an enemy force. The report did not recommend new fixed defences here, but further precautionary work so that more mobile forces could use the natural landscape of the river valleys as defence lines. Finally, they returned to the strategic importance of Harwich and the need to ensure that its defences were brought up to the standards required at that time. Interestingly, by this time, even though the line of Martello Towers were included in later defence plans they received no mention as part of the defences or worthy of upgrading as part of the defence of the coast at this time.

⁴³ TNA WO33/10, Detailed abstract of parts II and III of Barrack Estimates, 1861-1862, pp.3-57.

⁴⁴ Ibid., TNA WO33/10, pp.3-57.

Figure 5.15: The East's coastline most vulnerable to invasion at Bawdsey, Suffolk.



5.4 Defence Plans (1880-1914)

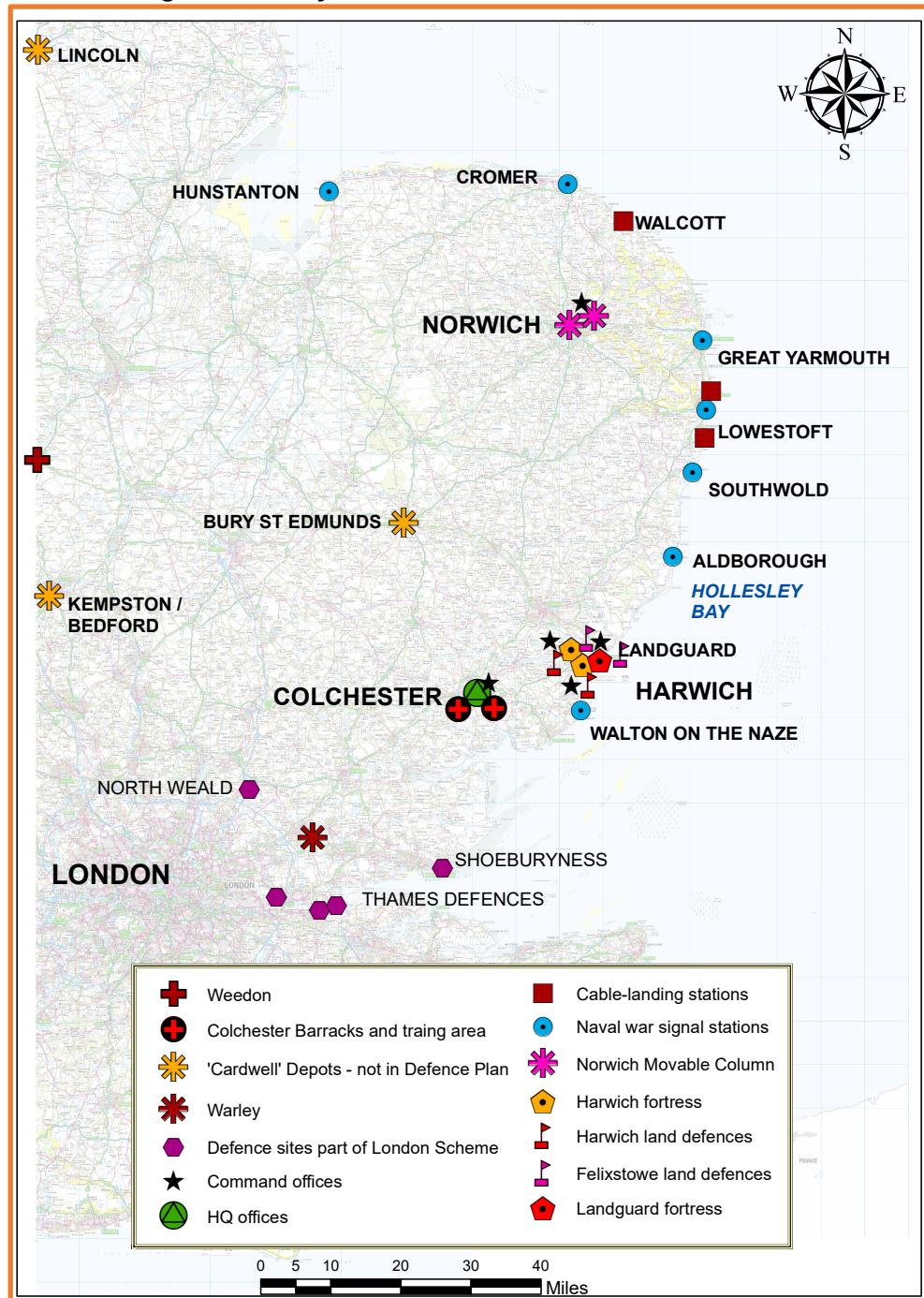
Thirteen Mobilisation Centres were constructed around London as part of the London Defence Scheme between 1889 and 1903.⁴⁵ These were mainly stores for arms and other equipment to support the army. They formed a semi-circle of defences along the south and east approaches to London in case of an invasion. In some cases, the Centres could be used to accommodate troops, but they were not specifically built for that purpose. In the East the focus for these defences was to be at Warley Barracks and a second Centre was constructed at North Weald on rising ground with a good command of the land to its front and sides.⁴⁶ There were originally 30 heavily armed locations identified in Col. Ardagh's 'Defence of London' published in 1888, but funding was only made available for the 13 storage sites and subsequently a line of trenches

⁴⁵ David Morgan-Owen, *The Fear of Invasion; Strategy, Politics and British War Planning, 1880-1914*. (Oxford, 2017), Chapter 2.

⁴⁶ Louise Barker and Paul Pattison, *North Weald Redoubt: A late 19th Century Mobilisation Centre*. (English Heritage Archaeological Investigation, 2000).

was planned to join these together. It would have required 200,000 men to man the defences. In the end only the 'fort' was constructed in the East at North Weald and existing ordnance stores at Tilbury and Warley were incorporated into the plan.⁴⁷

Figure 5.16: Key locations in the 1904 Defence Scheme.



The Eastern District Defence Scheme was drawn up in the first few years of the twentieth century.⁴⁸ Parts I and II set out the overall defence scheme and Part III

⁴⁷ Norman Longmate. *Island Fortress, The Defence of Great Britain 1603–1945* (Pimlico, 2001) Chapter 32, Fortifying London.

⁴⁸ TNA WO 33/329, Eastern Defence Scheme, 1904.

focused on what was termed The Norwich Movable Column. The area concerned included the counties of Norfolk, Suffolk, Cambridgeshire and Huntingdonshire, Bedfordshire, Hertfordshire, Northamptonshire, Rutlandshire and most of Essex. It did not include Lincolnshire and the parishes in south Essex which formed part of Thames Military District and were integral to the London Defence Scheme.

The Eastern District's defence objectives remained as the defence of Harwich Fortress and the opposition of any landings on the East Anglian coast. The estimated garrison required for such a defence was a force of 2,000 men. It was assumed that no serious attack would be made on Harwich Fortress other than as part of a land invasion. Therefore, the decision was made to focus on defending Harwich and using the Norwich Mobile Column to aid that defence. It was not proposed that a general defence of the coast or inland was necessary as the strategic conditions placed the defence of Harwich as the key element of the scheme. The geography of the North Sea was a key consideration in developing the focus on Harwich. Eleven ports on mainland Europe were considered a likely origin for any attack and the eight ports less than 300 miles from Harwich along the French, Dutch and German coasts were considered a particular source of threat for mounting raids. The 16th May 1904 Memorandum on Strategic Conditions identified that aside from invasion the most likely forms of attack would be naval attacks on defended ports and raids along the coast.⁴⁹ The strategy was still strongly influenced by the belief that naval defences would be strong enough to repulse any attack. The Scheme quotes the Admiralty position:

It is a fundamental principle of Admiralty policy that sufficient force shall at all times be maintained in home waters to ensure command of these seas, and in no other way than by defeat can naval force be rendered unable to meet the enemy at sea.⁵⁰

There was an acknowledgement that Harwich's defences were less strong than the south coast defences but also that taking Harwich would be less important to an enemy

⁴⁹ TNA WO 33/329, Eastern Defence Scheme, 1904.

⁵⁰ Ibid.

than taking or destroying the south coast ports. Overall, the assumptions relating to the likelihood of an invading force landing along the East Anglian coast was considered as hardly probable. This was especially in terms of any considerable force being able to land.⁵¹ This was certainly in line with the continuing belief in the role of the navy as the main protector of the homeland that stretched back across all of the nineteenth century. There was some acknowledgement that signal stations and cable-landing places might be the most likely targets in the event of conflict.

The precautionary stage was mainly focused on watchfulness and preparation with the main focus on ensuring electric lighting is operational and cable-landing places guarded. A heightened preparation for the Special Service Volunteers and especially submarine mining personnel and coastal gun battery teams was to be required. The Defence Scheme judged the communications in the Eastern District to be good, especially road, rail and telephone but with no water borne communications other than along the coast, with several steamships at Harwich that could be commandeered. The landscape influenced the Scheme significantly in that there were large areas which were considered too difficult and expensive to man permanently and therefore a Movable Column, organized from Britannia Barracks in Norwich, with mustering of the Volunteer and Militia units at Crown Point, Norwich was the preferred option.

The Movable Column was organized to oppose any coastal landing in Norfolk or Suffolk, to guard and protect cable landing places and naval war signal stations. Therefore, the Column was located in Norwich with smaller outposts at Hunstanton, Cromer, Yarmouth, Lowestoft, Benacre, Southwold and Alburgh, each with a complement of 25 volunteer infantry and 50 at Lowestoft. These were to be accommodated in camps or in the event of war they were to instigate billeting in Cromer, Yarmouth and Lowestoft as well. Other than the Norwich and Yarmouth sites no remains of the outposts are to be seen in the current landscape. The main invasion target discussed was that of the Landguard Fortress and the port of Harwich though the "Memorandum on Strategic Conditions" maintained that such an attack was improbable.

⁵¹ TNA WO 33/329, Eastern Defence Scheme, 1904.

However, the military analysis of the landscape maintained Bawdsey, Hollesley Bay, reminiscent of Napoleonic fears, as the most likely invasion point on the east coast. It was still considered that the main military objective would be the capture or destruction of Landguard and Harwich. The expected response from the Movable Column was to move by rail through Ipswich and advance on Felixstowe between the Rivers Deben and Orwell. The rivers were seen as natural stop lines. If the landing was further north at the less likely landing places of Aldeburgh, Southwold and Dunwich, the Column was to follow the movement of the invading force and cut off their communication and harass their rearguard. A third option, depending on the mobility of the invading force, was to move the Column rapidly by rail to secure the Wickham Market area and dispute the passage across the River Deben. Martlesham was identified as the fall-back position.

The Movable Column also had reserve orders in the unlikely event of a landing. It was thought that if this was to occur the most likely places would be, in order of priority; Lowestoft, Yarmouth, Hemsby, Hole, Kessingland, Cromer, Happisburgh, Mundesley, Weybourne and Marran Hills. In such a case the Movable Column was to observe and harass but become an outpost of the Field Army to deal with the invasion as required. The Column Commander was ordered to make himself thoroughly acquainted with the Defence Scheme and have a general knowledge of the country and coastline and ensure that the troops under his command were acquainted with their duties.⁵²

Despite the considerable investment of time and energy into such planning the outcome was a more co-ordinated use of the existing military estate rather than any addition to it. The argument had now moved from more drill and practice to battle readiness and a series of large-scale manoeuvres took place during the first decade of the twentieth century.⁵³ Several of them were based on assumed landings in the

⁵² TNA WO 33/329, Eastern Defence Scheme, 1904. p.86.

⁵³ PP, Military Manoeuvres Act, 1897 amended 1905, this enabled the military to access all parts of the affected country, set out compensation conditions and timescales for ensuring the same area was not closed frequently for military purposes.

eastern counties.⁵⁴ The 1904 'Invasion of Essex' involved over 11,500 men in the Blue Army, transported from Spithead and landed between Clacton and Holland on Sea. The Defence (Red) Army, roughly half the size was to defend Colchester and the area inland. An even larger 'battle' took place in 1912 with 50,000 troops and covered an area from King Lynn in Norfolk south to a line from Bedford to Colchester.⁵⁵ However, no additional land for such manoeuvres in the East was acquired. The only national locations for such practice and training on a regular basis were at Aldershot and on Salisbury Plain.

Figure 5.17: A soldiers view of public engagement with military manoeuvres. (Ambrose's folder of notes in the Norfolk Regimental Museum.)



This hardly inspires a soldier's perspective of manouevres being battle-like practice.

⁵⁴ Simon Batten. *Futile Exercise? 'The British Army's Preparations for War 1902-1914'*. (Warwick, 2018).

⁵⁵ TNA WO 27/47 1912, Manoeuvres Map, from Simon Batten. p.101.

PART B - Recruitment and Training

5.5 Growth in military land acquisition

It is clear from the first census of military land ownership in the early 1860s that the distribution of sites acquired for military purposes in the Eastern Region was mainly shaped by defence priorities. However, mapping the acreage of land owned by the War Office in the second half of the nineteenth century shows how other factors led to much greater areas of land acquisition.

In 1862 the Eastern Region recorded a total of 2,672 acres in military use, just under 9% of the total for Britain at the time. Most of this land was in the large barracks and training area around Colchester and the powder mills at Waltham Abbey and Purfleet. Ranges at Shoeburyness provided the next largest area of land used by the military. The other significant military land was for the continuing defensive fortifications at Harwich Harbour and along the Thames Estuary. The cavalry barracks at Ipswich, Norwich and Northampton had relatively small direct land impact but were significant in terms of the visibility of the army after the first major programme of barrack building in England. The site at Weedon was somewhat of an outlier in being both a defence driven facility and being a long way inland away from coastal fortifications. Several of the sites identified as 'not in use at this time' were left over from the Napoleonic accommodation of troops and the recently acquired Warley site which had transferred from the East India Company but was not yet fully operational for the home army. Most of the locations where acreage was not recorded were relatively small militia barracks or stores. It is unlikely that these would have added more than 150 acres to the total.

By the end of the first phase of the Cardwell reforms in the 1870s however, the military land area in the East had expanded more than threefold to 8,932 acres or 13.5% of the national total. While the new barracks had a marginal landscape impact in terms of acreage, as will be explored below, the visible impact and symbolism in the landscape was significant. Warley barracks and camp was back in use by the home army and was adapted to become the Essex Regimental depot. Ranges at Gravesend, while on the south bank of the Thames were integral to the sites used by troops in the

south of Essex. Developments at Shoeburyness, Landguard and Yarmouth increased the area of land for military accommodation and training.

Figure 5.18: The acreage of military land identified in the Land and Tenements return of 1862 (PP, Return of Lands, Tenements and Appurtenances held by Military or Ordnance Depts. C.305 1862).

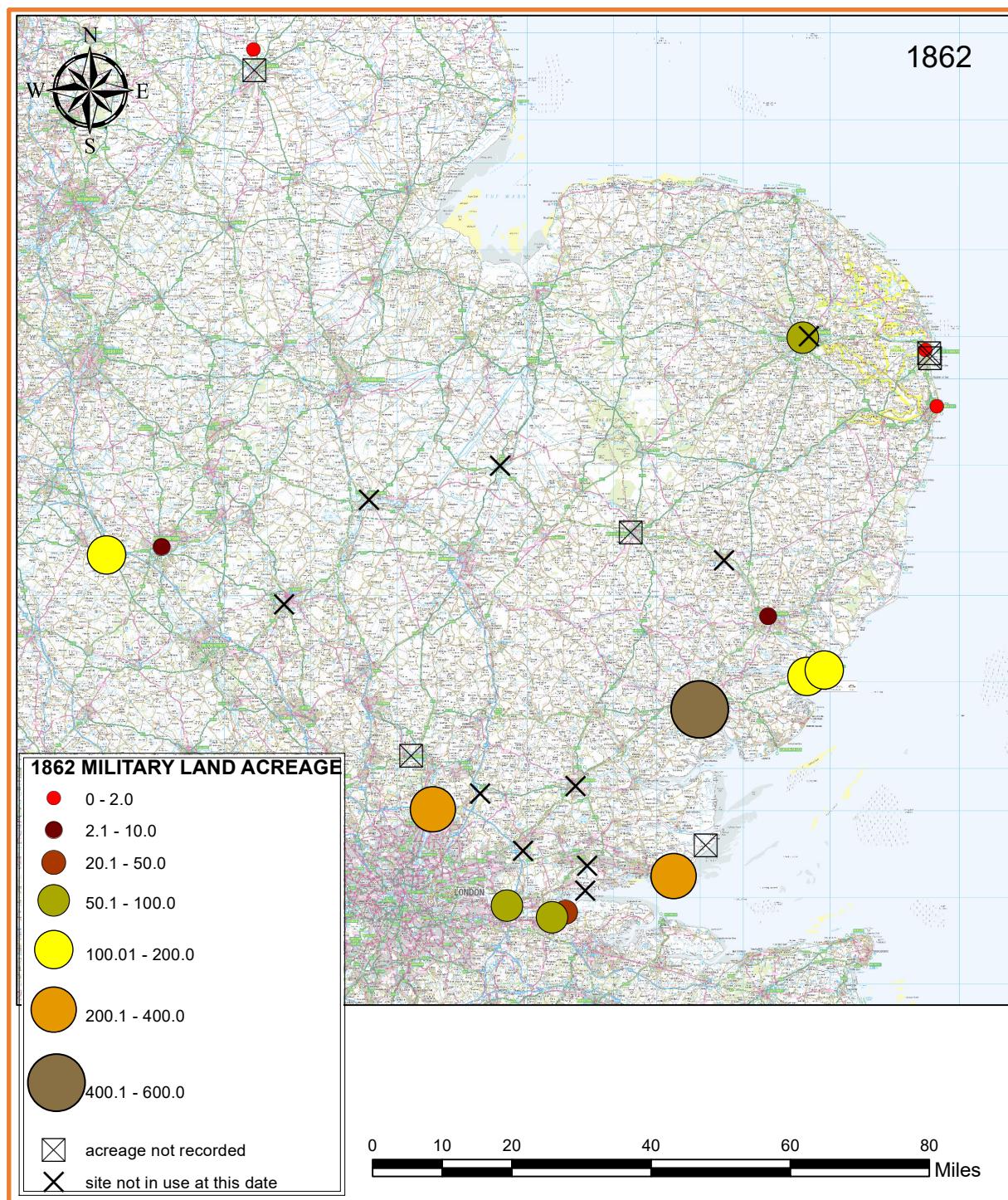


Figure 5.19: The acreage of military land identified in the Land and Tenements return of 1878 (PP, Return of Lands and Tenements in the UK by the War Department. C.402, 1878).

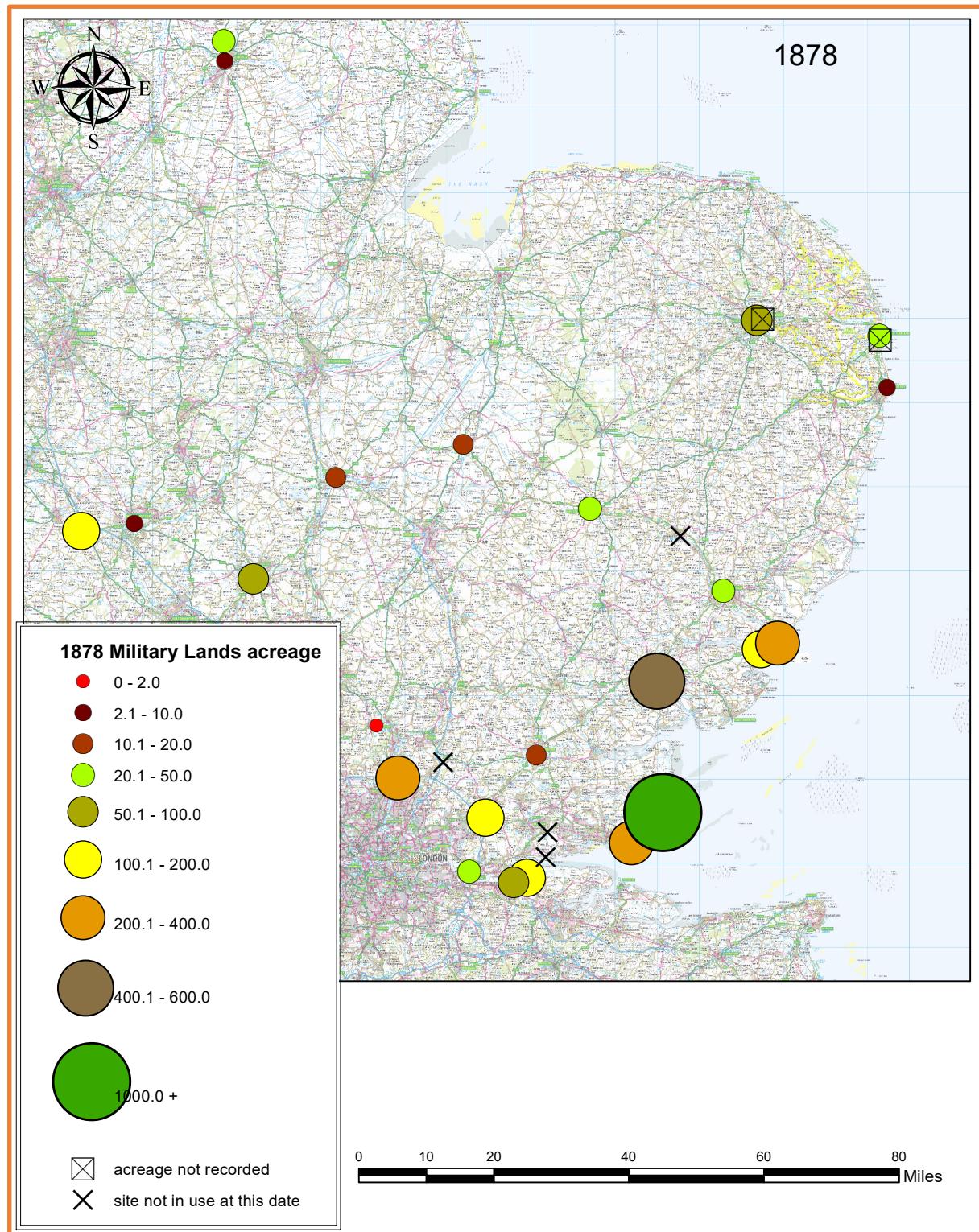
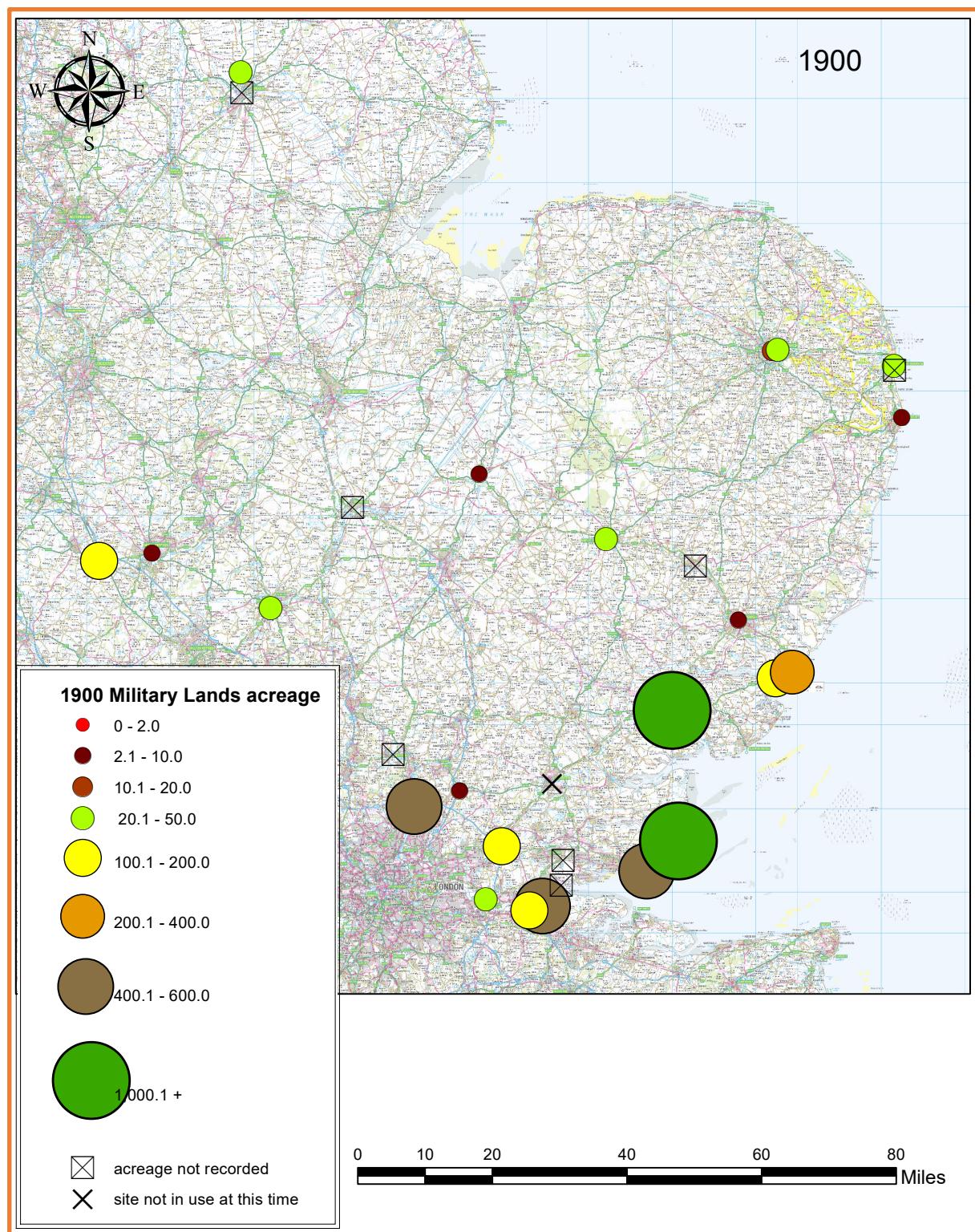


Figure 5.20: The acreage of military land identified in the Land and Tenements return of 1900
 (NAM. 2011-11-24-9, Return of War Department Lands at home stations on 31st March 1900).



The biggest change by 1878, however, was the acquisition of 4,662 acres of Maplin's foreshore at Shoeburyness for rifle and artillery practice. While Colchester remained

a significant military site the promised expenditure in the 1872 Localisation Act had not yet had a large-scale impact on the amount of land used for training in that area though Middlewick ranges expanded by 102 acres.

By the end of the century land use by the military had expanded another two and a half times to 23,573 acres which was 18.5% of Britain's military estate. Most of this was in the south of the region in Essex and Hertfordshire with gunpowder mills, the Thames Estuary defences and rifle ranges which had all expanded. But the major developments at Warley, in and around Colchester and at Shoeburyness set this area out as one of the most significant militarized landscapes nationally. The acquisition of 20,000 acres at Maplin adjacent to Shoeburyness also set this area out as one of largest and most unusual parts of the military estate, a descriptor it still carries with it today. The sections below examine these three locations in greater detail. By this stage the distribution of the military landscape had shifted from being almost entirely planned to provide active coastal defence and defence facilities for London along the Thames, to a military landscape dominated in areal extent by training, and by the defence industries and stores necessary to support the military in its wider roles beyond a local defence role. By 1911 the land owned or leased for military purposes was reported as 39,000 acres in the Lucas Report.

Warley Camp and Barracks

The history of Warley Camp and barracks illustrates how military reform became a more dominant factor in shaping the military estate. The role of Warley Camp between the end of the Napoleonic Wars and 1857 was to a large extent outside any considerations of the defence of East Anglia. It had been one of the major Training Camps during the Napoleonic Wars. Barracks were built and added to in the period from 1805 to 1842 and the barracks were sold to the East India Company to train recruits who were deployed to India. The site and men were absorbed into the British Army after the Indian Mutiny in 1857 and it was only then that it became part of the Eastern Region's Defences with a focus on London.⁵⁶

⁵⁶ TNA WO 33/9, Parts I and II of Barrack Estimates, 1860-1861.

Warley is 20 miles east-northeast of London and 30 miles southwest of Colchester making it a prime location for a military development. But it was its location within 10 miles of the Thames and on the nearest high ground above the flood plain that made it a suitable site within the strategic plans for defending London. Its situation made it ideal as a staging point for boarding ships at Tilbury to travel to Europe and to the distant corners of the Empire. Its site was also suitable for training with land rising up to a plateau of mixed wooded common and heathland where the land was not intensively farmed. Warley Common had been a popular training area for Militia Units since the 1700s.⁵⁷ However, as in many parts of the country, it was the fact that a large area of land adjacent to the common was enclosed in the fifteenth and sixteenth centuries and owned by the well-connected, aristocratic Petre family that attracted military involvement. The family had strong military links that made it attractive and possible to host military training and cope with the necessary luxuries of visiting royalty and aristocracy. It was here that George III and Queen Isabella stayed when they visited the Warley Camp in 1778.⁵⁸

Barracks were built in 1805 when George Winn, who owned the manors of Great and Little Warley, sold 116 acres of the common to the government to build permanent accommodation for soldiers at Warley Common. The barracks had accommodation for 10 Officers, 306 Men and 222 horses and was initially occupied by the Horse Artillery. It also included a hospital, and half a battalion of the Rifle Brigade. The barracks were of yellow brick in the plain style typical of early nineteenth-century military buildings. The chapel, which survives, was designed by Sir Matthew Wyatt in 1857 in an Italianate style, in yellow brick trimmed with red. The furnishings of the chapel were designed by Sir Charles Nicholson.

⁵⁷ <https://www.british-history.ac.uk/vch/essex/vol7>, *A History of the County of Essex*: Volume 7, ed. W R Powell (London, 1978), pp. 174-180; Royal Collection, IN 734032, Daniel Paterson 'Encampments / In South-Britain / From 1778 to 1782', (c.1784-91).

⁵⁸ <https://www.british-history.ac.uk/vch/essex/vol7>, *A History of the County of Essex*: Volume 7, ed. W R Powell (London, 1978), pp. 174-180.

Figure 5.21: Warley 1870s War Department land – topography and antecedent use

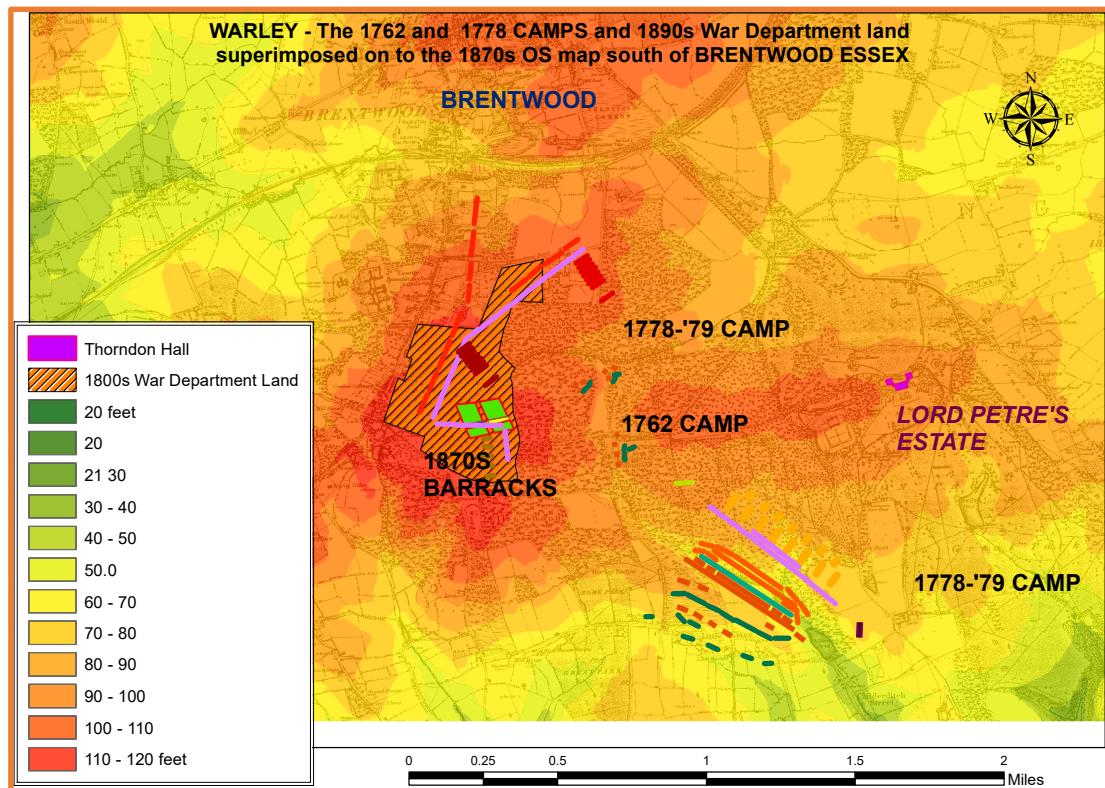


Figure 5.22: Warley, War Department Land 1870s

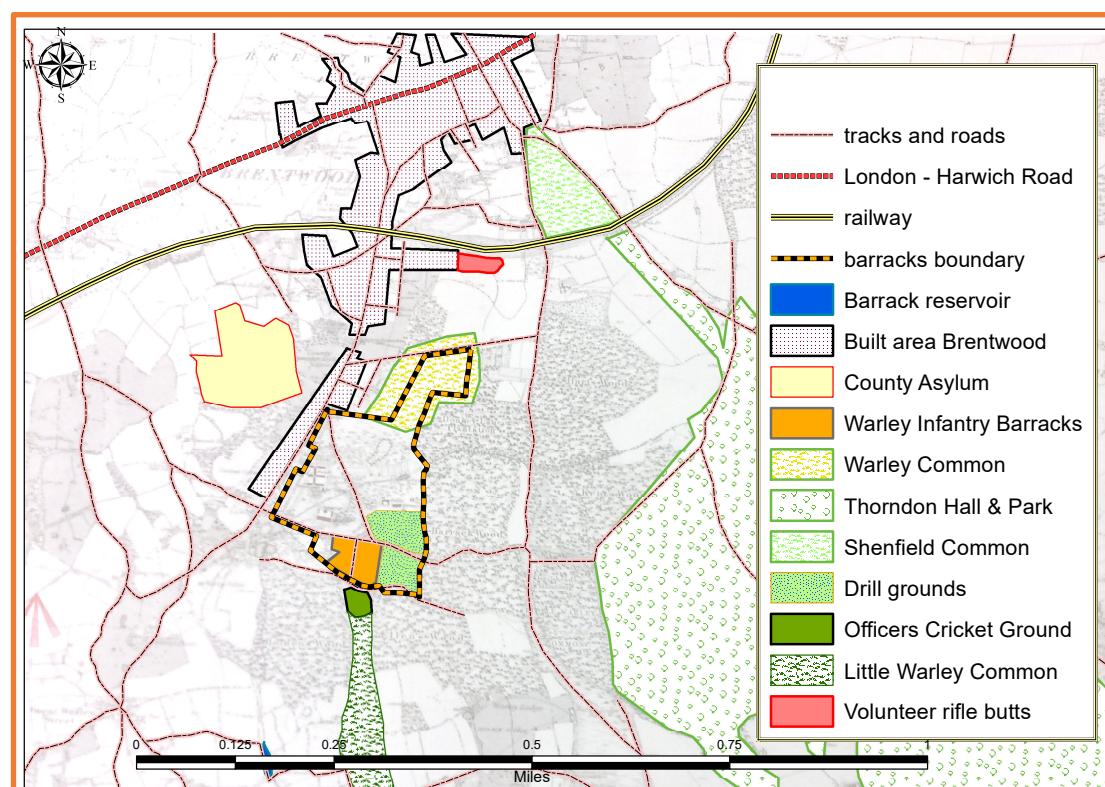
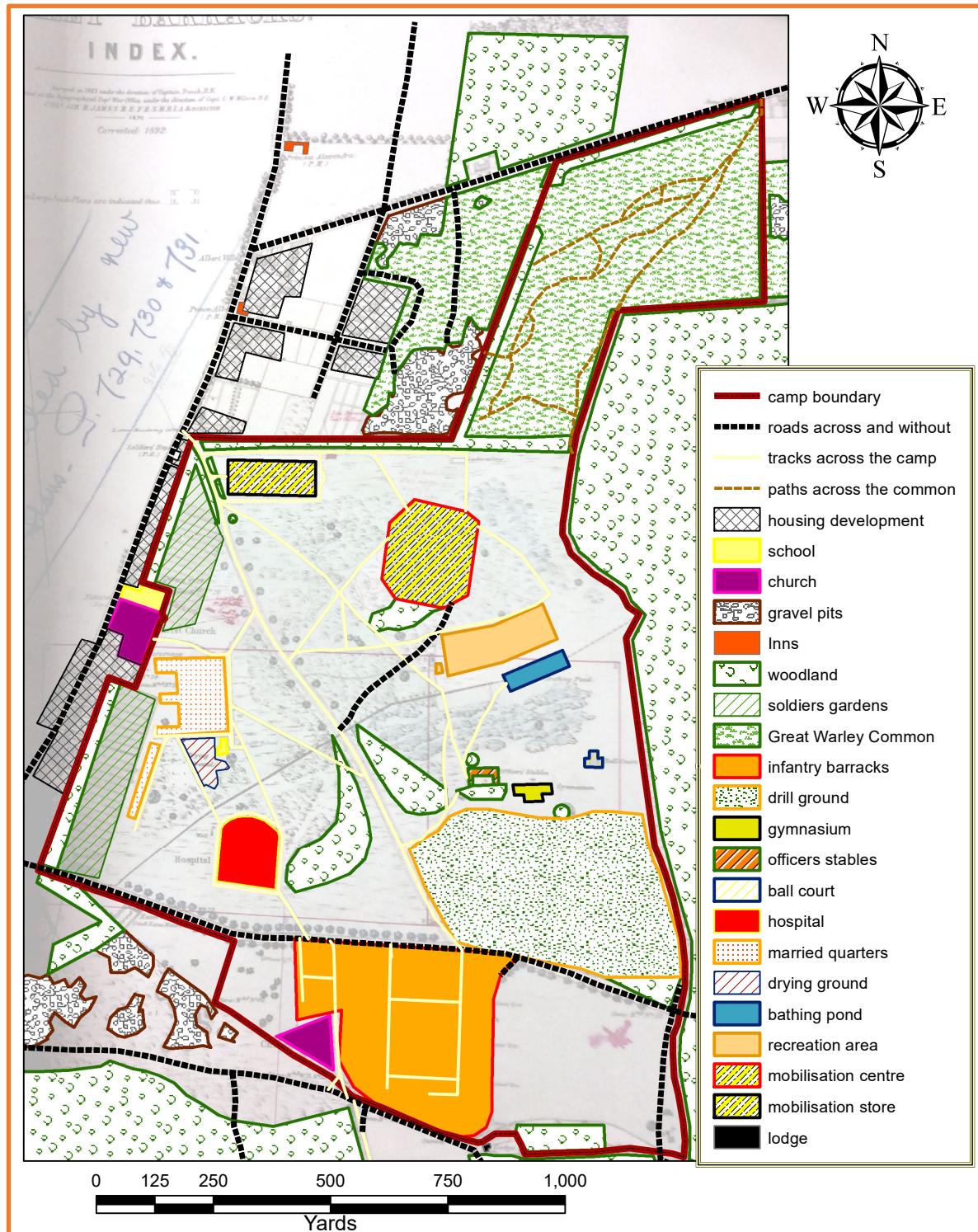


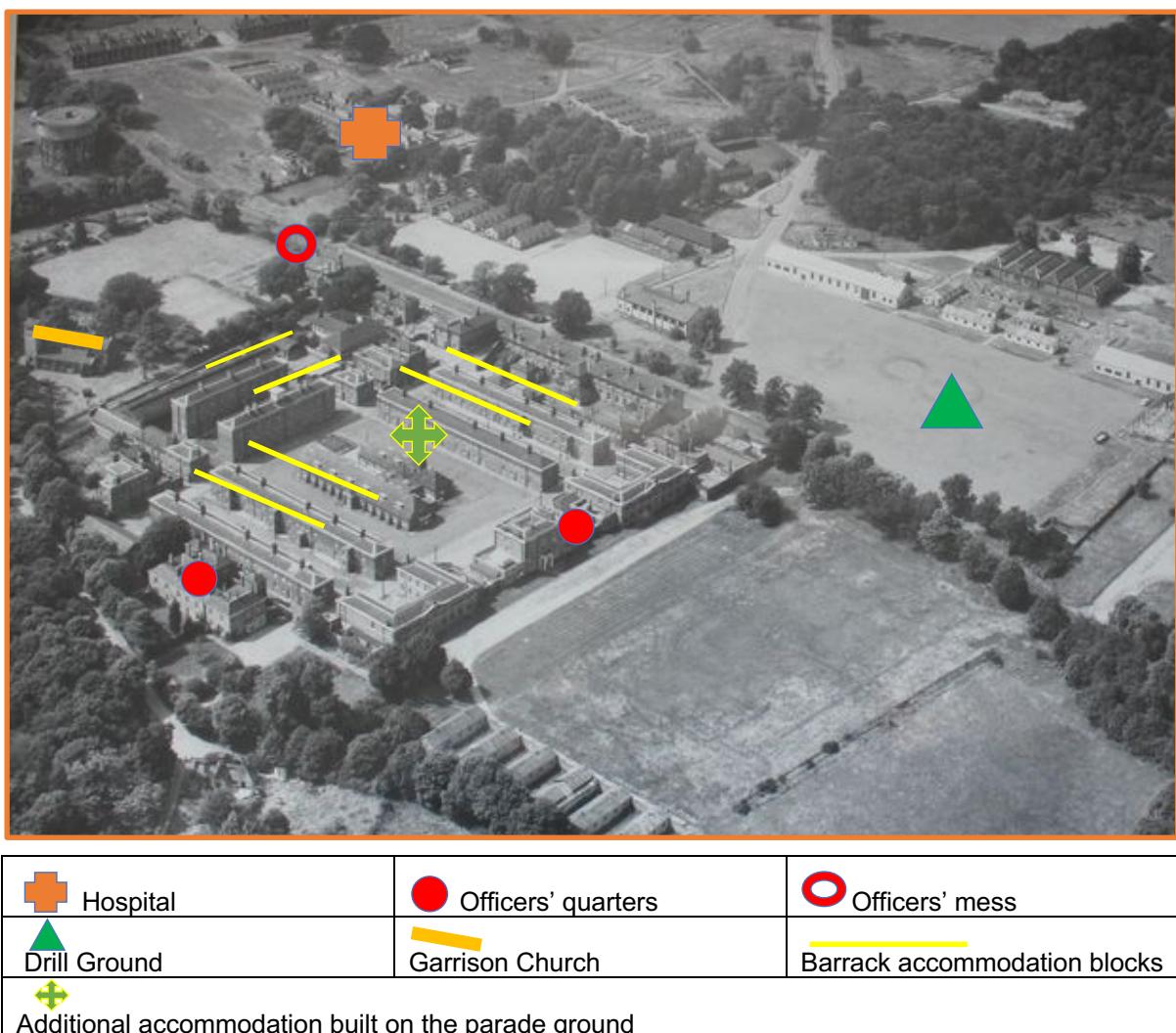
Figure 5.23: Warley Barracks site and training ground 1863 (amended 1892). (TNA WO 78/3317, Warley Barracks WD Boundaries, 1888; MPH 1/593 Warley Barracks, 1863-1914).



In 1843 the barracks were bought by the East India Company for £15,000 when their Chatham barracks became inadequate. Accommodation was created for 785 recruits

and 20 sergeants with new buildings for the officers. Married family housing was also provided, and a chapel. In 1856 further building work was carried out, 1,120 men were housed there every year. The barracks became the depot of the Brigade of Guards in the 1860s. As a result of the 1881 Childers reforms the 44th Foot and 56th Foot became the 1st and 2nd battalions of the Essex Regiment based at Warley. The Essex Regiment continued to be based at Warley until 1958 when they were merged with other regiments to form the 3rd East Anglian Regiment and the land was sold.

Figure 5.24: Warley Barracks in 1914 with significant amounts of additional accommodation in permanent blocks and in temporary huts as it became one of the key training and transhipment camps for the BEF and subsequent troop reinforcements.



5.6 The impact of military reforms

One outcome of the reforms was to create a more geographically contiguous District; in the late 1860s the Eastern District was constructed around the defence plan of 1867. It placed Colchester as the focal point and the District merely linking together the military sites along the east coast as far as Yarmouth and inland in a line from Norwich to Essex. The size of the army located in East Anglia to provide the core regular backbone to the defence strategy is set out here as a separate table.⁵⁹

Figure 5.25: Distribution of troops in the 1867 Defence Plans

The location of troops in The Eastern District 1867.		ACCOMMODATION		
		Officers	NCOs & men	Horses
1 Colchester	Cavalry Barracks	35	668	560
	Hospital			
	Infantry Barracks	130	2256	30
	Middlewick ranges			
2 Harwich	Fortress	1	83	
Shotley	Naval Batteries	5	30	
Landguard	Fort	12	177	3
Ipswich	Cavalry Barracks	11	120	202
3 Yarmouth	Armory Barracks	7	456	
	The Fort, South and North Batteries		2	
Norwich	Cavalry Barracks	16	172	266
Lowestoft	Beach, Cliff and South Batteries	No permanent garrison		
Essex & Suffolk Coast	Martello Towers; - A,B,C,D,E,F,K,N,P,Q,R,T,U,W,X,Y,Z,, AA,BB,CC.	No permanent garrison		
TOTAL		217	3964	1063

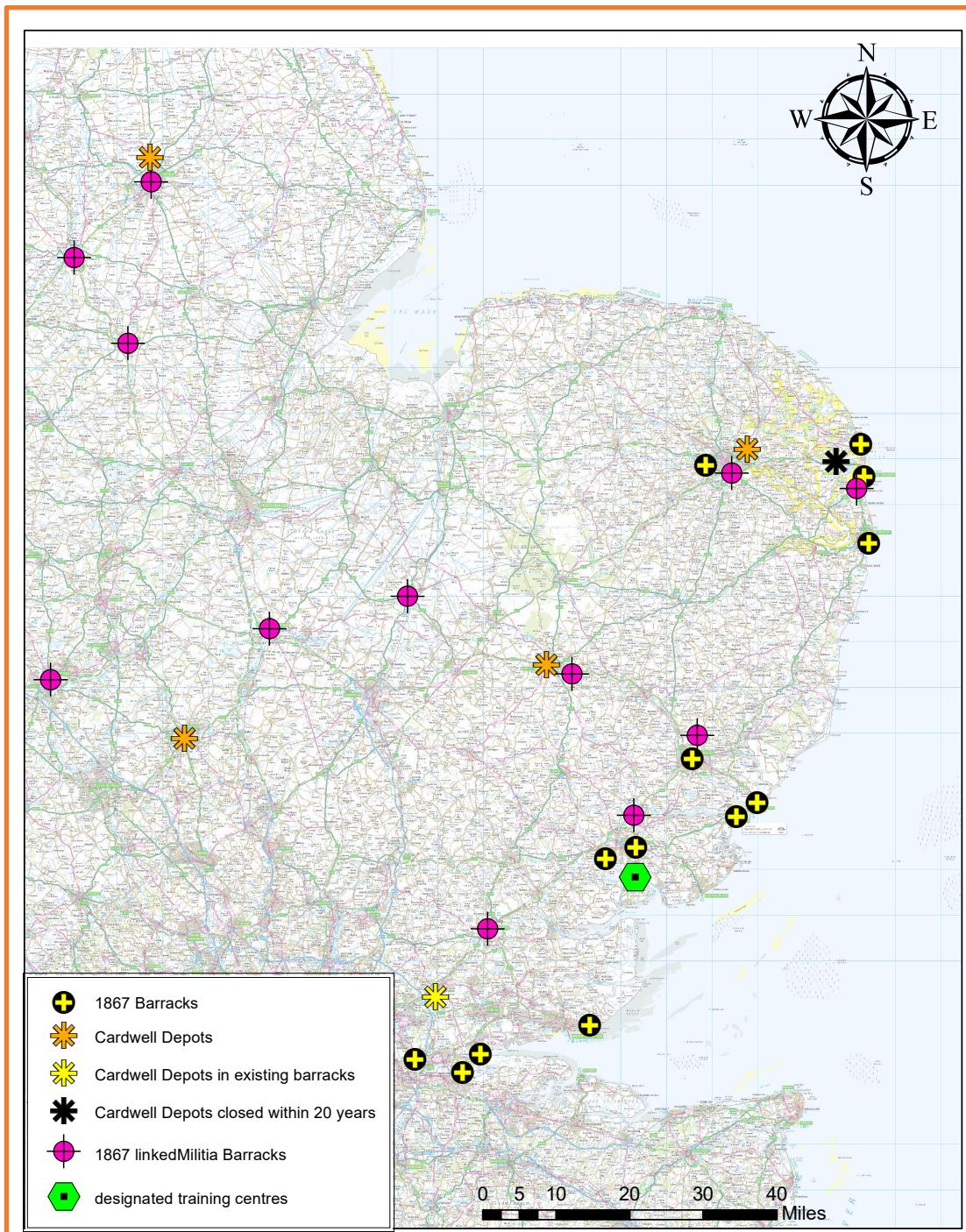
Overall numbers had dropped in the district by 1,000 men between 1857 and 1867.⁶⁰ The numbers show clearly the dominant role of Colchester with almost 75% of the District's manpower located there. The second cluster of facilities was around Harwich Harbour which would be reinforced from Colchester and a third locus in the Yarmouth / Norwich area with just 650 soldiers accommodated.⁶¹

⁵⁹ TNA WO 43/438/1-52.

⁶⁰ Compare figure 5.12 with 5.23.

⁶¹ TNA WO 43/438/1-52, Bound volume of 53 prints: 'England Plans of Barracks in Eastern District. 1867.

Figure 5.26: The Distribution and location of barracks in 1867 and the Cardwell Depot developments. (PP, Number of Barracks and Military Stations under each Barrack-Master, C.330, 1867).



However, after the impact of the Crimean conflict there was a general increase of over 2,000 men to 1900.⁶² Once the troops returned from South Africa and preparations

⁶² See figure 5.12.

were made for the First World War much of the region, but especially Essex, saw large numbers of troops based there or in temporary accommodation as they awaited transit.

The last quarter of the nineteenth century saw the impact of the Cardwell-Childers reforms. In the East these led to new regimental depot barracks in Bedford, Lincoln, Bury St Edmunds, and adapted barracks in Great Yarmouth, later transferred to new barracks in Norwich. Adaptations were also made to the barracks in Northampton and at Warley. As these depots focused on recruitment and initial training there was some confusion about their role in defence. This was heightened by the publication of the 1875 Mobilization scheme for the British Army. Local newspapers widely published a report on this Scheme, originally from *The Times*, in December 1875. They argued that the Scheme seemed to be at odds with the more fixed location of army regiments set out only a few years earlier by Cardwell, and, therefore, it would be a simpler matter to assign to each Cardwell Depot its share of the local Auxiliary Forces:

The Army Corps is, in deference to universal opinion, adopted as the main unit of the Field Army when mobilized; and the headquarters of each Corps being once fixed on, with proper relation to the two main requirements of ease in concentration and suitability to the possibilities of invasion.⁶³

The 1875 Mobilisation Plan assumed that the core group in each case should be purely regulars. These were to be focused on Colchester, where there was the convenience of an existing large camp, and the position was suitable to the special defence of the east coast and the approach to London.⁶⁴ The plan was in the main theoretical and organizational and led to no significant landscape impact, but it did cement Colchester's role as the dominant military focus in the East. In the Mobilisation Plan and the later Eastern Defence Plans the Cardwell Depots were assigned a role as a rallying points in the event of invasion and the Norwich and Warley barracks were identified as centres for mobilising defence forces.⁶⁵ But the main impact in the

⁶³ *The Essex Standard, West Suffolk Gazette, and Eastern Counties' Advertiser*. 10th December 1875.

⁶⁴ Ibid.

⁶⁵ WO 33/329 Eastern Defence Scheme, 1904.

landscape, as discussed in the study of the northern region, was as symbols of power and their design was meant to attract recruits and gain local public support. This was in part from the size of the installation, being usually over 20 acres, which was large for barracks at the time, and their dominant keeps. Commenting on the design of Cardwell barracks, Hughes noted that the century was one of contradictions, seeking to reconcile flights of fantasy of the early gothic revival with the stark reality of the industrial revolution. The keep, in the style of a mock castle imparted some semblance of an aristocratic background and a link to the importance of the state. Hughes' analysis of the history of fortifications, with an architect's eye, is an important aspect in understanding the landscape monuments that have been left dotting the landscape of the military estate.⁶⁶ Figure 5.27 shows this clearly at Bedford, Lincoln and Bury St Edmunds.

Figure 5.27 A: Kempston Barracks, Bedford



⁶⁶ Quentin Hughes, *Military Architecture*, (London, 1974).

Figure 5.27 B: Gibraltar Barracks, Bury St Edmunds.



Figure 5.27 C: Sobraon Barracks, Lincoln.



These three of the newly built Cardwell barracks in the East from the 1870s provide very clear examples of the dominant keep as integral to the designs produced by Major Seddon. They usually had concrete floors supported on iron columns, with a powder

room and armaments stores above cells and the guardroom.⁶⁷ One of the last barracks built under the Cardwell-Childers reforms was Norwich in 1886 and while the same stores and features were required the dominant position of the site carried the imposing, powerful image and the front was more in the style of Queen Anne and did not carry on the medieval keep imagery.⁶⁸

Figure 5.27 D: Keep in the final Cardwell - Childers style – Norwich from mid 1880s



The Cardwell Reforms were a significant part of the history of the military estate in the East. While the main function of the reform, to improve recruitment through the creation of localised Regimental Depots, did not directly add large areas of land to the estate, their locations became important nodes in the East of England's military infrastructure. The 12th Suffolk, with the West Suffolk and Cambridgeshire Militia were located at Bury St. Edmunds. The Bedfordshire Regiment was located in new barracks at Kempston Bedford with the 16th Foot despite the regiment relying on recruitment from Ireland and initially having little direct association with the counties of Bedfordshire and Hertfordshire. Many other regiments and militia were placed in renovated barracks as at Northampton and the 44th and 56th (Essex) going to Warley

⁶⁷ Douet, British Barracks, 1600-1914, (1998), p.173

⁶⁸ Ibid. p174.

in Essex. The barracks resulting from the Cardwell reforms made a significant impact on the military landscape of the northern region as discussed in the previous chapter with twelve new barracks and a further seven adapted barracks as regimental depots. The impact in the eastern region, as listed in Figure 5.28 shows important but significantly fewer regimental depots.

Figure 5.28: Cardwell Depots in the Eastern District – as at June 1875

Depot location* new depots in italics	Notes including progress report 25.06.1875 to the HOC (Fully, Partly, Land only, no land) ⁶⁹	Completion	Distance to railway station
<i>Bedford</i>	, Partly	1875-1876	1,992m
<i>Bury St Edmunds</i>	Land only	1878	1,350m
Colchester	Important tactical station to be enlarged	(from 1794, 1862 Cavalry and ranges from 1874)	440m 2,200m or to Middlewick 3,855m
<i>Lincoln</i>	Land only	1880	2,2600m
Northampton	Fully	1797 adopted 1881	1,334m
Great Yarmouth	Fully at Gt Yarmouth - as original proposal Gt. Yarmouth was too small and no new build was developed	(1806 converted for army in 1856)	460m
<i>Norwich</i>	(Norwich was only introduced as a depot in plans from 1882.)	1885-1887	1,287m
Warley	Fully ready redeveloped barracks	1805 – army in 1861	1,454m

The Reforms set out to incorporate the militia into regimental depots.⁷⁰ The aim was to attach the Militia battalion of each county to a depot in that county. For counties such as Cambridgeshire and Hertfordshire the existing headquarters of the militia were leased. The militia staff were brought under the command of the senior officer at each station and militia training was integrated into the role of the Regimental depot. In some cases, as at Norwich, the local militia buildings were closed and a militia block was constructed within the new Britannia Barracks whereas Bedford and Bury St Edmunds, serving more than one county trained the local militias but the counties retained the militia HQ within their county. The impact of the reforms in the East is best understood through the developments in the Norwich and Great Yarmouth area and the special role allocated to Colchester which contributed significantly to the development of a permanent military landscape in that area.

⁶⁹ PP, Return of Number of Depot Centres fully and not fully constituted, (HOC 283,1875).

⁷⁰ PP. Committee on Organization of Military Land Forces. Supplementary Report for Depots serving more than one county as in Ireland parts of England, Scotland and Wales (C.588, Amended 4th July 1872 Supplementary Report).

The impact of reforms on military land in Northeast Norfolk

The physical evidence of the past military estate in and near Norwich is more visible than at Yarmouth though there is no discernible current military landscape despite an intensive military presence for the best part of two centuries. The military created a strong imprint to the north-east of the City for well over 150 years from the last decade of the eighteenth century.

Figure 5.29: Captain Pattison's Volunteers at Household Ranges late 1800s. (Norfolk Museums Service, Officers of the 1st City of Norwich Rifle Volunteers, with Their Captain Henry Staniforth Patteson, on the Rifle Range, Household Heath by Claude Lorraine Richard Wilson Nursey (1816–1873).



Norwich already had a strong military presence prior to the construction of the Cardwell/Childers Barracks on Household Heath which had stretched across 20,000 acres of land towards Yarmouth.⁷¹ It was well known for the mustering of the volunteers and militia for decades and an 800-yard rifle range was situated there for the volunteers. The first permanent military site was built at Hassett's Hall, one of the

⁷¹ Fred Corbett, *The early maps of Household Heath*, (UEA, MA Dissertation, 2016); Andy Wood, *The 1549 Rebellions and the Making of Early Modern England* (Cambridge, 2007); Andy Wood in *Medieval Norwich*, Vol 1, ed. Carole Rawcliffe and Richard Wilson, London 2004) pp.277-299; Jane Whittle, *Lords and Tenants in Kett's Rebellion 1549*, (Vol. 207 No. 1, *Past and Present*, 2010), pp. 3-52.

farms, on land at the edge of the Heath, belonging to the Dean and Chapter of Norwich Cathedral which was demolished in 1792, and a Cavalry Barracks built on the site. The Deanery map shows an area behind the location of the barracks designated as a ‘shooting ground,’ so it is likely that there was a military presence in the area for many decades in the seventeenth and eighteenth centuries.⁷² Figure 5.30 shows a Cavalry parade at the original barracks with the imposing façade of the new Barracks on the ridge in the top left-hand corner of the photograph. Currently the name Barrack Street is a local reminder of a military presence that disappeared in the 1960s. The St James Estate, built on the site of the cavalry barracks, is a good example of part of the urban morphology being shaped by the military landscape that preceded it (Figure 5.31). The site of the original manor house may be recognised as an open raised area, landscaped and planted with trees, though the only remaining physical evidence of the barracks is part of the stone wall that enclosed Hassett's Hall and yards, incorporated into the barrack wall when that was built.

Figure 5.30: Parade on Norwich Cavalry Barracks 1901. (Norfolk Regimental Museum – parade of Kings Own Norfolk Imperial Yeomanry 17th October 1901. Officers at front Maj. A Morse, Prince Duleep Singh, Maj. J Harvey, Capt. Pattisson, Col H Barclay).

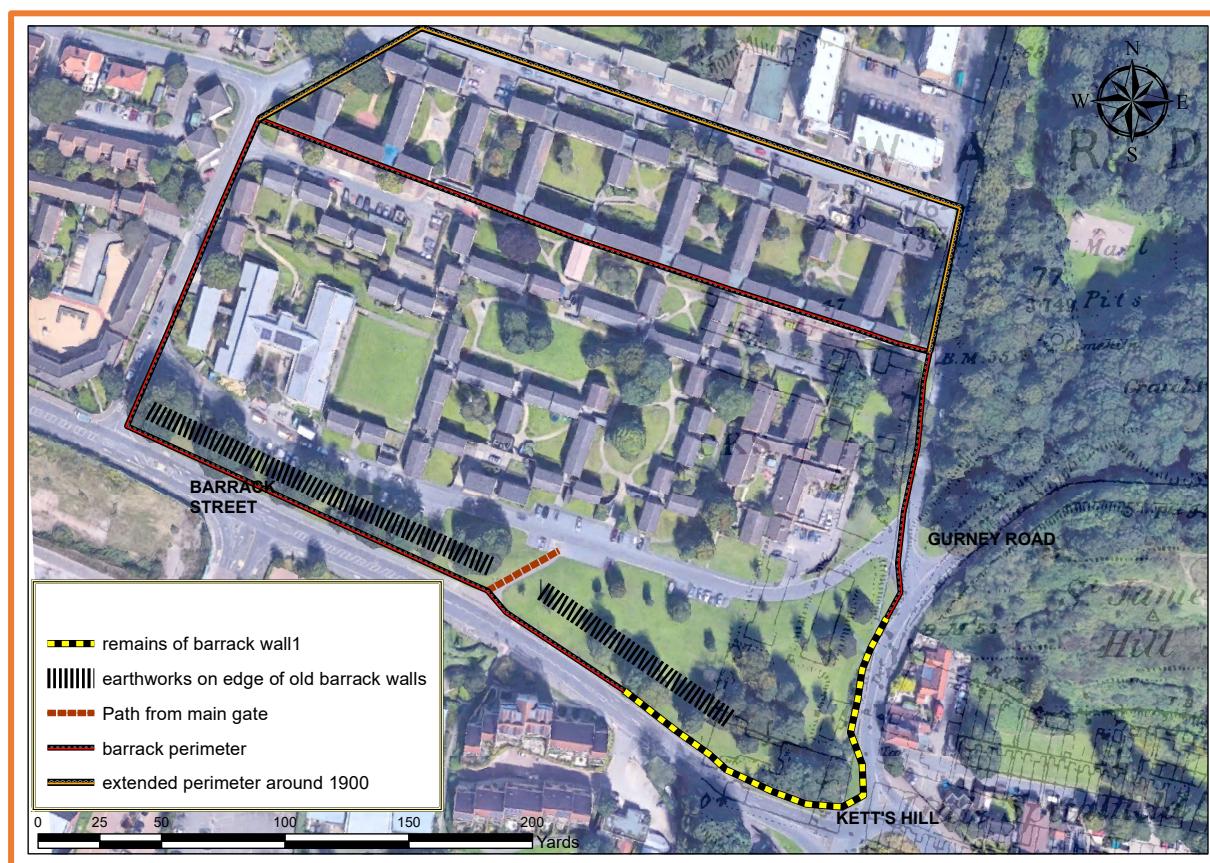


The cavalry barracks was one of those distributed across the country in the early

⁷² Norfolk Record Office MC 3085/3 Map of Household 1624; MC 3085/4 Map of Household 1718-1730; I Atherton, *The Dean and Chapter Estates since the Reformation in Norwich Cathedral, Church, City and Diocese, 1096-1996*. (London, 1996) pp. 665-687.

1790s with counterparts in the northern case study at Manchester, Leeds and Sheffield.⁷³ In the East similar barracks were constructed at Ipswich and Northampton, the latter being one of the barracks redeveloped as a Cardwell depot. Cavalry barracks needed to accommodate several hundred horses and men and to have good drainage, plentiful supply of water and especially exercise and feeding grounds for the horses. The cavalry had an exercise ground on relatively flat ground on the Heath and this was linked to the Barracks by roads called Cavalry Ride and Dragoon Street.

Figure 5.31: Norwich St James Estate on the footprint of the Cavalry Barracks

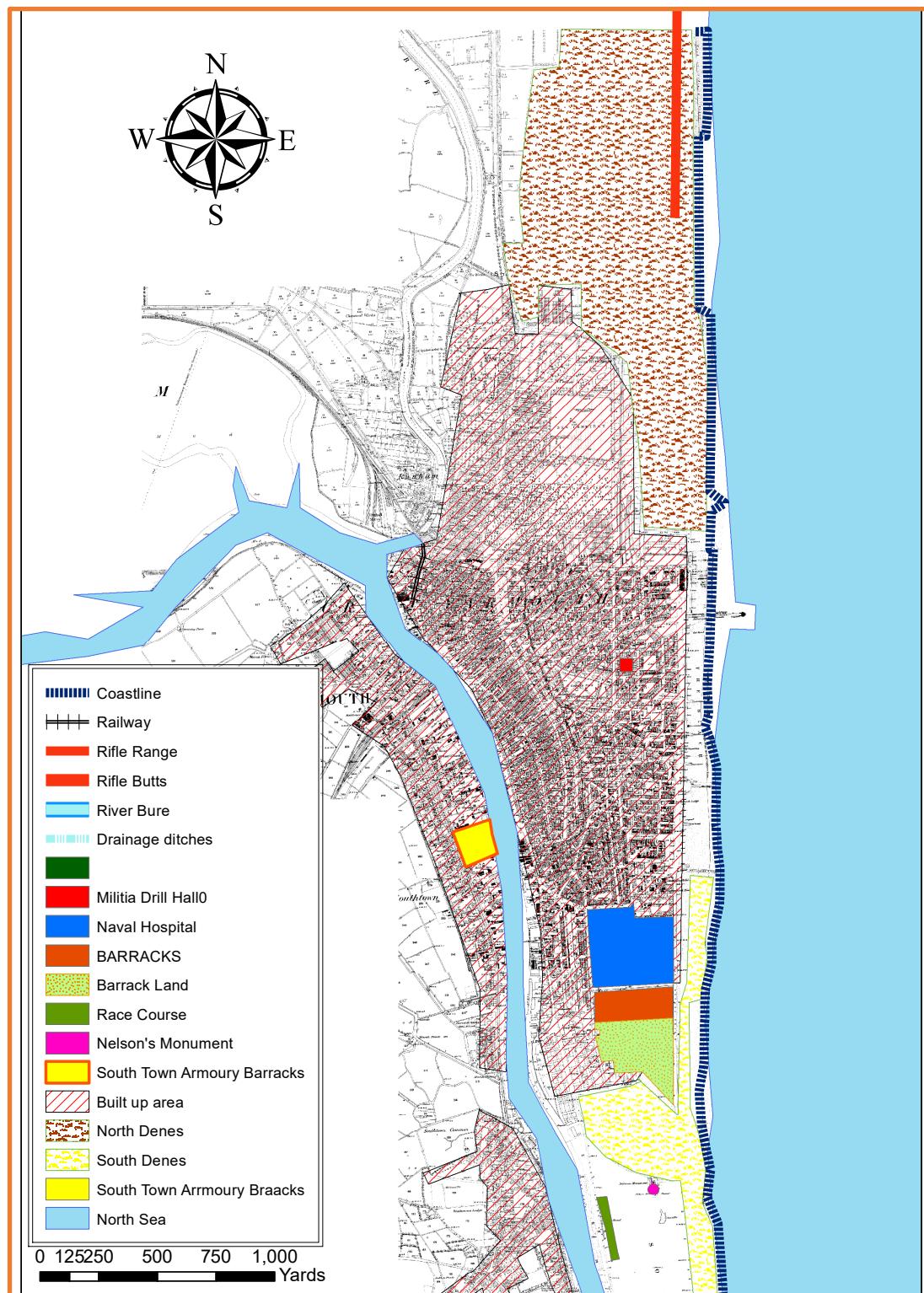


The early development of permanent military sites in Norfolk / North Suffolk focused on barracks and batteries at Great Yarmouth, coastal batteries at Lowestoft and the cavalry barracks at Norwich. These three locations provided the core of the military

⁷³ PP, Account of all Sums of Money that have been issued by the Barrack Matter General, for the erection of BARRACKS in Great Britain from the 1st Day of January 1790 to the 1st day of December 1795s, (© University of Cambridge).

estate in the area from the 1790s and throughout the nineteenth century with the new depot, constructed in Norwich added later.

Figure 5.32: Great Yarmouth Military Sites - 1880s



In the original version of the Localisation Plan in 1872 the Norfolk Depot was designated at Southtown, Yarmouth, an older relatively small barracks, originally an Admiralty service depot and armoury store.

Great Yarmouth was a secondary, but important, naval base and attracted sufficient investment to install defensive batteries north and south of Yarmouth itself and at Lowestoft. The naval facility required supplies and the provisioning of ships took place on the River Yare at Southtown where, in 1806, buildings designed by James Wyatt were constructed to store and supply naval ships.⁷⁴ During the same period the navy also built a Royal Naval Hospital across the river in South Denes. Both of these facilities had a relatively short maritime history and the hospital was later used as army barracks though often left unused. It became a hospital again in 1844 and returned to the Admiralty in 1863 as a naval 'lunatic asylum'.

The Royal Naval Hospital building remains as a highly visible reminder of past military activity. Adjacent to it is a 1930s housing estate called the 'Barrack Estate' but only Ordnance Road and Barrack Road contain a reminder of the past Artillery Barracks which were another important part of the military estate in Yarmouth. No evidence remains of the rifle ranges or exercise land on South Denes where the industrial and residential developments have blanked out all the previous military landscape. The North Denes range and battery was lost when the expansion of the esplanade and growth of the urban area occurred during the twentieth century.

The Southtown barracks were taken over by the army in 1855 (Figures 5.33, 5.34). Under the Localisation Act 1872 it was the initial choice as the Regimental Depot for the Norfolk Regiment. However, that function was transferred 20 miles west to Norwich in the 1880s when the much larger purpose-built Britannia Barracks was commissioned.

⁷⁴ John Robinson & John Martin, *James Wyatt, 1746-1813: Architect to George III*, (Yale, 2012). Wyatt was also responsible for the Royal Military Academy and RA barracks Woolwich.

Figure 5.33: Southtown barracks, Depot 9th Regt. Gt Yarmouth 1885. (Norfolk Regiment Museum – RM00694.PCX. RM10350)

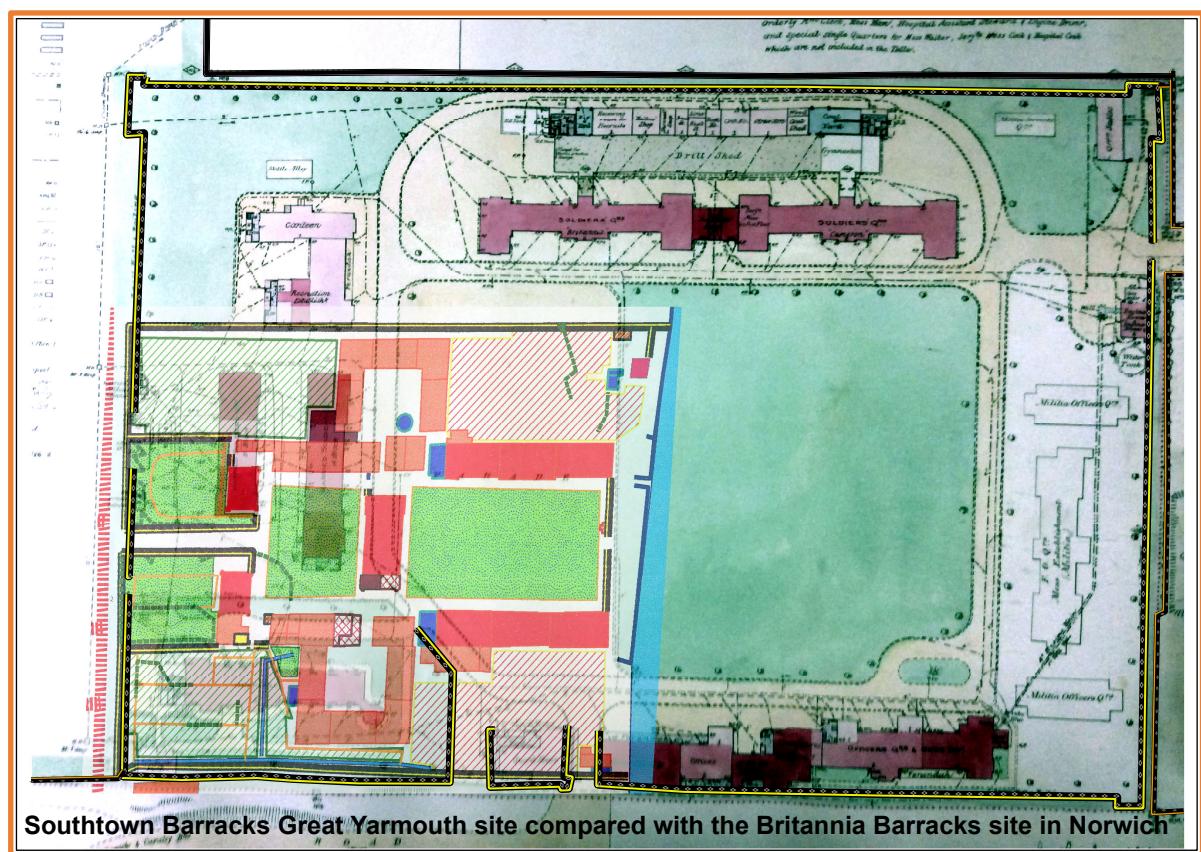


Figure 5.34: The Armoury Barracks Southtown Great Yarmouth.



The transfer to Norwich was a late arrangement as the original intention was for the Norfolk Regiment Depot to be at Southtown. However, the site was too cramped to provide the kind of accommodation expected as a result of the Cardwell reforms. Figure 5.35 shows the two sites superimposed and it illustrates clearly that the Southtown site, of just 4 acres, was less than one third the area of the Norwich barracks within the walls or about a fifth of the total site. The emerging military defence strategy required a more mobile response from the Depot and Yarmouth was appropriately defended with the development of the militia and The Royal Artillery.

Figure 5.35: The plan of the Southtown Barracks superimposed onto the Norwich barracks⁷⁵



The departure of the 9th Regiment was reported as follows:

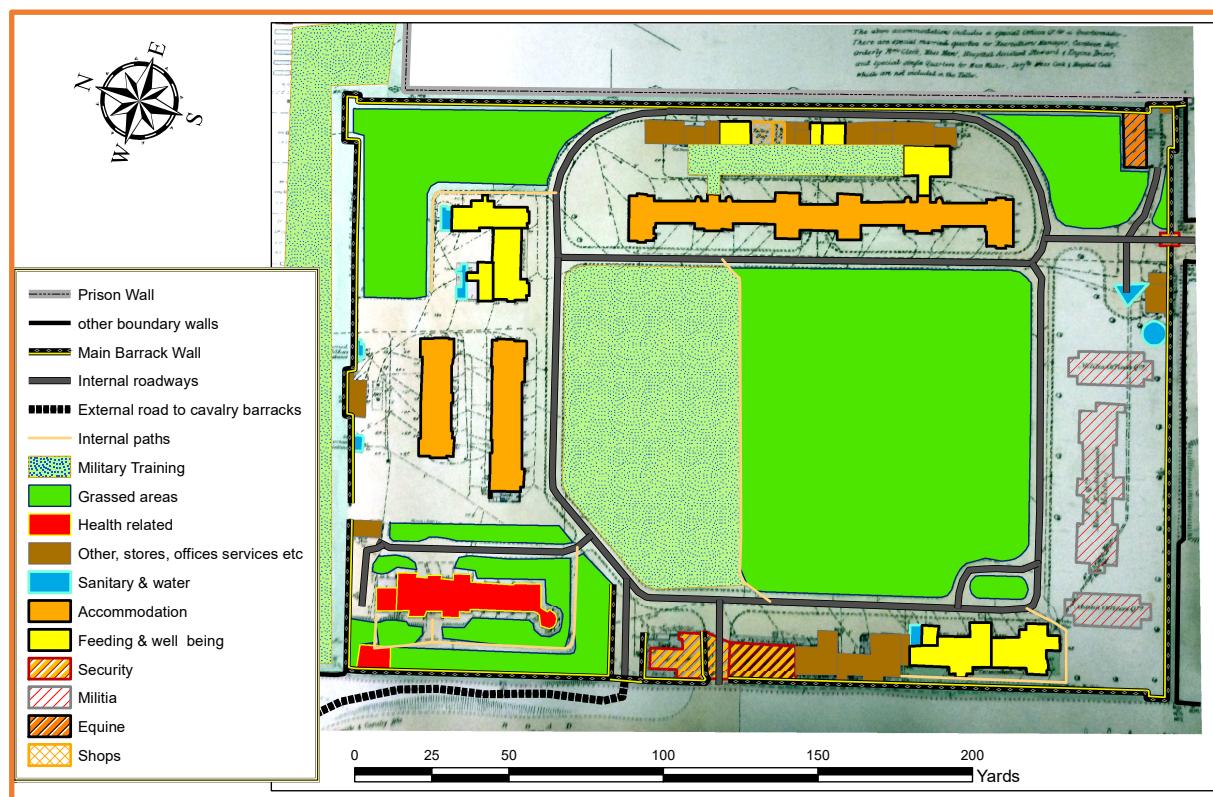
There was a considerable number of persons accompanying the detachment, and on arrival at the Vauxhall Station a rush was made for the platform but this was speedily cleared, and kept for the men and their friends. Among those who

⁷⁵ TNA WO 78/4566, Armoury Barracks, South Town, Great Yarmouth, 1878. WO 78/3412 Norwich Depot Barracks, 1892.

attended were some of the Artillery Officers, Major James, Major E. H. Combe, and several ladies. The men lost little time in taking their seats in the special which had been provided for them, amid leave-takings and the strains of the bands playing "Auld Lang Syne," the train steamed out of the station. The depot is under the command of Colonel Wood the officer commanding the Eastern Military District.⁷⁶

In the 1880s the importance of the Norwich area as a part of the military estate grew as the new Depot was built on the Heath on land made available through the City Council who wanted the benefits of a large military component in the local economy.

Figure 5.36: Britannia Barracks – one of the last 'Cardwell' Depots



The barracks illustrate the important functions of a Depot, albeit unusually with a role in local defence plans. As can be seen in Figure 5.38 the training aspect was given almost as much land as all of the rest of the depot. Norwich did incorporate the militia battalion and accommodation was built along the southeast side of the barracks. Health and well-being were given prominence with a large hospital included on the

⁷⁶ *Norwich Mercury*, 14th April 1888.

site. Unlike most other depots the Keep at Norwich had a pitched roof rather than the traditional crenelated style.

Figure 5.37: The Britannia Barracks Façade, ‘the Norman Shaw style, which is a surprising thing for barracks’. Sir Nicolaus Pevsner

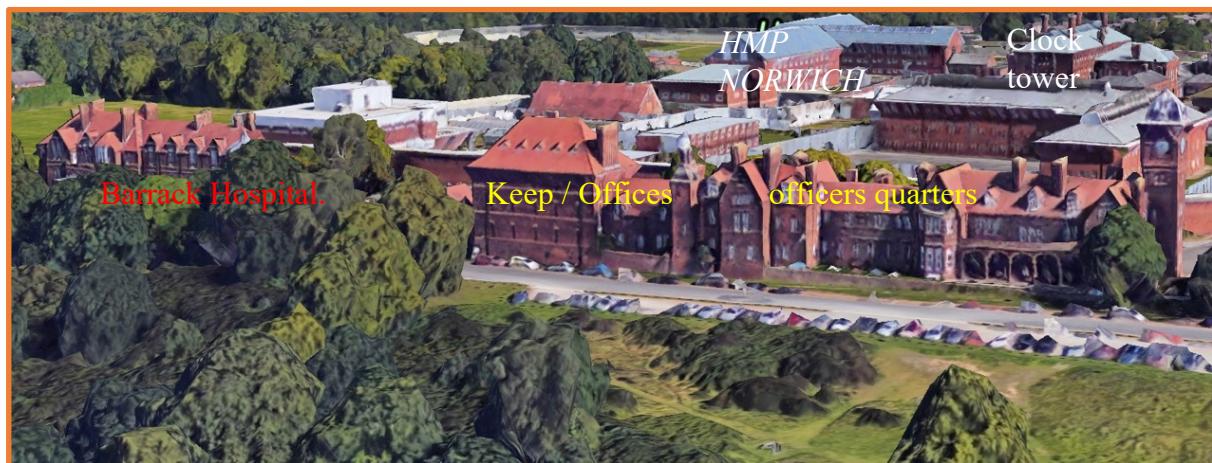
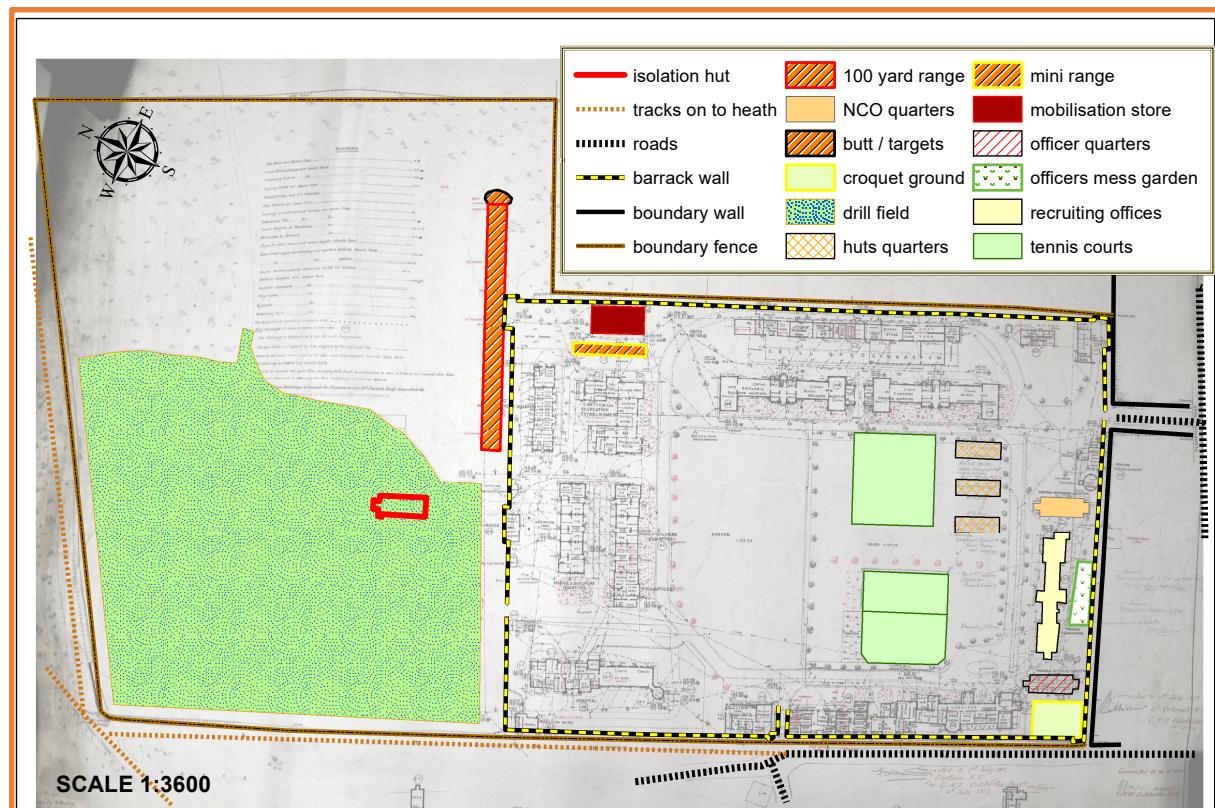


Figure 5.38: Britannia Barracks changes identified in the decade before the First World War showing a further focus on health, sport / physical exercise and a shift to a more defence plan role with the development of Mobilisation stores.



North East Norwich, and in particular the large area of Household Heath that was owned by the War Office and the adjacent common that was used for reviews and

exercises had a long history as a military landscape. Besides the two main barracks Norwich was also a city of volunteers and militia. While their footprint was small in terms of permanent buildings they were architecturally interesting and helped link with the community as symbols of the military in a city that always seemed to welcome military involvement. The local newspapers reported fully on local reviews and exercises.

As the hour of noon approached, the volunteers began to assemble their respective rendezvous. Many of the county corps arrived by rail, and marched through the intervening streets towards St. James', with their bands playing the most invigorating airs. In the meantime, thousands of civilians found their way to Mousehold, where on the first plateau, the large open space of level ground to the south of the butts. One side of the plateau had been fenced off, and within the enclosure the ground was preserved for the uninterrupted performance of the military evolutions.⁷⁷

Similar reports appeared over the next fifty years of drill and exercises on Mousehold Heath illustrating that volunteers, militia and regular army regiments used the rifle range, the War Office land and the common land that remained on the rapidly being enclosed Common. Some of these reports questioned why some land was leased at cost yet the War Office had the use of the Heath free.⁷⁸

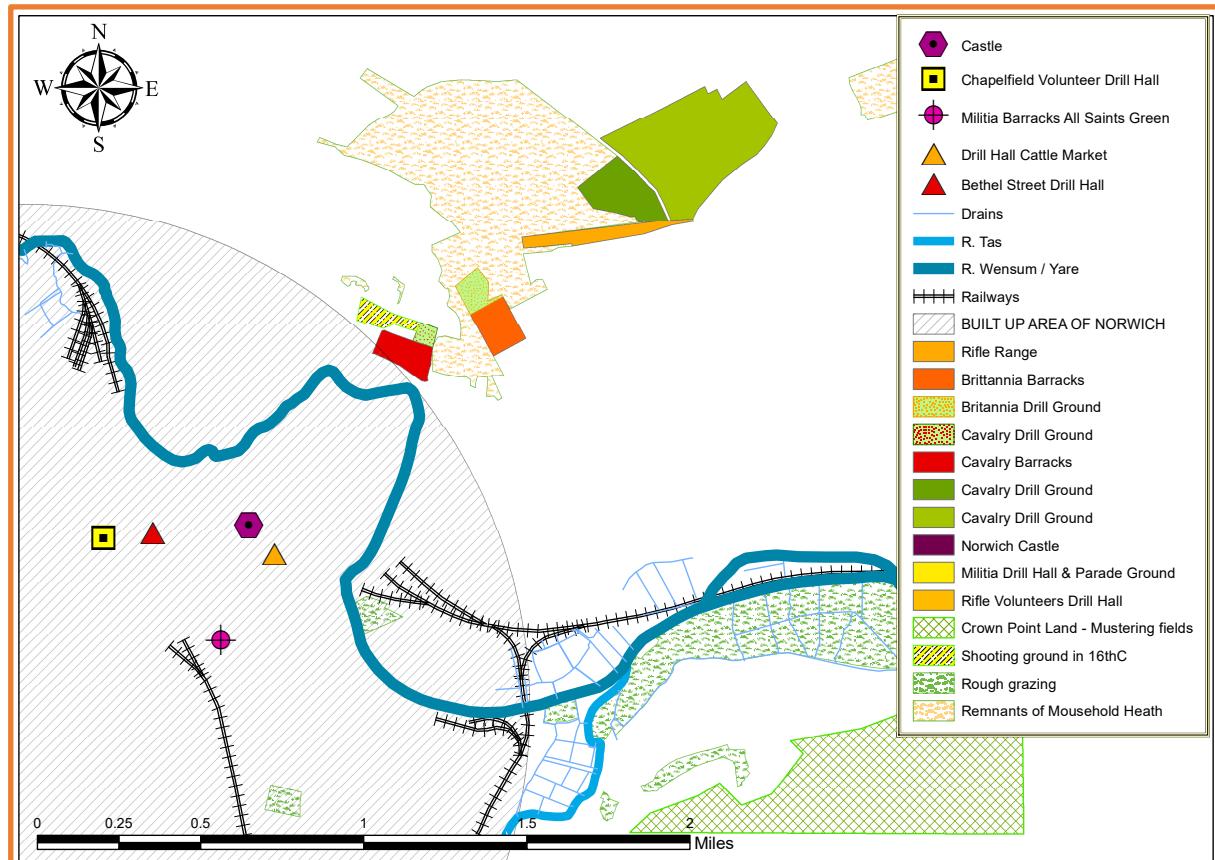
The northeast Norfolk development of the military estate illustrates an important growth in land acquisition and use over two centuries. But it also illustrates that permanence is relative and the military estate of this part of the Eastern Region ultimately dissipated leaving only monuments to that past military presence. Some of the original buildings remain, but with changed use, as with the Britannia Barracks, Southtown Barracks and the Naval Hospital in Great Yarmouth. Others, such as the Norwich cavalry barracks, disappeared but with subsequent use of the site shaped by the previous military footprint. However, for other sites the evidence relies on archival

⁷⁷ *Norfolk Chronicle*, Saturday 19 September 1863.

⁷⁸ *Norwich Mercury*, Saturday 17 September 1870; *Norwich Chronicle*, Saturday 4 October 1902; *Downham Market Gazette*, Saturday 4 June 1904.

evidence and maps such as for the artillery barracks in Great Yarmouth and the Norwich Cavalry Drill ground. This was a military landscape of 95 acres in 1862 growing to 120 acres during the second half of the nineteenth century, much of which remained in military use until the middle of the twentieth century but none of it remains part of the existing defence estate.

Figure 5.39: The Nineteenth-Century military landscape at Norwich



The cavalry barracks were condemned in the late 1800s and frequently cited as insanitary, and indeed pestilential. Men and horses had to be removed from them while some of the most flagrant defects were being remedied. It was decided to demolish the barracks and local civic and parliamentary voices persuaded the military authorities that the replacement should be erected in Norwich. Arnold-Forster (Secretary of State 1903-1905) was a great supporter of building the barracks to new design and Norwich donated land near the Britannia Barracks. The foundation-stone ceremony took place in 1905, with Arnold-Forster present, and the local politicians were content that the benefits of the military presence would continue. However, there was a change of government later that year and whether for financial reasons or because Arnold-Forster was so wedded to the Norwich project, his successor,

Haldane, would not support it. The barracks were never built and the old cavalry barracks was eventually repaired and made useful as additional accommodation for the infantry. It was probably at that point in 1905-06 that political wrangling or financial pressure sounded the death knell for Norwich as a long-term permanent military landscape in the way Colchester became.⁷⁹

Figure 5.40: Redundant foundation stone for the barracks that never were. (*Eastern Daily Press*, 7.03.1965 (Norfolk Regimental Museum)



The military landscape included a cavalry drill ground on the flat enclosed fields of the Heath. Its military uses remained as a First World War Airfield and in the Second World War as army camps and a Prisoner of War Camp. While the military presence in Norwich remained until the second half of the twentieth century it lost its strategic functions and eventually all of its military landscape other than in a few individual sites.

The reform impact on military land in Colchester

The 1872 Localisation Act confirmed Colchester as a nationally important centre for training when it was identified as the main Regional Training centre instead of a Regimental Depot. This established Colchester as the prime military site in the region giving it a wider role than as a regimental centre. It was a key location in the East's defence plans and in that role it required not only large scale accommodation but it

⁷⁹ Hugh Oakley Arnold-Forster, *The Army in 1906: A Policy and a Vindication*, (London 1906).

became an important training facility after recruits completed their initial training at the various regimental depots. So instead of there being about 100 acres of land as for the Norwich/Yarmouth developments, or Warley's barracks and camp of some 133 acres, Colchester already had over 400 acres of military land by 1878. James Stone provided a helpful early history of Colchester as a Military Town but missed the key point about the impact of the 1872 Localisation Act.⁸⁰

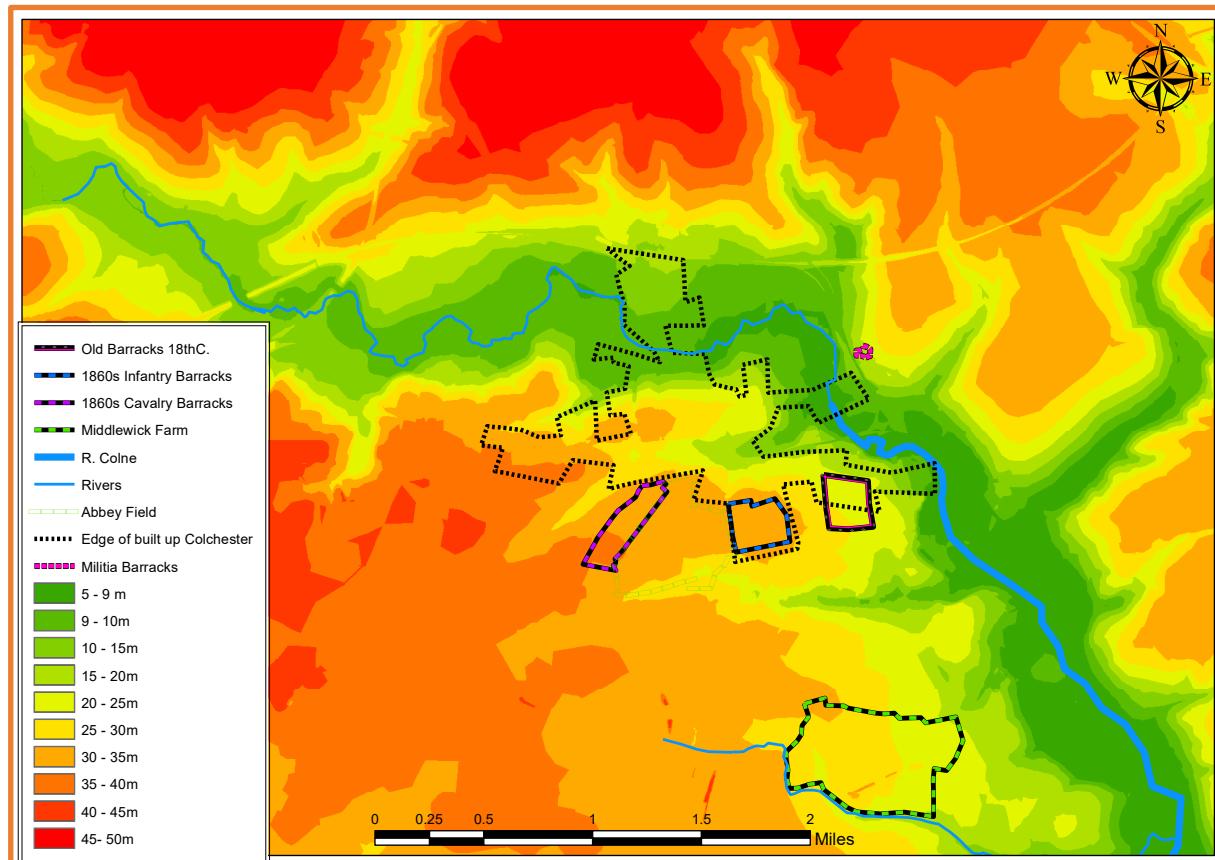
Colchester's location, at the lowest bridging point on the River Colne and roughly half-way between London and Norwich made it a military focal point from the Roman period and especially so since the late eighteenth century when its strategic importance was the fact that it was only 11 miles from Harwich. The location was clearly important but the large areas of common and heathland in the vicinity made it ideal for encampments and training on a large scale. Colchester's place as the focal point of the East's military infrastructure has been reinforced several times during its history. The Eastern Military HQ was moved to Colchester in 1797 and at that time the large huddled encampment pre-dated Aldershot as the largest camp to accommodate troops in mainland Britain.

The topography of the area that was developed for the military in the early nineteenth century to the south of Colchester is illustrated in Figure 5.41. The town was built on a terrace of land above the flood plain of the River Colne. The military sites developed on a spur of land just to the south. The first barracks, closest to the bridge over the Colne lay at the eastern end of the town. The next phase of development either side of Abbey Field on the southern edge of the town was on slightly higher well drained ground, with good water supply. The military also had the advantage of access to Abbey Field for training and recreation and access to the open heath land to the south of Middlewick Farm. The farm was later purchased for the development of Middlewick Ranges, in the middle of the nineteenth century, and this extended the military landscape from the southern edge of the town to the estuary of the River Colne and the coast 6 miles to the south.⁸¹

⁸⁰ James Stone. "Colchester". In; *Garrison, Ten British Military Towns*, ed. Peter Dietz, (London, 1986), pp. 3-17.

⁸¹ TNA T 1/15232, War Office: Middlewick: Construction Of Rifle Ranges. (1883); Wessex Heritage, Fingeringhoe and Middlewick Ranges, Colchester Training Area, DTE East, Essex, (March 2008).

Figure 5.41: The extent of the built up area of Colchester - topography and acquisitions of military land influence the shape of the town.

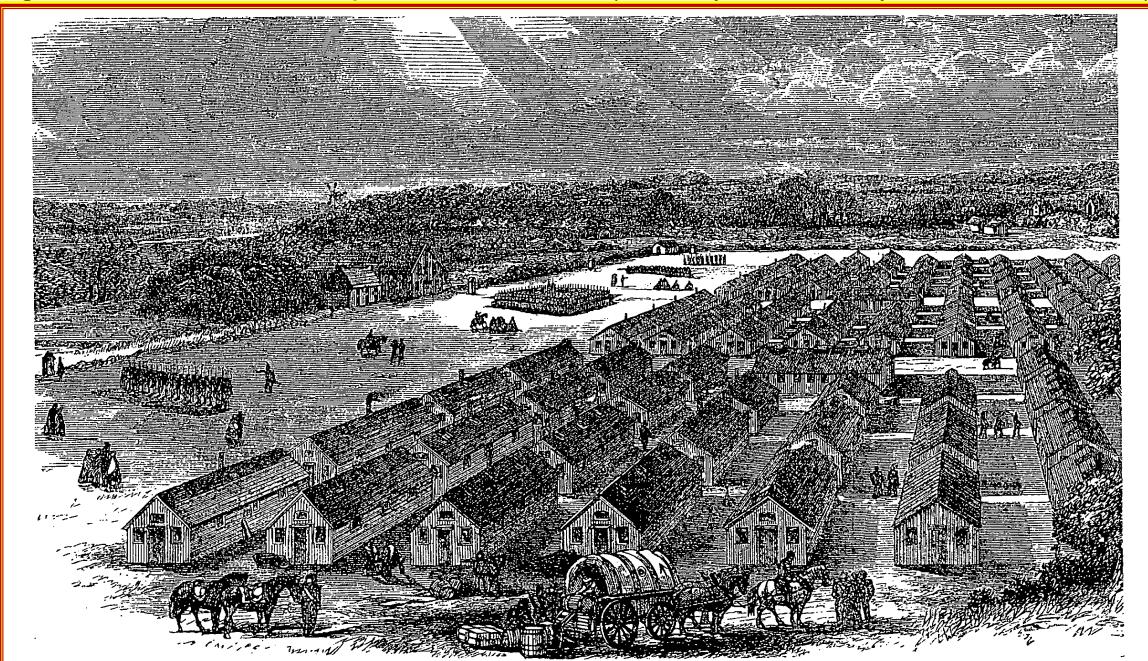


The area was used initially for staging camps for troops on their way to embark at Harwich for European campaigns or to rest on their return. The town grew east and west along the two spurs of land and later on land north of the river. Until the twenty-first century the development of the town to the south was constrained by the military estate. Virtually all land south of the town was gradually acquired by the military but the driver this time was as a location for training. It was technological factors, coupled with investment identified within the Cardwell reforms, that led to the large-scale expansion of the military estate and confirmed Colchester as a permanent military landscape through to the present day.

The period between the Napoleonic Wars and Crimea illustrates the challenges placed on military sites with a predominantly defence *raison d'être*. Once the defence threat reduced the demand for military accommodation in the area fell dramatically. The demand for land for defence purposes declined and the barracks on the eastern edge

of the town were disposed of for the development of what became known locally as Newtown. The sale of land took over 20 years to complete and left just 14 acres plus just over 100 acres of Abbey/Ordnance Fields for training and camps. The number of troops housed there varied but only 602 men and 16 officers were there in 1821.⁸² The British German Legion was raised for service in the Crimean War, under the provisions of the 1854 Enlistment of Foreigners Act; 10,000 troops were billeted in the infantry barracks and in tented encampments that year. By the end of the Crimean War a large wooden infantry barracks had also been erected on Ordnance Field with 5,000 troops by 1856.

Figure 5.42: Colchester camp and hutment 1856 (A History of the County of Essex: Vol9. BHO)

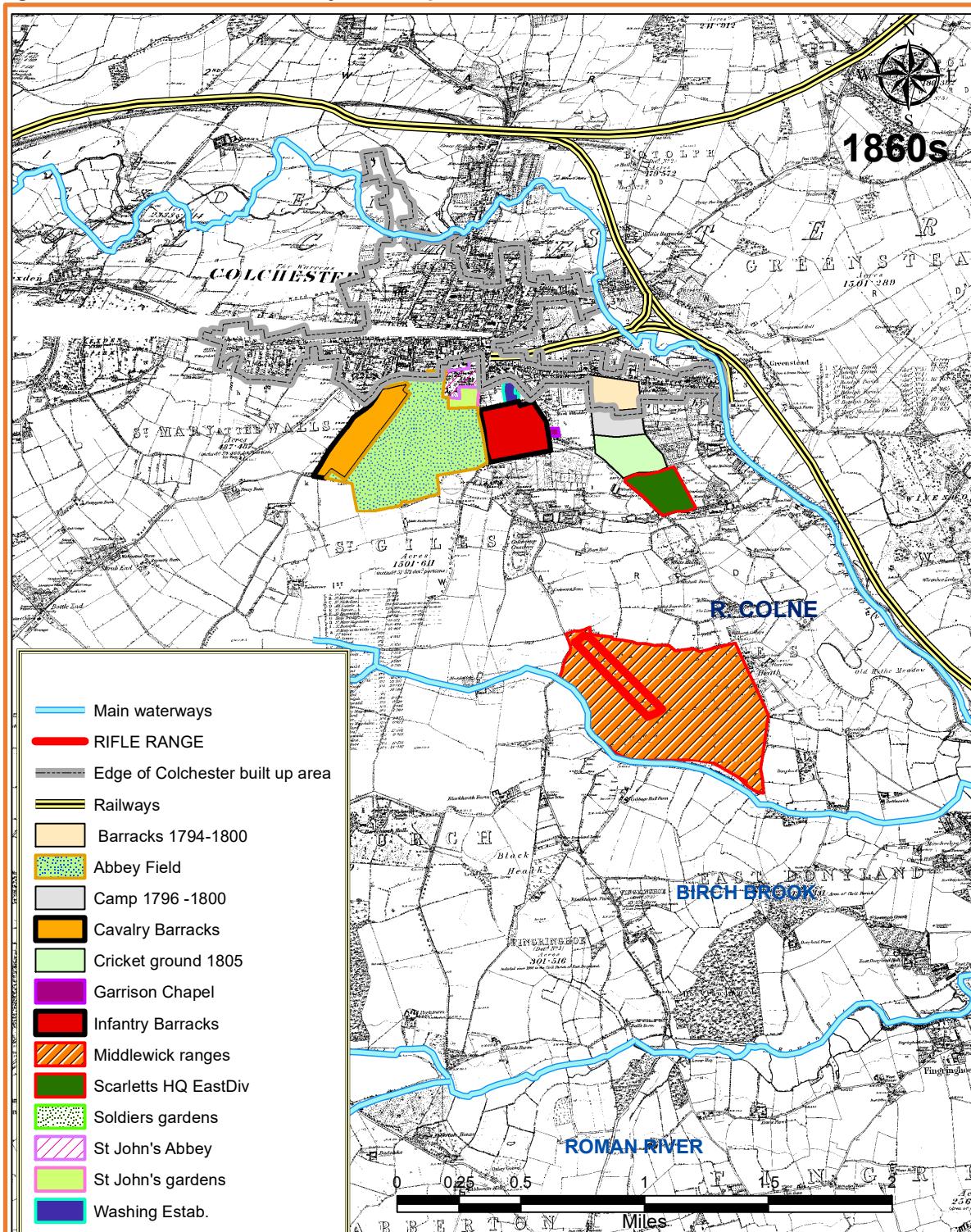


After the Crimean War the government decided that some permanent camps were necessary, among these the camp at Colchester was included.⁸³ It was at this time that the garrison church was built to accommodate 1,500 men. In 1857 the government purchased the 167 acre Middlewick Farm for use as a training area and a rifle range because of the inconvenience of holding military exercises at Wivenhoe Park on the other side of the river.

⁸² A. P. Baggs, et al, 'Barracks', in A History of the County of Essex: Vol9. BHO <http://www.british-history.ac.uk/vch/essex/vol9/pp251-255>.

⁸³ James Stone, "Colchester" in, *Garrison, Ten British Military Towns*, ed. Peter Dietz, (London, 1986) p. 14.

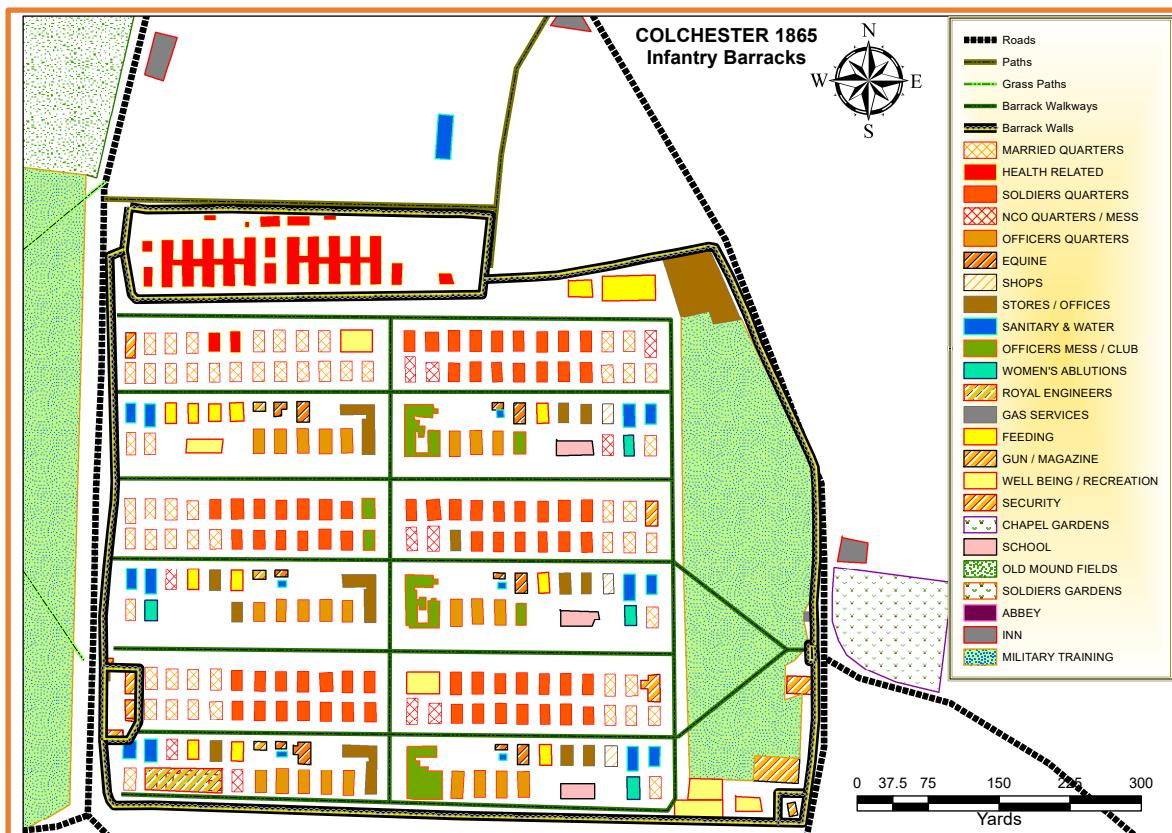
Figure 5.43: Colchester's military landscape in the 1860s.



In 1858/59 accommodation for army families was provided in rented cottages in Black Boy Lane at the Hythe, the historic port for Colchester. In 1860 the purchase of St. John's farm and the Abbey gardens added 156 acres to the estate. By the time of the

Land and Tenements return in 1862 Colchester recorded 416.85 acres of land used by the military, equivalent to 60% of the Northern Region estate discussed in Chapter 4. Permanent married quarters were built in 1862 on another 18 acres acquired south of the Abbey gardens and a gymnasium was built on the same site.⁸⁴ By 1864 the garrison had doubled in size with brick-built barracks for 2,500 men erected in Butt Road (Figure 5.44).

Figure 5.44: Colchester's Infantry Barracks (TNA WO 78/2301 Colchester Barracks)



At that time an Army medical report said that the ratio per 1,000 of mean strength of service men suffering from Venereal Disease in Colchester was particularly high at 464.⁸⁵ The admissions into hospital by these diseases were 330/1,000 soldiers. The Contagious Diseases Act passed in 1864, was an attempt to reduce VD (syphilis) among soldiers and sailors, a disease for which there was as yet no diagnostic test and no safe medical remedy. This empowered police to arrest women whom they thought were prostitutes in selected ports or army towns and to compel them to

⁸⁴ Colchester's Military Heritage - <http://www.camulos.com/militaryheritage/militaryheritage5.htm>.

⁸⁵ Jane Pearson, Maria Rayner, *Prostitution in Victorian Colchester: Controlling the Uncontrollable*, (University of Hertfordshire, 2018).

undergo a medical examination.⁸⁶ These health issues not only affected the effectiveness of the troops but created significant social issues in the town that made the expansion of the garrison a contested issue and not just seen as an economic or military benefit. Prostitution remained a concern and clergymen in the town submitted a petition against the re-licensing of inns that kept brothels, with the result that 13 pubs in the town had their licenses suspended until investigations had been carried out into their conduct. To avoid local leniency, police officers were recruited from the Metropolitan Police force, and normally operated in plain clothes to avoid the suspicions of the prostitutes and the landlords. It was unusual for the local press to cover such a distasteful subject, mainly out of a fear of upsetting the tender sensibilities of its readership. However, a report of the court proceedings, which concerned prostitution at several houses, was included in some detail.⁸⁷

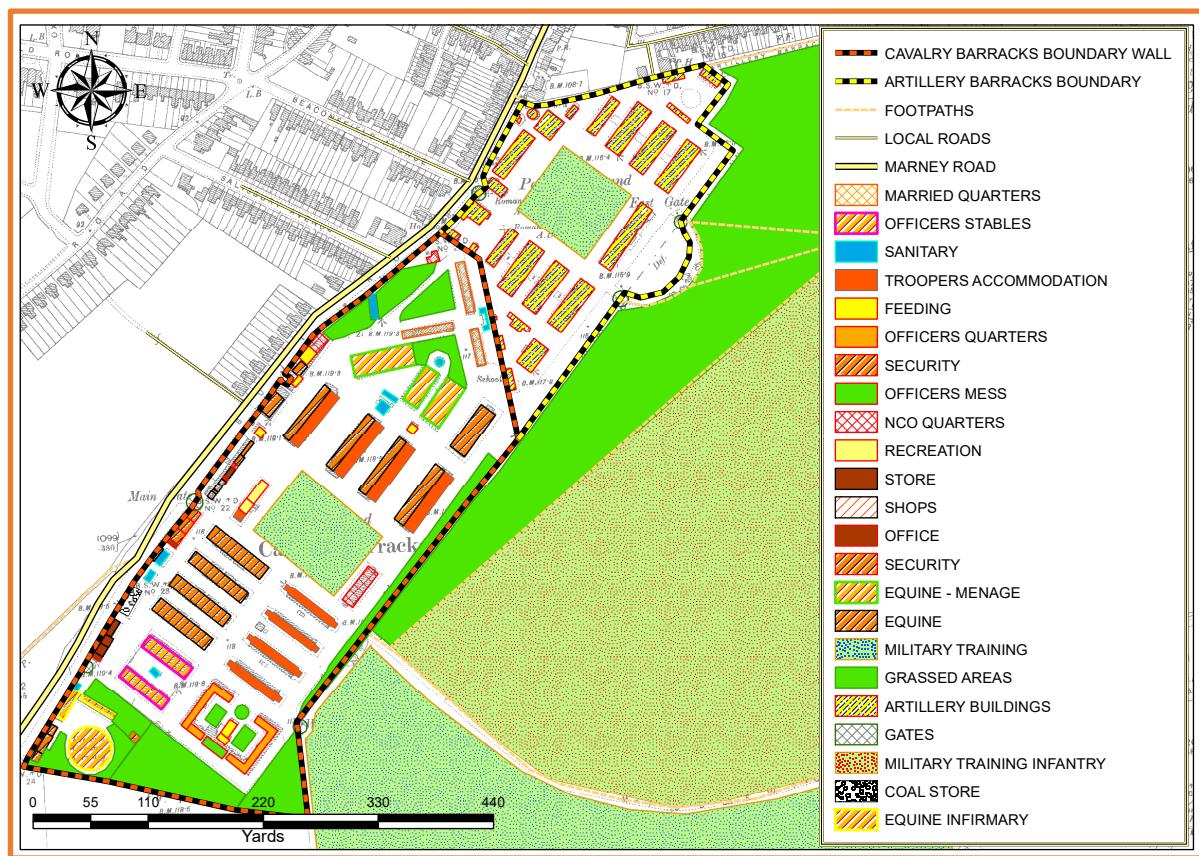
In 1866 Colchester was confirmed as the headquarters of the newly created Eastern District. In the early 1870s the garrison was further enlarged by the building of artillery barracks, later named Le Cateau, north of the cavalry barracks (Figure 5.45). The parade ground lay between the infantry barracks on the east and those of the cavalry and artillery on the west. By the time of the Land and Tenements Return in 1878 the area of military land had increased by a third to 559.6 acres. The War Office secured funding to expand the Colchester ranges through the Annual estimates 1883/84, for the construction of a Rifle Range at Bedford at a cost of £541 but owing to difficulties over the right of firing over the ground in the rear of the targets, that development could not be carried out. As an alternative the number of ranges at Middlewick were increased from 6 to 12. This reinforced Middlewick's place as the regional ranges for the greater part of the Troops in the District.⁸⁸ Military land grew again by two thirds when the next Return, eighteen years later in 1900 was reported. By then land in military use in Colchester was recorded as 937.5 acres.

⁸⁶ Jane Pearson, Maria Rayner, *Prostitution in Victorian Colchester*, (University of Hertfordshire, 2018).

⁸⁷ Ibid.; A. P. Baggs, *A History of the County of Essex*: Vol 9, British History Online, pp. 251-255.

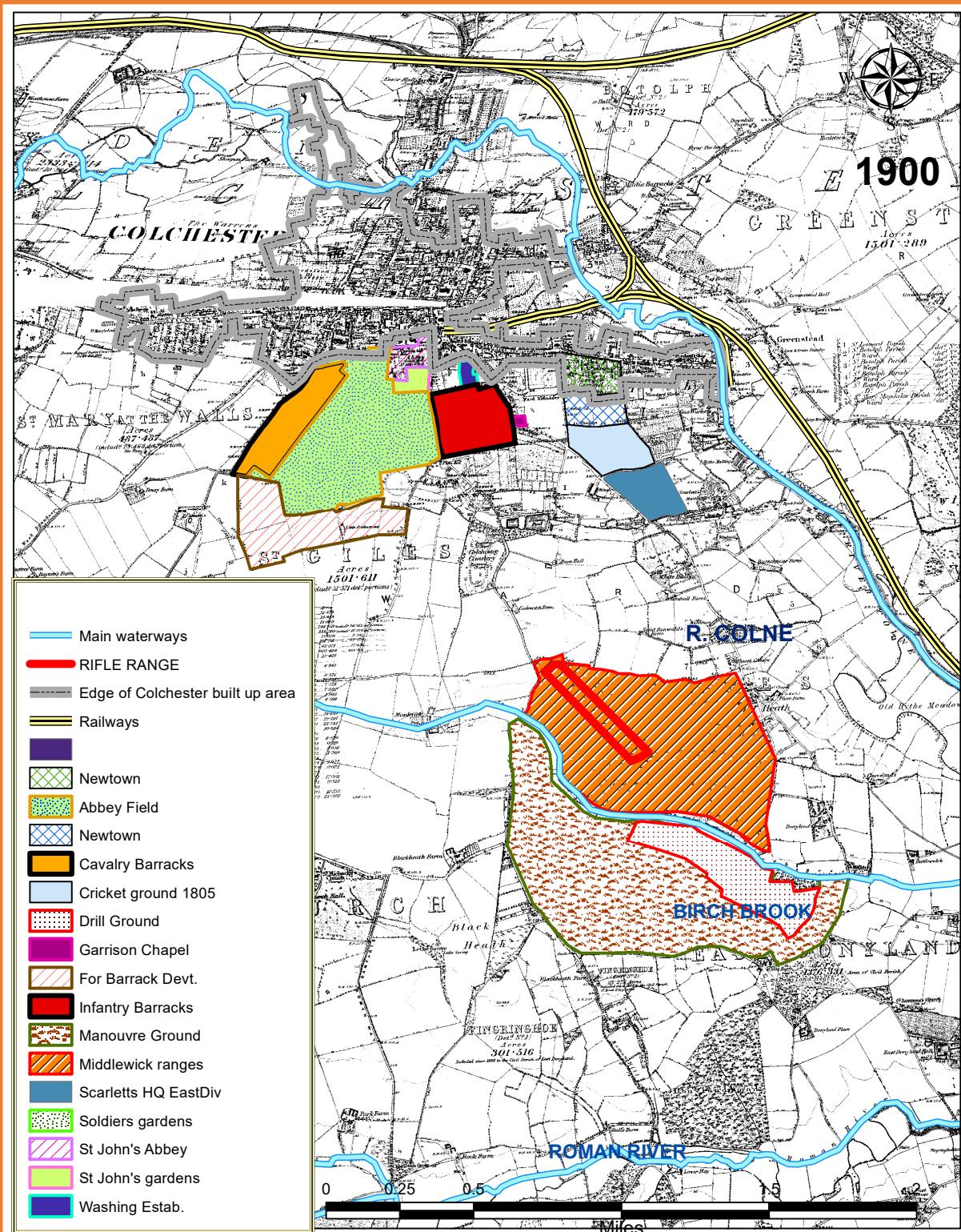
⁸⁸ TNA WO T1/15232, Accommodation, Works, Middlewick: Construction of Rifle Ranges.

Figure 5.45: Colchester's Cavalry and Artillery Barracks (TNA WO 78/2301, Colchester Barracks)



The Colchester Area remains a significant permanent military landscape unlike most of the military sites from the nineteenth century in the rest of the Eastern Region. It provides an excellent illustration of the history of land acquisition for military purposes. It saw rapid growth and rapid decline as military priorities changed in the first half of the nineteenth century and then steady but major land acquisition as military priorities and political priorities aligned in terms of a single regional training centre in the second half of the century. Until the search for the 'Northern Aldershot' in the North of England there was nowhere as large as the development at Colchester other than at Aldershot, The Curragh and Salisbury Plain at the end of the century.

Figure 5.46: Colchester Barracks and the military landscape by 1900.



However, as was set out in the Northern Case Study, for sheer impact on the extent of land acquisition there is little to compare with the effect of land required for artillery ranges and weapons development as examined in the next section.

5.7 Technology and strategy

Figures 5.47: Rifle ranges at Grantham (Lincolnshire)

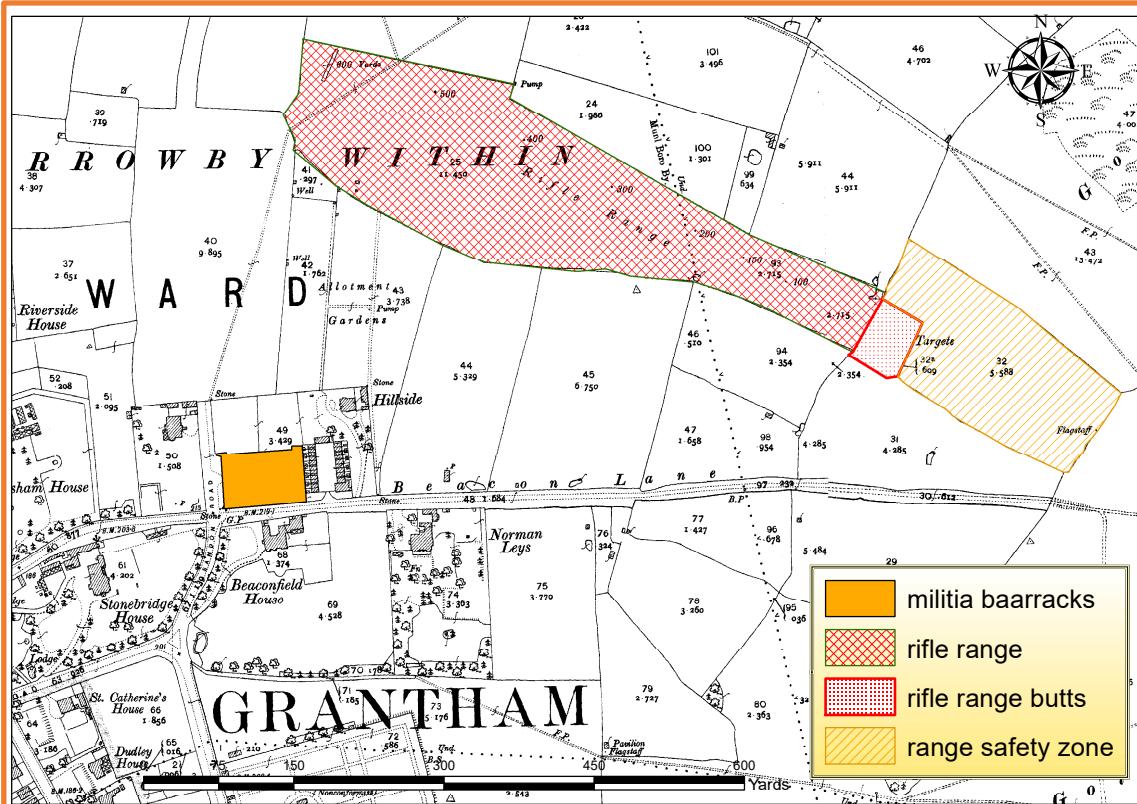
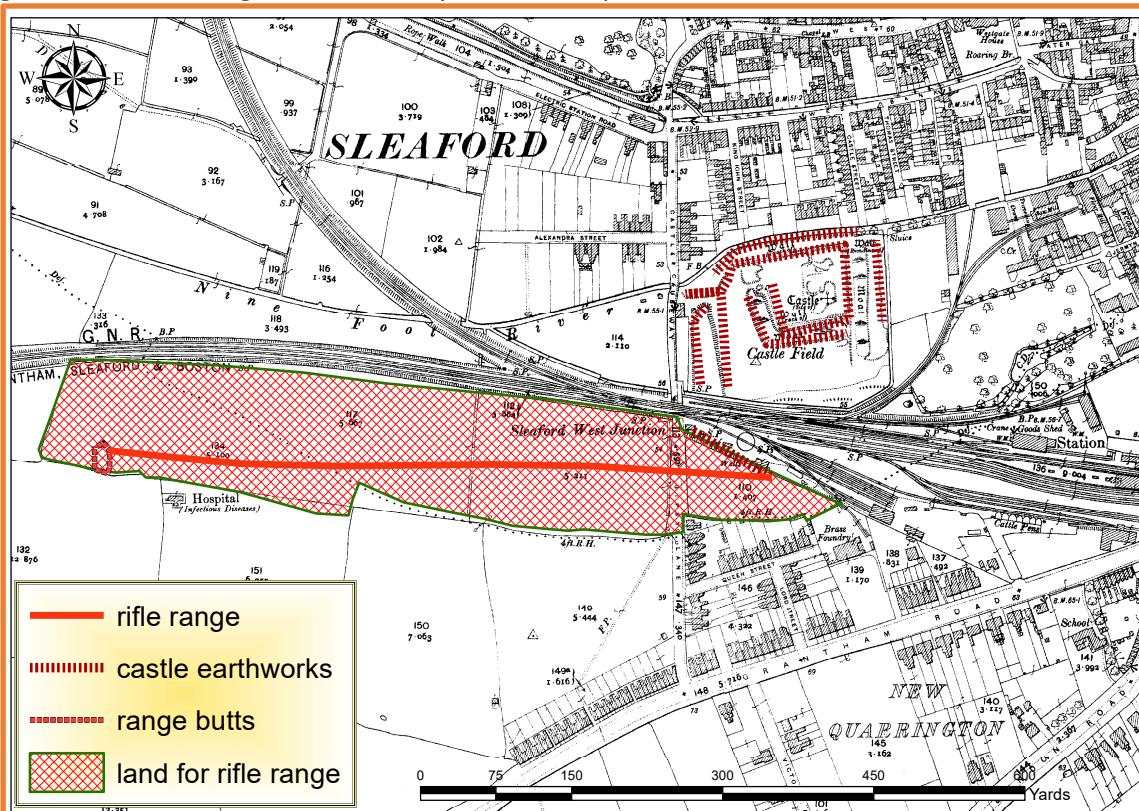


Figure 5.48: Rifle ranges at Sleaford (Lincolnshire),



Most of the early and mid-nineteenth-century ranges were constructed for local volunteer or militia units and these appeared in the landscape from 1859. Many were on leased land for only a matter of a few decades and in most places left little imprint on the landscape. Without the North's access to the hills and moors of the Pennines, ranges in the East were often on local commons or heaths as at Norwich, Beccles, and Lincoln, or on relatively open farmland as at Bury St Edmunds and Grantham. As in the North Region some were tucked in alongside railway embankments, as at Sleaford (Figure 5.48) and at Brentwood and larger ranges were constructed from the middle of the nineteenth century along the foreshore at Great Yarmouth and Shoeburyness. The rifle range in Ipswich was originally located along the racecourse and a similar location was chosen for south Great Yarmouth on a spit of land known as South Denes. As that area developed for industry and housing, the range was moved to an area on North Denes along the shingle and sand ridges between the railway line and the sea. Later adverts were placed in local papers seeking land for a rifle range but no evidence of another range has been found.

From 1804 the town of Enfield on the edge of the Eastern District became synonymous with the rifles used extensively by the British Army. As the accuracy and range of these weapons improved troops required greater practice in marksmanship and consequently there was a burgeoning of rifle ranges in the middle of the century. As discussed in Chapter 3, the introduction of more powerful rifles in the late 1880s and 1890s created considerable safety issues for the existing ranges many of which were too short and had insufficient safety margins of land beyond the butts. As the land requirements grew with the changes in the range of rifles and artillery there was a gradual rationalization of larger more isolated ranges. At the same time public objections to having dangerous facilities in or near their homes or livelihoods also grew. Admiral Sir George Strong Nares chaired a Board of Trade inquiry at Landguard in 1887 after local objections were raised to the extension of local byelaws for the ranges at Landguard Fort. It was asserted on behalf of the public of Felixstowe and Walton, 'that the proposed rules will seriously endanger the interests of the fishing and

boat-owning community, besides giving no adequate safety to life and property.⁸⁹ The byelaws were upheld and allowed for firing with the same red flag warnings as at other ranges. However, local objections continued for many years after this and an uneasy relationship persisted with military and community landscape needs in constant tension.⁹⁰ The demand for land for ranges was a frequent item in the newspapers in the 1870s to 1890s.

Safety concerns came to a head in 1887 when his Royal Highness the Commander in Chief set out that he required reports from all general officers commanding military districts giving information on the results of the permission granted earlier that year for volunteers to shoot at short ranges with miniature targets. The reports were mainly to deal with the question as to how far the system tended towards obtaining immunity from danger on the ranges.⁹¹ A Committee under Sir Evelyn Wood, V.C., commander of the Eastern Military District was set up to look into the issue of access to rifle ranges and especially the difficulty experienced, mostly in northern England, by Volunteer Corps belonging to the larger towns. The Select Committee Report on the difficulties in the acquisition of adequate rifle range accommodation reported in 1890.⁹² Nationally out of 160 ranges in use only 30 were considered safe for practice with the magazine rifle. The impact is illustrated clearly in the number of closures of ranges across the Eastern District.

This led to a demand, particularly in the House of Lords, for compensation for the Volunteer Corps and assistance in developing new ranges. The demands for ranges close to Volunteer offices or headquarters needed to be balanced with the need for safety and increased inspection. The Secretary of State for War responded that it was unfair to blame the increased range of the .303 rifle as solely responsible for the

⁸⁹ *East Anglian Daily Times*, Thursday 18 August 1887.

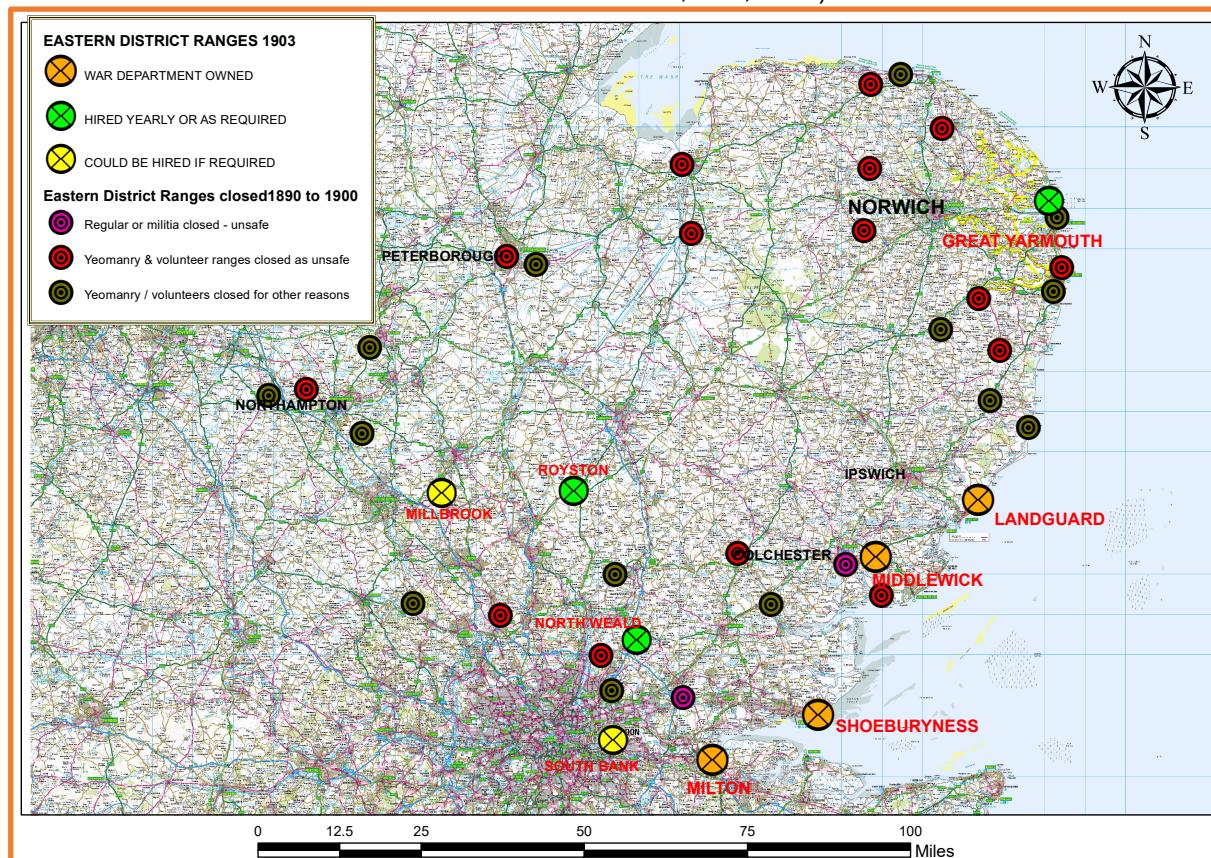
⁹⁰ TNA BT 297/866, Landguard Rifle Range: memorials of objections thereto, 1887-1948.

⁹¹ *Manchester Courier and Lancashire General Advertiser*. Tuesday 15 November 1887.

⁹² PP, 1890/'91, Select Committee on Rifle Ranges, Report (C.233).

problems. He identified two new circumstances as contributing to the situation. One was the rapid spread of the population in many parts of the country, and 'waste-places' had been built over. Secondly there was a stricter inspection process in place. He went on to admit that finding suitable land for ranges was becoming more difficult as competition for land increased.⁹³

Figure 5.49: Ranges in The Eastern Region 1903 and the impact of range closure 1890-1900 because of safety concerns with the use of the Lee Metford Rifle. (PP, Return of Rifle-Ranges closed in Eastern District since issue of Lee-Metford Rifle, C59, 1900).



However, despite the fact that the ranges had a significant local impact and added several hundred acres of land to the military estate, the single largest series of events that led to the military estate in the Eastern Region growing rapidly was the development of Shoeburyness as an artillery range. In 1862 the military land holding in Shoeburyness was 1,246.5 acres, a large site for that time but only a fraction of what was to come. With the expansion during the 1860s and 1870s the extent of land

⁹³ Hansard – HLdeb, Volunteer rifle ranges, (vol. 74 cc977-8, 17 July 1899).

acquired had grown to 6,727.25 acres just eighteen years later in 1878 and to 19,546.5 acres in 1900.

The impact of artillery, the significance of Shoeburyness

Problems for both field artillery and garrison artillery emerged in the decade before Crimea. This related to poor training and the limitations placed on the batteries in terms of ammunition that could be expended in training exercises.⁹⁴ In addition to the growing inappropriateness of the ranges at Plumstead (near Woolwich), where the land was still used by farmers, claims were made for damage to livestock and practice delayed by haymaking. The firing range was only 1,200-1,500 yards and new larger guns required ranges of over 3,000 yards. Several attempts were made to realign the range but no great improvement could be found and land ownership involved negotiations with 29 landowners. In 1843 the committee of Ordnance officers concluded that no hope existed of finding an adequate range nearby, and that a start should be made elsewhere:

Who would not prefer the creation of an enlarged and permanent establishment adequate to the pressing demands of the service and worthy of the nation to resorting to an inefficient and derogatory expedient.⁹⁵

Lt. Col Dansey (RA) set out the minimum requirements clearly as a site long enough for the greatest known distances achieved by artillery, and wide enough for all deflections. In 1844 Sandwich flats in Kent were examined and then in 1845 the focus moved to Landguard but both were overshadowed by a report setting out the merits of the sands of Shoeburyness. As the report noted the location had the benefit of:

the tide being off the area under consideration for eighteen hours a day, shots

⁹⁴ Hew Strachan, *From Waterloo to Balaclava: Tactics, Technology and the British Army, 1815-1854*, (Cambridge, 1985), pp.109-110. 'Until a reasonable supply of practice ammunition bred a certain confidence in the use of the gun, little would be achieved. In 1848, an increase to eighty rounds per gun (per year), or forty per mortar, was sanctioned.'

⁹⁵ Ibid., Strachan, *From Waterloo to Balaclava*, p.111.

could on the whole be easily observed, and vessels of sixty to seventy tons could steam from Woolwich in seven hours to discharge any equipment that might be required.⁹⁶

By the end of 1847 the first rockets had been fired on the embryonic ranges, but it was not until 1849 that more land was purchased, and troops were able to construct temporary accommodation. While the Lords of the Manors leased their land there were several problems relating to fishing rights and development was slow. The extension of the ranges across the foreshore had to be negotiated with three manorial owners.⁹⁷

In the early 1850s the officers' mess was set up in the former Coastguard station on what is now Mess Road, and a series of houses were built alongside, facing the sea, for the commandant and other officers. In the early 1850s the possibility of developing the site at Woolwich was again considered but Henry Hardinge became Master-General of the Ordnance on 5 March 1852 and threw his weight behind Shoebury as the best location for the best artillery ranges in the nation. Further land was purchased and 'The range was now said to be 5 miles of sand and the same extent of beach, and throughout the summer of 1853 two companies were stationed there, engaged in experimental firing. further land was purchased in 1855.'⁹⁸ The mid nineteenth century saw the introduction of the wrought iron rifled gun firing an elongated projectile and the Ironclad Warship leading to a period of battle between gun and armour.

In the wake of concerns about training and effectiveness of British gunnery during the Crimean War the Royal Artillery School of Gunnery was established at Shoeburyness in 1859.⁹⁹ The Horseshoe Barracks and various other amenities were added and eventually in 1862 Shoebury's range was guaranteed by Act of Parliament. On the eve of the First World War the War Office held 20,000 acres of foreshore along this coast.¹⁰⁰

⁹⁶ Strachan, *From Waterloo to Balaclava*, p.111.

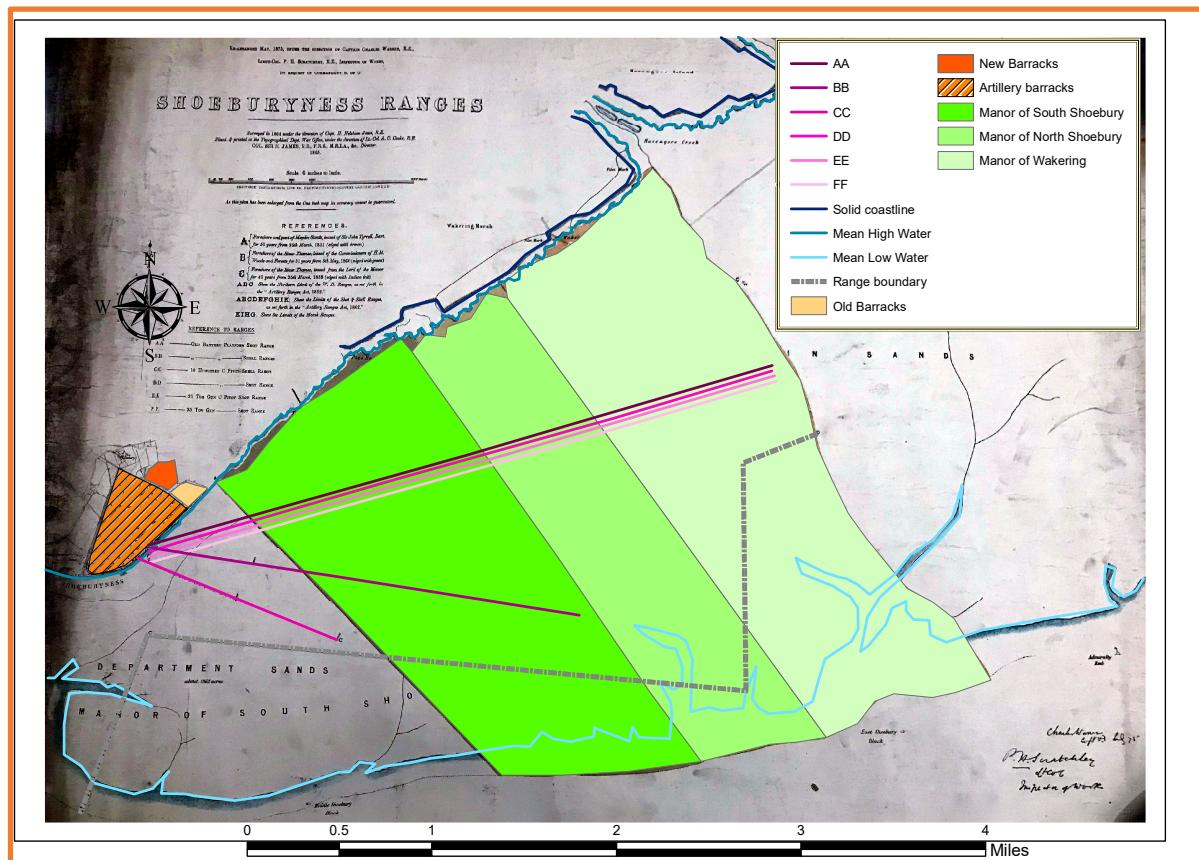
⁹⁷ TNA WO 78/2906, Shoeburyness 2 Plans of Rifle Range, 1865.

⁹⁸ Strachan, *From Waterloo to Balaclava*, p.112.

⁹⁹ Childs, *The Military Use of Land*, (Bern, 1998), p.116.

¹⁰⁰ Ibid., Childs, *The Military Use of Land*, p.192.

Figure 5.50: Shoeburyness manorial ownership 1865.



KEY:

Manor of Wakering – 1850 acres of Foreshore and part of Maplin Sands, leased of Sir John Tyrrell, Bart. For 50 years from 25th March, 1851

Manor of North Shoebury – 1000 acres of Foreshore of the River Thames, leased of the Commissioners of H.M. Woods and Forests for 31 years from 5th May, 1860

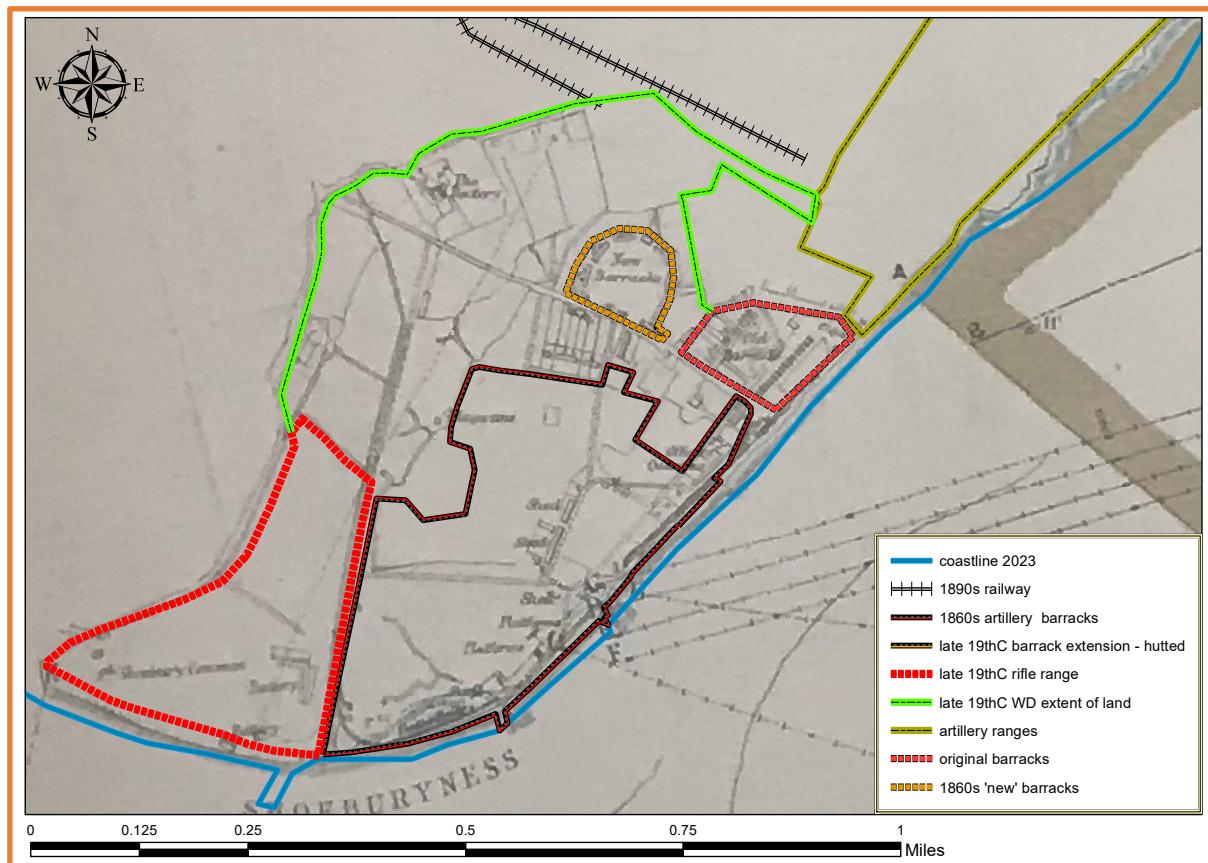
Manor of South Shoebury – 1800 acres of Foreshore of the River Thames, leased from the Lord of the Manor for 40 years from 25th March, 1852

A further 1862 acres was part of the War Department Sands south of Shoebury and was part of the South Shoebury Manor lands. **The Range Boundary** sets the limits of the W.D. Ranges, The limits of the Shot & Shell ranges and the limit of the Marsh Ranges, as set out in the "Artillery Ranges Act, 1862."

The Ranges are marked AA to FF:

AA - Old Battery Platform Shot Range; BB - Old Battery Platform Shell Ranges; CC - 10 Howitzer C Pivot-Shell Range; DD - 10 Howitzer C Pivot Shot Range; EE - 25 Ton Gun C Pivot Shot Range; FF - 35 Ton Gun C Pivot Shot Range.

Figure 5.51: Phases of the development of the militarised landscape Shoeburyness.



These events led to the expansion of lands and a major building programme including the old barracks being replaced by new barracks to the north of the artillery offices, stores and quarters. The need to extend capacity for the artillery at Shoeburyness, which had first been accommodated in the Artillery Ranges Act of 1862,¹⁰¹ was introduced in the Artillery Ranges Act of 1882. This land was defined in the Act as all the land and foreshore between high and low water mark that was part of the lands called Maplin Sands and Foulness Sands adjacent to the lands described in the schedule to the Artillery Ranges Act, 1862.¹⁰² The 1862 Bill set out the need to ensure that the firing area was kept free of waterborne craft between high and low-water, but it also ensured that previous manorial privileges were safeguarded:

Nothing in this Act contained shall be construed to prevent the Entry of the Lords or Ladies of the Manors of South Shoebury and Wakering, their respective

¹⁰¹ PP, Bill to extend Artillery Ranges Act, (C.127, 1862),

¹⁰² Ibid.

Servants or Agents, upon the Beach or Shore for the Purpose of exercising their Manorial or other Rights thereon.¹⁰³

Figures 5.52: The Horseshoe “New” Barracks –now converted to housing.



Figures 5.53: Entrance to The Horseshoe Barracks.



Figures 5.54a and 5.54b below illustrate how Shoeburyness became a settlement shaped by the changing requirements of the military.¹⁰⁴

¹⁰³ PP, Bill to extend Artillery Ranges Act, (C.127, 1862).

¹⁰⁴ TNA WO 78/2431 Map, Shoeburyness New Ranges, WD buildings.

Figure 5.54a: Shoeburyness, a settlement shaped by the changing requirements of the military

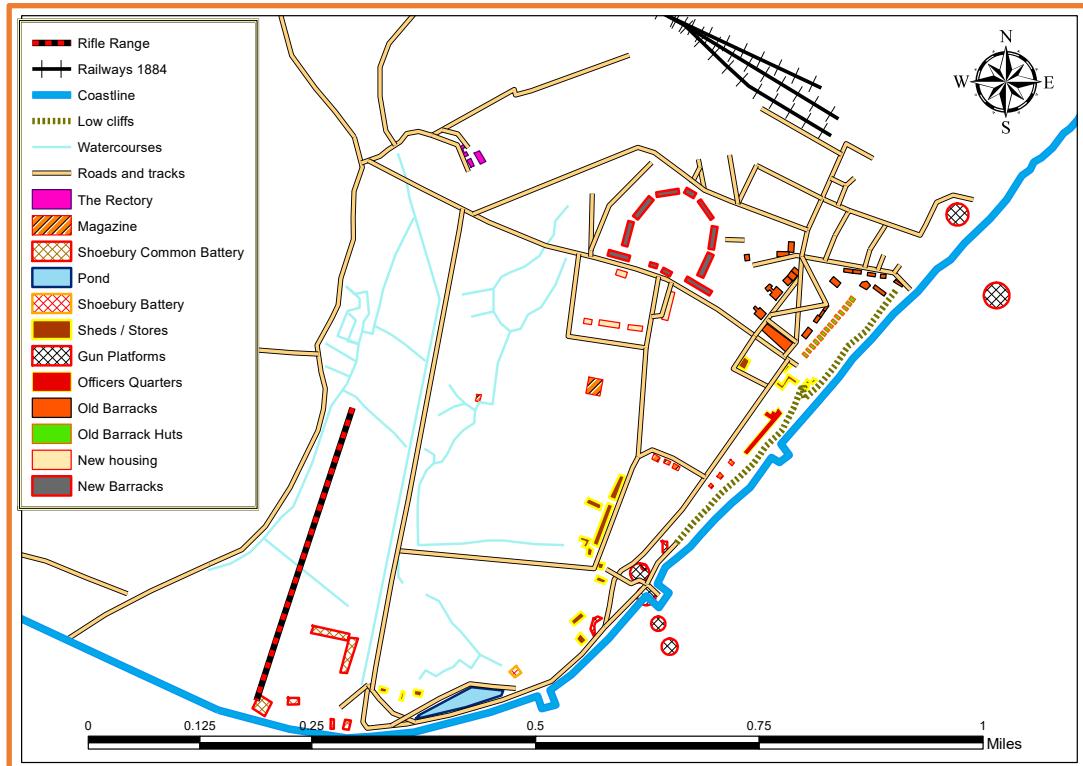
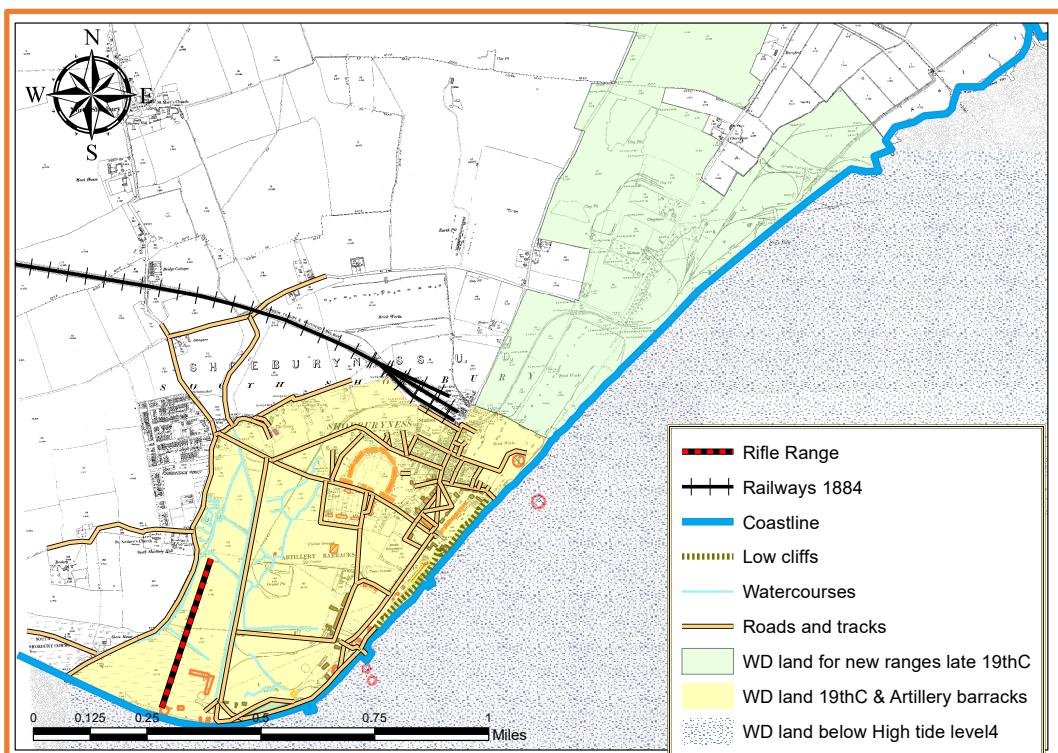


Figure 5.4b: Shoeburyness, a landscape shaped by the changing requirements of the military



Shoeburyness became, in effect, Woolwich by the sea, where safer facilities could be

developed to meet the changing technological sophistication of artillery. Not only were the artillery units accommodated here but there was the need for barracks to accommodate troops defending the local facilities and further accommodation was required to house those sent to Shoeburyness for training and practice.

In the second half of the nineteenth century Shoebury grew from being a small fishing village to become a large garrison at the gateway to London's defences. Over the years that followed Shoeburyness was integral to the development of new and improved artillery. As a result, more space was required for this work to continue, and from 1889 the establishment expanded on to a 'New Range' to the north-east, which encompassed Foulness and Havengore. Despite much criticism about the suitability of Shoeburyness as the location for a School of Gunnery as field firing became more important and the fixed coastal site reduced in overall importance to the Royal Artillery it is interesting to note the longevity of its militarised landscape.¹⁰⁵ While Shoeburyness became a commuter settlement at the end of the London to Southend railway during the twentieth century it has retained a strong imprint of a military landscape.

Figure 5.55: Heavy Quick Firing Battery, 1899; for coast training with two 6" and two 4.7" guns mounted on top.



¹⁰⁵ Major-General Sir Charles Callwell and Major-General Sir John Headlam, *The History of the Royal Artillery, Vol 1, 1860-1899*, (Woolwich, 1931), p.238.

Manufacturing explosives

While gunpowder was manufactured in several locations around Britain it was only at the large site at Ballincollig in Ireland, Marchwood near Southampton and 6 locations in the Eastern Region that they have left significant monuments to their dangerous activities.¹⁰⁶ Gunpowder was the only explosive available for military use and for blasting in mines and quarries until the mid-nineteenth century. Modern warfare was impossible without gunpowder; it fired muskets, cannon and mortars, rockets and siege guns. Armies and navies could not fight or operate without it. Two government manufactories in England were located either side of the Thames Estuary at Waltham Abbey and Faversham. From there gunpowder was taken to eight magazines sited around southern England which in turn issued smaller quantities of gunpowder to the numerous forts, depots and fleets which required it. Of these magazines Purfleet was by far the largest. The others were located at Tilbury Fort; Upnor Castle; Priddy's Hard and Tipner Point (Portsmouth Harbour); Keyham Point (Devonport) and Picket Field (Hungerford, Berkshire). A magazine within Hyde Park supplied London.¹⁰⁷

At the height of production at the end of the eighteenth century there were 54 gunpowder depots across the country complemented in 1817 by 30 magazines. Those in the Eastern region were at Great Yarmouth; Harwich; Purfleet; Waltham Abbey; Weedon and Chelmsford. Demand for military gunpowder was greatest in London and the south east of England. Waltham Abbey stood out as one of the largest and most innovative centres. Gunpowder was often stored in floating magazines that were not only vulnerable to attack in times of warfare but the stores frequently became damp which rendered much of the gunpowder useless. During the Napoleonic Wars the major Ordnance Depots, built for the storage and later the development of guns and ammunition were concentrated around the main naval dockyards at Chatham / Thames, Portsmouth and Plymouth.

Two major outliers were located at Purfleet on the Thames and at Weedon Bec in

¹⁰⁶ Wayne Cocroft, *Dangerous Energy: The archaeology of gunpowder and military explosives*, (Swindon, 2000).

¹⁰⁷ Roger Bowdler, *Former Board of Ordnance Gunpowder Magazines, Marchwood Hampshire*, (English Heritage, 1997), p.5.

Northamptonshire. Weedon Barracks later became a Regimental Depot under the Cardwell reforms, for the Northamptonshire Regiment and also served to supply the Northern Region as well. The Purfleet site had a very different history of use over the next 200 years.¹⁰⁸ The Board of Ordnance bought a 25 acre site at the mouth of the Mardyke and demolished most of the existing buildings, including water mills, three inns, and several cottages after Parliament had voted £15,000 for the project to replace the powder magazines at Greenwich where their proximity to London became too great a risk. Nearly 50% of the cost (£7,340 3s 10d) was for the purchase of five parcels of land and £7,012 of that went to two landowners, Captain Grantham and Mr. Fausett. A quay was constructed to land the powder from barges on the Thames. Gunpowder was initially supplied by private contractors but from 1787 it came from the government powder factories at Waltham Abbey and Faversham. The magazines were usually guarded by detachments of the Royal Artillery though, The West Essex Militia was used for a period after 1797.

Figure 5.56: The 1769 Clock Tower constructed where the armoury and barracks stood.



Figure 5.57: The gunpowder proof house where the quality of gunpowder was tested – now a community nursery and meeting place.



The five magazine buildings had a capacity of 52,000 barrels, each magazine could hold 10,400 barrels (460 tons) of gunpowder. The most significant monument to its past military use is the No. 5 Powder Magazine building which remains largely as originally built. It is divided as a pair of long brick barrel-vaulted aisles, each 19ft wide and 17ft from floor to head of vault. At the east and west ends groined cross vaults

¹⁰⁸ <https://historicengland.org.uk/listing/the-list/list-entry/1076515>.

link the aisles. The aisles are separated down the centre of the building by a 4ft-thick brick wall within which there are nine round-headed openings to facilitate air circulation between the magazines.¹⁰⁹

Figure 5.58: Building 5 the last remaining magazine building.



The extent of land taken up by the site in 1900 had almost doubled to 46.75 acres. The area became a significant militarised landscape during the first half of the twentieth century with large army camps during both world wars and a large rifle range was constructed on the neighbouring marshes at Rainham.

Purfleet was supplied by the large manufactory at Waltham Abbey. The site at Waltham Abbey includes intact buildings, ruins, earthworks and buried remains of parts of the Royal Armament Research and Development Establishment, formerly known as the Royal Gunpowder Factory. The complex produced and tested modern high explosives. It had an extensive water management system and an associated tramway and railway network.

The site is set within and around a series of watercourses, most of which are man-made and channel the River Lea as it flows from north to south. Although the manufacture of gunpowder in the Waltham Abbey area dates back to the 1560s, there is no documentary evidence for production at this site before the mid-seventeenth

¹⁰⁹ <https://www.purfleet-heritage.com>.

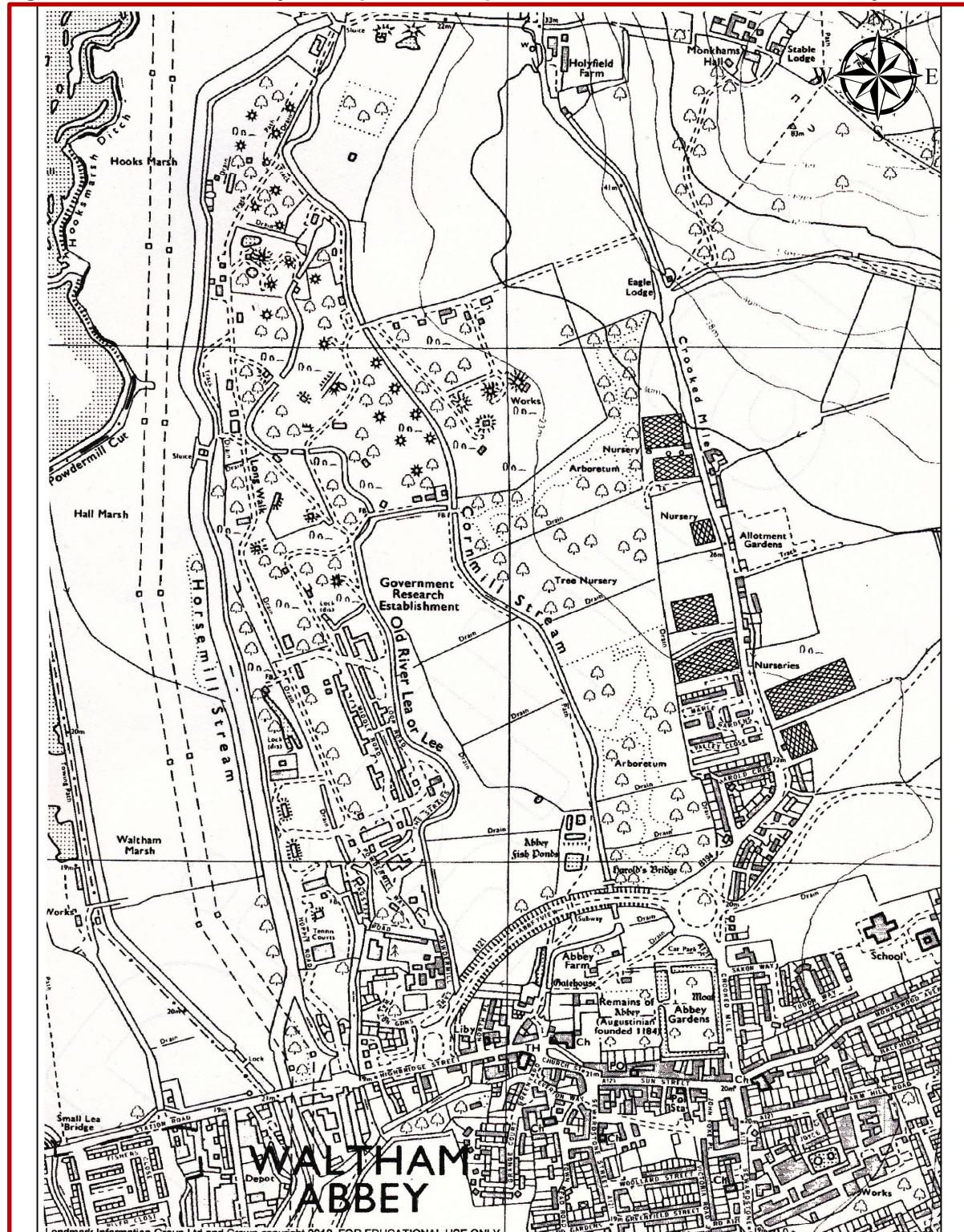
century. Between 1702 and 1787 the site was in the possession of the Walton family who developed many improvements to the gunpowder manufacturing process. Cartographic evidence from this period indicates that the early works occupied the area known as Millhead to the west of Middle Road and Powdermill Way in the south of the site. Here the mills and other buildings were set on either side of a large leat fed by a branch of the Lea. Water from this, the Millhead Stream, was drawn off at regular intervals along its course to power the mills and was returned to the river by means of two parallel tailraces either side of the leat.

On 15 December 1902, an explosion killed three men and severely damaged the incorporating mills. The risk of explosions was real throughout the site but with the great concentration of mills in this area the risks were higher. They were originally constructed in the 1860s to produce a type of gunpowder called pellet powder. Manufacture of this type of powder soon ceased and they were converted into incorporating mills. For security reasons early reference to the site on OS maps was kept as a blank. The site doubled in size between 1862 when it covered 286 acres and 420 acres by 1900. It was only by 1970 that OS maps were showing the extent of the sites (Figure 5.60)

Figure 5.59: Waltham Abbey - the remaining Incorporating Mills.



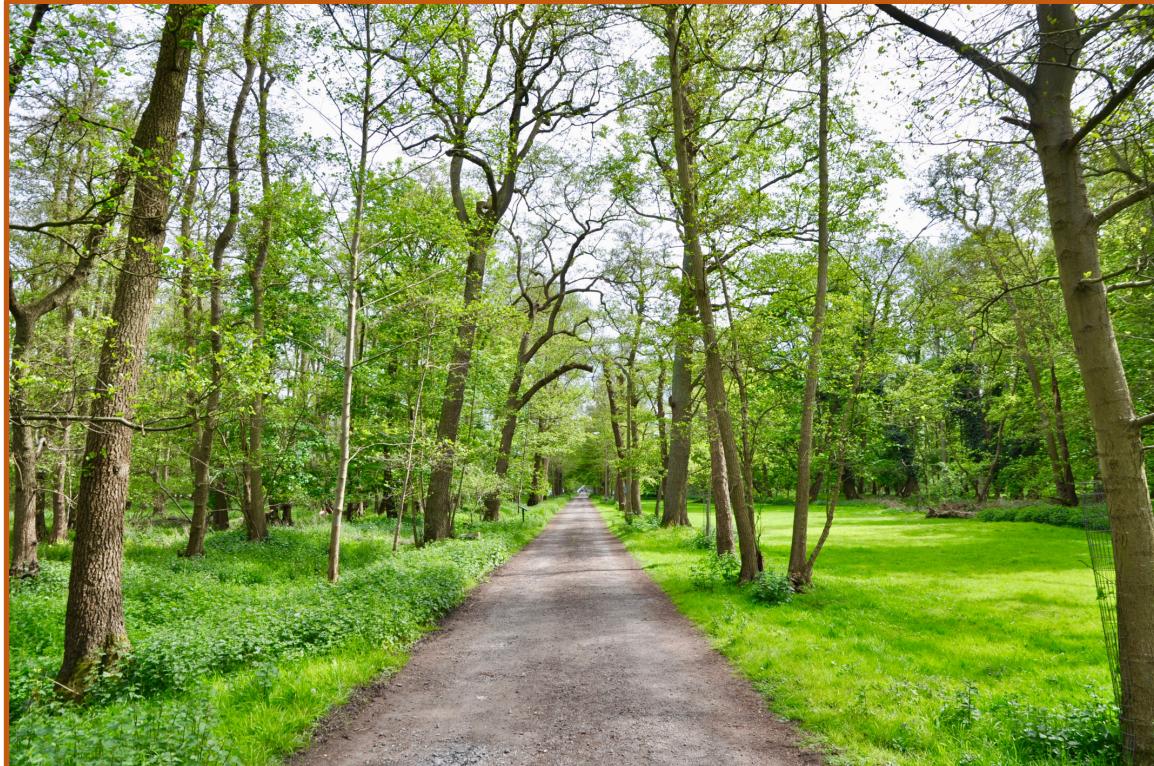
Figure 5.60: Waltham Abbey 1970s previous maps all left the site as a blank for security reasons



This Woodland within the military site is common elder after elder buckthorn. This wood makes the best charcoal and it was the species most commonly used to make charcoal from military powder. The charcoal was created, often over several days, by

burning wood slowly and evenly with as little air present as possible. At the beginning of the nineteenth century this method was superseded by cylindrical charcoal methods the wood was charred in airtight cylinders. Currently the site is preserved as an important national heritage site.

Figure 5.61: An unexpected landscape benefit from industrial / military processes.



Other storage and manufacturing sites in the Eastern Region were spawned by the economic demand created by the military. In terms of arms and gunpowder there were factories at Corringham (for the Kynochs Company) on the Essex bank of the Thames where explosives were manufactured, and this continued as an industrial site until recently. Nearby was the famous Pitsea Detonators factory for The British Explosives Syndicate Ltd. Its widely dispersed factory buildings required a lot of space and it is now a pleasant country park overlooking the Thames Estuary.

One of the more tragic sites was at Stowmarket in Suffolk, owned by Messrs Thos. Prentice and Co, on the edge of the town between the railway and the River Gipping. In 1871 a massive explosion in the gun-cotton manufacturing process illustrated all too well why safety factors had to be given a high profile. Graphic accounts of the destruction caused by the blasts were published in the local and national newspapers. They circulated across Europe and even appeared in *The New York Times*. They described how wooden buildings on the factory site were reduced to matchsticks and

how brick walls collapsed. There was a crater 10 feet deep and 40 feet across created by the explosions. Homes nearby were destroyed as they were very near to the factory but there was widespread damage to other houses and businesses all over the town. A common problem was windows being blown out but there was also some structural damage. The sound of the explosion was heard 30 miles away in Southwold.¹¹⁰

The human impact was enormous. Eyewitnesses described how terrified women and children fled to the fields after the first explosion. Twenty-eight people were killed including William and Edward Prentice, the owner's sons. Among the remaining dead were seven boys and eight women and girls. Most of the dead were interred in unnamed graves and there were two mass burials of unidentified body parts. A number of people were injured, and public subscriptions raised several thousand pounds which was paid to the families of the dead and injured, as well as those whose homes or businesses were damaged as there was no other form of benefit system, other than charity.¹¹¹

The final site worthy of specific focus is one of the unique military sites in Britain that is well preserved. It marries together a contribution to defence in its broadest sense, it is located because of and changed by technology, it links with the Northern Region in terms of needing to be a defensive site for internal reasons and it also shaped the appearance of the British Army. At first, Weedon Ordnance Depot appears to be in an incongruent location. It is located in Northamptonshire 100 miles from the east and south coasts. Yet it was a core component of defence planning, internal security and technological change. It was constructed between 1803 and 1814 on 53 acres subsequently expanded to 160 acres [1862 & 1878] and to 173.5 acres by 1900. It was a military site of national significance for 150 years with a large-scale permanent footprint to the present day.

¹¹⁰ PP, Report by Vivian Dering Majendie, Captain Royal Artillery on the explosion of guncotton at Stowmarket on the 11th August 1871, (C586, 1872).

¹¹¹ Suffolk Archives Ipswich, The Stowmarket Gun Cotton Explosion of 1871 [www.heritagecircle.onesuffolk.net. \(HC411, Acc.no. 6141\).](http://www.heritagecircle.onesuffolk.net. (HC411, Acc.no. 6141).)

Figure 5.62: Weedon Ordnance Stores 2019, and below the same view in about 1900



The Depot location has been a transport node throughout its history from the Roman period. Turnpike roads, the Grand Junction Canal (later called the Grand Union Canal) and the railways all crossed this rural area in the eighteenth and nineteenth centuries. This confluence of communication routes and Weedon's unique central location in England, between London and Birmingham made it a prime site for a munitions focused military development. It was sufficiently distant from towns and cities for safety reasons, easy to defend with a garrison and yet convenient for the transfer of munitions to London and other key strategic locations. It was the largest military site away from

the coast before the development of Aldershot and The Curragh in the middle of the nineteenth century. Originally the site included Royal Pavilions, an equestrian centre and barracks. It was an important and largely secretive arms distribution point for nearly 150 years. The Depot remained in operation until it was decommissioned in 1965. Today the former lower barracks and military storage base is privately owned and has been restored to offer local businesses workspaces within the original military storage buildings. Most of the rest of the site has been used as a business park and for modern housing developments.¹¹²

The land was acquired through a Parliamentary Act on 17 & 18 February 1794 for £12,923 1s 3d.¹¹³ Most of the land, identified as suitable, was found to be copyhold in the hands of The Provost and Fellows of Eton college, Lords of the Manor of Weedon, who refused to enfranchise any lands on terms. Therefore, the Board of Ordnance needed an act of parliament so it could obtain freehold possession of the lands from Eton college and ensure a fair purchase price for them.¹¹⁴ This military installation was developed with barracks already in situ in Northampton just 10 miles away purchased at the same time costing £938 9s 0d for 9 acres of land. These barracks were created in 1797 as part of Britain's response to the threat of invasion following the French revolution.

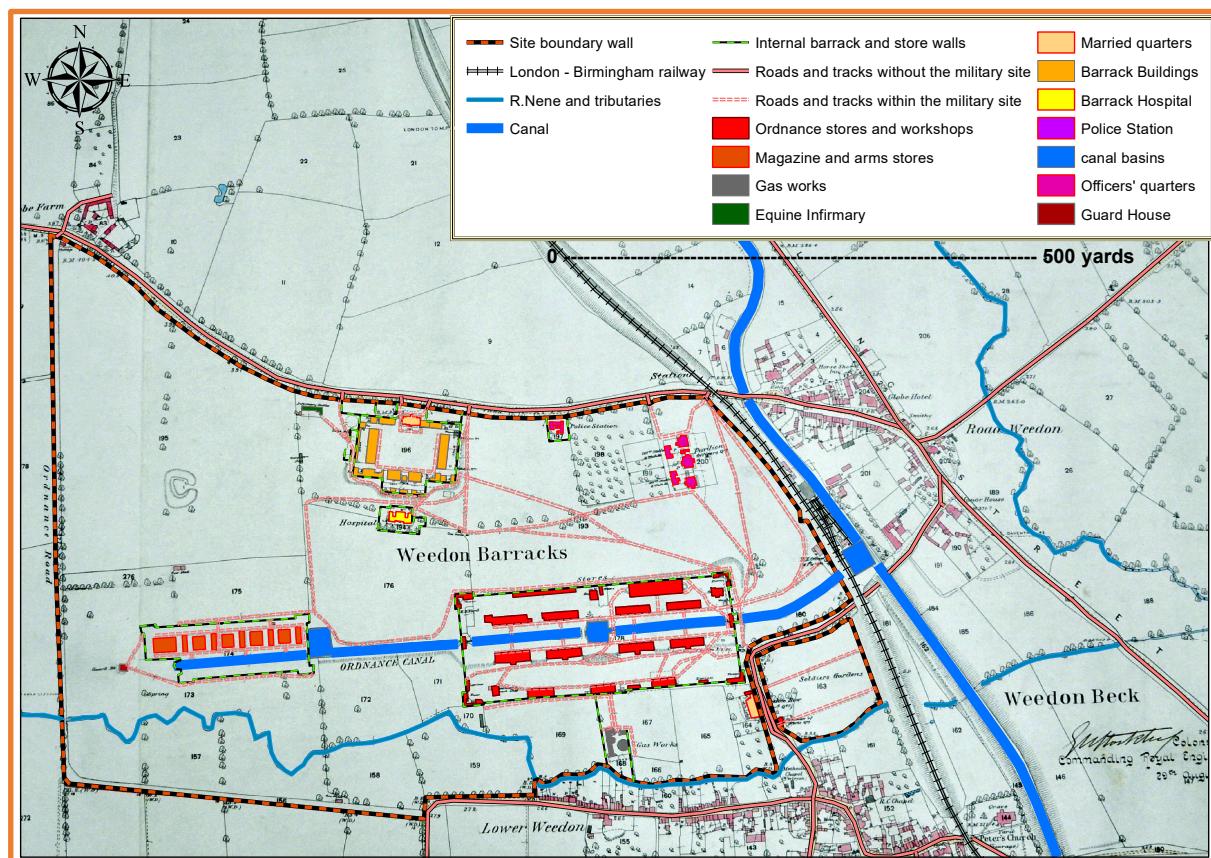
The Ordnance Depot at Weedon was authorised by an Act of Parliament in 1803 and a budget of £100,000 was approved for the purchase of 53 acres in Weedon, Northamptonshire, 'for erecting buildings thereon for the service of His Majesty's Ordnance'. The Great Works at Weedon commenced in February 1805 on the wharf and canal links.

¹¹² Weedon Bec History Society, *Weedon Royal Ordnance Depot Revisited*, (Weedon, Northants, 1996).

¹¹³ PP, L&T Return 1862.

¹¹⁴ Liv Gibbs, *Conservation Plan for Storehouse Enclosure, Royal Ordnance Depot, Weedon Bec* (2005).

Figure 5.63: Weedon Barracks and Stores in the late nineteenth century¹¹⁵



In the construction fire posed a major threat to store houses and their contents. One of the measures taken to reduce the risk was to leave a sizeable gap between each storehouse as a fire break. It also ensured sufficient turning room so field ordnance could be pulled through the doorways in the end walls and enabled access between the front and rear doorways of the storehouses. When the Expeditionary force of 40,000 men was sent to the Netherlands to try to destroy Napoleon's fleet, dockyards and arsenals in Antwerp and Flushing in 1809, the *Northampton Mercury* reported:

such has been the demand for small arms for the grand expedition that 22,000 muskets had been packed into cases in a short space of time by men of the Bedfordshire militia and sent by canal to Paddington and then by road to the Tower of London. A company of the Bedfordshire militia have been based at

¹¹⁵ TNA WO 78/3313 Weedon Barracks, adjoining land,

Weedon since August 1808 to assist the Civil Department with unpacking the tens of thousands of muskets being received from Birmingham for the armouries.

The initial site was complete by 1814.¹¹⁶ There is little recorded history of the depot between 1810 and 1858 although it is known that it functioned as a General Stores and Clothing Depot before 1858:

It is rumoured that the present mode of supplying the army with regimental clothing and necessaries will be discontinued at the end of the military year, and that a general contract for the whole army will be entered into, the supply to be furnished by one contractor, and that Weedon will be the great depot to receive all clothing and stores for inspection, previous to their being forwarded on requisitions to the different corps.¹¹⁷

Weedon's original *raison d'être* was driven by the Napoleonic War but after the 1815 peace the growing unrest in parts of Britain reinforced the need for a safe location in central England for the storage of arms and with the capacity to distribute across the whole country. Therefore, work was carried out to make the site more secure. Its defences were strengthened, it was fortified and the magazines of gunpowder, and other war stores were protected. Temporary batteries were erected on surrounding heights for cannon:

excavating for the formation of redoubts, cutting embrasures in bastions, and in a variety of other defensive preparations. Large quantity of bedsteads, bedding

¹¹⁶ TNA MPH 1/763, Twelve sheets of drawings of the proposed barracks at Weedon Beck, Northamptonshire. (1) Section. Description of materials to be employed. Scale: 1 inch to 8 feet. (2) Elevation of barracks for one troop of Horse Artillery. Scale: 1 inch to 10 feet, (1801-1900); TNA MPH 1/1005, 3 items extracted from WO44/194. Plans of Ordnance premises at Weedon Beck, Northamptonshire, (1834-1836); TNA MPH 1/1029 (from WO 44/196) Weedon Beck. 'Plan of Weedon Barracks', (1846); TNA MPH 1/1186: 8 items extracted from WO 44/573. Plans and drawings of Ordnance property, 1852. TNA WO 44/196 Weedon Beck. 'Plan of Weedon Barracks Magazines and Store Houses, (1846); TNA WO 78/3313: Weedon Barracks, Plan of barracks and adjoining land, (1887).

¹¹⁷ Cork Constitution / Cork Morning Post, 22nd January 1856.

and baric furniture adapted to the wants of the Garrison, has also been received at the Arsenal.¹¹⁸

In addition, the barracks were prepared for 800 men. Initially, after the Cardwell reforms the barracks became the depot for the 48th (Northamptonshire) Regiment of Foot and the 58th Rutlandshire, Regiment of Foot when they were renamed the Gibraltar Barracks. These regiments amalgamated in the 1880s to form the Northamptonshire Regiment. Weedon, as an iconic military landscape in Britain, carries with it the story of how adaptable the site had to be to meet changing priorities for the military.

5.8 Conclusion

This case study has explored how the development of the military estate in the East of England was shaped by the interaction between defence needs, military reforms, changes in technology and the geography of the Region. Despite the fact that the military reforms had the smallest impact on land acquisition, they created a most visible part of the estate because they took up prominent locations in the most populated areas. On the other hand, the influence of technology on weapons manufacture, storage and especially ranges, as at Shoeburyness, had the greatest impact on the amount of land acquired but, as they tended to avoid populous areas, they were the least visible part of the estate.

The national priorities for the army as a whole had a significant focus on supplying colonial needs and ensuring protection against civil disturbances in the nineteenth century, however, the analysis of military sites in the East suggests a different order in terms of the way the army was deployed in the Region. The first priority was clearly defensive. To ensure that the eastern flank of the capital was protected along the coast and along the north bank of the Thames. The second priority based on the importance of Colchester, and to a lesser extent Warley, was to contribute to a field army capable of home defence and to contribute to any expeditionary Army Corps needed for engagement abroad. The third priority, certainly in the early to middle years of the nineteenth century was to provide trained men for the army in India particularly through

¹¹⁸ *Northampton Mercury*, 29th October 1831.

the barracks and training area at Warley.

Even though the technological influences on the demand for land the military presence in the Eastern Region was still clearly seen as part of the defence of the realm. The defence of Harwich remained a central focus in military thinking and the defence command structures early in the 1900s maintained the view that the Eastern Region remained as a possible back door into Britain. This was reinforced by the fact that the area experienced large scale military manoeuvres over the first decade of the twentieth century.¹¹⁹

Of the 57 military sites examined in this case study 23 were listed as in use in the 1900 L&T return. Seventy percent of these were also in use in 1821.¹²⁰ However, the sites took up only a small amount of land and were mainly defence fortifications and barracks. Of the 23,500 acres of land used for military purposes in 1900 only 18% was in military use in 1821. This reinforces the view of the development of the military estate in the east set out in this chapter. The East's military estate had a large number of antecedent locations but many of these were temporary in nature and the more permanent growth in the estate occurred in the four decades after the Cardwell Reforms of 1872. The pattern of development in the East differs from the growth pattern in both the North and South of England and in Ireland. A further difference to developments in the north occurred in 1913 when on the eve of the First World War urgent air defence needs came to the fore. The south and east were identified as sites for airfields for the Royal Flying Corps and 155 acres of Orford Ness was purchased expanding to over 2,000 acres over the following year. As with other eastern defensive sites it was chosen because of its geography, proximality to assumed threats from an enemy and close to troops in Ipswich, Colchester and Norwich who could provide security for the site.¹²¹

¹¹⁹ Simon Batten, *Futile Exercise? The British Army's Preparations for War 1902-1914*, (Warwick, 2018).

¹²⁰ See Appendix Cii

¹²¹ Paddy Heazell, *The Hidden History of Orford Ness*, (Gloucestershire, 2012), pp.22-25.

Other than the use of troops from the late eighteenth-century cavalry barracks to deal with occasional rural unrest it was only at the Weedon Ordnance Stores that internal security threats affected the design of the site. There is no evidence of any land being acquired on the basis of potential industrial uprisings though making sure that local populations were safe did influence the location of the gunpowder manufacturers and stores.

A key factor examined in this case study shows that a major influence on the development of the military landscape at Colchester and the large expansion in land acquired there was driven by the growth of the concept of garrison towns and training camps in the second half of the nineteenth century. The comparison between the history of the estate in Colchester compared with that of the estate in Norwich and Yarmouth also raised interesting insights into how and why some locations become permanent military landscapes while others, seemingly permanent during the nineteenth century only create temporary footprints on that landscape.

Chapter 6: - Military Land: Priorities, Regions and Contestability

However, there was in any case little point in their [*military leaders*] attempting to determine the requirements of the army while they received no firm guidance as to the contingencies for which the army might be required to plan or the exact purposes for which the army existed. Lord Wolseley's call for a definitive statement of priorities had been repeated on a number of occasions since and in January 1888 Wolseley again demanded such a statement and suggested to Stanhope an order of priorities very similar to that which he had advocated seventeen years previously.¹

The two case studies have shown that there were several interrelated influences on the creation of the military estate. These were, in turn, shaped by the functions the military was expected to fulfil for the state. However, local priorities also affected the development of the military estate in both spatial and temporal terms. This final chapter takes the synthesis of the outcomes from the case studies and sets them within the national context. It examines over 300 locations nationally and identifies the following four main factors that explain the origins and growth of the military estate. These provide the best model for understanding the dynamic development of the early military estate on a national scale but takes account of the importance of regional differences. Two influences relate to the national priorities expected of the military and the way these changed and were shaped by local needs in different regions of Britain. However, two other factors proved to be strong determinants in final decisions about the location of military sites. These were, the often, intense contestability over land use, and the nature of the land itself, both in terms of topography and economic value which were, at times, a determining factor.² The following sections examine each of these four factors in turn.

¹ Ian Beckett, 'The Stanhope Memorandum of 1888: A Reinterpretation', (Vol 57 No. 136, *BIH*, November 1984), p.241.

² Lt. Colonel Dirom, *Plans for the Defence of Great Britain and Ireland*, (Edinburgh, 1797), pp.12-13.

6.1 Military priorities.

There was some national consensus about the roles expected of the military and the national objectives could be assumed from the Annual Army Estimates. However, it was only in the 1880s that the political priorities were articulated in writing in the Stanhope Memorandum.³ The priorities were for the British Army across the Empire and the Army at home reflected these.⁴ This thesis has set out the sequence of actions taken by the government to establish the legal framework and processes for acquiring land for military purposes. Land ownership and its value have long been focal points for social and political actions. Studying the acquisition of land for military purposes provides a different and little used avenue to understand the priorities given to, or asserted by, the military at home. Military land remains a focus for current political, environmental and defence debates.⁵ What this thesis shows clearly is that whatever the national expectations were, the way these were played out in the different parts of the country were as a result of several functions combining differently in different time periods. But the acquisition of land, either leasing or purchasing required agreement of, and the allocation of funding from parliament. With the range of functions expected of the military and its extensive deployment across the Empire the resources available for the home army were always under pressure.

Between 1815 and 1870 the international environment had allowed Britain to rely upon a loose set of general assumptions about the use of military power. However, the requirement to adopt a systematic approach to the size, distribution, and potential employment of the armed forces emerged as the century drew to a close. A laissez-faire approach to military and naval planning prevalent for much of the century had

³ Correlli Barnett, *Britain and Her Army 1509-1970*: (London, 1970); Edward M. Spiers, *The late Victorian Army 1868-1902*, (Manchester, 1999).

⁴ TNA WO 33/48 Paper A 148A, E Stanhope minute 8th December 1888 – adapted from E.M. Spiers. (Manchester, 1999) p.337. - The list of Stanhope 'priorities' starts with the effective support of the civil power, then focus on finding men for Indian service, providing a garrison for fortresses and coaling stations. The penultimate priority is to mobilise rapidly for home defence with Regular troops and Auxiliary Forces. The final priority, to send abroad two complete Army-Corps, with Cavalry Division and Line of Communication, had the following interesting caveat attached; the probability of the need to employ an Army-Corps in the field in any European war was thought sufficiently improbable so the primary duty of the military authorities was to organise our forces efficiently for the defence of the country.

⁵ Chris Pearson et al. *Militarized Landscapes*, (London, 2010).

hampered inter service coordination and encouraged short-termism.⁶ The protection of the United Kingdom itself was at the heart of this web of influences. Along with the defence of British seaborne commerce, it formed one of the priorities of British strategists. Home defence was a recurrent focus for the public, the military, and their political masters.⁷

Whatever other priorities were attributed to the military it had to defend the realm. It was not by attempting great military operations on land but by controlling the sea, and thereby the world outside Europe, that Britain ensured its expansionist triumphs. British troops were rarely committed to major operations in Europe, but it was accepted that there was a need for an army at home for defence. Britain's wealth from colonial trade was partly used to pay allies for European action as it was required.⁸ This approach affected the level of funding to invest directly into the British Army up the middle of the nineteenth century and was frequently carried out by the expansion of the militia and volunteers.⁹ Land forces had to be sufficiently strong to compel an enemy to come in such large numbers that could be intercepted at sea. British troops had been most effective:

when they had been used in an amphibious role to raid the enemy's coastline and compel him to withdraw forces which might otherwise have been used to fight Britain's continental allies, to cripple the enemy's fleet by destroying his naval bases, or to capture his overseas colonies.¹⁰

Irrespective of the overall expectations placed on the military, short-term pressures and political decisions often determined the priorities at particular times. For example, the response to the panics in the late 1840s and 1850s was the establishment of The

⁶ David Morgan-Owen, *The Fear of Invasion, 1880-1914*, (Oxford, 2017), p.11.

⁷ Ibid., pp.11-12.

⁸ David French, *The British way in warfare 1688-2000*, (London, 1990), pp. xiv-xv.

⁹ Ian Beckett, 'The Amateur Military Tradition', in Catriona Kennedy and Andrew McCormick, *Soldiering in Britain and Ireland, 1750-1850* ,(Basingstoke, 2013), pp.230-242

¹⁰ French, *The British way in warfare*, pp. xiv-xv.

Royal Commission on the Defences of the UK and this led to spending of £11.85 million to be made available for south coast forts, armaments and floating batteries.¹¹ From 1888 home defence again came to the fore in military debates which followed the fear of invasion. In the light of the need to provide large coordinated forces for both home defence and overseas operation mobilisation tables were drawn up in 1889.¹² However, despite similar alarms from the military, as were made in the 1850s and criticism of the ability of the Navy to deliver its promise to defend Britain, The Naval Defence Act put aside £21.5million to rebuild naval strength while the Army Estimates granted, 'by way of consolation' a mere £0.6million.¹³ It was the clarity and political acumen of some Secretaries of State, that set the priorities as they saw them. Cardwell's emphasis on recruitment and training in the 1870s led to some funding for the developments of new and expanded regimental depots and Haldane set himself two tasks when putting forward his Army Estimates in 1907-8. First, to create a Regular force capable of taking the field on the Continent and secondly, to prepare that force for rapid mobilization.¹⁴ The thesis has shown several examples of where these political and strategic approaches led to growth in the military estate.

However, it is interesting to note that despite the priority given to defending the realm, the Stanhope priorities placed the effective support of the civil powers at the top of the list. The late eighteenth and early nineteenth centuries were periods of real and perceived threats to the internal security of Britain. Frequent pressures from the control of Ireland, the fear of European revolutionary actions spilling over into British thinking and the need to control the increasing industrial worker class were of such a threat to the ruling classes that internal security was almost bound to be the first priority for politicians to ensure the effectiveness of the civil powers.

¹¹ John Gooch, *The Prospect of War*, (London, 1981) p.4.

¹² Ibid., p.99.

¹³ Gooch, *The Prospect of War*, p.7.

¹⁴ Ibid., p.95.

6.2 Regional differentiation.

The changing priorities expected of the military at home over time led to variations in overall military capacity and its deployment. Figure 6.1 illustrates the impact of Home Defence from a high point during the Napoleonic Wars, declining in the relative peace of the 1820s and rising again in the middle of the century. However, the dominance of colonial priorities skewed home numbers considerably with the large-scale deployment to southern Africa with home defence gaining numbers again on the return of the troops in the first decade of the twentieth century. National policy, such as those emanating from the Cardwell / Childers reforms created the demand for the infrastructure required to recruit, accommodate and train the various home-based battalions. When expectations and objectives changed, it necessitated the acquisition of land and buildings in different parts of Britain either as temporary or permanent solutions. The implementation of local plans, however, was shaped by national political direction, military leadership's energy and local context. All of these influenced the size and deployment of the home army and as Figure 6.1 shows its strength varied over time nationally and across the regions of Britain.

Figure 6.1: Home army numbers 1810-1904.¹⁵

	1810	1822	1857	1900	1904
Home army in Britain and Ireland (to nearest 500)	146,000	61,500	127,500	70,000	137,500
England and Wales	49.5%	44.5%	62.5%	76.0%	74%
Northern England	3.0%	6.0%	6.0%	21.5%	21.0%
Eastern England	9.0%	4.0%	4.0%	9.0%	9.0%
South/Home Districts of England	37.5%	34.5%	52.0%	45.5%	44.0%
Ireland	48.0%	48.5%	32.0%	16.0%	20.5%
Scotland	3.0%	7.0%	5.5%	8.0%	4.5%
The percentage of the whole army accommodated in the home barracks	64%	60%	55%	23%	48%

¹⁵ Troop numbers have been calculated from Barrack Returns and Army Estimates where troop numbers for each site have been identified, the dates indicating significant events – 1810 mid Napoleonic War, 1820 post Napoleonic, 1822 decline, 1848 mid-century focus on health concerns and detailed returns for each month from 1857, culminating in detailed Army estimates 1900 and 1904 after the Boer Wars.

It was clearly the large defence infrastructure in the south of England that needed extensive land acquisition and it was the development of accommodation and training at Aldershot and then Salisbury Plain that accounted for the largest increases in the military estate. Forty-two percent of the military land in 1862 was in Aldershot and Portsmouth, 41% in 1878 and 22% in 1900 but by then Salisbury Plain accounted for 31.5% of the land. These became some of the noteworthy militarised landscapes in Victorian Britain but the sheer size should not diminish the military impact in the other regions as can be seen in the examples of Strensall, Otterburn, Colchester, Shoeburyness, The Curragh and Kilbride. The North and East were dominated, in the main, by a larger number of sites but much smaller areal extent. This more widely spread infrastructure was probably more visible to the population as whole.

Figure 6.2: The distribution of land used, in acres, for military purposes.¹⁶

District	1862	1878	1900	1911
Southern England	20,266	40,442	44,380	105,700
Western England and Wales	3,330	7,109	49,002	
Northern	701	3,435	4,001	22,700
Eastern	2,672	8,932	23,573	39,000
ENGLAND & WALES - TOTAL	26,969	59,918	120,956	167,400
Ireland	3,080	4,563	7,389	8,000
Scotland	732	718	720	8,000
Channel Islands	721	944	800	800
'BRITAIN				
TOTAL ACREAGE	31,502	66,144	129,865	184,200

The regular movement of troops from location to location around Britain and to ports for transfer overseas would have created a highly visible military environment for the population as a whole. New barrack buildings provided visible reminders of military presence in many larger towns and local acquisition and byelaws created a more visible impact on the landscape than some of the larger training centres that were more inaccessible to the population as a whole. This national distribution was discussed in detail in Chapter 3.

¹⁶ All figures rounded to the nearest whole number. The 1862, 1878 and 1900 figures are derived from the Land and Tenements (L&T) Returns. The 1911 figures are extracted from the Lucas Report in 1911 (WO32/7189).

In England and Wales land holdings more than quadrupled in the nineteenth century. There was almost a six-fold increase in Northern England, though from a very low base. As was seen in Chapter Four there was an apparent mismatch between the relatively slow growth in the acreage of land acquired and the large number of troops located there. This was related to the slow growth in the northern training estate which became significantly larger in the four decades prior to 1914, but it was also influenced by the expanding rail network which meant troops could be deployed from outside a region as needs developed.

Land holding in Eastern England was more or less the inverse pattern to the north. Despite having more military sites during the Napoleonic Wars it had fewer military sites and a much smaller home army in residence throughout most of the nineteenth century. What it did have was the proximity of the south of the region to London and the Thames defences and large areas of foreshore and sea marshes suitable for ranges. Even excluding Maplin, the land holding more than doubled but including Maplin it was over 9 times larger between 1862 and 1900.

In Ireland military land holding more than doubled between 1862 and 1900 when troop numbers in Ireland were still significant. Much of the growth in land acquisition was for rifle and artillery ranges as well as larger areas where field firing and field manoeuvres could be practiced. Ireland was a key location for most British regiments as their battalions had regular tours of duty in Ireland and used the facilities at The Curragh, The Glen of Imphal and in Cork. The loss of these facilities at the time of Irish Independence in 1922 necessitated significant growth in military training especially in northern England.

What created regional variations?

Chapter 3 mapped the distribution of military sites nationally at different times from the Napoleonic Wars to the beginning of the twentieth century. It was clear in the examination of the distribution that the different countries and regions of Britain showed considerable variation in the number of military sites located in each region.

Further analysis of the area of land used reinforced that regional variation.¹⁷ The literature on the military tends, understandably, to look at the national picture and the British Army's role around the world but a deeper understanding of the military's relationship with different parts of the country is an important perspective in understanding that the military had a role and relationship with every part of Britain. Taking a regional approach adds depth to our understanding of the military which, after all uses a strong regional identity in its structures and naming of regiments.¹⁸ Mapping the Military Estate has shown how the military's priorities, especially during the nineteenth century, influenced the need for land for military purposes. Regional variations in the acquisition and use of land by the military can be understood through five inter-related themes that operated at different times.

Firstly, defence against external threat was a theme in both case studies. In the Eastern Region the defence sites clustered around Harwich Harbour, to a lesser extent at Great Yarmouth and as part of the London / Thames Estuary defences. In the Northern Region, defence had a more limited impact overall but antecedent defence structures were upgraded along parts of the Yorkshire, Northumberland and to a lesser extent the Lancashire coasts. Coastal defences also played a key part in the pattern of sites in Ireland especially along the east coast around Dublin, in the south-west from Cork to Limerick and in the north around the large sea loughs. The most obvious defence led distributions were along the south coast of England from Kent and Sussex through Portsmouth, Portland, Plymouth and the Channel Islands.

The second theme, of internal security, was closely linked to the defence of the realm from external threat and any potential internal uprising. It was significant in influencing regions differentially especially in the first half of the nineteenth century. This can be divided into two strands, the protection of strategically important locations to defend London, and other large important cities and ports such as Dublin, Cork, Newcastle, Hull, Plymouth, Portsmouth and Liverpool. This was also a dominant theme in understanding the distribution of barracks in Scotland and in Ireland where a colonial relationship meant that the countries went through an occupation and garrisoning

¹⁷ The area information was extracted from the Land and Tenements Returns of 1862, 1878 and 1900, abbreviated in the text to L&T.

¹⁸ French, *Military Identities*, (Oxford, 2005).

phase during the eighteenth century. A linked strand of internal security, which was locally very influential, but often not explored through the barracks returns, was the location and defence of explosives and ammunition stores and manufacturing. These were important but few in number, especially in parts of the Eastern Region, at Purfleet, Waltham Abbey, Corringham and Pitsea. They were of sufficient size and importance to warrant troops being accommodated nearby to defend them. In the case of Weedon, on the boundary between the East and North Regions its location as a major weapons store necessitated additional security protection as discussed in Chapter 5. In Ireland, at Ballincollig, gunpowder manufacturing was significant and led to the development of a large protected site with manufacturing and a large adjacent barracks. Many other smaller factories involved in the explosives industry were private and their land was not included in military returns.

The third, mainly political theme, was providing aid to the civil powers. Unlike internal security this was mainly the responsibility of the Home Office and focused more on the strategically important and potentially volatile manufacturing towns. Local magistrates could call on the military for assistance and the deployment of sufficient troops to meet these demands influenced where troops were located, especially in the first half of the nineteenth century. Troops were used to quell riotous behaviour in London and the south and west, but the number of troops already accommodated for other reasons meant that there was little direct impact on locating military infrastructure for that purpose other than at Bristol. However, it was a major influence on the early distribution of sites in the Northern Region, especially in the industrial towns of the north Midlands, Lancashire and west Yorkshire. In the predominantly rural Eastern Region it had little impact despite food riots in the early part of the nineteenth century.¹⁹ It had a residual influence on sites in Ireland but the earlier development of the police in that country moved responsibility away from the military at a much earlier time. Being available to support the civil powers remained very important, especially in Northern England, industrial Wales and Ireland until well into the late nineteenth century.

¹⁹ Evan Wilson, *The Horrible Peace: British Veterans and the end of the Napoleonic Wars*, (Massachusetts, 2023), pp. 203-210.

The fourth main theme, that affected regions differentially, was the set of late nineteenth-century military reforms that led to the re-distribution of barracks and the decline of militia sites after the Cardwell / Childers reforms of the 1870s and 1880s. These brought back a militarised landscape presence to many areas that previously had military links but where the impact had been temporary. Bury St Edmunds, Warley and Lincoln provide good examples of a resurgence of a military landscape some eighty or ninety years after the same areas had a short term but important military role at the end of the eighteenth century. The case studies showed how the impact in the East was important in a few larger towns but in Northern England this was a significant influence in reshaping the focal points of infrastructure in that region. The Cardwell reforms affected nearly all counties in Britain especially in England where county regiments became the norm. The grouping of counties in the less densely populated parts of Ireland and Scotland meant that while 'Cardwell depots' were developed they tended to be more widespread, serving several counties and were often redeveloped existing barracks. The often-missed aspect of the localisation reforms in the 1870s, focusing on training, was especially influential in the acquisition of large training sites in the northern counties and in the establishment of Colchester as a permanent regional centre for the army in the East. This, along with military reforms based on analysis of tactics, strategy and new technology, led to large scale changes in the military estate.

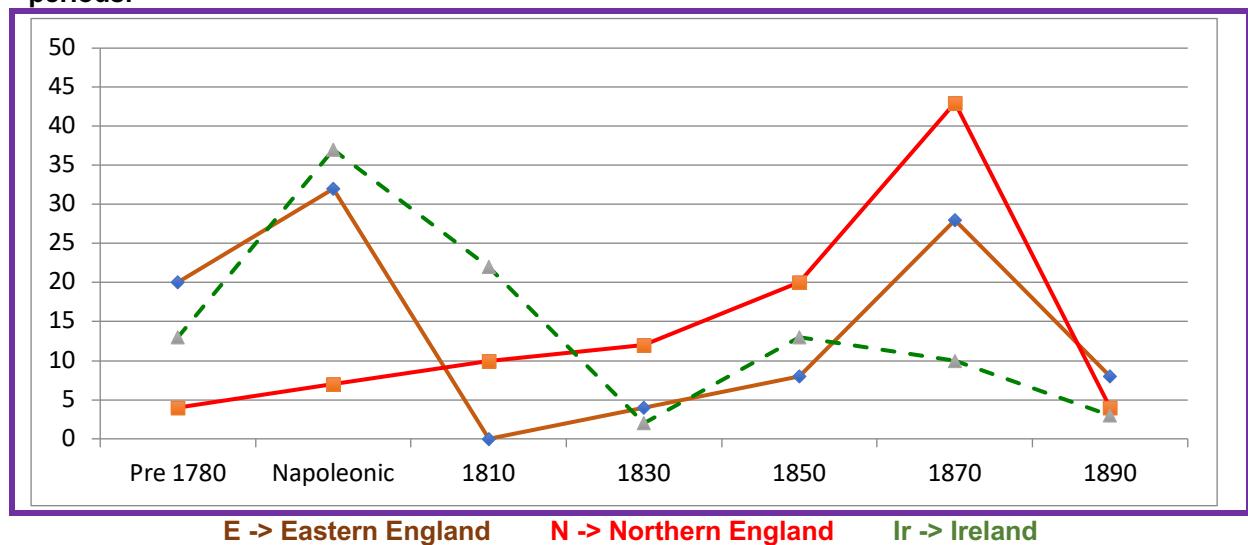
Finally, the expansion of individual sites was very influential in some locations as a result of changing training requirements. The drivers were sometimes strategic with larger concentrations of troops being judged to be safer instead of small detachments spread thinly. This was aided by improved technology in the form of rail transport. Larger and expanding sites frequently required additional adjacent land to be acquired to accommodate larger numbers of soldiers in better living conditions. This also had the impact of reducing the number of sites, particularly in Ireland. The growth of garrison-camps created extensive land requirements for training, large scale provision of accommodation and headquarters facilities which, in turn, created a strong sense of permanence in the landscape. The major developments were in the south at Aldershot, Salisbury Plain, Shornecliffe and Lydd. Several other locations had a significant influence on the military landscape; at The Curragh, Kilbride and Kilworth, and the two major camps and military garrisons around Colchester and Strensall.

Towards the end of the study period it was changing requirements for artillery ranges and integrated training that led to the demand for very large expanses of land on Salisbury Plain, Dartmoor, Stobs in southern Scotland, The Glen of Imaal in Ireland and at Otterburn.

Regional variations over time.

At any one time the themes set out above worked together to create the need for land for military use. The relative weighting of the themes changed in different regions at different times. While the national patterns of requirement and funding was determined by parliament, the local regional priorities played a key role in creating the regional infrastructure. It was this combination of national policies and priorities with local needs and geography that determined the type of military estate developing in the regions. The case studies in Chapters 4 and 5 illustrate clearly how priorities varied significantly over time.

Figure 6.3: Percentage of late nineteenth-century military sites commenced at different time periods.

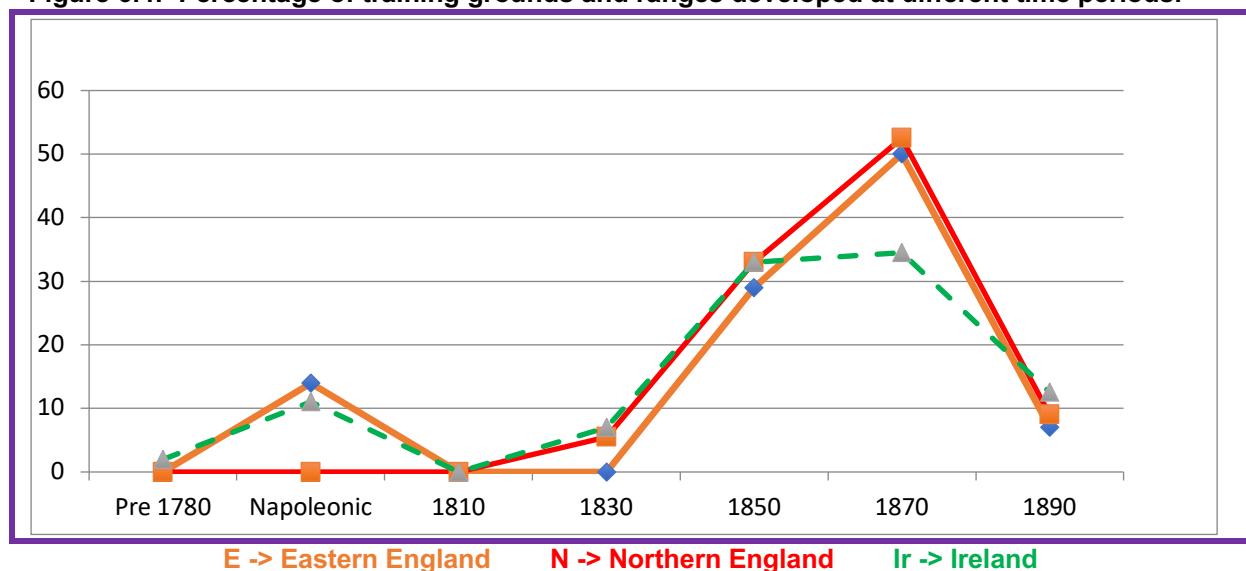


In Northern England in the early nineteenth century the small scale of infrastructure was created by the inherited priority for national defence from the late eighteenth century. For the first half of the nineteenth century this was the dominant priority in Northern England but the control of civil unrest rapidly overtook that in the early decades of the nineteenth century. This led to a steady increase in military sites commissioned from 1810 through to 1850. During the same period the estate in the east of England was almost entirely shaped by national defence needs and priorities. The graph in Figure 6.3 illustrates this vividly with a very large percentage of sites

commissioned before 1810 and only moderate increase in the next 40 years. Ireland had a similar early profile but most of its estate had been commissioned by 1810 reflecting the much earlier commitment to a standing army.²⁰

By the middle of the century the antecedent defence structures had become less important and played only a minor role in the shaping the estate. National defence continued to be dominant for the east but greater priority was placed on recruitment and improving conditions for soldiers in existing sites. Technology and training was beginning to play a prominent role in the acquisition of land. While, in the north a similar set of priorities can be identified it is clear that the response to civil unrest was more influential up to the middle of the century. However, as in the Eastern Region, improving accommodation and conditions for soldiers was gaining greater importance. Greater attention was also been given to developing ranges and training facilities.

Figure 6.4: Percentage of training grounds and ranges developed at different time periods.



The last quarter of the nineteenth century and the first decade of the following century saw a significant change in the priorities. The east had three main influences shaping the estate. Undoubtedly, a defence factor was still very important but this was complemented by improving the quality of accommodation though with a smaller impact from the Cardwell reforms in the construction of new depots. In this region the importance of training resulting from changed technology and the development at Colchester of a regional training centre, reinforced its importance in defence plans and required an expansion of its footprint. Figure 6.4 shows clearly the acceleration in

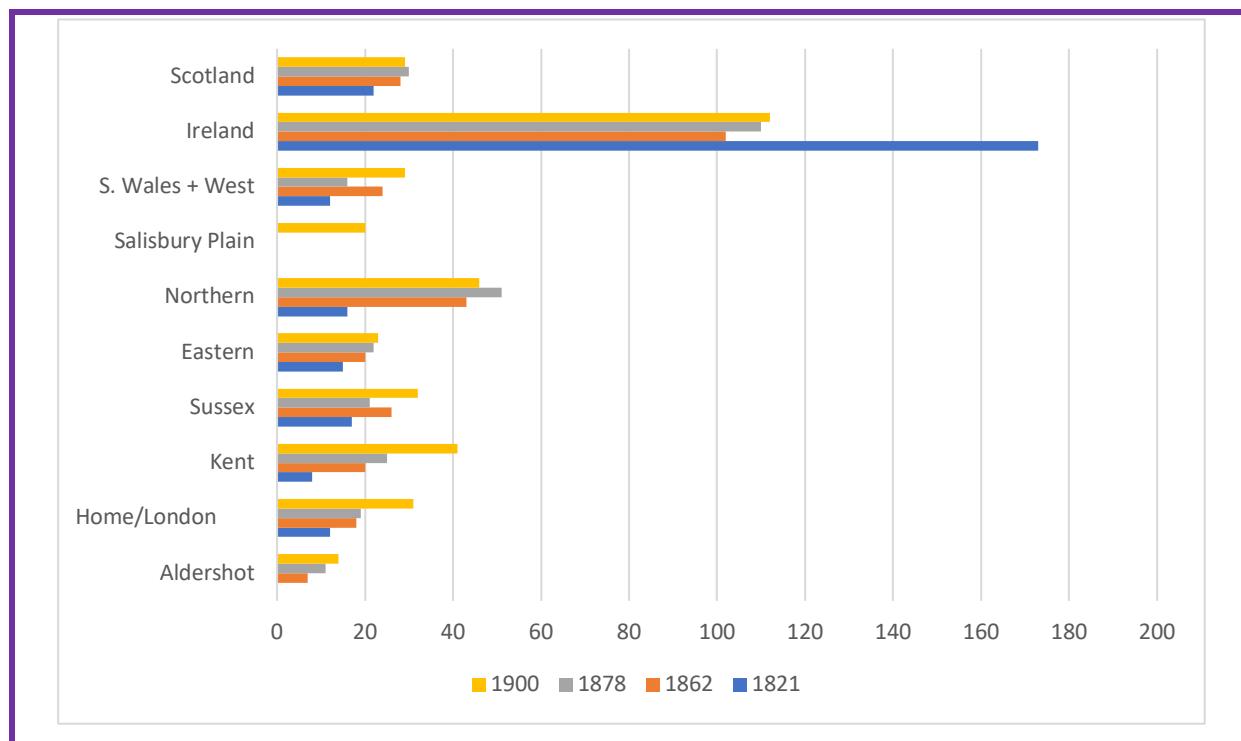
²⁰ Charles Ivar McGrath, *Ireland and Empire 1692-1770*, (London, 2012).

acquiring land for training grounds and ranges in the two decades up to the 1870s. There was a small development of training grounds and ranges in the east and in Ireland during the Napoleonic Wars. In all regions the decades up to the 1870s saw a peak in the acquisition of land for training and explains the very large expansion of the military estate seen in the Land and Tenements returns. The evidence drawn from the L&T returns shows that the role of training further dominated military land demands and for the first decade and a half up to the First World War training was the main priority for the military especially in the north.

Figure 6.5(a) : Number of military sites by region 1821-1900

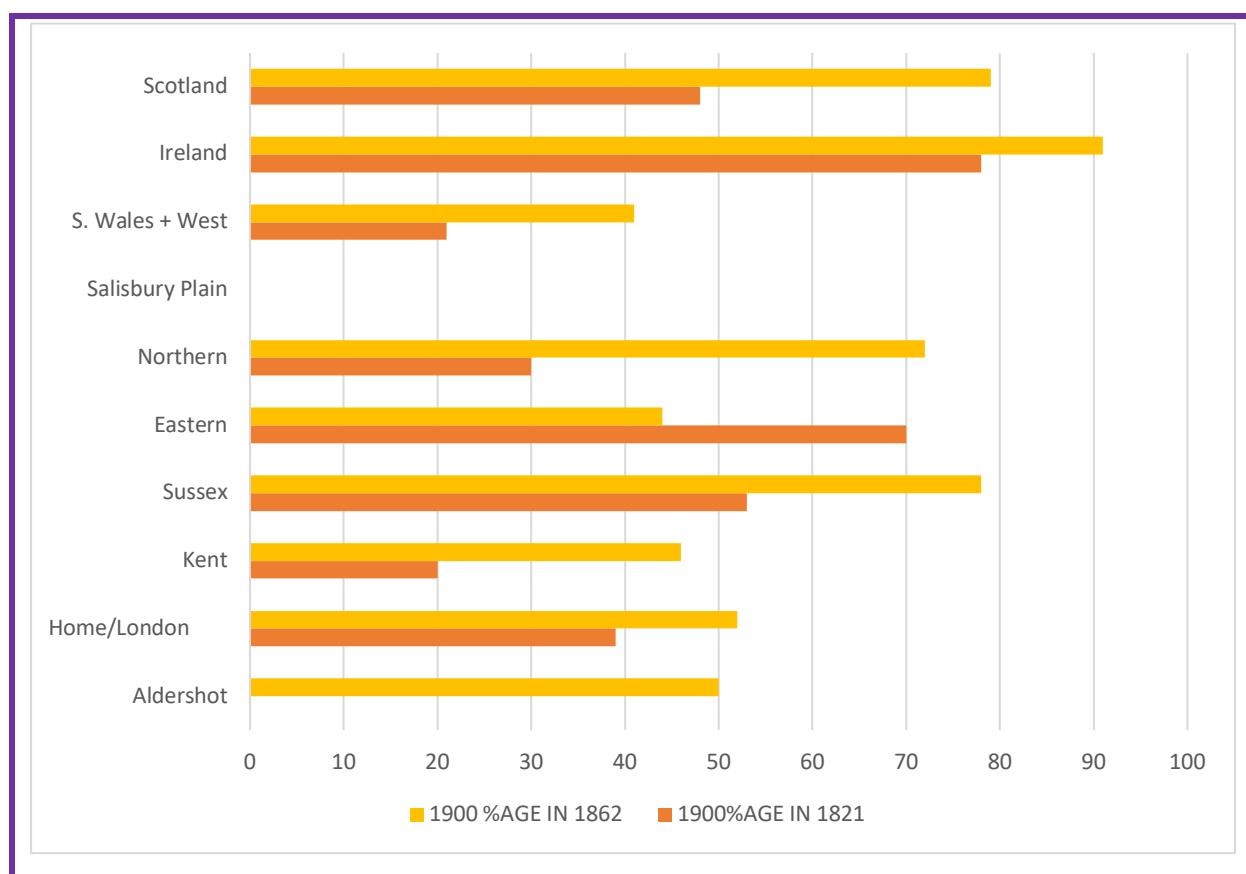
REGIONS	1821	1862	1878	1900
Scotland	22	28	30	29
Ireland	173	102	110	112
S. Wales + West	12	24	16	29
Salisbury Plain	0	0	0	20
Northern	16	43	51	46
Eastern	15	20	22	23
Sussex	17	26	21	32
Kent	8	20	25	41
Home/London	12	18	19	31
Aldershot	0	7	11	14
TOTAL NO OF SITES	275	288	305	377

Figure 6.5(b): Number of military sites by region 1821 – 1900



At the heart of the argument put forward in this thesis is the idea that the military estate commenced much earlier than previously identified. The thesis shows clearly that, despite constant economic pressures, the military estate expanded significantly in the century and a quarter leading up to the First World War. While John Childs acknowledged that there was acquisition of land for military purposes prior to 1914, it is argued here that much greater weight needs to be given to the antecedents of the Defence Estate. The analysis that follows shows that there was a significant military estate by 1900 but also that many of the sites used in 1900 had their origins in military use a century before.

Figure 6.6: Percentage of military sites in 1900 operating 1821 and 1862



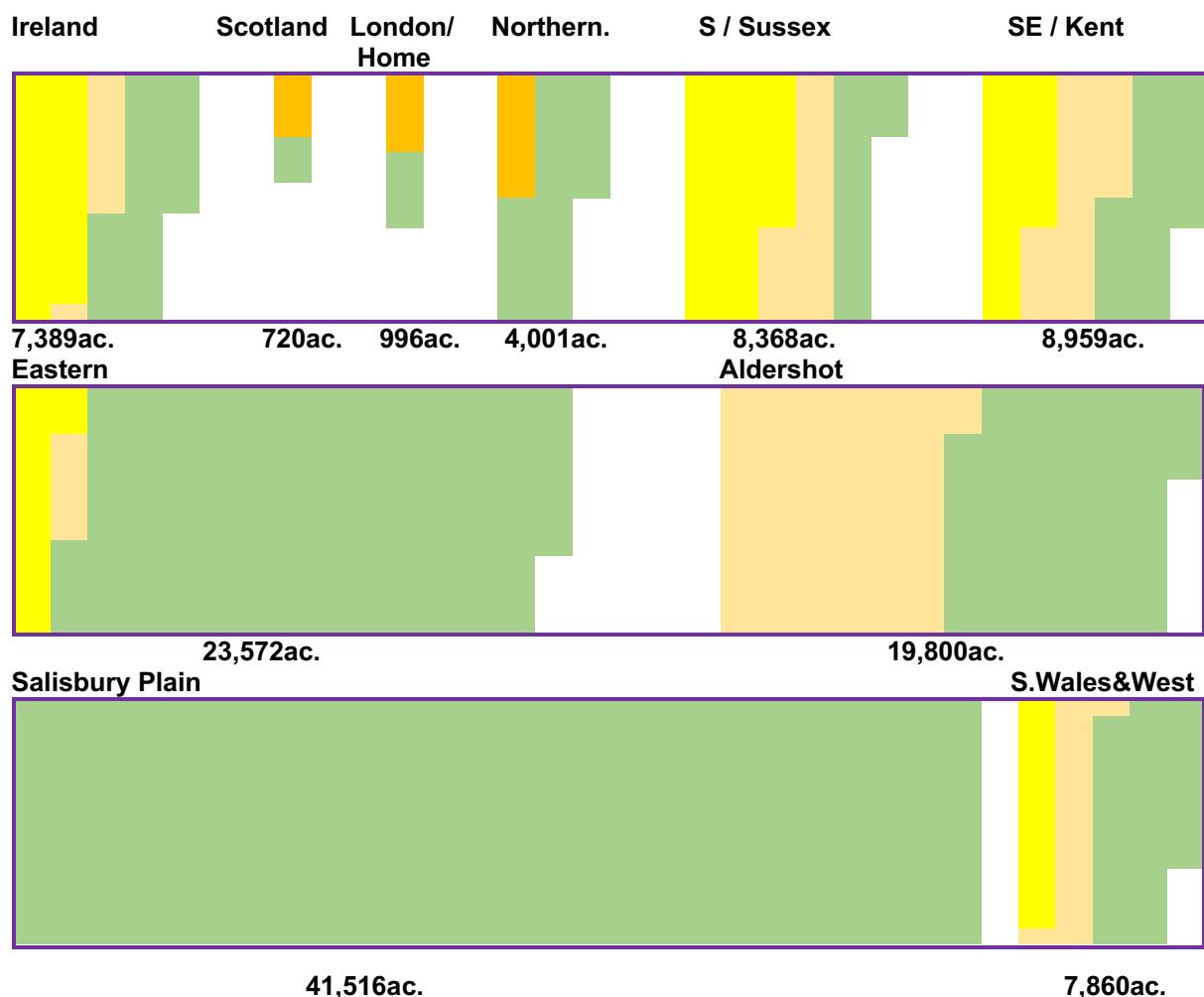
An examination of the 377 sites with military land use identified in the 1900 Land and Tenements Return was made and compared with sites identified from L&T returns, army estimates and barrack returns in 1821, 1862 and 1878.²¹ The 1900 sites were examined in terms of whether they were in use in 1821 and 1862. Figure 6.6 shows the percentage of sites used in 1900 that were also used in the identified years. While these are sites and do not indicate the extent of land used they provide a very good indicator of antecedent development.

This analysis shows that the development of military sites had significant earlier origins, though the regional variations are significant. The North, South Wales and the West and Kent had less than 40% of their sites in 1900 with origins by 1821 but Sussex, the East and Ireland all had over 50% of their sites with early origins, despite the closure of some Napoleonic War sites. The links between sites used in 1900 and in use in 1862 show a much higher correlation with over 50% of the sites in Scotland, Ireland, The North, Sussex, London and Aldershot having such earlier origins. However, the challenge that can be levelled at this analysis of sites is that it does not relate to the areal extent of the estate emphasized throughout the thesis. Therefore, the same information was analysed and used to model the impact on the areal extent of the estate.

Figure 6.7 shows graphically the dominant role played by Aldershot and Salisbury Plain in expanding the extent of the military estate in the second half of the nineteenth century. However, it also shows, despite the smaller acreage of the estate in the other regions, that there was a clear antecedent influence in all the regions with land acquired prior to 1821 and still in use after the Napoleonic Wars still in use by 1900 and an even greater influence for land acquired by 1862 and still used in 1900. This illustrates that while the acquisition of the large tracts of land at Aldershot and Salisbury Plain were rightly emphasized by Childs, the acquisition of numerous sites for military purposes in all regions of Britain was not insignificant.

²¹ TNA Land and Tenement Returns 1862 and 1878 and NAM for 1900.

6.7: 1821 and 1862 military land as a proportion of military land in 1900.



KEY

Extent of the Military Estate in 1900 in military ownership or leased in 1821
Extent of the Military Estate in 1900 in military ownership or leased in 1862
Extent of the Military Estate in 1900 where the 1821 and 1862 coverage is the same
Extent of the Military Estate in 1900 (includes the 1821 and 1862 land coloured in above)

6.3 Contesting the acquisition of land for military purposes.

Land acquisition, its management, environmental impact and redesignation are the core ideas in examining the military estate. The thesis examined the growth in the estate in the nineteenth century in terms of whether it elicited public and political concern and debate in such a way as to be a precursor to the current heritage, environmental and accessibility debates about militarized landscapes. Clearly modern-day discussions about militarized land have strongly contested aspects.²² As Linda Colley pointed out there were over 300 different newspapers by 1820 and they

²² Rachel Woodward, *Military Geographies*, (Newcastle, 2004).

carried a strong interest in military activities.²³ They acknowledged that there was still some public dislike of the idea of standing armies but praised the military for its success at Waterloo and in the many succeeding colonial wars. They, therefore, were an important source in understanding local issues about the expansion of military activity in many localities.

Despite different ideas amongst military leaders about their attitudes to their soldiers, different traditions and the influence of a mainly aristocratic officer cadre, the army was usually clear about what it required. However, reform was often slow and change and funding frequently lagged far behind the will to achieve what was needed. Examples of this permeate most aspects of military life and the facilities it required, whether it was to do with accommodation and sanitation, recruitment and punishment or weaponry, tactics and practice. In parliamentary commissions and enquiries, while there were frequently different views expressed, military officers were usually clear about what they needed the politicians to fund. The acquisition of land for military use was often smoothly achieved with high levels of local support. However, there were also significant levels of contestability, and as has been seen, there was a long period of disagreement about how military land should be acquired and managed. Chapter 2 explained how reform of that process, to ensure military needs as well as expert land management, gradually professionalised the process but land ownership, competing use and compensation, frequently threw up different perspectives and expectations.

The thesis has shown how from the earliest debates about the development of the cavalry barracks in the 1790s there were strong political, press and local voices expressing antithesis to the concept of a standing army and even more so to the notion of settling soldiers in separate barracks instead of being billeted within communities. This often bitterly expressed view set the tone for opposition to the building of military infrastructure for most of the early decades of the nineteenth century. Such views could be seen in the language of Cobden's opposition in the 1840s. He berated barracks as a great moral evil, claiming that they automatically put an economic blight on neighbourhoods, and he queried whether it was wise to depend on a body of men whose presence causes such blight:

²³ Linda Colley, *Britons: Forging the Nation 1707-1837*, (Yale, 2014), pp. 224-30.

Is it so in the neighbourhood of a police station? No, there you find men living in habits of domesticity and virtuous life, not brought to, to say the least, to live in an unnatural and demoralising condition.²⁴

Concerns about the economic and social impact of barracks in particular were played out in the press throughout the nineteenth century. Local disagreements were prominent in the debate about whether barracks should be developed in Bolton or Burnley or Blackburn. However, economic benefits were also frequently identified. The oscillating decisions about the provision of land for the redevelopment of the regimental depot for the Norfolk Regiment in Yarmouth, where the local politicians procrastinated, opened the door for Norwich councillors to step in, making land available for a new barracks, claiming that the economic spin off would benefit the city.²⁵

In general, localization helped to forge a shared sense of identity between civilian communities and particular regiments. In 1873 and 1874 Pontefract, Halifax and Antrim all petitioned the War Office to establish depots in their towns. Similarly, a public meeting in Glasgow, in January 1873, expressed a strong opinion in favour of army reform. Even the Halifax decision, discussed in Chapter 4, elicited strong views on both sides:

His Royal Highness the Duke of Cambridge and Mr. Cardwell received a deputation at the War Office, representing between 4,000 and 5,000 inhabitants of Halifax, all objecting to the town or immediate district being made a military centre.²⁶

The argument centred on the competing demands for labour. Local manufacturers were concerned that localised recruitment to the military would draw men from

²⁴ Cobden on land values, *Cork Examiner*, Friday April 20th 1849.

²⁵ *Norwich Mercury*, 21st January 1874; *Lowestoft Journal*, 5th September 1874; *Chelmsford Chronicle*, 17th October 1874, *Norwich Mercury*, 29th April 1882.

²⁶ *Leeds Mercury*, Thursday 27 March 1873.

important pursuits and have a generally demoralising effect on the district. They were afraid that the temptations arising from, 'the frequent parades, reviews, and other military retreats which made men neglect their work.'²⁷ In response, General McDougall explained that the object of a Depot was to raise and drill recruits and pass them on to the Regular Army. They would be from 18 to 20 years of age, and their number would rarely exceed 200, and there would be 50 old soldiers to regulate their conduct.²⁸ The argument in favour of the development of a local depot was summarised by Cardwell when he explained that other local deputations approved of military centres, and those acquainted with the subject were of the opinion that those centres would introduce industry and discipline into their districts, where before there was a want of them, and he should be very much disappointed if any of the evil consequences being predicted arose from its introduction.²⁹

Arguments against the military presence in a town were often expressed in terms of poor behaviour, crime, drunkenness and the social and moral ills of prostitution. The counter argument was captured by the Duke of Cambridge. He argued that,

At these depots they would have men of good character, such as non-commissioned officers and old soldiers, who would set a good example to the recruits They would be as near as possible accommodated in barracks or places where they would be under good control and where any irregularities would be immediately checked.³⁰

All too often the behaviour of soldiers in nineteenth-century towns did not live up to The Duke's high expectations. While the contestability with regard to barracks was often enshrined in anti-soldier attitudes, aligned to economic, social and moral

²⁷ *Leeds Mercury*, Thursday 27 March 1873.

²⁸ Ibid.

²⁹ Ibid.

³⁰ Ibid.

concerns, the contests over land for ranges and training were more about opposing land use concerns, access and compensation.

The 1891 Commission on Ranges identified several competing demands on land for range developments especially as longer ranges with greater safety margins were needed. Chapter 4 identified particular issues over land used as catchment for water supply but also noted a symbiotic relationship between reservoir developments and finding suitable land for ranges. The Act establishing Crowden and expanding Diggle Ranges had specific orders setting out how the sites were to be managed and operate in water catchment areas so as to avoid pollution.³¹

Occasionally disputes were unspecified but led to disruption for the military as in the reported dispute at the Milton ranges, Gravesend in 1877. Newspaper reports noted that although the War Department had signified its intention to purchase the land, from the Dean and Chapter of Rochester, there had been a dispute about the land adjoining the rifle range at Milton, 'between the owners and occupiers and the Government, extending over a period of several months.'³² Firing at the range had to be discontinued, but fortunately for the army, alternative facilities were available at Shorncliffe and, while somewhat more inconvenient for the soldiers, practice did not have to be cancelled.

An advertisement in a Sussex newspaper shows why the changing demands for the size and layout of ranges became more problematic in terms of finding suitable land of the required extent when ranges changed in the later years of the nineteenth century:

Offers of land suitable for rifle ranges, to the following extent, 7,000 yards in length, and 2,000 yards in breadth, contact Head-quarters South-Eastern District, Dover, July 1890, with all particulars as to terms for hire, or purchase, to be received by the Commanding Royal Engineer, Archcliffe Fort, Dover.

³¹ PP, Bill to Confirm certain Provisional Orders of the Secretary of State under the Military Lands Act 1892, (HOC. 255,1896).

³² *London Daily News*, Monday 20 August 1877.

Ranges with hills near the centre of the length of 7,000 yards would be preferred.³³

Not only would this require 2,980 acres of land but also sufficient space nearby to avoid conflict with public safety. Frequently the requirement for space for ranges was, from the mid nineteenth century, in areas that were rapidly expanding as urban areas. The Barton Moor case, in Chapter 4, showed that it was not only the safety of agricultural workers on the land that was a concern but those adjacent to it as well. In addition, while the railways were a benefit to range location, enabling soldiers to access ranges some distance away, the proximity to the railway itself could cause safety concerns and also complaints from rail companies.³⁴

Safety and land use conflict was a significant theme in the 1891 Select Committee Report.³⁵ The newspapers had previously identified the rationale for the report in terms of land competition for expanding urban areas. The report focused on the increasing difficulty experienced by many Volunteer Corps and especially by those belonging to the larger towns, in finding rifle ranges at which they could qualify for their grant.³⁶ While the expanding northern towns had particular problems for their numerous Volunteer Corps it was the cases of Wimbledon Common and the New Forest (in Chapter 3) that created the greatest media and political interest. The Wimbledon debate publicly centred on safety as the somewhat ironic letter in the *London Evening Standard* illustrates:

Your Correspondent condemns the whole of these ranges as unsafe. I can assert the contrary, as every precaution is taken for the safety of the public, by the hoisting of flags, semaphore, and also by the employment of a bugler, and the paths that run across the ranges are marked off by ropes. If, after all these

³³ *Sussex Agricultural Express*, Tuesday 22 July 1890.

³⁴ *Manchester Times*, Saturday, 20th August 1881.

³⁵ PP, Select Committee on Rifle-Ranges, Report, paragraphs 423 to 426, (H223,1890-1891).

³⁶ *Courier and Lancashire General Advertiser*, Saturday 10 September 1887.

precautions are taken, some residents of Putney will persist in going into places marked dangerous, they must not be surprised if they get hurt.³⁷

The history of shooting on Wimbledon Common ranges illustrates the way in which decisions about ranges took on social, political and economic dimensions let alone the needs of the military. Volunteer numbers varied considerably during the century closely allied to perceptions of external threat from Europe. The Volunteers were frequently drawn from middle class backgrounds who would never join the Regulars but felt that it was their duty to join military units designed for home defence. In 1860 the first meeting of the National Rifle Association (NRA) took place on the Common. It was supported by the monarch and many of the country's most influential members including the landowner for Wimbledon, The Commander in Chief, The Duke of Cambridge.

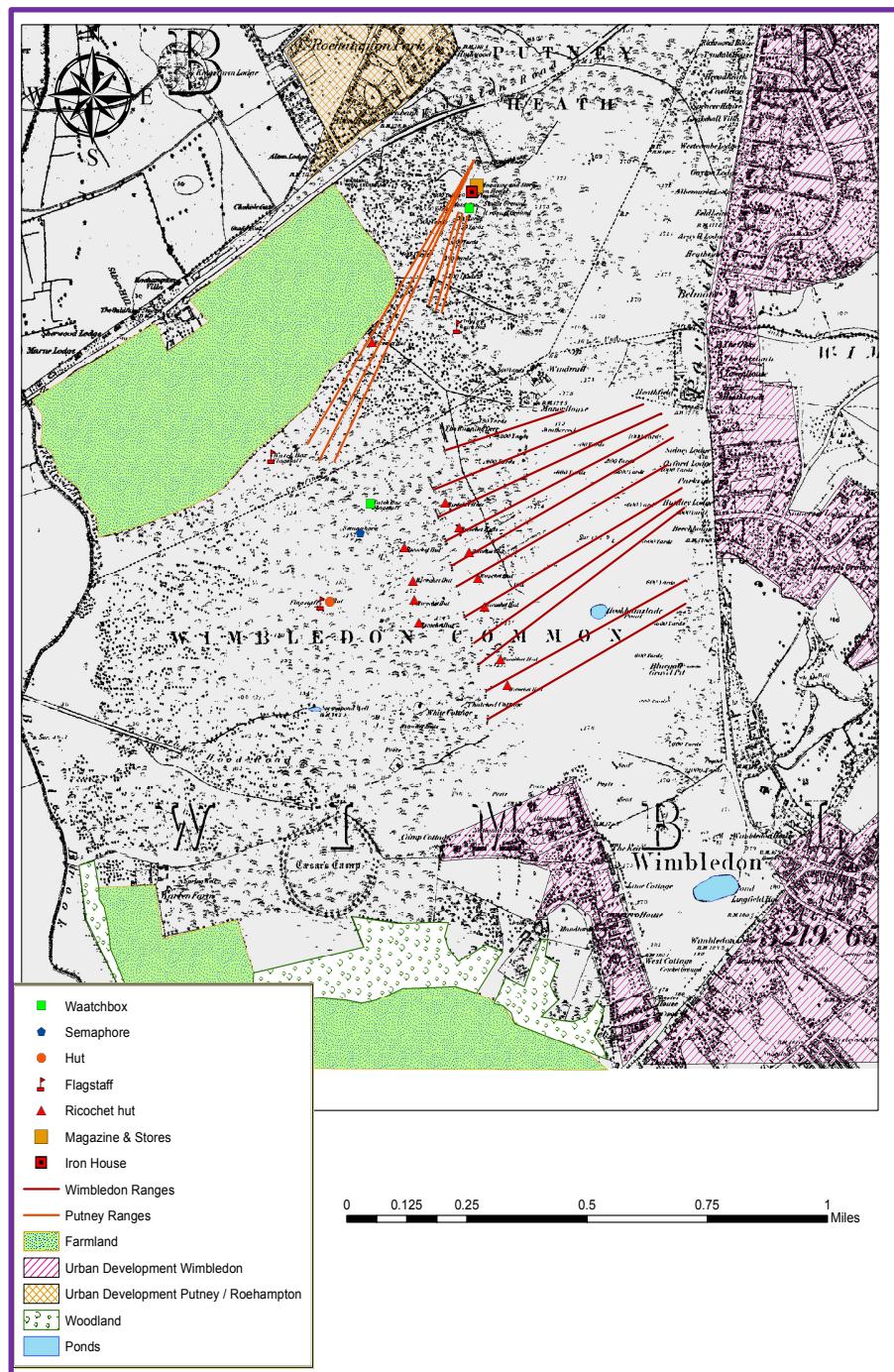
The NRA annual shooting competition became a national event that lasted for several weeks and was an important part of London's social life and economy. In adopting the shooting habits of the landed aristocracy, the urban middle-class that made the volunteers movement popular, was willing to incorporate the 'squiresarchy' of the countryside. The volunteers drew their structure largely from the old county system, with Lord Lieutenants acting as colonels and Church of England clergymen eagerly promoting the organisation.³⁸ The perceived safety of the ranges was part of the reason that led to the competition being stopped and transferred to Bisley at the end of the century. The advantages in terms of location were not contentious but there was much dispute about its safety, yet there was only one reported fatality over the years. In the debate in Parliament about shutting down the annual competition the, 'tenure of the present ground depended largely upon the goodwill of His Royal Highness, the Duke of Cambridge, who had kindly allowed firing in the direction of his property'.³⁹

³⁷ *Evening Standard*, May 1894.

³⁸ Margery Masterson, "English Rifles: The Victorian NRA", (*History Today*, 13 Dec. 2017) <https://www.historytoday.com/miscellanies/english-rifles-victorian-nra>.

³⁹ Hansard, NRA proposed removal Wimbledon Common, The Earl of Wemyss, (08 August 1887).

Figure 6.8: Wimbledon Common Ranges-1880s



By 1887 The Duke had changed his position as he put it in the parliamentary debate, acknowledging that the place was now unsafe;

Every year a considerable proportion of bullets go through the whole of the ground behind the butts. Now, I ask your Lordships whether that is a proper condition of things? Wimbledon is really now becoming London. A resident, who lived behind the butts, was in the garden picking a flower, when a bullet whistled past their head, though, fortunately, no accident occurred.⁴⁰

Due to difficulties associated with finding and preparing a suitable location for a rifle range, the prize meeting remained at Wimbledon until 1889. In 1890 it moved to Bisley.⁴¹ In the 1880s the 1860s regulations were amended and these are still in use giving the right to create byelaws,

for the regulation of shooting and the prevention of intrusion on ground acquired or used, with the assent of a Secretary of State, by any volunteer corps for rifle or artillery practice, and it is expedient to amend the said power and to extend it to ground appropriated by a Secretary of State for the like purposes in the case of other portions of Her Majesty's forces.⁴²

Conflict occasionally developed about compensation for an individual. Dr. Havens, the landowner at Middlewick near Colchester, had manorial rights and the case there was about compensating both the landowner and those with commoners rights. While there were some who objected to the expansion of the ranges by another 120 acres it was the value of the compensation that was at the heart of the dispute that continued for many years.⁴³

One of the most public and significant cases about common rights was that of the commoners in the New Forest explained in Chapter 3. The opposition from the commoners revolved around the incompatibility with the uses listed in the New Forest Parliamentary Act 1877. Pelham's enquiry advised in favour of the Commoners' and the Commons Preservation Society. The principal rights of common were agreed to

⁴⁰ Hansard, NRA proposed removal Wimbledon Common, Duke of Cambridge (08 August 1887).

⁴¹ Hansard, H.L.Deb vol. 318, cc1496-515, 08 August 1887.

⁴² PP, Artillery and Rifle Ranges Act, and Drill Grounds Act, byelaws to cover the right of land for drill or other military purposes, (1886).

⁴³ *Essex Standard*, 4th November 1899; *Essex Herald*, 7th November 1899.

add greatly to the value of the holdings and the commoners' prosperity was only underpinned by their rights of pasture over the common land. The 1877 Act stated that the common was to, 'remain open and unenclosed' and it was argued that the opening of the range on the scale proposed would, 'materially change the aspect of the forest'.⁴⁴ Similar rights issues were involved in the protracted case of Strensall Common finally resolved through parliament.⁴⁵

In 1873 the War Office leased Plumstead Common, adjacent to the depot at Woolwich, as a training ground. Three years later some of the commoners rioted, partly because some private landowners had erected fences that deprived them of their grazing rights, but also because the constant passage of troops and horses across the common was destroying their pasture.⁴⁶

The requirements of the military or pressure exerted on an area created the context for the contestability debate played out very publicly in the Colchester area. A local councillor questioned the military claim that it was the duty of a council to protect public rights, the stoppage of such rights would be prejudicial to the interests of the district. However, the local paper captured the alternative view, arguing that the future of Colchester depended on the favour with which it was regarded by the War Department:

It will also count for something in Colchester's favour that it's local authority and its inhabitants welcome the military population and desire to make things pleasant for the army and for those responsible for its administration. The corporation of the time have shown this by their activity in securing a rifle range which will make Colchester of the greatest possible value to the War Department.⁴⁷

⁴⁴ PP, New Forest Rifle Range, Pelham Report. (1892).

⁴⁵ PP, Strensall Common Acts, (1880, Bill 60) and (1884).

⁴⁶ TNA HO 45/ 9413/56640.

⁴⁷ *Essex County Standard and Eastern Counties Advertiser*, 13th May 1899.

The ability of the military to establish local byelaws was another source of conflict as it inhibited local rights of access either permanently or at specified times. One of the longest standing of such disputes surrounded the position near Landguard Fort. This dispute went on from 1887 to the 1930s in relation to the ranges constructed adjacent to the fort and barracks. In 1887 notice was posted informing the local people that the Secretary of State for War had applied to the Board of Trade for their consent, 'to the following bye-laws made under the provisions of The Artillery and Rifle Ranges Act, 1886 in respect of rifle firing at Landguard Fort'.⁴⁸ This resulted in a Board of Trade Inquiry under Admiral Sir George Strong Nares, K.C.S.⁴⁹ The public of Felixstowe and Walton claimed that the proposed rules would seriously affect the fishing and boat-owning community, and no adequate safety was put in place. Interestingly this inquiry was held by the Board of Trade to look into matters they were responsible for, namely, 'any right of navigation, anchorage, grounding, fishing, bathing, walking, recreation; and that the by-laws did not unreasonably interfere with any those rights.'⁵⁰

Rights of access were not just in contention on land but when ranges were situated on the coast and firing over the foreshore the position with regard to competition from fishing or sea transport had to be determined. The Act of 1862 setting up the artillery ranges at Shoebury had to establish the rules with regard to clearance rights at sea. It also provides an early example of the legal attempts to resolve contested claims on the landscape.⁵¹ The rules were clear. If any vessel anchored on ground marked as part of the then the owner or Master of such a vessel, could be fined between 'Forty Shillings and not exceeding Five Pounds for every Offence'.⁵² On the other hand the rights of the Lords and Ladies of the Manor were well safeguarded. It made provision for the various Manorial Rights relating to the beach and foreshore to be exercised, so that, 'Wrecks of the Sea, Jetsam, Flotsam, and Lagan Goods, Merchandise, or Effects

⁴⁸ *East Anglian Daily Times*, Saturday 23 April 1887.

⁴⁹ *Ibid.*, Thursday 18 August 1887.

⁵⁰ *Ibid.*

⁵¹ Bill to Appropriate certain Portions of Land lying between High and Low Water Mark, situate in the Parishes of Shoebury and Wakering, as Ranges for the Use and Practice of Artillery (20.05.1862).

⁵² *Ibid.*, para 3.

whatsoever,' could be recovered or removed.⁵³ If issues of contestability originated in the rights of access or use of land then friction between owners, the military and commoners could ensue.

Friction also occurred during army manoeuvres outside the immediate confines of barracks. In 1871 Cardwell held a large camp of exercise, involving 16,000 regulars, militia and volunteers, on the Berkshire downs. Local farmers insisted that the government should pay them compensation for any damage done to their property by the troops. They also insisted that signs warning troops not to trample their crops and for the government to make 'liberal payments for any transports they are asked to provide, and to put money into their pockets by purchasing supplies locally for the troops.'⁵⁴

However, manoeuvres were also of great interest to the public and the press in the first decade of the twentieth century:

Many horses and their riders fell into the water, causing roars of laughter among the thousands of spectators. The local press provided much mirth through its portrayal of a full-scale landing on a beach full of holidaying Londoners. The landing craft went on, while bathers in costumes of marvellous tints bobbing up and down in the water made a comical picture amid the landing stages and khaki clad troops. At all times huge crowds watched the events, with civilian and military police preventing sightseers from getting too close to the action. Local fish store proprietors did a roaring trade from troops and spectators alike.⁵⁵

This thesis has found no direct precursors to the environmental impact debates of the twenty-first century over issues such as the positioning of parts of the military estate in National Parks. A theme particularly apposite for Otterburn within Northumbria National Park to this day. However, the debate about such matters stems back to at least the 1870s when Jean Lubbock attempted to introduce a national monuments

⁵³ Bill to Appropriate certain Portions of Land lying between High and Low Water Mark, para 4.

⁵⁴ French, *Military Identities*. pp.236-237; TNA - WO 33/ 23, papers relating to proposed exercise 1871.

⁵⁵ Batten, *Futile Exercise?* p.62

preservation bill.⁵⁶ Eventually, following the precedent set by the Commons preservation society in the 1880s, a wonderful British blurring of the distinction between private and public ownership was concocted and the politicians were won over. So, for example, the National Trust holds the properties and land privately in the national and public interest.

The Northern Region case study also exemplified another issue in terms of competition for land, that relating to perceived and actual land values. In other words, the competing economic values of different land uses. The case study examined aspects of the long hunt for suitable land to act as the 'northern Aldershot'. However, finding an area of land large enough within the budget allocated in the Localisation Act was more complex than merely finding 'waste land', as the local papers identified as early as 1874. It was assumed that one of numerous large tracts of moorland in Yorkshire or Westmoreland would be suitable and available. But the Localisation Act, only allowed £300,000 for the purpose. Local reporters pointed out that a reasonable calculation about the value of 'waste land' by other users, in particular the aristocratic hunting and shooting sportsmen, would require far in excess of that figure. These apparently, 'wild and barren moors, to all appearances valueless, will realise during the season from £10 to £14 per acre for their fluctuating supply of grouse.'⁵⁷ As the demand for sport each year far exceeded the supply, the moors had become a landscape of relatively high value with an annual income of some £20-£30,000. Therefore, the amount available for the purchase of land would only cover about 10 years of income.

Finally, a case in Colchester illustrates, in one serious, yet slightly humorous exchange of letters, the competing desires in the community for the use of land. James Hurnard (Hon. Sec. to the Footpath Association) found, men measuring the North side of the barrack field, with the view to enclose the footpaths and prevent the public trespassing on the large open space of grass, perhaps 100 acres, which was being let to a farmer

⁵⁶ Barbara Bender, *Landscape: Politics and Perspectives. Stonehenge: Contested Landscapes*. (Oxford, 1993), pp. 270- 298.

⁵⁷ *Edinburgh Evening News*, Tuesday 20 January 1874.

for his sheep to graze. That open space was the chief resort of those seeking exercise and recreation and a source of immense enjoyment to the towns people:

The cricketers are now no longer allowed the privilege of playing and have no other suitable place. All is to be sacrificed for the good of a flock of sheep. Now the question is whether the people of Colchester do not deserve as much consideration as the sheep, and, whether they cannot enjoy it together as heretofore. Colchester is deprived of its bathing places, the River is closed against boating, and now we are threatened with the loss of our breathing place.⁵⁸

One can almost feel the gritting of teeth in the courteous, careful but firm response from Secretary of State Edward Cardwell:

My dear Sir, The War Department has no intention of interfering with any rights which the people of Colchester now possess, and if the local authorities are desirous of obtaining the use of the whole field for the recreation of the inhabitants, I shall be perfectly ready to consider any proposal they make to rent it for that purpose. *I must make it subject to its use for military purposes.*⁵⁹

6.4 Land for military purposes - topography and value

This section focuses on the land, often marginal or called wasteland, that the military frequently acquired. The military often had a close affinity for such land as it had a history of using it temporarily, for training and camps, especially during the late eighteenth century. Costs, undoubtedly, also meant that the military was dependent on what land was available at prices it could afford or it required close collaboration with supportive landowners or city fathers to access strategically important locations. However, there were also specific needs relating to training in different terrains, and in some cases such as clearance land, explained in Chapter Three, the location continued to have an agricultural value and was protected by the military from further

⁵⁸ *Essex Standard*, 24th June 1870.

⁵⁹ *Ibid.*, (author's emphasis).

development. But there is no doubt that the geography of the country had a deterministic impact on some locations, particularly the coastal defensive sites. While the examples used are mainly drawn from the two case studies, locations from across the whole of Britain are also used.

The notion of a landscape that is hostile or threatening comes from many different cultures but the idea that any particular landscape may be viewed as a wasteland and therefore a problem was a set of emerging ideas in England, in particular in the seventeenth and eighteenth centuries.⁶⁰ Ideas of aesthetics developed within the Enlightenment period and principles relating to natural and artistic beauty became important in the way aspects of landscape were judged. In particular the reaction to wastelands occupied a key role in Western views because they had the ability to trigger strong emotional and religious responses.⁶¹ When these views were combined with political and philosophical views about land ownership, land usefulness and land as a central economic resource it is understandable that strong views emerged about what wastelands are and how they should be used.

Arguments about the role of commons were fuelled by strong emotional views as well as through the influence of agricultural improvers. Wasteland was considered to be associated with ideas of flawed or bad landscapes and the presence of wasteland seen as inherently sinful. Such arguments about wasteland became deep seated in various parts of society. This was especially so if the land itself 'produced or harboured the wrong kinds of life'.⁶² From the middle of the seventeenth century the lack of productivity of wasteland was subject to criticism and proposals from agricultural improvers such as Samuel Hartlib. The focus of the criticism of waste was not only on the obvious mountains, moorland, and forests but also included fens, heathland and commons.⁶³ These attitudes crystallised and fermented action throughout the

⁶⁰ Vittoria Di Palma, *Wasteland: A History*, (Yale, 2014), p.4.

⁶¹ Isaiah 5:1-7 I will take away its hedge for it to be grazed on, and knock down its wall for it to be trampled on. I will lay it waste, unpruned, undug.

⁶² Vittoria Di Palma, *Wasteland*, p.10; Neil MacMaster, The battle for Household Heath 1857-1884: Popular Politics and the Victorian Public Park, (*Past and Present No.127*, Jan. 1990), pp.117-54.

⁶³ R Grove, Cressey Dymock and the Draining of the Fens, (*Vol. 147 No.1, Geographical Journal*, 1981), pp.27-37.

eighteenth century and contributed to the pressure to enclose much of the landscape well into the nineteenth century. Attitudes that emerged during this period go some way to helping to understand why many military sites developed on commons, heathland and moors which were considered wasteland by many, a term seen in parliamentary debates and on military maps. However, understanding the Commoners perspective explains why any encroachment on common rights would ensure contested views of the use of the land even when that use was underpinned by political might or legislation.

The use of commons for military purposes goes back many centuries. Archery was practiced on commons often after church on Sunday in the sixteenth century and many examples of buttlords were identified on commons in Norfolk.⁶⁴ Late eighteenth-century military camps and training sites, especially in Southern England, East Anglia and parts of the Northern District were dominated by locations on heaths, commons and moorland. Later barracks, rifle ranges and training sites were invariably found in similar landscapes. In addition to the buildings and camps there were countless local mustering points where army and militia paraded and trained. Commons were sometimes usurped for large military exercises. In the spring of 1777, Parson Woodforde and his nephew 'took a walk...to see the Dragoons exercise on Household Heath about three miles from Norwich'. Again in 1793 he recorded seeing 'a Regiment of soldiers march thro' the City to Household-Heath to do their Exercise'.⁶⁵

A study of the Historic Environment value of urban commons provides a useful summary of the long-standing military use of urban and rural commons.⁶⁶ From the medieval period parts of commons were used for shooting grounds, as on Household Heath, on land behind the site of the Norwich cavalry barracks and for archery practice as well as mustering troops. Military reviews were carried out on the common south of Lincoln by the City of Lincoln Volunteers in the early 1800s and royal reviews were

⁶⁴ Sara Birtles, "A Green Space Beyond Self-Interest: The Evolution of Common Land in Norfolk, c.750-2003" (Doctoral Thesis, UEA, 2003)

⁶⁵ Ibid., p.159-160

⁶⁶ Mark Bowden, Graham Brown and Nicky Smith, *An Archaeology of Town Commons in England. – 'A very fair field indeed,* (English Heritage, Swindon, 2009), pp.44-55.

often carried out on commons in and around London. Commons were used by the militia during the Napoleonic Wars and these were intensive on places such as Tiptree Heath, near Colchester and on Warley Common in Essex. With the enclosing of commons, provision was made in some Enclosure Awards for military training and drill. Bowden identified Stamford and Wimbledon as such locations. At Wimbledon there was a requirement to give two days' notice of use and there were restrictions on horses and artillery, which were not allowed on cricket pitches, golf courses, young plantations and pond dams. Other examples include Pitchcroft, Worcester, and Hob Moor York though here military use was temporary, and the development of local barracks avoided these commons.⁶⁷

The impact of military sites on the landscape during the Napoleonic War was commented on by a Suffolk labourer. He explored what sort of land was requisitioned, leased, bought or otherwise acquired to accommodate the needs of the military either temporarily or permanently. He talked about large camps at Bromeswell, and at Foxhall, with constant mustering on Westerfield Green, and Rushmere with large barracks at Ipswich and Woodbridge. His memories give an insight into the politics of land acquisition. He felt that it was the military take-over of the land that ended its common use. He bemoaned the loss of the open park-like commons at Westerfield Green where the cottagers had the right of pasturage. 'To rob the labourers of these open spots, which they and their forefathers had used for centuries, was one of the foulest acts of the rich towards the poor'.⁶⁸ The Napoleonic Wars influenced attitudes to the military and the land. War metaphors seemed to give strength to attitudes being expressed about the land as well. Sir John Sinclair, President of the Board of Agriculture, inspired by the drama of war in 1803 commented that:

We have begun another campaign against the foreign enemies of the country Why should we not attempt a campaign against our great foe, I mean the hitherto unconquered sterility of so large a proportion of the surface of the kingdom? let us not be satisfied with the liberation of Egypt, or the

⁶⁷ Mark Bowden et al, *An Archaeology of Town Commons in England*, (2009).

⁶⁸ Acc.No. 62449 Class No.qS942.08, Suffolk Local Studies Collection, 1816-1876.

subjugation of Malta, but let us subdue Finchley Common; let us conquer Hounslow Heath; let us compel Epping Forest to submit to the yoke of improvement.⁶⁹

The attractiveness of the common for military practice and display was clear well into the late eighteenth and early nineteenth centuries.⁷⁰ Some of the military spirit survived in Cawston after a large portion of the heath was allotted to the poor for fuel at enclosure in 1800 and a rifle range for the Aylsham Volunteers was established in the middle of the nineteenth century.⁷¹

Figure 6.9:
Caption from the
Illustrated London
News reads:
“Review of the
Norfolk Volunteers
on Household
Heath...”. The
Norfolk Light Horse
are mounted
wearing white
plumes left and right
of the engraving.
(1863)



As late as 1879, a map of potential sites for the development for military defences along part of the Suffolk coast provides an insight into the terminology applied to land used by the War Department. The map 'of wastelands' identifies those parts of the Manor belonging to His Grace the Duke of Hamilton and Brandon where there are

⁶⁹ J.M. Neeson, *Commoners: common right, enclosure and social change in England, 1700-1820*, (Cambridge, 1993); Michael Williams, The enclosure and reclamation of waste land in England and Wales, (No. 51, *IBG*, Nov. 1970), pp. 55-69.

⁷⁰ Sara Birtles, A Green Space Beyond Self-Interest: The Evolution of Common Land in Norfolk, c.750-2003, (Doctoral Thesis, UEA, 2003).

⁷¹ Norfolk Heritage Explorer, NHER 53138, A bank is shown on the OS 1st Edition (1883) and is labelled 'targets'. A rifle range is labelled with distances from 100 to 800 yards.

common rights.⁷² This may well capture the way in which land suitable for military use, that may be less contested by local people, was perceived at the time by the War Office officers.

It was, therefore, no surprise that the commons and heaths of the country became prime sites for military use in the following century. Barracks were frequently built on or near heaths, on moorland or commons. The barracks on Hounslow Heath, Norwich and Lichfield are examples extant in the current landscape. By the time of the Cardwell reforms the acquisition of land was less dominated by wasteland and commons as most land for Depots was in towns and cities. However, larger areas of land for training were also required and this was often influenced by the availability of large tracts of land which were generally not intensively developed for agriculture as at Strensall, Chipping, Middlewick, Shoeburyness and famously on the commons and heaths of southern England around Aldershot.⁷³ The use of commons for these purposes was seen as normal by the end of the century. In 1903 it was reported that a Lt. Dunraven did not get formal leave from Lord Onslow to construct the lines for a military encampment on the common near Guildford but 'the actual lines were laid out upon neighbouring farms,' *The Gazette* felt that this was excusable, 'As the common has been habitually used for military purposes since 1854, such an omission is not altogether incomprehensible.'⁷⁴

Coastal locations, especially where firing out to sea was possible, were also favoured if transport links were good and the surrounding land was considered a 'waste'. Waste covered a wide range of marginal lands from coastal dunes to wetlands on the foreshore. Examples of these locations in England can be found at; Fleetwood and Altcar in Lancashire; Hythe, Walmer and Dover in Kent; Browndown and Gosport on the south coast; Redcar, Scalby Beck Scarborough and Whitley in the north of England and at Great Yarmouth. Parc Pentir in Wales: Montrose Links and Seaton Links in

⁷² TNA WO 78/642, Suffolk and Essex. Map of wastelands in the parishes of Felixstowe, Levington, etc. (1879) - seventeen plots totalling 824 acres used by the WD including creeks, salttings, Landguard Commons both dry and wet, part of beach and land around five Martello Towers.

⁷³ Peter Dietz, Aldershot: Home of the British Army: *Garrison – Ten British Military Towns*, ed. Dietz, (London, 1986), pp. 119-136; Graham Webster, 'Man's influence on Chobham Common,' <https://chobhamcommon.wordpress.com>. accessed 25/10/2017.

⁷⁴ *St James' Gazette*, Common Land near Guildford, Friday 7th August 1903.

Scotland; and Youghal, Preghane, Duncannon and Finner in Ireland also exemplify the importance of coastal sites.

Rifle ranges were also frequently located on commons as at Household Heath, South Common Lincoln, Abingdon Common and Figham Common near Beverley. Extensive areas of heath and common south of Colchester were developed for ranges and training during the nineteenth century.⁷⁵ The acquisition of common land was not a popular move especially during the second half of the nineteenth century when the value of commons had a resurgence. The Commons Preservation Society became a strong and well-organized defendant of the commons especially when large scale acquisition was proposed.⁷⁶

However, many ranges were also developed, especially in the mid nineteenth century for the Volunteers, on the estates of the aristocracy but also tucked away in suitable dips in enclosed farmed land as at Bury St Edmunds, Grantham or in less productive land adjacent to railways and racecourses as at Seaford, Warley, and Ipswich, as illustrated in Chapter Five. By the end of the century the scale of land acquisition was being dominated by the need for large areas of land for integrated military use, accommodation, training, exercise, development and manoeuvres. The press reported in 1892 on a schedule of purchases by the War Department of property across Salisbury Plain showing that 32,033 acres had been bought including 362 cottages and 42 'residences'. The property on Tidworth estate was bought for £93,000, a similar amount was paid for Netheravon, owned by Sir, M Hicks Beach which was the only one that required a referral to arbitration under the Military Lands Act of 1892.⁷⁷ The land-owning classes in Britain and Ireland often did well out of the demand for land by the War Office and later War Department. The leasing of the land at Chipping, which never did develop to be the northern centre initially intended, provided a useful income for Lord Stanley, at £350 annually for 99 years. The Fleetwood Estate gained fees of £24,000 in 1861. However, an analysis of the owners of the land show

⁷⁵ Stone, Colchester: *Garrison – Ten British Military Towns*, ed. Dietz. Peter, (London, 1986) pp. 3-22.

⁷⁶ See New Forest discussion in Chapter 3.

⁷⁷ *Northwich Guardian*, Land for Military Manoeuvres, Saturday 3rd September 1898.

a broad spectrum of owners benefiting from the military acquisition of land, from the governors of private schools, Cambridge Colleges, various Trusts, Church organisations and large and small landowners.⁷⁸

The detailed analysis of the origins and development of the military sites that formed the military estate in the north and east of England concluded that the acquisition of land for military purposes was, in part, shaped by the national priorities expected of the military. But these were adapted differentially in different parts of Britain depending on local needs and by the local topography. The two case studies also identified that the acquisition of land was not without its critics and many of the developments were subject to considerable local objection. This chapter has tested that view on a national basis and it has confirmed that the four factors; the national military priorities, the regional variations, resolving contested demands for the land and the nature of the land itself, its geographic location and its topography, provide a useful synthesis of the way the military estate's distribution emerged. This is complemented by the further understanding of how these factors change over time in the way they interact together. The analysis has shown to be rigorous in terms of the overall national position and provides a robust model for the examination of the military estate in any part of Britain.

⁷⁸ Land and Tenements Returns.

Conclusion:- Land for military purposes

In July 2022, United States General Mark Milley was asked if NATO, and Britain in particular, had a large enough military force to make sufficient difference in a European conflict and to provide effective support to Ukraine in its current war with Russia. His response was clear and resonated across similar questions about the size and efficiency of the British military in the previous two centuries. He emphasised that military planners and politicians have to answer two related, difficult but central questions about military strategy. These focus on capability and capacity:

Yes, size does matter, you do need enough personnel, weapons, armour, ammunition and vehicles but first and foremost you need those numbers within the concept of capability. At that point the numbers have to be thought of in relation to the technology available, its impact and effectiveness.⁷⁹

Fundamental to answering the questions that this research explored and explained are the challenges inherent in the strategic concepts of capability and capacity, not that these terms were used in the nineteenth century as they are now.⁸⁰ In seeking to understand how the British military's demand for land grew, the sufficiency of resources to meet its expectations is a constant question and the demand for land needs to be understood in the context of the development of the military itself, its priorities, its effectiveness and changing strategies. Within that environment, the amount of land acquired was an important enabler, and barrier, to the changing demands to accommodate the military efficiently, and enable it to train to be effective. The capacity of the military estate had a direct relationship with the military's capabilities.

This thesis adds to our knowledge of how the military estate emerged and by the first decade of the twentieth century the War Department was already one of the most

⁷⁹ General Mark Milley (US Army, 20th Chairman of the Joint Chiefs of Staff 2019 – 2022) BBC interview 3rd July 2022.

⁸⁰ MOD *How Defence Works*, Ver.6.0 Sept. 2020; MOD *Integrated Operating Concept* (2021); European Defence Agency (EDA) *Future Trends from the Capability Development Plan* (Brussels, 2008); Ján Spišák, *Military Concepts – A background for future capabilities development*. (University of Defence, June 2013).

significant landowners in Britain.⁸¹ The thesis charts where military land was located across Britain and identifies the factors that influenced that distribution. There was a continuous debate about the capacity of the military in terms of numbers of soldiers required and available throughout the nineteenth century. There was a mixture of satisfaction with the military performance in the many 'small wars' across the Empire but lack of clarity about which of the several objectives expected of the military took precedence at any particular time. The lack of military capacity was not only in terms of manpower, but also in terms of land available for training and practice. This was particularly so in the half century after the Crimean War and was further highlighted by the difficulties faced in the wars in South Africa at the end of the nineteenth century. Land, or 'ground' as the artillery liked to call it, was a limiting factor in terms of the response the military made to technological improvements in weaponry.⁸²

This thesis answers the two central questions set out in Chapter 1. It establishes the chronology for the way the military estate developed in the 125 years leading up to the First World War, and shows what land was acquired for the various military purposes expected during that time. It also illustrates how different weightings given to different political and military priorities led to significant regional variations in military land use. The thesis sets out, for the first time, a detailed chronology of the legal changes that enabled the state to acquire land for military purposes up to 1914. This has brought up to date, but also explained, the diligent work of officials who produced the list of statutes relating to lands vested in the Secretary of State in 1882.⁸³

Studying the military through an examination of the ground they fought on is a familiar approach in much of the military literature focused on conflicts. However, studying the military at home through its interaction with the British landscape tends only to be

⁸¹ Even if the military estate had not grown any more in the twentieth century the estate of 1911 would still be in the top ten largest landowners in Britain today in 2023; TNA - While the War Office was the government department responsible for military matters from 1857 to 1964. Military land matters are usually referred to as War Department Lands despite the WD only operating from 1855 to 1857 when it took over from the Ordnance Department. From 1857 WO land issues were dealt with through the WD Lands committee.

⁸² Major General Charles Calwell and Major General Sir John Headlam, *History of the Royal Artillery* (Vol.I&II, 1931).

⁸³ WO 33/39, War Department Lands Committee Report - Appendix K setting out the national, local and personal statutes from 1427 to 1875.

incorporated into individual studies of camps or barracks.⁸⁴ This thesis adds different and complementary perspectives to the understanding of the development of the British military in the 125 years before the First World War. It has highlighted further perspectives into the excellent studies in recent years emphasising the economic context for military growth and deployment.⁸⁵ It throws light on the tensions in the relationship between the military, society and politics throughout the study period.

The economic environment for the military during the study period can best be described as volatile and tight. While the building of the Empire added significantly to the wealth of Britain through trade, the long periods of war during the eighteenth century had put significant fiscal pressures on the economy.⁸⁶ The willingness to raise military funding through taxation was embraced cautiously at best and military reform frequently started with the desire for savings. Price fluctuations had an impact on levels of civil unrest and on the willingness to make funding available to see reforms through. This had a direct impact on recruitment, the size of the army and investment in facilities. The economic climate had an impact on land values and the views about the value of 'waste' land and the desire to improve agricultural land. Attitudes to enclosure, land acquisition and ownership directly influenced the choice of many military locations.⁸⁷

Despite the large number of members of parliament that had military attachments,⁸⁸ the political decisions about funding the military's needs, frequently influenced the location and timing of the establishment of barracks, stores, exercise facilities and training sites. Changes in expectations and requirements changed the design and

⁸⁴ Costello, *A Most Delightful Station, 1855-1922*, (Cork, 1996).

⁸⁵ Morgan-Owen, *The Fear of Invasion, 1880-1914*. (Oxford, 2017); French, *Military Identities, C1870 – 2000*, (Oxford, 2005); Page, *The Seventy Years War, 1744-1815, and Britain's Fiscal-Naval State*. Vol.34 No.3 (War & Society, 2015).

⁸⁶ Colley, *Britons: Forging the Nation 1707-1837*, (Yale, 2014).

⁸⁷ Vittoria Di Palma et.al., *Wasteland: A History*, (Yale, 2014), p.10; Bowden et al. *An Archaeology of Town Commons in England*, (English Heritage, Swindon, 2009).

⁸⁸ Linda Colley, 'Of the more than 2000 men who sat as members of parliament between 1790 and 1820 almost half served as militia or volunteer officers. A further fifth of all MPs, twice as many as in any pre 1790 parliament, who are officers with the regular army; 100 more were naval officers,' p.189.

functions of sites over time. This led to barracks often becoming the physical symbol of military importance in towns and cities and they were often the point of interface between the military and the population as a whole. They created social concerns but also enhanced the local economy, social, sporting and cultural life. Ranges and training facilities tended to have fewer social concerns but created anxiety about safety and considerable local conflict about access and compensation.

Ultimately it was the Secretaries of State for War who agreed plans for new sites, the redevelopment of sites and at times their disposal. They argued for the funding needed to acquire land for facilities. This was a major influence on whether a site became a permanent feature of the military landscape or had an important but fleeting impact. At local levels the influence of some senior military leaders, owners of large estates and local politicians also played their part in shaping the national priorities locally. The determination of how military sites were developed, repaired, improved and equipped was subject to intense political and journalistic scrutiny. The presentation of the annual army estimates provided the key source for understanding the pace and ambition of governments at any stage during the century to acquire and improve the quality of the military estate.⁸⁹

Public and political perceptions of the army changed during the nineteenth century shaped by economic and social context and by the changing demography of Britain. Views about the needs of the soldier were strongly shaped by class divisions and the expected role of the soldier. In turn these influenced the oscillating views of the balance required between a regular army, a militia and volunteer corps. Changing views of the need for facilities, their size and quality and the way soldiers were recruited, disciplined, drilled and exercised had particular influences on the nature of military sites, their distribution and the land required to provide effective facilities for soldiers and their families. Attitudes were often created through views such as that expressed by Wellington in 1813, when he was angered by looting amongst his own soldiers. He stated that, Britain had in service, 'the scum of the earth,' as common

⁸⁹ TNA Annual Army Estimates were the records concerning the forecasts of army expenditure presented annually to Parliament by the War Office.

soldiers.⁹⁰ Decades later, that epithet still stung. When leaving Norwich in 1872 the NCO in his speech on behalf of the 7th Dragoons thanked the people of Norwich emotionally. He thanked the City for the gift that had been presented and for the way the people of Norwich had welcomed them. He noted that soldiers were not welcomed everywhere and that the magnanimity of the people of Norwich should teach other communities, such as those of Richmond, who objected under the new system of army organization, to the military being located in their neighbourhood.⁹¹ It is worth quoting in full his stinging rebuttal of Wellington's comment from sixty years before:

.... more especially I would allude to such communities as have designated, and only very recently, the British soldier as "the scum of the earth", that scum of the earth, gentlemen, fought at Crecy, Agincourt, Poitiers, and a thousand other battles that culminated in Waterloo, that 'scum of the earth' won the brightest gem that sparkles in the British crown, the empire of India, that "scum of the earth", avenged the outrage upon English ladies, the murder of innocents, and upheld the name and honour of England in the terrible crisis of the Indian mutiny, that "scum of the earth" has had its battlefields situated in the remotest parts of the world, and that "scum of the earth", represented by our soldiers and sailors, has enabled the treasures of the globe to be transported to our shores to make England at once the envy and the mistress of the world.⁹²

Throughout this thesis examples of the acquisition of land for military purposes have shown that the perceptions of the soldier have had an impact on decision making at both national policy levels and in the reactions from individuals and communities. It has shown that growth in the size of the military estate, particularly for accommodation and exercise, was heavily influenced by health-related concerns and that these reflected the reforming drive by some politicians throughout the nineteenth century.⁹³

⁹⁰ Susan Ratcliffe, (Oxford Essential Quotations, Oxford 2017) – 'Ours is composed of the scum of the earth—the mere scum of the earth'. Philip Henry Stanhope, *Notes of Conversations with the Duke of Wellington* (1888) 4 November 1831.

⁹¹ The 7th Dragoon Guards Journal (Shorncliffe, February 1895) in Regimental Museum York.

⁹² Ibid.

⁹³ PP, Sidney Herbert, Royal Commission Appointed to Inquire into the Sanitary Condition of the Army, (C2318, 1858).

In a period so influenced by industrialization and rapid urbanization, it is no surprise that technology had the greatest impact on the extent of the military infrastructure. While improvements in heating, lighting and sanitation all influenced the physical form of military sites, it was the technological advances in weapon manufacturing, weapon range and effectiveness that led to increases in the need for land for training, practice ranges and for research and weapons development. It was when these technological pressures combined with new military strategy and tactics that the greatest expansion of land holding occurred.⁹⁴ However, the improvements in transport, communications and supply logistics also played a significant role in decisions about the location of many military sites. This meant that distance became less of a locational factor but access to the rail network increased in importance. The needs of horses, bicycles and, towards the end of the study period, the combustion engine in military vehicles also had a significant impact on military planning and the nature of military sites. Technological improvements also applied to the supply of food and the supply and storage of water.

These contextual factors form a recurring set of themes throughout the thesis. They provide a useful model for the analysis of any military site in Britain and especially in seeking to understand the genesis of the military estate across the different regions of Britain and Ireland. The complex set of expected services provided for the Crown, the state and the people of Britain required a military presence in the homeland even if the core functions around Empire building seemed to place the emphasis on service overseas. Britain's discomfort with a standing army gradually reduced and the importance of having a well behaved, well-armed and well-trained military became the norm for an advanced industrial state with global interests. In the two decades before 1914 the importance of having a European focus to its priorities emerged and the army shifted from a force trying to reconcile many objectives to being prepared for conflict and European conflict at that. As the military and political leadership in the country grappled with the priorities for the military one aspect had an inexorable drive. Major-

⁹⁴ Matthew Ford, Towards a revolution in Firepower? Logistics, Lethality, and the Lee-Metford. (Vol. 20 No. 3, *War in History*, 2013), pp. 273-299.

General Headlam explained the differences in the effectiveness of field artillery and coastal batteries:

It was not their fault, for the first essential – ground – was denied them. For drill and manoeuvre the great majority had only the miserable drill-fields provided at county quarters, or the crowded commons of Woolwich and Plumstead.⁹⁵

As this thesis shows, the significant growth in military land during the nineteenth century and especially in the decades after 1870 went a long way to putting Headlam's criticism right. Taking a landscape history approach to the development of the military estate shows that, time and again, the factor that hindered reform and improved performance was not soldiers' ability or even the quality of leadership but the lack of 'ground'. At every step in the improvement of the British Military's ability to defend Britain, to carry out its complex roles and meet the challenges of technological advancement was the need for more land to support its activity, in other words to acquire land for military purposes. And that meant the growth of a well-structured, well managed Military Estate relevant to the needs of military tactics and strategy. This thesis shows how that estate grew substantially and developed across Britain in the years leading up to the First World War. Across the whole of Britain there remains a large, and still contested military estate. Few who look at that estate realise that it provides a lens to look back at the development of the military in Britain and Ireland over the last two centuries or more.

⁹⁵ Major-General Sir John Headlam, *The History of the Royal Artillery*, Vol. 1, 1860-1899, (1931), p. 218.

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