

Sherene Baugher
Douglas R. Appler
William Moss *Editors*

Urban Archaeology, Municipal Government and Local Planning

Preserving Heritage Within the
Commonwealth of Nations and the
United States

 Springer

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Contents

1	Introduction: Thinking Globally and Acting Locally— Exploring the Relationships Between Community, Archaeological Heritage, and Local Government	1
	Sherene Baugher, Douglas R. Appler and William Moss	
	Part I The Challenges and Accomplishments of Local Government Archaeology Programs in the Commonwealth of Nations	
2	Planning Archaeology in World Cities: Looking at London	17
	Hana Morel, Joseph Flatman and Kim Stabler	
3	Preservation, Participation and the Pursuit of Knowledge: Strategic Policy and Archaeological Practice Within the City of York 1989–2015	35
	John Oxley	
4	Crowdsourcing the Story of Bristol	53
	Peter Insole	
5	Archaeological Resource Management in Toronto: Planning, Preservation, and Interpretation	69
	Ronald F. Williamson, David A. Robertson and Susan Hughes	
6	Under the Old Stones of Kingston, Ontario: The City of Kingston Archaeological Master Planning Process (1987–2011)	91
	Marcus R. Létourneau	
7	Quebec City’s Archaeological Programme and Provincial Cultural Heritage Legislation	115
	William Moss	

8	Archaeology Down Under: Management and Outcomes in the First State in Australia.	137
	Siobhán Lavelle	
9	From Alliance to Dissonance: Two Centuries of Local Archaeology and Conservation in Indian Cities. The Case of Lucknow, India	161
	Ashima Krishna	
Part II The Challenges and Accomplishments of Local Government Archaeology Programs in the United States		
10	Toward a Theory of Municipal Archaeology: Why Local Government Should Become Public Archaeology's New Best Friend.	183
	Douglas R. Appler	
11	We Dig Alexandria: A Reflection on More Than Fifty Years of Community Archaeology	203
	Francine Bromberg, Pamela Cressey, Garrett Fesler, Paul Nasca and Ruth Reeder	
12	Reflections on the New York City Archaeology Program (1980–2016)	227
	Sherene Baugher	
13	Digging the Hub: The Evolution of the Boston City Archaeology Program	257
	Joe Bagley	
14	Phoenix Rising: The Development of a Municipal Archaeology Program in Arizona, USA.	277
	Todd W. Bostwick	
15	Municipal Archaeology Policies as a Vector in Public Outreach Programs: Digging Up Dirt for the Masses in St. Augustine, Florida.	299
	Carl D. Halbirt and Sarah E. Miller	
16	Like No Other Place: Albuquerque's Archaeological Odyssey	321
	Matthew Schmader	
	Index	343

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Chapter 1

Introduction: Thinking Globally and Acting Locally—Exploring the Relationships Between Community, Archaeological Heritage, and Local Government

Sherene Baugher, Douglas R. Appler and William Moss

Introduction

From ancient times to the present, cities have been dynamic places that bring together people of diverse occupations and classes, and they are constantly transforming as economic, political, and social conditions change. Cities have fascinating and diverse histories, and archaeologists, historians, and preservationists have worked with local communities to protect and preserve that heritage. As a city evolves, the new and the old can exist in harmony. Sections of some, such as the historic district of Old Town Quebec City, have been declared World Heritage Sites by the United Nations Educational, Scientific and Cultural Organization (UNESCO). Others, such as Boston, New York, and Sydney, Australia, have landmark commissions that have designated sections of their cities as historic districts to preserve their diverse architectural heritage. Preserving this heritage can bring a unique sense of place and pride to a community, and many cities capitalize on that heritage and use it as a marketing tool. For example, Santa Fe, New Mexico, calls itself “The City Different” in order to market its Native American, Spanish,

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and Anglo-American heritage. Across the globe, planners and economic development officials are realizing the value of heritage tourism. Yet despite the many contributions of urban archaeology to those working in the heritage sphere at the local level, very little has been written that explores the relationship between city government and archaeology. We hope to address this gap in the archaeological literature.

Archaeology can play an important role in revealing a city's heritage. Globally, many urban archaeological projects have garnered tremendous publicity for the cities in which they are found. Excavating Viking remains in York, England, and unearthing an eighteenth-century merchant ship in New York City are just two relevant examples of major finds over the last thirty years that have captured media attention. But the unexpected discoveries that capture the minds and attention of the public are just part of what makes these examples so important. Many projects, including the two mentioned above, were either first identified or are now protected as a result of a strong relationship between archaeology and local government. The discoveries themselves, of course, deserve the attention they have received. But the process that created a regulatory framework and local political environment conducive to community archaeology is the larger, "behind the scenes" story.

Improving and expanding the relationship between archaeology and local government represents one of the next great challenges facing archaeology. Not only does local government have access to powerful legal tools and policy mechanisms that can offer protection for archaeological sites, but because local government exists at the grassroots level, it is also often closer to people who have deep knowledge about the community itself, about its values, and about the local meaning of the sites most in need of protection.

In a diverse range of cities across the globe, the tools of local government and taxpayer funds, have been used to support archaeology either to pay directly for urban archaeology projects led by archaeologists on city staff, or to support archaeological staff to review the work conducted by cultural resource management firms (contract archaeologists) who are hired by developers. Developers in this context undertake the archaeological work because of local laws and policies regulating the conditions associated with obtaining building permits.

But what is the public benefit of these projects? Some cities, such as London, have permanent archaeological exhibits in their museums. Cities such as Phoenix, Arizona, and Albuquerque, New Mexico, have stabilized and partially restored the archaeological remains of ancient Native American buildings. Other cities have archaeological walking trails, such as the Alexandria Heritage Trail in Alexandria, Virginia. An increasing number of cities have erected monuments and signage commemorating heritage sites and places of archaeological discoveries. Perhaps more significant than the physical amenities, however, are the opportunities many of these cities create for local residents to develop a personal stake in the past. By participating in the process of protecting archaeological sites or recovering archaeological information, they become stewards of, and advocates for, the use of that information. Volunteers invest their time and energy into making sure that information about their city's past reaches the present. It is worth mentioning that

developers themselves are not necessarily excluded from this group of advocates. In some of the cities discussed in this book, such as Boston, developers and landowners permitted archaeological work to be conducted when none was strictly required, and in others, such as New York, they funded archaeological research or interpretation beyond their legal obligation. For a handful of developers, the opportunity to recover archaeological information or to interpret the history of their site represented a chance to distinguish their project from competitors.

The tools of local government can be very effective in creating these opportunities where archaeology is a “value added” instead of an obstacle, and where local residents can exert ownership over their own history. By providing the structure, the informational resources, the archaeological expertise, and the relationships with community members, municipal archaeology programs can create a thoughtful, informed, and less destructive process for developing land that has in many cases been occupied for millennia. Instead of treating all land within a community as a blank slate devoid of archaeological or social value, cities with municipal archaeology programs balance the need of the community to build and grow with its perhaps less widely appreciated need to protect, recover, and use information about its past. Creating this balance benefits not only archaeologists and their supporters, but residents of the community at large.

Urban Archaeology Versus Municipal Archaeology

Urban archaeology is both an archaeology of a city and in a city. Many North American urban archaeologists are interested in the archaeology of a city as an urban place, and they analyze the city’s urban development. With the advent of the environmental and preservation legislation of the 1960s and 1970s, historical archaeologists from Canada and the USA have focused on the study of the cities during the post-medieval period. Archaeologists Nan Rothschild and Diana Wall (2014, p. 20) write that an urban archaeology of the city

examines the city as an artifact and looks at how it developed and the functions of its various parts, and it explores how these relate to each other, to the city’s history, and to the events that took place within it and how it has changed with the development of modern global processes.

Urban archaeologists study the material culture—the artifacts, the building foundations, food remains, gardens, pathways, and bridges—to understand the lives of the diverse people in the city and how they transformed their landscape. Archaeologists have uncovered the remains of now-abandoned seventeenth- and eighteenth-century fortified North American towns, such as Jamestown in Virginia (Kelso 2006) and the Fortress of Louisbourg in Nova Scotia (Fry 2004) that are now tourist destinations, but remnants of many other fortified colonial towns are still buried in our modern cities. Quebec City in Canada was founded in 1608, and urban archaeologists continue to unearth evidence of the transformation of the

fortified city of New France into a major nineteenth-century urban port (Moss 2005, 2009). In New York City, archaeologists analyzed how the colonial city's neighborhoods changed as commerce expanded, as new immigrant groups moved in, and as class differences became more apparent (Rothschild 1990). The impact of the global economy and capitalism altered the shape of our nineteenth-century cities and has been seen in archaeological research in numerous cities including New York (Louis Berger 1990; Yamin 2001).

But urban archaeology is also about archaeology in the physical place of the city and not just about the development of post-medieval cities. Archaeological work undertaken within our cities not only uncovers material from the recent past but also uncovers material from the ancient past. Our global cities all have long histories of indigenous people finding those locations desirable for habitation. Archaeologists have excavated numerous artifacts that attest to people living for thousands of years in the places we call modern cities. For example, Native Americans were living in New York City as early as eleven thousand years ago (Cantwell and Wall 2001, 3, 39–45). The site of the city of Phoenix, Arizona, has been transforming over the last six thousand years from the home of small bands of hunters and gatherers to the elaborate large farming settlements of the Hohokam people down to a small western town in the nineteenth century to a large metropolitan area in the twenty-first century (Bartlett et al. 1986). The remains of a Wendat Indian village and ossuary were unearthed in Toronto (Williamson and Pfeiffer 2003). The archaeological history of a location that we call a city is filled with stories of different people, times, and events. In the 1970s, archaeologists unearthed the remains of a Viking settlement in York, England (Jorvik 2016). In 1999, in the Spitalfields section of London, archaeologists excavated a Roman cemetery that was beyond the boundary of the Roman city of Londinium (Thomas 2004). In the heart of London, prior to the start of many construction projects, archaeologists uncover the remnants of buildings, roads, wells, and even drains and water pipes from Roman Londinium (Rowson 2000). Our cities are treasure troves of thousands of years of human history.

Municipal archaeology is different from urban archaeology in that it is the municipal laws, bylaws, and regulations that require certain types of archaeological investigations to take place prior to permits being issued for development projects. The municipal archaeology laws prevent the archaeological record of a city from being destroyed by modern construction projects. City archaeologists work for a city agency and enforce these municipal archaeology laws. They ensure that archaeological sites of all time periods and cultures are protected. They may oversee archaeological work undertaken by private archaeology firms as part of the permitting process, and they may also undertake work on city sites sometimes with their team of community volunteers. The city archaeologists may also be involved in public outreach in the form of tours, lectures, museum exhibits, archaeology signage for public plazas, city archaeology Web sites, and community engagement in excavations and archaeology laboratory work. Because of the diverse scope of activities that might be conducted by municipal archaeology programs, the chapters

of this book may contribute to a number of discussions currently underway within public archaeology and the broader heritage management sphere.

There are, for example, many recent works drawing much needed attention to the gaps and weaknesses of conventional approaches to the protection of heritage resources worldwide (King 2009; Kaufman 2009; Smith 2004; Waterton and Smith 2010). Many of these critiques underscore how the lack of access to political power by marginalized groups shapes the character of the resources that are protected. Municipal archaeology programs address some of the issues raised in this discourse, though certainly not all, by creating an environment supportive of a heritage-centered conversation at the relatively approachable level of local government. Municipal archaeology programs allow local residents, archaeologists, developers, and members of descendant communities, of preservation and planning commissions, and of city councils, to collaboratively define the parameters under which archaeological work will be conducted. Many of these programs take the devolution of heritage authority even further by providing avenues for local residents to use the information recovered through archaeology, even though that use may complicate existing historical narratives (Appler 2013).

This volume also contributes to the discourse exploring public outreach within archaeology, as seen in *Past Meets Present* (Jameson and Baugher 2007) or *Unlocking the Past: Celebrating Historical Archaeology in North America* (DeCunzo and Jameson 2005). While these works emphasized public outreach and partnerships with community groups, the chapters in this volume build on those ideas by focusing on the political reality of sustained, long-term, community archaeology carried out through local government. Many of the chapters in this book reflect the compromises necessary for building enduring relationships with politicians, developers, and property owners, but they also highlight what happens when a community conceptualizes archaeology as a long-term commitment, rather than as short-term project. That means that the tools and processes used in municipal archaeology are different than their traditional CRM or academic counterparts. For example, the sequence in which sites within a city are excavated will likely be dictated by developers seeking building permits, by modern ideas about what neighborhoods are desirable, and by land availability, rather than on a purely rational, scientific sampling process. The community members who become involved are different, in the sense that volunteers are rarely limited to those in the demographic found in university field schools or to others who might be making a professional career out of fieldwork. The vehicles for communicating archaeological information to and with the public are also different, in the sense that most programs with significant levels of public engagement will almost as a matter of course create opportunities for social activities and events featuring archaeology that are encountered only in the most exceptional CRM projects. In short, municipal archaeology enables and enhances urban archaeology and, in some cases, is the only rampart permitting it to exist. Municipal archaeology is more often than not instrumental in allowing field research to present otherwise invisible results to the public, often with the agency of the public.

The Focus of This Book

This book explores the experiences, both positive and negative, of small and large cities globally where local government has played a role in the protection of archaeological resources. The case studies in this volume examine programs in the Commonwealth of Nations (formerly known as the British Commonwealth) and in the USA. These countries share similar perspectives on preservation and heritage, although the approaches these cities have taken to address municipal archaeology reveal considerable diversity.

Most of the case studies highlight how these innovative partnerships have developed and explain how they function within local government. A handful examine cities where there are no formal local archaeology regulations or policies, but where local actors have achieved varying levels of success in merging local government and archaeology. Engaging with the political sphere to advocate for and conduct archaeology requires creativity, flexibility, and the ability to develop collaborative partnerships. One of the principal themes to emerge from the chapters in this book is that there is no “one-size-fits-all” approach to developing municipal archaeology programs. The needs of each community vary from place to place, the objectives of stakeholder groups vary wildly, even within the same country, and the level of financial support that these programs receive runs the gamut from being relatively well supported to having virtually no budget at all. One of the major goals driving the creation of this volume is simply the need to increase awareness among archaeologists and their allies that municipal archaeology programs can be made to function under a diverse range of circumstances if residents feel compelled to protect the archaeological resources of their community.

Many chapters in this volume draw attention to the significant challenges that municipal archaeology programs have faced during economic downturns. In the past fifty years, cities have experienced both periods of economic expansion and contraction, such as the Great Recession following the stock market crash of 2008. Spending cuts imposed by mayors and municipalities, often weakening the impacts of local laws, have damaged some of these innovative municipal archaeology programs. In addition to threatening the realization of urban archaeology’s vast potential, this all-too-frequent sputtering of financial support impacts what the public and the press perceive. With limited funding, municipal archaeology can change from being a constant source of new and meaningful information about each city’s past to being a source of sound bites, in best cases stimulated by excitement generated by occasional finds that lend themselves well to media spectacle, the equivalent of a museum’s most recent but momentary blockbuster exhibits instead of the continuity of an accumulated appreciation of heritage. In other situations, such as those found in Albuquerque, the financial downturn prevented the hiring of an archaeologist to enforce the regulations that the city had just passed. While that city was fortunate in having a qualified archaeologist in another department on city staff, this situation is indicative of the “do more with less” attitude that has become firmly entrenched in many local governments since the Great Recession.

Another, possibly more uplifting, theme to emerge from these case studies is that so many cities are changing the public perception of archaeology as something that only happens in far off locations—someplace other than “home.” In the minds of local politicians, public administrators, developers, and residents, these cities are now archaeological sites. While that may sound like a small victory, it is an important one. These programs feed the public’s interest in the past, and they do this with real, place-based information and processes. Each chapter will highlight the excavations, discoveries, interpretive efforts, and public outreach programs developed by these cities as they encourage this more sophisticated understanding of the local past. Several chapters will also explore the accomplishments and challenges facing cities whose relationship with archaeology has taken a less formal shape or that may still be in the process of being defined.

The Case Studies in the Book

The volume is divided into two sections. The first section of the book looks at eight cities in the Commonwealth of Nations: London, York, and Bristol in the UK; Toronto, Kingston, and Quebec City in Canada; Sidney/New South Wales, Australia; and Lucknow, India. The second section presents six examples from small and large cities in the USA: Alexandria, Virginia; New York City, New York; Boston, Massachusetts; Phoenix, Arizona; St. Augustine, Florida; and Albuquerque, New Mexico.

Section I

Over the years, London has had over 8500 urban archaeology excavations especially projects unearthing London’s Roman heritage (Chap. 2). Objects from some of these excavations are now on display in the Museum of London. An outsider might assume that this city has a strong city archaeology program but that unfortunately is not the case. However, a unique and complex mixture of local and central government controls has been used to protect London’s archaeology. Greater London has overlapping borough, district, and city laws and regulations governing archaeology. Community activists, local institutions, archaeologists, and preservationists have all played significant roles in trying to protect London’s heritage. This chapter describes the complex legal protections, some of the key political battles, and some of the key archaeological discoveries. The authors (Morel, Flatman, and Stabler) discuss the challenges that have and continue to face the protection of London’s archaeological resources since 2010 with the neoliberal government’s austerity budget, cuts in government spending, and its agenda for deregulations to promote economic development. In facing these challenges, the important role of community activists is highlighted.

Despite common origins of legal codes within the former British Empire, countries of the Commonwealth of Nations have surprisingly varied approaches to archaeological heritage. As explained by Morel, Flatman, and Stabler (Chap. 2), the English system largely relies on planning consent given within the urban development process in conformity with guidelines prescribed by the central government through the National Planning Policy Framework. Bristol and York work within this same context, but each has “bet on” separate strengths. In the case of Bristol, crowdsourcing information through the Getting to Know Your Place program has helped foster public awareness and involvement (Chap. 4). York has capitalized on its Viking past to develop an innovative interpretation center, Jorvik, that has in turn rallied public support for archaeological heritage protection (Chap. 3).

The Canadian example is perhaps more surprising. Canada has no nationally binding heritage legislation as heritage comes under provincial jurisdiction. Each province thus has its own legislation and its own approach. Ontario, with examples from Toronto (Chap. 5) and Kingston (Chap. 6), has a very structured context with both heritage legislation and archaeology fully integrated into the planning permission process with very interesting results. Letourneau none the less clearly illustrates the importance individual staff play in the process, and losing key players can inhibit the application of municipal bylaws and programs (Chap. 6). The Province of Quebec, whose legal system blends both British and French traditions, has developed a unique approach that harks back to legislation first enacted by France’s Vichy government in 1941. The case of Quebec City, a UNESCO World Heritage city (Moss, Chap.7), shows to what extent the provincial government’s reliance on municipal actors permitted the city to protect and develop its rich archaeological heritage though there is now uncertainty as to how the application of newly adopted heritage legislation will affect this.

The New South Wales (NSW) Heritage Act of 1977 provides some protection for archaeological sites in Sydney, Australia. Chapter 8 on Sydney highlights some of the serious problems that arise when there is no city archaeology program and no protective city laws. The state archaeologist at the NSW Heritage Council works with local government agencies, and some archaeological zoning or management plans have been developed for parts of Sydney. However, it is non-archaeologists with local government who evaluate development proposals that may impact archaeological sites in Sydney, and local approvals for development may be given in spite of the site’s archaeological potential. In spite of these limitations, there have been some successful projects in an historic area of Sydney known as Parramatta. Public outreach involving tours of sites, signage, and exhibits has occurred. The author (S. Lavelle) notes that there are still numerous challenges to properly undertaking archaeology in Sydney. There are also no formal storage facilities for the archaeological collections, and there is a limited ability for the state archaeologist to require any written reports from these CRM excavations.

Lucknow, India, is a city without a formal city program (Chap. 9). India has the Archaeological Survey of India, a federal agency, and various state agencies that deal with archaeology associated with national and state monuments but not with non-designated sites. Unlike Sydney, there is no state agency trying to protect

potential archaeological sites within cities. The city of Lucknow is an example of the major problems that Indian cities face as rapid development moves forward without local laws and any mechanism for heritage management to protect archaeological sites. The author (A. Krishna) discusses a development project that accidentally uncovered colonial-era building features and artifacts. The project received lots of media attention and community interest in spite of a lack of protection on the federal, state, and local levels.

Section II

The case studies chosen for Section II, which represent small and large cities within the USA, demonstrate the overriding importance of local context in the development of municipal archaeology programs. As is discussed in Chap. 10 by Appler, the Federal government in the USA does have in place laws requiring the review of potential effects of federal projects on recognized archaeological and historic sites. Private projects, however, are much less likely to be subject to any kind of archaeological review than are federal projects. Municipal archaeology programs, then, step in to fill this gap in the manner most appropriate for the people, resources, and political climate of the city in which the program exists. No two programs are exactly alike, nor should it be expected that they would be, even when operating within a common legal system. Far from being problematic, this variety of approaches to municipal archaeology should be seen as encouraging. It suggests that this is a lively subfield of archaeological and preservation practice—one in which the avocational public and the professional work collaboratively to protect, recover, and make use of archaeological information for the benefit of local residents.

The chapters included in this section reflect this diversity of approaches to municipal archaeology. Some cities' archaeology programs, such as those in Alexandria, St. Augustine, and Albuquerque, (Chaps. 11, 15, and 16), were created essentially through popular demand. Local residents saw archaeological resources as being threatened and were eventually successful in lobbying city officials to develop policies and procedures to prevent the loss of those resources. It is perhaps not a surprise that this type of "direct" relationship between public sentiment and city action is visible in the smaller cities of this group. In the larger cities, including New York, Boston, and Phoenix (Chaps. 12, 13, and 14), where the regulatory framework is generally a bit more robust, the cities' archaeology regulations and programs seem to have developed first out of administrative necessity, or as a result of someone inside the bureaucracy advocating for the inclusion of archaeological resources in other existing review procedures. In Phoenix (Chap. 14), for example, it was the increasing need for federal compliance archaeology on city projects that led to the decision to split the duties of the Pueblo Grande Museum Director from the position of City Archaeologist, which led to new development review procedures for the city.

Collaboration with the many different stakeholder groups present within a community also shapes the activities of city archaeology programs, tailoring them to fit the needs of the local population. In both Phoenix and Albuquerque (Chaps. 14 and 16), consultation with local Native American tribes has shaped the activities of the city archaeology programs, often leading to more respectful treatment of sensitive sites. In Alexandria (Chap. 11), collaboration with the city's African American community has long guided the research questions that shape the city's archaeology program and that influence is on full display at several sites across the city, including the African American Heritage Park and the Contrabands and Freedmen's Cemetery Memorial site.

One of the most important aspects of municipal archaeology programs is the variety of ways in which the public can access archaeological information. Some of these approaches are the result of careful planning on the part of archaeologists, designers, and developers, such as interpretive exhibits built into the plaza of an office tower in New York City (Chap. 12). Sometimes, these approaches are more serendipitous—budget limitations leading to the creation of a strong corps of volunteer laborers, researchers, or artifact washers, such as those found in Boston, Alexandria, or St. Augustine for example. Many of these programs regularly question the nature of the relationship between the heritage professional and the avocational archaeological enthusiast. They reflect the willingness to meet members of the public where they are, rather than trying to lead the public into a tightly proscribed environment where learning “should” take place.

Of course, another reason for the diversity of activities that might be seen in municipal archaeology programs has to do with the archaeological resources present within the community. Some cities simply bear more evidence of human activity than others. In many parts of the country, new cities and suburbs have been built in areas that the public does not perceive as having a great deal of evidence of previous human occupation, and it would be difficult to imagine a strong municipal archaeology program flourishing under those conditions. In other cities, such as Albuquerque and New York, that evidence of human occupation may date back 12,000 years. The examples in this section as well as the Canadian cities in Section I all have extensive Native American material buried under contemporary city pavements. Beyond the question of the specific archaeological resources, there is the question of whether or not these resonate with the city's current residents. In Phoenix, Arizona, the public interest was triggered by the excavation and preservation of Native American sites. In some cities, the recent past is not seen as worthy of significant attention, while in others having a personal or familial connection to a site may be what triggers public involvement. Alexandria's Fort Ward Park provides an example of an archaeological site that gained significant attention and public interpretation even though its period of significance lasted until the early 1960s.

Conclusion

In the end, this book is an effort to encourage the use of an underappreciated tool for building a relationship between the public and its past. Though municipal archaeology programs have been in operation for decades, they have not received the attention that is perhaps their due. The chapters included here suggest both why these programs should be seen as having so much potential and why they have not become more common. They are difficult to establish, they require compromise, patience, professional expertise, and a willingness to engage with the unpredictable and seemingly irrational political sphere, and in many cases, they require the organization of an enthusiastic, but likely untrained, public. They require politicians to allocate scarce public funds for the protection of a resource that they may not even be able to see. And there is also the larger picture issue of whether voters in a community care enough about their history to make a point of protecting it. To many, it is difficult to justify the salary of an archaeologist, or the cost of artifact storage and laboratory space, when faced with the ever-present boogeymen of crumbling public infrastructure and unsatisfactory city services.

And yet as many of the chapters included in this volume make clear, municipal archaeology programs represent an investment in place and people. They are not simply recurring expenses. This is an important distinction to make. Framing archaeology as an investment in the community may help archaeologists and their supporters to be more strategic in their use of resources, in partnerships and collaborations, and in how they present their activities and goals to the city. Many of the greatest community returns, for example, stem from programs prioritizing the *use* of archaeological information, not simply its recovery. This slight change of emphasis can encourage archaeologists and members of the public to ask what steps during the process of information recovery and dissemination can be used as opportunities for volunteerism, for creative place-making projects, and for recreation of different forms when combined with the work of other departments, organizations, or developers. Each of these provide opportunities for “value” to be created for the city, usually in the form of human or social capital, but not necessarily excluding the monetary form. The following chapters include many examples of the public reaping its reward for having made relatively modest investments in local archaeological capacity.

The contents of this book could serve many purposes. In one respect, the book could be a primer for small and large communities across the globe trying to establish municipal archaeology programs. Many of the chapters highlight how successful programs began, faced various challenges, and have taken root and grown over time. The variety of experiences help to demonstrate that there is more than one way to approach combining archaeology and local government. The book could also be used by existing programs to identify new approaches or forms of practice that could address the seemingly intractable problems that resurface with each new election or budget cycle. Simply put, it is almost never a bad thing to understand how different people in similar situations have dealt with similar issues.

While it may be the most optimistic take on the contents presented here, the editors sincerely hope that this volume will raise the profile of municipal archaeology programs worldwide and that it will draw attention to their potential for putting archaeological information in service to the diverse stakeholders who call the modern city home.

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Part I
The Challenges and Accomplishments of
Local Government Archaeology Programs
in the Commonwealth of Nations

Chapter 2

Planning Archaeology in World Cities: Looking at London

Hana Morel, Joseph Flatman and Kim Stabler

Introduction

Cities are dynamic organisms, and London is not alone in experiencing changes—brought on by today’s rapid urbanisation and global economy—to both the urban fabric and the society that inhabits it. The vast majority of archaeological work undertaken in England sits within a national planning framework, which itself is also under constant flux in response to the political setting of the nation at any given time (London Consensus 2014). The devolved governance structures of the UK particularly impact upon this planning framework: England, Wales, Scotland and Northern Ireland all have different planning regimes and in many cases also different Acts of Parliament underlying these regimes. London’s particular systems thus sit as part of the English planning system that is similar to but legislatively distinct from that of the other ‘home nations’, as the four constituent parts of the UK are referred to. As such, any appreciation of the current set-up of London’s archaeology necessitates an equal understanding of the political and economic circumstances that unfold alongside it.

This chapter considers how London manages the protection of its archaeology through various institutional relationships, and addresses relatively recent changes to legislation that impact the practice of archaeology; reference is made to the wider

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historic environment including buildings, parks, gardens and monuments, but the focus is on the archaeological resource. Key to this discussion is the fact that London—unlike many of its European neighbours—does not have a municipal archaeology programme or central, state-funded national archaeological service, and thus has and continues to develop through an evolving community of practitioners and interested parties. Below we explore the highlights and drawbacks of how London has developed its approaches to archaeology and archaeological resource management, and thus contribute, we hope, to a discussion of how to improve the management of city archaeology in general.

A Brief Introduction to Greater London

London is a varied and multicultural environment and one of the world's leading global cities. Greater London is 1569 km² and, according to the London Census 2011, its population is just over 8 million with a foreign-born immigrant population of 36.7%, similar to the population size and ethnic and cultural diversity of New York City (NYC Department of Planning 2000).

Politically and geographically Greater London consists of 33 inner and outer boroughs (Fig. 2.1): one of which is the City Corporation of London—the original City at the physical, geopolitical and economic 'heart' of the larger city. The boroughs were amalgamated into Greater London following the 1963 London Government Act. This Act created a new local two-tier government structure for London, the basic structure of which is still in place today, albeit with modifications. The 1963 Act created the present boroughs by absorbing land from a number of counties—Kent, Essex, Surrey and Middlesex—as well as the historic core of London. Greater London remains bordered by these counties today.

In 2000, the Greater London Authority (GLA) was established as the 'strategic' level of local government, which is headed by an elected mayor. The borough councils provide the majority of local government services, such as housing, planning, social services, environmental health and waste services, libraries and leisure and recreational facilities. With few exceptions, archaeological planning advice throughout England is provided at the county level by in-house archaeological advisors situated within the county councils. Several major cities—Birmingham and York, for example, and Edinburgh in Scotland—have independent City Archaeologist roles that sit separate from the County Archaeologist positions. In London, however, the absence of a county structure has led to the evolution of the Greater London Archaeology Advisory Service (GLAAS), which is run and funded by the London division of Historic England—England's national heritage advisory service (as of 31 March 2015 English Heritage split into two organisations: a charitable trust that kept the name English Heritage responsible for managing historic sites owned by the State, and Historic England, England's national heritage advisory service) (Historic England 2016). In this unique arrangement, GLAAS provides archaeological advice in a strategic and cost-effective manner to 31 of the London boroughs, some of which are too small to support a



Fig. 2.1 Map of Greater London with different boroughs highlighted. Attributed to Wikimedia commons

dedicated officer. The City of London and the south-central borough of Southwark (an historic Roman settlement with significant prehistoric and also post-Roman archaeology) both maintain and fund their own archaeological advisory services alongside that provided by GLAAS. Scheduled Monuments, those remains officially designated by Historic England as being of national or international significance (under the 1979 Ancient Monuments and Archaeological Areas Act), are managed through separate legislation and officers. Meanwhile, London is home to Europe’s largest archaeological archive, the London Archaeological Archive and Research Centre (LAARC). It holds thousands of records and deposits from over 8500 excavations. The LAARC plays a huge role in the consistency and standardisation of deposits and in doing so has helped improve consistencies during excavations and reporting.

Archaeology and Planning

The vast majority of archaeological work in London and throughout the UK is commercially led and funded through development activity. In 2006, for example, 93% of all archaeological investigations in the UK were initiated through the

planning process (Aitchison 2009). Archaeology, or more accurately the impact to significant archaeological assets, has been a ‘material consideration’ under the planning process in the UK since 1991, which means that prior to receiving planning permission, the developer must ensure that they have sought expert opinion on whether there is significant archaeology present or not (Flatman and Perring 2012; Flatman 2012).

Today, all national planning policies, including policies surrounding archaeology and built heritage, are delivered through the National Planning Policy Framework (NPPF), which came into effect in March 2012. The NPPF consolidated a substantial amount of existing legislation in favour of a streamlined, single-policy approach to planning that would be faster and fairer and would, it was argued, aid development and thus economic growth; those against such reform highlighted in contrast the risk of diminishing or entirely destroying the many hard-won ‘checks and balances’ of the previous systems, including many of the advances towards the protection of the historic environment that had been won over the preceding decades (Sheppard 1991; Marsden 1996; Flatman and Perring 2012; Aitchison 2012). In terms of the historic environment, the NPPF sets out the government’s aspirations for the protection of all heritage assets, both designated and non-designated, which are considered of having heritage value. Policies specifically associated with heritage and archaeology stress the need to assess the significance of any heritage asset in order to fully understand the impact of development proposals and inform on how to manage change, using local historic environment records and expert advice (section 12 of the NPPF paragraphs 126–141). Most importantly, however, the high-level positioning of the historic environment within national planning policy is in itself a victory.

The major themes and issues presented in national planning policy are further expanded and articulated in local development frameworks, which are better suited to address local issues and development concerns. Within the London boroughs, local archaeological policies require developers to consult the Greater London Record, a GIS database of all assets and archaeological intervention within the region, prior to the submission of a planning application. The policies generally state that the boroughs will seek expert archaeological advice, such as that offered by GLAAS or the City or Southwark archaeology advisors, when determining planning applications. This advice may range from a series of pre-determination intrusive or non-intrusive assessments, depending on the archaeological potential and significance of a site, through to the recommendation of planning conditions attached to any consent, preservation in situ, or the refusal of planning applications. For example, in 2013–14, a total of 79,837 planning applications were submitted in Greater London; GLAAS carried out detailed assessments on the archaeological impact on 2188 of the applications. Further work—excavation or building recording—was recommended in 790 cases. GLAAS advisors and their borough colleagues also monitor the implementation of planning conditions, including fieldwork, post-excavation assessment, publication and archiving. While archaeology advisors do have the right to seek prosecution for offences provided under the Ancient Monuments and Archaeological Areas Act 1979, Planning Act 1990 and

the National Heritage Act 2002, they are considered to only have soft power and work under the Local Authority Planning Officer, who makes the final decision on whether or not ‘conditions’ (the British equivalent of the US permit system, including specifically for archaeology) have been met, and who pursues any enforcement action, either directly through the planning system or indirectly, and with greater severity, through the courts in more extreme cases of developer misbehaviour. So regardless of the law being quite strong clarifying a series of obligations and roles, England’s current sidelining of environmental and cultural considerations during the planning process, and its cuts to resources, are increasingly making it easier for developers to find loopholes in the law.

The Background of London’s Archaeology

Part I: An Issue of Access and Funding

The current high level of urbanisation and increasing agglomeration of economies in politically and economically strategic cities such as London has, since the 1950s, generated an extraordinarily fast pace of change on the urban environment, demanding an exponential growth of infrastructure as the population’s needs and requirements increase.

London’s archaeology in such a context followed from the devastation of World War II and the consequential global economic boom that went on until the early 1970s recession. During this time, London went through an intensive period of post-war reconstruction and development. The bombing from the war, which destroyed more than a third of the City, and subsequent redevelopment uncovered numerous archaeological sites across London, providing an opportunity for various archaeological societies scattered around the city to do limited excavations (Sheldon and Haynes 2008). Some seminal sites were excavated in the immediate post-war period, including the third century Roman Temple of Mithras, uncovered in 1954 by Professor William Francis Grimes, the then director of the Museum of London, as part of an informal programme recording Blitz sites prior to wholesale clearance and redevelopment of the City of London. The Mithraeum remains one of the best-known archaeological remains from Roman London (Shepherd 1998; Lyon 2007). Recent excavations from 2010 to 2013 by the Museum of London as part of the larger redevelopment of the site undertaken through the planning system outlined above completed Grimes’ work on the site and will enable the statuary and remains of the temple to be returned to their original location and accessible to the public (Walbrook Discovery 2016).

It was clear that, despite interest from the major museums, learned societies and the general public, the rate of change across London, coupled with the limited resources (from government or negotiated with some developers) available for archaeological investigation, meant that an increasing number of potentially significant sites were being lost without appropriate recording. At that time, there was no full-time professional coverage of archaeological sites in the Greater London

area; the odd project was executed by museums, the occasional university, or by local archaeological societies. These projects, despite their invaluable contribution, were geographically patchy, and, despite keen interest and enthusiasm from those practitioners, the hardships that they stood against included fundamental challenges such as the lack of any legislative requirement by developers to undertake archaeology, and the difficulty of receiving funding or even access to set up city projects. Access to sites and any funding was generally negotiated on an individual basis without consistent application. It was gradually realised that key to providing means to investigate and preserve archaeological deposits was creating a formal relationship between the archaeological community, planning authorities and commercial developers.

Part II: The Rescue Movement and the Setting up of Archaeological Units

This political environment of the 1970s provided the right conditions for archaeologists to agitate for change against the increasing impacts of such intense development in historic cities across the country, not just in London. With the push from Philip Barker at Birmingham University, the organisation RESCUE was founded in 1971 with the aim of excavating as many threatened sites as they could and ensuring preservation for some (RESCUE 2016).

With the aims of the ‘rescue archaeology’ movement gaining momentum across England, RESCUE itself was promoting archaeology and informing the public on the devastating damage that was being done to England’s archaeological heritage, alongside ‘sister’ organisations such as SAVE Britain’s Heritage (founded in 1975) campaigning to protect historic buildings (SAVE Britain’s Heritage 2016). One of the most influential publications of the time was *The Future of London’s Past* (Biddle et al. 1973), which suggested that a City of London Archaeology Unit be established for the investigation and recording of the remaining evidence of London’s past before it was lost to development. This Unit was thought to be best organised under the auspices of the Museum of London (MoL) which was then being built as a city museum amalgamating both the London Museum and the Guildhall Museum under the Museum of London Act 1965. It opened in December 1976 and was agreed that costs would be divided by the City of London, The Exchequer and the City Corporation. The previous year, the Department of Urban Archaeology (DUA) was set up and based in the City of London as part of the Guildhall Museum, until the opening of the MoL. The DUA was only to cover the City of London under the funds of the Corporation of London and was only one of many organisations operational at the time; indeed, the 1970s saw something of a zeitgeist in the provision of archaeological services throughout Greater London. Units operational in the early 1970s were often based in local museums or sponsored by planning authorities or learned societies. This included the Southwark and

Lambeth Archaeological Excavation Committee (1973); the South West London Archaeological Unit (1974); the West London Archaeological Unit; the Inner London Archaeological Unit (1974); Passmore Edwards Museum; and the Kent Archaeological Rescue Unit. These organisations all worked within particular geographical areas in or close to London and provided planning advice to local authorities, determined what work needed to be done, conducted the fieldwork, and would also negotiate with developers requesting either time slots or financial assistance for conducting archaeological work they would advise as necessary. Unlike more recent work, these organisations both made the determinations for the need for work and undertook the work themselves, rather than the split system of government advice and contracted archaeological units that later emerged. Depending on the unit, artefacts would be stored in various available spaces, in some cases in local museums or archives, in other cases in long-term storage.

A more regular system of engagement fuelled the number of excavations undertaken, and many influential sites were investigated and published during this time that demonstrated the importance of London's archaeology. Much work was focused on the identification and exploration of the Roman settlement of Londinium as a major mercantile and administrative centre for the Roman Empire (Merrifield 1965; Bird et al. 1978; Marsden 1980). Similarly, in the 1980s, extensive investigations in the Covent Garden area of London allowed for the identification of the Saxon settlement of Lundenwic (Biddle 1984; Cowie and Whytehead 1989). Such fieldwork included limited opportunities for public engagement, something that was not seen as a priority, neither in terms of time nor funding, at that time.

This landscape of many small and disparate local units providing archaeological services continued until 1983. At that time, the Greater London Council provided central government funding to establish a full archaeological service for all of London. While the Department of Urban Archaeology continued its jurisdiction in the City of London, the rest of the London units were pulled together as the Department of Greater London Archaeology (DGLA), also based at the Museum of London. This move consolidated, for the first time, the operating excavation units, the Sites and Monuments Record and the archaeological archive. This was the first—and arguably the last—time that all three wings were completely integrated.

The 1980s saw a massive development boom in London, partly led by changes in the deregulation of the City of London financial corporations. This saw a significant uplift in the number of major City sites under excavation, when developer funding overtook public grants as the means of resourcing archaeological works and offset a continuous erosion of public funding. The Museum of London issued site codes—registered codes to identify sites—for archaeological work undertaken in Greater London from the 1960s onwards. Although a simplistic measure, the overall increase in archaeological sites is easy to trace. In the 1970s, 538 site codes were issued, in the 1980s 871 and the 1990s 2800 (Sidell 2012). This model was, however, heavily dependent on the voluntary cooperation of the development community. Government guidance lagged considerably behind what was being established as standard professional practice: a government circular (Department of the Environment Circular 1/85) allowed access to archaeologists, but the issue of obligatory funding was yet to

be addressed. The length of time available for excavation was also fluid and was most likely based upon tight development timescales rather than the completion of archaeological works to an agreed professional standard. The DUA and DGLA were very successful in obtaining funding on a case-by-case basis, but as they were also providing planning advice, without the support of a clear regulatory framework, there was an increasing tension between all parties, with the museum services open to accusations of conflict of interest (Sheldon and Clark 2008, p. 256). When a developer did not want to undertake archaeology, there was only limited recourse to the law in order to enforce a bare minimum of work under the terms of the DoE Circular 1/85. This often meant the most rudimentary of archaeological investigation, with little or no post-excavation analysis, conservation or publication, and no public engagement in the process at all.

At the same time, and fuelled by the success of some recent excavations, the public awareness of the value and fragility of London's archaeology was increasing. Londoners have always had a complex relationship with the past—ancient cultural traditions and customs are steeped into current social and political constructs, historic places and buildings rest alongside steel and glass high-rise towers, the rate of change is fast yet the desire to protect is also strong, which creates an ongoing tension between 'modernisation' and retention. The concept of preservation in situ, where significant sites are retained despite development interest, was perhaps first implemented in London in 1848, when the remains of the Billingsgate Roman bath house were found during the construction of the Coal Exchange in what is now Lower Thames Street, parallel to the north bank of the Thames. The remains of the baths, which include the *frigidarium*, *tepidarium*, *caldarium*, furnaces and hypocaust systems, were preserved by order of the then City Architect J B Brunning (Sidell 2012). The remains are currently part of the basement of an office block. The opportunity to view remains of Londinium in situ, particularly when during the course of excavation, has also always been of enormous popular interest, with numbers of over 30,000 being recorded as queuing for glimpses of Roman mosaics or baths. The British fondness for lengthy queues is indeed a well-noted phenomenon, no less for archaeological sites. An estimated 50,000 people visited the Bucklersbury mosaic over a course of 3 days when exposed in 1869 (see Museum of London Archaeology 2014 for an in-depth analysis). Similarly, almost 100 years later, a recorded 30,000 queued to see the Temple of Mithras remains in 1954, an event that has since become a crucial part of the cultural history of London's archaeological community (Sidell 2012: 378), and which was itself the subject of an oral history project in 2014–15 (Museum of London Archaeology 2014).

In the late 1980s, two particular sites brought these issues to the fore: Huggin Hill Bath in the City of London and the Rose Theatre Playhouse in Southwark. Huggin Hill baths are part of a massive public building complex from the first AD. The baths are terraced into the banks of the Thames to make use of the natural water supply and drainage. Elements of the hypocaust systems, marble mosaic floors, numerous rooms and wall survive, some to a height of c. 3 m. The Rose Playhouse was built in 1587 and was where Shakespeare and Marlowe, amongst others, wrote and performed.

The footprint of the Rose is intact, including the stage area. A large number of artefacts recovered from the excavation has contributed significantly to understanding of the Elizabethan age and literature (Fig. 2.2). Both sites contained important, and in the case of the Rose internationally significant, remains preserved to a very high standard. It was estimated that revoking the consents at Huggin Hill, for example, could have left English Heritage open to claims of between £7 and



Fig. 2.2 An overview of the Rose Theatre excavation. Courtesy of Rose Theatre Trust, 1989

£70 m (in 1980s prices), which would have been equal to its annual budget (Orton 1989). Both were also subject to high-profile development schemes, and although negotiations had taken place to allow DUA archaeologists on to the sites for limited periods of time, the value of the remains was such that public opinion demanded they be retained. As planning consents had been granted for both developments, the cost of compensation was simply too high to consider revoking permissions as the quality of the remains became revealed. The Rose Theatre foundations are currently under water to help preserve it and continue to be monitored, while the Huggin Hill Roman bath house is scheduled under the Ancient Monuments and Archaeological Areas Act 1979.

In the face of mounting public pressure, including dramatic protests and sit-ins, questions were asked in Parliament about the lack of planning regulation in a system that enabled such destruction to take place (Fig. 2.3). There needed to be a fundamental shift in including archaeological remains as a consideration when granting planning permission, and making the development community responsible for the impacts that they were creating.



Fig. 2.3 Public demonstrating against the demolition of the Rose Theatre. Courtesy of Rose Theatre Trust, 1989

Part III: A Change in the Organisational Landscape

Finally, through Planning Policy Guidance Note 16: Archaeology and Planning (DoE 1990), archaeology was for the first time identified through policy as a material consideration during the process of approving development projects. The guidance note also secured preservation in situ as the first option for nationally significant remains and emphasised the need for proper assessment and investigation prior to granting planning consent in order to avoid situations as at Huggin Hill and the Rose. It was through PPG16 that archaeologists for the first time gained guaranteed access and funds to carry out archaeological work. The ‘polluter pays’ concept was adopted, whereby developers, rather than government departments or publically funded museum services, would be responsible for funding archaeological works.

This change symbolically marked an end to the struggles that had been faced by the various archaeological groups of the 1970s and 1980s. By the early 1990s, the introduction of archaeology underpinned by political planning requirements directed the profession into a realm of economics, through highlighting that the MoL excavation unit clashed with trade practices law—or competition law—that promotes and maintains market competition by regulating or restricting monopolies. A separation between those providing advice and those carrying out resultant work was necessary, which is when GLAAS, acting within the wider umbrella of English Heritage (since March 31 2015, Historic England), was created. The set-up meant that the archaeological process was divided into different sections: local authorities and GLAAS would become curators (understood in the UK as local planning authority archaeology officers, development control archaeologists or county/city archaeologists who oversee archaeology under the planning regulation on both public and private land and property); private archaeology contractors (such as the redeveloped MoL, now MoLA) would tender for the work and undertake necessary fieldwork required by curators and developers so that the former can ‘sign off’ required considerations (known as planning conditions) for planning permission; and a requirement of a basic technical report would need to be submitted to the Planning Authorities and agreed by the archaeology officer. MOLA is one of the largest archaeological contractors in London, although it should be noted that there are numerous companies of varied sizes in this highly competitive urban environment, which (in a microcosm of the UK as a whole) is arguably the most competitive archaeological marketplace in the country. As a consequence, staff sizes in such organisations change regularly, with a significant use of fixed-term or subcontracted staff to meet short-term shifts in demand.

Archaeology was now part of legislation and part of the political economy. Following this, shift archaeology experienced a new age of a huge rise of funding, professionals, greater job opportunities, career development and most importantly the re-emergence of separate units—this time professionally driven contract/commercial units. In 2010, PPG 16 was replaced by Planning Policy Statement 5: Planning for the

Historic Environment (DCLG 2010), itself rapidly replaced in turn less than two years later by the current NPPF (DCLG 2012; discussed above).

London's Archaeology Today

The ostensibly clear and simple basis of archaeology in London—and in the UK—being managed through the frameworks of the NPPF since 2012 belies in truth a very much more complicated system of heritage management, especially in London. The unique political, social and economic pressures of this city discussed above place particular pressures on its archaeology. The fact that England does not have a state-funded national archaeological service, the archaeological structures that are seen in many of its European neighbouring countries, has also necessitated London's archaeology to progress in a unique way through the intersection of multiple different stakeholders in different partnerships. This includes local communities (and community-based archaeologists); owners and developers of historic sites (often via their paid consultants and/or archaeological contractors); the charity and amenity sector (including religious organisations); local and national planning authorities; and other governmental and non-governmental organisations, (notably in London the Port of London Authority along the river Thames). While it would be naïve to suggest that there are no tensions between these sectors, it remains a fact that the responsibilities and roles of each sector and the effort to make relationships work are now most important as we see an increasing loss of services across the country. While there is a strong focus on the regulatory functions that allow archaeology to develop, London continues to experience a challenge during the current economic and political climate of austerity whereby archaeological work of all types is constantly squeezed to do the bare minimum of work within the tightest of financial margins.

An Archaeological Archive

Having an archaeological archive is undoubtedly one of the greatest accomplishments throughout the development of London's archaeology. In the early 1990s, the Curatorial Division of the MoL hosted the site archives (both field notes, photographs and site reports and also artefacts and ecofacts) previously housed by a range of organisations. Space and resources were a continual concern, and so the collection was moved during the mid-1990s and reopened in 1998 as the London Archaeological Archive and Research Centre (LAARC) in a central London warehouse, part of, and funded via the MoL (Museum of London Archaeology 2016a). Having such a rich archive situated in the heart of London—one that holds information or full archives of over 8500 sites—is a phenomenal advantage for access

purposes, whether by professionals, enthusiasts, students or other researchers. The LAARC is the largest such archaeological archive in the world, and although its value may at times be under-appreciated by heritage professionals, developers and the public alike, having it has played a powerful role in setting standards for excavation, acquisition, site reporting and also the ability to make the information more accessible through digital means. However, like so much of London's archaeology, the LAARC is also an anomaly, in that no other parts of the UK have anything close to the space and facilities that it provides for the city's archaeological archives (although many areas of Britain aspire to this, the LAARC is in general seen as an exemplar).

The LAARC faces a number of challenges, which include a lack of space, a relatively small team of staff and issues with what to keep and what to throw away. Despite this, it has created strong relationships with various archaeological societies and has a good volunteer programme, which both encourage public involvement in archaeology and contribute towards the analysis and understanding of artefacts. Volunteer tasks range from as basic as re-boxing artefacts to more in-depth analysis of sites and reports, also in some cases the conservation of materials, based on the volunteer's skill set. LAARC often has placements with universities, mostly—but not exclusively—London-based higher education organisations such as University College London and Birkbeck College. There has been a steady flow of masters and doctoral dissertations and theses stemming from such work, which often in turn lead to formal publications, especially short reports in the specialist journal *London Archaeologist* (London Archaeologist 2016).

Roles, Partnerships and Communities

What is interesting about London is not necessarily the formal organisations discussed above, but rather the relationships that have formed over a hugely significant period for London's archaeological profession. The success stories of London's archaeology lie, as much as anything, in the ability of successive generations of individuals and groups to invent, reinvent and persevere in their identities and relationships through periods where their existence would seem anachronistic. However, as time continues and established confidence fluctuates, we see that all our established groups continue to offer key pieces to the puzzle of the archaeological process. While the many county, archaeological or historical societies seem of little interest to younger generations, they nevertheless serve as engines for communication and networking.

Although there are legislative frameworks that require local authorities to work with commercial archaeologists, and although much of the archaeological sectors are fragmented, the archaeological community in London works because these networks exist, providing a foundation for a solid community. The city has also successfully, and repeatedly, developed innovative archaeology programmes that

have been set up to seal ‘gaps’ observed in the archaeology of the city. Many of these programmes include individuals from different sectors, linked to organisations and institutions that provide it with strengthened legitimacy. A recent, nationally influential example is that of the Thames Discovery Programme (TDP). Launched via funding from the Heritage Lottery Fund in 2008, the TDP built on initiatives pioneered by the Museum of London’s Thames Archaeological Survey of 1993–1999 that undertook the first systematic survey of the Thames riverfront, identifying thousands of sites and first highlighting to the public and profession alike both the extent, and the fragility, of this elongated archaeological ‘site’. The TDP communicates an understanding and informed enjoyment of the historic Thames River—which includes significant archaeological sites of all periods (including major prehistoric foreshore and intertidal sites)—to the widest possible audience through a programme of education, outreach and, crucially, public involvement and training in active research on riverside sites. A cornerstone of this work was the creation of Foreshore Recording and Observation Groups (FROGs). This is a network of over 400 volunteers who have been fully trained by the TDP in foreshore recording techniques and health and safety and have been certificated by the TDP to record the archaeology of the foreshore, assist the TDP with training sessions for new members, participate in outreach events and monitor the archaeology of the key sites of archaeological interest, found on the Thames foreshore. The FROGs provide a self-sustaining network of volunteer groups, each with their own identity but operating within the wider TDP network, akin to the types of self-sustaining groups that first developed amongst the natural environment community in the 1980s and 1990s in many towns and cities and that prosper to this day. Through such a network the TDP brings together the public with the existing archaeological community of London to generate additional ‘value’ (be this in terms of data; management; understanding or enjoyment) from archaeology for all partners. Such has been the success of the TDP that major components of its structure and ethos are now being introduced nationally via the TDP offshoot project CITiZAN (Coastal and Intertidal Zone Archaeological Network) (Museum of London Archaeology 2016b).

Archaeology is about recording information and about the analysis of that information to generate new knowledge, information and even improving skills in practice. It is fundamental—with that in mind—to both communicate that new information and ensure that it is used to advance the practice. Because London is fortunate through its historical circumstances to have a museum solely dedicated to the city, an incredible archive, dedicated local societies and bodies that work alongside development-led archaeology, it is in a prime position to get added value out of contracts and to make sure that archaeologists can maximise the benefits they can for society at large. Examples such as the TDP show this process in action.

Concluding Discussion: Why It Works, or Does It?

In London, more than perhaps in any other part of the UK, developers, owners and occupiers have—at least some of the time—fully identified and valued the wider benefits of paying for archaeology beyond simply being a ‘cost’ of doing business. There is social, and even economic, cachet and ‘added value’ in London archaeology to an extent rarely seen anywhere else in Britain and even in the world. This is particularly the case in terms of leaving elements of significant archaeological sites ‘in situ’ as part of redevelopments: these include the Guildhall Roman amphitheatre, the Fleet Street Ossuary, Billingsgate Roman Bathhouse and the Temple of Mithras (Fig. 2.4). Such inclusions come at a price, yes, but are also seen as a benefit by both community and local government—as one of the things that makes London distinctive, a valued, high-profile place for organisations to have their offices, within which heritage is directly seen as contributing to the quality of life of employees. Historically, there have been incentives given under some circumstances to the developers, or the future occupiers, of new buildings that incorporate historic (especially archaeological) features. However, such incentives are negotiated on a case-by-case basis rather than being a standing incentive provided by government. Such incentives are usually part of the broader, highly confidential financial arrangements associated with such redevelopments, and as such are rarely if ever on public record. More generally, the inclusion of historic/archaeological features within modern buildings in London is part of the wider phenomenon (shared with other mega-cities around the world) of having high-profile ‘prestige’ offices that incorporate a prominent location along with distinctive architectural designs (often by well-known architects) and ‘unique selling points’ such as the inclusion of archaeological remains, the provision of roof gardens, the presence of cafes and other facilities like gyms on site, and the prominent placement of major works of art (often by famous artists) around or within the building, and other attractions to organisations to be based within a building as both a mark of their success and an aid to staff retention. In various publications coming out of the Greater London Authority, it is recognised that ‘our culture...is central to promoting London as a place to visit, work and study and to attracting foreign investment and multinational companies’ (GLA 2014, p. 11).

The wider socio-economic benefits of archaeological sites to London should be framed in more negative lights as well, however; not all is as rosy as the picture above might suggest. Leaving aside the constant fight for sufficient time and funding to undertake archaeological work in advance of development that remains a concern to this day, there are politically driven medium-long-term planning issues that continue to seriously impact upon London’s archaeology. There has been, for example, a continued loss of or degradation to the setting of heritage assets in London under the current administration’s—arguably uncontrolled—programme of introduction of tall buildings (including its impact on the Tower of London World Heritage Site) (UNESCO 2016). There has been within this also the loss of much public realm streetscape. This includes some areas of historical significance itself,



Fig. 2.4 London's Roman Amphitheatre in situ under the Guildhall in Central London. *Photograph taken by Valeria E.M. Bellazzi, 2016*

including more 'intangible' elements of heritage such as historic street patterns, names; and tangible elements such as street furniture like public realm art, statuary and facilities like public toilets; and thus the ability to appreciate freely historic locales. Outside of the historic City of London, there has also been the loss of significant proportions of outer London greenbelt.

Such changes on the one hand, and losses on the other, if projected forward, raise serious concerns about what London looks like, for example, fifty years from now in 2065 under such a model of uncontrolled ongoing development—of a sprawling megacity with endless outer suburbs and a giant inner core of tall buildings of the like seen in parts of the Near and Far East and the Americas, but not—yet—in Europe. Add in here the anticipated pressures of ongoing growth in population, but a demographic imbalance within that (with a super-rich core surrounded by miles of middle- and lower-class suburbs serving that super-rich centre); the concluding question of this chapter has to be not what lessons others can learn from London in how to deal with archaeology, but rather, what lessons London can learn from other big historic cities facing similar challenges?

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Chapter 3

Preservation, Participation and the Pursuit of Knowledge: Strategic Policy and Archaeological Practice Within the City of York 1989–2015

John Oxley

Introduction

The historic City of York is located in the Vale of York in the north of England (Fig. 3.1). A Roman legionary fortress, Eboracum, was established at the confluence of the rivers Ouse and Foss on this site in 71AD. Over the next 2000 years, the town flourished as an Anglian centre, Eoforwic, in the sixth, seventh and eighth centuries, became the capital, Jorvik, of the Viking kingdom of York in the ninth and tenth centuries, and the self-governing City of York flourished as the second city in England during the mediaeval period. There has now been almost 2000 years of continuous urban settlement in York. This long history coupled with specific topographic characteristics and intensity of settlement activity has led to the accumulation and survival of deep, wet, anoxic deposits across the historic city. These deposits preserve organic material and objects that simply do not survive on the majority of urban sites where such conditions do not exist. The archaeological layers preserved in the city are of international importance, and the heritage management practices developed and implemented in the city have attracted international interest. This chapter describes the background to and development of these practices in York since the 1960s. It focuses on the period after 1989 when the local authority assumed an active role in heritage management in the city.

During the period covered by this chapter, there have been two major episodes of local government reorganization in Yorkshire. These have had significant implications for the practice and development of archaeological services and heritage management in York. In 1974, a two-tier, County and District system of local government was introduced and York City Council, a new District Authority, was created to replace the ancient County Borough and Corporation of the City of York. At the same time, the new North Yorkshire County Council (NYCC) took over

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Fig. 3.1 Map showing location of York in the UK. *Contains OS data © Crown copyright and database rights 2016. Open Government Licence v3.0*

responsibility for education, social services, highways and the Yorkshire Museum from York Corporation. York City Council retained the same physical boundary as York Corporation. In 1996, a new Unitary Authority with new boundaries, City of York Council, was created. This new municipal authority included all the area formerly covered by York City Council and parts of the areas of four adjacent District Authorities: Hambleton, Harrogate, Ryedale and Selby. City of York Council also took over responsibilities exercised since 1974 by NYCC: education, social services, highways and the Yorkshire Museum. In this chapter, the title York Corporation is used for the period before 1974; York City Council is used for the period from 1974 to 1996; and City of York Council is used for the period 1996–2015.

The development of heritage management practices in York can be broken down into three periods. These periods do not coincide precisely with the episodes of local government reorganization. The first period relates to the years before the establishment of York Archaeological Trust (YAT) in 1972. The second period, from 1972 to 1989, covers the years between the creation of YAT in 1972 and the establishment in 1989 of the post of City Archaeologist within York City Council. This period includes the statutory designation in 1984 of the Area of Archaeological Importance the historic core of York and six smaller satellite areas. This designation was made by the Department of the Environment under the provisions of Part 2 of the 1979 Ancient Monuments and Archaeological Areas Act. This period also includes the creation of the Jorvik Viking Centre by YAT. The third period covers the years from 1989 to the time of writing. This period comprises commissioning Ove Arup and Partners, an international engineering and environmental consultancy to produce an innovative report on archaeology in the city, the adoption of clear archaeological policies by the local authority and the creation of the post of City

Archaeologist within both York City Council and City of York Council. It includes adoption, implementation and review and amendment of research frameworks, strategic archaeological policies and heritage management practices. It also sees the creation and development of a database, now called the City of York Historic Environment Record, to hold information on the archaeology of the city. A significant programme of community involvement in and initiation of archaeological projects also takes place during this period. This final period also coincides with the development of a competitive market for archaeological services within the UK and includes the emergence of a range of archaeological organizations that in addition to YAT deliver archaeological services within York. Overall, this combination of strategic policy, heritage management procedures and protocols, database development and community engagement from 1989 represents a comprehensive municipal archaeology programme.

Before 1972

Before 1972, there was no coherent system or programme for guiding archaeological investigations in York. However, there was a long tradition of antiquarian activity and engagement with the archaeology of the city. In the nineteenth and first half of the twentieth century much of this activity centred on the Yorkshire Philosophical Society (YPS) and the Yorkshire Museum. The YPS was formed in 1823 to “pursue the study of natural sciences ... and to combine the private collections of individual members” (YPS, n.d.). In 1828, part of the grounds of St. Mary’s Abbey was given to the Society by royal grant. The YPS constructed a purpose-built museum to house its collections. Members of the YPS contributed to the collection of the Yorkshire Museum. York-based members were responsible for making records of and gathering archaeological materials from a series of large-scale developments within and immediately outside the walls of the mediæval city. The materials and records of Roman objects and contexts proved to be particularly important in framing future understanding of Roman York. The YPS *Annual Reports*, published from 1823 and continuing, and its *Communications and Proceedings* recorded notices of large and small finds from the city. The importance of the work during the nineteenth century of the YPS and the Yorkshire Museum can be seen in the still-authoritative publication by Royal Commission on Historic Monuments England (RCHME) in 1962.

It was not until the 1920s that the first modern archaeological excavations took place. These were organized by the York Excavation Committee. The Committee appointed Stuart Miller, a lecturer at Glasgow University, to carry out the excavations, which were targeted at recovering evidence for Roman York.

In the aftermath of World War II, the scale and intensity of development within York grew significantly. However, there was no response to these threats from the municipal authority. Volunteers, working with limited resources, carried out the work of investigating York’s archaeology. A leading figure during this period of

work was Peter Wenham, head of history at St. John's College, York (now the University of York St. John). Wenham investigated evidence for both the Roman and later Viking and mediaeval cities. This marked a change from earlier practice, where investigations were predominantly concerned with evidence for Roman York.

From the middle of the 1950s onwards, staff of the RCHME carried out archaeological investigations in the city, both to inform the production of the inventory of historical monuments in the City of York and out of personal interest. The RCHME was established in 1908 by Royal Warrant. Sponsored from 1970 by Department of the Environment and subsequently by Department for National Heritage, later the Department for Culture Media and Sport, it was a recording body whose role was to identify, interpret, survey and record sites and buildings of archaeological and architectural interest in England. Apart from archaeological work carried out by the Ministry of Public Buildings and Works and most recently English Heritage at Clifford's Tower and a limited amount of work by Department of the Environment Inspectors of Ancient Monuments in the 1970s, the work of the RCHME represents the only direct archaeological work in York by a national government organization.

Archaeological excavation led by Derek Phillips took place at York Minster between 1967 and 1972 as part of the extensive programme of underpinning and engineering works that were required to stabilize the central tower and transepts (Phillips 1985). The RCHME was also involved in this campaign.

It will be apparent that archaeological investigations before 1972 were sporadic and lacked any overall direction or guiding framework.

1972–1989

The pace of change within historic cities grew throughout the 1960s and 1970s. One of the drivers of change was the publication of a report *Traffic in Towns*, for the Ministry of Transport (Buchanan 1963). This envisaged large-scale interventions in order to create new roads within towns and cities to accommodate the ever-increasing amount of traffic. Four reports were also commissioned on the historic towns of Bath, Chester, Chichester and York. The aim of the reports was to “discover how to reconcile our old towns with the twentieth century without actually knocking them down” (Esher 1968, Preface). The York report has become known as the Esher Report, after its author, Viscount Esher. In York, a new inner ring road was planned. The proposed ring road would have cut an enormous corridor through the suburbs outside the city walls, threatening large areas of subsurface archaeology including Roman cemeteries. Esher saw the ring road as an essential element in removing congestion from the historic core. Esher also envisaged conservation of historic buildings and construction of new high-quality housing in the historic city. The Esher Report was an innovative and insightful agenda for conservation and change. However, its agenda together with the

proposed ring road presented a significant series of threats to archaeological deposits in the city.

The Council for British Archaeology (CBA) and the YPS commissioned a report, published in 1971, to assess the impacts of the proposed ring road and the Esher Report (Addyman and Rumsby 1971). Addyman (then lecturer in archaeology at Southampton University, subsequently became first Director of York Archaeological Trust) and Rumsby (then chairman of the Yorkshire Philosophical Society) suggested that in York it would be necessary to spend £50,000 a year for 10 years on archaeological excavations to respond to this threat.

It was clear that a dedicated organization would be required to carry out this archaeological programme. The CBA and the YPS therefore proposed the establishment of a new archaeological charity, the York Archaeological Trust for Excavation and Research Ltd (YAT). YAT came into existence in April 1972. Since that date, YAT, a non-governmental archaeological organization, has carried out archaeological work in York funded initially by grants from national government. Fortunately, the immensely damaging ring road was never built. The recommendations in the Esher Report were, however, taken forward with enthusiasm. Large areas within the city centre were cleared of semi-derelict, poor-quality buildings. These areas, together with key sites on the ill-fated ring road, provided the locations for YAT's earliest interventions. From the outset, it benefitted from grants given by the Department of the Environment, and assistance and premises from York University.

From 1972, YAT's work involved excavation in advance of developments and carrying out watching briefs on all other disturbances of the ground (e.g. operations carried out by utility companies). However, archaeological interventions were guided from the outset by specific research objectives aimed at investigating the "whole process of urbanization over the past two millennia" (Ottaway 2009, p. 14, quoting Peter Addyman, first Director of YAT). The haphazard and reactive nature of archaeological work in York before 1972 disappeared with the creation of the YAT.

Over the next 20 years, YAT went on to establish itself as one of the pre-eminent archaeological excavation and research organizations in the UK. It carried out large-scale archaeological investigations, instigated an ambitious publication programme and embedded environmental archaeology and conservation into its work. It also saw the benefit of involving the general public in archaeology. This emerged most successfully at the excavations on the large site at 16–22 Coppergate, the location of a proposed new shopping centre (Fig. 3.2). YAT spent over five years between 1976 and 1981 excavating the well-preserved, deep, wet organic deposits on the site. Access to carry out the excavations at Coppergate was facilitated by York City Council. The excavations were funded in part by national government through the rescue archaeology budget of the Inspectorate of Ancient Monuments and through private donations by interested individuals, trust funds and companies (Hall and Hunter-Mann 2002, p. 867). YAT opened the site to the public and generated huge public interest in the excavation. This led in turn to the creation of the Jorvik Viking Centre (JVC), a totally new form of educational

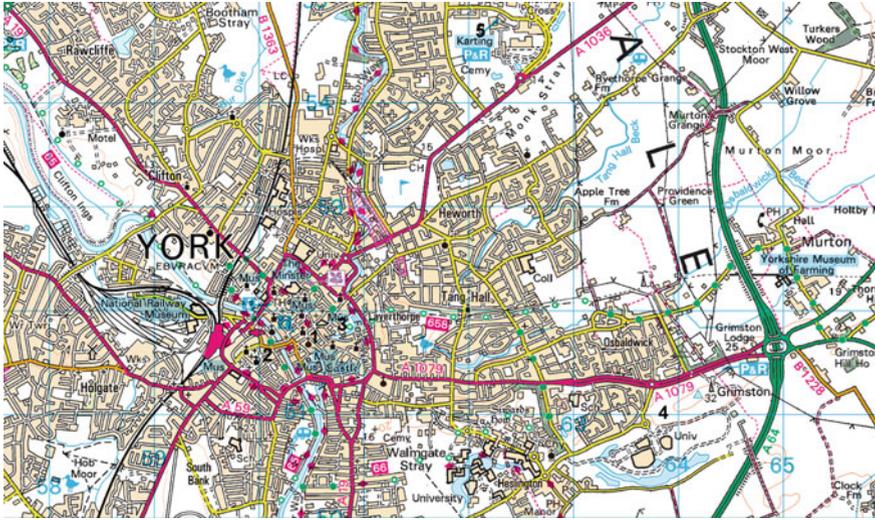


Fig. 3.2 Plan of York showing main sites mentioned in text: 1 Coppergate Jorvik Viking Centre; 2 Queen's Hotel; 3 Hungate; 4 Heslington East; 5 Community Stadium. Contains OS data © Crown copyright and database rights 2016. Open Government Licence v3.0

and tourist experience in the basement of the new shopping centre. The JVC was created by YAT and its founding Director, Dr. Peter Addyman. The JVC was funded initially through commercial loans and private donations and thereafter from the income from visitors to the JVC (Addyman and Gaynor 1984). A highly entertaining account of the design and installation of the JVC has been published recently by the lead designer for the project, John Sunderland (Sunderland 2013).

YAT was one of several organizations set up in the late 1960s and early 1970s as a response to the threats posed by road building and development in historic towns and cities. In 1972, the CBA published *The Erosion of History* (Heighway 1972) an agenda for how archaeological interventions should be organized and facilitated through the planning system. It identified amongst other issues that the legislative framework and voluntary procedures for managing archaeology had not been successful; it recommended that the “archaeological potential of a development site should be required by law to be considered in the granting of planning permission” (Heighway 1972, p. vii).

Although YAT was able to gain access to sites to carry out archaeological investigations, this was largely due to the fact that a) these sites were owned by City of York Council and b) the costs of excavation were being met to a large extent by barely adequate grants from national government’s Department of the Environment. These were precisely the “voluntary procedures” that the *Erosion of History* considered in 1972 were already unsuccessful.

In 1979, a piece of legislation was passed that attempted, to some extent, to address the problems identified by the *Erosion of History* (Heighway 1972). The

1979 Ancient Monuments and Archaeological Areas Act introduced for the first time the concept of an archaeological area. Part Two of the 1979 Act allowed the Secretary of State to designate an Area of Archaeological Importance (AAI) and to appoint a Statutory Investigating Authority (SIA) for the AAI. Within an AAI, anyone who intended to carry out an operation that flooded, tipped material on, or disturbed a site would have to submit a notice to the Local Authority giving notification of the operation. The Local Authority would validate the notice and pass it on to the SIA. The SIA could make one of three responses to the person who served the notice: that it had no interest in the operation; that it wished to attend and observe the operation (i.e. carry out a watching brief); or it could claim a period of up to four months and two weeks to carry out an archaeological investigation. Crucially, the 1979 Act placed no duty on the person serving the notice to meet any archaeological costs that arose as a consequence of a notice being served. Part Two of the 1979 Act provided a right of access to carry out archaeological investigations, but did not cover the financial costs of those excavations.

It was not until 1984 that the Secretary of State designated the first AAIs, and then only five “pilot” cities were designated: Canterbury, Chester, Exeter, Hereford and York. In York, the whole of the historic core was designated as an AAI (Fig. 3.3). YAT was appointed as the Statutory Investigating Authority for the AAI in York. YAT has since 1972 been an independent charity with no formal or legal links to the local authority. Between 1984 and 1990, when determining planning applications, local planning authorities in England and Wales did not have to take into account the impact of a development on archaeological deposits. As a consequence, any advice offered by YAT to York City Council on planning applications generally was ignored. In York, the effect of AAI designation had an

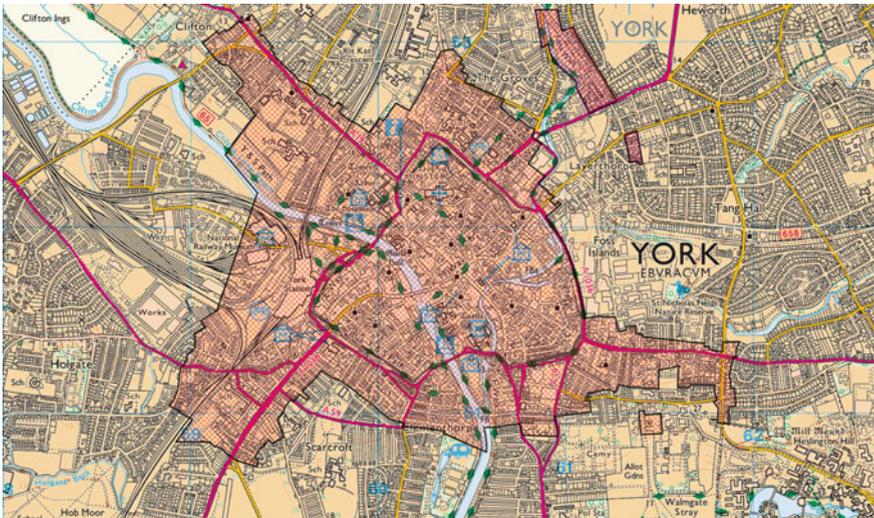


Fig. 3.3 Central Area of Archaeological Importance. *Contains OS data © Crown copyright and database rights 2016. Open Government Licence v3.0*

unintended consequence. It made the local authority less inclined to consider archaeological issues when it granted planning consent. City of York Council considered that the appointment of YAT as the SIA meant that archaeology was adequately provided for in the city centre. However, as has been pointed out above, the 1979 legislation contained a fundamental flaw: it provided access but no resources. YAT was left to continue its policy of reliance on government grants and such funding as it could negotiate from developers. The right to claim up to four months and two weeks to carry out an excavation became part of the negotiation process.

At the same time as YAT was appointed SIA for the AAI in York, the Jorvik Viking Centre opened. Jorvik proved to be a stunning commercial success and soon provided YAT with an income stream that was to contribute significantly to the charitable objectives of YAT. The mid-1980s saw YAT develop into a confident ambitious archaeological organization that began to play a very important role in the development of commercial tourism within the city. YAT was updating, reviewing and looking at ways through which it could implement its own research frameworks and objectives. Through astute negotiation that secured funding from developers and the newly formed English Heritage, it had been able to carry out a number of large-scale excavations including the important excavations at 46–54 Fishergate (Mainman 1993; Stroud and Kemp 1993; Kemp 1996; Kemp and Graves 1996).

However, this period witnessed a growing distance between City of York Council and YAT. The local authority was focused strongly on encouraging economic development opportunities in the city. The economic development programme that emerged in the late 1980s identified 35 sites in and around the city centre that were suitable for redevelopment for offices. This programme represented the most significant “threat” to archaeological deposits since the proposals that led to the formation of YAT in 1972. For YAT, this programme presented both an opportunity and a problem. In one sense, it was an opportunity to implement its own research questions. At the same time, it presented a problem in that the AAI procedures, YAT’s negotiating skills and access to project funding from English Heritage would not provide the necessary resources to pay for the increasingly expensive process of archaeological excavation and analysis.

The concept of “the polluter pays” had not as yet been recognized within the planning system for archaeology; the majority of the costs of archaeological excavation continued to be met from the public purse. The transition from public to private funding of archaeological excavation would take several years to achieve. It was a piece of European legislation that kick-started the process. The publication of European Union directive 85/337/EEC in 1985 was not formally incorporated into UK law until 1988 with the enactment of the Town & Country Planning Act’s Environmental Assessment legislation. The EIA Directive (85/337/EEC) has been in force since 1985 and applies to a wide range of defined public and private projects (EIA 1985). The directive has been amended three times, in 1997, in 2003 and in 2009. The directive provides for a developer, where directed to do so by a “competent authority” (normally the local planning authority), to provide information on the environmental impact of a development. This legislation introduced into UK law for

the first time the concepts of *impact assessment*—what effect will a development proposal have on environmental, including cultural, assets?—and of mitigation—how will the effect of those impacts be reduced or removed? Impact assessment required a process of evaluation of a site. In archaeological terms, this translated into looking at a small sample of a site and using this sample to date and characterize deposits and assess their importance. Mitigation might require excavation, or equally it might require deposits to remain undisturbed. However, in the period between 1985 and 1989, impact assessment and the notion of the developer paying for the process of evaluation and mitigation were neither a requirement or accepted practice.

All these contradictions came to a head in York over the site of the former Queen’s Hotel in Micklegate (Fig. 3.2). The Queen’s Hotel had been a listed Georgian Inn that had been demolished in 1972. Demolition had been allowed by the Secretary of State after an appeal against York City Council’s decision to refuse consent for demolition. The site had remained vacant and undeveloped. In 1986–1987, the site had been identified in the council’s economic development programme as being suitable for office development. A tenant was identified, and a developer secured planning consent for an office building with a basement car park. YAT using their powers as SIA gained access to the site and negotiated a limited amount of funding from the developer and excavated what amounted to a series of evaluation trenches. These revealed a sequence of wet, well-preserved organic deposits dating from the tenth to fifteenth centuries. These overlay the remains of a Roman building whose walls survived to a height of some 2 m above foundation level. In short, here was a rich well-preserved site of national importance that would be destroyed by the proposed office development and its basement (YAT 1989). The planning approval for the development did not take account of any archaeological issues; the local authority took the view that the provisions of the 1979 Act and the powers vested in YAT were there to deal with the archaeology.

The events at the Queens Hotel made local, national and international headlines. The City of York Council stood accused of approving the destruction of this nationally important archaeological site. From the council’s point of view, a row about archaeology had effectively undermined its entire economic development programme. It was clear that each of the remaining 34 sites identified in its development portfolio had significant archaeological potential and could be rendered undevelopable or categorized as “too difficult” by the development industry. The decision taken by the city council to take a hands-off approach and leave archaeological decisions to YAT was no longer tenable. As a consequence of the Queen’s Hotel debacle, York City Council and English Heritage came together to look at how this situation could be avoided in future.

1989–2015

One of the key outcomes of the discussions post-Queen’s Hotel between York City Council and English Heritage was the decision to commission a study of Development

and Archaeology in York from Ove Arup and Partners—the “Arup study” (Arup 1991, Fig. 3.4). Ove Arup and Partners, now Arup, were and are an independent firm of designers, planners, engineers, consultants and technical specialists offering a broad range of professional services. The primary purpose of the report was: “To update knowledge of the City’s archaeological resource and to provide a framework for ensuring the development of sites is secured in a way which can conserve the most outstanding archaeological resources” (Arup 1991, (1)).

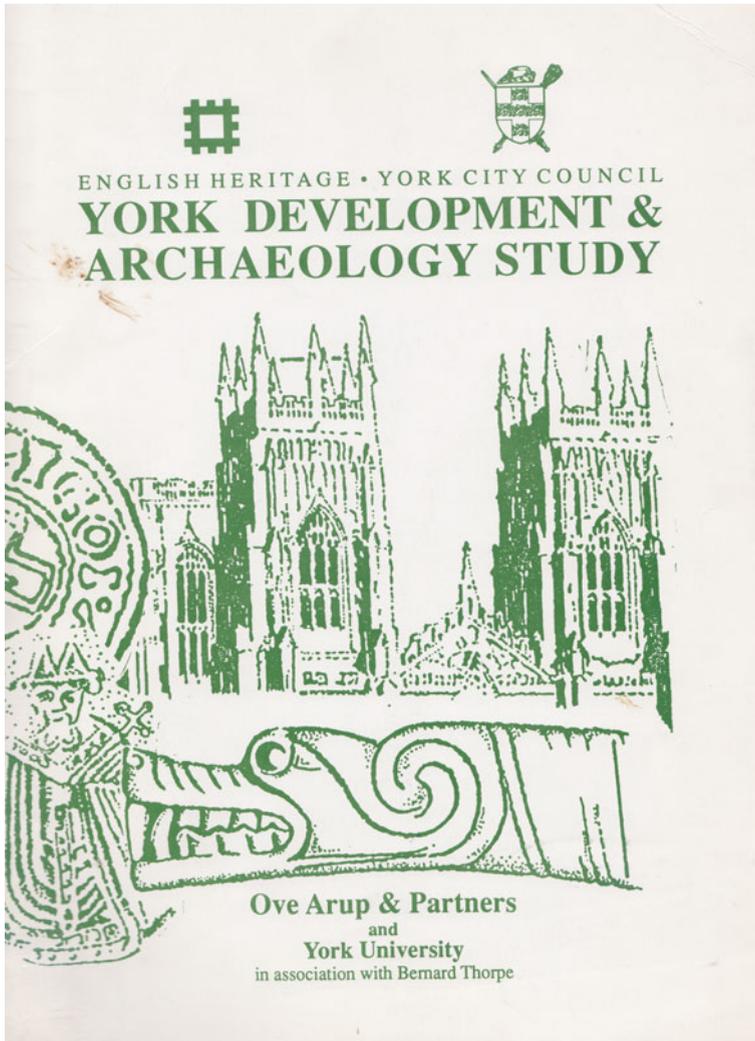


Fig. 3.4 York Development and Archaeology Study (the “Arup study”). *Photo credit:* © John Oxley 2016

The Arup study assessed the location, character and meaning of archaeological deposits within the study area. It also examined building construction and development procedures in order to analyse the interrelationship between development and archaeology.

The study area comprised the majority of the AAI in the historic core of the city. The study considered only the archaeological deposits of the Roman, Anglian, Anglo-Scandinavian and mediaeval periods. The study produced a database which included records drawn from archaeological interventions in the city from the nineteenth century to 1989. The database was used to produce a deposit model which divided the city into 20 zones with the quality of archaeological deposits within each zone assessed. The Arup study recommended that on-site evaluation of all sites be undertaken “as part of the planning process” (Arup 1991, (2)). A research agenda comprising five separate topic papers formed a key part of the Arup study. These topic papers addressed the hinterland, the environmental sequence, the Roman period, the early Middle Ages and the mediaeval period (Arup 1991, pp. 29–30). A research framework was proposed “in which reactive excavation is minimized”; the framework was expressed as nine separate projects. These nine projects included evaluation and deposit modelling of every site (Project 1); formal excavation only for those sites of high current archaeological value where deposit quality matches the research agenda; all other sites to be preserved in situ (Project 2); and seven non-destructive projects (remote mapping, mediaeval buildings, artefact assemblages, the river regime, the hinterland survey, protection for the future and research reviews). The key recommendation of the Arup study concerned preservation in situ. It suggested that for the geotechnical and archaeological conditions identified in York, it would be possible to ensure preservation in situ by adopting construction methods that ensure that no more than 5% of the archaeological deposit is destroyed. Chapter 6 of the Arup study (Arup 1991, pp. 40–57) sets out the detail of this innovative and controversial approach to preservation in situ.

The Arup study addressed the problem of how new development can proceed within a historic city that contains deep, wet, fragile archaeological deposits. It was designed to ensure that another archaeological disaster like the Queens Hotel would never happen again.

The appointment of an archaeologist in 1989 at the same time as the Arup study was commissioned to work within York City Council’s Planning Department was critical to the successful implementation of the Arup study. Between 1989 and 1992, the post of City Archaeologist was jointly funded by English Heritage and York City Council. Since 1992, the post has been fully funded by the city council. The main role of the City Archaeologist is to provide advice to people applying for permission to carry out development in York. In addition, the archaeologist (or “curator”) maintains and updates the HER for the City of York and assists in the development of strategic policies for archaeology and the historic environment in York.

In 1992, after a period of public consultation, York City Council adopted the document “Conservation Policies for York: Archaeology” (YCC 1992). This

document, in the absence of a formal adopted Local Plan for the city, took the Arup study recommendations and set them out as policies that the Council would implement through the planning process. These policies were formally re-adopted in 1996 by the new City of York Council and have formed the basis of subsequent development control policies in successive, unfortunately unadopted, Local Plans.

Adrian Olivier writing in *Frameworks for the Past* (Olivier 1996) commented that the Arup study and *Conservation policies for York: Archaeology* represented “the furthest that a local authority has gone in recognizing the importance of archaeological frameworks and demonstrates the level of commitment that can be achieved for positive preservation policies acting in tandem with a structured research program.” (Olivier 1996, p. 12).

The research behind the Arup study played a key role in informing the development of the national planning policy guidance document published in November 1990, Planning Policy Guidance 16: Archaeology and Planning (PPG16). It is beyond the scope of this chapter to look at the development since 1990 of national guidance in England and Wales for protecting and investigating the historic environment: PPG15 (1994) and PPG16 (1990); Planning Policy Statement 15 (2010); National Planning Policy Framework (NPPF 2012). A very useful summary of national policy development up to the publication of the NPPF and its implications can be found in the report produced by the Southport Group (Southport Group 2011).

The Arup study linked preservation in situ of the vast majority of archaeological deposits with the concept of large-scale excavation where “deposit quality and research objectives coincide in sites where complete preservation of the deposit is undesirable or incompatible with the agreed development, or where the promotion of the City of York through a public excavation is desirable” (Arup 1991, p. 36). The first candidate site to meet these requirements emerged in 1999. The Hungate redevelopment area consists of a 6-ha site that lies within the historic core on the east side of the historic city. The site is defined by the River Foss on the south and east sides, by Stonebow and Peaseholme Green on the north and by Garden Place on the west (Fig. 3.5). The site had been a series of nineteenth century streets (Fig. 3.6), home to a tightly knit community, which was swept away in a frenzy of slum clearances between 1930 and 1935. The area had then undergone piecemeal post-war redevelopment, but by the late 1990s was largely unoccupied. It offered an opportunity for comprehensive redevelopment. It also offered an opportunity for extensive archaeological evaluation to take place alongside community consultation on development options. The outcome of this programme of evaluation and consultation between 1999 and 2004 was the creation of the largest programme of urban research, including the single largest area excavation, ever undertaken in the historic core of York. The entire cost of the project, set out in a Section 106 legal agreement between the developer and City of York Council, has been met by the developer. At the time of writing, the final phases of archaeological excavation, additional evaluation and deposit monitoring are under discussion. The main programme of excavation has been carried out by the archaeological contractor appointed by the developer, YAT. A summary of work to date can be found on the



Fig. 3.5 Hungate, York, aerial view. © Getmapping plc (2007)

Dig Hungate website (YAT 2015a). From the outset, there has been extensive involvement of residents and visitors in the project. The Hungate project represents a dramatic illustration of the success of the Arup study and the Conservation Policy document in providing a mechanism to achieve large-scale archaeological research with enormous public benefits.

In 1996, York became a Unitary Authority within much expanded boundaries. One of the effects of this expansion was to adjust the balance between the historic core, as represented by the 1991 Arup study area, and its previously detached hinterland. This offered for the first time the opportunity to explore the implementation through the planning process of the Arup study project on the hinterland of York.

The archaeological responsibilities of the newly formed council now included not only the deep wet deposits found in the historic core of the city but also the largely uninvestigated archaeological resource lying below the extensive fields and farmland surrounding the city. Deposit survival in these rural areas is very different to that which is found within the historic core of the city. A thin layer of topsoil covers archaeological features and deposits. They have in the past been threatened more by agricultural activities than by development pressure. Since 1996, however, there has been considerable pressure on these rural edgelands of York to provide land for retail, residential and educational expansions.

In York, the strict application of the policies contained in the 1992 *Conservation Policies for York: Archaeology* document supported by the guidance contained in PPG16 had established archaeology as a material consideration in determining planning applications. By 1996, the requirement for pre-determination evaluations on development sites had been widely accepted by the development community.



Fig. 3.6 Nineteenth century street surface of Haver Lane, Hungate archaeological excavations.
Photo credit: © John Oxley 2016

It was, and still is, recognized a key piece of work to assess and reduce the risk that the presence of archaeological deposits might pose to a development proposal. Developers have come to value archaeological evaluations in the same way that they value geotechnical and contamination assessments. It is necessary to carry out these surveys in advance so that at the very earliest opportunity the problems, solutions and costs can be identified and quantified. The routine requirement for evaluation of the urban deposits identified by the Arup study was therefore applied

to developments in the rural hinterland of York. The cost of these archaeological surveys and subsequent mitigation work is all born by the developer.

This has resulted in an opportunity to carry out an unprecedented amount of archaeological work in York's rural hinterland. For instance, archaeological evaluation followed by extensive excavations has been undertaken since 2003 on a 116 ha site for a new campus for the University of York (Roskams and Neal, forthcoming). The planning for this piece of archaeological research was heavily influenced by the principles set out in the Arup study. The archaeological evaluation work allowed the identification of areas where deposit survival was good and where clear research questions about the prehistoric and Romano-British landscape could be posed and answered. Two archaeological contractors, YAT and On-Site Archaeology, were appointed by the University of York to carry out the programme of formal archaeological excavation across the site. Part of the site was also used as a training excavation by the Department of Archaeology, University of York, and for a programme of community involvement.

Community archaeology has been an important development in this period and particularly since 1996. There has been a growing demand amongst the general public for access to view and take part in archaeological excavations. Television programmes such as *TimeTeam* played a very important role in “demystifying” archaeology, albeit within a particular format (the three-day excavation) designed for television (*TimeTeam*, n.d.). *TimeTeam* visited York in August 1999 when they excavated three sites over a three-day period. This exercise generated enormous public interest within the city and led directly to a four-year programme of archaeological research at St. Leonard's Hospital. This formed YAT's first Archaeology Live! project (YAT 2001). Since 2001 Archaeology Live! has held training excavations on six sites within the historic core of York. The training excavations run for up to three months, and trainees pay a fee to attend the excavation. Training is offered to anyone who wants to take part—archaeology students, people with no archaeological experience, people of all ages and backgrounds. Over the past three years, City of York Council has pursued a policy of procuring archaeological evaluation and excavations as professionally led, community staffed projects on sites where it is acting as developer. Most recently over 100 volunteers have worked with YAT on a four-week long excavation on the site of the new Community Stadium at Monks Cross, on the north-east edge of York (YAT 2015b, Fig. 3.7). This excavation was also visited by over 700 schoolchildren. Between 2005 and 2010, the Heritage Lottery Fund (HLF) funded the post of Greater York Community Archaeologist. This post emerged from an initiative of the York Archaeological Forum, a body set up to advise City of York Council on archaeological research (YAT 2003). After HLF funding finished, the post was retained by YAT until March 2015. Through the work of the Community Archaeologist, a network of community archaeology organizations was established. This now meets under the umbrella of Timeline York Plus. There is a web page (TYP 2015a) and a blog (TYP 2015b) which together with twice-yearly meetings provides a means of sharing information, experiences, skills and equipment.



Fig. 3.7 Excavations in progress at site of York's Community Stadium. *Photo credit: © John Oxley 2016*

In 2013, a review of the 1991 Arup Study was commissioned by City of York Council and English Heritage (Arup 2013). “The purpose of the review was to assess the extent to which the 1991 report’s aim to allow development to go ahead in York whilst conserving the city’s outstanding archaeological resources has been achieved” (Arup 2013, p. 1). The conclusion of the review was broadly supportive. It suggested that a thoroughgoing renewal of the 1991 study would not be necessary. It emphasized that certain elements of the study are essential to the effective management of the historic environment in York. It argued that “The essential robustness of the 1991 study has been demonstrated by the extent to which the arguments it put forward and the recommendations it made remain relevant” (Arup 2013, p. 36).

The period since 1989 has been characterized by several key policy concepts: allowing development to proceed provided it destroys less than 5% of deposits within the footprint of the development; routine archaeological evaluation of every development site; the desirability of large-scale, publicly accessible research excavation projects; and encouraging community engagement and involvement in archaeological projects. The role of the City Archaeologist working within the City of York planning department has been critical in ensuring the development and implementation of these policies. The integration of the procedures and protocols set out in the Arup study in 1991 into archaeological and heritage management policies of City of York Council has led to the development of a successful and comprehensive municipal archaeology programme in the City of York.

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Chapter 4

Crowdsourcing the Story of Bristol

Peter Insole

Introduction

Archaeology is the story of place. Archaeological evidence in all its forms contributes to our understanding of place and should be used to inform changes and improvements to the physical environment. In this respect, archaeology is as much about the future as it is about the past and our current shared understanding of this archaeology is the join between the two.

Archaeology has been a material planning consideration in the UK for over 20 years in recognition of this connection. The primary tool that aims to enable relationships between past, present and future as well as connecting academic research and understanding about archaeology to planning disciplines is the Historic Environment Record (HER). The majority of Local Authorities in the UK maintain an HER in accordance with the National Planning Policy Framework (DCLG 2012) and adhere to data standards guidelines provided by the national advisory body, Historic England (formerly English Heritage). Each authority takes an individual approach to managing its HER in terms of software and resourcing. Historic England is gradually developing the Heritage Gateway to link all historic environment datasets, but because of differences between authorities only 60% of HERs are currently represented on the resource (Heritage Gateway).

The HER is a spatial database of all known historic and archaeological information within the area of a statutory local authority. Since the late 1880s, the British Ordnance Survey (OS) has been mapping places of historic interest with symbols that we now recognise and associate with ancient places that we value. Often these places were visible remains like a castle ruins, but the mapping of ancient places by

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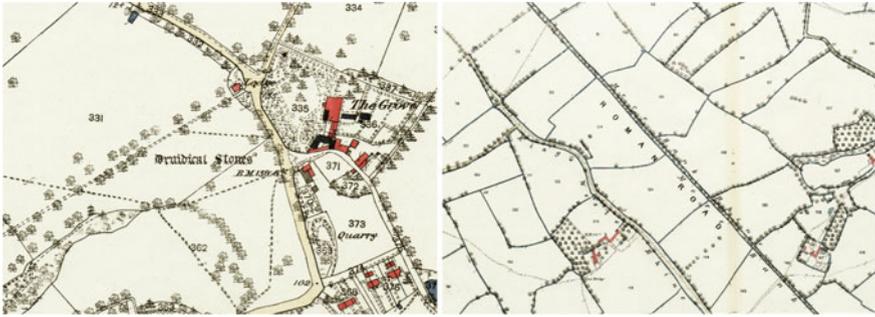


Fig. 4.1 25" Ordnance Survey map of Bristol, 1881–4 available as one of the layers on Know Your Place. It is available in its entirety for the City of Bristol, but by 2017 will cover the historic counties of Gloucestershire, Somerset and Wiltshire thanks to Heritage Lottery funding (courtesy of Bristol Record Office)

the OS extended to the suggested route of a Roman Road, or former site of a medieval priory or manor house (Fig. 4.1).

The Past in the Landscape

The connection with mapping the ancient world on an accurate modern survey probably owes its origins to William Roy, the creator of the first baseline of the triangulation of Great Britain at Hounslow Heath in 1784 (Hewitt 2010, p. 74). Of particular relevance to the link between past, present and future planning, Roy, operating as a military surveyor during turbulent times in Scotland, could empathise with Roman generals building fortifications in the same Scottish landscape 1500 years earlier (Hewitt 2010, p. 36). It was the work of Roy that led to the establishment of the Ordnance Survey in 1791 a year after his death.

The interest in mapping ancient places was further influenced by the Romantic Movement in the later eighteenth century and early nineteenth century as the concept of rambling the wild countryside of the Lake District, Scotland or the Forest of Dean began to grow. This early origin of leisure walking was promoted by publications such as West's *A Guide to the Lakes* (1778) (Lake District UK 2008) and the poetic writings of Coleridge and Wordsworth, see *Lines written a few miles above Tintern Abbey* (1798). Although the poem makes no mention of the abbey ruins themselves and the Romantic Movement was largely concerned with emotional responses to the natural environment, Wordsworth's use of the Abbey as a landmark means that we can visit approximately the same awe inspiring location today.

The visual interest of a remote overgrown ruin set in a verdant, rocky valley epitomises the Romantic Movement; landscape designers of the period such as Capability Brown and Humphrey Repton strove to recreate the physical form,

erecting follies where ruins were absent and using techniques like revealed views to simulate the visual drama of the natural landscape.

Further back, visible ancient places in the landscape have been recorded in topographic accounts, folklore and art. Before land boundaries were officially surveyed they were often described with reference to notable, man-made features from antiquity whose original purpose had long been forgotten. Early medieval perambulations contained in land charter records mostly describe natural landmarks, but occasionally ancient remains appear in the descriptions. For example the perambulation contained in a land charter for two estates at Caldicot, south-east Wales recorded in the *Liber Landeveis* (Llandaff Charters), refers to a *crug* at one corner of the land unit. A *crug* is a Welsh place name for a tump (a term for a mound or tumulus) or heap (Ordnance Survey 1973), but in the Llandaff Charters has been identified as often referring to a tumulus (Evans and Rhys 1893). In the Caldicot example, this use of *crug* is very likely to refer to a Bronze Age barrow visible in the modern landscape the location of which corresponds closely to the perambulation description.

These examples suggest that man-made features in the landscape as much as natural features have contributed to our sense of place, to way-finding and community identity. These points in our landscape connect us to our predecessors and capture our imagination. They are the things that form the backdrop of everyday lives.

Even the names of our places can provide clues to our past and are part of our story of place, as illustrated in *Translations* by Friel (1981):

...we call that crossroads Tobair Vree...Tobair means a well. But what does Vree mean? It is a corruption of Brian - (*Gaelic pronunciation*) Brian - an erosion of Tobair Bhriain. Because a hundred- and-fifty years ago there used to be a well there...And an old man called Brian...one morning was found drowned in that well. And ever since that crossroads is known as Tobair Vree - even though that well has long since dried up (p. 53).

In this example from Brian Friel's play, the English surveyors of Ireland added the Irish place name to their name book, but elsewhere local names were anglicised such as Dún Laoghaire, a port on the east coast of Ireland, was known as Kingstown from 1821 to 1920, but was identified on earlier maps as the anglicised Dunleary. Friel's *Translations* is a demonstration of the politics of mapping and the power of the mapmaker.

The Ordnance Survey included ancient places on its maps, although the use of terms like 'druidic' or 'Celtic' (Fig. 4.1) hints at a mythological interest suggesting a lack of formal academic rigour. However, this systematic 1880s survey was the beginning of much of our current understanding of the historic landscape of Britain. Many of those ancient remains buried and standing above ground first acquired legal protection under the Ancient Monuments Protection Act 1882 and are now named as Scheduled Monuments under the Ancient Monuments and Archaeological Areas Act 1979.

It is the 1880s mapping by the Ordnance Survey and their subsequent revisions that provided the basis for the first HERs in the 1970s, then known as Sites and

Monuments Records (SMRs). These paper map-based records with associated card index were established by many local councils to ensure that planning decisions could be made with consideration of the known ancient remains that had so much public interest.

Digitising Place

These paper records have now been converted to computer-based geographic information systems (GIS), but some of the locational information at their heart stems from the 1880s surveys and all the data are related to twenty-first century Ordnance Survey mapping. GIS enables robust academic information to link directly to an accurate spatial entity. This allows us to be precise about the extent of a heritage asset, but at the same time permits us to justify why this asset is of historic or archaeological importance.

The use of GIS is especially important for archaeology to link into future planning for places. It allows an immediate understanding of what the potential heritage impacts of a proposal might be simply by drawing a plan of a proposal on the digital map and querying what archaeological features it intersects.

GIS is a key tool for the archaeologist in the twenty-first century; however, issues remain particularly when assessing the importance or heritage value of an asset, what current legislation and guidance refers to as ‘significance’ (Department for Communities and Local Government 2012). The challenge is to develop a shared understanding of heritage and encourage residents of these places to participate in the conversation. This latter point is especially important because heritage is ubiquitous. Everything in our daily lives has a connection to the past; most of our houses are the homes of other families before, our local community centres or cafes may be in buildings which were once places of worship, our parks are green oases that have often been enjoyed since they were first protected from Victorian urban sprawl. These assets are all part of the archaeological resource that cannot be separated from the present. Understanding the factors that have shaped our city today will be a critical part of creating quality places for the future. Historic character of a neighbourhood takes generations to develop, it can be quickly eroded through insensitive regeneration and it is difficult and costly to build from new whilst embedding a strong sense of place.

In Bristol we make extensive use of GIS to manage our data about heritage. Generally this data comes from traditional sources like the historic OS maps mentioned above, historic accounts or archaeological investigations. The bulk of this since the Town and Country Planning Act of 1990 comes from planning-related archaeological interventions ranging from a full-scale excavation prior to the construction of a new office block on the site of a medieval graveyard to the monitoring of groundworks within the area of the Roman town of Abona at the Sea Mills suburb of Bristol for the extension of a house. The Bristol Sites and Monuments Record (SMR) was converted to GIS from paper records in the early

1990s. It was further funded by English Heritage to create an Urban Archaeological Database (UAD) in the mid-1990s to inform an assessment of the archaeological resource in the historic core. The process of creating the UAD involved a trawl of the city archives, historic maps and images to create a comprehensive spatial historic record. The UAD has now been amalgamated with our other heritage data (including the SMR) to create the existing Historic Environment Record (HER) that covers the whole city. However, the type of funded data enhancement as with the UAD is becoming less available and is now usually associated with a thematic approach; the recent influx of WWI-related data as a result of projects related to the conflict's centenary being a prime example.

The Heritage Information Cycle

The formation of the UAD was a project managed from within the planning department; the data became part of a planning database and continues to be managed by the local authority. It is used in planning decision processes on a daily basis and continues to be directly relevant to place making in the city. As with most Local Authorities, Bristol City Council has a Senior Archaeological Officer who uses the HER data to provide advice to planning officers on the potential archaeological implications of development proposal. Working collaboratively with urban designers and conservation officers to achieve the best result for a development site, this advice ranges from requests for further archaeological information through the commissioning of desk-based or fieldwork research to recommendations for the preservation of a site either in situ or by fieldwork recording. These planning-related archaeological projects are commissioned and funded by the developer and continue at a rate of approximately 150 projects a year. Because these projects are planning-related, adding the results to the HER is ensured through conditions of a planning consent. This heritage information cycle where the HER provides information to inform a project that then feeds back the results of this project to the HER exponentially increases our understanding and is an invaluable tool to further research.

This is a successful model within the planning process provided the systems are in place such as adequate staffing and data managers (HER officers) to keep this continual heritage information cycle progressing. The HER is a never-ending project just as urban development, and renewal is never ending.

In order to build a comprehensive heritage database, the information needs to include sources beyond those that are generated through the planning process. In the past, local authorities may have had staff and capacity to continually trawl through academic journals, local studies publications and the latest research papers to enhance their data records, but now with diminishing resources coinciding with the era of 'Big Data' where more and more information is being shared online via blogs, Facebook, Twitter, etc.... the HER needs to adapt its data collection strategies.

Getting to Know Your Place

In contrast to the extensive and often freely available data online, valuable information about place and the heritage of places is locked in relatively inaccessible locations. It is either not in digital format, or it exists only as local knowledge, or was the subject of an unpublished thesis. Conscious of this growing issue, but also conscious of the fact that developments in GIS and online technologies could help to tackle this problem, Bristol City Council developed the web resource Know Your Place. Bristol has one of the most comprehensive collections of historic maps dating back to the first accurate survey by Jean Rocque in 1742, but with earlier fifteenth, sixteenth and seventeenth century representations of the city. The city archives also contain hundreds of paintings and photographs of streets and buildings from familiar landmarks to everyday workplaces. With funding from English Heritage the aim of this project was to create a facility that allowed online access to these archives and enable the public to compare historic and modern mapping so that users could form an appreciation of the historic development of Bristol. The web resource allows members of the public to overlay one map on another to facilitate a direct comparison (Fig. 4.2).

Historic images are accessed by clicking points on the map identified by coloured icons. The majority of these locations were originally located during the development of the previous UAD and include accurate painted representations of Bristol's streets and houses from the early nineteenth century, an early twentieth-century photographic survey of the city docks and images of the bomb-damaged city in the Second World War.



Fig. 4.2 Know Your Place showing the 1880s OS plan (right) compared to Rocque's 1750 plan (left) with sites of archaeological investigations (cross symbols) and Listed Buildings (pink polygons) overlain

In addition to uploading many of the city's archives to various map layers, a public contribution facility is provided. This was to enable members of Bristol communities to add their own images and information about their neighbourhoods or the results of their own research providing the opportunity to add data that was previously unavailable. Items uploaded to the site using the public contribution function are added to a community layer following validation by the historic environment officer. This is not an onerous task and usually takes only a few minutes a day checking the location and submitted information against existing HER data and historic mapping. Data submitted using the public contribution form on the web resource are immediately added to a non-public part of the HER database. The validation process includes a check that there are relevant permissions in place for the use of any image. The Know Your Place home page provides guidance on copyright issues as well as what types of information are relevant for publication on the site. Once validated the data is copied across to the public facing information layer that appears on the website. Since going live with the site in March 2011 there have been over 1000 items added to the site by members of the public; photographs of existing features in people's neighbourhoods, family archive photographs or information from local history groups. Only a small handful of uploads has been rejected due to copyright infringement or inappropriate content.

The community contribution facility allows Know Your Place to crowdsource heritage information and is building a shared understanding of the city's heritage enriching our knowledge without compromising council resources. One of the best examples of this data enhancement occurred within the first few days of the site's launch; a local resident uploaded a colour photograph of five late eighteenth or early nineteenth-century lime kilns (Fig. 4.3). This surviving evidence of an industrial activity associated with quarrying the local limestone is not recorded on any maps or any previous images that we know of. The kilns are only visible from privately owned land so it is highly possible that without Know Your Place and its facility to source data from the general public, this valuable and unique insight would not have been made.

The historic maps and archive collections of images are grabbing the interest of Bristolians especially with the recently added historic film archives that have started to be uploaded. Evidence from the historic maps and layers of data on the web resource are used to inform developers' proposals and evidenced in supporting design and access or heritage statements in over 90% of major planning applications. Their availability online through a map interface provides relevant information for understanding a specific site without the need to visit physical archive collections. This means that some of the city's unique and fragile documents are requested less frequently from storage, assisting with their long-term preservation.

Know Your Place is increasingly being used in schools particularly through the Heritage Schools initiative coordinated by English Heritage. One primary school ran a Know Your Place lunchtime club where pupils were reportedly queuing down the corridor, eager to discover what their neighbourhood was like in the past. The same school is planning an after school club, opening up Know Your Place to parents and carers, increasing the likelihood of them taking a more active role in the



Fig. 4.3 Five limekilns at Coombe Dingle, Westbury-on-Trym image uploaded to Know Your Place in March 2011 by a local resident, Matthew Rogers

scheme and hopefully uploading their own resources. Know Your Place only requires copies, allowing people to retain their precious originals.

The site's user-friendly interface has encouraged daily use by planners, urban designers and conservation officers as well as by the Archaeological Officer, communities and schools. Overlaying historic maps and historic environment data such as heritage designations allows officers to undertake a rapid initial heritage assessment before approaching specialist officers (Fig. 4.2)

Crowdsourcing the Story of Place

'Crowdsourcing' reflects the current zeitgeist, the term having only entered the Oxford English Dictionary in 2013 (despite its own use of crowdsourcing techniques since the nineteenth century) the initial appearance of the coinage generally attributed to an article in *Wired* in 2006 (Oxford Dictionaries 2013). There are many other crowdsourcing tools being used in heritage; Facebook, Flickr and particularly History Pin, but interestingly where this appears to be happening the most is in cultural heritage organisations, museums, libraries where the power of the crowd is

helping to digitise and catalogue hard to access parts of their collections (see Ridge 2014).

This is an invaluable approach to heritage collections made possible through technology that is broadening public interaction with archives and contributing to research and understanding. It does raise ethical and data quality questions that need to be addressed through relevant research methodologies, and associated ethics policies (Dunn and Hedges 2014), but at the same time without crowdsourcing, present resources in the cultural sector would probably not allow for this level of data processing.

The application of new and emerging technologies is facilitating the crowdsourcing approach across many sectors; however, in the heritage sector it is primarily focussed on archives and curatorial processes. If the available technologies are not employed to link the understanding of the past to planning for the future, the danger is that though our heritage will eventually be preserved digitally, it will no longer form part of our daily lives.

Many people might think that this is an appropriate way forward, but digitising the past does not diminish the task of managing the resource. Just as paper archives require management, cataloguing, referencing and storing data formats requires just as much time and effort to allow for the effective storage and retrieval of information. There is often an expectation that digital archives are easier to manage or even maintain themselves, but the burgeoning of digital technologies and applications only serves to proliferate this information in this media, making issues around data collation and maintenance even more paramount.

To permit the removal of buildings and spaces and accept only a digital record in their place is a poor substitute and not a sustainable approach. These places contain many kilo joules of embodied energy. They usually consist of high-quality building materials and architecture that is often more difficult or not even possible to reproduce.

We should see ourselves as being the curators of a living museum. One of the aims of Know Your Place is to raise public awareness of this and to promote a responsible approach to planning for the future of the physical environment. This responsible approach has to be based on a shared understanding that should come from all relevant sources. Who understands a place better than the people who live there? The understanding therefore needs to be developed or co-produced in partnership with historians and local communities.

Know Your Place seeks to foster an appreciation of the value of data, to promote opportunities for people to share their knowledge and to encourage them to contribute to the HER where the information will become a material consideration in planning decisions. Most other crowdsourcing projects do not facilitate this feeding back of information to the planning process. Closing this link, completing the loop of information so that the past informs the decisions for the future requires resources that are unlikely to be available. As a result, information held on a site like History Pin is less likely to inform a planning decision process.

Towards a Shared Understanding

Failure to properly value information is a recurrent theme at all levels of heritage interest. In a recent example, a postgraduate student who casually referred to some aspect of her research on a unique eighteenth-century designed garden in Bristol would have positively affected a planning decision had this information been formally shared with the HER. Although this research was undertaken some time before a planning decision was reached on the site, the academic's information was not shared with the HER until after the decision to redevelop the site. With an appreciation of the value of the information a better outcome might have been achieved rather than the destruction of the archaeology without record during the subsequent construction works.

One good example where information on the HER led to excavation and the preservation of significant archaeological remains comes from Portwall Place (Fig. 4.4). This was the site of an early glass manufactory recorded on the HER. This data was used by the Archaeological Officer to argue for a programme of fieldwork to establish the state of preservation of the remains. When this demonstrated that the surviving evidence was highly significant, a series of negotiations with the project design team led to the preservation of the remains beneath a new office development. These negotiations involved the project architect, engineer, planning officer and urban designer with a positive outcome as a result of a detailed archaeological understanding of the site.

At the other end of the scale, the biggest barrier to building a shared understanding with the help of local communities is in the fact that most people don't believe that their memories or their personal archives, family photos, etc., have any value or that anyone would be interested in what they have to say. Time and again members of the community express surprise that someone from the heritage profession might be interested in what they have to say.

When attempting to establish an online crowdsourcing tool that aims to enable planning and heritage management to be a more democratic process, one of the biggest issues to be tackled is digital exclusion. The utopian vision that online, open source, freely available information creating a more inclusive world with communities making informed decisions about their future is yet to be realised. There are many barriers to achieving this dream ranging from user interface design to lack of hardware infrastructure. However, a key issue when trying to crowdsource information about all neighbourhoods is the likelihood of obtaining very rich data from middle-class members with good access to hardware and sparse data from those less wealthy, who do not necessarily have home computers and are reliant on the limited access to the internet via the variable provision from libraries and community centres. An uncritical view of the resulting data spread might result in the conclusion that it is exclusively the middle classes residing in the more historic neighbourhoods. We know this is not necessarily the case, but it highlights some deep rooted concerns about how and what society values in terms of heritage. It is also a reminder to consider the reliability of data and consequently the conclusions



Fig. 4.4 Archaeological excavation at Portwall Place exposing the surviving remains of an eighteenth-century glass manufactory to enable the foundations of a new office building to be designed to preserve this significant archaeology. *image courtesy* of Bristol City Council

we can safely draw from it. This can be borne out as in the example of Bristol where the majority of the listed buildings and conservation areas are in the more affluent north and west of the city, whilst the traditionally poorer south and east have little or no conservation areas and less dense concentrations of listed buildings.

This type of discrepancy is being addressed in the UK and has been addressed in Bristol. A recent study commissioned by English Heritage identified that there was a general lack of recognition of the value of tangible and intangible heritage pertaining to African-Caribbean communities, Asian communities, Disabled people, Faith groups (including Buddhist, Hindu, Muslim, Jain, Jewish, Sikh and Black

Christian groups), Lesbian, Gay, Bisexual and Transgender (LGBT) people, and Women (English Heritage 2012).

To this list could be added working class communities from particular neighbourhoods where academic study has not translated into an understanding or valuing of the associated physical environment. Until recently there was not a single element of any of the largest council estates (public or social housing areas built and maintained by the local authority) recorded on the Bristol HER; most of which were created in the interwar years as a response to the Housing Act 1919.

To tackle these issues it is not enough to create an online tool and expect people to begin submitting their information. There remain many barriers, digital exclusion being one, but also issues regarding ability to orientate with map-based sites like Know Your Place, where only a potentially small group arguably have the capability of locating features and annotating them on an online map (Dunn and Hedges 2014). These types of barriers may explain the fact that soon after the launch of Know Your Place, gaps in data coverage in terms of the community contributions began to emerge. An Arts and Humanities Connected Communities project in partnership with the University of Bristol began to address these data gaps by taking Know Your Place to the silent communities. A series of 'roadshow' events were held during 2012 and 2013 that aimed to provide opportunities for people to tell their stories to researchers, what it had been like to grow up and go to school in the neighbourhood, how the neighbourhood had changed. The events held at local venues like the community centre or library collected a huge amount of information through oral history collection and a facility to digitise personal archives. The result was a digital archive of images and audio that could be linked to locations across the local area adding the information to Know Your Place and thereby the HER. This information is the archaeological record of a community that is not usually captured spatially and rarely becomes a material planning consideration. It has the added benefit that these people may continue to contribute to the database now that the concept has been introduced and their data have been deemed of value by an independent party.

Sourcing the Crowd

To achieve results like these requires external funding to cover costs like staffing, venue hire and publicity. The staffing resource required is considerable to achieve a successful outcome. In addition to the preparation and publicity beforehand, sufficient numbers of staff are required at the venue to cover 'meet and greet' duties, scanning of materials and interviewing people. Just a dozen attendees can occupy several members of the project team for the duration of an event. After the event, processing the digital images and editing the audio to create a formal catalogued archive with spatial references necessitates further resource investment for the project team.

This type of crowdsourcing is not cheap or easy because it is undertaken with the intent to create an archive that is fit for future researchers, searchable spatially and can be used for planning purposes. Given the level of investment required, what do we gain from this type of approach that goes beyond a Facebook page covering reminiscences of a school's alumni or protests about the demolition of a local landmark? The Know Your Bristol events added 247 records to the HER over the course of seven one-day 'roadshow' events, many of them covering areas where there was previously no information. We can point to places on the map that might have previously been overlooked, but are of high significance to a community. One example of this is the Dings Rugby Club at Lockleaze, a post-war housing estate on the north east fringe of Bristol. When the estate was built there were originally no community facilities, no place of worship and no meeting hall. The rugby club house became the community centre, church and ran regular film nights during the 1950s. These are the sort of stories and community values that need to be captured and used in decision-making processes. Removing what seems like an innocuous building can tear a hole in the fabric of their heritage, undoing the seam that helped to bind the community together.

In addition to the data gathered through these activities the community perception of the value of this type of information has been raised. This can lead to an increased sense of civic pride, community cohesion and an understanding of how these community stories fit into a bigger picture of Bristol's story and how these stories can contribute in the future. In this way what is actually being crowdsourced is informed community advocates for the historic environment that will contribute to better care for heritage in the future.

Conclusion

The heritage, both tangible and intangible, that we are losing the fastest is the heritage of the recent past, the late twentieth to early twenty-first century. This is ironic given the huge technological advances, social networks and modern media that have developed in that period. Monuments like those first mapped by William Roy and the first Ordnance Survey are mostly well protected by an Act of Parliament and appearing on a national list. What needs to be appreciated is that we are living in the historic environment, that we are part of the archaeological resource and that the past should be informing the future. Our present will become the past, and a future will be lost if this present is not conserved.

To achieve this, research of all types, from local studies to academic dissertations, need to connect better with planning. The technologies at our disposal should be used to facilitate a process that connects understanding to planning, where the past informs decisions for the future and where information is not locked away behind physical, virtual or intellectual barriers.

Digital tools do not solve the problem in their own right. Data management including validation, systems management and systems development remains

important consideration. However, the benefits of a coordinated approach where our present digital systems become the thread stitching the past to the future will lead to better community relations, better decision-making and better places.

Archaeology and heritage need to be part of the conversation about place, but the whole approach is reliant on partnerships and collaborations. Know Your Place would not be the success that it is if it were not for the partnerships within the local authority, between archaeologists, urban designers and planners, between built environment professionals and technical developers, between archivists and the HER officer. The success is also built on partnerships with the local communities as well as collaborations with universities and Historic England (formerly English Heritage).

A question that Know Your Place posed from the outset, and a question that is common to the principles of Localism and local democracy, when talking about the story of place, whose story is it? Addressing this question requires a broad holistic conversation with the widest possible demographic. The planning department has its traditional perceptions of what comprises a quality place, but whose perspective is this? Is this borne out by people's experiences? Is it really representative of the entire community? A 'top-down' approach and the resistance to it is what in part led to the localism concept in the UK.

Know Your Place doesn't try to tell the story of place from a single perspective, but instead encourages its users to participate in a multivocal story. Know Your Place hopes to facilitate or at least contribute to the development of a shared understanding of place. The imperative 'know your place' instructing a particular demographic to recognise and accept their low social status is overridden by the alternative interpretation offered by Know Your Place. Mapmakers have always understood the political power of a map, supported by relevant policies Know Your Place provides the community with the opportunity to make their own geographic mark, giving that power to the people.

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Chapter 5

Archaeological Resource Management in Toronto: Planning, Preservation, and Interpretation

Ronald F. Williamson, David A. Robertson and Susan Hughes

Introduction

The legislative requirements for archaeology related to public and private development in Ontario are among the most comprehensive in North America. Decisions related to archaeological resources are made at the municipal level, where the role of development approval resides. Many of the municipalities experiencing the greatest development pressures, including the City of Toronto, seek to ensure that planning decisions are informed by detailed archaeological management plans. These plans consider the known and potential archaeological resource base and define the process by which sites should be identified, evaluated, and mitigated. In this paper, we will discuss the legislative background to the undertaking of archaeological planning in Ontario with a focus on the City of Toronto's Official Plan policies, archaeological management plan process, and efforts at community involvement and public outreach. Toronto recognizes explicitly the roles of descendant communities and other local interest groups in collaborative decision making in this process and the importance of public interpretation and commemoration of archaeological sites.

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Legislative Background

In Canada, there is no overarching federal legislation concerning archaeological resource management; federal regulations apply to crown lands only and each province has crafted its own approach to heritage conservation. Ontario, the largest province in Canada in terms of population, and for much of the post-World War II era arguably the economic engine of the country, boasts some of the most comprehensive legislation related to archaeological resource management and the land development process in North America. The legislative basis for this mandate was first enacted in the 1970s in response to the realization that development poses the most serious threat to the archaeological record. Between 1951 and 1991, for example, it has been estimated that over 8000 archaeological sites were destroyed within the Greater Toronto Area, the most heavily urbanized region in the province, as a direct result of development and land-use change (Coleman and Williamson 1994). The majority of this destruction took place between 1951 and 1971 and was not accompanied by any significant degree of archaeological mitigation.

Since the 1970s, however, and increasing in effectiveness since the mid-to-late 1980s, the *Ontario Planning Act* and the *Ontario Environmental Assessment Act* have required that archaeological resource assessments, as well as built heritage and cultural landscape analyses, be carried out in advance of most forms of land-disturbing activities, whether these are public initiatives, such as infrastructure projects, or private developments related to housing or industrial subdivisions. In the case of private development, this requirement applies to any land development project where a planning application is submitted and in the case of public sector environmental assessments, any project that involves land modification. The Renewable Energy Approval Regulation under the *Environmental Protection Act* also constitutes a relatively new tool in terms of incorporating archaeology in infrastructure projects. Natural resource extraction activities are also subject to archaeological requirements according to legislation such as the *Aggregate Resources Act* and the *Ontario Mining Act*. All archaeological assessments in Ontario are on a proponent pay basis; there is no government funding for proponents in meeting these responsibilities.

Direct control over the archaeological process is articulated through the *Ontario Heritage Act*, primarily through issuing archaeological licenses to practitioners, who carry out almost all of the archaeological work in Ontario. The Archaeology Unit within the Ontario Ministry of Tourism, Culture and Sport, the ministry responsible for implementing the *Ontario Heritage Act*, reviews all archaeological reports, regardless of triggering legislation, to ensure that they meet the requirements of the Act and, if so, enter the reports into the Ontario Public Register of Archaeology Reports. The Archaeology Unit also maintains the Ontario Archaeological Sites Database. In 2011, the Ontario Ministry of Tourism, Culture and Sport (2011a, b) released *Standards and Guidelines for Consultant Archaeologists* as well as a new technical bulletin entitled *Engaging Aboriginal Communities in Archaeology*. The *Standards and Guidelines*, which were designed

collaboratively by the Ministry and cultural resource management industry, describe technical expectations for archaeological assessments ranging from background reviews to full-scale salvage excavations. *Standards* set out the minimum requirements for fieldwork, analysis, and reporting to which the Ministry holds licensees accountable while the *Guidelines* represent practice undertaken as a matter of professional judgment on the part of the licensee. Together they provide an expression of expectations while allowing consultants to respond to special circumstances, all of which it was hoped would make the review process more transparent and efficient. While clearly advancing archaeological resource management in the province, the overly prescriptive character of the standards has been problematic in application, especially in urban contexts for which they were not designed.

The technical bulletin addresses the interests of descendant communities in the identification, evaluation, and conservation of archaeological sites and material culture. It encourages archaeologists to engage communities early in the life of a project, preferably during the planning phase. While engagement is recommended during all stages of an archaeological assessment on lands with potential for Aboriginal sites, it is required at the detailed site test excavation phase, when evaluating the cultural heritage value or interest of an archaeological site that is known or appears to have sacred or spiritual importance, is associated with traditional land uses or geographical features of cultural heritage interest, or is the subject of oral histories. It is also required when formulating and implementing strategies for mitigating the impacts on Aboriginal archaeological sites through protection and/or salvage excavation. This engagement process was not intended to replace any Crown responsibility to consult with First Nations concerning their asserted or established rights and interests on lands slated for public or private development but rather to address the long-standing professional commitment on the part of Canadian archaeologists to consult with descendant communities about their work (Nicholson et al. 1996).

The *Environmental Assessment Act* applies to public sector infrastructure projects and designated private sector projects. Private sector projects that are designated by the province as subject to the Act are usually major projects such as landfills. In cases of environmental assessments, documents must be prepared that include examinations of how projects might impact cultural heritage features. The heritage sections of these reports contain detailed inventories and evaluations of heritage resources, comparison of the impacts posed by design alternatives, and discussions of mitigation options. It is subject to formal government review and public scrutiny and, potentially, to a tribunal hearing. There are also Municipal Engineers Association (MEA) class environmental assessments for municipal projects that require similar considerations, but entail a simplified review and approval process. Toronto carries out approximately 40 class environmental assessment projects annually. Various provincial ministries have also established protocols related to activities subject to the environmental assessment process, in order to ensure that heritage concerns in their respective jurisdictions are addressed. The Ontario Ministry of Transportation (2006), for example, ensures that

archaeological surveys are undertaken in advance of all new road construction in order to preclude destruction or damage to archaeological sites.

In planning contexts (most private land development), the Ontario legislative approach to archaeological resource conservation has evolved to one of shared responsibilities with local governments. In 1990, the province suggested a re-allocation of roles, in which the provincial government would maintain an advisory function and municipal governments would assume the day-to-day responsibility for monitoring those archaeological features in their jurisdictions. The rationale for this approach was that planning and land-use control are predominantly local municipal government responsibilities and that the impact of municipal land-use decisions on archaeological resources is significant, especially since locally approved developments constitute the majority of land-disturbing activities in the Province. With adequate screening at the municipal level, it was thought the provincial government would be able to ensure protection for valued archaeological resources.

Underlying this approach is that in most cases, the province is not the approval authority for the developments that will have effects on archaeological resources. This power lies with local governments, be they large upper- or lower-tier municipalities. It is the municipal government that reviews the development application, makes the determination as to the need for archaeological assessment, and ultimately allows the development to go ahead after the assessment and any mitigations that may be required have been completed to the satisfaction of the provincial archaeological regulators, although some municipalities with trained heritage staff do not wait for provincial sign-off on the resulting license reports.

The authority for municipalities to manage this process flows through the *Ontario Planning Act* and the *Provincial Policy Statement*. A key issue is that the custodians of heritage resources are often private property owners. It is neither possible nor desirable that all resources be brought into public ownership. Conservation management, therefore, is undertaken by a variety of actors, and it is necessary, through legislation and education, to bring all of these actors together in pursuit of a common goal. In many instances, these are traditional planning mechanisms that are used to ensure that cultural heritage resources are conserved within the process of change.

The Province of Ontario is clear that it expects cultural heritage features will be conserved in the review and approvals process as outlined in its recently updated vision for land-use planning (*Provincial Policy Statement*, Ontario Ministry of Municipal Affairs and Housing 2014):

The Province's natural heritage resources, water resources, including the Great Lakes, agricultural resources, mineral resources, and cultural heritage and archaeological resources provide important environmental, economic and social benefits. The wise use and management of these resources over the long term is a key provincial interest... (p. 4).

This vision and policy statement now guides all provincial and local planning authorities in their decisions. With respect to archaeological resources, the *Provincial Policy Statement* states that:

Development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved... [Conservation] means the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures their cultural heritage value or interest is retained under the Ontario Heritage Act. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment. Mitigative measures and/or alternative development approaches can be included in these plans and assessments (p. 29, 40).

For this policy statement, significant archaeological resources are defined as those “that have been determined to have cultural heritage value or interest for the important contribution they make to our understanding of the history of a place, an event, or a people.” The identification and evaluation of such resources are based on archaeological fieldwork.

Thus, all decisions made during the land development process, regardless of the identity of the development proponent or the relevant approval agency, must address potential heritage resource impacts. The statements in the Act are sufficient for a municipality to require that an archaeological assessment be completed on public or private lands prior to the approval of a planning application. Archaeological assessments must be completed and submitted *with an application* for approval of a plan of subdivision. The applicant shall identify for the approval authority whether the subject land contains any areas of archaeological potential or a known site and, if so, provide an archaeological assessment prepared by a licensed archaeologist as well as a conservation plan for any archaeological resources identified in the assessment. By enacting these requirements, development proponents will have sufficient time to plan for archaeological site protection, rather than salvage excavation, by considering alternative site plan designs. A basic requirement for assessments in advance of private land development has been in place for over three decades now in Ontario and the private land development industry now accepts this requirement in the same way as they do all other legislative conditions of approval; improvements to the *Provincial Policy Statement* and the timing of these assessments have eliminated some of the strains in the process as has its uniform application in all planning jurisdictions across the province.

Cultural heritage landscapes are also broadly recognized in the *Provincial Policy Statement*, establishing an alternative path for conserving certain types of archaeological sites. Cultural heritage landscapes are classified as “a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Aboriginal community. The area may involve features such as structures, spaces, archaeological sites, or natural elements that are valued together for their interrelationship, meaning, or association.” Examples may include, but are not limited to, “heritage conservation districts designated under the *Ontario Heritage Act*, villages, parks, gardens, battlefields, main streets and neighborhoods, cemeteries, trailways, viewsheds, natural areas and industrial complexes of heritage significance, and areas recognized by federal or international designation authorities (e.g., a National

Historic Site or District designation, or a UNESCO World Heritage Site)” (*Provincial Policy Statement*, Ontario Ministry of Municipal Affairs and Housing 2014, p. 40).

While it had always been possible to protect cultural heritage landscapes through designation under Part IV or Part V of the *Ontario Heritage Act*, generally Part IV designations have been used to protect individual built properties whereas Part V designations have been used to protect heritage conservation districts—areas which may consist of several properties which together retain cultural heritage significance. The *Provincial Policy Statement* now provides a wider and renewed focus on establishing identification frameworks and policies for fully protecting a wide range of types of cultural heritage landscapes including those that encompass archaeological sites.

Municipalities also have the opportunity for establishing their own tailor-made heritage conservation policies within their Official Plans. The *Ontario Planning Act* and the *Provincial Policy Statement* give municipalities the tools to do so while a provincial growth plan called *Places to Grow* (Ontario Ministry of Municipal Affairs and Housing 2005) requires municipalities to implement those policies within a framework centered on intensifying already built-up areas.

Toronto’s Heritage Policies

Toronto established new policies for heritage resources in 2013 as a component of the statutory periodic review of their Official Plan. While consistent with the most recent changes to provincial planning legislation, the new policies improve heritage resource conservation practices throughout the City in ways that recognize its cultural diversity. The new policies also concede that preservation can only be achieved through coordinated ventures between the private sector, the City, and the general public.

An extensive consultation process was thus undertaken in 2012 that included the establishment of an inclusive Official Plan Review Heritage Advisory Committee that helped plan and implement meetings and interviews with members of City Council, the City Heritage Preservation Board, representatives of the Preservation Panels of the various wards in the City, resident and ratepayer groups, the development community, provincial heritage officials, representatives of faith groups, and heritage consultants. Written submissions were received from many of these people as well as the ministries of Municipal Affairs and Housing and Culture, Tourism, and Sport. Comment was also requested from First Nations and Métis groups and a separate meeting was held with representatives from several First Nations within whose traditional territory Toronto is situated. This was followed up with a well-publicized open house to discuss the proposed new heritage policies.

The new proposed Official Plan policies reflect the views that emerged from public consultations as well as the new more rigorous provincial policy framework for heritage preservation, and best municipal practices in heritage resource

conservation. An official plan amendment with new heritage policies was subsequently passed by City Council in the spring of 2014. The new policies reflect the new powers and responsibilities available to Council to conserve heritage properties and archaeological resources. They also articulate a new vision of heritage conservation in the context of well-designed development that *protects* important heritage attributes on heritage properties and raises heritage awareness throughout the neighborhoods of the City.

The archaeological policies, for example, while laying out the process for archaeological assessment in areas with archaeological potential as defined by the City's archaeological management plan (see next section), also encourage protection as the preferred option to mitigate the impacts of proposed development on any archaeological feature, acknowledging that this is most feasible in greenfield contexts and those where the discovery is on publically owned land. In keeping with provincial regulations laid out in the Ministry of Tourism, Culture and Sport bulletin *Engaging Aboriginal Communities in Archaeology*, in the case of Aboriginal sites, Toronto's policies require the landowner to give, prior to development, the archaeological reports to the First Nations or Métis group(s) with the closest cultural affiliation and in whose traditional territory the archaeological resources were found. The landowner is further required to consult with those First Nations or Métis groups to discuss conservation of the sites and interpretative approaches. The new policies also state the City will henceforth take possession of artifact assemblages recovered from all archaeological sites within the City, as well as the accompanying records. In the case of Aboriginal sites, the ultimate disposition of assemblages will be subject to the development of an Aboriginal consultation protocol.

In regard to municipally initiated public works projects, the *Ontario Planning Act* states that where there is an Official Plan in effect, no public work shall be undertaken that does not conform to the Plan. In summary, a municipality must ensure that archaeological concerns are addressed in connection with any planning application and that they are able to regulate the use of land, through the enactment of zoning by-law(s), which contain significant archaeological resources. The City of Toronto has been a leader in not only following these regulations but in articulating an all-encompassing vision for archaeological resource conservation. The basis for that vision has been the design and implementation of an archaeological management plan for the city.

Archaeological Management Planning in Ontario: The Toronto Process

Not surprisingly, the ability, or willingness, of municipal governments to embrace these responsibilities has not been universal across the province. Smaller municipalities do not necessarily have the resources or expertise to evaluate the potential

implications of a development in terms of archaeology. Many have tended to rely on generic information developed by the province to assist municipal planners in evaluating archaeological potential and there has been a degree of inconsistency, within and between municipalities, in terms of placing appropriate conditions on the applications they receive. Sometimes, planners in smaller, more rural, municipalities are also afraid that the application of rigorous demands on proponents will discourage growth in their communities. It is the responsibility of the Ontario Ministry of Municipal Affairs and Housing to ensure that the policies of the *Provincial Policy Statement* are applied uniformly across the province.

Also, the recognition that proposed disturbances to archaeological sites and their associated cemeteries is often at the center of controversies between modern development and First Nations interests, led Provincial Justice Linden (2007, p. 369) to recommend in his *Report of the Ipperwash Inquiry*,¹ that the provincial government should encourage municipalities to develop and use archaeological management plans across the province.

One of the major problems in planning for archaeological site conservation is that we do not know where all the sites are located. Comprehensive archaeological surveys of entire municipal jurisdictions to complete inventories are clearly not feasible. As an alternative, therefore, planners and managers must depend on predictive site location models. The main purpose of an archaeological management plan is to design predictive models specific to a particular jurisdiction.

Fortunately, many of the municipalities where the pace of development has been greatest have commissioned detailed archaeological management plans or archaeological potential studies to provide themselves with a more accurate means of determining archaeological potential and the need for the assessment of specific properties or land areas; all but three of these studies were undertaken by archaeological consultants while municipal staff with archaeological expertise conducted the others. To date, 22 such municipal studies have been completed (three are local municipalities within York Region whose previous studies were superseded by York Region's plan), mostly in southern Ontario, encompassing a total area of some 20,000 km² (Fig. 5.1). For the most part, each of these municipal study areas tends to subsume a vast range of natural, rural agricultural, and urban landscapes. And naturally, the scale of research and analysis that goes into the development of these models and management plans varies according to the size and character of the

¹The Ipperwash Crisis occurred in 1995 over a long-standing land claim to Ipperwash Provincial Park, Ontario, filed by the Chippewas of Kettle and Stony Point First Nation with the federal government. The land had been expropriated from them during World War II by the federal government to establish a military training facility. The government had promised to return the land at the cessation of international hostilities. Failure to do so along with denied access to a former community burial ground led to occupation of the park and the death of one of the protesters during a violent confrontation with the Ontario Provincial Police. The land was returned to the nation in 2007. The inquiry into the death of the protester, Mr. Dudley George, also involved deliberations by Justice Linden on the formulation of policy that would help avoid similar situations in the future.

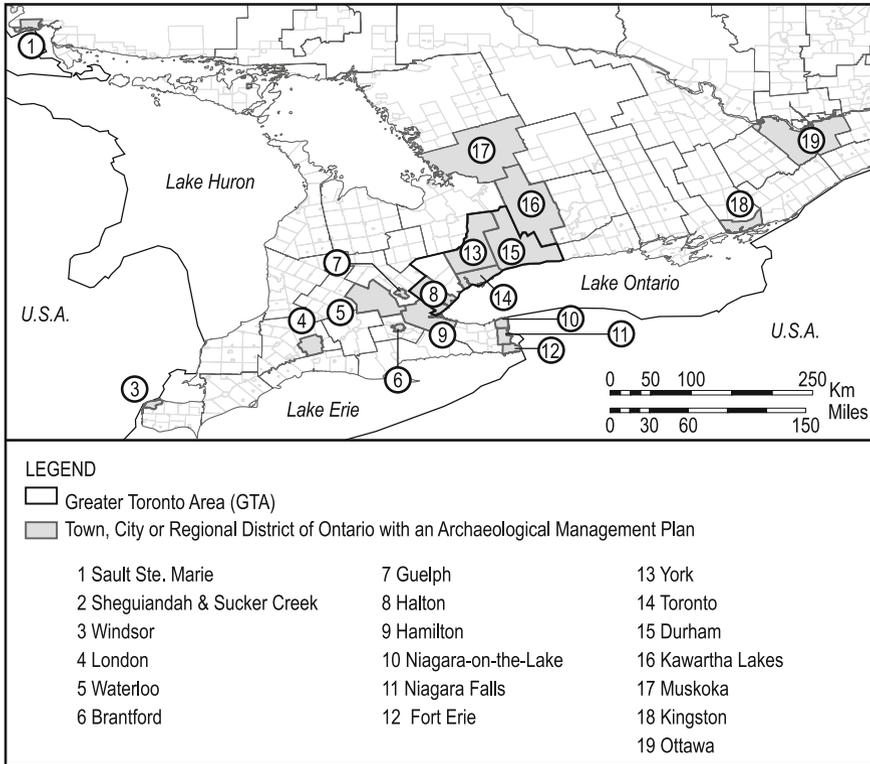


Fig. 5.1 Municipalities in Ontario that have undertaken detailed archaeological management plans (drawing by ASI)

specific study area, the available funding, and the perceived immediate needs of the municipality, but in general they all proceed using a similar approach and underlying logic. The role and input of the Ministry of Tourism, Culture and Sport has varied with each plan; they have not regularly reviewed and approved these plans.

Precontact Aboriginal site modeling is developed through a combination of deductive and inductive approaches, using known archaeological site locations and paleoenvironmental criteria such as hydrology, soil texture and drainage, slope, vegetation patterns, and wildlife ecology. The City of Toronto modeling process involved a primarily deductive assessment of the paleoenvironmental constraints that may have affected precontact land use in the region as well as an inductive analysis of the locations of the 135 known sites in the City. An additional 186 sites, situated in a four-kilometer zone immediately surrounding the City, were also employed. This assessment began with a review of the most fundamental determinants of the landscape, namely bedrock and Quaternary geology, and proceeded through considerations of hydrology—using topographical and historical clues to map the former paths of streams that no longer exist, having been subsumed within

the urban landscape—soils, climate, flora, and fauna. Modeling criteria were established through the consideration of both paleoenvironmental and cultural data, and zones of archaeological potential were digitally mapped on a GIS platform (ASI 2015a).

Post-contact Euro-Canadian potential zones are developed through primary and secondary source research, often beginning with the identification of historical themes related to the growth and development of the municipalities or the settlement centers within their jurisdictions and the compilation of inventories of features identified on historical maps. Urban growth is often conceived as ever-widening circles expanding outward over time from a primary core. Although to some extent the City of Toronto can trace its origins to the ten-block radius of the Old Town of York, the history of the City and how it formed over time is a far more complicated process. The contemporary City, made up of the original historic townships of Etobicoke, York, and Scarborough, is actually the product of coalescent settlement centers, the evolving patterns of industrial and agricultural development and the transportation networks that emerged to support them. The needs of the growing population, and the demands of political economy, drove these patterns, while practical necessity and historical memory determined settlement areas (ASI 2015b).

In most archaeological management studies, including Toronto, areas of large-scale development that have clearly resulted in deep subsurface disturbances (e.g., foundation and basement excavation) or alteration of the original topography (e.g., identifiable cutting/filling/grading events) that may be expected to have removed any archaeological deposits that were present are generally excluded from the archaeological potential zones. The only exceptions to this tend to be the historic cores of settlement centers, which may retain significant archaeological deposits within and among the existing structures, but which generally cannot be identified in detail within the context of a municipal potential study or management plan due to the level of effort that would be required. Within these settlement centers, far more detailed assessments of individual properties, involving the development of comprehensive land-use histories and compilation of large-scale nineteenth-and-twentieth-century map sources, are completed at the development application stage. In essence, the historic archaeological potential zonation overrides integrity in settlement cores. A consequence of such caution is that many properties may be unnecessarily or inappropriately flagged as having archaeological potential.

In the case of the City of Toronto, however, efforts are being made to refine this process through a number of means. A second level of review was undertaken by ASI for the over 1100 city-owned parks and public “green spaces” that fall within the general potential zone to refine the integrity review, as in most plans these types of property are, by default, assumed to have integrity. This work involved consulting available historical mapping and earlier aerial photography, to permit a more accurate diachronic understanding of the land-use histories of these parcels, as well as use of Google Earth’s Street View tool to examine existing conditions in “three dimensions” (ASI 2015c). This process resulted in removal of approximately 50% of these public properties from the general potential zone. Given that the parks and public properties represent a varied portfolio of property types and functions, this

review also led to a categorization of properties according to the types of archaeological resources that may be expected to have survived within them, which was based on their general landscape and development histories. This work has led to the identification of a series of protocols, specific to each park, as to what types of maintenance or infrastructure improvement activities should be preceded by an archaeological assessment.

One assumption made at the outset was that playing fields, such as soccer pitches and baseball diamonds, even though they have likely been formed through some degree of landscaping and leveling, must still be considered to exhibit potential. This came into stark relief with the discovery of an ancestral Wendat village and ossuary under a soccer pitch in north Toronto (Fig. 5.2). While the almost one hectare village itself has only been subject to test excavation, the associated ossuary, located on the perimeter of the site, was subject to detailed excavation (Williamson and Pfeiffer 2003). It contained the commingled remains of eighty-seven people representing the earliest ancestral Wendat community ossuary yet excavated; the remains have since been reinterred elsewhere. The mapping and removal of each bone in the ossuary afforded a rare opportunity to document the structure of an early Wendat ossuary and to evaluate the health and diet of a population at that time.

A similar process is being undertaken by consultants retained by the City within two Heritage Conservation Districts within the historical core of the City. Approximately 700 individual properties are being evaluated through overlays of historical maps and aerial photographs to refine the potential determinations and to identify, on a property-by-property basis, the types of maintenance, servicing, or development activities that are of concern in terms of any impacts to potential archaeological resources.

On the basis of such general and specific mapping exercises, 50–70% of the total landmass of large jurisdictions and 40–50% of smaller municipalities are typically found to exhibit potential for the presence of hitherto undocumented Aboriginal and Euro-Canadian archaeological sites. In the case of Toronto, only 28% of the City has archaeological potential because there has been so much late twentieth-century urban core redevelopment (Fig. 5.3). For purposes of comparison, the application of the Province's generic criteria, which have been circulated to most municipalities in southern Ontario for the purposes of applying archaeological assessment conditions in the approvals processes, will capture about 85–95% of any given jurisdiction.

These modeling exercises are the first approximations of archaeological site distributions, and they are intended to provide to land-use planners and heritage resource managers a theoretically supported estimate of the scope of a resource for which there is generally only limited substantive data available. Given the hypothetical nature of such models, however, users must be aware of their limitations in order to employ them appropriately.

It is also anticipated that the locations of certain site classes, sacred ones, for example, will not necessarily be captured by modeling exercises of this nature. Residual sites of this kind, and sites in localized zones of potential that could not be

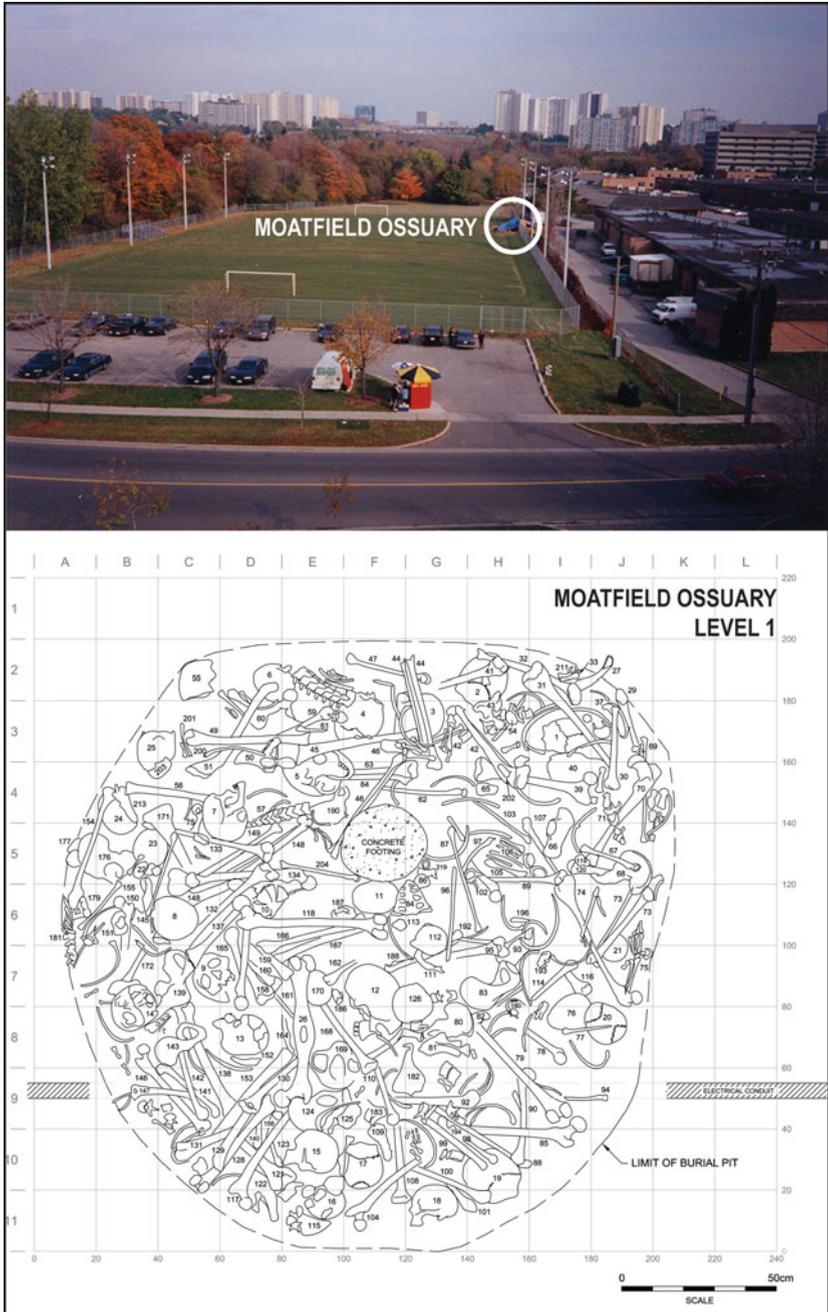


Fig. 5.2 Moatfield Ossuary, an ancestral Wendat village and mass burial feature found to survive in a previously developed recreational complex (photo courtesy of ASI)



Fig. 5.3 Areas of archaeological potential within part of the historical core of the City of Toronto as identified by the modeling exercise undertaken for the archaeological management plan (drawing by ASI)

resolved at the mapping scales utilized by the studies, can be expected to occur. These are reasons why the implementation sections for such studies typically recommend that, where any part of a development application falls into a zone of archaeological potential, the entire application should be subject to assessment. This provides the opportunity for examining lands outside of the archaeological potential zone identified in the model, sometimes representing the majority of development lands, thereby improving the site sample and avoiding the self-fulfilling prophesy of only finding sites where one thinks they should be found. In the case of Toronto, city planners make the decision on whether to require archaeological assessment using the archaeological potential mapping in this manner. To ensure the viability of the models, it is always recommended that they be subject to comprehensive review on a five-year basis. Such reviews consider any changes in provincial criteria for site significance, an analysis of the distribution of sites discovered since the last review, changes required to the archaeological potential modeling, and all associated planning procedures and protocols. At least seven of the municipalities have had regular updates to their plans.

These potential models and management plans are used by the municipalities to identify those land developments that have the potential to impact archaeological sites and should therefore be subject to archaeological assessment in advance of land-disturbing activities. In Toronto, this procedure is applied to all large-scale land-use alterations in the form of Official Plan Amendments, Zoning By-law Amendments, and Draft Plans of Subdivision. Site Plan Control applications which may involve both residential properties and large parcels of undisturbed land (recreational, industrial, or commercial projects, such as golf courses, industrial parks, and shopping malls) are also reviewed for archaeological potential like any plan of subdivision. The archaeological resource assessment reports and any site-specific mitigation reports arising from this work must be submitted for review with the proposed land development applications to the City's Heritage Preservation Services Unit (Planning Division) as well as the Ontario Ministry of Tourism, Culture, and Sport. This minimizes development delays and provides for opportunities to ensure that any heritage concerns are identified and possibly resolved well in advance of final registration of the development. Plans to preserve or salvage excavate are typically time-consuming to develop. It is, therefore, to the advantage of the proponents to identify, schedule, and budget for any mitigation measures at the earliest opportunity.

In the cases of some municipalities that are particularly rigorous in their application of the model, like Toronto, these archaeological procedures are also applied to small-scale consent and minor variance applications as well as municipal development and/or infrastructure projects that involve construction of a building or structure. In addition, other activities such as topsoil removal, site grading, placing of fill, and new drainage works are all subject to the same procedures. Also, in recognition of the demonstrated or potential sensitivity of some complex archaeological sites, a number of municipalities have defined them and their surroundings as Archaeologically Sensitive Areas or ASAs. Within such an ASA, even small-scale activities, such as private swimming pool construction or house additions, and small-scale municipal activities, such as parks and recreation facility upgrades that will result in subsurface disturbance to previously undisturbed or potentially undisturbed lands, are recommended for an archaeological assessment. They are only recommended as it is not possible within the existing legislative framework to require such assessments in those contexts. Landowners and proponents are nevertheless reminded that, under the *Ontario Heritage Act*, it is unlawful to knowingly disturb an archaeological site. While the City has not maintained compliance statistics in this regard, anecdotal evidence suggests the majority of public sector proponents do comply while private landowners are less willing unless neighbors have encountered archaeological features such as burials. This has occurred twice within one of the City's seventeenth-century sites; compliance by neighboring private landowners has been excellent.

The process of approvals-driven archaeology at the core of these management plans and potential studies, even in jurisdictions where these studies are absent, but the general provincial requirements are still met, has resulted in a vast increase in

the number of archaeological sites discovered yearly. Between 2005 and 2010, for example, the Ontario Ministry of Tourism, Culture and Sport has reviewed some 10,000 archaeological projects across the province resulted in the recording of over 4000 new sites by cultural resource management archaeologists (Williamson 2010, p. 10). City of Toronto planners review approximately 300 development applications under the Planning Act per year, including applications to the Committee of Adjustment, for impacts to potential archaeological resources. This does not include numerous reviews of inter-divisional city activities such as parks projects.

Community Involvement and Public Outreach

An appreciable number of newly documented sites represent types not previously subject to much consideration by the wider archaeological discipline, at least in Ontario, and the salvage excavations carried out on an annual basis have dramatically altered our understanding of Ontario's past. In some cases, large complex sites have been found in phased developments where some phases encompassed areas of less than ten acres. The late-fourteenth-century to early-fifteenth-century Alexandra site, for example, was located in the City of Toronto adjacent to a minor tributary of West Highland Creek and consisted of a five-acre unpalisaded village with seventeen long house structures of which fifteen represented permanent or year-round dwellings (ASI 2008). The site's location adjacent to a school and community center provided an ideal opportunity to commemorate the former presence of the village with plaques erected by Heritage Toronto, which were unveiled in 2008 by representatives of the Huron-Wendat from Wendake, Quebec.

A problem that has emerged as a direct result of this massive increase in archaeological excavation, and is not being addressed by either the province or municipalities, is the need for the systematic curation of the millions of artifacts that are being recovered. Existing municipal museums are generally unwilling or unable to house archaeological collections due to funding and capacity constraints. New curation and research facilities, funded through federal and provincial development grants, have been established at Western University in London, Ontario and McMaster University in Hamilton, Ontario, to attempt to fill this gap. Their success at attracting the participation of the CRM industry and financial support from that quarter remains to be seen. Such support has not been forthcoming since to remain sustainable, these facilities must charge several hundred dollars for each box transferred, which is not affordable by consultants for legacy collections. There are two initiatives that should be undertaken by the Ontario Ministry of Tourism, Culture and Sport to address these problems. The first is to mandate, after a certain point in time, transfer of all new assemblages to these facilities. This would be a further requirement of provincial licensing and would persuade all consultants to include the box transfer fees in their cost proposals to proponents. The second necessary provincial initiative is to provide several million dollars in financing to

help with the transfer of all legacy collections to these facilities from both public and private holdings. At the very least, Toronto has assumed responsibility in their Official Plan heritage policies for curation of those assemblages derived from within their jurisdiction although they have not yet identified where that will occur.

Another downside of the situation is that the objective of conserving archaeological resources through means other than excavation, analysis, and report preparation has been rather less well realized until recently. While the archaeologist's and the Province's default preferred recommendation for a significant site is that it be preserved within the context of the proposed development project, this has seldom been achieved because of the absence of planning policy needed for their protection and the lack of incentives such as tax relief for proponents to follow this course of action. There is room for some optimism though. This is due, in large part, to the increasing participation of First Nations in the design, implementation, and review of municipal archaeological management planning studies and the recent insertion of policies in municipal Official Plans requiring protection of certain significant sites. As these policies were negotiated with the representatives of the development industry at the table, they are not opposed largely due to the fact that the zones of protected archaeological sites would be far smaller in extent than that already protected by them for natural heritage reasons.

While it has not always been the case, management plans are now undertaken in the context of comprehensive Aboriginal consultation, providing the relevant Aboriginal groups the opportunity to have a decisive role in directing the conservation of their cultural heritage. In addition to Toronto, the plan recently completed for the Regional Municipality of York, situated immediately north of Toronto (see Fig. 5.1), for instance, involved consultation with 14 First Nation communities and organizations in establishing preferred mitigative options for Aboriginal sites of various types. These options include a stronger commitment to protecting a range of sites, where possible and appropriate, including undisturbed sites of any kind, burial sites of any kind and Late Woodland villages, among others (York Region 2014). Similar processes of First Nation consultation in relation to development protocols elsewhere in southern Ontario have resulted in protection of Late Woodland villages as well and are part of the broader process in which archaeologists, municipalities, and the Province have become aware of their need to engage with these descendant communities. This engagement process holds out the promise for the increased direct participation of First Nations in managing the archaeological remains left by their ancestors, and in establishing the means by which these remains can be used for the long-term cultural and educational benefit of their communities. Complex urban centers like Toronto have also had to consult with their urban Aboriginal citizens; Toronto has the largest urban population of Aboriginals of any Canadian city numbering 25,675 (11% of Ontario's Aboriginal population) (Environics Institute 2010).

In a similar vein, it is an axiom of cultural resource management that archaeology conducted in advance of development is in the public interest as it preserves knowledge of the past that would otherwise be lost and provides the opportunity to disseminate the results of this work to the public. Discussion of the issues that stand

between making this assertion and making it a reality is all too familiar. But it is worth noting that the City of Toronto, in its archaeological management role, has embraced the concept of public interpretation of archaeological excavations, not only in policies but in implementation of those policies. The city routinely requires development proponents to fund and maintain permanent commemorative and interpretive displays related to the history and archaeology of their properties. The initiatives that have been completed to date have all been paid for by the proponents and typically included didactic panels and signage or artifact displays in public realm spaces. The excavation of the Bishop's Block site (Fig. 5.4) in the core of the City, for example, involved the exposure of the foundations and backyard features of four townhouses, three of which were constructed in 1832, and the other in 1860 (ASI 2012). By the end of the excavations, almost 70,000 artifacts had been uncovered, which together with structural remains and the documentary record demonstrate a changing landscape from a semirural, upper-middle-class range of single-family homes to a fully urban, working-class enclave of boarding houses and commercial businesses by the early twentieth century. While the excavation was considered an active construction site and therefore subject to the Ontario Occupational Health and Safety Act, special tours of the site were arranged for university school classes and interested personnel from the Ontario Ministry of Tourism, Culture and Sport and Heritage Preservation Services, City Planning



Fig. 5.4 Salvage excavation of the mid-nineteenth-century townhouses making up the Bishop's Block site (photo courtesy of ASI)

Division, Urban Design, Toronto, although all visitors were required to wear personal safety equipment. The story of the block and its archaeological investigations are now revealed in an installation near the entrance to the new hotel built on the property (Fig. 5.5), as required by the City. The display encompasses large glass-fronted panels on portions of the north and east walls of the earliest townhouse, which was retained and repurposed by the proponent at the direction of the City. In other cases, interpretation has taken more abstract artistic or landscape approaches, such as paving the locations and outlines of former structures or wall treatments evoking stratigraphy and artifacts.

The City is also currently working with a development proponent to preserve, in situ, the partial remains of the foundations of an 1841 military barracks building within the entrance walkway of a new hotel (Fig. 5.6). In another case, the city has negotiated a land transfer with a private developer to secure the archaeological remains of Upper Canada's 1797–1824 Parliament buildings (Dieterman and Williamson 2001). The outcomes of this acquisition, in terms of future public interpretation and programming, remain to be seen as there are substantial issues of environmental contamination and future site uses to be resolved. It is, nevertheless, a project that has received the general support of a broad range of public agencies including the Citizens for Old Town, St. Lawrence Neighbourhood Association, Heritage Toronto, Ontario Heritage Trust, and Ontario Ministry of Tourism, Culture and Sport all being coordinated by the office of Councilor Pam McConnell, Ward 28, Toronto Center-Rosedale, under the rubric of the First Parliament Working



Fig. 5.5 Part of the interpretive installations near the entrance to a luxury hotel built on the Bishop's Block site (photo courtesy of ASI)



Fig. 5.6 Excavation of the remains of the East Enlisted Men's Barracks at the "New Fort," built in 1841 and to be incorporated within the entrance walkway of a hotel currently under construction (photo courtesy of ASI)

Group. These public initiatives underscore another aspect of the artifact curation issue. While Toronto is pursuing individual interpretation projects, the City does not have a museum devoted to its own history, archaeological or otherwise, despite many years of discussion and proposals of various sorts. Although the reports generated through the archaeological assessment and excavation process are available through the Ontario Ministry of Tourism, Culture and Sport's Public Registry, the artifacts recovered from the many excavations that have taken place, along with the accompanying field and analytical records, remain in the hands of the private archaeological industry. Public interpretation of Toronto's past takes place only as opportunities, based entirely on specific development projects, arise. While addressing the City's need to present the results of the archaeological work it requires by proponents to its own citizens, the process inhibits the creation of a unified program of presenting the archaeological history of the City to the public.

Conclusion

The Province of Ontario is characterized by an admirably progressive planning and environmental assessment legislation related to archaeology, one that not only encourages, but requires, the active participation of the municipalities in managing

these resources. The most proactive municipal governments, like Toronto, have seen the need to develop archaeological management plans tailored to the archaeological and environmental records of their jurisdictions to ensure that development review for archaeological concerns is as effective as possible. A few municipalities, like Toronto, have retained individuals with broad heritage and planning experience to help coordinate these processes. We are also seeing these plans evolve in response to wider issues, beyond those of mere site identification and mitigation through excavation, to embrace larger issues of descendant community participation and the encouragement of greater awareness on the part of their citizens of the archaeological records of the places where they live. There is still much to be done, but these recently emerging trends can only reinforce the protection and wise management of the archaeological resource base.

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Chapter 6

Under the Old Stones of Kingston, Ontario: The City of Kingston Archaeological Master Planning Process (1987–2011)

Marcus R. Létourneau

Introduction

While the City of Kingston (Ontario, Canada) is known in Canada for its architectural heritage, it also has significant archaeological resources that require conscientious management. In addition to over 8000 years of FNMI¹ archaeology, Kingston is one of the oldest European settlements in Canada, dating to the 1673 establishment of Fort Frontenac. Within the Province of Ontario (Canada), archaeology is a matter of provincial interest. However, the approval agents for most planning works are local municipalities. In response to provincial requirements, the Corporation of the City of Kingston (Ontario), drawing upon past archaeological initiatives, embarked on a multiyear archaeological planning project starting in 2005 that was designed to integrate archaeology into not only the land-use and heritage conservation approval processes, but also broader municipal operations. The project resulted in the development of new policies, bylaws, and an Archaeological Master Plan (completed 2010); new municipal processes; and a draft Urgent Archaeological Protocol. However, there were also a number of challenges to the project that illustrate issues related to integrating archaeology into municipal policies and processes. Still, the process served as a catalyst for new archaeological discoveries important to the Kingston community and to the province.

¹FNMI (First Nations, Métis, and Inuit) has been used in this work as a more inclusive term to identify Canada's aboriginal community including formally recognized First Nations communities, the Inuit, the Métis, and individuals not formally affiliated with a particular community.

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Municipal Planning and Archaeology

The local land-use planning process is a critical juncture for the identification and protection of archaeological resources. Planners and archaeologists have long recognized the interrelationship between archaeology and the land-use planning process (Castillo and Menéndez 2014; Keers et al. 2011; The Scottish Government 2011; Seip 2006; Güçer 2004; ‘Archaeology’ 2000; Ross 1996; Zukowsky 1983). Scholars such as Lipe (2012) have identified the need for archaeologists to provide insight into the land-use planning process on the potential impact of surface disturbance on archaeological resources, while others, such as Zukowsky (1983) and Dulaunany (1987), have identified planners as key agents with specialized knowledge that are able to understand the risks associated with land-use changes and development processes. Both Sullivan (2012) and Martha Demas (2012), when considering planning in its broadest sense, identified the importance of practical and engaged planning for the conservation of archaeological resources. This is particularly the case in the post-World War II era with changes in the scale and intensity of development (Trotzig 1987). The planning process can result in significant impacts on archaeological resources, which are inherently fragile and non-renewable resources (Ministry of Environment—Northern Ireland 1999). Within Ontario, it is estimated that between 1951 and 1991, over 8000 archaeological sites were destroyed within the Greater Toronto Area alone (Ministry of Attorney General 2007; Coleman and Williamson 1994). Of these 8000 sites, it is estimated that approximately 25% represented significant archaeological resources (Ministry of Attorney General 2007). Ultimately, there is a need to integrate archaeological considerations into the land-use planning process through ongoing dialogue among archaeologists and planners; this requires understanding the scope and limitations of each other’s profession (Dulaunany 1987; Regina and Querrien 2012).

However, there are currently many challenges to the effective integration of archaeology into municipal land-use planning. Strategic approaches for archaeological resources conservation require a more holistic approach that is often undertaken in contemporary land-use planning practice (Caitlin 2005). In addition, as King et al. (2011) found in their analysis of British Columbia municipalities, although local governments are well positioned to bridge the various publics they represent, there are often very divergent perspectives and understandings about archaeology and the archaeological process. Further, in the absence of preexisting knowledge about archaeological resources, there are often limited tools available to municipal planners (Ross 1996). Municipal planners also work within established frameworks that may not prioritize the protection of cultural heritage or lack basic inventory information about cultural heritage resources in their jurisdiction resulting in reactive decision making. This can be further complicated if there are questions about jurisdiction and authority (Keers et al. 2011) As RESCUE, The British Archaeological Trust (2012), noted in its analysis of changes to planning legislation in Britain, municipal planners require particular skills and training to enable them to make appropriate decisions:

How far heritage concerns can be properly addressed during the planning process is not simply dependent upon having policies in place that require it to be, however. It also depends upon an appropriate knowledge base and professional expertise being available to the appropriate authorities to allow it to be taken into proper account (p. 11).

This is echoed by Ferris (2002), who argues that the existing process in Ontario often results in non-specialists having the responsibility to identify, implement, and defend archaeological requirements. Lastly, although the benefits of a positive working relationship between the two disciplines have been repeatedly identified, they often work apart (Güçer 2004). Nonetheless, there are municipalities in both Canada and the USA that have actively sought to integrate archaeology into municipal operations (Appler 2012, 2013; Williamson 2010; Williamson et al. 2010; Seip 2006; Muller 2007; Poulton 1986). Further, it has been recognized that municipal archaeology programs enable the active engagement of local residents in the archaeological and planning processes (Appler 2012).

The Ontario Context

Within Canada, under the *Constitution Act 1867–1982*, planning and heritage are generally considered provincial matters. Within Ontario, the identification and protection of archaeological resources is a matter of provincial interest and is a requirement under a number of provincial acts regarding planning, heritage conservation, human remains, environmental assessments, energy development, and aggregate resource extraction. Ontario has developed some of the most progressive policy and legislation for the identification and protection of cultural heritage resources, and municipalities have specific obligations to fulfill (Williamson 2010; Williamson et al. 2010; Pearce 1990). Archaeological management plans have been used within Ontario for over 25 years. In the 1980s, the Province of Ontario actively encouraged municipalities to develop archaeological management plans as a tool to assist with the identification, evaluation, and protection of archaeological resources (Wilson and Horne 1995). At the time, the Ministry of Culture and Communications had funding to assist with the process; as a direct result, a number of municipalities, including London, Vaughan, Markham, Walpole Island, and the Regional Municipality of Waterloo, engaged with the process.² However, with the loss of funding in the 1990s, despite Ministry statements regarding the value of such plans, few municipalities undertook the process (Ministry of Culture 1997).

²The ministry responsible for archaeology and heritage has undergone a number of name changes since 1975. These have included: Culture and Recreation (1975–1982); Citizenship and Culture (1982–1987); Culture and Communications (1987–1993); Culture, Tourism, and Recreation (1993–1995); Citizenship, Culture and Recreation (1995–2001); Culture, Tourism and Recreation (2001–2002); Culture (2002–2010); Tourism and Culture (2010–2011); and Tourism, Culture, and Sport (2011–Present). For the purpose of this work, any references to the Ministry (including publications) will use the name used at the time.

In 2005, there were significant changes to the *Provincial Policy Statement* (issued under the provincial *Planning Act*) and the *Ontario Heritage Act* that shifted the milieu for the protection of cultural heritage resources in the province. In particular, the 2005 *Provincial Policy Statement* mandated that development and site alteration must take into account both known archaeological resources and areas of archaeological potential. As the policy stated:

2.6.2 Development and site alteration shall only be permitted on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal and documentation, or by preservation on site. Where significant archaeological resources must be preserved on site, only development and site alteration which maintain the heritage integrity of the site may be permitted.

As the Ministry of Culture noted in 2006, this change required municipalities to better integrate archaeological conservation into their planning processes (Ministry of Culture 2006).

The 2005 *Provincial Policy Statement* was reinforced by the 2007 Ipperwash Inquiry Findings. The Ipperwash Inquiry was established by the Government of Ontario in 2003 to investigate the death of Dudley George, a First Nations protester who was killed during a 1995 protest at Ipperwash Provincial Park (Ministry of the Attorney General 2007). The Inquiry Report specifically highlighted the importance of archaeology, and archaeological management plans, to government decision making. In particular, archaeological management plans were identified as an important predictive tool; however, the report also noted that the effectiveness of such plans is contingent on their active implementation (Ministry of the Attorney General 2007).

The 2007 Ipperwash Inquiry also highlighted the dangers of oversimplifying FNMI notions of sacredness and heritage. Further, it reinforced the importance of FNMI's engagement in the process:

[E]xperience has shown that Aboriginal burial and heritage sites can be identified in the appropriate circumstances if First Nations are actively and meaningfully involved in the planning and development process. Traditional knowledge is the most important source of information about the location or nature of Aboriginal burial and heritage sites currently used in living memory. For older sites, archaeology is an important supplement to traditional beliefs and understandings. (Ministry of Attorney General 2007, pp. 135–136)

This echoes the findings of Sullivan (2012), who argued that there is a danger of 'heritocrats' (p. 642) appropriating minority or indigenous cultural heritage.

This provincial framework was accentuated in 2014 with the issuance of a new *Provincial Policy Statement* that introduced more stringent language requiring the conservation of archaeological resources and introduced new policies recommending the development of archaeological management plans and aboriginal consultation (Ministry of Municipal Affairs and Housing 2014). This document echoed a 2010 publication produced by the Ministry of Tourism, Culture, and Sport that identified archaeological management plans as an important tool for ensuring the conservation of archaeological resources and a means to ensure compliance

with provincial legislation and policy (Ministry of Tourism, Culture, and Sport 2010). Ultimately, within the Ontario context, there is an increasingly litigious environment resulting in the onus resting with municipal decision makers and planners to be aware of all lands containing archaeological resources or areas of archaeological potential. However, within the Ontario context, the responsibility for paying for the archaeological work is the responsibility of the property owner.

Indeed, despite this onus resting with municipalities, the archaeological profession is regulated in Ontario by the Ministry of Tourism Culture and Sport. An archaeological license is required to excavate an archaeological site in Ontario, and methodology is highly structured according to provincial standards and guidelines. Although formally adopted on January 1, 2011, the *Provincial Standards and Guidelines for Consultant Archaeologists* were developed over several years, and prior to their adoption, archaeologists were encouraged to ensure that their archaeological assessments conformed (Ministry of Tourism, Culture, and Sport 2011; Ferris 2007). All archaeological assessments undertaken within Ontario are submitted to the Ministry and municipalities may or may not receive copies of assessments undertaken within their boundaries. Within Ontario, archaeological assessments are divided into four stages:

Stage 1: Background Study and Property Inspection: At this stage an archaeologist determines whether there is potential for archaeological sites on the property. A Stage 2 assessment is required when archaeological potential is identified.

Stage 2: Property Assessment: At this stage, an archaeologist surveys the land to identify archaeological resources on the property being developed. The archaeologist uses this stage to determine whether any archaeological resources found are of sufficient cultural heritage value or interest to require Stage 3 assessment.

Stage 3: Site-specific Assessment: This stage is used to determine the size of an archaeological site, evaluate its cultural heritage value or interest and, where necessary, makes recommendations for Stage 4 mitigation strategies.

Stage 4: Mitigation of Development Impacts: This stage involves implementing conservation strategies for archaeological sites that are of cultural heritage value or interest (Ministry of Tourism, Culture, and Sport 2013).

The licensed archaeologist also is responsible for the safekeeping of all artifact collections recovered from fieldwork; other than Sustainable Archaeology (a repository developed from collaboration between the University of Western Ontario and McMaster University), there is no provincial repository.³ The transfer of artifacts to another entity (such as a municipality) is only possible under specific circumstances. As a result, artifacts are often removed from the municipality in which excavations occurred. Thus, what has resulted from this structure is a disjuncture between those responsible for ensuring that municipal decisions are consistent with provincial archaeological requirements and the archaeologists who undertake the archaeological work.

³For more information in Sustainable Archaeology, please see their Web site at <http://sustainablearchaeology.org/>.

Placing Kingston

Located at the confluence of Lake Ontario, the St. Lawrence River, and the Cataraqui River, the City of Kingston has been the site of human activity for over 8000 years, and continuous human habitation of the Cataraqui River Basin for the past 3000 years (Fig. 6.1) (Williamson et al. 2010).⁴ However, although several small prehistoric and post-contact aboriginal settlement sites and seasonal camps have been found (including the Arbour Ridge Site), the paucity of the soils in the area appears to have limited the size and purpose of these settlements with many showing evidence of use as seasonal fishing and hunting centers (Williamson et al. 2010; Adams 1986, 2003, 2006). Indeed, as Adams (2006) has noted, despite ongoing archaeological work in the City, there is still a relatively poor understanding of the prehistory of the area. Nevertheless, it was the presence of First Peoples in the area of Kingston that attracted European interest, and it became a focus of early trade (Willes 2014; Osborne and Swainson 2011; Williamson et al. 2010; Burleigh 1973, 1979; Preston and LaMontagne 1958).

By the late seventeenth century, the St. Lawrence–Lake Ontario route was already a well-established corridor into the interior of North America (Osborne and Swainson 2011; Williamson et al. 2010). In 1673, Governor Louis de Buade, Count Frontenac chose the site as the location for the new fort. Although primarily established for the purpose of trade and maintaining a military presence, the fort supported some small-scale agricultural activities with several seigneurial estates in the area. In August 1758, British troops serving under Lieutenant Colonel John Bradstreet captured the fort following a three day siege, and the area came under British rule (Bradstreet 1759).

The American War of Independence had a significant impact on the area surrounding Kingston. Immediately after the war, the British government specifically identified the north shore of Lake Ontario as a resettlement area and, in 1783, selected the former site of Fort Frontenac as the site of a regional town (Willes 2014; Osborne and Swainson 2011). The new community quickly became one of the largest in Canada and served as a hub for both government and commerce (Osborne and Swainson 2011). Kingston was also one of the few communities to have a permanent military garrison at this time; in addition to rebuilding Fort Frontenac, the British forces established a naval dockyard across the river on a peninsula named Point Frederick (Fig. 6.2).

By the 1840s, Kingston was still an important institutional town. This was reinforced by the construction of Kingston Penitentiary in 1833–1834. The City's fortunes were further bolstered by the establishment of the Province of Canada in 1840. Following the loss of the capital in 1843, the community declined. Yet, by

⁴For a more detailed discussion on the City of Kingston's history, there are a number of valuable sources including: Willes 2014; Osborne and Swainson 2011; McKendry 1995; Patterson 1989; Errington 1988; Patterson 1985; Tulchinsky 1976; Preston 1959; Preston and LaMontagne 1958; and the Kingston Historical Society's publication *Historic Kingston* (1953 to present).

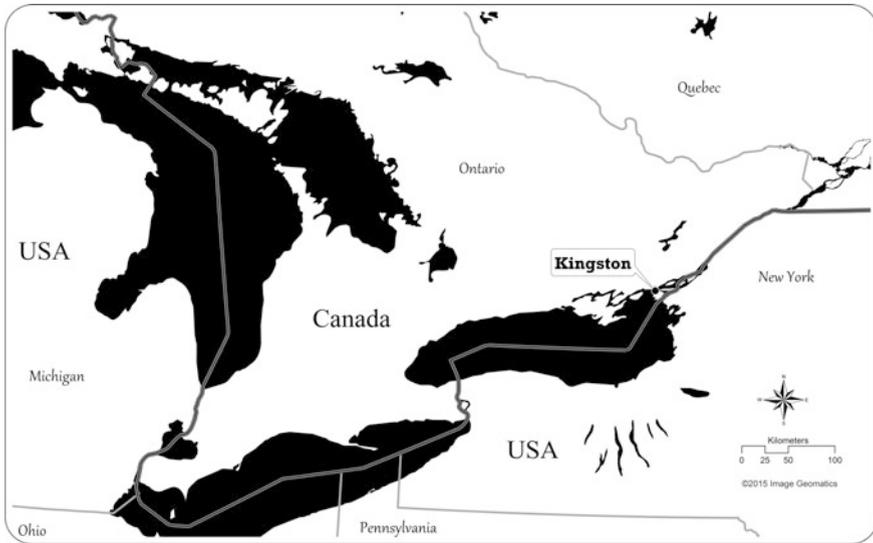


Fig. 6.1 The City of Kingston is located at the confluence of Lake Ontario, the St. Lawrence River, and the Cataraqui River



Fig. 6.2 James Peachy. c. 1783. *A South East View of Cataraqui [Kingston]* (Courtesy of Toronto Reference Library. Accession No. JRR 1355 Cab IV.)

the 1850s, Kingston re-emerged as a regional center for transshipping and manufacturing (McKendry 1995). In 1856, the Grand Trunk Railway arrived in Kingston, linking it to other major centers to the east; by 1860, a spur line was constructed to link the Grand Trunk mainline to the waterfront (Smithson 2000). In the 1860s, Kingston boasted industrial enterprises such as breweries; foundries;



Fig. 6.3 Kingston Waterfront. c. 1919. (Courtesy of Archives of Ontario. Accession No. C 285-1-0-0-327)

various mills; and shipyards (Osborne and Swainson 2011; Warmington 2002). The Second World War saw an expansion of its manufacturing enterprises including the local shipyards; the opening of a new Aluminum Company of Canada (ALCAN) plant that employed over 700 people; and the opening of a new Canadian Industries Limited (DuPont) nylon plant. Amalgamation of the old City of Kingston with the neighboring Pittsburgh and Kingston Townships in 1998 greatly expanded the size of the City proper (Fig. 6.4). Today, the City of Kingston, with a population of approximately 123,000 people, remains dominated by the service and public sector industries, although more recently there have been initiatives to develop it as a leader in the cultural and knowledge economies (Fig. 6.3).

Kingston Archaeology

With such a complex prehistorical and historical record, it is perhaps surprising that formal archaeological activities in Kingston were relatively late compared to neighboring areas. Indeed, while the community is known for its architectural heritage, archaeology was not formally undertaken until the 1930s (McKendry

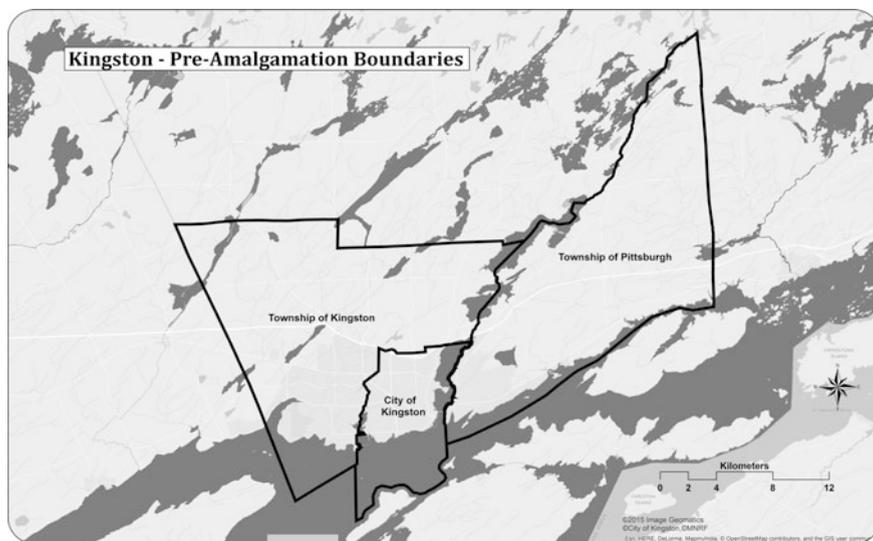


Fig. 6.4 The boundaries of Kingston before the 1998 amalgamation of the old City of Kingston with the neighboring Pittsburgh and Kingston Townships

1995; Angus 1966, 1971).⁵ While archaeological finds were discovered throughout Kingston's history, the first exploratory archaeological excavations in Kingston were undertaken at Fort Frontenac in 1937–1938 by Hagarty (1953) and in 1952 by Brigadier-General (later Major-General) Kitching (1953). These works remain exposed within today's Fort Frontenac as a visual reminder of the site's past (Williamson et al. 2010; Bazely 2001; Cataraqui Archaeological Research Foundation 1988) (Fig. 6.5). However, it was the discovery site of human remains in the western part of Kingston in 1949 that became the City's first formal excavation. While grading a hill, a homeowner discovered two skeletons covered with red ocher (Williamson et al. 2010). Dr. William Ritchie, State Archaeologist for the New York State Museum and Science Service, spent four days investigating the site in 1952 (Williamson et al. 2010; Ritchie 1955) (Fig. 6.6). A contemporary to Ritchie, James Pendergast undertook test excavations of the Kingston Outer Station Site (BbGc-2) in 1952 and 1953. In 1961, Pendergast collected material from the Treasure Island site (BbGc-4), a campsite situated on an island in the St. Lawrence River at the mouth of Abbey Dawn Creek on the eastern end of the City. In 1968, under the auspices of Lt.-Col. P.T. Nation, works were undertaken at the circa 1812 Fort Frederick blockhouse (Williamson et al. 2010; Berry 2003). In the 1970s, the National Historic Parks and Sites Branch of Indian and Northern Affairs, Canada

⁵For a more detailed discussion of Kingston's archaeological record, see the two volume 2010 City of Kingston Master Plan (Williamson et al. 2010) and the four volume Archaeological Master Plan prepared by the Cataraqui Archaeological Research Foundation (CARF) 1988–1990.



Fig. 6.5 Reconstructed remains of the historic Fort Frontenac located within today's fort (Photograph by M.R. Létourneau, 2007)

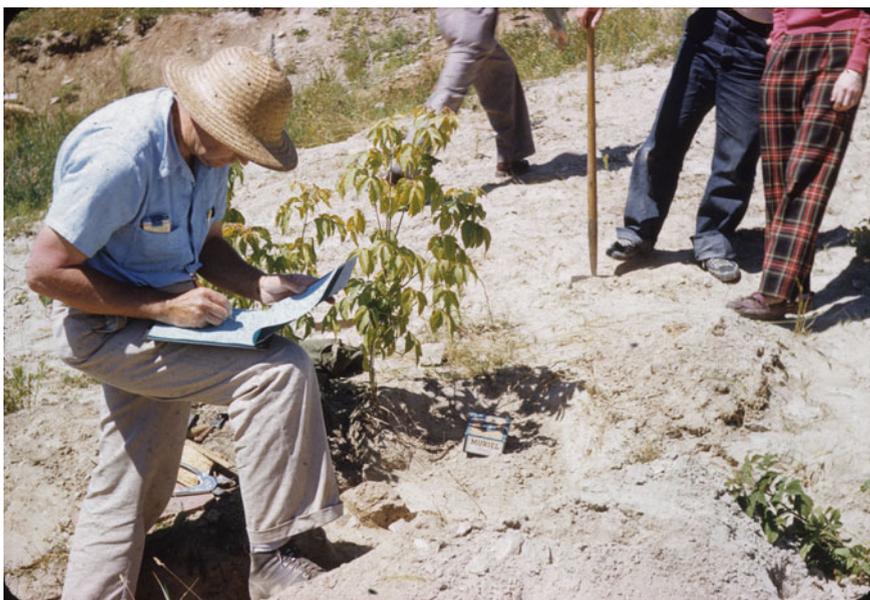


Fig. 6.6 William Ritchie's archaeological excavation. 1952 (Courtesy of New York State Museum Accession No. A1952-04I-002S)

(now Parks Canada), carried out several archaeological excavations including at Kingston Market Shoal Martello Tower (1972) and Bellevue House National Historic Park—former home of Prime Minister John A. Macdonald (1979) (CARF 1988). However, it was several developments in the early 1980s that served to highlight Kingston’s archaeological past.

Kingston’s Archaeological Master Plans

The 1980s was a period of significant archaeological research within Kingston. Among the major excavations were the Kingston Harbourfront Project (BbGc-7) (September to December 1980); excavations at Fort Frontenac (1982–1984; 1987); the Frontenac Village site (BbGc-11) (1984); and the Bajus Brewery site (BbGc-12) (1985). As Bazely (2001) notes, many of these early projects were salvage or rescue excavations; in the absence of clear requirements mandating that archaeological work be undertaken, funding often came from government sources and heritage foundations. Many of these projects were pilot projects within the province and helped to inform the development of province practices. In July 1981, *Preserve Our Wrecks Kingston*, a local organization dedicated to the conservation of marine archaeological resources, was established (Preserve our Wrecks, 2012). In 1982, W. Bruce Stewart completed a M.A. Thesis on the Kingston Harbourfront Site at Wilfrid Laurier University, and in 1983, Ron Zukowsky completed a Master’s report in planning on the development of archaeological master planning using Kingston as a template (Zukowsky 1983; Stewart 1982). In 1987, the Cataraqui Archaeological Research Foundation, a local research foundation that had been established in 1983, was commissioned by the City of Kingston to develop an Archaeological Master Plan for the old City of Kingston. As Williamson et al. (2010) note, the project was significant for Kingston:

In the course of this project, 35 properties were assessed within the City, the majority of which pertained to the historic Euro-Canadian occupation. These investigations, which are detailed in the Stage II report of the first Kingston Archaeological Master Plan study, yielded further information on two previously registered archaeological sites, four new significant archaeological sites, fourteen properties for which further assessment was recommended prior to any proposed land development, and fifteen properties for which no further archaeological concern was recommended (p. 36).

While the Plan was never formally adopted, it did provide significant insight into the history and archaeology of Kingston, and many of its principles were integrated into the City’s Official Plan. Shortly after this process, the neighboring Kingston Township (now amalgamated with the City of Kingston) adopted a heritage strategy to augment its Official Plan in 1993. This strategy contained a broad definition of cultural heritage resources and included specific provisions for the conservation of archaeological resources such as the development of an Archaeological Master Plan (Township of Kingston 1993). The former Pittsburgh Township (which was also amalgamated in 1998) also had specific provisions for the protection of

archaeological resources in its Official Plan as well as the 1992 *Barriefield Heritage Conservation District Plan*. Since the 1990s, a considerable amount of historic archaeology has been carried out throughout the City and its environs, usually in response to *Planning Act* and environmental assessment requirements. However, following amalgamation in 1998, there was no concerted policy or approach from the whole of the amalgamated City of Kingston, and archaeology was being addressed according to the existing policies for three former municipalities. By 2005, with the changes in provincial legislation and policy, the City recognized that a more comprehensive and consistent strategy was required.

The development of an Archaeological Management Plan must be understood as a process requiring more than just the development of a study and plan; it requires a shift in approach and the development of tools to facilitate effective decision making. In 2010, Ontario's Ministry of Tourism, Culture, and Sport published an information guide to archaeological management planning. Within this document, the Ministry identified the goal of archaeological management planning to:

[I]nventory, classify and map significant archaeological resources and provide direction for their appropriate assessment and protection, as required. There are also conservation policies and procedures that are developed as part of an AMP that can be integrated into the municipal Official Plan and other municipal strategic documents (Ministry of Tourism, Culture, and Sport 2010).

However, this statement belies the challenges associated with such a plan's development and implementation. As Ron Williamson argues (Williamson 2010; Williamson et al. 2010), one of the values of an archaeological management plan is its development of predictive models specific to a particular context. Indeed, the understanding of a particular milieu in which one wants to develop and implement an archaeological management plan requires care and diligence. Kingston's Archaeological Master Plan process revealed some of the issues and challenges of such projects and also provided key lessons for future projects.

The 2010 City of Kingston Archaeological Master Plan's origins stemmed from a February 2005 meeting of Kingston's municipal heritage committee, where a discussion identified the need to consider archaeology more systematically. As noted although the City of Kingston amalgamated in 1998, in 2005 there were no consolidated heritage policies for the City; each of the three former municipalities still had their own heritage policies resulting in tremendous variations in how (and if) archaeology was addressed. The motion from the heritage committee meeting resulted in budget funding for the project. In 2006, Archaeological Services Inc, supported by a local heritage planning firm, Bray Heritage, was retained. From the outset, the project had three main objectives:

1. The compilation of inventories of registered and unregistered archaeological sites within the City and the preparation of an overview of the area's settlement history as it may be expected to pertain to archaeological resources;
2. The development of an archaeological site potential model, based on known site locations, past and present land uses, and environmental and cultural-historical data; and,

3. A review of the current federal, provincial, and municipal planning and management guidelines for archaeological resources, as well as the identification of a new recommended management strategy for known and potential archaeological resources within the City.

The Archaeological Master Plan was intended to be a key reference document for planning decisions (including public works and infrastructure renewal projects); culture and tourism policies (including the City's Cultural Plan which was in development); and a consideration in the City's economic development models (City of Kingston 2010a).

However, early in the process it was recognized that the development of the Plan alone was insufficient. In May 2006, as part of the project's initiation, several actions were undertaken to facilitate the development of a culture of archaeological conservation (City of Kingston 2006a). These included the following:

- Formally adopting the Ministry of Culture's checklist for archaeological potential as the standard interim criteria against which all planning applications, including applications to the Kingston Municipal Heritage Committee and the Committee of Adjustment, were to be evaluated;
- The development of new standard conditions concerning unexpected archaeological discoveries to be included in all planning applications for all properties within the City of Kingston for which an archaeological assessment is not required;
- The establishment for Legal Deposit for Archaeological Assessments undertaken within the City⁶;
- The repeal of several outdated bylaws that were replaced with a new bylaw to regulate the discovery of archaeological resources on City of Kingston property; and
- The development of new confidentiality protocols.

All of these actions were necessary to help create a culture of archaeological conservation within the City. Prior to its adoption, the provincial checklist was only used intermittently and inconsistently by City staff; through the formal Council adoption, there was a clear Council directive that it was to be used, providing the necessary justification to both staff and community members. Standard Planning clauses were developed to replace outdated statements and to ensure that there was some direction in place for unexpected archaeological discoveries. The Legal Deposit, a Kingston innovation, was identified as necessary as detailed archaeological site data were not shared with the City by the Ministry of Culture. Although the City had a data sharing agreement in place with the Ministry, the Ministry only

⁶The "Legal Deposit" bylaw required that copies of all archaeological assessments undertaken within the City be provided to the City's Heritage Planners.

provided the geographic locations of registered archaeological sites⁷; information concerning areas that were assessed and where nothing was found and detailed information on registered archaeological sites was not provided. With the provincial obligations stemming from the *Planning Act*, particularly the changes to the 2005 *Provincial Policy Statement*, City staff were in a position of having to be responsible for ensuring the protection of archaeological resources without always having the required data. As a result, there were several duplicate studies prepared or requested as City staff was not aware that sites had already been assessed and were under provincial review. As part of the review of existing documentation and regulations within the City, it was found that not only were some of the existing regulations outdated, but also some were contrary to provincial law. Lastly, the confidentiality protocols were specifically developed when it was discovered that some City departments were posting archaeological assessments to the City's Webpage, including an assessment with detailed pictures of human remains. The project was also designed to provide input into municipal initiatives, while the formal Plan was in development. As a result, as the City was developing its first consolidated Official Plan (2010b) and the Kingston Cultural Plan (2010c), the information and policies that were being developed as part of the Archaeological Master Plan were also integrated into these documents. The Official Plan includes a specific section of policies for the conservation of archaeological resources, and the Kingston Culture Plan specifically recognizes the importance of cultural heritage resources (including archaeology) and the need to develop a broader cultural heritage strategy for the City that helps to better tell the stories of Kingston's past (City of Kingston 2010b, c). It also includes developing working relationships with a number of internal City departments to help integrate archaeological considerations into their operations and to assist with tendering guidelines.

Indeed, consultation and engagement, along with an understanding of the local context, were central to the development of the Kingston Archaeological Master Plan. The project included the development of a Technical Working Group that included representatives from various City departments as well as relevant stakeholders, including professional archaeologists, local heritage groups, and the local development community. Complete drafts of the Plan were circulated to all local archaeological firms as well as several FNMI feedback. There were two public meetings, one open house, education sessions, and consultations. The completed Plan was designed to reflect the local context and identified specific archaeologically sensitive areas and areas of non-interest, and helped to develop a refined potential map for the City. Indeed, using the Ministry of Culture's checklist, more than 90% of the City was identified as having archaeological potential; the community-specific mapping reduced this to approximately 66% (Williamson et al. 2010; City of Kingston 2010a). Still, this engagement and consultation with local

⁷In Ontario, a registered archaeological site refers to any property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest and that has been registered by the Province of Ontario in its database.

community members and FNMI communities, which was initially not expected, resulted in an extended timeline for the project; in the end, Kingston City Council adopted the Plan on May 18, 2010, nearly 5 years after the initial heritage committee meeting.

However, the formal adoption only demarked the next phase of archaeological conservation for the City. A draft implementation plan was developed, and a series of next steps were identified, including the completion of supporting studies, further community engagement and education, and additional work with internal departments (Létourneau 2010). While many of the recommendations were already in practice or implemented prior to the formal adoption of the plan, including the use of the Plan's archaeological potential mapping, several key future actions were identified. These included the following:

- The development of a public awareness campaign;
- Preparing both an accurate and comprehensive inventory of the archaeological collections currently held by museums and consulting archaeologists and a guideline encouraging the curation of material from archaeological sites within Kingston at local museums;
- The development of a *Contingency Plan for the Protection of Archaeological Resources in Urgent Situations*;
- The preparation of additional studies/reports/protocols including a Marine Archaeological Protocol; Aboriginal Protocol; an Internal Protocol for the Discovery of Human Remains (in conjunction with Kingston Police); a Protocol of Works on City Roads; and the exploration of creating a staff position for a City of Kingston archaeologist; and,
- The development of Stage 1 Archaeological Assessments for Archaeologically Sensitive Areas (ASAs).

ASI was retained to develop the *Contingency Plan for the Protection of Archaeological Resources in Urgent Situations*. An innovative document it identified key actions for the accidental discovery of both human remains and non-human archaeological resources; it was one of the first of kind in Canada to be developed (Williamson et al. 2011). Unfortunately, the City, to date, has not chosen to adopt it. City staff did develop several educational materials on the Archaeological Master Plan and archaeology, but since 2011, public engagement on archaeology through the planning department has been limited due to shifting priorities and changing staff. Indeed, many of the identified initiatives have since failed to materialize, including discussions around the possibility of hiring a City archaeologist.

The project revealed a number of challenges with the development and implementation of archaeological management plans. These included the following:

- A persistent lack of understanding concerning legislated archaeological requirements by both community members and staff;
- The persistence of a negative understanding of heritage/heritage planning and archaeology as a process that prevents change rather than facilitating it;

- The inherent nature of municipal government and the political process that results in changes in Council and municipal management over the duration of any long-term project; and,
- Other heritage people.

This latter point was surprising to the project team. Nevertheless, some of the most vocal objectors were members of Kingston's heritage community. Some were archaeologists who did not understand the archaeological master planning process. Others were members of the local architectural conservation community who viewed funding for archaeology as a direct threat to the funding for architectural conservation.

In the end, there were several important lessons gleaned from the Kingston experience. The first, and perhaps one which was not as successful as hoped by the project team, was the need for strong engagement. This was one of the main reasons for the project's delay. Several additional meetings and information sessions were required to facilitate community and staff buy-in. It was not sufficient to state that archaeology was a legal requirement; the process required a meaningful dialogue with, and education for, both stakeholders and staff. Council, senior management, and municipal decision makers (including planners) must be aware of and understand archaeological requirements, the legislative/policy basis, and the implications of failure to consider archaeology (legal and otherwise). They must also buy-into the process in order to ensure long-term implementation and sustainability of archaeological conservation. Indeed, archaeology must be understood as an important part of not only the planning process but all municipal operations. Assertions made during the project that archaeology is only a heritage issue (not a planning issue) and that archaeology was exclusively the heritage planners' job revealed the need for continuous and meaningful training. An archaeological management plan, in and of itself, is not enough to ensure that archaeological issues will be adequately considered. There must be an implementation strategy, and there must be clear links made between other municipal policies and the archaeological management plan. This includes succession planning for key staff. In the Kingston case, the process also revealed the need to enhance dialogue between the municipality and more senior levels of government. The Kingston Archaeological Master Plan required several conversations with provincial bodies to relay concerns around data sharing, the need for more context specific policies, and issues with the provincial archaeological assessment review process. Lastly, municipalities must be prepared to dedicate staff time to archaeology; if it is to be treated as more than just a regulatory requirement, staff must be able to engage and educate in a meaningful way with their colleagues and their community.

The Outer Station Site: The Benefits of Creative Planning

Planning tools have tremendous potential to ensure the conservation of archaeological sites; still, there are a variety of tools available that are not often considered by planners or archaeologists. A solution developed for the Outer Station Site

(BbGc-2) illustrates one creative approach that was applied in Kingston as part of the negotiations between a private developer and the City of Kingston.

Located on the western shore of the Cataraqui River, the Outer Station Site (BbGc-2) was first excavated by James Pendergast in 1952–1953. This limited work revealed the remains of a late Woodland, Pickering, fishing station (Heritage Quest 1999). The site was revisited in the summer of 1988 as part of the 1980s Kingston Archaeological Master Plan study which revealed a variety of material dating over a period of 600–700 years covering an area of approximately 4000 m² (Heritage Quest 1999). The site was re-examined in 1999, and additional material was discovered.

In August 2006, in the early stages of the Master planning process, an application was submitted for the development of the lands surrounding the Outer Station Site. This project, which was originally designed to include 96 residential townhouse units, was not the first application for the property, which had been the subject of several planning applications since 2000 (City of Kingston 2006b). As part of these previous applications, several archaeological assessments were undertaken by Heritage Quest, now part of Golder Associates Ltd. These excavations revealed the need for further work on the site, and as part of the rezoning application, initially a Holding Provision was recommended by the author for the section of the property where the Outer Station Site was located (City of Kingston 2006b).⁸ However, as the application proceeded, it was revealed that local FNMI communities had expressed an interest in the site and, in particular, did not want to see it disturbed through further excavation. The situation resulted in a potentially challenging situation; while the typical archaeological practice at the time would have included mitigating the entire site, the FNMI communities were not in agreement with the provincial requirements.⁹ The issue had the potential to stall the project as the excavation was required to remove the Holding Provision and allow the project to proceed. Following discussions with the City's Legal Services Planning and Parks staff, an innovative solution using existing planning tools was developed. To facilitate the development project, negotiations with the developer resulted in the transfer of the archaeological site to City ownership through existing parkland conveyance provisions as part of the Draft Plan of Subdivision Application (City of Kingston 2007). In total, the proposed land conveyance constituted approximately 16% of the total area of the property. This was undertaken with the understanding that the City would be responsible for negotiations with the local FNMI communities concerning the future of the archaeological site

⁸A Holding Provision is a planning tool that is used when zoning bylaws or codes are amended. This is done to delay development until a specific requirement, such as the provisions of local municipal services, or measures mitigate negative impacts are in place. When development is ready to occur and conditions are met, the holding provision is removed by an amending bylaw. In Kingston, policies were put in place to enable using Holding Provisions for the protection of cultural heritage resources.

⁹Changes to archaeological requirements in Ontario since 2006 now necessitate engaging FNMI communities during the archaeological process.

and that any lands conveyed to the City were not to be altered in any way. As part of this process, the archaeological site was fenced. The development project was also set back from the archaeological site which was (and continues to be) monitored by a provincially licensed archaeologist to ensure that no work or unexpected impacts occurred (or occurs) on the archaeological site. As part of this process, the developer was also permitted an additional 20 townhouse units on the remainder of the development site as part of the project redesign (City of Kingston 2007). This solution enabled the developer to commence building while ensuring that this important site remained under City auspices. As of 2015, the project has been developed (by another development company who took over the project from the initial developer), and talks are still occurring with local FNMI communities concerning the future of the archaeological site.

The Artillery Park Project

Archaeological management planning must be understood as more than merely the development of policy and operational frameworks; it is an important tool for the identification, protection, and promotion of a community's heritage. The archaeological management planning process can help to highlight key areas of interest and, through community education, can facilitate innovative work. One such example in Kingston is the Artillery Park Project.

As noted, the City of Kingston Archaeological Master Plan informed other municipal initiatives. This includes the Kingston Culture Plan which included specific recommendations for the development of new educational materials and exhibits on Kingston history (City of Kingston 2010c). The Archaeological Master Plan also served a key educational role in raising staff awareness on the importance of archaeology.

The Artillery Park facility, located in the historic core of Kingston, is a major community recreation facility with community pools and activity spaces. It is also located on the site of a historic military facility founded during the War of 1812. Located at the head of Barrack Street, the site contained its own parade ground, gun sheds, forges, stables, barracks, and a residence for the commanding officer (Williamson et al. 2010). Parts of grounds remain in military use, including the Kingston Armouries, which is currently occupied by The Princess of Wales' Own Regiment. In 2012, the City of Kingston owned Artillery Park recreation facility, which was originally constructed in the 1940s, was closed for extensive renovations. As part of the work, an archaeological assessment was commissioned by the City for the site; subsequent excavations uncovered approximately ten thousand artifacts. Based on these discoveries, the City's Director of Recreation and Leisure Services approached the City's Cultural Services Department (which oversees the City's museums) to discuss how the renovated recreational facility could integrate these discoveries. The result was an exhibit entitled *History beneath our feet: Artillery Park (1800–2014)* that was in place when the facility reopened in 2014



Fig. 6.7 Display panel from the Artillery Park *History Beneath Our Feet* Exhibit (Photograph by M.R. Létourneau, 2015)

(Fig. 6.7). Specially designed exhibit cases were integrated into the building at the design stage, and a long-term temporary installation was developed. The parking lot of the facility also featured in situ markings showing the locations of the former military building on the site. The project was viewed as a unique opportunity to provide wider community access to Kingston's history and archaeology in a non-traditional (albeit extremely popular) venue while meeting regulatory requirements. The process was also seen as contributing to the City's efforts at developing a culture of heritage conservation through the implementation of both the Kingston Culture Plan and the City of Kingston Archaeological Management Plan. Based on the success of the program, Cultural Services as of 2015 was exploring the development of similar exhibitions in other facilities. However, this project was challenged by existing provincial legislative requirements concerning the deposition of artifacts with a licensed archaeologist. The municipality was obligated to show that it was able to conserve the artifacts at a much higher standard than the licensed archaeologist who had the items in storage. While the City was ultimately able to achieve this requirement, it raised the question as to the ability of other municipalities to meet them, and whether or not this requirement is beneficial. If the aim of the provincial requirements is to ensure the protection and promotion of archaeological resources, then ultimately there is still a need to determine how source communities can better access their own heritage. Without it, there is a danger that the heritage of many communities will remain in permanent storage.

Conclusions

Ultimately, the development of the 2010 City of Kingston Archaeological Master Plan was a significant project that not only highlighted important aspects of Kingston's past, but also continues to serve as an important document for its future. Indeed, the archaeological management planning process must be understood as more than about planning and archaeology; it is about a community and how it addresses change. In retrospect, while the stated objectives of the 2010 Archaeological Master Plan project were met, there remains, as in all things, areas that merit reflection and reconsideration. The critical components of engagement and education, taking into account local understanding and experiences, needed to be one of the foremost considerations. Arguably, this was one of the weakest areas of the project. While projects such as Artillery Park illustrate the benefits and opportunities for innovative interpretation, there is a danger that archaeological management plans (and more broadly heritage planning) are only seen as an extension of land-use planning. In order to be successful, these plans must be implemented broadly across municipal departments. Consideration must be given to the practical and political barriers to success. As the Kingston experience demonstrates, implementation efforts must broadly consider the available opportunities for innovation and creativity. Nevertheless, often it is the responsibility of individuals to ensure that the products of the archaeological management planning process are implemented, and it is here that any process must start.

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Chapter 7

Quebec City's Archaeological Programme and Provincial Cultural Heritage Legislation

William Moss

Introduction: Quebec City

France first attempted to establish a colony in what is now Quebec City between 1541 and 1543 near the Iroquoian village of Stadacona, but it was not until 1608 that Samuel de Champlain founded an outpost at the narrowing of the St. Lawrence River, known as Kebec to native Algonkians, that the seeds of a city were sown. Quebec would grow into one of the major cities on the North American continent. The city became the capital of New France, and following the independence of England's American colonies, the capital of British North America. It later became the capital of Lower Canada and finally that of the province of Quebec. Situated at the strategic entrance to the Great Lakes' watershed, Quebec has been fortified since its foundation and, until the beginning of the railroad era, it was a major port. Indeed, in 1830, Quebec was the third most important port on the continent, after New York and New Orleans. Champlain recognized the strategic importance of the city he had founded, but he would be amazed to see how his frontier post has changed over time. The inclusion of the city on the United Nations Educational, Scientific, and Cultural Organization (UNESCO)'s list of World Heritage Sites in 1985 would not have been the least of his surprises! (Fig. 7.1).

Quebec is now a city of 536,000 people in an urban region of 790,000 inhabitants; it covers a territory of 463 km² or 178 square miles (CMQ 2015). This territory includes four historic districts defined by the province's *Cultural Heritage Act*, which together represents one-third of designated districts in the province. One of the four, Old Town Quebec, is listed as a UNESCO World Heritage city, and it is one of two such sites in Canada. The city is comprised of over twenty former village centres, several going back to the first decades of the French colony in the New World. They were subsumed by the modern city in a long series of annexations beginning in 1889,

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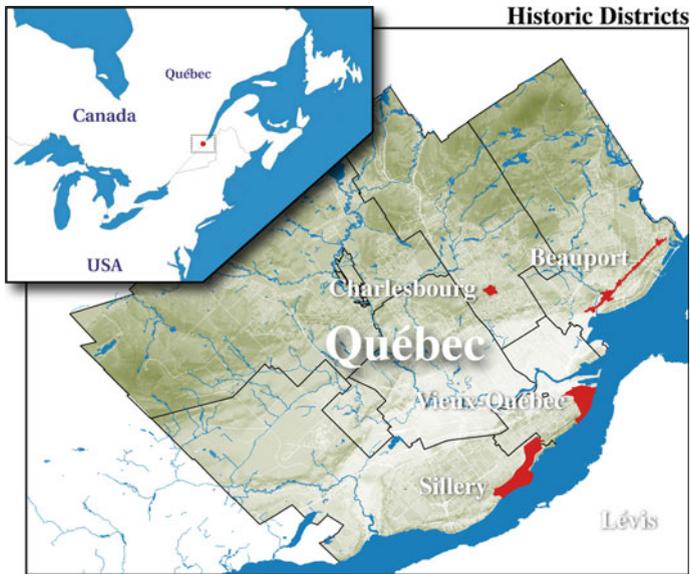


Fig. 7.1 Map of Quebec City and the four historic districts defined by the provincial *Cultural Heritage Act*. (Graphics by André Tanguay; courtesy of the *Ville de Québec*.)

the most recent taking place in 2002. The city sits at the junction of the three major geological regions of the north-eastern portion of the continent and has been the site of succeeding biomes and physical environments during the Holocene. For these reasons and many more, Quebec City has a particularly rich and varied heritage, to which archaeology can and does attest regularly (Moss 1993; Moussette and Waselkov 2013, pp. 217–257). In 1985, the City created a municipal archaeologist’s position, the first in Canada. This position, which has moved through several departments within the City, is fully embedded in the municipal administration and the team working under the archaeologist’s direction is active on all fronts. The team itself is composed of full-time regular and temporary as well as seasonal employees, depending on the scale of operations from one season to another.

Numerous institutions are involved in research, site preservation and site interpretation within the city. These include the federal government’s Parks Canada Agency, the provincial government’s *Ministère de la Culture et des Communications* (MCC) and its *Commission de la Capitale-Nationale du Québec* (CCNQ), *Université Laval* and the municipal administration of the City of Quebec. The City occupies a central position in this matrix, one reason being its direct relations with citizens of every stripe, be they members of the corporate or private sector, property developers or simple residents. Also, as is generally the case, municipal administrations are the closest level of government to the population and numerous individuals and associations are active participants in municipal processes. The City adopted a general heritage policy recognizing the contribution of

archaeological heritage to the general economy (Ville de Québec 2007, p. 47), but it has not adopted bylaws on the matter. The City has played an exceptionally active role over the past quarter century and has had considerable success, particularly through partnerships with different stakeholders. This chapter will examine several of these partnerships and situate them in the context of recently adopted heritage legislation that will change the stakes for decades to come.

Heritage Legislation and Approaches to Archaeology in the Province of Quebec

Several analysts have defined a continuum of government-controlled versus market-controlled archaeology (Demoule 2007; Willems 2008; Willems and van den Dries 2007). Polar extremes of these two approaches are found in France and Anglo-Saxon countries, respectively. The approaches applied in Canada and the province of Quebec fall somewhere between the two.

In France, the *Code du patrimoine* was adopted in 2001 in order to implement the prescripts of the Council of Europe's Valletta Charter (1992), thus bringing France to comply with a general European approach that obliges promoters to cover the cost of archaeology on a preventive basis (Demoule 2007). The *Code du patrimoine* defines developers' financial and procedural responsibilities and requires them to pay an archaeological levy on all large-scale property development projects. The government's National Institute for Preventive Archaeological Research (INRAP) was created and charged with all preventive, development-led archaeology in France. It is financed by the levy on property development in the country. The *Code du patrimoine* was modified in 2004 to allow developers to directly contract with free-market service providers (Demoule 2010).

Practice in the Anglo-Saxon world is somewhat different as archaeology relies almost entirely on free-market service providers responding to development projects. In the USA, this process is generally development-led, as witnessed by section 106 of the *Historic Preservation Act* (Peacock and Rafferty 2007). In the UK, planning-led archaeology is the major source of archaeological activity though it is under considerable pressure (Southport Group 2011).

In Canada, there is no overarching federal heritage legislation as heritage issues come under provincial jurisdiction (Pokotylo and Mason 2010). Each province adopts its own legislation and, consequently, defines its own approach to heritage matters. Political objectives and programmes vary from province to province.

In the province of Quebec, renewed heritage legislation was adopted in 2011 and came into effect in 2012. The new *Cultural Heritage Act* (National Assembly 2011) replaces the 1972 *Cultural Property Act* (see MCC 2012b for a brief history of heritage legislation in the province of Quebec). It imposes legal constraints on the practice of archaeology—compulsory permits for archaeologists, obligation to

declare all discoveries, possibility of halting work on construction projects to protect sites and vestiges and offers municipalities additional powers. It is interesting to note that certain provisions of this legislation are renewed prescriptions of the preceding *Cultural Property Act*, notably the provisions concerning permitting. They are based on legislation enacted by France's Vichy government in 1941 with the intent of protecting archaeological heritage from the Nazi occupying power (République française 1941; Karlsgod 2011, p. 296)! The 1941 Vichy legislation was replaced in France by the *Code du patrimoine* in 2001.

The 1941 Vichy legislative framework was, paradoxically, maintained in Quebec's 2012 *Cultural Heritage Act*. No provisions were introduced to define developers' financial or procedural responsibilities. By not replacing this approach, Quebec reinforced its ambiguous position on the continuum of government-controlled versus market-controlled archaeology. In Quebec, consultation with First Nations is done by the MCC on a nation-to-nation basis. Individual archaeologists have no individual obligation to consult First Nations other than that prescribed by applicable codes of ethics (see Canadian Archaeological Association 1996). It is also noteworthy that collections and moveable heritage are treated differently in the province. Indeed, artefacts are the property of the owner of the land where a site is found. This, too, is half-way between the French model where the state is owner of all collections and that of another Canadian province, Ontario, where the individual archaeologist is responsible for collections generated by research carried out under his licence.

In short, the 2012 *Cultural Heritage Act* can trace its origins to mid-twentieth-century French legislation. It did not adopt the later modifications to its French model which led to the implementation of the Valetta-based approach defined by the *European Convention on the Protection of the Archaeological Heritage* (Council of Europe 1992) and now predominant in most European countries. Nor did it adopt a compliance-driven approach as is now generally practised in North America. As such, Quebec's cultural heritage legislation is also notably different from that of its Canadian neighbours such as Ontario (see Williamson et al. this volume). The province of Quebec thus asserts its particular cultural specificity within Canada through different facets of its archaeological legislation.

The provincial *Loi sur la qualité de l'environnement* (Environment Quality Act), administered by the *Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques* (MDDELCC), both defines and enforces a development-led environmental assessment approach where project proponents have the legal and financial responsibility to mitigate the impact of their projects on archaeological resources. However, this Act does not often apply in urban contexts (see MDDELCC 2015). In a similar manner, Quebec's municipal planning legislation, the *Loi sur l'aménagement et l'urbanisme* (Act Respecting Land-Use Planning and Development) administered by the *Ministère des Affaires municipales et de l'Occupation du territoire*, has no provisions concerning archaeology (see MAMOT 2015).

In general—and insofar as urban archaeology is concerned—the *Cultural Property Act* and the *Cultural Heritage Act* that replaced it in 2012 assure tight

control of archaeology within provincially designated historic districts. Once outside the limits of these districts, control rests largely on the shoulders of project promoters and citizens who are obliged to declare any discovery of archaeological sites and artefacts to the MCC. Developers, particularly state agencies such as Hydro-Québec and the *Ministère des Transports du Québec*, have mostly adopted a proactive methodology and carry out their projects in a manner similar to a planning-led approach.

A general understanding of the place of archaeology in the *Cultural Heritage Act* is required to fully understand the provisions that specifically concern municipalities (see MCC 2012a, pp. 37–40 for a general description of the Act). In general, the Act allows the government to designate historic persons, events and sites (Division II) and cultural landscapes (Division III). Though designation does not afford any protection, it does indicate that the tangible or intangible heritage element identified by this process has collective importance. Individual properties may acquire a degree of protection by being classified (Division IV), and districts can be declared heritage sites (Division V). Archaeological sites and moveable objects, such as archaeological collections, can be classified. A full division of the Act applies specifically to archaeology (Division VI). Two general prescriptions apply to all citizens. Firstly, any person wishing to undertake archaeological activities involving excavation or survey must obtain an archaeological research permit from the provincial government (s. 68). A permit may only be issued to qualified persons, and it is valid for one year; a report describing the work carried out must be submitted in order to be eligible for another permit (s. 72). Secondly, any person who discovers an archaeological property or site must inform the Minister without delay, whether the discovery is made under the conditions of an archaeological research permit or is a chance find (s. 74). These two provisions provide the government with an important window of opportunity in that it may subsequently undertake investigation of the find or halt work in order to undertake investigation at the expense of the promoter (s. 76). Costs for research generated by the discovery that led to the stoppage are assumed by the party responsible for the excavations though no definition of the extent of costs or scale of projects is provided. This is the only financial provision of the Act concerning archaeology. The approach applied by the Act can safely be characterized as rescue archaeology in the purest tradition, and it is merely an extension of the legislative prescriptions of the 1972 *Cultural Properties Act*.

The 2012 Act introduces new powers for municipalities that mirror the powers held by the provincial government. These new powers will permit municipalities to adopt an approvals-driven approach for specific parts of their territories on an elective basis. Firstly, municipalities may adopt bylaws protecting archaeological heritage resources: they may recognize sites within zones previously identified within a planning programme (s. 127). This is analogous to the powers of designation held by the Province (s. 13). Municipalities may also issue orders to halt work and carry out an archaeological evaluation where there is a perceived threat of significant degradation to a property that may have heritage value (s. 148). This too is analogous to the powers that may be exercised by the Province (s. 76). Finally, municipalities may determine the circumstances in which a person who must obtain

a permit or authorization from the municipality is required to carry out archaeological excavations or surveys before carrying out a project in a zone of heritage interest identified in the land-use planning and development plan in force in the municipality's territory (s. 150). This section, and this section alone, defines the planning-driven aspects of the Act concerning archaeology.

As powers delegated to municipalities are accepted on an elective basis, their implementation may be hindered. Indeed, the Act creates an uneven playing field in that some municipalities may decide to implement heritage powers and others not. Few financial responsibilities are clearly attributed to developers: promoters are required to assume the cost of archaeology only if section 76 is applied by the Province or if section 148 is applied by the municipality. There are no other explicit financial directives in the new legislation. Finally, there is an overlap in provincial and municipal powers; it is yet to be seen how this will play out in contentious situations. No municipalities in the Province of Quebec have yet applied any of these new powers.

In conclusion, despite the absence of explicit legislation requiring preventive archaeology in most contexts and circumstances, there is now an expectation on the part of the provincial government that municipalities will apply a compliance-driven approach. Archéo-Québec (2012), a non-profit heritage association, produced a guide to preventive archaeology with funding and guidance from the MCC. This guide, *Archéologie préventive. Guide pratique à l'intention des municipalités du Québec*, explicitly defines an approach similar to that developed by France's INRAP with the stated intention of counselling municipalities with no in-house expertise in the art and science of archaeology. It is an articulate expression of the MCC's new expectations.

Archaeology and the Municipal Administration

Archaeology in the City of Quebec may be seen as a logical and noteworthy extension of the province of Quebec's distinctive approach to archaeological practice! The City is probably unique insofar as it has developed an approach that is substantively different from other models within Canada or even within the North American continent. The City is particularly distinctive in the emphasis it puts on developing and renewing knowledge of the city's archaeological heritage, creating attractive urban spaces through innovative placemaking and actively fostering public education. These axes of development are expressed in the master plan, *L'avenir maintenant. Plan directeur d'aménagement et de développement*, adopted in 2005 following the amalgamation of thirteen municipalities into a new City of Quebec administration in 2002 (Ville de Québec 2005, pp. 137–168). A frequently used advertisement proclaiming Quebec City as the wellspring of archaeology in the province of Quebec is an eloquent expression of the City's recognition of the importance of its archaeological heritage resources and its pride in them (Fig. 7.2).

Fig. 7.2 The City has put considerable effort into interpreting its archaeological heritage for the general public. This advertisement, used in local newspapers and regional heritage magazines, proclaims Quebec City as the wellspring of archaeology in the Province of Quebec. (Courtesy of the *Ville de Québec*.)

Soif
d'archéologie ?

La source se trouve
À QUÉBEC

Origine des artefacts
Bouteilles provenant
du premier Palais de
l'intendant (1684-1713)
et des magasins du Roi
(1716-1760) sur le site
de l'Îlot des Palais.
Photo : Diane Bussières

Entente de
développement culturel

VILLE DE QUÉBEC

Culture,
Communications et
Condition féminine
Québec

General Approach

Quebec City—the geographic entity, as opposed to the political administration, the City of Quebec—is characterized by a community of researchers working for a series of important institutions: the City of Quebec, the Province of Quebec’s MCC and CCNQ the federal government agency Parks Canada and *Université Laval*. Each organization has its own mission and mandates, but their researchers have several things in common. Apart from their appreciation of their city, they share the knowledge and the know-how of their discipline as well as the expertise they have developed during their research over the years. The federal government, represented by the Parks Canada Agency, has spearheaded numerous projects on sites and around the city such as the Saint-Louis Forts and Châteaux National Historic Site and the network of sites associated with the fortifications of which it is largely the owner. The federal government owns several other major properties in the city of Quebec which are not under the direct control of Parks Canada, including the Defense Department’s Citadel, the Port Authority’s Old Port and the National Battlefield Commission’s Plains of Abraham. Parks Canada may act as a consultant for work carried out on these sites. The government of the province of Quebec has been involved in several initiatives focused, for example, on Champlain’s Habitation and the *Place-Royale* sector as a whole. Parks Canada’s archaeological services were affected by wide-ranging cuts in 2012 (Society for American Archaeology 2012). These cuts have affected functioning and programmes in Quebec City and across the country but their full impact has yet to be measured. The provincial government also works in partnership with other organizations such as the CCNQ and the City of Quebec. The City, for its part, has undertaken research on several major sites, such as the *Séminaire de Québec*, *Îlot Hunt* (or Hunt Block) and the *Îlot des Palais* (or Intendant’s Palace). *Université Laval* has carried out research on a number of sites in collaboration with the City in the context of the university’s annual field school. This synergy has generated important results, the most recent example being a roundup of research in the context of the 400th anniversary of the founding of the city in 2008 (Moss 2009b). All of these sites are an important part of the regional economy, which is largely based on tourism (ranking second after government).

The City administration itself has had an active archaeological programme since the eve of the listing of the Old Town Historic District on the UNESCO World Heritage Sites list in 1985, at which time it created a City Archaeologist’s position, the first of its kind in Canada. The City has vigorously promoted a collaborative approach in partnership with a number of institutional and corporate partners. The approach is characterized by the concept of “*vivre ensemble*” or “living together”, which is fundamentally important in an urban context where archaeologists, town planners, promoters and whole populations must live, work and advance into the future together.¹ The most penetrating examples of this are the City’s long-standing collaborations with the provincial government’s MCC and with *Université Laval*.

¹Dufay et al. (2014: 3) describe “*vivre-ensemble*” as: “Ce territoire si particulier, où se succèdent et cohabitent des populations diverses, est par définition le siège du ‘*vivre ensemble*’”.

Under the *Cultural Properties Act*, which preceded the 2012 Cultural Heritage Act, the bulk of the City's actions was carried out within the terms of a series of memoranda of agreement concluded with the provincial MCC beginning in 1979. Known as the *Ententes sur le développement culturel*, these long-term memoranda of agreement (for five- or, more recently, three-year periods) covered a wide range of cultural and heritage projects, including archaeological research and site interpretation. The orientations and programmes were identified by each agreement, and projects were elaborated through yearly, jointly approved programming. Costs were shared on a 50/50 basis between the provincial MCC and the City of Quebec. Though archaeology was only a very small portion of each memorandum of agreement's objectives and concomitant budgets, the availability of funds guaranteed on an annual basis greatly enhanced the City's capacity for action. It also allowed development of new projects and perspectives that went beyond the simple rescue of sites and data, contrary to what often occurs in urban development projects.

Development projects for historic districts were submitted to the City Archaeologist by the City's planning department and the respective boroughs. The nature and scope of research, site protection and site interpretation were negotiated with project promoters by the City Archaeologist. Research was carried out by the City's archaeological team or with private contractors mandated and funded by the City within the annual budget of each *Entente sur le développement culturel*. Public utilities companies, such as Hydro-Québec, are responsible for their respective projects within the historic districts. Hydro-Québec has an active team of archaeologists who have assured a strong presence in all the organization's projects, be they inside the limits of historic districts or not. Provincial government agencies, such as the CCNQ, are also responsible for their projects. The CCNQ contracted with the City's archaeological team to carry out research and, more recently, has mounted research teams for specific projects such as the well-known sixteenth-century Cartier-Roberval Site (Moss 2009b). All research was subject to permitting and quality control by the MCC under provisions of provincial heritage legislation.

The City and *Université Laval* have been particularly close partners and have worked together without interruption since 1982. They have concluded a series of memoranda of agreement mirroring the *Ententes sur le développement culturel* since 1985. These memoranda offer financial and technical support to the university's field school, which has been held on a municipal property since 1982 (Fig. 7.3), except for a brief period when it was held on the Hunt Block (Roy 2012). This collaboration has notably produced a series of publications by Laval students and City-mandated archaeologists in the series *Les cahiers d'archéologie du CÉLAT* as well as in earlier series.² *Université Laval* developed an ecosystemic model for use by the City to orient research on major and minor sites in the context of urban infrastructure programmes in an early agreement between the two organizations (L'Anglais 1994). This model is due for updating, but it has fostered

²The CÉLAT's web page provides a full list of these publications: www.celat.ulaval.ca/recherches-2/publications/cahiers-darcheologie-du-celat/.



Fig. 7.3 The City of Quebec and *Université Laval* have collaborated on the university’s field school since 1982. The *Palais de l’intendant* site, shown here, has undergone extensive research. (Photograph courtesy of *Université Laval*.)

internal coherence amongst initially disparate small-scale projects in different parts of the city (Moussette and Moss 2010). The City Archaeologist and the university’s faculty responsible for the long-term agreements supporting the field school are members of the CÉLAT, and their collaboration is fully congruent with the central “*vivre ensemble*” concept for the CÉLAT’s research activities. The City programme has obtained considerable scientific results. Examples of early research projects carried out on private properties with the collaboration of owners include the *Séminaire de Québec* (Moss 2005; Simoneau 2008a), the Anglican Cathedral (Rouleau et al. 1998b) and the *Auberge Saint-Antoine*, also known as the Hunt Block (Simoneau 2008b). General overviews of these and other projects can be consulted in several publications (see Auger and Moss 2001, 2009b; Rouleau 2014). The university’s CÉLAT research centre adopted “*vivre ensemble*” as its central research focus in 2009 (CÉLAT 2009; see also Moss 2009a).

Public Benefits

There have been many benefits to the community. One project in particular, the *Auberge Saint-Antoine* hotel complex developed by a private owner in the heart of the Old Town Historic District, has had considerable tourist benefits. *Université*



Fig. 7.4 The *Auberge Saint-Antoine* has archaeological interpretive modules throughout the public and private parts of the hotel complex. *Université Laval* held its archaeological field school on this property, the Hunt Block site, from 1993 to 1996. (Photograph by Victor Diaz Lamich; courtesy of the *Auberge Saint-Antoine*.)

Laval held its field school on this site from 1992 to 1996 with the support of the *Entente de développement culturel*. The university continued to participate in the development of the project during the hotel's expansion in 2000. Though this was entirely a private sector initiative, both the City and the Province worked closely with the developer to ensure the harmonious integration of the new construction into the historic fabric of the Old Town. The very rich archaeological heritage of the site was fully integrated into the design concept of the complex which is considered as an archaeological hotel.³ Vestiges and interpretive displays are open to the general public in several areas of the hotel such as the lobby, the conference zone, the *Artefact Café* and hallways (Fig. 7.4). Each of the six floors in the complex is associated with a period and an historical figure linked to the site. Special artefact displays representing the appropriate period are placed in controlled-access portions of the hotel, such as elevators and room-block corridors; custom-designed furniture displays artefacts from the corresponding period in each room. A publication for the general public prepared on the project (Lapointe 2007) complements several scientific publications prepared on this site (Cloutier 2006; Rouleau et al. 1998a;

³The hotel's web page provides ample examples of this: www.saint-antoine.com/en/hotel.

Simoneau 2008a). The City has further contributed to this project by marking three former states of the St. Lawrence River shoreline in the street pavement besides the stabilized ruins of stone wharves from the eighteenth century. The *Auberge Saint-Antoine* is routinely cited as an example of private–public collaboration for archaeological heritage promotion in Quebec, and it can be seen as an innovative fusion of placemaking and commercial development. Apart from a long series of awards from the hotel industry (Auberge Saint-Antoine 2015), the *Auberge Saint-Antoine* won the prestigious Heritage Canada The National Trust *National Achievement Award* in 2008, notably “...for the restoration of its hotel and museum, and its commitment to heritage conservation ... to incorporate and display the artefacts found on the site during the eight-year archeological dig. Used as a cannon battery in wartime and a centre of merchant trade in peace time, the site, known as Îlot Hunt, produced an array of artefacts that can now be seen in the Auberge’s museum” (Heritage Canada The National Trust 2008).

Several other sites have been developed and interpreted for the public by the City under the terms of the *Ententes sur le développement culturel*. Projects are based on intensive research on each site, and they are developed as a part of a general movement of placemaking and, more generally, public education. Several municipal departments participate in these projects, particularly the *Service de l’aménagement et du développement urbain*, the equivalent of a planning division, and the *Service de la culture* which has a mandate to interpret the city’s rich heritage for the public. The massive ruins of the church *Notre-Dame-de-la-Foy* in Sainte-Foy, now the *Parc de la Visitation* Historical Site, have been stabilized and are used for open-air concerts (Fig. 7.5). Another park, the *Parc du Vieux-Passage* in the Limoilou district, contains a scaled-down reconstruction of a temporary fortification, a bridgehead hastily constructed in 1759 to prevent the invading British from crossing the Saint-Charles River and reaching the fortified Upper Town. This reconstruction is Lower Town’s response to Upper Town’s citadel, and it sets a contemporary heritage project squarely in the middle of well-known sociological debates going back to the nineteenth century when Lower Town was considered as being on the wrong side of the tracks! Another display module interprets the results of excavations on the site of Royal shipyards and nineteenth-century markets at the entrance of the *Gare du Palais* multimodal train station, one of the principal points of entry to the city’s tourist area (Fig. 7.6). The station is a stone’s throw from the *Îlot des Palais* archaeological site, *Université Laval*’s Intendant’s Palace field school. An archaeological interpretation centre was opened in 2014 on the *Îlot des Palais*, a municipal property, by a heritage association affiliated with the City.

Interpretive modules have been installed in *Place D’Youville*, a public square situated at another entrance to the Old Town Historic District in front of the eighteenth-century ramparts so characteristic of the fortified city. These modules were first constructed by the City in 1989 on the site of the town’s first suburb, and they presented artefacts recovered during 1986 and 1987 research on artisans living just outside the city walls in the eighteenth century. The modules were refurbished in 2014 to showcase the contribution archaeological research has made to knowledge of the



Fig. 7.5 The ruins of a burned-out church have been stabilized and developed as an open-air interpretive site, the *Parc de la Visitation*. (Photograph by Robert Greffard; courtesy of the *Ville de Québec*.)



Fig. 7.6 Archaeological interpretive modules have been placed in two public squares at important entry points to the Old Town Historic District, *Place D'Youville* in front of the ramparts and *Place de la Gare* in front of the intermodal train station. (Photographs by Chantal Gagnon and Robert Greffard; courtesy of the *Ville de Québec*.)

UNESCO World Heritage Site (Fig. 7.6). Another module, completed in 2014 in the Charlesbourg Historic District's *Parc du Sacré-Coeur*, was constructed at the request of the parish's heritage committee and the borough council to commemorate the town's first church (Fig. 7.7). This collaborative project involving the City's borough council and the parish council, designed by City personnel including architects, landscape architects and archaeologists, has produced a large-scale open-air evocation of the church. It was designed in a manner to protect the very rich subsurface of the park, including the archaeologically located vestiges of the church, the remains of hundreds of early parishioners still buried in the now-forgotten cemetery and the root structure of mature urban trees.

Another project took collaborative efforts with local groups, a step beyond what had been achieved in the past. The City of Quebec worked in close partnership with several local organizations while improving the public space surrounding the *Nativité de Notre-Dame de Beauport* church in the heart of the Beauport Historic District (Fig. 7.8). The City worked with the parish council and the local historical society, the *Société d'art et d'histoire de Beauport*, to design the new public space and the monument erected in honour of the founding families of one of New France's first communities. The *Société d'art et d'histoire de Beauport* assumed the role of promoter for the archaeological research project, hiring archaeologists and crews over three years for stratigraphic excavations and watching briefs monitoring



Fig. 7.7 The City installed a full-scale module over the vestiges of a former village's first church in *Parc du Sacré-Cœur* at the heart of the Charlesbourg Historic District. (Photograph by Robert Greffard; courtesy of the *Ville de Québec*.)



Fig. 7.8 The local *Société d'art et d'histoire de Beauport* carried out several seasons of excavation on the site of the Beauport Historic District's first church, *Notre-Dame-de-la-Nativité de Beauport*. (Photograph by Christian Dionne; courtesy of the *Société d'art et d'histoire de Beauport*.)

construction activities. A general synthesis of three years of research on the site was produced by the *Société* in 2014 (Roy 2014). All of the preceding projects were financed by the memorandum of agreement between the City and the province's MCC.

Finally, the City has budgeted \$1.5 M over 2015 and 2016 to create a new archaeology laboratory and collections reserve adjacent to *Université Laval*'s complex of seven archaeological laboratories, the *Laboratoires d'archéologie*, in a historic building in the Old Town Historic District. Prior to that time, such services were made available by the MCC in the province's *Laboratoire et Réserve archéologiques du Québec*.

The City and the 2012 *Cultural Heritage Act*

The new *Cultural Heritage Act* will be a major game-changer, and the *Ententes sur le développement culturel* will be modified in the context of the new Act, especially given the MCC's expectation that municipalities will implement a compliance-driven approach to preventive archaeology. The City of Quebec has adopted a proactive position in order to assure continuity with past successes and newly created traditions. The City will continue fostering stewardship through partnerships with community heritage groups, enhancing the knowledge base through research on minor sites and supporting site development and interpretation in both public and private projects. Quebec City fully intends to consolidate 25 years of achievements while implementing the new legislation.

The City is notably preparing the adoption of a bylaw congruent with section 150 of the new Act. It is hoped that funds traditionally available in the memoranda of agreement can be used to support projects carried out by private citizens or small-scale developers under the new programmes. Though not required to do so by law, the City of Quebec archaeological team is preparing an archaeological master plan to underpin the proposed bylaw. This plan will be integrated into the corporate GIS-based management system.

The master plan is based on a database of over 900 sites in the province's *Inventaire des sites archéologiques du Québec* (MCC 2014) and series of potential archaeological sites identified through predictive modelling. The identification of potential Aboriginal prehistoric-period occupation sites is based on environmental data: distance from sources of water, slope (less than 10%), soil drainage and land-disturbing activities. Over 1000 potential sites have been selected for future examination (Plourde 2013). Historic-period sites are identified through various documents including very abundant historic maps, written sources and reports about the history of the city. Over 15,000 potential sites have been identified. This number was reduced by applying a series of criteria to the whole territory and by tailoring them to each borough and to each of the four historic districts. Fourteen chronological periods ranging from 1500 to 1940 were identified, and 17 functional categories were applied. The methodology and preliminary results were validated by a scientific committee made up of the City's archaeological team, *Université Laval* archaeologists and MCC personnel. Archaeologists from Hydro-Québec, Parks Canada and designated consulting firms participated on an ad hoc basis. The master plan, named *Système intégré de gestion en matière d'archéologie* (SIGMA), is an open system; new data can be added or existing data corrected at any time (Simoneau 2011, 2014).

The City is currently considering the creation of zones of heritage interest as per new powers offered through section 150 of the *Cultural Heritage Act*. This will permit the subsequent adoption of a bylaw specifying the type of control that can be exercised through the permitting system to ensure the protection of archaeological heritage resources.

The efficacious application of an archaeological bylaw and the full use of the archaeological master plan will require policy and programmes fostering public interest and promoting participation in the process. As the Act does not ascribe financial responsibility to any particular actor in this context, the City has deemed it important to respect the financial capacity of property owners. The City Archaeologist is thus drafting a programme offering financial support for small-scale property owners or promoters to accept these responsibilities. Otherwise, it will be the responsibility of the promoter to assume all associated costs, which would in all likelihood impose a political barrier to the implementation of the desired approach.

The management system is being implemented through 2018. It will be integrated with the electronic permitting system already in place throughout the municipal administration. Each concerned department is advised of requests for building permits and can apply its restrictions before issuance. It is foreseen that the archaeological component of the permit analysis process will be applied in two manners depending on the status of the territory concerned under the *Cultural Heritage Act*. Firstly, any construction project requiring ground-breaking activities within the four heritage districts will be analysed by the City Archaeologist, and the project promoter will be required to undertake mitigation as defined by the provincial government archaeologists. Secondly and elsewhere, any construction project requiring ground-breaking activities on specific sites outside of the historic districts will be subject to analysis and mitigation as defined by a municipal archaeologist. The bylaw should be implemented through 2018.

Using the system will require the presence of an archaeologist to evaluate construction projects in real time. The SIGMA database sorts projects on the basis of preliminary criteria, but actions to be taken are defined by an in-house professional. All projects from the four historic districts involving excavation and projects from selected sites outside of these districts will be submitted for analysis by the City Archaeologist to determine what type of archaeological fieldwork may be required.

Under the *Cultural Heritage Act*, it is mandatory to report any and all finds to the government. Also, an individual must have a permit to undertake research. This will, in principle, ensure that no projects or excavations will be undertaken outside of the system. But will the manpower and the political be there to enforce this? Another problem is entailed by the difficulty of ensuring the coherence of professional and scientific actions done under the system. With multiple actors come multiple approaches. Only provincial staff enforcing the current permitting system can counterbalance these centrifugal tendencies, especially in the absence of methodological guidelines on the part of the MCC.

In short, the integration of this new approach and the application of the tools necessary to its working are a new and major stake in the management, protection and development of archaeological heritage resources in Quebec City. By continuing to provide financial and technical support to private and corporate citizens, the City expects to be able to consolidate past successes with new approaches.

Conclusion

The 2012 *Cultural Heritage Act* recently changed some, but not all, aspects of archaeological practice in the province. The Act extends a tradition stemming from legislation adopted in France in 1941. Though France recently modified its archaeological legislation to conform to the 1992 *European Convention on the Protection of the Archaeological Heritage*, revision of Quebec's 1972 *Cultural Property Act* did not follow the same path. Nor did it integrate the precepts of planning-driven approaches adopted by neighbouring Anglo-Saxon provinces through the 1990s. The new legislation offers the possibility to willing municipalities to protect archaeological heritage through the permitting process within heritage zones, particularly within provincially constituted heritage districts. The provincial government expects that municipalities will apply an admixture of these different approaches by adopting bylaws controlling building permits. In response to the new law and with a view to being proactive, the City of Quebec has developed an archaeological master plan based on the SIGMA database and is currently developing a bylaw in conformity with elective provisions of the new law. The City also intends to develop a joint programme with the MCC in order to offer financial support to selected projects. The City intends to consolidate archaeological heritage management and site development within the new legislative context by building on a quarter century of achievements. The City intends to maintain partnerships with private and corporate citizens and to foster the archaeological contribution to the process of placemaking, site development and resource protection in one of North America's premier heritage cities.

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Chapter 8

Archaeology Down Under: Management and Outcomes in the First State in Australia

Siobhán Lavelle

Introduction

This chapter examines the management of historical archaeology in the Australian state of New South Wales (NSW) and its capital city of Sydney. Australia is a federation of six states, each of which was until 1901 a separate British Colony. The states—New South Wales, Victoria, Queensland, Western Australia, South Australia and Tasmania—each have their own governments, and there are also two self-governing territories, the Northern Territory and the Australian Capital Territory. The federal Australian government is known as the Commonwealth of Australia. Each of these jurisdictions has separate legislation related to the management of cultural heritage; this is considered further shortly.

NSW was the location of the first British Colony on the continent in 1788. Within the state, there are 129 local government areas designated as cities, municipalities and shires. These local Councils are concerned with matters such as building regulations and development, public health, local roads and footpaths, parks and playing fields, libraries, local environmental issues, waste disposal and other community services. Local government has some heritage responsibility through the process of including heritage items or places within planning instruments (local environmental plans).

The NSW Heritage Council has worked with various local government authorities on collaborative day-to-day management of development proposals within key towns and cities where these may encounter significant historical archaeological sites. Sydney does not have a city archaeology programme, but other strategies for managing the city's archaeology are discussed below. For nearly 40 years, there has been legislation to protect historical archaeology in NSW, but this has not always resulted in protection or best practice outcomes, and this chapter

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will discuss examples of both success and failure. An important strategy has been the preparation of Archaeological Zoning or Management Plans for early settlement areas and also management across the heritage and planning systems. This is important because although archaeological sites may be identified and scheduled by local government it is the state authority which retains responsibility for management of archaeology through the issuing of permits to excavate and investigate, or ultimately remove, sites. As might be expected there are different levels of capacity, resourcing, political will and interest in the management of archaeology within the sphere of local government. In many areas, there remain opportunities for increased collaboration and enhancement of archaeological outcomes, some of which will be foreshadowed in this chapter.

Early Concerns and Initial Legislation

In NSW, concern for historic sites and relics grew in parallel with the conservation movement as a whole. There were preservation and recording efforts from the early to mid-twentieth century with the formation of private organisations such as the Royal Australian Historical Society (1901) and the NSW National Trust (1945), both concerned with the disappearance of historic buildings and early landmarks due to the march of progress. In the 1970s when historic heritage legislation emerged, national achievement was observed through the lens of white, universalist and progressivist history.

NSW is Australia's oldest state, and it still has the largest population and economy (7.3 million of 23.13 million people; \$320 billion or about 33% of Australia's GDP; 10.4% of Australia's land area) (Australian Bureau of Statistics 2015). In 1770, the HMS *Endeavour*, captained by Lieutenant James Cook, sailed into Botany Bay where Cook claimed dominion over the territory for Great Britain under the name 'New South Wales'. The arrival of the First Fleet in January 1788 led by Governor Arthur Phillip established the first European settlement (or invasion) in what is now Sydney. The colony became a state in 1901 after Australia was proclaimed a nation.

Australia's six states and two territory governments all have legislative responsibility for the management of significant cultural places. Most legislation was enacted in the 1960s and 1970s initially to protect 'Aboriginal sites' and 'relics' as the artefacts of a (presumed) vanished culture or way of life. Legislation to protect non-indigenous or historic sites and heritage places came slightly later, in some states not until the 1990s. A corollary of the legislation was the subsequent creation of government agencies and management positions.

The Commonwealth Australian Heritage Commission was established under the Australian Heritage Commission Act, 1975 (Commonwealth). It was followed in New South Wales by the Heritage Council, established under the NSW Heritage Act, 1977. The Heritage Council is a government statutory body appointed by the relevant Minister—either environment, planning or (rarely) heritage, subject to the

political and administrative tides of the time. The Council is comprised of experts in specified fields—such as archaeology, architecture, Aboriginal heritage, planning, cultural landscapes; government representatives; and a nominee of the NSW branch of the National Trust of Australia (NSW Heritage Act 1977, Section 8). A small specialised staff was also established to provide the administration and assessment needed for the Heritage Council to operate, with skills in architecture, town planning, landscape architecture, engineering, history and historical archaeology. Although its staff has migrated between different departments and ministerial portfolios, the Heritage Council of NSW has been a constant presence since the commencement of the Heritage Act. This has allowed for reasonably consistent policy directions and application, despite different administrative arrangements.

Although local government has responsibility for the approval of new development, this tier of government does not manage or resource archaeology, even where sites are likely to be encountered. As will be discussed shortly, there are no municipal- or city-based archaeological units or programmes in NSW or Australia. Despite this, there have been important projects and findings, made in the early and foundational towns and cities in the state of NSW. These have occurred since the commencement of the Heritage Act, and several examples indicate that leadership by the NSW state government has been important in resourcing major excavation programmes. These were important in generating the idea of public archaeology as a process where the public can see, experience and understand key archaeological findings, especially the significant archaeology of the city of Sydney, the Colonial foundation capital of NSW.

Colonial Sites in Sydney

Soon after the commencement of the NSW Heritage Act, excavations of very significant sites occurred with permits issued under the new Act. An early case was Hyde Park Barracks (1817–1819) where one of Sydney's first large public archaeological excavation programmes began in 1980 after a NSW Government decision to make this building a public museum. As restoration works began, artefacts were revealed under the floors of the main building and within the grounds of the compound. Opened to the public as a Museum in 1984, the Barracks is one of 11 historic places that form the Australian Convict Sites UNESCO World Heritage property (World Heritage Convention 2015, p. 1306).

A site that came to public attention in the same era—the first decade of the Heritage Act—was that of the First Government House at the corner of Bridge and Phillip Streets in Sydney. In 1982, the NSW Government invited proposals to develop the site with a 38-storey building. An historic memorial noted this as the site where Arthur Phillip and successive governors including Hunter, King, Bligh, Macquarie, Darling and Bourke, administered the colony from 1788 to 1845. The Heritage Council requested investigation to assess whether any remains of the House were present, and in early 1983 a two-week excavation and initial historic

report were completed. More archaeology directed by Anne Bickford took place throughout 1983 and 1984. In 1985, it was announced by the NSW Premier, Neville Wran, that the site would be conserved and that there would be an architectural design competition. The Museum of Sydney on the First Government House site was opened to the public by the (government) Historic Houses Trust in 1995 (Sydney Living Museums2015).

These were important early initiatives by the state government, which funded the costs of the archaeology; \$80,000 for Hyde Park Barracks and \$400,000 for First Government House (Temple 1988, p. 1). There were additional hidden costs from forgone development, completion of in-house work by government agencies or staff and subsequent reporting and publication costs.

In the same era as the Heritage Act, broader environmental concerns were also reflected in New South Wales in the cognate *Environmental Planning and Assessment Act, 1979* (EP&A Act). The EP&A Act controls land-use planning and development by establishing the need for zoning, permissions, factors to be considered in relation to development—including environmental, social and economic factors—and penalties. The EP&A Act also establishes Local Environmental Plans, which usually include a Heritage Schedule listing those places and items assessed to be of local significance.

The National Level

After a series of events saw the Commonwealth government using its powers to regulate environmental issues where particular States had a major stake, the Council of Australian Governments 1997 Heads of Agreement on Commonwealth/State Roles and Responsibilities for the Environment formalised a national partnership between all levels of government on environment issues based on principles of cooperation and minimisation of duplication and overlap between governments. The Agreement stated that policy, programmes and decision-making should be the responsibility of the level of government best placed to deliver agreed outcomes (Council of Australian Governments 1997).

One consequence of the 1997 COAG agreement was the repeal of the 1975 Australian Heritage Commission Act and new legislation, the Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth). This resulted in devolution of many heritage functions to the States, through the implementation of bilateral agreements, which is in line with the federal principle of subsidiarity, whereby responsibility lies with the lowest level of government possible.

The Local Level

In Australia, local government—Municipal, Shire or City Councils—is usually described as the third tier of government (below Federal/Commonwealth and State government). However, local government is not formally recognised within Australia’s federal system, and there has been little interest in providing formal constitutional recognition for it. Local government may act only to the extent that a State legislature grants it the power to do so. States do regularly grant local authorities power, in recognition that they have responsibility for development and implementation of relevant policies at the local level.

Currently, NSW has 129 local government areas, plus unincorporated lands, islands and waterways. Heritage is managed at local government level by Local Environmental Plans (LEPs) made under the NSW EP&A Act, 1979, which include schedules or lists of heritage items and heritage maps. Archaeological sites may be included in local heritage schedules, although this is still relatively rare (approximately 7% of scheduled sites). All scheduled items are protected and managed by the heritage provisions included in the planning instrument, which generally require lodging of applications to seek consent for major changes or development.

The NSW Government initiated the Standard Instrument LEP Program in 2006 to create a common format and content for LEPs. This was intended to simplify the plan making system in NSW by providing a standard approach as a response to an increasingly complex local planning system with many plans and diverse approaches. Standard LEPs and ‘model provisions’ require that an LEP shall contain provisions that facilitate the conservation of: items, places, buildings, works, relics, moveable objects or precincts of environmental heritage significance to an area, in relation to the historical, scientific, cultural, social, archaeological, architectural, natural or aesthetic value of the item, area, object or place, identified in a study of the environmental heritage of the area. There are also requirements to address Aboriginal objects or Aboriginal places that are protected under the NSW National Parks and Wildlife Act 1974, which manages Aboriginal cultural heritage (NSW Planning & Environment, Standard Instrument Local Environmental Plan (LEP) Program 2015).

The NSW Heritage Act and Archaeology

The NSW Heritage Act 1977 (as amended) protects the State’s natural and cultural heritage, and it also contains broad measures to protect historical archaeological relics, effectively the study of the British colonisation and subsequent occupation of NSW after 1788 AD. Aboriginal archaeology is specifically excluded as it is managed under separate legislation, the NSW National Parks and Wildlife Act, 1974. This may change in future as work is currently underway within government

to progress Aboriginal cultural heritage reform (NSW Office of Environment and Heritage 2015a).

The purpose of the Heritage Act is to conserve the environmental heritage of the State, which is defined as: ‘those places, buildings, works, relics, moveable objects, and precincts, of State or local heritage significance’ (Heritage Act, Section 4). State heritage protection includes listing on the NSW State Heritage Register and provisions for the making of Interim Heritage Orders or Emergency (stop work) orders. The effect of listing on the State Heritage Register is that a person cannot damage, destroy, alter or move the item, building or land without approval from the Heritage Council. Less than three per cent of approximately 1700 items on the State Heritage Register are archaeological sites, but the legislation’s ‘relics’ provisions provide another means of protecting unlisted sites.

The ‘relics’ provisions apply to all land in NSW whether in public or private ownership and exist separately from and in addition to, the controls for land which is listed on the State Heritage Register. This has provided an unusual situation whereby archaeology on public and private land is managed by the state agency whether it is of State or local heritage significance.

The ‘relics’ provisions require an excavation permit to be obtained if the person knows, or has reasonable cause to suspect that they might discover, expose, move, damage or destroy a relic (Heritage Act, Part 6, Division 9, Sections 139–146). Under the Heritage Act, relics are: ‘any deposit, object or material evidence which relates to the settlement of the area that comprises New South Wales, not being Aboriginal settlement, and which is of State or local heritage significance’. This particular definition is the product of relatively recent amendments made in 2009. In the 1977 Act, a relic was time-limited to material dated ‘prior to the 1st of January 1900’; in 1987, amendments changed the timeframe to ‘50 or more years old’.

In 2007 when a government-appointed expert panel reviewed the Heritage Act, it made comments and recommendations regarding the archaeological ‘relics’ provisions. The panel noted that submissions by consultant archaeologists considered the provisions essential to the maintenance of archaeology and heritage in the State because many archaeological sites of State significance are not on the State Heritage Register (Independent Expert Panel 2007, p. 7). The expert panel, however, expressed concern that:

To obtain an excavation permit, an applicant is required to prepare an Archaeological Assessment and a “Research Design”, which sets out the methodology and rationale for the proposed excavation. The preparation of these reports in addition to the excavation itself can have a substantial time and cost impost on a project and in many circumstances does not appear to result in any tangible benefit to the community (Independent Expert Panel 2007, p. 77).

The panel also commented ‘it was not the original intent of the Act to capture such a broad range of potential ‘relics’; rather, the intent was to ensure archaeological places of significance to the State were recognised and investigated’ (Independent Expert Panel 2007, p. 78). The definition was amended in 2009 to refer to significance rather than age, in accordance with the review’s recommendations (Heritage Council of NSW 2009a).

As an example, if a private developer wants to build a new office tower with basement car parking in an area where it is known or suspected that there is a likelihood of historical archaeological ‘relics’ present, then a permit under the Heritage Act would be required to affect those relics. In practice unless the site is on the State Heritage Register, local government will be responsible for approval of the development application. They may or may not require an Archaeological Assessment report as part of the application, although this is encouraged by the state agency. Many local governments issue development consent with conditions that require the necessary permits under the NSW Heritage Act to be obtained later, for example prior to the issue of a construction certificate for the building. By the time the state agency is contacted about an archaeology permit, consent may already be issued for the new building. The developer may believe they have the ‘go-ahead’ in the form of a valid consent for the new building, but at this point the NSW Heritage Act will require an Archaeological Assessment and Research Design to accompany a permit application. These will usually be prepared by private contract archaeology firms. The documentation submitted will be reviewed by the state agency archaeologists, and there may be a need for amendments to proposed methodologies or requests for additional work and information. Frequently, the opportunity for early discussion about in situ conservation or other alternatives will have passed, often due to the holding costs and other financial arrangements for a project.

In other cases, development approval may have been given by local government without any indication that historical archaeology may be present on a site. Excavation commences and once the project, its timelines and finance are on a critical path, archaeology emerges and then must be dealt with as a matter of urgency. A permit must be sought to continue. In these scenarios, it is even more difficult to get comprehensive and considered outcomes. As a response for many years, the NSW Heritage Council has provided funds for predictive studies such as Archaeological Management Plans to enhance the available knowledge about the likelihood of archaeology being present and needing to be addressed as part of development.

The City of Sydney

New South Wales does not have any city-, municipal- or shire-based archaeologists. The City of Sydney employed a full-time archaeologist from 1997 to 2001, which changed to a part-time contract position before disappearing. Sydney City’s annual income is reported at more than \$500 million, with an operating surplus of more than \$110 million; however, the categories of heritage or archaeology do not specifically feature in the City’s annual reports. There is a small team of heritage specialists (no archaeologists) within the heritage planning team that assesses development applications. This usually means decisions affecting archaeology are made by non-archaeologists. In cases where an Archaeological Zoning Plan identifies the site, the city planners might consult an archaeologist at the state level but this is not routine.



Fig. 8.1 Members of the public queuing for the open day at Sydney Town Hall in January 2008 (Photograph S. Lavelle)

The City of Sydney Town Hall is built upon the site of the Old Sydney Burial Ground dating back to the 1790s. In 1869, the site was acquired by the City and all graves which could be found were exhumed, with the remains transferred to the new Rookwood Necropolis, west of the central business district. Remains of burials and coffins have periodically been found during ground disturbance works. In 2007, works to the Lower Town Hall necessitated an archaeological salvage excavation, completed by Casey and Lowe Pty Ltd, which found remnants of more than 60 graves (Casey and Lowe Pty Ltd 2008). Public interest was manifest when 3000 people queued for up to 1½ hours to visit the site during the Open Day on 22 January 2008 (see Fig. 8.1).

The Rocks

Some NSW government agencies employ archaeologists in-house, but these professionals tend to coordinate advice within the agency regarding its own work programmes or heritage requirements; very few engage in ‘hands-on’ archaeological work or public interpretation. A notable exception is the Sydney Harbour Foreshore Authority (SHFA) which functions somewhat like a local government

body in that it is a small agency tasked with the management of a specific geographical land area. It funds its own operations principally from rental and other property income, with an annual income just below \$300 million and 140 employees. The Authority directly manages about 100 State-listed heritage items and spends around \$10 million for property-/heritage-related capital works each year (SHFA 2014). A small archaeology team, led by Dr. Wayne Johnson since 1993, also conducts public outreach archaeology programmes and ensures on-site interpretation of archaeological results.

SHFA has directly undertaken a number of archaeological projects including excavations at Dawes Point Battery in 1995, 1999 and 2000 (Johnson 1998). This was the site of Sydney's first fortification shortly after the arrival of the First Fleet. Extensive remains, including two underground rooms for storing gunpowder, were incorporated into a redesign of the public park. The Dawes Point Battery is now on the State Heritage Register (NSW Office of Environment and Heritage 2015b). There are other interpreted sites and public art, and The Rocks also features a purpose-built Discovery Museum opened in 2005 in a restored 1850s warehouse. The museum houses a unique collection of images and archaeological artefacts found in the area. It receives 125,000 visitors per year (SHFA 2014).

The most spectacular project in The Rocks has been the adaptive reuse and redevelopment of a key archaeological site into a Youth Hostel. Dating from 1795, the Cumberland Street Archaeological Site is listed on the State Heritage Register (SHR number 1845) for its outstanding cultural significance as rare surviving evidence of the mostly convict and ex-convict community established on The Rocks at the time of Australia's first European settlement. The site contains remains of 46 historic houses, two lanes and other features on two early Sydney town lots. Excavation undertaken by Godden Mackay Logan Pty Ltd in 1994 recorded structural remains and recovered over 750,000 artefacts (Godden Mackay Logan, Astarte Resources, & Historic Houses Trust 2000). About 30% of the site was left unexcavated at that time (Crook et al. 2003).

In 2006, SHFA called for development proposals for the site. The winning proposal was by Youth Hostels Australia for a state-of-the-art, energy-efficient 106-room hostel and education centre. Construction of Sydney Harbour YHA and The Big Dig Archaeology Education Centre took place in 2008–2009. The buildings are supported by structural-steel trusses spanning over the archaeological remains, allowing over 85% of the site to be visible at ground level. Cleverly designed grouped column bases limit the physical impacts on the site; the original laneways were reinstated as thoroughfares through the building and site, voids within the building allow views of the archaeology, and the Big Dig building is used for education about the site (see Figs. 8.2 and 8.3) (NSW Office of Environment and Heritage 2015c).

Although outstanding as an adaptive reuse, the YHA development was a rather unusual model, which will not be easily replicated on other archaeological sites. One key factor is the type of development. The hostel style accommodation has clustered central services (communal kitchens and bathrooms), and as the main market is independent travellers, there was no need for provision of car parking.



Fig. 8.2 The Big Dig Archaeology Education Centre, part of the new YHA at The Rocks, Sydney (Photograph S. Lavelle)

Both these factors meant that excavation into the site was limited. Another key factor was that the YHA is a not-for-profit organisation and was interested in innovative design and public outcomes for the site (Godden Mackay Logan 2014). In July 2016 SHFA was amalgamated into a larger agency, Property NSW, as part of a whole of government approach to property management.

The Push for Public Outcomes

In New South Wales, due to an absence of government-funded archaeology units, actual fieldwork projects are usually delivered by consultant archaeology companies as part of development consents. As evidenced by the submissions to the 2007 Heritage Act review, for many consultants, a scientific paradigm of archaeology being essential to recover ‘evidence’ of the past in an ‘objective’ way is sufficient justification for their existence and simultaneously for the ‘relics’ provisions. By contrast, the incumbents of the public archaeology jobs in the State regulatory agency have consistently displayed considerable anxiety that the archaeology emperor enshrined within the state legislation might be found to have little or no clothes (Temple 1989, p. 5).



Fig. 8.3 The YHA building, supported on grouped columns above the ground-level archaeology, The Rocks, Sydney (*Photograph S. Lavelle*)

In 1985, the first NSW state archaeologist, Helen Temple, completed a study tour of the USA and the UK to examine aspects of the management and protection of historic and archaeological sites. She suggested the development of (government) urban archaeological field teams; more publicly oriented site investigations/excavations/interpretation; and the need for a specific organisation to curate collections of archaeological relics from historic sites and provide research facilities (Temple 1987, p. 4). In 1988, Temple wrote: ‘Historical Archaeology in NSW must be publicly oriented and accountable. ...The public pays, directly or indirectly, for archaeological research; it deserves to know whether the expenditure is justified’ (Temple 1988, p. 2). Nearly 30 years later, few of these have been delivered. Artefact storage and on-site interpretation are now addressed through statutory conditions attached to site-specific excavation permits. This remains, however, a limited approach both spatially and temporally. It might be regarded as an interim rather than a definitive solution. Whilst each permit will require that how and where the artefacts have been catalogued and stored is documented, there is no agreed system (each firm can use its own) and no central repository where artefacts can be made available for future researchers. In practice, several contract firms have formed links with universities, and in those cases major collections will be stored and accessed by students.

In 2002, state archaeologist Natalie Vinton undertook a ‘public archaeology’ tour to the USA. Programmes and practices were again examined for their relevance and application to NSW, with a particular eye on the potential economic, tourism, cultural and educational benefits of archaeology for cities and local communities (Vinton 2002). Insights gained on this tour were used to promote public outcomes. Site interpretation became routinely included as a consent condition on archaeological permits issued by the NSW Heritage Council from 2003 onwards. This is usually in the form of permanent signs or panels which include descriptive text, historic images and photographs or graphics related to the archaeological findings. Permits may also require websites where archaeological reports can be hosted, open days, and occasionally public talks by the site archaeologist. Talks or lectures would usually be timed to coincide with National Archaeology Week, which is a relatively recent initiative in NSW organised by a small committee of archaeology professionals and held in the third week of May each year. It has a Facebook page that lists events.

The Quadrant

Significant in the early 2000s was the Quadrant site in Ultimo which occupied two full city blocks on the fringes of the Sydney CBD. Excavation directed by consultant archaeologist Dana Mider occurred in 2001 ahead of a mixed use residential and commercial redevelopment of the area by Australand Holdings (Property Council 2002). The initial woodland, creek, estuarine and marine environments supported the Cadigal people’s Aboriginal lifestyle of hunting, fishing and gathering. By the 1830s, the presence of Blackwattle Creek attracted a variety of polluting industries including tanneries, slaughterhouses, and breweries. The area became known as the Eau de Cologne Valley due to its offensive odours. The innovative use of website information, the connections made between the archaeological team and the public, the media interest, and the preparation of an education kit by the developer ‘Trowels and Tribulations’, have been previously described (Cressy and Vinton 2007).

Despite the early promise the Quadrant project showed for a new approach, a final report was never completed. As the new building had development approval, construction work commenced once the archaeology team left the site. It is rare for an archaeological report to be a requirement for an occupation certificate to be issued under a local development consent as two different pieces of legislation are involved, and here the lack of integration between state and local government requirements may hinder archaeological outcomes. The main record of the findings other than media or web articles and the education kit became the on-site interpretation. There are small printed interpretative panels displayed on building columns around the central courtyard, with themed headings such as Chamber Pots, Decoration, Making Do, Money, Many Cultures, Morality Tales, Religion, Play, Smoking, and Eating. Larger panels near the entrance to the courtyard discuss the

archaeological project and environmental evidence recovered. There was also a substantial artefact display case in the internal, but publicly accessible, apartment foyer. The nearby University of Sydney used this as a resource for teaching archaeology students. Two articles about the faunal remains from the site were also published (Colley 2005, 2006).

In February 2008, a deliberately set explosion in a chicken shop in one of the ground floor commercial tenancies rocked the nine-storey building, causing \$3.5 million worth of damage (Tadros 2008). The distraught property manager contacted the (then) NSW Heritage Office and advised the writer that the carefully conserved archaeological artefacts in the foyer display case, already fragmentary, had literally been 'blown to bits'. This left the small thematic panels and the larger more technical panels as the main result of the project. These panels have a somewhat didactic tone and have been criticised for their 'large slabs of text...engraved in indigestible chunks' with 'rapid-fire ...facts and truncated stories' which are considered 'at odds with...[the]... aim to communicate effectively the stories of the past to a casual audience who might wander past' (McInnes 2009 n.p.). The historian criticising these panels some time later may not have realised that they were only intended to form one part of a larger package. When interpretation has been conditioned by an archaeology permit, however, there has been more than one instance where on-site signage was designed and installed without further discussion or approval by the state agency.

The Quadrant is not the only major site where archaeological fieldwork undertaken by consultants for private developers has not produced a final report. This is true for several large and complex urban archaeological sites. Many developers see value in paying for visible fieldwork which removes archaeological material which otherwise might restrict development, but apparently have much less interest in paying for largely invisible post-excavation analysis and reporting. It is an ironic situation for a profession which so often proclaims the need for information to be recovered before it is lost and then fails to deliver the information gained through the fieldwork process. The field notes and records generally remain the private property of the consultant archaeologist or firm, and the excavated artefact collections remain the property of the developer (as the land owner at the time they were excavated). The Heritage Act has little detail regarding curation of the artefacts and information yielded by archaeological digs. There are (rarely used) provisions that the Minister (government) may direct the lodgement of particularly significant 'relics', but effectively there is no central place or designated repository to take them. Consequently, the interim solution has been storage of collections within new developments or with other interested parties such as local museums.

In more than 35 years, there have been no penalties imposed under the NSW Heritage Act arising from breaches of the 'relics' provisions or permits. The Act is silent about powers to collect evidence, and the state agency has not included a permanent compliance officer in its staffing. There have been very few prosecutions for offences under the Act. Response to the lack of output and reporting from some archaeologists has been to strengthen archaeology permit conditions and to revise the Heritage Council Criteria for Excavation Directors. These criteria are used to

assess the suitability of a nominated excavation director for different types of archaeological projects. Criteria have existed since 1981, but were most recently revised in 2011 (Heritage Council of NSW 2011). Criterion No. 4 requires ‘Ability to demonstrate that work under any approvals previously granted by the Heritage Council has been completed in accordance with the conditions of that approval and the final report has been submitted to the Heritage Council’. In 2012, the Heritage Council also approved a final report amnesty which ran through 2013. This provided an opportunity for outstanding reports to be submitted ahead of (intended) future tracking of the permits issued and the submission of final reports for those permits. The amnesty resulted in the submission of numerous reports, but mostly these were for small-scale projects. The key reports missing for large and complex urban excavations in Sydney, such as the Quadrant site, were not forthcoming.

Highlands Marketplace

There are many cases where the private sector has shown great willingness and flexibility to comply with statutory requirements to record, preserve or interpret archaeology in NSW. This has produced various outcomes at different scales. In July 2004, Woolworths Limited (Australia) lodged a development application to build the Highlands Marketplace Shopping Centre in Mittagong, a town 110 km south-west of Sydney. The site had formed part of the Fitz Roy Iron Works, the first iron works in Australia, which operated from 1848 to the 1890s. The expectation was that remains on site would be limited and would be removed (subject to recording) ahead of the new development. A large enterprise, the Iron Works was commemorated by a substantial historic monument at a separate location on Ironmines Oval. Permits were issued for a series of archaeological investigations, and with the discovery of substantial remains, an Interim Heritage Order was placed on the site in December 2004. This required Heritage Council approvals to be sought for future works. Additional archaeological work, in situ conservation treatments, project delays and redesign were estimated to cost an additional \$2.5 million. Sixty car spaces were also ‘lost’ to the extensive area of in situ conservation, although there remained over 700 spaces.

Woolworths worked conscientiously with the Heritage Council and its staff and the Highlands Marketplace opened in March 2007 with the Fitz Roy Iron Works restoration a key feature. See Fig. 8.4. The exposed remains of the protected site are located in the undercroft car park of the shopping centre. These remains have been conserved, maintained and displayed with permanent public access provided as part of the interpretation, communication and celebration of the history of the place. There are also Maintenance and Conservation Plans in operation, and Woolworths have advised that the centre is proud of this asset, the public are amazed by it, visitation is high and responses are generally very positive (Fitz Roy Iron Works 2007–2014; Ray Christison, High Ground Consulting, personal communication, 4 November 2010).



Fig. 8.4 Fitz Roy Iron Works archaeology in the undercroft car park of Highlands Marketplace, Mittagong (*Photograph S. Lavelle*)

Parramatta

Successful collaboration has also occurred between State and local government to identify areas of early settlement where high concentrations of archaeological remains are likely to exist. In 1991, the Parramatta City Council, in conjunction with the NSW Heritage Council, commissioned the first Archaeological Zoning Plan for Parramatta to identify the most significant archaeological sites within that CBD (Higginbotham and Johnson 1991). In 2001, that work was extended by the Parramatta Historical Archaeological Landscape Management Study (PHALMS) completed by several project partners, including local and state government, with Godden Mackay Logan as the principal consultant (NSW Heritage Office, Godden Mackay Logan 2001; Parramatta City Council 2005). The Parramatta Historical Archaeological Landscape Management Study (PHALMS) uses a geographic information system (GIS) platform and a connected relational database to manage the data for an entire historic city and its subsurface historical archaeological features. It provides a citywide predictive model indicating locations where archaeological features have been removed and where archaeological sites may yet be discovered. The significance of known or predicted archaeological sites is graded from ‘exceptional’ to ‘low’. An electronic database divides the city area into different ‘Archaeological Management Units’ (AMUs), which include a summary history, a predictive statement about values/significance, basic references to historic maps and other resources, and a clear indication of conservation policy and

statutory requirements for each AMU (Logan and Mackay 2013). Requirements are standardised and for units of high significance may include ‘test trenching’, ‘conservation in situ’ or ‘large-scale excavation’. All PHALMS AMUs can be found with the NSW State Heritage Inventory, which is available online. An actual approach to an AMU will be established through completion of a more detailed and property specific, Archaeological Assessment and Research Design at such time as an impact is proposed and a permit needs to be obtained.

Parramatta was occupied by the Burramattagal clan of the Darug Aboriginal people prior to the arrival of the British in 1788. The name means ‘place of eels’, and Parramatta River was important for camping and fishing for over 10,000 years. Rose Hill (now Parramatta) was settled from Sydney in November 1788 as additional farming land was needed after crop failure. By 1791, there were 100 convict huts and 1628 people at Parramatta, over half the colonial population at that time. Old Government House, dating from 1799, is the oldest public building in Australia, and it is also part of the Australian Convict Sites UNESCO World Heritage property.

Over the last decade, interpretation of several archaeological ‘digs’ in Parramatta has occurred as a direct outcome of archaeology permits, and it is now possible to walk around the Parramatta central business district and view a range of different information about sites along key streets from the early town within recently constructed new buildings. Information includes wall panels with historic text, maps and illustrations, artefact display cases in building foyers, public artwork (archaeology themed) and small areas of conserved archaeological remains. These have been delivered by government and by private developers (Heritage Council of NSW 2010).

An important site in Parramatta is that of the former Parramatta Hospital, historically significant at a national level as the oldest continuously occupied site for public health in Australia. The first hospital in Parramatta, and the third in the colony, was established by 1790. The hospital site was identified as PHALMS Archaeological Management Unit 2868, and the site is also listed on the State Heritage Register, SHR number 0828 (NSW Office of Environment and Heritage 2015d).

As a government owned site, there was important pro-active action over a long time period to ensure that significant archaeology was appropriately considered in future site planning. Hospital services were gradually withdrawn from the site following the construction of a new major hospital campus two kilometres away at Westmead in 1978. Archaeological testing was undertaken in 1994, 2000, 2001 and 2003. In 2003, a Conservation Management Plan (CMP), prepared by the Government Architect’s Office Heritage Design Services, recommended that if the Parramatta Hospital site was to be redeveloped that ideally future open space areas should coincide with the archaeology (Government Architects Office 2003).

In 2004, a further Masterplan was prepared which sited future building envelopes away from known areas of major archaeological remains and created an open area which anticipated in situ retention of the likely archaeological resource as an ‘archaeology courtyard’ between the new buildings (NSW Department of Commerce 2004). The CMP and Masterplan were both approved by the Heritage Council.

In 2004, the Parramatta Justice Precinct was announced as the new use of the site. This was a \$280 million development to be delivered by 2008 that occupies a whole city block. Built by the Multiplex Group, the Precinct includes six Children's Courts in a three-storey building, nine Trial Courts in a seven-storey building, a Justice Administration Offices building of 10 storeys; refurbished \$16 million health facilities (Jeffery House), underground car parking and public open space. 'Brislington', a separately listed colonial building on the site dating from 1821, was also retained (SHR number 059).

The major archaeological work for the new Precinct was completed by Casey and Lowe Pty Ltd and directed by Dr Mary Casey over 2004 and 2005 (Casey and Lowe Pty Ltd 2005). Not all archaeology was excavated. Where not affected by the proposed development (including services and basements) State-significant archaeology was retained in situ for future investigation.

The new Heritage Courtyard includes interpretation in the form of plaques, photographic images, signage, artefact displays, paved building footprints on the ground plane and other devices, not least the architectonic representations of the former buildings in the form of new lightweight pavilion structures. See Figs. 8.5 and 8.6. These buildings, designed by Bates Smart Pty Ltd, won the Australian Institute of Architects Award for Heritage Architecture (NSW) in 2008 (Australian Institute of Architects 2008).



Fig. 8.5 Heritage Courtyard, Parramatta Justice Precinct where ground-level markings and new pavilion structures interpret former buildings and display archaeological remains. (*Photograph S. Lavelle*)



Fig. 8.6 Parramatta Justice Precinct, 1818 Colonial Hospital archaeological remains in new pavilion (Photograph S. Lavelle)

The Wheatsheaf Hotel

A future site in Parramatta that will be displayed and interpreted to the public has also featured a long gestation period. Now known as the ‘V by Crown’ development, the site occupies half a city block with three street frontages. The site was identified in PHALMS as Archaeological Management Unit, AMU 3190, as the site of several ‘convict huts’ c.1790s–1800s. In November 2003, development consent was granted by Parramatta City Council for a nine-storey building with central courtyard and two and a half levels of basement car parking. The \$20 million dollar development anticipated costs of \$800,000 for archaeology and interpretation (assuming removal of all remains). A permit was also issued for a large-scale open area excavation. Undertaken in 2005 by Dr Edward Higginbotham, the excavations revealed evidence of a convict hut c.1800 with a brick-paved floor and other additions including a wheelwright’s workshop, c1823. Also found was a substantial early stone cellar with an intact timber floor from ‘The Wheatsheaf’ Inn (1801–1809) later the ‘Shepherd and Flock’ Inn (1825–1870) (Higginbotham & Associates 2005, 2007).

An Interim Heritage Order was made over the site in March 2006 (IHO number 101). Also made was a (rarely used) Section 129 Curtailment Order. That order

suspended the height limits and floor space ratios of the local planning instrument to allow the submission of a non-complying development, provided that the development conserved the archaeology.

Over the next five years, a succession of developers submitted various designs, each seeking greater development concessions for retaining and displaying the archaeology. The 'V by Crown' development was approved in 2011, and construction is in progress for six levels of basement car park with commercial/residential towers up to 22 storeys. A public plaza at ground level will provide public open space and archaeological display areas with 'viewing windows' surrounded by café/retail space. Part of the underground basement space is dedicated for archaeological interpretation and viewing of remains in situ, with additional separate Maintenance and Archaeology storage areas.

Apart from Parramatta, other key early settlement centres in pre-1850 NSW also have archaeological management plans which can be used by the Heritage Council and Local Councils or other consent authorities to assist in the day-to-day management of development proposals which might affect significant historical archaeological sites or 'relics'. In 2009, the Heritage Council endorsed new Guidelines for Archaeological Management Plans outlining an appropriate scope of works, timeframe and the support requirements needed for a useful and viable AMP. The aim is to ensure that AMPs provide the information required to assist in determining the identification, significance and appropriate management of sites and items included in their study areas. They also provide a model brief to guide the preparation of such plans (Heritage Council of NSW 2009b).

Limited dollar for (matching) dollar grant funding is also available within the NSW Heritage Grants Program to prepare such plans.

Port Macquarie

Beyond Sydney there have also been mixed stories of lost opportunities, learning and subsequent better outcomes. Port Macquarie is a town situated on the mid-North Coast of NSW about 390 km north of Sydney. The town is significant for its two stages of convict settlement that are rare in NSW: firstly from 1821 to 1832 as one of only two penal settlements in NSW established for the secondary punishment of convicts, and secondly, from 1833 to 1847, as one of only two penal establishments in NSW for convict 'specials' (invalids, the insane and educated gentlemen convicts). When Port Macquarie was opened up to free settlement in 1830, the town was re-surveyed on its regular, present-day alignment which destroyed many of the pre-1831 buildings. About 26 archaeological sites of these prior buildings, usually sited at 45° to the present alignment, are anticipated to survive beneath the current street layout. Other early fabric (such as drains and roads) also survives.

An Archaeological Management Plan (AMP) prepared by consultants in 1994 mapped the archaeological resource of Port Macquarie, identifying around 300 sites (Higginbotham and Johnson 1994). It also provided mapping which indicated areas where there would be no need to undertake archaeological work. The AMP provided recommendations for future management, such as consideration of archaeological conservation areas; in situ conservation of State or Nationally significant sites; interpretation and display; promotion through cultural tourism; incorporation of archaeological remains in new developments; and the implicit assumption that archaeological investigations would be undertaken as required by the Heritage Act. Since the AMP was prepared, over 40 excavation permits have been issued in the Port Macquarie central business district, affecting around 10% of the archaeological resource. The majority of permits were for full excavation and removed all archaeology. Two key cases resulted in some in situ conservation outcomes which are described below.

In 2001, there was a major archaeological excavation which exposed the footings of the four-room 1821 Government House with two rear wings and service areas added in 1826, and a cellar. There were ancillary elements such as drains, privies, paving. The discovery of highly intact remains led to requests to 'save' the site by the local and wider community, and the formation of the group Friends of Port Macquarie's Archaeological Heritage (Jennings 2002). The archaeological site was subsequently listed on the State Heritage Register (SHR No. 1517).

The Heritage Council worked with the site owners, local government, the community and State government to investigate options for the site. Options considered included purchase of the site by government and the construction of a museum. Finally, a compromise option was agreed which put underground parking below the adjacent street and allowed the capping of the archaeological site in a manner that retained the ruins in situ for potential future conservation and display, with a new development over the top, the 'Focus' Apartments. No archaeological remains are directly visible as they are sealed beneath a solid concrete slab that supports the new building. The 18-storey 'Focus' development features an interpretative foyer where displays and information give visitors an understanding of what exists at the site (Lavelle 2007).

In 2005, the Heritage Council, the local Council and several local businesses also contributed funding towards archaeological heritage signage in the central business district. There is an accompanying brochure which explains the important role played by Port Macquarie as a place of secondary punishment when more than 1500 convicts were there at the height of the settlement (Port Macquarie Hastings Council 2003).

For many years, the local Council in Port Macquarie had also been planning a new Arts and Cultural Centre on an existing Civic Centre site. By 2005, the \$25 million project included a 620-seat theatre, art gallery, conference venue, restaurants and associated facilities. An excavation permit was granted in 2006 to allow archaeological investigations, with the completion of the new development anticipated by early 2008. The project managers, private consultants, demonstrated little recognition of the nature of archaeology; rather, it was seen as something to be

‘managed out’ of the site. Excavations by Dr Edward Higginbotham revealed State significant archaeological remains related to the early penal settlement (1821–1830), the administration of convicts (1831–1846) and the town development after 1831 (Higginbotham & Associates 2008).

Project delays and significant cost overruns resulted in the dismissal of the local Council by the state government and the appointment of an Administrator in February 2008. At that time, the total costs were above \$41 million with the archaeology and redesign costs estimated to be in the vicinity of \$2 million. The new centre, now named the ‘GlassHouse’, opened in 2009. It includes in situ archaeology displays in the basement; floor and pavement treatments indicating the location of former structures both inside and outside of the new building; interpretative panels and artefact displays. The archaeology of the site was listed on the State Heritage Register in 2010 (SHR number 1813).

Conclusion

In 2012 Tracy Ireland, a former NSW government archaeologist now an academic, examined 19 sites where archaeology is conserved and displayed in situ, noting that ‘over the last decade the conservation of urban archaeological remains has been more strongly enforced through legislation and policy, has become more technically achievable, and has come to be seen as a more acceptable and feasible option to groups such as property developers, regulators and communities’ (Ireland 2012, p. 7).

Preserved sites and displays certainly demonstrate public interest and engagement with historical archaeology when it is retained as part of the layering of urban fabric. Nevertheless, this value is not necessarily self-evident. It has taken decades of effort by the NSW Heritage Council and its staff to promote the need for public outcomes as part of the archaeology process. It requires engagement with intangible values and a shift from a focus on purely archaeological research outcomes or archaeology for its own sake on the part of archaeologists whether acting as contractors or as government public servants (North 2007).

Political will and interest in heritage and specifically archaeology versus the costs of conservation, public outcomes and forgone development have also changed over time. In over 35 years of the operation of the Heritage Act, agencies have been restructured and renamed usually due to government-of-the-day interests in efficiency dividends or other agendas. The definition of a ‘relic’ has been amended each decade, both to expand and to contract the type of material that might be captured. From 1996 to 2007, there was a small specialist stand-alone NSW Heritage Office, but more commonly heritage has been incorporated as a small branch within a much larger agency. A risk in this scenario is that heritage might be seen as a peripheral sideline to overall agency functions.

Another potential risk is the current worldwide interest in the reduction in ‘red tape’. The Australian Government has a current plan to cut \$1 billion in unnecessary and costly legislation and regulation every year, and this approach has

cascaded to lower jurisdictions (Australian Government 2014). This evidences a change in long-held political philosophy that accepted government's responsibility to act as a benevolent caretaker of the public interest and address any market failures.

Whilst intangible values will always be difficult to capture within a purely market-based valuation, it does not follow that simply keeping some footings or archaeological artefacts from the past at selected sites should be seen as an end in itself. It is important that if and when this occurs it is done in a meaningful way. Whilst many of the current archaeology displays might be critiqued for a tendency to accept a version of colonial history largely based on received narratives of settlement, indigenous displacement, change and progress, there is also an opportunity for these retained places to construct their own updated narratives through the lens of the future. It will be more difficult for the technical reports and analyses of the result of archaeological work as it has been written up to be revisited in such a way. Reports and conserved sites can both make a contribution to knowledge and understanding of how Australia as a nation has evolved from its beginnings.

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Chapter 9

From Alliance to Dissonance: Two Centuries of Local Archaeology and Conservation in Indian Cities. The Case of Lucknow, India

Ashima Krishna

Introduction

The Indian subcontinent has a long and ancient history that has been meticulously developed through several centuries of concerted archaeological and conservation efforts, and methodically documented for nearly two centuries (Chakrabarti 2003). The evolution of the fields of archaeology and conservation into a formal and bureaucratic enterprise was first through the Asiatic Society, and then the Government of India under the East India Company (1757–1857), and the British Crown (1857–1947). This pre-Independence archaeology and conservation most often involved alliances and cooperation between central, provincial, and local governments. Post-Independence, as the country began to focus on development and progress, the older administrative systems gradually led to disassociated approaches to archaeology and conservation at the central and state levels, with little to no involvement by local agencies. The repercussions of this disconnection are seen increasingly across Indian cities today, most commonly through the damage to, and destruction of archaeological and historical resources during construction and development activity. Using the city of Lucknow as an example, this chapter traces how these adverse impacts on archaeological and historical resources are rooted in the evolution of particular bureaucratic and administrative processes spanning nearly two centuries, and therefore need to be re-examined in the contemporary context.

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From Central to Regional to Local: Evolution of Archaeological Interest and Conservation

The fields of archaeology and antiquities in India preceded conservation by several decades. Archaeology formally began in the middle of the eighteenth century, through the antiquarian and archaeological explorations of several French, Danish, and British scholars (Chakrabarti 1999; Goswamy 2013; Guha 2003; Keay 2011; Pant 2012). The establishment of the Asiatic Society of Bengal in 1784 by Sir William Jones, a leading Orientalist of his time, brought these explorations and excavations within an institutional framework, leading to the development of formal scholarship and research on archaeology and anthropology (Allchin 1978; Chakrabarti 1999; Keay 2011; Pant 2012; Sen 2010; Sengupta 2013). With such august beginnings, eighteenth-century archaeology and conservation eventually came under the aegis of the Government of India (under the British East India Company), with several initiatives to document archaeological and historical resources through descriptions, measurements, and drawings (Pant 2012, p. 9). These early origins are also important because they brought archaeology and conservation within the same administrative framework, a practice that has continued in India for over one hundred and fifty years.

Throughout the early eighteenth century, successive Governor Generals of India serving the British East India Company began to authorize and fund excavations and explorations, and in some cases, repairs to sites of archaeological and antiquarian interest throughout the country (Pant 2012, p. 10). In the early part of the nineteenth century, several repairs were carried out at monumental sites such as Agra Fort and Sikandra in Agra, the walled city of Shahjahanabad in Delhi, the palace in Padmanabhapuram, and Sultan Khusrau's tomb in Oudh; these, however, were carried out without much archaeological supervision or expertise (Pant 2012, p. 10). In the early part of the nineteenth century, native rulers also sanctioned preservation works. The then Nawab of Oudh, Saadat Ali Khan, for example, approved funds for improvements and repairs to the Fort of Fatehgarh (Pant 2012, p. 10). These earliest conservation attempts were, however, highly dependent on the whims and fancies of those in power, and were therefore rather infrequent. Archaeological explorations and discoveries continued to be sporadic into the 1830s: Francis Buchanan surveyed Mysore, and the Bengal Presidency, and Colin Mackenzie examined south Indian antiquities (Chakrabarti 1999, p. 6). Excavations were also carried out elsewhere in India: military officers worked on major Buddhist stupas (hemispherical sacred structures containing relics) and Grecian remains and idols in the north, and megaliths in the south of India (Chakrabarti 1999, p. 7).

The Government of India Act of 1858 brought about significant administrative changes when power was transferred from British East India Company to the British Crown. Alexander Cunningham, who had by then distinguished himself as an archaeological and classical scholar with the Asiatic Society, campaigned for a nationwide survey of archaeological and antiquarian resources. His persistent efforts bore fruit, and the Archaeological Survey of India was created in 1861 to

excavate, list, document, and repair archaeological and architectural sites (Chakrabarti 1999, p. 8; Government of India 2011; Keay 2011; Pant 2012).

Development of Archaeology and Conservation in and Around Lucknow

Unlike the rest of the country, heritage-related conservation and archaeology initiatives in Lucknow gained momentum only towards the end of the nineteenth century, even though there were significant efforts elsewhere in the region. There are several probable reasons why archaeology and conservation came so late to the city. First, the city of Lucknow had been a provincial capital throughout much of its *Nawabi*¹ phase (ca. 1731–1856). During this time, the city saw significant changes and construction activity, especially with every new *Nawab*'s ascension to power (Das 2008; Krishna 2014b; Llewellyn-Jones 2006; Praveen 1989, 2008). This was a time for assertion of political power through prolific construction activity, much like the British would do throughout Lucknow and the rest of the country for the later part of nineteenth century (Oldenburg 1984; Sen 2010, p. 207). Given the extensive construction activity during this period, it is not surprising that conservation and archaeological excavations were not dominant in Lucknow until much later. In the aftermath of the 1857 War of Independence (also referred to as The Mutiny, or The Revolt of 1857 by scholars), Lucknow was one among many cities that suffered extensive damage, especially to its significant historic buildings. Post-1857, British engineers began a rebuilding and 'modernizing' campaign that included laying down militarily advantageous wide avenues by destroying older neighbourhoods, and constructing railways, bridges, and telegraph lines (Keay 2011, p. 48; Singh and Jafri 2011, p. 147). The Residency, the complex housing the British Resident, suffered significant damage during the war. It was also the only major site of extensive, deliberate, and politically motivated conservation efforts in Lucknow immediately after the War (Llewellyn-Jones 1995, p. 56). Conservation of vernacular built heritage and archaeological excavations were therefore not of paramount importance during this period in Lucknow's history.

Another reason why archaeological and conservation activity came to Lucknow much later deals with Lucknow's location among other, visibly monumental and historical settlements. During much of the late nineteenth century, officers and scholars from the Archaeological Survey of India had been focusing their archaeological excavations and repairs on the Buddhist sites to the north and east of Lucknow, the

¹A *Nawab* was a native governor during the Mughal Empire, usually a Muslim nobleman of high status.

Mughal era (ca. sixteenth–seventeenth century) sites of Agra² to the west, and other historic settlements such as Mathura, Ayodhya, and Gorakhpur, among others (Beglar and Carlleyle 1874; Carlleyle 1883, 1885; Cole 1873; Cunningham 1871a, b, 1873, 1875, 1880; Mukherji 1899). Mentions of conservation in Lucknow, if present, were mostly in political contexts, or primarily related to the Residency complex.

Third, Lucknow's significant historic built environment, when compared to the monumental Mughal architecture of Delhi and Agra, fell short of the British aesthetic sensibilities, with one account terming them 'the worst specimens in all India' (Caine 1890, p. 276). As early as 1808, Lord Minto, the then Governor General of India, appointed a Taj Committee to execute unprecedented and extensive repairs to protect the Taj Mahal in Agra (Pant 2012, p. 12). In 1815, the Marquess of Hastings directed conservation and repair activities at Fatehpur Sikri, Sikandra, and other significant sites in Agra (Cole 1882, p. 4). The relative disregard for Lucknow's built heritage by the British was also evident between the 1860s and 1880s, when two of the city's most iconic and recognizable historic sites, the *Asafi Imambara* (Fig. 9.1), and the adjacent *Asafi Masjid* (Fig. 9.2), part of the larger Fort *Macchi Bhawan* area, were being used to store military equipment by British troops (Government of North-Western Provinces and Oudh 1886a). The early neglect of Lucknow's historic resources was also a way for the Colonial regime to assert its power: focusing on Mughal heritage elsewhere allowed the British Crown to portray its rule as an extension of the mighty Mughals (Sengupta 2013). Mookherji in 1883, in fact, berated the British criticism of Lucknow's architecture as 'narrow-mindedness' (Mookherji 1883, p. 211).

By the 1870s, provincial and city agencies began carrying out archaeology and preservation-related works, but not in Lucknow. Between 1872 and 1876, most of the preservation work focused on Agra Fort and Taj Mahal in Agra, and was carried out by the Executive Engineer of Agra (Government of North-Western Provinces and Oudh 1886a). In 1876, a special Archaeological Division of the Provincial Branch of the Public Works Department was created and headquartered in Agra, a significant local archaeology framework. Over the next two years, nearly ten *lakh* (one million) rupees were spent on seven major archaeological and architectural sites in the region including Agra Fort, Taj Mahal, Fatehpur-Sikri, Etmad-ud-daula's Tomb, and Akbar's Tomb in Agra, monuments in Jaunpur, and Gobind Dewa's Temple in Brindaban. In 1885, the Lieutenant-Governor of North-Western Provinces and Oudh removed the special officer in the provincial Archaeological Division; instead, occasional repairs

²Sites in Agra include the World Heritage Sites of Taj Mahal, Agra Fort, and Fatehpur Sikri. In addition to these, other sites such as Sikandra, Itmad-ud-daula's Tomb, and Rambagh Gardens are among dozens that comprise Agra's rich architectural and historical fabric dating to the Mughal period. In fact, by the late nineteenth century, Agra's sites had received significant attention from the Government of the North-Western Provinces and Oudh and Government of India (Smith 1896, 1901). By 1889, a 'Historical Monuments Committee' was already in place to take care of not only all the historical gardens in the area, but all the 'monuments' as well (Government of North-Western Provinces and Oudh 1891).



Fig. 9.1 The Asafi Imambara, located in the historic precinct of Husainabad, is one of the most iconic historic sites in the city of Lucknow. The main mausoleum (above, in 2013) is part of a larger complex that includes a forecourt, the Asafi Masjid (mosque), an inner gateway, an outer forecourt, outer gateway, and a stepwell. Image courtesy Michael Tomlan



Fig. 9.2 The Asafi Masjid (mosque, seen above in 2013) is part of the Asafi Imambara complex. The mosque is located in the inner court, flanked by the inner three-arched gateway seen in the background to the left of the image. The image, taken from the terrace of the main mausoleum (Asafi Imambara) structure, encapsulates the monumentality of the complex. Image courtesy Michael Tomlan

were undertaken by an officer working under the Executive Engineer of the Agra Division Provincial Works, effectively ending the presence of an agency and an officer wholly dedicated to archaeology and conservation in the region (Government of

North-Western Provinces and Oudh 1886a). This lack of a dedicated officer is also reflected in the contemporary city departments in Lucknow.

The next decade brought somewhat better alliances between the central, provincial, and local governments. The Government of India appointed Major Henry Hardy Cole as the first Curator of Ancient Monuments from January 1881 to April 1884, during which time he produced three detailed reports on the preservation of national monuments in India dated 1882, 1883, and 1885. The Curator's task was to ensure that each provincial government would prepare detailed inventories of the archaeological and antiquarian resources within their province, classified according to condition and ownership (Krishna 2014a, p. 367). The provincial government also determined the agency that created the inventory, often comprising district³ officials or officers of the Archaeological Division of the Provincial Branch of the Public Works Department.

The purpose of these lists was for provincial governments to judiciously preserve sites of archaeological and antiquarian importance within districts and provinces. Given the 'local' nature of this endeavour, the cost and administration of these sites administered by the provincial government were borne by the local Public Works Departments, even though the lists were commissioned by the central-level Home Department (Archaeology). These lists were also meant to encourage buildings under private ownership to be responsibly preserved, and 'native' sites from Lucknow were finally recognized as heritage for the first time (Government of North-Western Provinces and Oudh 1886a; Krishna 2014a). These lists, created by the provincial government, likely spurred on a period of significant archaeological and preservation activity in the city. The Deputy Commissioner of Lucknow, Lieutenant-Colonel HW Hastings, for example, supervised several preservation and repair works of residential, institutional, and civic buildings funded by the Lucknow city *nazul*⁴ fund for special projects (Government of North-Western Provinces and Oudh 1886b).

The expiration of Cole's term as Curator of Ancient Monuments in 1884 was close to Cunningham's retirement from the ASI in 1885, leaving an administrative void at the central level. During his tenure, Cunningham pioneered extensive work on topographical archaeology in the country (Chakrabarti 1999, p. 9). Upon retirement, he recommended that the ASI be decentralized to allow provincial governments to employ regional surveyors such as James Burgess and James Fergusson (Chakrabarti 1999, p. 9). This led to administrative changes in the ASI in 1885, bringing central, provincial, and local governments closer when working on preserving archaeological and historic sites. Surveyors of the ASI were made to report to a provincial government rather than a department or a European officer

³In India, districts are subdivisions within a state and can often comprise cities, towns, and villages. Districts also have headquarters, often the largest town or city within their boundary. The district of Lucknow, for example, is headquartered in the city of Lucknow.

⁴The *Nazul* Land department was set up in the pre-independence era for controlling of revenue land and collecting taxes from city residents who were given plots on lease.

elsewhere. That year, the Government of India, through its Home Department (Archaeology), appointed Major J.B. Keith as Surveyor, Dr. Führer as Assistant Surveyor, and Babu Purno Chander Mukherji as Draftsman to the North-Western Provinces and Oudh Circle of the ASI, with the Public Works Department as their local liaison. The Public Works Department was tasked with providing the officers with a list of detailed descriptions and drawings of the architecturally and archaeologically significant sites in the province (Government of North-Western Provinces and Oudh 1886a). This was a significant step in creating an alliance between central, provincial, and local governments for the purposes of archaeology and conservation. In a letter to the Home Secretary of the Government of India, dated 14 October 1885, Major Keith was appreciative of this move, expressing his belief that:

Each Surveyor ought to feel that he is working for the credit of a particular Province, of a particular Local Government and not for the benefit of a particular department or a few European Orientalists. He ought, above all things, to try and awaken a Native sympathy for the work, an aim that has hitherto escaped notice. In a large country like India where there are such divergences of style and so many peculiarities, it would be impossible to adopt one uniform system of work. (Government of North-Western Provinces and Oudh 1886a)

Meanwhile, Lucknow's continued role as a political and military centre meant that the Lucknow cantonment was reorganized and redeveloped throughout 1860s and 1870s, this time in a militarily strategic location near Dilkusha gardens (Oldenburg 1984, p. 50). After the War of 1857, one of the oldest fort precincts in the city, Fort *Macchi Bhawan* (construction date not known; demolished ca. 1890s), and surrounding buildings such as palaces, residences, and religious buildings had been confiscated and converted into military outposts and armed camps by the British forces (Oldenburg 1984, p. 49). With the development of the new Lucknow cantonment near Dilkusha, one of the largest in the Indian Empire, military operations housed within Fort *Macchi Bhawan* (Fig. 9.3) were evacuated by the Military Department between 1883 and 1888. Buildings in the newly vacated Fort *Macchi Bhawan* complex were subsequently divided: some were transferred to the *Nazul* Department, the Asafi Imambara and Asafi Masjid to the Husainabad Trust, and the rest to the Public Works Department. Unfortunately, within a five-year period, all buildings except those under the Husainabad Trust were demolished for development projects by the City Commissioner (Government of North-Western Provinces and Oudh 1888). The demolition of Fort *Macchi Bhawan*, the city's first fortified precinct, was a significant loss to the city's historic fabric, and set the precedent for loss of archaeological and historical resources in the course of development projects executed by the local government.

Between 1888 and 1890, the Colonial government continued listing archaeologically and historically significant resources—albeit those with a British provenance. Thirty-five tombs and cemeteries within the district of Lucknow were included in the 'List of Christian Tombs of Historical and other interest in the North-Western Provinces and Oudh'. These were in addition to the eighty-nine 'Historical British Monuments and Memorials worthy of preservation on account of their public interest' previously listed from Lucknow (Cole 1885). Consequently,



Fig. 9.3 Felice Beato, *Macchi Bhawan*, print, albumen silver, w29.5 × h24.3 cm, Lucknow, 1858. Digital Image Courtesy of the Getty's Open Content Program. Partial Gift from the Wilson Centre for Photography

by the turn of the nineteenth century, the number of British monuments and memorials in Lucknow listed by the provincial government far exceeded those considered of 'native' interest.

In June 1901, provincial governments in the country approved a memorandum that allowed Surveyors of the Archaeological Survey of India to work closely as consultants to the provinces within their jurisdiction, another significant 'local' alliance. That same year, another list of buildings worthy of preservation was prepared for each district in the North-Western Provinces and Oudh, and included sites from Lucknow (Government of North-Western Provinces and Oudh 1901).

In 1906, the ASI was given a more permanent status by the Government of India (Chakrabarti 1999, p. 14), creating the administrative framework that is still followed today, comprising regional 'Circles', headed by a director-general at the Delhi headquarters. Archaeology in India was also influenced first by Sir John Marshall between 1902 and 1929, and then by Sir Robert Eric Mortimer Wheeler between 1944 and 1948 through their respective directorship of the Archaeological Survey of India (Chadha 2002; Chakrabarti 1999, p. 14; Guha 2003; Wheeler 1966). John Marshall's *Conservation Manual: A handbook for the use of Archaeological Officers and others*

entrusted with the care of ancient monuments, published in 1923, has also been the guiding policy document in the country for close to a century (Marshall 1923; Sengupta 2013). This manual was only updated in 2014 to comply with contemporary standards and guidelines (Archaeological Survey of India 2014). While Marshall shaped conservation policy, Sir Mortimer Wheeler's contributions were more in archaeology. His extensive archaeological excavations, particularly in the Indus Valley, lay the foundation for twentieth-century archaeology in India, especially through his emphasis on archaeology as a scholarly endeavour and an academic craft (Chakrabarti 1999, p. 16).

Provincially, meanwhile, in 1934, the Public Works Department of United Provinces (formerly North-Western Provinces and Oudh) created a list of 'monuments' that were not considered to be of national importance by the Government of India. The list identified twenty-four sites from Lucknow out of a total of 185 from elsewhere in the state (Government of United Provinces 1934). By this time, Lucknow had a Municipal Board as well as a Lucknow Improvement Trust (which later became Lucknow Development Authority) catering to civic, infrastructural, and development initiatives in the city. Pursuant to the Government of India Act of 1935, however, all the archaeological and preservation duties of the provincial government came under the aegis of the Archaeological Survey of India, and effectively ended the decades of alliances between central, provincial, and local systems for archaeology and conservation (Government of India 2011).

Significant administrative and physical changes took place in the wake of the Indian Independence in August 1947, and central, provincial, and municipal governments were further reorganized in the subsequent decades. During this time, the Archaeological Survey of India was also transitioning, but epigraphical, archaeological, and preservation work continued under successive directors-general, as there was significant support from the government to expand archaeological research in the country. Post-1947, the agency saw a significant increase in budgetary allocations, staff, and regional branches (Chakrabarti 1999, p. 18). Several educational programmes in archaeology were also instituted in the period immediately after Independence, to add to the excavations and explorations being done by the ASI (Chakrabarti 2003; Ray and Sinopoli 2004). The decades between the 1930s and 1960s, however, lay the foundation for separation of archaeological, preservation, and planning efforts at central, state, and local levels, leading to the different kinds of dissonance seen in contemporary Indian cities like Lucknow.

Dissonance in Local Urban Archaeology and Conservation: Lucknow

As of 2015, the Archaeological Survey of India (ASI) is the primary custodian of roughly 3650 archaeological and cultural heritage sites designated as 'national monuments', and conducts major archaeological excavations across the country—a

deliberate, post-Independence centralization exercise (Chakrabarti 2003, p. 3). Since the ASI's inception in 1861, several legislative⁵ efforts have been implemented to regulate and encourage archaeological and preservation activities in the country. The Ancient Monuments and Archaeological Sites and Remains Act (AMASR Act) of 1958 and its 2010 Amendment are the most recent, prominent, and robust central ordinance in existence. The National Monuments Authority (NMA), headquartered in Delhi, was created as a consequence of the amendment, and oversees the regulation of 'prohibited' (up to 100 m) and 'regulated' areas (up to 200 m) around nationally protected monuments and archaeological areas. The presence of major agencies for heritage oversight, however, can often not be enough of a deterrent to adverse impacts on historical resources brought on by 'local' actions. In May 2015, for example, part of a 113-year-old historic structure in an old neighbourhood in Delhi, designated as Heritage Grade B by the Indian National Trust for Art and Cultural Heritage (INTACH), collapsed as a result of tunnel excavations for a new line of the Delhi Metro (Verma 2015). This damage to a listed heritage structure occurred despite the existence of a 'Heritage Conservation Committee' for Delhi.

Provincially, various state government agencies are tasked with archaeological explorations, excavations, maintaining state museums, and the conservation of 'state monuments'. The role of state agencies in conducting archaeological and conservation work varies widely, and was contested as far back as 1948, when the first Indian director-general of the ASI, Niranjan Prasad Chakravarti, took office. While Chakravarti welcomed the interest shown by state governments in 'starting their own archaeological departments', he opposed any efforts at decentralizing archaeological excavations (Chakrabarti 2003, p. 4). Fortunately, by 1951, there was clearer articulation in the responsibilities of state governments and the regional 'Circles' of the ASI to allow for local archaeological projects to be dealt with more efficiently (Chakrabarti 2003, p. 6). More recently, however, this articulation has been lost, with very little overlap between the ASI Circles and the state government agencies dealing with archaeology and heritage. At the local level, municipal agencies are often completely dependent on the ASI or the state archaeology departments for conservation and archaeology-related activities.

In the state of Uttar Pradesh, for example, the Directorate of Archaeology⁶ is the principal statewide agency responsible for excavations, epigraphy, conservation, and protection of sites and 'monuments' designated at the state level under the provisions

⁵Legislation related to the protection and designation of cultural heritage in India began with The Treasure Trove Act of 1878. It was followed by the Ancient Monuments Preservation Act, passed in 1904 under the then Government of India (under the British Crown) and applied also to those historic sites that were privately owned. Post-Independence, the Government of India passed The Ancient Monuments and Archaeological Sites and Remains Act (AMASR) in 1958, which is still in effect. The rules pertaining to this Act were published in 1959. The Amendment to this Act was finalized and passed in 2010.

⁶The Directorate of Archaeology is one of the four directorates that are administered by the Government of Uttar Pradesh's Department of Culture. The others are Directorate of Museums, Directorate of Culture and Bhatkhande Sangeet Sansthan. The state currently has only about one hundred sites listed and protected under the 1956 Act.

of the U.P. Ancient and Historical Monuments and Archaeological Sites and Remains Preservation Act of 1956. This is the strongest legislation within the state for the excavation, designation, and protection of archaeological and historical sites and resources. It is also, however, woefully inadequate and out of date. Between 1967 and 1995, the state agency designated only nine historic and archaeological sites within the district of Lucknow (Directorate of Archaeology 2008b). Their principal focus and staff expertise lie in archaeology, and the agency has successfully carried out several archaeological excavations over the years (Directorate of Archaeology 2008a, c; Subramanian 2015; Tiwari 2011). Hardly any of these excavations, however, have been in Lucknow (Directorate of Archaeology 2008a, c; Tiwari 2011). The Directorate's last excavations in the district of Lucknow were between 1979 and 1987, in the village of Hulas Khera, located about 25 km south of the city. This was a significant find, with the excavations unearthing a site dating back to 1000 B.C. (Directorate of Archaeology 2008a). More recently the Directorate's work within Lucknow has been limited to maintenance and conservation of 'state monuments' (Tiwari 2011). Similar to the ASI, the Directorate has very little say at the local level of governance unless local actions pose a direct threat to their designated sites, or unless municipal agencies expressly seek their assistance.

On the other end of the spectrum, local development and planning agencies in Lucknow lack staff with expertise in dealing with historical and archaeological resources and sites, and do not require an environmental impact survey, or a cultural resources survey to issue building permits. This is of concern because the dearth of local staff expertise and lack of legal frameworks requiring environmental assessment pose a direct risk to the excavation, preservation, and management of archaeological and historical resources during any construction project in a historic area. It also results in very little clarity in how to treat archaeological resources found during construction in sites outside of state or central jurisdiction. Such resources are often either ignored, or worse, destroyed—sometimes inadvertently. The city of Lucknow faced such problems during the urban conservation of Hazratganj, a significant historic precinct in the city.

Hazratganj has historically been one of Lucknow's most iconic, upscale, and centrally located precincts, whose origins date back to 1810 (Krishna 2012; Llewellyn-Jones and Kidwai 2011; Praveen 2008, 2010). In recent years, the area has seen incredible construction activity to respond to growing commercial and other functional needs, putting the precinct's historic fabric and any buried archaeological resources at risk. Concerns for the market street among private and public stakeholders led to its revitalization in 2010 (Krishna 2012, 2014b). The project received funding from the government of Uttar Pradesh for major infrastructural upgrades. Other parts of the project, such as façade restoration, renovations, and signage control, were all privately funded by members of the Hazratganj Traders Association (Krishna 2012, 2014b). Given the absence of specific local policies and ordinances that address the treatment of cultural and historical resources, however, building permits for these infrastructural upgrades and restoration works did not require any kind of preservation oversight, and did not mandate studies or surveys to ensure that archaeological or historical resources were not harmed during construction.

It was therefore not surprising that the project in Hazratganj ran into heritage-related problems. The area, established in 1810, was initially part of the larger Hazratbagh, and evolved to include Chini Bazaar, Captain Bazaar, *kothis* (vernacular bungalows), and colonnaded buildings inspired by European architectural styles (Llewellyn-Jones and Kidwai 2011; Praveen 2008; Town and Country Planning Department 1971). By 1824, Hazratganj was the ‘main street’ of the city (Hay 1939, p. 124). For most of the nineteenth century, Lucknow was a significant political centre under Colonial rule—it was also an important site in the War of 1857 (Caine 1890, p. 275). While most Mutiny-related accounts focus on the Residency complex, several officers’ accounts from the period describe the movement of troops, and the gunfire exchanged between the British troops and the ‘mutineers’, especially in and around iconic structures such as *Tara Kothi*, *Khurshid Manzil*, *Begum Kothi*, *Moti Mahal* and Shah Najaf Mosque, all located in and around Hazratganj (Gordon-Alexander 1898; Innes 1895). In fact, ‘Huzrutgunge’ is mentioned as an important street strategically connecting the British troops from Banks House to the Residency, clear from the 1938 map shown in Fig. 9.4 (Innes 1895, p. 278). Lieutenant-Colonel William Gordon-Alexander of

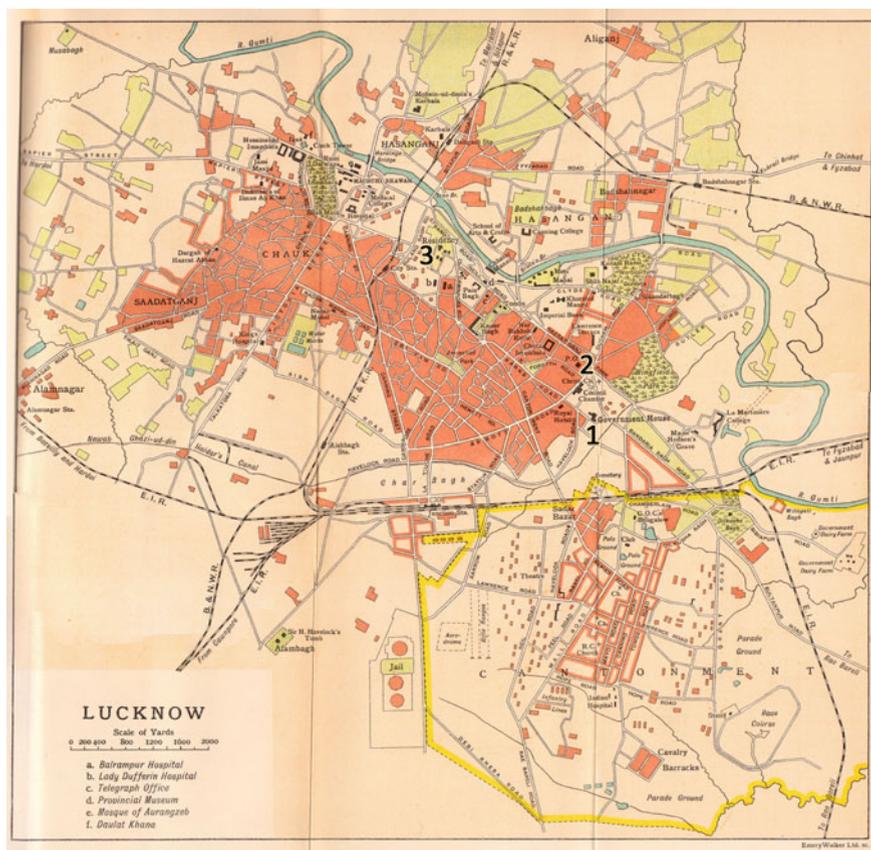


Fig. 9.4 Hazratganj (2) has been a major commercial street connecting the Residency complex (3) to the Government House (1), formerly known as Bank’s House. *Image:* Murray (1938)



Fig. 9.5 A memorial, seen above in 2013, was constructed in one of the newly designed plazas to place and commemorate the cannon ball. The artefact, however, has little maintenance and is not protected from the elements. Additionally, the words on the plaque are riddled with inconsistencies: ‘The 68 Pounder Cannon Ball that played havoc in Ganj In March 1868 raising to the ground every monument which had a claim to beauty and Grandeur of our Ganj’. Historical accounts suggest that the date here should be March 1858. The reference to the ball razing ‘every monument’ is rather inaccurate, as there is no evidence of such an event. The interpretation of the cannon ball and its role in Hazratganj (Ganj) can be re-evaluated for a more accurate narrative. *Photograph by A. Krishna*

the 93rd Highlanders also recounted the firing of ‘shot and shell’ into Hazratganj on 10 March 1858 (Gordon-Alexander 1898, p. 241).

In December 2010, construction workers were digging a trench to lay the foundation for a new electricity transformer when they discovered a cannon ball at a depth of about 1.2 m, shown on display in Fig. 9.5 (HT Correspondent 2010, 2011; Times News Network 2010a, b). The location of the find was in very close proximity to the Sibtainabad Imambara, another site that played a role in the events of 1857–58. Finding artefacts in this area, therefore, was not surprising, and should have been anticipated. During the same period, construction workers also found bricks inscribed with ‘1882’, leading to speculation on the existence of a tunnel, a drain, or a brick-paved road in the excavated area (Times News Network 2010a). Historians believe the cannon ball was probably from the attack on the Imambara on 14 March 1858, which allowed the British troops to advance towards Kaiserbagh (Little 2010; Times News Network 2011). Various officers’ accounts from the nineteenth century also suggest the same (Gordon-Alexander 1898; Innes 1895).

Given the level of historical activity in the area, it is likely that significantly more archaeological resources exist below the surface in areas that were not disturbed by

recent construction activity. Owing to the lack of clarity in dealing with the discovery of such archaeological resources, however, the items were removed from site, and construction carried on with no further archaeological or historical surveys to determine whether other such resources could be affected by construction in the area. The fate of the unearthed artefacts was also uncertain for some time. At first, both the cannon ball and the bricks from 1882 were to be taken to the Residency Museum, which already houses several artefacts from the 1857–58 period. Eventually, however, they were kept in a store room of the Lucknow Development Authority, the principal city agency carrying out work in Hazratganj. The cannon ball was examined by a member of the Lucknow Circle of the ASI, and it was also suggested by them that if found to be from the 1857–58 era, the cannon ball could be ‘preserved by state archaeology, museum or even by ASI’ (HT Correspondent 2010). Later that year, in November 2011, construction workers digging a pit in Dayanidhan Park in Lalbagh (a few minutes’ walk from Hazratganj, shown in Fig. 9.6) came upon a small 110-cm-long cannon, similar to what had already been found at the same site in 2001 (TNN 2011). Similar to the Hazratganj case, there was very little clarity in which agencies would be involved in examining the cannon, and there was no mechanism to halt construction and carry out cultural surveys at the site to investigate the possibility of more artefacts.

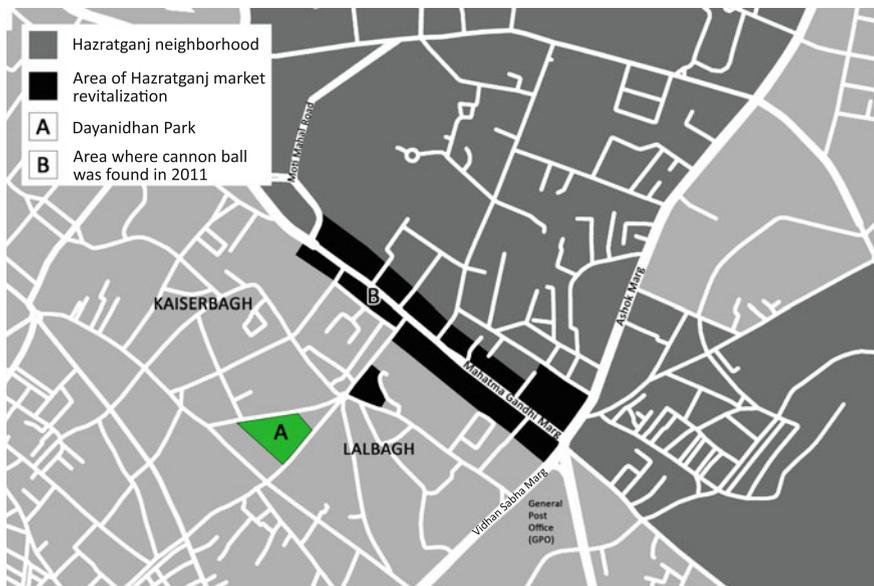


Fig. 9.6 This plan shows the central and historically important location of the Hazratganj market street along Mahatma Gandhi Marg. The locations of the discovery of a cannon ball (*B*) and two cannons in ten years (*A*) suggest that there may be a lot more archaeological resources yet undiscovered, and many more from the past that may not have been made public

Given the important role of archaeology, preservation, and planning in cities today, this kind of ambiguity does not bode well for future artefacts unearthed in urban areas, and points to a systemic problem. While the respective central and state legislations of 2010 and 1958 provide legal frameworks for sites protected by the concerned agencies, there is no clarity on safeguarding and protecting sites and artefacts that fall out of their ‘protected’ areas. According to the Indian Treasure Trove Act of 1878,⁷ the responsibility for such artefacts falls on the local administration, often headed by a District Collector (DC), a District Magistrate (DM), a Commissioner, or a Deputy Commissioner, as the case may be (Government of India 1878). While the Act assigns the relevant local authority with the responsibility to decide the future of the artefacts found, the role of the finder, and the owner of the site of discovery, it lacks provisions for any further explorations to be done to ensure that construction activity does not harm any other buried archaeological or surface historical resources.

The various archaeological finds in the process of routine construction and urban infrastructural upgrades highlight the dissonance between local, state, and central agencies in administering archaeological and historical resources. There are currently no legal provisions at the state or local level to halt construction for further investigation, especially in case of unexpected archaeological finds as found in and around Hazratganj. In addition, the regional ASI Circle often do not get involved in local projects unless they fall within the prescribed perimeter of a national monument. They need the cooperation of local authorities to get involved in archaeological finds outside their jurisdiction. In Bangalore, Karnataka, for example, construction workers unearthed an 11-ft cannon in May 2015 while digging to lay the foundation for a building in the Bangalore Medical College and Research Institute campus (Reddy 2015; TNN 2015). The cannon was discovered outside, but close to Tipu Sultan’s Palace, and is widely believed to belong to his eighteenth-century arsenal. The Superintending Archaeologist of the Bangalore ASI Circle, however, needed the City Commissioner’s permission before getting involved (Reddy 2015; Staff Reporter 2015b). In November 2012, similar cannons and balls were discovered in the K.R. Market area of Bangalore while excavating for the Bangalore Metro tunnels, and they eventually found their way into the hands of the State Department of Archaeology (Reddy 2015; Staff Reporter 2015a, b).

While the cannons found in 2012 in Bangalore were put in the backyard of the Venkatappa Art Gallery and Government Museum (state), the artefacts found in Hazratganj, Lucknow, in 2011, did not meet a similar fate (Staff Reporter 2015b). In early 2011, the cannon ball was put on display (Fig. 9.5) in front of Capoors Hotel as a reminder of the events that occurred in Hazratganj during the War of 1858. It is unclear though, why this particular location was chosen instead of the area in front of the Sibtainabad Imambara gateway (B in Fig. 9.6), where the

⁷The Indian Treasure Trove Act of 1878 defines the competent authority as: ‘Collector’ means (1) any revenue officer in independent charge of a district, and (2) any officer appointed by the [Provincial Government] to perform the functions of a Collector under this Act.

cannon ball was originally found, and where its interpretation would have been more appropriate. Incidences like this, especially in historically important cities like Lucknow, highlight the dissonance and ambiguity in administering archaeological and historical resources that are unearthened in the process of various kinds of construction activity.

Needed: Local Archaeology and Preservation Programmes in Lucknow

Cities like Lucknow lack archaeological, architectural, and preservation-related expertise within their municipal framework, much to their detriment. Existing expertise comes from either private practitioners, or state or central agencies whose guidance can be either curbed by their jurisdiction, or by the reluctance of local agencies to involve them for bureaucratic reasons. The discovery of artefacts during construction at Hazratganj, though relatively minor, highlighted the dissonance in administering archaeology and conservation through central, state, and local agencies, and point to the need for significant changes. The century-old alliances between central, state, and local agencies could be revived to resolve issues related to cultural heritage. First, as representatives of the principal agency in the country, officers of the regional Circles of the ASI would need to play a more significant role in situations where archaeological artefacts are unearthened. This would not only include examining and documenting the objects, but storing, researching, and interpreting them as well. Agencies like the Lucknow Development Authority or the Lucknow Municipal Corporation do not have trained staff to handle artefacts, nor do they have special facilities for storing them. An expanded ASI role would also mean that other urban conservation projects in the city could be more collaborative, rather than avoiding the complications of various levels of bureaucracy.

Second, the State Directorate of Archaeology would also need to play a bigger and more vocal role not only in archaeological excavations in prehistoric sites of the state, but also in conservation, preservation, and heritage management within urban centres like Lucknow. Its participation in the Hazratganj conservation project was conspicuous by its absence. An expanded role, however, would also mean an expansion in personnel to cater to more interdisciplinary projects within urban areas.

Third, even with better participation from the central and state agencies, the city government in Lucknow needs a department cell that employs trained staff who can liaise in such projects, especially in historic areas like Hazratganj where chances of finding archaeological artefacts are high. This cell, created with systems and mechanisms particular to Lucknow, could be very useful in ensuring compliance with all heritage laws, ensure that local agencies carry out their projects responsibly, and facilitate the documentation and listing of local heritage and archaeological resources. Agra Municipal Corporation (Agra Nagar Nigam) for example, created a 'Heritage Cell' in 2006 in collaboration with an NGO, with funding from the

Jawaharlal Nehru National Urban Renewal Mission (JNNURM). They employed trained professionals to document historic resources in the city not listed by the central and state agencies, and created heritage walks to promote sustainable heritage tourism (Center for Urban and Regional Excellence 2006, p. 40; Shrestha et al. 2014, p. 200). More recently, the Agra Development Authority (ADA) created a 'Heritage Cell' in June 2014, along the lines of a Landmarks Preservation Commission, comprising representatives of the ADA, the district administration, the ASI and civil society members from various NGOs including the INTACH. This local committee aims to create a plan of action for documenting and preserving historic resources in the city (Dev 2014).

While this Heritage Cell is a much-needed local effort in a very historic city, it is still lacking ways for local agencies to have accountability in archaeologically sensitive areas. A local Heritage Cell for Lucknow could build upon the Agra model, and in addition to documentation and preservation, help facilitate and mitigate urban situations concerning cultural heritage. This could also ensure that city agencies such as Lucknow Development Authority and Lucknow Municipal Corporation can carry out their routine projects without adversely impacting historic or archaeological resources. In cases like the discovery of the cannon and cannon ball in Hazratganj, a Heritage Cell could ensure that further investigation is carried out to see whether other artefacts exist in the area. They could also ensure that the artefacts are stored, conserved, and interpreted appropriately. Such a system would enable staff of the Heritage Cell to be local enforcement agents, and liaise with the ASI to intervene in historic and archaeological sites, mitigating encroachments and damage to them. Cities have to take responsibility for their own archaeological and historical resources before they are lost to the pressures of development, and learning from Lucknow's own history, cooperative alliances between central, state, and local agencies would be a step in the right direction.

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Part II
The Challenges and Accomplishments
of Local Government Archaeology
Programs in the United States

Chapter 10

Toward a Theory of Municipal Archaeology: Why Local Government Should Become Public Archaeology's New Best Friend

Douglas R. Appler

Introduction

For most archaeologists working in the field of cultural resource management (CRM) in the USA, government involvement in archaeology usually involves responding to federal laws, including Section 106 of the National Historic Preservation Act of 1966 (NHPA), the National Environmental Policy Act (NEPA), or Section 4f of the Department of Transportation Act. In this context, government archaeology is driven by actions that trigger the federal permitting process, or by the expenditure of federal funds. If those actions have the potential to negatively impact properties listed or eligible for listing on the National Register of Historic Places, archaeologists may be called into evaluate and possibly mitigate that damage through excavation and recording of the site. The cost of conducting this archaeology is generally borne by the agency initiating the federal undertaking, by the state agency using federal funds to initiate an undertaking, or by the private party seeking a required federal permit.

NHPA and the associated environmental protection legislation that created the modern federal preservation framework were major accomplishments at the time of their enactment and have resulted in the identification of over 90,000 historic and archaeological sites across the country (NPS 2016). Over time, however, the gaps in this system have become both more apparent, and more clearly in need of attention on the part of the archaeological community. Arguably the most significant gap is that archaeological resources on private property are offered minimal protection through federal preservation legislation. The review procedures specified in NHPA only apply to federal undertakings, not to purely private actions, and the more powerful protection offered by Section 4f only applies to resources threatened by

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federally funded transportation projects. At both the federal and the state levels, archaeological sites located on public land are much more likely to be afforded legal protection than are archaeological sites on private land, though state regulations do typically offer some protection for burial sites, and individual states have protected special categories of archaeological sites.¹ The result is that most privately owned archaeological sites, even those listed on the National Register of Historic Places, can be freely disturbed by their owners. As such, there is a need for a new, supplemental, system that can protect archaeological sites from destruction by private action.

A second major gap in the federal preservation framework is simply the scale at which it was designed to operate. It is federal legislation designed to address threats created by federal undertakings and is largely administered by the state historic preservation offices for each state (which were created by federal legislation—NHPA). It was never designed to address the problems or opportunities created by local actions, conditions, or circumstances. The decisions made by the state historic preservation office when carrying out the review process are often guided by local input, and that input is typically a major part of the SHPO's decision-making process (Potts 2012). However, by virtue of the scale of Section 106 projects, members of the public in this context are stakeholders, not decision makers. The work is done under the conditions specified, and to the degree required, by federal law, and the SHPO is generally responsible for determining when the demands of those laws have been met. The importance of the local perspective is necessarily diminished by virtue of being one of many perspectives that must be considered before a federal undertaking affecting a listed historic resource can proceed. Along with the need for administrative efficiency and the public's lack of familiarity with federal preservation legislation (Klima 2012), this may represent one of the possible reasons why SHPOs increasingly struggle to engage with the public on Section 106 projects. The "project by project" nature of federal CRM archaeology may be another reason. The local population's exposure to archaeology may last only as long as the project is under construction.

If archaeologists want to encourage the protection of archaeological resources from private actions, on private property, while encouraging a stronger connection between the public and the past, they would be wise to explore the experiences of cities and counties that have developed their own relationship with archaeology. As several chapters in this volume make clear, a number of municipalities within the USA approach the management of archaeological resources from a local perspective. Some of these communities have been refining their relationship with archaeology for decades, while in others that relationship is relatively new. Some have emphasized regulation and process, while others have sought to make public education their primary goal. While their methods and objectives may vary, these programs provide a way of addressing both of the flaws identified above: They are developed with the

¹The Kentucky Cave Protection Act, for example, makes disturbing archaeological sites within caves a misdemeanor (Kentucky Revised Statutes 433. 871–885).

needs of local residents in mind, and they offer a measure of protection for archaeological sites located on private property. This chapter explores the ways in which local archaeology programs address these two issues. The first section recognizes characteristics or traits often found in different municipal archaeology programs that can be used to cultivate an archaeologically savvy citizenry and that can engender a sense of guardianship for archaeological resources and information. It explores how the production and use of this knowledge allows a reconceptualization of the role of archaeology in public life. While the idiosyncratic nature of these programs makes it difficult to make blanket statements that can be applied to all archaeology carried out through local government, there are several traits that many of these programs seem to have recognized and used to their advantage. Different governments may capitalize on each to different degrees, but all communities seeking to engage with archaeology should be aware of their existence.

The second half of the chapter explores how a variety of local governments have approached the idea of archaeological regulation. Because each community is, generally, trying to achieve a similar goal and is operating within the boundaries of US law, it is not surprising that there are similarities in the regulations as written. These similarities may serve as “starting points” or “best practices” for other communities as they begin to develop their own archaeology regulations. There are, of course, also many differences between the regulations found in different communities. These differences may be a result of local political constraints, the types and sensitivity of the archaeological resources present, or other factors. The end result, however, is that archaeological resources are offered a measure of protection through the application of local land-use regulations that make archaeological review a mandatory part of the development review process.

Characteristics of Successful Municipal Archaeology Programs that Can Encourage Community Ownership, Understanding of, and Use of Archaeological Information

Seeing the Entire City as an Archaeological Site

The first of these recurring characteristics relates to the way archaeologists working in local government are guided by modern political boundaries. Because land development can take place virtually anywhere in a city, municipal archaeologists must understand how all lands within the community have been used, shaped, and changed by different historical forces over time. Rather than becoming an expert in one period of history, or in one field of human activity, these archaeologists must apply the same level of expertise to all archaeologically visible activities that have taken place within the limits of the modern city. From the earliest Native American or Colonial sites to those associated with the recent past, municipal archaeologists must be able to communicate the significance of any artifact recovered anywhere in the city.

Being sensitive to modern boundaries does not mean that archaeologists can be unaware of how their city fits into broader regional, national, or global narratives. That is part of what allows archaeologists to discuss the significance of the information they recover. It does, however, create opportunities for understanding the development of one community from many different intersecting perspectives, drawing together multiple eras of history, and different social forces, to be understood not at the relatively abstract scale of the region, but at the much more personal scale of the city. This approach can only be used to its full extent, however, if the archaeologists have built a research program around questions that are capable of contextualizing and linking the information being recovered from all corners of the city, and all eras of its past. One community that has in many ways set the standard for the using the “city as site” concept and building a successful research program to accompany it is Alexandria, Virginia.

The “city as site” perspective is a very pluralistic framework on which to build a research program, particularly when historical land-use patterns are used to inform discourses surrounding ethnicity and socioeconomic status, as they have been in Alexandria for much of that program’s existence (Cressey 1979; Bromberg et al., this volume). Understanding how cities change over time requires understanding the contributions of all the city’s diverse populations, and how they shaped the city as a specific geographic place. If a city’s archaeologists are given the freedom to develop a research program that is based on the city as a whole, rather than on just a handful of already identified historic sites, the contributions of ethnic or social groups that are less visible in the historical record may be allowed to come to the forefront. This can have very real consequences in terms of how the city’s history is portrayed and understood, and it can directly influence who may develop an interest in the city’s past.

Alexandria’s decades-long effort to raise the historical profile of the city’s African American population provides one way of exploring this process. When the city hired its first professional archaeologist, Pamela Cressey, in 1977, the city’s Colonial-era and Civil War histories were the primary beneficiaries of local residents’ archaeological interests (Appler 2015). By adopting a “city as site”-based approach to research, it became clear that the role of African Americans in shaping the city had not been sufficiently developed. As a result of this determination, for nearly four decades, the city has actively sought to recover information that relates to the African American experience in all parts of the city, tied to a broad range of historical themes. The archaeology program has helped to tell the story of slaves held by what was once one of the largest slave-trading firms in the USA; it has told the story of many free black communities in different parts of the city; by researching and memorializing the city’s Freedmen’s Cemetery it has told the story of slaves escaping to the city and to freedom during the Civil War; it has explored the process of post-Civil War land purchase and development by African American families at Fort Ward; it has documented African American churches, businesses, schools, social organizations, and many other aspects of African American life.

The archaeological sites that have helped to tell this story are located throughout the city, many in areas not previously thought of as being historic or recognized for their pasts. The emphasis on valuing information from all corners of the city, not just in its historic districts, has helped Alexandria to communicate the multifaceted nature of its history. It has also helped to build a citizenry that is unusually well versed in, and comfortable using, its history (Appler 2015).

Archaeologists operating from this “city as site” perspective must also understand the importance of the city’s modern population as a product of the same forces that have shaped the community over time. If the research design values the process of urban change, and the modern population is a product of that urban change, the local population, its geographic distribution, its history, beliefs, values, and priorities are of fundamental importance to the ability of the archaeologist to understand the relevance of information recovered from the past. By emphasizing that the process of urban growth and change links historical forces to the population living in the modern city, archaeologists have to see the current population as archaeologically relevant. The process of reinterpreting Alexandria’s Fort Ward Park, discussed by Francine Bromberg later in this book, helps to illustrate how modern residents with personal and familial ties to a historic site can be of fundamental importance to shaping the local need for, and use of, archaeological information.

Local Government Means Local Priorities

Archaeology programs developed through local government have a tremendous opportunity to be shaped, guided, and respond to the values and priorities of local citizens. The federal government has very different needs, and has access to very different resources, than any local government in the USA. As a result, federal preservation regulations that were developed to meet those needs should not necessarily be understood as the ideal model for protecting or recovering information in the very different political and cultural environment found at the local level. Local governments are more likely to be aware of local conditions and needs, they can identify and collaborate with the appropriate stakeholder groups, they can form different types of working relationships with those stakeholders, and they can be much more nimble in their response to archaeological issues and opportunities as they arise.

As is discussed in his chapter describing the development of the archaeology program in Phoenix, Arizona, the former city archaeologist, Todd Bostwick, worked closely with the Salt River Pima–Maricopa Indian Community, the Gila River Indian Community, the Fort McDowell Indian Community, and the Arizona State Museum to establish city policy that would provide for the respectful treatment of Native American burial sites when they are inadvertently discovered in city projects. In such an event, a media blackout ensues. The site is blocked from public view, it is not photographed, its location is not publicized, and both tribal

representatives and the Arizona State Museum are notified (Bostwick 2006, p. 17). In addition, any cloth placed on the grave sites must be made of muslin. This not only helps to prevent vandalism of the site, but it also helps to make sure that the remains and the affiliated descendant communities are treated with dignity and respect. This is a textbook example of archaeology at the local government level being shaped according to local values and priorities. While all local governments in the state are obligated to notify the Arizona State Museum when Native American burials are inadvertently discovered, state law does not require the level of protection or privacy required by the city's policy, and the inadvertent discovery provisions of the Native American Grave Protection and Repatriation Act (NAGPRA) only apply to federal or tribal lands. The end result is a cooperative arrangement that recognizes the members of the Native American community as major stakeholders in the decision-making process that determines how burial sites will be treated. The agreement is a reflection of the ability of local archaeologists, public officials, the Arizona State Museum, and the Native American community to work collaboratively to develop regulations and policies that apply to specific local conditions.

Though they will be discussed in greater detail in the second half of this chapter, local archaeological protection ordinances are invariably also crafted in response to local archaeological and political conditions. As such they, perhaps more than any other metric, demonstrate how local priorities can drive innovation in cultural resource management practice. It would not make sense, for example, for one city to adopt another's archaeological protection legislation whole cloth without substantial modification to target specific resource areas, or gaps in local archaeological knowledge, or without having significant conversations between local archaeological advocates, property owners, developers, and politicians to determine what level of intervention is appropriate. These components of local regulations and these steps in their creation must all be determined locally, by members of the community whose resources are to be subject to the regulations.

Local Residents Are Both Generators and Consumers of Archaeological Knowledge

A third trait shared by many successful municipal archaeology programs is that local residents are recognized as both the generators and primary consumers of the program's archaeological knowledge. Some of those residents are more actively mobilized as volunteers in the production of information, while others may encounter that information as researchers or students, but in these communities, interaction with archaeological information by local residents is a recognized goal. These communities typically treat the research process as an opportunity to kindle the public's interest, to build camaraderie among archaeology enthusiasts, and as a way to build a corps of informed local citizens. They recognize that the process of assisting in archaeological research is, in and of itself, a highly enjoyable type of

interpretation. Volunteers certainly have a more memorable experience and a better understanding of the meticulous nature of archaeology when they can, for example, help screen dirt as it comes out of the ground. These programs frame archaeological research as an opportunity for volunteerism—building community while recovering archaeological information. They also take advantage of the fact that people involved in the production of archaeological information will also be likely advocates for the use of that information. These individuals are less likely to be satisfied with interpretive media that are out of date or that do not change to reflect current thought or questions. Similarly, interpretive programming that specifically targets local residents with thought-provoking interpretation and meaningful publications, talks, or Web sites as a matter of course, is a fundamentally different “final product” than an archaeological report filed in a local library or museum. Putting local residents on equal footing with future researchers as the audience for information recovered through archaeology requires additional work, but greatly improves the likelihood of meaningful interaction with the past.

Anne Arundel County, Maryland; St. Augustine, Florida; and Boston, Massachusetts provide excellent examples of how local residents can assist in the research process while also learning about their community’s history. In Anne Arundel County, the Cultural Resources Division of the Planning and Zoning Department invites volunteers to “...dig alongside the County’s professional archaeologist, volunteer in our lab, or research the County’s past at the Maryland State Archives” (Anne Arundel County 2015). Each of those three activities generates new knowledge and provides a learning experience for the volunteer. In St. Augustine, the city’s archaeologist, Carl Halbirt, depends entirely upon the availability of a core group of volunteers to provide a labor force for the city’s mandated excavations (Halbirt and Miller, this volume). As in Anne Arundel County, the practice of volunteering both fills a need for the local government and creates an interpretive opportunity. Similarly, in Boston, volunteers are essential for the labor they provide on archaeological excavations, for their help in processing artifacts as they come in from the field, and for developing content for the broader public through the archaeology program’s Facebook page (Bagley, this volume). Each of those steps is an opportunity not only for learning about the city’s past, but for developing the history that becomes available to others.

The Longevity of City Archaeology Programs

Archaeologists working in local government enjoy another characteristic that distinguishes their work from that of their colleagues laboring under other circumstances. Municipal archaeologists do not have to pack up their trowels and look for the next job when the current project is finished. They can plan on being present in the community not only for the duration of a particular excavation or season, but indefinitely (or at least until the city decides to stop funding their position). To illustrate this point, the cities of Alexandria, Phoenix, St. Augustine, and Anne

Arundel County all currently have, or until very recently had, archaeologists on staff with more than 20 (and in some cases more than 30) years of experience working in the same city. With that longevity comes the opportunity to develop relationships with others in the city, to establish side projects, and to tap into deep community knowledge that allows the program to grow and to partner with the public in new and unexpected ways. In his chapter discussing the archaeology regulations in Phoenix, for example, Todd Bostwick makes clear that establishing a culture of respect for archaeology, even among other City departments, was a long-term project. In Anne Arundel County, this timeline allowed archaeologist Al Luckenbach, his colleagues, and volunteers to develop the *Lost Towns Project* as a nonprofit organization that could respond to archaeological research opportunities that the county government could not necessarily pursue through regulation alone (Furgerson 2014). The *Lost Towns Project* has recovered information from numerous Colonial-era and more recent historic sites, as well as the Pig Point site, which may be one of the most important prehistoric sites in the Chesapeake region (Luckenbach 2009; Kille and Ware 2012). The gradual development of the Alexandria Contrabands and Freedmen's Cemetery Memorial and the newly re-examined story of the families who lived at Fort Ward following the Civil War represent projects in which archaeology played a major role, but in which that role was only possible because of the knowledge accumulated over decades of working with community members on these and related issues. Both projects will be discussed in greater detail in the Alexandria chapter.

This long-term view also has very concrete side effects in terms of the ability of the program to function as a repository for archaeological knowledge. In Alexandria, the Archaeology Museum houses not only the finished reports of sites that have been excavated, but also the insurance maps, historical tax records, oral history transcripts, property records, church directories, aerial photographs, Civil War records, family photographs, and other documentary evidence that allows the city's archaeologists to carry out their long-term research goals. A good research facility, like relationships with community members, takes time to develop.

Local Government Has Unique Powers and Authorities that Can Greatly Facilitate Archaeological Protection

The ability of local government to provide a measure of archaeological review prior to private development projects is one power that will be discussed in greater detail later in the chapter. But development regulations only comprise one way in which local government may use its authority for archaeological protection. Another tool that local government possesses stems from its obligation to develop and operate community facilities, such as public parks, municipal buildings, greenways, and transportation enhancements (Fig. 10.1).



Fig. 10.1 The sculpture “Truths that Rise from Roots Remembered” by Jerome Meadows is a central feature in Alexandria’s African American Heritage Park. The sculpture is inscribed with the names of organizations and individuals who played a prominent role in the city’s African American history. The sculpture also identifies historic African American neighborhoods throughout the city. The park provides one example of a city amenity developed to draw attention to information recovered through archaeology (*photograph* by D.R. Appler)

Anne Arundel County’s Historic London Towne and Gardens represents one example of a community amenity that is owned by local government and that was created in order to protect historic and archaeological resources. In Phoenix, the city accepted ownership of the Pueblo Grande platform mound in 1924 and subsequently made it the centerpiece of the Pueblo Grande Museum (Wilcox 1993, p. 89). In Alexandria, Fort Ward Park, the Contrabands and Freedmen’s Cemetery Memorial, African American Heritage Park, and Alexandria Archaeology Museum all speak to the ability of local government to protect archaeological sites and information by creating community amenities. St. Augustine provides probably the oldest example in the country of a city protecting a public space that doubles as an archaeological site, though its circumstances are quite unusual. The city’s central plaza, the *Plaza de la Constitucion*, has been a public square since 1598 (founded in 1565 by the Spanish, St. Augustine is the oldest continually occupied European city in the continental USA). While the creation of the square obviously predated its recognition as an archaeological site, maintaining its status as protected city land for over four centuries has preserved significant archaeological deposits (Halbirt 1996).

Those deposits will likely stay in place, and if they do not, they will be professionally excavated, analyzed, interpreted, and made available to the public.

Mandating Archaeology Through Local Development Regulations

The second goal of this chapter is to explore the different ways archaeology has been included in the development review process for several different cities. Not surprisingly, there are both similarities and significant differences in how local governments across the country accomplish this goal. The regulation of land use on private property in the USA generally falls to local government. As inefficient as it may be, it is up to each of the nearly 39,000 local governments in the USA to determine what steps a property owner must take before he or she can “turn dirt” for a new house, a new subdivision, or a new commercial development (U.S. Census Bureau 2012).

For those who have not had reason to become familiar with local land development regulations, a few words of guidance might be helpful. Generally speaking, cities and counties in the USA exercise their state-granted governing authority by passing and enforcing ordinances that promote and protect the public health, safety, and welfare. Those ordinances are communicated to the public either in the form of a unified city or county code, or in a similar collection of ordinances. Believing that the orderly and efficient development of the community is in the public interest, most local governments in the USA have adopted zoning ordinances, subdivision regulations, building codes, and similar restrictions as part of their city or county code.

Most communities that have adopted archaeological protection regulations have done so by inserting language into their zoning ordinances. Arguably the most important part of that language is the question of how archaeology should be connected to ground disturbing activities, and most communities have done this by linking archaeological review to the application for a building permit. This linkage represents the most frequently encountered similarity in US ordinances. Alexandria, VA; St. Augustine, FL; Miami-Dade County, FL; Albuquerque, NM; Santa Fe, NM; San Antonio, TX; Anne Arundel County, MD; New York City; and Albany, NY, among others have all adopted some type of regulations specifying that there are conditions under which archaeological review will be required before the permitting process can move forward. For local developers, nothing except project financing is more important than obtaining a building permit, and this requirement makes sure that they take their archaeological review seriously.

What follows is a review of the language used in several of these ordinances to require archaeological review. In St. Augustine, the ordinance is quite clear. Section 6-6 of the city’s Code of Ordinances outlines the type and size of

disturbances that require an applicant to submit an archaeology review form and unambiguously declares that “No building, right-of-way, or utility permit will be issued by the city until the archaeology application has been submitted and the applicable archaeology fees have been paid.” In Santa Fe, section 14.5-3 of the City Code requires an “Archaeological Clearance Permit” prior to the issuance of building permits for projects in its Historic Downtown Archaeological Review District and before the approval of the final development plan for its other two archaeological districts. In Miami-Dade County, section 16A-14 of the Code of Ordinances requires a “Certificate to Dig” for virtually any significant activity within an archaeological zone, salvage archaeology may be a condition for the certificate, and no applications to other county agencies that involve ground disturbing activities may be approved if an applicant has not first obtained a certificate to dig. Borrowing language from its historic preservation districts, section 375-36C of the Code of the City of Albany requires a certificate of appropriateness for excavating in previously identified areas of archaeological sensitivity. Other cities, including Alexandria, tie archaeological review to site plan review without specifically creating an archaeology permit, but they follow the same basic process of using the “carrot” of a building permit to lead developers through the various steps of archaeological review (Bromberg et al., this volume). Similarly, in New York City, any developer requesting a discretionary permit, meaning proposing a building larger or taller than allowed by a normal building permit, must undergo an environmental review, which includes determining whether the site has archaeological potential, and undertaking archaeological testing if the site is significant (Baugher, this volume).

A Publicly Available “Archaeological Areas” Map

Another element shared by several successful city archaeology ordinances is the use of a map that identifies areas of high probability for archaeological sites. An “archaeological areas” map is important for many reasons, but among the most important is that the research determining the boundaries of the archaeological zones helps to establish the nature of the resources present in different parts of the community. For developers, surprise discoveries are not usually a good thing, and any pre-excavation research that can give property owners or developers advanced warning of what their land might contain is generally welcome. The research behind the map may also help to determine what types of mitigation measures are appropriate. For example, areas with the highest concentration of archaeological resources might require mandatory full excavation, while areas of a more scattered nature might only need testing (Fig. 10.2).

An archaeology map is also useful because while the historical significance of the resources present in an area may be understood by archaeologists and historians, it is not likely to be the most important issue for a developer. Most developers simply want to know whether their project is in an archaeology zone or not, and if

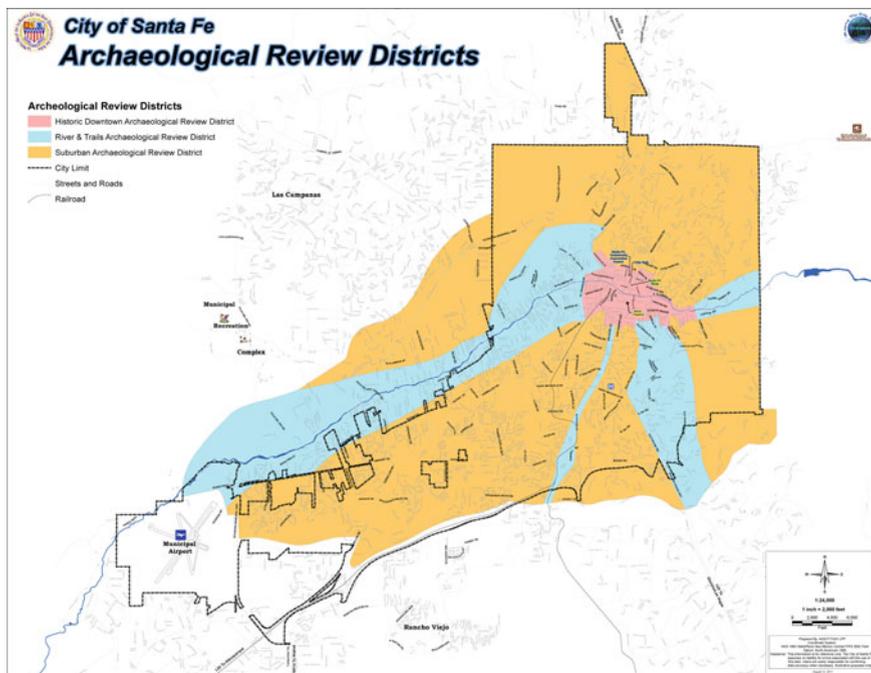


Fig. 10.2 The City of Santa Fe makes its map of archaeological zones readily available through the city Web site. The zones are drawn to include most of the city, making it clear that archaeological resources could be found nearly anywhere (City of Santa Fe 2016)

so, what that means for their project. The availability of a well-drawn map allows a developer to get his or her bearings before proceeding to the next step in the development process. Finally, a map of archaeology zones is important because the production and use of the map becomes an opportunity to share something with the public about the resources present in the community. Maps are very effective tools for communicating a great deal of information quickly, and their visual nature makes them much easier for the public to grasp than the text of a zoning ordinance. The cities of Alexandria, St. Augustine, and Santa Fe all have easily accessible maps of their archaeological districts available through their city Web sites (Alexandria Archaeology 2016; City of St. Augustine Archaeology Program 2016; City of Santa Fe 2016).

Inclusion of Municipal Ground Disturbing Activities in Regulations

Another characteristic shared by many communities with successful archaeology regulations has to do with what the local government does on its own projects.

When cities or counties undertake ground disturbing activities, such as widening roads, constructing new municipal buildings or facilities, or extending utility lines, they are just as capable of destroying archaeological resources as are private developers. As such, several forward thinking communities have created specific language to make clear their desire to protect the city's archaeological heritage. Section 14-3.13B of the Santa Fe City Code, for example, makes clear that city projects in all three archaeological zones are subject to the same review procedures as private projects. City projects in Phoenix that are greater than two square feet in area and two inches in depth are also reviewed by the City Archaeologist (Bostwick 2006 p. 11). In Phoenix, however, the requirements for city projects are written into the city's archaeology guidelines, rather than into the city code or land development ordinance. Todd Bostwick explains the implications of difference in his chapter. In New York City archaeology is required under the City Environmental Quality Review Act (CEQRA) (Baugher, this volume).

Differences

The preceding section of this chapter has drawn attention to a several common practices among cities with archaeology regulations. This section of the paper will turn the reader's attention to the considerable variety found in the regulatory approaches to including archaeology in the development process.

The Presence or Absence of "Archaeological Zones"

One area where many cities differ is over the question of whether to use "archaeological zones" as a way of identifying areas of the city likely to contain archaeological sites. Archaeological zones in this context are very similar to traditional historic districts, in that their boundaries are identified based on historical or archaeological research and that development projects taking place within the boundaries of those districts are subject to additional scrutiny before approval is granted. The cities of St. Augustine, Alexandria, Albany, Santa Fe, and Monterey County, California (Monterey County Code, section 21.66.050) all use archaeological zones as a way of determining whether a proposed project will be required to undergo archaeological review. If the project is within an archaeological zone, the proposal must be subjected to some level of archaeological review. If it is not within an archaeological zone, it does not generally require review by an archaeologist.

Among those cities that use archaeological zones, there is an additional level of variation. In Alexandria, section 11-411 of the city's Zoning Ordinance requires all development applications that are in archaeology resource areas, regardless of which area, to obtain a preliminary archaeology assessment from city archaeology

staff. Other cities, such as St. Augustine and Santa Fe, require different actions based on the characteristics of the archaeological zone. For example, in St. Augustine, section 6-6 of the city's Code of Ordinances dictates that "major disturbances" taking place within the zone that contains the most significant resources are required to undergo mandatory salvage excavation. Major disturbances within the less significant zones are subject to testing, followed by additional salvage work as deemed necessary by the city archaeologist. As will be discussed below, in Santa Fe, the archaeology zone determines the size of the project that will trigger archaeological review.

Anne Arundel County, MD, uses a slightly different approach. Rather than limiting archaeological review to specific archaeological zones, review of proposed projects is triggered by the likelihood that the project could affect a previously known archaeological site. Section 17-6-502 of the Anne Arundel County Code states that development should avoid disturbing significant archaeological resources listed on the Maryland Inventory of Archaeological Resources. With that as a guide, if the Office of Planning and Zoning determines that a listed archaeological site is on the property or that there is a high potential for archaeological sites to be present on the property, section 17-6-502 allows it to require a "Phase I" preliminary survey to determine whether the property should undergo additional archaeological scrutiny.

One city that stands out from the others in this respect is Albuquerque, NM. The city does not use archaeological zones or base the need for review on proximity to known archaeological sites. Instead, section 14-16-3-20 of the city's Zoning Code requires preliminary plats or site development plans of over 5 acres in size to be reviewed for their effect on archaeological resources. While this may create additional work for the City Archaeologist in terms of reviewing projects that will not affect archaeological sites, it does obviate the need to periodically update archaeological zones based on new information. It also makes it quite clear that virtually everyone whose project is over a certain size will have to have their project reviewed for its potential impact on archaeological resources (Schmader, this volume).

The Nature of the "Trigger" for Archaeological Review

One significant question that any city contemplating an archaeology ordinance must answer is "What type of project triggers archaeological review?" Answering this question successfully requires delicately balancing archaeological needs with local political concerns—because the moment a city starts telling private developers that they are legally required to conduct archaeological review, that additional cost must be justified, and archaeology becomes a very modern political issue.

The City of St. Augustine has arguably one of the country's most sensitive "triggers" for requiring archaeological review of private development projects.

Section 6-6 of the city's Code of Ordinances states that within the city's archaeological zones, all projects that require a city building permit, utility permit, or right-of-way permit and that are greater than 100 square feet in area and deeper than 3 inches in depth, must submit an application for archaeological review. In basing its "trigger" on the combined area and depth of the hole to be created, St. Augustine's policy is similar to that used by the City of Phoenix to trigger review on city projects.

Most cities do not include a "depth" requirement. Santa Fe, for example, bases review on the area of the disturbance, and the area that triggers review varies by zone. Section 14-3.13B of the Santa Fe City Code states that within the city's Historic Downtown Archaeological Review District, projects 2500 square feet in area or greater are required to apply for an archaeological clearance permit. In the city's "Rivers and Trails" district, projects over two acres in size are typically required to apply for a clearance permit, and in the Suburban Archaeological Review District, projects over 10 acres in size require an archaeology permit.

Alexandria takes a slightly different approach, linking archaeological review not to the size of the hole that a property owner wants to dig, but to the nature of the proposed project. Section 11-411B of the city's zoning ordinance states that within the city's archaeology zones, those projects requiring site plans must undergo archaeological review. Section 11-404A specifies that site plans are not required of developments that produce fewer than three housing units. Therefore, someone constructing one or two houses within an archaeological zone would not be subject to archaeological review, because they are not required to submit a site plan for review. For subdivisions that create three or more housing units, and for most other forms of development within archaeological zones, project review by an archaeologist is required.

In Albany, the system for determining what activities trigger archaeological review is essentially the same as the city's system for reviewing changes to its historic architecture, in that virtually any change must undergo review by the planning department. Just as changes to a historic building's windows or front porch would require review by the city's historic preservation planner in order to obtain a certificate of appropriateness, section 375-36C of the Code of the City of Albany specifies that changes to the soil in an archaeological zone require review by the city archaeologist in order to obtain the same certificate of appropriateness. The language of the ordinance gives the city archaeologist the authority to determine whether or not the proposed project will be sufficiently likely to impact archaeological resources. If so, the city may require field work prior to issuing the certificate.

Who Conducts "Archaeological Review?"

Arguably the most important part of any archaeology ordinance is the question of what is required when a project has to undertake "archaeological review." In most

cities, once a project has been reviewed by the archaeologist or the zoning administrator and it has been determined that actual fieldwork is needed, the developer or land owner is required to hire a professional archaeologist who conducts the archaeology to the extent required by the city's ordinance and prepares a report for the local government. This is the model used in Alexandria, Albany, Santa Fe, Anne Arundel County, New York City, Phoenix, and San Antonio, TX. That report may be given to the city's historic preservation staff, its development review staff, the archaeology review board, or the city archaeologist, but typically the administration of the city's archaeology regulations and the responsibility for research, fieldwork, and preparation of the final report are separated. There are many reasons for this division, but one of the most readily apparent is the size of the workload required by strong archaeological protection regulations. One noteworthy exception to this rule is St. Augustine, whose ordinance requires the City Archaeologist to be the one who conducts the salvage archaeology for all projects in which fieldwork is required. While this model does provide the city archaeologist with extraordinary familiarity with that city's archaeological resources, it also places a tremendous burden on the individual in that position. Although this system seems to work well for St. Augustine, larger cities might want to consider the separation of the administrative and archaeological functions of the ordinance, or possibly hiring a larger staff of archaeologists.

The Role of the Public in Administering Archaeology Regulations

One final area of variety in the local archaeology regulations most often encountered in the USA is the question of how, or whether, there is an avenue for public participation in the process of archaeological resource protection. As is to be expected, each city approaches this idea differently. Alexandria is well known for its exemplary program that pairs the public policy guidance of the citizen-led Alexandria Archaeological Commission with the skill of the city's professional archaeologists. And with training, the city's avocational archaeologists can participate in several ongoing city archaeological projects, as well as with historical research, interpretation, and public outreach. But the day-to-day administration of the ordinance falls mostly to the city's professional archaeologists, while the fieldwork triggered by the ordinance is largely done by CRM firms. As described by section 14-2.7D of the Santa Fe City Code, that city's Archaeological Review Committee consists of private individuals appointed to the committee by the Mayor, but three of the five committee members are professional archaeologists, while the remaining two posts are held by a historian and a member of the development community. Given the role of the committee in determining the scope of work to be done before an archaeological clearance permit can be granted, that

professional knowledge plays an important role in the ordinance's success. In St. Augustine, in large part because of the way the city's ordinance was first developed, the city archaeologist actually uses volunteer labor to help conduct the archaeological fieldwork and laboratory work required by the city ordinance. Members of the St. Augustine Archaeological Association played a major role in the creation of the city ordinance, and their continued interest has helped the city archaeologist to stay on top of an ever-increasing workload (Appler 2013). In short, there are many ways in which both the professional and non-professional public can interact to support the goals of an archaeology ordinance. This is a situation where creativity, openness to new ideas, and a willingness to develop an ethic of archaeological stewardship can pay substantial dividends.

Conclusions

Although the number of communities with archaeological protection regulations is small, it is a larger group than most people realize, and the experiences of these communities point the way toward a form of archaeology that addresses some of the most glaring flaws in the federal preservation framework. While they do so with different tools, techniques, and requirements, they use the legal authority of local government to protect archaeological resources on private and municipal property. Residents in these cities also enjoy much more contact with, and control over, archaeological resources than do most US citizens. While it may be difficult to think of any level of government as being "nimble," these communities have proven themselves to be capable of developing innovative regulations and policies that address local needs and respond to local conditions.

These cities and counties demonstrate that archaeology can be integrated into the development processes of small communities and large communities, they can provide protection for historic and prehistoric sites, and they can be drawn to respond to commercial, residential, and public land uses. One fundamental concept that must be understood, however, is that the benefits of developing local archaeology regulations will never be fully realized if the non-professional public is not "built-in" to the archaeology program. Residents must be given a chance to participate in, learn from, and develop an appropriate level of ownership over the information recovered—because a city is not just a collection of archaeological sites—it is also home to the citizens of that community. If archaeologists and their supporters do not make themselves and the information they recover available to the general public, they risk alienating the people who ultimately must be persuaded that the power of local government can and should be used for the purpose of protecting archaeological resources.

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Chapter 11

We Dig Alexandria: A Reflection on More Than Fifty Years of Community Archaeology

Francine Bromberg, Pamela Cressey, Garrett Fesler, Paul Nasca and Ruth Reeder

Introduction

Community archaeology began in Alexandria, Virginia, even before the term entered the lexicon of professional archaeologists. The year was 1961, and the first archaeology in the City resulted from citizen efforts to preserve a Civil War fort from destruction by the encroachment of suburban sprawl. Over the next fifty years, the hallmark of Alexandria's successful community archaeology program became collaboration among professionals and the public, with public advocates often leading the way, as they did in 1961, for the promotion of archaeology as a community value and for its use as a preservation strategy.

Founded in 1749, the Town of Alexandria was laid out in a grid pattern around a small cove of the Potomac River. With the third oldest historic district in the country, Alexandria has been recognized as a national leader in preservation. The City takes pride in its historic character and has become a destination for those seeking charm and authenticity. Situated across the Potomac from the nation's capital, the diverse 15 square-mile town, with a population of more than 140,000, extends from colonial Old Town on the river to the highways, high-rises and subdivisions of the West End. A World-War I torpedo factory, rehabbed into a popular art centre on the riverfront, provides a location for the Alexandria Archaeology Museum, and office space for six staff members, who are employees of the municipal government.

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Throughout the years, the key component of the City's archaeological program has remained public participation and partnership. As Maureen Malloy points out in the introduction to the SAA volume *Archaeologists and Local Communities: Partners in Exploring the Past*, community archaeology involves going beyond "**participation by the public**" to incorporate "**partnership with the public**" (Derry and Malloy 2003:ix). The Alexandria Archaeological Commission, a residents' board of 14-members appointed by City Council, acts as one of the most significant catalysts for this public/professional interaction and collaboration. Established in 1975, likely the oldest city archaeology board in the country, the Commission advises City Council on policy and direction for archaeological matters and works in tandem with the professional staff. As a voice for the larger community of interested residents, the commission serves as the focus of community input and makes specific recommendations to City Council. The recommendations are strengthened, and residents' concerns and interests have more impact when expressed through actions of such a board.

Naturally, public participation must always remain a strong and integral part of any community program. Each year, about 100–200 volunteers and students have contributed from 5,000 to 11,000 hours of time. Their tasks are varied: they conduct excavations, historical research, and oral history interviews; process artifacts; teach lessons to school children and help to run other public programs; receive visitors to the Museum; and provide administrative support. They come for many reasons—to learn, to contribute to the community, to enjoy the past. Their interests and curiosity shape the character and products of the program. Other participants in partnerships include city planners and developers, citizens at planning meetings and public hearings, visitors to the Museum, teens in summer camp, college students, bicyclists and walkers along the Alexandria Heritage Trail, children in hands-on activities, and families at Dig Days. These people are more than receivers of information; their questions and ideas continue to affect plans for the future. All are invited to join the Friends of Alexandria Archaeology, a non-profit group formed in 1985, which encourages participation in, knowledge of, and support for archaeology. As the program has evolved, a constant dialogue between the public and professional archaeologists has led to the establishment of a strong "archaeological community" and the creation of an ever-increasing number of partnerships within the community at large.

This chapter reflects on more than 50 years of archaeology in Alexandria, illustrating how the citizens and archaeologists of one American city have approached the challenge of unearthing the knowledge and recognizing the value of its buried past and using this knowledge to enrich the community. The chapter is organized chronologically to provide a glimpse into the evolving priorities of Alexandria's archaeological program through the decades. It highlights some of the knowledge gained over the past fifty years and emphasizes the various strategies, tools, and partnerships that emerged to accomplish the program goals.

Rescue and Reconstruction

In keeping with the expanding preservation tenets of the decade of the 1960s, which saw the passage of the Reservoir Salvage Act and the National Historic Preservation Act, the first archaeology in Alexandria focused on rescue and reconstruction. The efforts of a group of activists, led by local resident Dorothy Starr, moved by their commitment to history and their recognition of the value of historic places for education and enrichment, led to the City's purchase of Fort Ward to create a historical park with a museum dedicated to interpretation of Alexandria's Civil War past (Douglas 1964). In order to create a more accurate reconstruction of the northwest bastion of the fort, the City hired archaeologist Edward Larrabee in 1961 to excavate the site (Larrabee 1961). This model of saving a site or historic place and turning it into a park continues to this day as a part of the archaeological preservation toolkit in Alexandria.

Between 1965 until 1975, local citizens mobilized again to protect the City's archaeological resources, this time in the heart of Old Town. During this period, the City's ongoing urban renewal program razed several city blocks along King Street, the commercial centre of the city. As demolition exposed artifact-laden privies, the community outcry led to demands that the City address and halt the losses to Alexandria's heritage. An archaeological technician was hired to conduct excavations, first funded by the Smithsonian between 1965 and 1971, then by local citizen contributions through 1973, and finally by the City in the fall of 1973 (Watkins 1965b; Ozefovich 1971, 1974) (Fig. 11.1).

The constant sight of this salvage work in the middle of Old Town and the array of artifacts recovered bolstered the public's appreciation of archaeology. With the support of architectural historians and other preservationists, residents successfully lobbied City Council, resulting in the 1975 passage of a resolution that created the Alexandria Archaeological Commission (Alexandria City Council 1975). The resolution articulated three general goals for archaeology within the City: To Search, To Study, and To Share. Through formulation of this last goal, Alexandrians incorporated the lessons learned from the salvage projects of the preceding years and expressed that the City's archaeological heritage belonged to the public.

Research, Context, and Discovery

The hiring of professional staff beginning in 1977 sparked a shift from a rescue strategy to a research strategy for archaeology in Alexandria. As the last King Street urban renewal block was investigated with a virtual out-pouring of help from hundreds of volunteers contributing thousands of hours, the new City team began to picture this one block as a part of a larger city-site (Cressey 1979; Cressey and Stephens 1982; Shephard 1988). Envisioning that this broader research framework



Fig. 11.1 Richard Muzzrole, the archaeological technician first sent to Alexandria by the Smithsonian Institution in 1965. Photo courtesy of Alexandria Archaeology

could bring more power to the findings, the City archaeologists recognized the need to develop contexts to allow for the accurate identification, evaluation, and interpretation of sites across the City within the framework of the full continuum of human occupation, which extended back more than 10,000 years.

To aid in the development of a context for Native American occupation, the Commonwealth of Virginia allotted funds in 1979 for a preliminary survey of stream valleys, which led to the identification of more than 15 sites that had

survived over two centuries of urban and suburban development (Commonwealth of Virginia, Alexandria Regional Preservation Office 1979). For the historic periods, the development of context began with the collection of historical maps, aerial photographs, and other key locational information to allow for the plotting of potential site locations. Themes of study and periods of significance were established.

Looking back on Alexandria Archaeology's projects from the late 1970s through the 1980s, it becomes apparent that research often centred on a number of significant themes. Waterfront studies focused on locating potential resources buried in the Potomac River and mapping the physical changes along the river as the bluffs along the cove were "banked out" to fill the silty mud flats and allow for the construction of wharves and piers to extend into the deeper river channel, thereby ensuring the port's viability (Shomette 1985; Watts 1986; Shephard 2006). A cemetery survey was completed to gather information about locations of these particularly sensitive resources (Commonwealth of Virginia, Virginia Department of Historic Resources 1989). Excavations and analyses provided insight into early commerce and industry in Alexandria. Investigations at Arell's, McKnight's and Gadsby's taverns revealed that they catered to different clientele, with tankards for beer and ale for the rowdier crowd found at Arell's, teapots and cups for the businessmen and politicians at McKnight's, and fine wares confirming the impressive reputation as a tavern that entertained presidents at Gadsby's (Foss 1974; Beane et al. 1994). Stoneware recovered from the Wilkes Street Pottery had distinctive forms and blue cobalt designs that characterized the wares of the three successive potters, John Swann (1813–1825), Hugh Smith (1825–1841), and Milburn (1841–1877) (Myers 1983; Cressey and Magid 1993, p. 14–17). Work at the Moore-McLean Sugar Refinery led to increased knowledge about Alexandria's role as a sugar producer and exporter and to a greater understanding of the process of sugar production in the early nineteenth century (Barr 1989; Barr et al. 1994). Among the artifacts recovered were thousands of red earthenware sherds in two basic forms: cone-shaped moulds where the sugar crystalized and jars with glazed interiors where impurities were collected.

Hundreds, perhaps thousands, of hours of archival research into tax and census records led to the preparation of maps that fostered an understanding of changing land use patterns and the evolution of neighbourhoods in the City from 1780 to 1910. Results of this work indicated that elite households and businesses were initially situated along the riverfront, but later moved inland to the Washington and King Street corridors. A 1981 grant from the National Endowment for the Humanities allowed for archaeological testing of households of varying socio-economic status. In addition, oral history interviews were conducted to establish a living connection with activities and life in Alexandria's past.

A focus on Alexandria's African American community as an important research theme emerged as archival work documented locations of, and changes in, African American neighbourhoods through time. African American sites of Free Blacks and sites of enslavement were investigated. At the Harriet Williams site, home of an enslaved Alexandrian, the recovery of large serving pieces but no kitchen wares

suggests that she cooked food in her owner's house, two doors away, and carried it to her home (Cressey 1985; Cressey and Magid 1993). In Hayti, one of Alexandria's first free African American neighbourhoods, excavations unearthed thousands of artifacts of everyday life, including mismatched table wares and large numbers of buttons, presumably bearing witness to the women's roles as laundresses (Cressey 1985; Cressey and Magid 1993).

None of these discoveries would have been realized without a strong cadre of volunteers, who learned from and interacted with the professional staff. As new neighbourhoods were explored and new sites investigated, there were impromptu and scheduled site tours as well as lectures given at neighbourhood associations and churches. Through expansion into new neighbourhoods, new connections were formed between archaeologists and residents, including leaders in the African American community, thus broadening the base of the "archaeological community."

Before the passage of the Archaeological Protection Code in 1989, there were no legal requirements for archaeology prior to development, and all archaeology conducted on private sites was the result of negotiation and good will between the City Archaeologists and the property owner or developer. In one early example from the late 1970s and early 1980s, when plans for new construction along the north waterfront became imminent, the Commission recognized an opportunity for



Fig. 11.2 As part of the TransPotomac Canal Center development, the Alexandria Canal Tide Lock was excavated, reconstructed, and preserved as an Alexandria cultural heritage site. Photo courtesy of Alexandria Archaeology

the creation of another historic park, this time as part of a private development project that was located on the site of a tide lock of the Alexandria Canal. The developers, Savage Fogarty, Inc., were convinced that creating this amenity to enrich and enhance the community would add interest and value to their project, and as a result, financed both the excavation and the subsequent creation of the park (Hahn 1992) (Fig. 11.2).

The canal was excavated, recorded and preserved in place; a reconstruction above the original fabric was completed and interpretive signage erected (Hahn and Kemp 1992; Shephard 1994). New development is currently planned for this site, and the canal reconstruction will be retained and incorporated into a new mixed-use complex.

Museum and Collections

With the collection of so many artifacts and so much information about the City's past, the pressing need arose in the early 1980s for a facility where exhibits and interpretation could convey information to the public and bring the Commission's



Fig. 11.3 The Alexandria Torpedo Factory Art Center. Though its location within the facility has changed, Alexandria Archaeology has been headquartered in the Torpedo Factory since 1984. Photo courtesy of Alexandria Archaeology

goal, “To Share,” into focus. The Alexandria Archaeology Museum opened in 1984 in the newly renovated, City owned, Torpedo Factory Art Center (Fig. 11.3).

The guiding principle behind the development of the Torpedo Factory Art Center was to showcase artists at work and allow the public the opportunity to witness the creative process, ask questions, and learn about the many different art forms as 150 artists practiced their crafts in full public view. This same principle applied to the Alexandria Archaeology Museum, where the theme morphed into “Archaeologists-At-Work.” The museum thus became more than just a series of interpretive displays. It is designed to function as an open, working laboratory where the public can witness professionals and volunteers engaged in the processing of artifacts, see and touch authentic finds, and freely ask questions as material from sites across the City is washed and catalogued. In addition, the museum design incorporates flexibility, with lab tables on wheels so that they can be quickly moved to create space for lectures and other activities. The Alexandria Archaeology Museum is funded by the City of Alexandria, and its archaeologists are City employees. The activities of the Museum also benefit from a very enthusiastic corps of archaeology supporters. Between July 2013 and July 2014, the activities of the Alexandria Archaeology Museum were supported by just over 11,000 hours of volunteer support (Friends of Alexandria Archaeology 2015: 15).

Responsibility for the high volume of artifacts collected also brought about the pressing need for proper collections management and curation. The original storage space did not meet newly developed federal curation standards; thus, in 1989 grants from the National Science Foundation and the Institute of Museum Services allowed the City to develop a new off-site collections facility. In 1991, the entire collection was re-boxed and placed into this temperature and humidity controlled environment. Today, the City continues to own and operate the facility, which is just over a mile from the museum. It now contains more than 2 million artifacts and ecofacts from almost every site excavated in the City, providing a research resource that is extremely rare for any locality in the country.

Archaeology Code and Master Planning

By the late 1980s, rapid development raised concerns for threatened sites across the City. The Archaeological Commission concluded that a local protection ordinance was needed to identify and preserve threatened resources. The Commission sought input from the business community—developers and their lawyers—thereby bringing new players into partnership with archaeology. As a direct result of the Commission’s vision and commitment, City Council adopted the Alexandria Archaeology Protection Code in November 1989, one of the first local ordinances in America (Lait 1989). It set out a process whereby the private sector would pay to preserve resources through excavation and analysis before construction, or hopefully, through protection of some sites in situ (Alexandria Archaeology 1990). The Code makes archaeological review part of the permitting process, meaning that a

developer cannot receive a building permit until the project has been reviewed by the City's archaeology staff.

The Code, which formally became part of The Zoning Ordinance of the City of Alexandria in 1992, stipulates that Alexandria Archaeology review all city site plans that involve ground disturbance and make a determination of the potential impact on archaeological resources (City of Alexandria 1992). The City archaeologists determine the level of work to be done by private developers who are required to hire archaeological consultants to conduct investigations and produce both technical and public reports on their findings.

The City review process necessitated the compilation of as much data as possible regarding the locations of potential sites in order to make appropriate determinations of the work levels. Using the maps obtained and surveys completed through previous research efforts, City archaeologists wrote a preservation chapter in 1990 for the City's Master Plan that included over 4,000 potential site locations, as well as historic districts and standing structures. This mapped information, now in digital form using Geographic Information System (GIS) software, facilitates the review process (City of Alexandria 1992).

The passage of the Code more than 25 years ago changed some aspects of the program. Code implementation meant that research became more development-oriented with a focus on sites that were threatened by construction. Consultants from cultural resource management firms began to conduct the bulk of the fieldwork required by the Code, and City staff adopted an oversight role for these projects. In addition to completing reviews of development projects, the staff became responsible for overseeing the archaeological preservation process to ensure quality, writing scopes of work, consulting during the processes of excavation and analysis, and reviewing technical and public reports.

Code implementation begins with a Preliminary Archaeological Assessment. Using GIS, historic maps, tax maps, settlement pattern data, and other primary documents, City archaeologists put the project area through an assessment process of due diligence. Guiding the staff through this assessment are six criteria, similar to those of the National Register of Historic Places: research value, rarity, public value, site integrity, presence of materials, and impact of the development on resources. At this point, the assessment focuses on the potential the property may hold for archaeological sites, and the significance of these potential buried resources. Questions asked include: Do any historic maps show sites on the property? What are the time periods and functions of these map features? Is the landform conducive for prehistoric settlement? What is the current condition of the property? Depending upon what turns up during the assessment process, City archaeologists generally issue one of four directives:

1. No archaeological action.
2. Call Alexandria Archaeology if prehistoric or historic finds are uncovered.
3. Arrange for Alexandria Archaeology to monitor the project.
4. Hire an archaeological consultant to conduct historical and archaeological studies of the project area as requested by Alexandria Archaeology.

If it is determined that the project area has good potential for archaeological sites, then the property owner is required to hire a professional archaeological consultant and move through the process of background research, surveying, evaluating, and if necessary, excavating any significant resources. It is worth noting that, although not officially under the Code, Alexandria Archaeology also reviews building permits and other activities that do not require formal site plans—things like additions to homes, the replacement of pipes, moving a fence, and so forth. In these cases, if something of significance is on a property, the City does not burden the owners with the cost of archaeology, but the City archaeology staff asks permission to conduct some sort of emergency recovery project or monitor the ground disturbing activity. The cost of this archaeology is borne by the City.

Studies mandated by the Archaeological Protection Code have added immeasurably to the understanding of Alexandria's past as demonstrated by looking back and evaluating what the Code has accomplished. Between 1989 and 2015, the City's archaeological staff has conducted more than 11,000 reviews. If not for the vision of the Archaeological Commission and the foresight and action of the City Council to implement a protection code, much of the information would have been lost.

An understanding of Native American life, commercial and industrial activities, African American enslavement, death and dying, waterfront activities, rural life and the Civil War are among the themes elucidated by the implementation of the Code. For instance, CRM excavations at the Jones Point Site led to the discovery of Alexandria's first known house, a structure that measured about 12 feet in diameter, that was built by Native Americans about 1000 years ago and made of bent saplings, probably covered with woven mats (Barse et al. 2006). It was identified by the presence of a rough circle of 25 small postholes—dark, organic soil stains, remnants of the saplings that had decayed in the ground. At Keith's Wharf/Fords Landing, CRM archaeologists unearthed the remains of an eighteenth-century wharf, the hulls of eight sunken derelict vessels, and the Alexandria Marine railway where a four-mast schooner weighing 1500 tons was constructed and launched in 1883 (Artemel et al. 1988). Excavations at the Bruin Slave Jail, a slave-trading establishment in operation from 1844 to 1861, uncovered a cistern that was part of the slave jail laundry, a pit containing hundreds of animal bone fragments—scraps from stews that were made to feed the slaves, and evidence of a connection to African customs with the discovery of a full chicken skeleton minus the head in another pit on the site (Kraus et al. 2010). Analysis of artifacts recovered from the Quaker Burial Ground suggests that Alexandria's Quakers abided by the tenets of simplicity that characterized their faith (Bromberg and Shephard 2006). Investigations have provided insight into Alexandria's industries with the discoveries of a 50-foot long beer cellar that maintained the cold temperatures needed for lager fermentation at the Shuter's Hill Brewery Site (Walker et al. 1996) and the furnaces and flues that reveal the mechanics of creating the high temperatures needed for manufacturing bottles at the Virginia Glass Company (Pfanstiehl et al. 1999). Work at two Civil War encampment sites revealed brick fireboxes and flues covered with metal, features known as Crimean ovens, that were designed to

provide heat for hospital tents during winter encampments (Balicki et al. 2005; Jirikowic et al. 2004).

Education, Recreation, Tourism, Promotion

Concurrent with the implementation of the preservation strategies, numerous public programs for different audiences—school children, families, walkers and bicyclists, etc.—were developed in the 1980s and 1990s as important educational tools to promote public awareness of archaeology. The museum remains the hub of the archaeological education network. Over the past decade, annual visitation to the museum averaged more than 30,000 individuals. From the information recorded in the museum’s guestbook, it is clear that Alexandria Archaeology is communicating its message to a national and international audience. For example, from October to December 2013, the museum had visitors from 44 different states and the District of Columbia, and 24 foreign countries, including Canada, Nicaragua, Venezuela, England, Italy, Ireland, Spain, Romania, Thailand, Turkey, New Guinea China, Australia, and more.

On a local level, the space in the museum serves as a community venue for public archaeology lectures, such as the Friends of Alexandria Archaeology’s Saturday “Java Jolt” lecture series. During these events, the portable work tables that fill the centre of the museum’s workspace are rolled away and chairs are set-up to accommodate the attending public.

Similarly, many of archaeology’s hands-on educational programs are conducted within the museum space, creating an interactive classroom for children and young adults alike. These programs, called “Adventure Lessons,” link to state-mandated educational standards. On average, over 1,000 students participate annually in one of these lessons. Nearly all of the students are part of public, private, and home-schools groups from the greater Washington DC area; but a group of high-school students from Toronto, Ontario, Canada, recently visited the museum specifically to partake in one of our lessons (Fig. 11.4).

Each Adventure Lesson employs real artifacts recovered from a site excavated within the City. The use of genuine artifacts provides a level of authenticity to the lesson and creates a link between past generations and the present. For instance, the Sugar Lesson is based on the excavation at the early nineteenth-century Alfred Street Sugar House site. This lesson focuses on the refinement of sugar in Alexandria and uses sherds from the site to help students interpret the functions of two different types of ceramic redware vessels—one with a glaze to collect the syrup and the other unglazed where the sugar cones crystallized. The lesson also addresses the broader themes of Alexandria’s commercial ties to the Atlantic world and the issue of slavery, as seven enslaved African Americans worked at the sugar house. The Hayti Lesson is based on excavations in one of Alexandria’s early nineteenth-century free black neighbourhoods. In this lesson, high-school aged



Fig. 11.4 Students participating in an “Alexandria Archaeology Adventure Lesson” in the museum. Photo courtesy of Alexandria Archaeology

students work with a variety of artifacts and census records to interpret what life was like in this African American community (Landes and Moyar 1996).

Other educational programs and activities draw visitors and tourists out of the museum and into the community. “Family Dig-Days” have been a part of Alexandria Archaeology’s public-outreach toolkit since 1991. Currently held at the Shuter’s Hill site on the grounds of the George Washington Masonic National Memorial, the program allows members of the public to tour the site and put the soil through a screen to collect the artifacts dug by volunteers. The Shuter’s Hill site is an ongoing, City-sponsored excavation that is not driven by development pressure (Fig. 11.5).

A second program, the week-long archaeology summer camp, caters to teens interested in history. This year’s excavation took place at the City-owned Fort Ward Park. The 23-mile Alexandria Heritage Trail, which opened in 2002 after more than 15 years of public effort, brings historical and archaeological knowledge of 100 sites dating back 9000 years to cyclists and walkers. An explanation of the sites and their histories can be found in the short book *Walk and Bike the Alexandria Heritage Trail* (Cressey 2002). City Council has approved a template for heritage signs as part of the way-finding sign project, and interpretive markers are constantly being added to the system.



Fig. 11.5 Family Dig Day at the Shuter's Hill site. Photo courtesy of Alexandria Archaeology

In addition to the museum and public events, the media and the internet also help to spread word about the City's archaeology program, and about the information it has recovered. Press releases and media tours continue to generate newspaper, radio, and television coverage so that more people are included in the discoveries and hear about good stewardship. The City's website, along with the City's eNews network, Facebook, Twitter, and YouTube, provides information to an even broader community base, with updates that provide in-depth knowledge of archaeological investigations, and that afford an opportunity for instant messaging about current finds, excavations and events. A recent series of YouTube videos documented the day-to-day excavation of a well that was discovered in the basement of one of Old Town's historic structures. Historical research indicated that the well, which may have collapsed during construction, was meant to be used in an early nineteenth-century bath house. These videos, along with videos of the archaeology summer camp and other Alexandria Archaeology activities, can be found on the Alexandria Archaeology YouTube feed: <https://www.youtube.com/user/ArchaeologyAlex/feed>.

Community Projects

So where is Alexandria's program now, after more than 50 years of archaeology? The implementation of the Code continues to build upon the historical and archaeological knowledge of past decades. Pure research goes on in the form of

excavations at Shuter's Hill, where volunteers and students excavate the laundry of a plantation site that promises to provide significant information about the lives of enslaved African Americans. However, most research now is often community-driven and revolves around large, long-term projects that require archaeological expertise.

Contrabands and Freedmen Cemetery Memorial

Threads leading to one current project, the creation of the Contrabands and Freedmen Cemetery Memorial, weave a compelling tale of the value and benefits of the public/professional partnerships that have developed as part of Alexandria's archaeology program. As with the creation of Fort Ward Park fifty years ago, it is the story of the dedication and commitment of inspiring women and a small group of residents. Freedmen's Cemetery was established in 1864 by the military governor of Alexandria, head of the occupied town during the Civil War. According to a document, known as the Gladwin Record, discovered buried in the archives of the Library of Virginia in Richmond, it is the resting place for at least 1,711 African Americans, mostly refugees who fled to Alexandria to escape from bondage in the war-torn areas south and west of the town (Pippenger 1995). In the mid-twentieth century, a gas station and office building were constructed on the property, and memory of the cemetery faded. When a 1997 series of newspaper articles published information about the existence of this historical and sacred ground, the subsequent desecration, and the possible impact of a federal bridge construction project, residents (and two women—Lillie Finklea and Louise Massoud, in particular) sprang into action to attempt to save the site and create a memorial commemorating the hardships and contributions of these African Americans refugees (Cressey 1997a, b, c) (Fig. 11.6).

The Friends of Freedmen's Cemetery was established to support the preservation efforts, and City Council resolved to set aside a Day of Remembrance, with an annual ceremony on the site. Archaeological testing, which included both remote sensing and excavations, confirmed the presence of extant burials, and lobbying efforts led the City to purchase the gas station and office properties with plans to create the Contrabands and Freedmen Cemetery Memorial as part of the federal bridge project.

After the demolition of the structures, which was monitored by City archaeologists, a ceremony was held in 2007 to rededicate the site as a sacred place. Hundreds attended the event, which featured memorial candle illuminations created by Alexandria school children and residents, one for each of the 1,711 souls buried on the site whose names come down to us through the Gladwin Record kept by the military government and the Freedmen's Bureau. A full-scale archaeological investigation was deemed necessary to identify grave locations and ensure that creation of the memorial would not cause further desecration of the burials. By the end of the excavation, 631 grave locations had been identified (Sipe et al. 2014).



Fig. 11.6 Lillie Finklea and Louise Massoud were central to the effort to create the Alexandria Contrabands and Freedmen Cemetery Memorial. Photo courtesy of Alexandria Archaeology

During the excavation, the grave shafts were identified, but the human remains were left undisturbed.

The City sponsored a competition for the design of the memorial. Design guidelines specified that no burials were to be disturbed and included the archaeological site map with grave locations and other potential burial areas delineated. The City received more than 200 entries, with at least one from each of the 50 states and from 20 countries. Winners of the competition were chosen by the Freedmen’s Design Steering Committee, and final plans incorporated elements of the winners’ designs. A second design competition was held to choose a statue for the memorial, and Mario Chiodo’s *The Path of Thorns and Roses* now serves as the site’s centerpiece (Fig. 11.7).

Fig. 11.7 The *Path of Thorns and Roses* is the centerpiece of the Alexandria Contrabands and Freedmen Cemetery Memorial. Photo courtesy of L. Barnes for Visit Alexandria



The final design incorporated features that would not be known without the historical and archaeological research. The 631 known grave locations are each marked with a flat stone—never to be forgotten again. The location of the carriage path that entered the cemetery was identified by the archaeological work and serves as the entry to the memorial. The Gladwin record, which lists the names, ages, dates of burial, place of death, and sometimes, cause of death, is reproduced in bronze on stone walls of remembrance. Char Bah, the City’s genealogist, has found thousands of descendants who can trace their ancestry back to more than 100 of the names on the wall.

In September 2014, the City dedicated a memorial park on this one and a half-acre site. Hundreds of descendants from the local area and all parts of the country attended the ceremony and led a procession into the memorial, each placing a rose on the statue of *The Path of Thorns and Roses*.

Fort Ward Park

Another significant community project centres on the history and archaeology at Fort Ward Park. It was perhaps fitting that the 50th anniversary of archaeology in Alexandria brought us back to this site. Where the archaeological work in 1961 coincided with the 100th anniversary of the start of the Civil War, the commemoration of the sesquicentennial was just beginning. The forces in play that brought about a return to Fort Ward remain similar to those that resulted in the creation of the park fifty years ago, namely resident interest and activism. When the City's Department of Recreation released proposed plans for changes in the park, concerned residents banded together to require the City to consider impacts to all historical and archaeological resources within the park, not just those related to the Civil War. A previous survey had identified the location of a Native American site, and archival work and oral history had demonstrated that an African American community, known as "The Fort", had grown up on the property after the Civil War (OHA/Alexandria Archaeology 2009). Some descendants of the original residents continued to live on the site until it was taken by the City, through both purchase and condemnation through eminent domain, for the creation of the park. It was clear that remnants of residences, a school/church, and most importantly cemeteries and burials, could remain extant in the park. At public meetings in 2009, descendants of former residents of the park and other current City residents ranked park planning and management goals, citing protection of the graves and preservation and interpretation of the full range of the history of Fort Ward as the number one priority. Acknowledging these values as important, City Council established a citizen committee, the Fort Ward Stakeholders Advisory Group, to make recommendations relating to planning and management in the park.

With the recognition that knowledge of the locations of graves and resources was paramount to park planning and management as well as to preservation and interpretation of The Fort community, City Council also allocated funds for historical research and archaeological investigation. A documentary history was written of The Fort community, and archaeological investigation has identified a concentration of Native American activities, scatters of Civil War artifacts, numerous home sites of The Fort community, and 43 grave locations in four separate areas of the park (Moon 2014; Bodor 2011; Alexandria Archaeology/OHA 2012). In early 2015, City Council adopted a management plan for the park, which provides guidance for beginning the interpretation of the Fort Community, stipulates that no graves are to be disturbed by future development, and sets up an archaeological process to look for graves and other buried resources prior to any ground disturbance. Council approved both a public management plan implementation committee and a public interpretive committee to oversee the process as the project moves forward. To ensure preservation and promote interpretation, City archaeologists will work with both of these groups, as well as other City departments and The Ft. Ward and Seminary African American Descendants Society, a

non-profit group formed to report on the project and share the history and contributions of African Americans in the Fort Ward area.

Planning and Preservation

More than ever, archaeology is integrated into the planning process of the City. With the implementation of the Code over the past twenty-six years, developers, planners, engineers and landscape architects, both within the City and in private firms, have become more sensitive to preservation needs and to how the integration of historical character and archaeological finds can enhance development projects and benefit the community. In addition to site plan reviews, the archaeological staff contributes information about history and archaeology to studies of planning districts, open space, and land acquisition. One recent example of this process comes from the City's recent effort to formulate plans to revitalize the riverfront and address issues of flood control and increased public access. As a part of this process, the Alexandria Archaeological Commission produced a waterfront preservation plan. Highlighting the importance of preservation and knowledge of history in the planning process for waterfront development, the Commission's plan includes recommendations of ways to incorporate aspects of historic character into the design and was accepted by Council as part of the Waterfront Plan.

The increased interaction with developers, planners and designers has led to community decisions to preserve sites, create more parks with historic meaning, and integrate art that reflects historical themes into development projects throughout the community. Thus, knowledge of the past has made its way out of the museum and into the fabric of the City. Interpretive markers, erected in parks and as part of development projects, highlight the history and archaeological significance of historical places. Coordination between archaeologists and a developer saved a Civil War battery from destruction, as a decision was made to change proposed house locations so that the battery remained as open space. Archaeological work for the African American Heritage Park identified 26 burial locations, and park design incorporated the gravestones that were discovered and featured a sculpture that evokes a tree of life and the roots of remembrance. The design for a long linear park at Potomac Yard drew its inspiration from historical and archaeological maps of the canal and railyards that once traversed the length of the development area. In a housing development named for James Bland, an African American musician and songwriter, planners opted for a musical theme in the design of a park to pay homage to the project's namesake. A globe, highlighting the importance of trade and commerce to Alexandria's early history, occupies a prominent location in an area of new development at the south end of the City. At the site of the former Bruin Slave Jail mentioned earlier in this chapter, the location of the cistern from the slave jail's laundry is demarcated in the open space of the new development project. A statue on the site was inspired by the story of the Edmonson sisters, who were jailed on the site after a failed attempt to escape to freedom aboard the

schooner *Pearl* in 1848. Abolitionists, including Harriet Beecher Stowe, raised money to purchase their freedom, and the novel *Uncle Tom's Cabin* incorporates characters and incidents from Stowe's knowledge of Bruin's slave-trading activities (Kraus et al. 2010).

Conclusion: A Network of Partnerships

The public/professional partnership that began with citizen activism to create Fort Ward Park continues to enrich the lives of visitors and residents with an ever-widening circle of partners. The success of the program stems from **both engaging the public and listening to the public**. As demonstrated in the review of the evolution of the Alexandria Archaeology program over the past 50 years, the sources of collaboration are manifold. Perhaps the most appropriate way to conclude a discussion of Alexandria's community archaeology program is to recognize the many different groups of people who have been drawn to contribute to the program over time. One group might be described as those who have come into fortuitous or occasional contact with the program. This might include individuals who hear our media coverage, visit our web site, or join our list-serve to hear about events. Also included in this group are the residents and tourists who visit the museum, attend a lecture or site tour, or participate in a family dig day, as well as riders and walkers of the heritage trail, teachers and students who come for lessons.

A second group of individuals has a more intentional and often long-term interaction—the many students, interns and volunteers who contribute their time and energy to the process of developing and communicating historical information. They conduct historical research, excavate sites, process artifacts, help with collections, staff the museum, conduct and transcribe oral history interviews, and perform administrative duties. This group includes the members of the Friends of Alexandria Archaeology, whose dues have helped to support the program financially for thirty years.

Political engagement has been particularly important for the development of archaeology in Alexandria, and a third group includes individuals whose interest in history and archaeology led them to support an archaeologically informed civil society within the city. Members of the Alexandria Archaeological Commission and officers of the Friends of Alexandria Archaeology fall into this group, but so do members of more focused committees and organizations, such as the Freedmen's Design Steering Committee, Fort Ward Stakeholders Advisory Group, and Friends of Freedman's Cemetery who take on advisory and/or collaborative roles on project-specific bases. This group is essential for creating an active voice for archaeology within the participatory framework of local government.

A fourth group includes those who come into contact with archaeology through the development, planning, and design process. This includes the residents who attend planning meetings where history and archaeology are discussed; as well as the developers, planners, landscape designers, and artists from both within the City and in private firms, who have taken on a shared responsibility to preserve, protect and interpret the past and have begun to incorporate historic character into their site plan designs. The act of weaving the City's history into its modern urban fabric can be tremendously challenging from a design perspective, but when successfully executed, can be of significant, long lasting, public benefit.

A fifth group includes members of descendant communities, whose connections to the City's past continue to inspire awe, and whose oral histories, family photographs, and knowledge of past activities have contributed so much to our understanding of what it was like to live in Alexandria in bygone eras. Their stories provide both historical information and a human perspective on the past that is unavailable through archaeology alone. Without their help and cooperation, many of the stories that have come to define the City's understanding of places such as Fort Ward Park, would be impossible to tell.

A sixth group includes those who are our professional partners—the many archaeological consultants who have worked on code projects, conservators who have worked with our collections, local historians and university scholars who contribute to our interpretations, and genealogists who discover links to descendant communities, among others. Having a diverse group of professions bring their skills to bear on the City's past helps to make sure that the public has access to a tremendous amount of historical information, and that that information reflects the highest professional standards.

A final group is, in many ways, an umbrella for all the others, as it includes those individuals who have led crusades to protect our past; who have lobbied and garnered support for the passage of the Code, for the protection and interpretation of our resources, and for the creation of parks including Fort Ward and the Contrabands and Freedmen Cemetery Memorial. Their efforts have radically altered the social and physical landscape of the City of Alexandria. They have made it a place where local residents have easy access to archaeological and historical information, and where that information can be put to new uses that result in a deeper more meaningful interaction with the past.

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Chapter 12

Reflections on the New York City Archaeology Program (1980–2016)

Sherene Baugher

Introduction

The excavation of New York City's shops, taverns, warehouses, slave burial grounds, almshouses, working-class and middle-class homes, elite residences, and sunken ships have all captured the public's attention and imagination. These sites have also garnered the attention of academics through conference papers, journal articles, and book chapters. New York City sites are unusual because most of them were excavated as a result of local municipal laws rather than federal mandates. For most cities in the USA, urban archaeology is undertaken because of federal government mandates under section 106 of the 1966 National Historic Preservation Act (NHPA). This requires an archaeological evaluation of a proposed development whenever the project triggers federal permits and/or uses federal funds.

However, not all urban projects are simply the result of mandated federal laws. During the past fifty years, New York City and a few other urban centers have moved beyond federal regulations to create innovative programs to protect the archaeological resources within their municipalities. With the support of municipal legislation, municipal budget allocations, and municipally mandated funding required of developers, innovative urban archaeology projects have taken place in American cities, such as New York City; Boston, Massachusetts; St. Augustine, Florida; Albuquerque, New Mexico; and Phoenix, Arizona.

This chapter focuses on the development and transformations in the municipal archaeology program in New York City, which includes all five boroughs of the city: the Bronx, Brooklyn, Manhattan, Queens, and Staten Island. The City Archaeology Program is part of the New York City Landmarks Preservation Commission. This chapter discusses:

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- the legislation that created a process for evaluating archaeological resources that might be destroyed by development projects,
- the creation in 1980 of the position of City Archaeologist,
- the creation in 1981 of the City Archaeology Program,
- the City Archaeology Program's innovative projects in the 1980s,
- the downsizing of the program in the 1990s as a result of the 1987 and 1989 stock market crashes and consequent political changes,
- the impacts of the 2008 stock market crash and the Great Recession, and
- the program as it is in 2016.

During all of these periods, there is a discussion of the challenges to the local law and examples of major successes. This chapter also examines how the City Archaeology Program has provided public interpretation and public outreach programs and has engaged the public in New York City's archaeological heritage.

Legislative Background

In the 1960s and 1970s, the confluence of the environmental protection and historic preservation movements led the federal government, and various state and local governments, to pass regulations mandating archaeological evaluations prior to major construction projects (Tomlan 2015). These laws impacted how archaeological work was and is carried out in New York City. For the city, the most important legislative acts were and remain the New York City Landmarks Preservation Act of 1965 and the City Environmental Quality Review of 1977 (CEQR).

State Laws

In 1975, the State Environmental Quality Review Act (SEQRA) required the consideration of environmental factors, including archaeological evaluations, in decision making by state and local governments. SEQRA was modeled on the 1969 National Environmental Policy Act (NEPA) (Pagano 1984, p. 103). While NEPA only covered federal projects, SEQRA extended state authority to review state funded projects or projects requiring state permits. Under this authority to review projects that require government permits, both the state and local governments such as New York City must approve any discretionary permits. This dual responsibility is meant to assure that an important site is protected from two perspectives: the interests of the state and the interests of a local government (NYS Dept. of Environmental Conservation 2015). In 1975, SEQRA regulations allowed local governments to establish their own environmental review procedures as long as they were as protective as the state procedures. New York City government used

this prerogative to pass a law in 1977 establishing the City Environmental Quality Review (CEQR) (NYC Mayor's Office of Sustainability 2015).

New York City

Under the 1977 City Environmental Quality Review (CEQR), the City placed environmental review functions within two “co-lead agencies”—the Department of City Planning and the Department of Environmental Protection (NYC Mayor's Office of Sustainability 2015). New York City established its own environmental regulations that are triggered when a developer requests a discretionary permit from a city agency. For example, a discretionary permit could be sought by a developer to build a taller and/or larger building or complex of buildings than is currently allowed by law. Another trigger is when a developer requests a zoning change for his parcel, such as from residential to mixed use, or to build a commercial structure or complex not originally permitted (“zoned”) for this area. All these permits enable a developer to construct buildings that will yield much greater revenues from the sale or rental space within the building or complex.

The New Yorker City Planning Commission issues these permits. Before a permit is issued, it must be evaluated to determine whether it requires an environmental review. The Planning Commission works with relevant city agencies that have the expertise to evaluate environmental concerns such as transportation. The New York City Landmarks Preservation Commission evaluates all discretionary permits regarding a site's potential for archaeological or historic resources. If a project's site indicates potential as an archaeological site, this in turn triggers an archaeological study. The developer is required to pay for all costs of the environmental review. This financial obligation includes paying for all phases of the archaeological work carried out by one of the Cultural Resource Management (CRM) firms that the developer is required to hire. The Landmarks Commission evaluates all phases of the CRM archaeology projects.

Archaeology and the New York City Landmarks Law

The first large-scale archaeological project funded by a developer in New York City was not triggered by federal or state laws, nor by CEQR, but by the 1965 Landmarks law. This project, named the Stadt Huys (Dutch, meaning “State House”) excavation on Pearl Street in Lower Manhattan, unearthed remnants of seventeenth-century Dutch “New Amsterdam” (Rothschild et al. 1987). This excavation excited the interest not only of local citizens but also of government officials and led to the creation of the City Archaeology Program.

The background to this exciting archaeological project began in 1965 when, more than a decade before the establishment of CEQR, Mayor Robert F. Wagner

signed a law that created the New York City Landmarks Preservation Commission (NYC LPC 2015). During the next year, 1966, the Landmarks Commission began to designate individual landmarks, including what became known as the Stadt Huys site at 71 Pearl Street. The fate of this site had a rocky start. The building at 71 Pearl Street had an 1826 façade and various components of the foundation dated to 1641, 1700, and 1826 (NYC LPC 1966, p. 1). In 1968, Lehman Brothers, a brokerage house, requested permission from the Landmarks Commission to demolish this 1966 designated landmark. In 1970, the Commission gave permission to remove the façade and put it into storage so that it could be re-erected later at another site, but the rest of the building was demolished (Baugher and Wall 1997, p. 117). The development did not take place, the site was turned into a parking lot, and the façade was never re-erected. Nine years later the new owner, intending to build a skyscraper for Goldman Sachs, requested a permit to build on the site. The Landmarks Commission suggested that the developer finances an archaeological excavation at the site instead of re-erecting the 71 Pearl Street façade (Baugher and Wall 1997, p. 117). In 1979 and 1980, Nan Rothschild and Diana Wall co-directed the first major CRM (Cultural Resource Management) excavation in Manhattan (Cantwell and Wall 2001, pp. 18, 28). Map studies suggested that this area was the site of the Dutch administrative headquarters known as the “Stadt Huys,” and this soon became the popular name for the site. The discovery of thousands of artifacts from Dutch and English colonial New York buried only a few blocks from Wall Street amazed government officials and captured an enthralled public. The broken artifacts included plates, cups, wine glasses, and clay smoking pipes. The archaeologists found the foundation of an English Colonial 1670 tavern, Lovelace Tavern. They also unearthed an early eighteenth-century well and a section of Stone Street, a busy seventeenth-century thoroughfare (Baugher and Wall 1997, pp. 117–118).

The officials at the Landmarks Commission realized that if so many artifacts were still preserved in the heart of the most developed part of the city, then archaeological material could be found in all five boroughs. As a result, they negotiated with the City to create a position for a City Archaeologist. In 1980, the Landmarks Preservation Commission created a City Archaeologist position and hired Sherene Baugher (the author) as the first City Archaeologist. A year later, in 1981, the Landmarks Commission created the City Archaeology Program.

After Baugher was hired, one of the first assignments given to her by the commission’s executive director (Lenore Norman) was to work with the commission’s legal counsel (Dorothy Miner), the developer’s staff, and the archaeologists who excavated the site (Nan Rothschild and Diana Wall) to plan a permanent archaeological exhibit for the plaza. The outdoor exhibit, which opened in 1984, has the footprints of the Stadt Huys outlined in yellow brick and the Lovelace Tavern is outlined in gray granite pavers (Baugher and Wall 1997, pp. 118–119) (Fig. 12.1a). Two corners of the actual Lovelace Tavern foundation are on view under Plexiglas, and an eighteenth-century well is partially reconstructed near the Lovelace Tavern footprint, plus there are numerous interpretive signs (Baugher and Wall 1997, pp. 118–121) (Fig. 12.1b). This was the first permanent New York City outdoor exhibit focusing on urban archaeology. A section of colonial Stone Street

was removed to allow for the construction of the new building. But the architectural firm, Skidmore, Owings, and Merrill, ingeniously aligned the lobby of the building to reflect the original gentle curve of Stone Street (Baugher and Wall 1997, pp. 120–121). The lobby floor has brown pavers that extend outside the building’s lobby to connect with the remaining two-block segment of Stone Street. After more than three decades, the outdoor exhibit is still open to the public. The Stadt Huys project was important on multiple levels—the value of the archaeological data on colonial Dutch and English New York; the positive support it created for urban archaeology among both the public and politicians; the support from the Landmarks Commission to have large urban projects include a component for public outreach, such as exhibits; and finally the impetus for the creation of the City Archaeology Program.

There have only been three full-time New York City Archaeologists: Sherene Baugher (1980–1990), Daniel Pagano (1991–1997), and Amanda Sutphin (2002–present). This chapter will cover the development, challenges, successes, and transformations in the City Archaeology Program. But first, we begin with a brief discussion of how city-mandated archaeology functions under CEQR.

Legally Required Archaeological Work Under CEQR

The evaluation of archaeological work under CEQR does not end with the initial flagging of a project as possibly having an archaeological potential. Developers select the CRM firms and pay for the CRM work. To ensure appropriate archaeological work by the private firms, the City Archaeologist evaluates the CRM firms’ scopes for both field and laboratory work, recommends any changes to the proposed field and lab work, and can require revisions to the draft the final site report. In the early 1980s, the City Archaeologist and staff members of the Landmarks Commission, incorporating input from the Professional Archaeologists of New York City (PANYC), established the process for the evaluation of CRM projects under City jurisdiction. A detailed 2002 document, *Landmarks Preservation Guidelines for Archaeological Work in New York City*, explains all the procedures for the various phases of city-mandated archaeological work (NYC LPC 2002). This review helps developers, property owners, and CRM firms understand what triggers archaeological work and what that work may entail.

The phasing of CRM work is similar to the federal project requirements known as Phases 1A, 1B, 2, and 3, except that the New York City phase entitled “Phase 1A” requires more extensive documentary research. Because of the available archival data in the city, including maps, documentary research often reveals extensive site disturbance and thus no field testing is required. The archaeology staff reviews discretionary permits to determine whether any archaeological evaluation is needed. The 2002 Landmarks Archaeology Guidelines note in bold print “over 85% of projects reviewed do not trigger archaeological concerns” (NYC LPC 2002, p. 6). Examples of projects requiring no further archaeological work are as follows:



Fig. 12.1 **a** The footprints of the seventeenth-century Stadt Huys in *yellow* brick pavers (foreground) and the Lovelace Tavern in *gray* granite pavers are in the plaza of the 85 Broad Street building in lower Manhattan. Plexiglas covers the foundation stones of one of the corners of the Lovelace Tavern (*left corner* with the brass railing) (Photograph by C. Forster). **b** The rear wall of the Lovelace Tavern is visible under Plexiglas. The *gray* granite pavers that extend from the Plexiglas outline the rest of the footprint of the Lovelace Tavern. (Photograph by S. Baugher)

a new development of the site of a building with a very deep basement that would have destroyed any archaeological record; or a site where the previous basement went down to bedrock; or a site where the new structure is on slab construction on a site that was previously disturbed by other buildings (NYC LPC 2002, pp. 6–7). For the 15% of projects that require an archaeological investigation, the developer pays for all phases of work undertaken by CRM firms. “Phase 1A” involves using the extensive library and archival resources in New York City to carry out documentary research and the writing of a report. Then, based on a report of this research, the CRM consultants may or may not recommend preliminary field testing known as Phase 1B. For example, during the ten-year period from 1980 to 1990, only 50% of the documentary studies found that the archaeological sites were still intact, meaning half of the projects required no field testing (Baugher 2001a, p. 141). If archaeological testing is required, then the work is done in stages. Preliminary testing known as Phase 1B determines if the site actually contains archaeological resources. Then, Phase 2 determines the significance of the resources. Phase 3 is known as “mitigation” and requires either that the developer’s architects and construction crews avoid sensitive areas entirely or that a CRM firm conduct a large-scale excavation because significant resources will be destroyed by the proposed construction (NYC LPC 2002, p. 5 and 9). For example, in the period 1980–1990 of all the projects requiring some archaeological field investigation, only 10% of all these projects required a full-scale excavation (Baugher 2001a, p. 141). These Phase 3 projects were truly outstanding. They included a Dutch trading post just off Broad Street in Lower Manhattan; colonial Dutch and English homes found throughout the city; eighteenth- and early nineteenth-century merchant shops; and even an eighteenth-century cargo ship that had been intentionally sunk to be part of colonial landfill in the East River in what is now the South Street Seaport. These excavations provided new insights into life in colonial and early nineteenth-century New York. These sites have been described and highlighted in the books *New York City Neighborhoods* (1990) by Nan Rothschild, *Unearthing Gotham* (2002) by Anne-Marie Cantwell and Diana Wall, and *Archaeology of American Cities* by Nan Rothschild and Diana Wall (2014).

The City Archaeologist reviews all phases of CRM archaeological work and also visits the CRM projects to inspect the fieldwork. The City issues construction permits after the archaeological fieldwork has been completed and has been approved by the City Archaeologist. One of the problems that have plagued other cities is getting CRM firms to complete the washing and cataloging artifacts in laboratory work and writing a detailed project report. This has not been a problem on City-mandated work in New York because the City withholds the Certificate of Occupancy for a building until the City Archaeologist has approved the final archaeological report. This economic leverage by the City also means that the developer can withhold funds from a CRM firm until they produce an acceptable final report. In some other cities, artifacts from official archaeological digs can

languish in warehouses. But in New York City, the artifacts from CRM collections must be sent to a repository such as a museum, historical society, or a university that is acceptable to the Landmarks Commission and the City Archaeologist. In addition to CEQR, the New York City Archaeologist also serves as a consultant to the State Historic Preservation Office (SHPO) archaeologist on federal or state projects within the boundaries of New York City.

The City Archaeology Program in the Formative Years 1980–1990

When Baugher became the City Archaeologist in 1980, the New York City Landmarks Commission was fully committed to preservation and public outreach. Because Baugher was the first person to hold the position of City Archaeologist, there were no precedents defining what the City Archaeologist should do. Baugher, with the support of Commissioner Kent Barwick, was able to extend the scope of her work beyond her core responsibility to evaluate the CRM projects that were mandated by law. She gradually initiated archaeological field and laboratory work on city-owned properties, conducted innovative research, designed and installed exhibits, gave public lectures, co-wrote and published a brochure on preserving gravestones, and created public programs at various sites. Baugher recruited a team of volunteers and was eventually able to pay some of them through grants she wrote. Given the range of work mentioned in this paragraph, the rest of this section is divided into two parts: (1) work related to legally mandated archaeological projects undertaken by CRM firms and (2) innovative projects carried out by the staff of the City Archaeology Program.

Legally Mandated Archaeology Undertaken by CRM Firms

Urban archaeology, whether it is mandated by federal, state, or municipal laws is economically tied to the development and construction industry. When the economy is in good shape and the construction industry is on an upswing, urban archaeology projects are in abundance. The 1980s was a period of great prosperity for New York City with extensive new buildings going up and hence numerous archaeological projects. By 1986, the Landmarks Commission hired a full-time assistant archaeologist, Daniel Pagano, to help with the heavy load of environmental reviews. Pagano handled all initial reviews while Baugher oversaw all Phase

2 and 3 projects. Pagano also assisted on some of the grant projects (to be discussed in a later section). The 1980s was also the time when developers were testing the strength of CEQR, looking for loopholes and challenging whether positive outcomes emerged from the archaeological digs they were required by law to pay for, and whether or not the public even cared.

The Excavation of a Ship and Public Outreach

Of the many high-profile CRM excavations that have taken place in New York City, the one that made a lasting positive impact on the way the public responded was the discovery a sunken eighteenth-century merchant ship in the South Street Seaport area of Manhattan (Fig. 12.2a, b). In 1981, the developer, Howard Ronson, requested a discretionary permit to build a taller building than allowed by law. The project site was originally flagged because of the potential to contain merchant shops from the late eighteenth and early nineteenth centuries—and CRM archaeologists uncovered almost 250,000 artifacts (Geismar 1983). Near the end of the

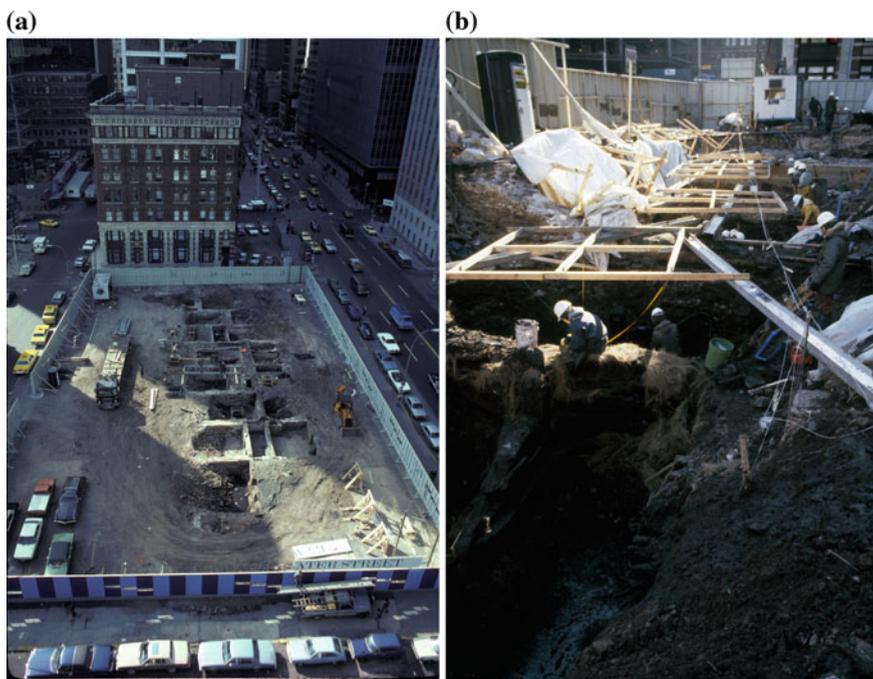


Fig. 12.2 **a** The excavation of the 175 Water Street site. The Ronson ship was found along the left side of the block near the location of the flatbed truck (*Photograph* by C. Forster). **b** Archaeologists from the CRM firm Soils Systems excavate the bow of the Ronson ship (*Photograph* by C. Forster)

dig, the archaeologists were testing the block, which was on colonial landfill, for evidence of colonial “retaining” walls or other supports and instead found a sunken ship. The original CRM documentary research and even a subsequent doctoral dissertation by Warren Riess were unable to uncover any record of a ship being sunk on this parcel (Geismar 1983; Riess 1987). However after thirty years of additional research, Warren Riess now believes that the name of the ship was probably the “Princess Carolina” (Riess and Smith 2015, p. 60).

Because the archaeologists found a sunken ship, the developer, Howard Ronson, the City Archaeologist Sherene Baugher, Landmarks Commissioner Kent Barwick, and the Landmarks counsel Dorothy Miner, were able to renegotiate the scope of work and extend the excavation for almost six weeks. The developer fully cooperated because he was interested in maritime history and archaeology, especially because he was British and had seen significant archaeology in London. Ronson willingly spent extra funds, beyond what was required by law, to bring in a team of nautical archaeologists from Texas A&M. He also willingly funded \$350,000 to conserve the bow of the ship, which he then donated to the Mariner’s Museum in Newport News, Virginia (Baugher 2001a, pp. 148–149).

“The Ronson Ship,” as the project was known, was also the first CRM site in New York City opened to the public. Commissioner Barwick had visited Viking excavations in York, England, and was intrigued by the way the British archaeologists set up temporary exhibits and viewing areas so the public could observe the excavations. Barwick wanted to have an “open house day” so that the public could view the excavation of the early eighteenth-century sunken ship in the South Street Seaport area of Manhattan. With the approval of the developer who agreed to admit the public to what was legally his property, an “open site day” was held in February 1983. The City Archaeologist, archaeologists working for the CRM firm Soil Systems, and preservationists from the Landmarks Commission all hosted the event. The event was a great success and the project received coverage in local and national newspapers and in local television news, and over 10,000 people took the site tours (Baugher 2001a, p.148). The public interest and excitement amazed everyone including the archaeologists. The project created positive (and free) publicity for the developer and also helped to create future public support for archaeological projects. It also demonstrated to other developers that archaeology could be an asset to a project instead of a problem. Because of the amazing level of cooperation between the developer and the Landmarks Commission, home of the City Archaeology Program, the project won both city and state preservation awards. The project demonstrated to the public, the politicians, and the developers that high archaeological professional standards could be carried out in a legally mandated project without incurring construction delays. In fact, the building was completed two months ahead of schedule (Baugher 2001a, p. 150). After the 1982 ship excavation, most New York City-mandated archaeological projects in the 1980s went smoothly with the full cooperation of developers.

The 1986 Challenge to CEQR—17 State Street Project

The only major challenge to the City law occurred in 1986. A developer, Melvyn Kaufman of the William Kaufman Organization, applied to City Planning for a discretionary permit and was informed that his site, 17 State Street, had archaeological potential to contain material from the seventeenth and eighteenth centuries (NYC LPC 1986a; Dunlap 1990). While the developer was working with the City Planning Commission to receive his discretionary permit, his staff went to the New York City Buildings Department to obtain an as-of-right permit as if he was going to build a smaller building than he intended (NYC LPC 1986a). With the new permit, a construction team quickly excavated the site for the building's foundation and destroyed any trace of the archaeological site (Cantwell and Wall 2001, p. 31). The City Planning Commission had required an archaeological documentary study, which was paid for by the developer. The study by Joan Geismar found that the property had been the home of an early eighteenth-century Jewish merchant, Abraham Isaacs, from 1728 to 1754 (Geismar 1986, pp. 10, 30–31). The site could have been the first Jewish colonial site excavated in the northeast; thus, it had significance to both New York City and the region (Baugher and Wall 1997, p. 126).

The developer's circumvention of City law challenged the whole environmental review process. This became a test case and went before the New York City Board of Standards and Appeals, the legal body that resolved conflicts between the City Planning Commission and the applicants. The Landmarks Preservation Commission requested some form of mitigation because of the purposeful destruction of an archaeological site. Community groups and professional organizations, including the Professional Archaeologists of New York City (PANYC), spoke at the hearings in favor of mitigation (Wall 1986). The developer's battery of attorneys fought hard to prevent any penalty—but they failed. The Board decided in favor of mitigation, and the Landmarks Commission was asked to submit a draft proposal for mitigation (Dunlap 1990). Baugher, Joseph Bresnan (Executive Director of the Landmarks Commission), and Jeremy Woodoff (Director of Environmental Review at the Landmarks Commission) proposed a museum exhibit and a maintenance plan (Woodoff 1986). With some modifications to the plan, the developer agreed to pay for the design and installation of a mini-museum, *New York Unearthed*, located in the plaza of his new building (Dunlap 1990). He also had to pay for the management, maintenance, and public education programs for five years (NYC LPC 1986b). To insure that this agreement was fulfilled, the developer could not obtain a Certificate of Occupancy for his building until all of the conditions of the agreement had been fulfilled, including the opening of the museum and funding for its management (Baugher and Wall 1997, p. 126). The developer turned over the operation of the mini-museum to the South Street Seaport Museum (Fig. 12.3). In 1990, the museum opened to the public with 400 square feet of exhibit space on the plaza level and 1200 square feet of exhibits and a conservation lab on the floor below (Baugher and Wall 1997, p. 126). This test case sent a powerful message to the development community, and the result was a continued compliance with the



Fig. 12.3 The Unearthed New York mini-museum is in the plaza of the 17 State Street building in Lower Manhattan. The museum operated from 1990 until 2006 (*Photograph by S. Baugher*)

law. The City also planned to close the loophole used by Kaufman Organization in the permitting process in which the company applied for and received an as-of-right permit for a smaller building, destroyed an archaeological site, while in the process of getting a discretionary permit. In the future, before issuing any as-of-right permits, the City's Buildings Department staff would check with the Planning Commission to determine if a project was also undergoing review for a discretionary permit.

Innovative Projects by the Staff of the City Archaeology Program

Besides the municipal laws pertaining to developers' projects, there were also innovative programs that involved cooperation among city agencies between 1980 and 1990. Baugher, with the support of Commissioner Kent Barwick, established the City Archaeology Program in 1981 that would also undertake work on city-owned sites. Baugher studied a state-level archaeology program directed by Paul Huey as one model for working on city property with paid temporary staff. Huey's Program was part of the Historic Sites Bureau of New York State Office of Parks, Recreation, and Historic Preservation. Baugher also used Pam Cressey's City Archaeology Program in Alexandria, Virginia, as a model for how a program

functioned with a large volunteer core (Cressey and Vinton 2007). Baugher wrote grants to fund archaeology staff and also created a volunteer core to work on both excavations and on laboratory work. The Archaeology Program archaeologists included people familiar to scholars in historical archaeology such as Diane Dallal, Meta Janowitz, Ed Lenik, and Gaynell Stone. Daniel Pagano also assisted on some of the projects. Pagano started working with the program as an intern 1981, moved on to become a member of the grants staff, and then became a full-time city employee as the Assistant City Archaeologist in 1986.

The City Archaeology Program depended on grant money to undertake excavations on city-owned and/or city landmarked properties on projects that had not triggered discretionary permits but were nevertheless significant. These grants funded temporary archaeological staff. Baugher wrote and received state and private foundation grants, and other city agencies also provided grants. The Landmarks Preservation Foundation, the nonprofit arm of the Landmarks Commission, managed all grants. Some of the grants also funded projects involving: (1) evaluations of the historic cemeteries in all five boroughs, (2) creation of predictive models of properties with high archaeological potential within Manhattan, and (3) design and installation of archaeological museum exhibits (Baugher et al. 1982; NYC LPC 1984). Baugher and the archaeology staff undertook documentary research, archaeological excavations, laboratory work, and preparation of reports on sites on city-owned land and on the property of city-owned historic house museums. These projects included the excavation of the colonial Voorlezer House located in Staten Island's "Historic Richmondtown," a 100-acre outdoor museum complex (Baugher et al. 1985).

The Archaeology Program's excavations were on city-owned cultural institutions and in city parks that were slated for some ground disturbance such as installing underground pipelines or the creation of new parking lots. One of these projects involved diverse excavations at the 80-acre Snug Harbor Cultural Center on Staten Island. Snug Harbor had originally been built as a stately, columned series of buildings to house retired seamen and thus had originally been named "Sailors' Snug Harbor"—the word "snug" meaning a safe anchorage (Baugher and Baragli 1987; Baugher 2007, 2010). Other city-funded projects involved an assessment and report regarding the archaeological potential of a cultural institution's property such as the Bronx Botanical Garden. These studies highlighted significant archaeological sites so that they could be protected from future construction projects (e.g., Baugher et al. 1989).

These excavation projects usually involved some form of public outreach whether it was site tours, public lectures, or museum exhibits. The public programming and exhibits were also funded by grants. One example was a year-long archaeology exhibit called "Staten Island Trade Networks: Studying Community History Through Archaeology." The New York Council for the Humanities funded this exhibit at the Staten Island Museum.

The community engagement goals of New York City Archaeology Program were similar to the City Archaeology Program in Alexandria, Virginia, which has a public component that enables people to volunteer on excavations and in the

archaeology laboratory. Over the years, New York City teachers, city employees, nurses and doctors in private practice, and preservationists from the Landmarks Commission became New York City archaeological volunteers. This type of public involvement also increases grassroots support for archaeology and preservation.

Perhaps the most high profile of these City Archaeology Program projects was the six-week excavation in 1989 of the colonial almshouse in City Hall Park (Fig. 12.4). This was a joint excavation by Baugher and the staff of the City Archaeology Program working together with Professors Frederick Winter and Arthur Bankoff and their students from Brooklyn College (Baugher and Lenik 1997). The almshouse kitchen was located behind current City Hall. The archaeologists unearthed thousands of eighteenth-century artifacts. After the excavation was completed, all the washing, cataloging, and report preparation were undertaken solely by the City Archaeology Program staff (Baugher et al. 1990). The conditions in this almshouse, while not ideal, were certainly better than the nineteenth-century English workhouses depicted by Charles Dickens or in the crowded conditions in twentieth-century homeless shelters (Baugher 2001b, p. 199). The dishes, glasses, clay smoking pipes, buttons, buckles, eye glasses, toys, marbles, coins, and faunal remains revealed the positive treatment for what colonial New York considered the “deserving poor”—widows, children, elderly without families, and injured soldiers.

The almshouse site was opened to the public and created lots of interest. The archaeologists had daily visitors to the site. These visitors included people who worked in nearby offices as well as tourists. Staff and students handed out a one-page description of the project and happily answered questions about the excavation. Many visitors returned to observe the progress of the excavation. The project received local newspaper and television coverage as well as national television coverage by Maria Shriver and Al Roker on NBC’s program *Sunday Today*. Despite all the media coverage, there was never any attempt at looting. New Yorkers were intrigued and interested in learning about the history of their city, as we had already seen with the thousands of people who came to see the Ronson ship in 1982.

Summarizing the years from 1980 to 1990, the City Archaeologist did more than just oversee and regulate archaeology on developers’ properties. Baugher developed a robust program creating joint voluntary projects with other city agencies to undertake archaeology on city-owned properties. She encouraged public participation in field and laboratory work, gave site tours, and public lectures. She even gave tours in city cemeteries to encourage communities to help protect their local cemeteries. To encourage the public’s respect for and protection of cemeteries, she co-authored an extensively illustrated cemetery brochure (Baugher et al. 1984). Her archaeological efforts also involved her work with descendant communities, including collaboration with members of the city’s American Indian Community House to jointly excavate a potential Native American site in lower Manhattan (Baugher 2009). The year 1990 marked the conclusion of the City Archaeology Program’s innovative, successful, and challenging first decade.



Fig. 12.4 Tourists and New York City residents view the excavation of an eighteenth-century almshouse near City Hall in Lower Manhattan. In the background, an archaeologist near the fence discusses the latest discoveries with the public (*Photograph* by C. Forster)

Transformations in the City Archaeology Program 1991–1994

Nothing remains static and change is inevitable. In December 1990, Baugher left the Landmarks Commission to become an assistant professor at Cornell University in Ithaca, New York. For the next six months, she volunteered her time to work with the remaining grants staff members, Judith Guston and Ed Lenik, to oversee

the completion of all of the grants. Baugher's work included editing reports, writing parts of some chapters, and making sure all the artifacts were cataloged in order to leave the next City Archaeologist with a clean slate (Baugher et al. 1991a, b, c; Baugher and Lenik 1991). In 1991, Daniel Pagano became the Acting Director of the City Archaeology Program. Formerly, the assistant archaeologist, Pagano, had to take on Baugher's responsibilities as the City Archaeologist as well as his own because the agency only had funds for one archaeologist.

In 1987 and 1989, there were stock market crashes that still had profound impacts on the economy in the early 1990s (Carlson 2007). Unfortunately, by 1991 a recession brought a major slowdown to construction in New York City. The economy suffered and New York City government's reaction under Mayor David Dinkins (1990–1994) was to downsize all city government agencies no matter how efficient an agency was. When staff left to take other jobs or to retire, their positions were not filled. The Landmarks Preservation Commission cut back its work to only legally mandated services. For the City Archaeology Program, this meant their innovative grants and programs were cut and never restored. Funding for exhibits and public programs ceased. Nonmandated archaeological work on city-owned properties ended. Public participation in excavations on city-owned property was terminated. Public tours of excavations stopped. Innovation was no longer encouraged. The work of the City Archaeologist shifted to the task of evaluating environmental reviews. The job was now similar to the role of the archaeological evaluators of CRM work at state and federal-level agencies, the once-innovative position ceased to be.

In 1991, there were also major changes to CEQR. The previous system of two lead agencies was discarded. For the City Archaeology Program, this originally meant dealing directly with City Planning. The 1991 modifications to the 1977 law created a system "in which each City agency acts as lead agency for projects that it approves, funds, and/or directly implements" (NYC Mayor's Office of Sustainability 2015). This change (still operational in 2016) divested the responsibility of environmental reviews to many diverse agencies and made it more difficult for the City Archaeologist to be sure that potential projects were flagged.

There were CEQR archaeology projects during the 1990s recession and recovery. But the two highest profile archaeology projects of the period, the Five Points project and the African Burial Ground, were triggered by federal funds, not by city discretionary permits. The biggest projects of the decade would have been missed had the city been solely reliant on its own regulations. The General Services Administration (GSA) funded both projects. The project at Five Points, New York's infamous nineteenth-century slum, was triggered by the proposed construction of a new federal courthouse at Foley Square in Lower Manhattan. Because of the federal funds, the archaeologist at the State Historic Preservation Office (SHPO) in Albany served as the lead reviewer, with the City Archaeologist only serving as a consultant. Although the CRM archaeologists excavated only one block within the entire multi-block neighborhood of Five Points, their efforts uncovered over a million artifacts associated with the Irish, German, and Italian people who lived there (Yamin 2001).

During the period 1990–1994, the project that overshadowed all the others was the controversial excavation of the colonial African Burial Ground in New York City. In the beginning of the project, the City Archaeologist's involvement was again only as a consultant to the State Historic Preservation Office (SHPO) archaeologist since this was a federally funded project but that changed. In December 1991, the Memorandum of Agreement (MOA) for the project was amended to make the Landmarks Commission (and thus the City Archaeologist) directly involved in the project (Howard University and John Milner Associates 1993, p. 5). Throughout the remainder of the project both the Landmarks Commission and the Advisory Council on Historic Preservation commented on all phases of the work (Advisory Council on Historic Preservation 2003). Due to the increase in workload brought on by the Landmarks Commission's direct involvement with the oversight of the African Burial Ground project, the Commission hired Jean Howson as a half-time assistant archaeologist to work with Daniel Pagano. Howson primarily worked on the African Burial Ground designation report, and she also assisted with site visits to the burial ground.

Much has been written about the African Burial Ground because it is the most well-known study of a segregated, Northern colonial cemetery for enslaved and free people of color. The cemetery dates from at least 1703 and Africans continued to use the burial ground until 1795 (Howson et al. 2009, pp. 35–36, 43, 53–55). The CRM team recovered 419 burials and provided an unprecedented opportunity to study this urban population's cultural and geographic origins, investigate the physical quality of life for these people who were primarily enslaved, and learn about “the biocultural transformations of these people from African to African American identities” (Mack and Blakey 2004, p. 10). However, the story of the African Burial Ground is not simply about what the bones and artifacts revealed. Equally important is the story of the politics, ethics, and community activism that arose to protect the burial ground.

In the summer of 1991, CRM archaeologists discovered human remains on the former burial ground, but the US General Services Administration (GSA) kept the discovery a secret until October 1991 (Harrington 1993, p. 21). Religious leaders and lay people from New York's African American community were angered that they were not informed about the excavation, and the anger increased when several burials were destroyed by a backhoe (Harrington 1993, p. 33). Unlike Native American burials protected by Native American Grave Protection and Repatriation Act (NAGPRA), unmarked African American burials can be excavated without a legal requirement to inform the descendants or stakeholders. A two-year battle ensued between the GSA and the African American community over the fate of the burial ground (Statistical Research 2009, p. 278). The Landmarks Commission held public hearings in November 1992 regarding the potential designation of the site as a city landmark. Assistant archaeologist Jean Howson was a co-author of the designation report (Harris et al. 1993). In 1993, the site was designated as “the African Burial Ground and the Commons Historic District” by the Landmarks Commission and is still the only archaeological site that is a New York City designated landmark. The entire area that historically contained the burial ground



Fig. 12.5 **a** The African Burial Ground Memorial, designed by Rodney Leon, is in lower Manhattan. The controversial GSA office tower is the gray building in the background (*Photograph* by S. Baugher). **b** The grassy mounds in the foreground mark the location of the reburial site of the 419 bodies that were excavated at the African Burial Ground in Manhattan. The memorial is in the background (*Photograph* by S. Baugher)

was also declared a National Historic Landmark in 1993. In 2006, the site was proclaimed the African Burial Ground National Monument and became part of the National Park System (Statistical Research Inc. 2009, p. 20, 34).

In 1993, Howard University was hired by the GSA to undertake post-excavation research on the human remains, coffins, and artifacts that had been removed from the African Burial Ground (Howson et al. 2009, p. 5). The archaeologists and biological anthropologists involved in this post-excavation research characterized themselves as activist scholars. They were committed to working closely with the descendant community, and later, they also ensured the repatriation and reburial of the human remains and artifacts (La Roche and Blakey 1997; Perry et al. 2009). The role of an engaged and politically active public and descendant community also shaped how the African Burial Ground was protected and was/is interpreted to the public (Fig. 12.5a, b). In 2003, all 419 bodies that were excavated and scientifically studied were reinterred at the site (National Park Service 2011). In 2007, after a major national competition, an outdoor memorial designed by Rodney Léon was installed and unveiled (Rothstein 2010). In 2010, the National Park Service opened a museum/visitor center on Broadway near the burial ground memorial (Rothstein 2010). The African Burial Ground provides a model for scholars and government officials working with descendant communities and indeed highlights the importance of community collaborations in shaping the interpretation of such sites.

After Daniel Pagano's direct involvement with the African Burial Ground excavation was completed, he took an eighteen-month leave of absence to work for the Advisory Council on Historical Preservation in Washington, D.C. Jean Howson continued as a half-time archaeologist until 1994. While Pagano was on leave, the Commission hired two temporary half-time archaeologists, Susan Dublin and Marjorie Ingle, to handle all the archaeological environmental reviews. All three archaeologists worked for Gina Santucci, the Director of Environmental Review at the Landmarks Commission. Pagano returned to the Commission in 1994 as the Director of the City Archaeology Program and Susan Dublin and Marjorie Ingle left the Commission shortly after his return.

Changes Under Mayor Giuliani 1994–2001

The administration of Republican Mayor Rudolph "Rudy" Giuliani brought a pro-development approach to New York City government. Even though the city was successfully rebounding from a recession, there was no attempt bring back any of the innovative archaeology programs of the 1980s. Giuliani's minimalist approach of only focusing on legally mandated work has been continued by subsequent mayors of New York.

Mayor Giuliani appointed Jennifer Raab as the new Chair of the Landmarks Preservation Commission. Commissioner Raab (1994–2001) made internal changes to the Archaeology Program, including creating two new positions. In 1994, Landmarks Commission hired Amanda Sutphin as a part-time archaeologist to assist the City Archaeologist. Between 1997 and 2002 was a period of change in the management of the Archaeology Program. In 1997, the Landmarks Commission hired Professor Arthur Bankoff from Brooklyn College as a part-time staff member with the title Archaeology Advisor. As of 2016, Professor Bankoff still serves a few hours a week as a part-time staff member. From 1997 until 2002, Bankoff directed the Archaeology Program. Pagano's job transformed and he became responsible for the initial CEQR reviews for archaeology. In 1998, Sutphin became a full-time archaeologist as the Deputy Advisor to the Chair, and her responsibilities evolved over time. In 2002, Sutphin was promoted and became the City Archaeologist as well as the Director of the Archaeology Department.

With the growing importance of the Internet, Commissioner Raab pushed the archaeology staff to create archaeological content for the Landmarks Commission's Web site, which provides information to the public on all of the Commission's diverse work. The archaeology staff provided the official written detailed guidelines and steps for archaeology under the CEQR requirements, and these guidelines were placed on the Web in 2002.

The Department of Archaeology, 2002–2016

In 2002, the former Archaeology Program was renamed the Archaeology Department with Amanda Sutphin as the director. During the terms of Mayor Michael Bloomberg (2002–2013), New York experienced prosperity, but then suffered the Stock Market crash of 2008, followed by the Great Recession. The city is still rebuilding from that economic crisis under its current mayor, Bill de Blasio. During these turbulent times, the City Archaeologist continued to review CRM archaeological projects triggered by discretionary permits and to evaluate the field proposals and final site reports of CRM firms.

In an effort to provide more Web-based information for archaeologists, researchers, and the public regarding CRM projects, the Landmarks Commission scanned all the 1980s and 1990s CRM Phase 1, 2, and 3 reports. These scanned reports were uploaded to the archaeology section of the Landmark Commission's Web site in 2009. All new CRM reports are required to be submitted in digital form so that they can be placed on the Web.

Daniel Pagano continued undertaking the initial evaluation CEQR proposals. In 2007, Daniel Pagano and Gina Santucci, Director of Environment Review at the Landmarks Commission, wrote grants and then designed and implemented the Environmental Review GIS database program (ERGIS). Starting in 2007 and

continuing in 2016, Pagano utilizes ERGIS for research purposes to produce GIS maps and predictive models of potentially archaeological sensitive areas in communities throughout the city. Pagano has also digitized over 2500 historic maps for use with ERGIS. These materials and the ERGIS database provide valuable information for initial environmental review assessments. In particular, they have been helpful to improve predictive modeling for the identification of Native American sites in the borough of Brooklyn (Pagano 2013) as well as throughout the other four boroughs.

Impacts of the Great Recession on CRM Archaeology in New York

The 2008 stock market crash impacted all sectors of the US economy including the construction industry and CRM firms. In New York City, some CRM firms have seen projects that initially would have been totally privately financed by developers and triggered CEQR now included components involving federal funds. This meant that these projects fell under federal and state review, and thus, in these cases, the City Archaeologist is no longer the primary evaluator. That role now resides with the archaeologists at the State Historic Preservation Office (SHPO). In an advisory role, the City Archaeologist still advocates strongly for archaeological projects. There are, however, still CEQR projects that are solely under the review by the City Archaeologist.

The city archaeology projects that have received the most press coverage in the last 15 years were federal not New York City-mandated projects, similar to the pattern seen in the 1990s. In 2004, the significant South Ferry Terminal project at the southern tip of Manhattan was undertaken using federal funds to replace and enlarge the South Ferry subway stop (Dallal et al. 2011). During the monitoring phase of this large construction project, CRM archaeologists uncovered four colonial-era stone foundation walls from New York's military fortifications. A positive public outreach result of this project was that the Metropolitan Transportation Authority, the project's sponsor, had a section of Wall 3, which dates to 1755–1756, reconstructed on a wall in the new South Ferry subway terminal (Dallal et al. 2011, p. 8, pp. 16–18).

The other major project was the 2010 discovery of another colonial sunken ship one block south of the site of the World Trade Center, on property that was also impacted by the destruction of the Twin Towers on September 11, 2001. The block was part of the larger redevelopment of the World Trade Center. Since this was a project involving city, state, and federal investment, it triggered federal laws and thus was reviewed by the archaeologist at the State Historic Preservation Office (SHPO) with the City Archaeologist acting as a consultant (AKRF 2013, p. 1.2). From 2009 to 2011, the CRM firm known simply as "AKRF" (originally "Allee King Rosen and Fleming") monitored the construction at the site. In July 2010, at a

level between 20 and 30 feet below street grade they found an eighteenth-century ship intentionally sunk as landfill (AKRF 2013, p. S-1). The ship was in a class known as a Hudson River Sloop that was designed to transport cargo and passengers in the shallow waters of the Hudson River or along the coast (AKRF 2013, p. S.2). The ship received lots of media coverage including television, newspapers, and magazines, thus bringing this discovery to a wider audience.

In New York City, the community activism of the 1990s African Burial Ground project is still being felt in contemporary projects. In Harlem, the 126th Street Bus Depot is on the location of an African American burial ground and the cemetery extended to the edge of another CRM project, the Willis Avenue Bridge (Historical Perspectives 2004, 2011). The CRM firm Historical Perspectives conducted the initial work to locate the boundaries of this cemetery and worked with the descendant community. The cemetery was not disturbed by either project plus signage commemorating the burial ground was erected near the Manhattan side of the Willis Avenue Bridge (C. Saunders, personal communication, June 9, 2016). Then, in 2015, 140 disarticulated bones were unearthed just outside the known boundaries of the cemetery by the CRM firm AKRF. The CRM archaeologists worked with the descendant community, and the burial ground was re-consecrated by the Reverend Dr. Patricia Singletary, pastor of the Elmendorf Reformed Church (Dunlop 2016). The concern and commemoration for burial grounds is not limited to African American cemeteries. For example, Historical Perspectives excavated the burial ground of Irish and German men, women, and children who died in a Staten Island mid-nineteenth-century quarantine station hospital (Mascia 2011). Due to community activism, the 83 excavated bodies were reburied on the grassy lawn in front of a new courthouse and a sign and gravestone mark the burial grounds (Ishayik 2014) (Fig. 12.6).

The Challenges and Successes

The CRM Collections

In addition to her environmental review work, Amanda Sutphin had to handle the increasing challenge of determining where to put the collections from all the CRM excavations, as well as how to deal with challenges to the archaeological section of CEQR. In the 1980s, the collections from the CRM excavations in Lower Manhattan primarily went to the South Street Seaport Museum near the Manhattan side of the Brooklyn Bridge. Other New York City collections from the other four boroughs and other sections of Manhattan were housed in other facilities including Brooklyn College, Columbia University, New York University, and Queens College, as well as in historical societies and house museums. The South Street Seaport Museum gladly accepted high-profile CRM collections from Manhattan excavations and also managed the archaeology museum, *New York Unearthed*



Fig. 12.6 Signage and a gravestone in the grassy plaza in front of a courthouse commemorates the nineteenth-century Quarantine Hospital Cemetery on Staten Island. The gravestone marks the reburial site of 83 bodies excavated by archaeologists prior to the construction of the courthouse (Photograph by E. Hudson)

(created as mitigation for the 1986 destruction of the archaeological site at 17 State Street). TIAA/CREF, the owners of Kaufmann's 17 State Street Building, continued to voluntarily fund the staffing of the *New York Unearthed* museum until they sold the building in 1999 (Schiffman 2005). The new owner, RFR Realty, was willing to provide the space rent-free but was not willing to pay the Seaport to staff the museum (Schiffman 2005). In 2005, *New York Unearthed* closed and the artifacts were removed (Nazaryan 2011).

In 2004, the South Street Seaport Museum cited financial difficulties and fired seven employees including the archaeological curator (Walker 2004). The Museum also threatened to get rid of its archaeological collections (Sutphin 2016, p. 4). Amanda Sutphin tried unsuccessfully to find a suitable storage facility in New York City. When no affordable space was available in the city, the New York State Museum in Albany came to the rescue and agreed to take the collections in 2005 (Rose 2005). The State Museum houses archaeological collections from all over the state and has the staff to make these collections available to researchers, so this indeed is a proper home for the CRM collections from the South Street Seaport Museum.

Challenge to CEQR—15 Williams Street

In 2004, a developer submitted a proposal to City Planning for a discretionary permit for property at 15 Williams Street in Lower Manhattan. The land was part of seventeenth-century Nieuw Amsterdam (Dutch New York). The site was flagged for archaeology because it might contain a seventeenth-century brewery, a residence, and orchard. The property's minimal development increased likelihood of finding seventeenth-century resources, especially the brewery (Sutphin, personal communication, January 26, 2016). However, the developer's staff decided to go to the Buildings Department to receive an as-of-right building permit and to begin excavation on the site. This is the exact procedure that was used in 1986 by Kaufman's staff for the infamous 17 State Street project. Apparently the loophole between the Buildings Department and City Planning was never formally closed with a written agreement and existed only as an understanding between staff. Sadly, when staff members leave or retire, the institutional memory of an informal agreement is lost. After Sutphin discovered what had happened, she alerted Mark Silberman, the General Council for the Landmarks Preservation Commission, who then notified David Karnovsky, the General Council for the Department of City Planning. Staff at the Landmarks Commission and at City Planning, worked together and drawing upon the legal precedent of 17 State Street, they were ultimately able to reach agreement with the developer. The developer agreed to pay 1.1 million dollars to the Department of City Planning, which was then deposited in the Fund for the City of New York (a nonprofit organization) in order to create an archaeological repository (Sutphin 2016, p. 4). The search for an archaeological storage facility ended happily with a very generous offer from the private sector. The Durst Organization, one of the city's largest real estate development firms, offered for free a 1500-square feet, fully climate-controlled space in Midtown Manhattan for a period of 10 years (Sutphin 2016, p. 15). The developer's fine was used to furnish the facility, to move the collections, to support the repository, and most importantly to create an accessible collection.

The City has artifacts from forty-one sites still stored at various locations in about 1800 banker boxes in various states of preservation (Sutphin 2016, pp. 4–6). Staff members from the Museum of the City of New York worked with Sutphin to create a digital database of these collections. The museum staff also repacked fifteen of the forty-one collections in a uniform way, preserving the artifacts in archival storage boxes. This will make it easier for future researchers to access them. Unfortunately, additional funds will need to be raised to complete the work on the other twenty-six collections.

Since 2014, Sutphin has been overseeing the shipment of the archived artifacts to the new City Archaeology storage facility. From 2014 to 2016, access for researchers was by appointment only. In August 2016, the Landmarks Commission hired a part-time archaeologist, Dr. Jessica Striebel Maclean, and one of her roles will be to be at the repository one day a week. In addition, the Landmarks Commission hired a firm, Keepthinking, to design the archaeological database and

to create a Web site. The Web site will provide data from the collections and photographs of some of the artifacts. Hopefully, this Web site will be useful to researchers, students, and the general public. When the Web site is completed, it will have a link to the Landmark Preservation Commission's Web site.

Conclusions

Much has changed between 1980 and 2016. Like other global cities, New York City has seen its share of both prosperity and economic retrenchment. The prosperity of the 1980s created a growth in both city development and city-mandated archaeological projects. In the plaza of 85 Broad Street in Lower Manhattan, you can still see the 1984 granite footprints outlining two colonial buildings and the restored colonial well, reminders of the 1979 archaeological excavation on the Stadt Huys site. A wall in the South Ferry subway terminal contains a reconstructed segment of a stone wall from colonial fortifications. The memorial and burial mounds at the African Burial Ground and the museum/visitor center are also places the public can visit. These three sites provide lasting visual images of the city's urban archaeology.

In spite of all the budget cuts, New York City municipal laws regarding archaeology on projects requiring discretionary permits are still intact. In New York City, CRM firms are still constantly unearthing artifacts and foundations from the past. Taxpayer dollars are spent on some of these excavations. On others, developers receive special discretionary permits to build larger and more profitable buildings. But what does the public receive from these public archaeology projects? Since the 1990s, public involvement and outreach in archaeology have not been a priority of the Mayors of New York. Unfortunately, many of the CRM archaeological discoveries receive no publicity and the public rarely learns about these sites. CRM companies produce technical reports for the review agency archaeologists, but almost nothing is provided for the public. In the past, the public has clearly shown an interest in the city's archaeology through tours of sites like the Ronson sunken ship and the daily visitors to the almshouse excavation. Unfortunately, the community outreach and engagement of the public in New York City's archaeology that took place in the 1980s has been replaced by an avoidance of public participation. The reason is usually given as "insurance concerns" and "liability issues." But these concerns also existed in the 1980s, when ten thousand New Yorkers visited the Ronson ship. Because New York citizens have clearly shown enthusiasm and interest in their archaeological heritage, they deserve to see how their tax dollars are being spent. In addition, engagement with the public helps to generate grassroots support for the protection and preservation of the city's archaeological heritage.

With the new archaeological storage facility provided by the Durst Corporation, the City is moving forward to a goal of making these collections accessible to researchers. But how will the staff of the City Archaeology Department at the

Landmarks Commission reach out to the general public? How will they present archaeology to the public? Will the archaeology staff be allowed to become involved in more than simply doing environmental reviews? Will they be allowed to bring back some of the innovative projects of the 1980s such as public lectures and exhibits? Will some of the artifacts in the storage facility be used to create traveling exhibits for public schools, senior citizen centers, or public libraries? Perhaps the opening of this new archaeological storage facility will provide an opportunity for the City. It is time to put the public back into public archaeology.

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Chapter 13

Digging the Hub: The Evolution of the Boston City Archaeology Program

Joe Bagley

Introduction

The City Archaeology Program emerged in 1983 from the mire of the now-infamous Central Artery/Tunnel project or, as it is more widely known, the Big Dig, a 20-year transportation project to re-route the elevated highway that cut through Boston into a 3.5-mile tunnel. Throughout the three decades of its existence, the program has experienced the typical highs and lows of municipal entities but has survived predominantly due to its flexibility and, in many ways, its lack of formal jurisdiction. This flexibility has allowed the four City Archaeologists who have run the program to pursue a variety of personal and professional priorities that have changed with each City Archaeologist, as well as with the growth and development of Boston. This has also resulted in prolonged vacancies within the program as there is no formal legislation requiring the existence of a City Archaeologist in Boston. This chapter will review the history of the City Archaeology Program, and the work of the four archaeologists who have held the title of “City Archaeologist,” with a focus on the recent work of the program.

History of Enabling Legislation

In 1975, the City of Boston created the Boston Landmarks Commission (BLC) in an effort to identify and preserve historic properties, review development and demolition projects, and provide review for several Historic District Commissions. Today, the BLC regulates over 8000 individual properties and landscapes in nine historic districts and individually designated Boston Landmarks (City of Boston

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2016). The BLC also reviews demolition permits for any property over 50 years old to determine potential landmark status (City of Boston 1995).

In Massachusetts, federal Section 106 review and compliance is expanded with Massachusetts General Laws in Chap. 9, Section. 26–27C, which extend Section 106-style review to *state* permitted, funded, or licensed projects. These regulations and laws created the position of State Archaeologist and the State Archaeological Permit (SAP), which is required for any archaeological work on public land.

In 1982, the Massachusetts Historical Commission (MHC), the State Historic Preservation Office (SHPO), published a document that reviewed the known and potential historical and archaeological resources of the Boston area, with specific recommendations for preserving and documenting archaeological resources in and around Boston (Bradley et al. 1982). One of these recommendations was that the City of Boston hire an historical archaeologist, as four neighborhoods within the city (Charlestown, Dorchester, Downtown Boston, and Roxbury) had well-documented seventeenth-century settlements with known and potential early historical archaeological sites within their historic cores.

The City followed the recommendations and hired its first City Archaeologist in 1983. Neither the original 1975 enabling legislation nor the 1988 bylaws (written five years after the position of City Archaeologist was created) include any mention of archaeological resources, mandate the existence of the position of City Archaeologist, or define its role. It is this lack of legal definition and enabling legislation that has been both a blessing and a curse of the program and the role of City Archaeologist. The City Archaeologist has no legally defined role and is not required by law to review projects of any kind. While it was an original role of the position, the City Archaeologist is not currently required to review archaeological permits for projects in Boston, and while he may comment on SHPO-reviewed projects, he is not required to participate in SHPO review. The City Archaeology Program does not formally exist in any legal or legislative format. The City Archaeologist's role can best be defined as “whatever the City Archaeologist can convince people to do through the Landmarks Commission and through overall cooperation with other agencies and individuals,” and the City Archaeology Program can be best defined as “whatever the current City Archaeologist wants it to be.”

Though not mandated, the placement of the City Archaeologist position as staff within the BLC was the most logical location as the BLC is the primary definer, protector, and overseer of Boston's historic resources. In this role, the City Archaeologist functions somewhat like a miniature State Historic Preservation Officer or State Archaeologist, but only for those landmark-designated properties that include landscapes as part of their review criteria. Of the 8000 landmark-designated properties, all but approximately one hundred lie within nine historic districts. Each district has an individually compiled set of Standards and Criteria against which BLC staff review proposed work. None of the districts include belowground archaeological resources as part of their review, meaning the City Archaeologist cannot request archaeological mitigation on these properties through Landmark review.

The Standards and Criteria for each of the 91 individually designated landmarks, which represent the most significant historic properties and landscapes in Boston, all require new development to be evaluated for potential impacts to historic landscape features, which the Landmarks' staff has interpreted as including archaeological resources. As staff of the BLC reviewing projects that arise on landmark properties, these 91 properties represent the *de facto* "jurisdiction" of the City Archaeologist, though legally this has never been defined. While these properties are relatively few in number, they are by definition significant to the history of the region, and projects associated with them often both have archaeological impacts and lie outside of the jurisdiction of federal and state archaeology laws. Despite this, only one landmark, the City Square Historical and Archaeological Site, was specifically designated due to archaeological data. Archaeological heritage of most landmark properties is thus an incidental accident.

With the creation of the City Archaeologist position in 1983 came the creation of the City Archaeology Laboratory. The laboratory became the City's repository of archaeological materials including collections excavated during the Big Dig and other projects. State law mandates that all archaeological work on public land requires a State Archaeology Permit (SAP) issued by the State Archaeologist (MHC/SHPO). In Massachusetts, SAPs stipulate that all objects excavated under a SAP (regardless of whether it is public or private land) become state property and must be curated in accordance with the Secretary of Interior's Standards and Guidelines for Historic Preservation. Under the state's rules, nearly all of the collections from private and public property held by the City Archaeology Laboratory are state-owned. Because the MHC/SHPO does not have its own curation facility capable of storing all of the Commonwealth's collections, it has designated various repositories at laboratories, universities, and museums as state-approved curation facilities, though this designation does not come with financial support from the Commonwealth for the curation or management of these collections.

The State Archaeologist designates custodians for collections at individual facilities. It is the policy of the State Archaeologist to issue them in the name of the director or head of individual departments or agencies, so the official state-sanctioned custodian of the City Archaeology Program is the Director of the Landmarks Commission, the City Archaeologist's boss, who is typically a historic preservationist, not an archaeologist. In summary, the laboratory is a state-approved repository of Boston's archaeological collections, the majority of which are State property, which is managed by the City Archaeologist under the guise of a State Archaeologist custodial permit issued to the Director of the Boston Landmarks Commission. This system allows the State Archaeologist the legal means to confiscate the majority of the archaeological materials in the state if they deem them to be stored in unsuitable conditions and issue a new custodian and transfer permit to a suitable storage facility. These state laws, regulations, permits, and mandates coupled with the relatively undefined role of the City Archaeologist in city government form the foundations of Boston's City Archaeology Program. Since its founding, four individuals have held the title of City Archaeologist. Each brought with them individual priorities for the position, resulting in a wide variety of accomplishments.

Stephen Mrozowski (1983–1985)

By 1983, the Big Dig archaeological surveys were well underway. The Public Archaeology Laboratory (PAL), Inc., a private cultural resource management (CRM) firm, had been awarded the data recovery (Phase 3) federal contract for Section 106 compliance archaeology at the City Square Archaeological District in the Charlestown neighborhood. PAL leased the basement of the City-owned Tunnel Administration Building at 152 North Street in Boston's North End neighborhood as laboratory space to process the Charlestown assemblage (Fig. 13.1).

Stephen Mrozowski, who at the time was pursuing a Ph.D. in Anthropology at Brown University, was hired in 1983 as the first City Archaeologist, though the position was a temporary contract with no benefits. Mrozowski piggybacked off of PAL to run the City Archaeology Program. At the time, the program was focused almost exclusively on public outreach, though the State Archaeologist required that SAPs be reviewed by the City Archaeologist on projects within Boston prior to their issue. The program was run out of a small room within PAL's temporary laboratory, though Mrozowski also had a shared desk at City Hall if needed.

In 1985, Mrozowski released *Boston's Archaeological Legacy: The City's Planning and Policy Document* through the BLC. This seminal work summarized the known archaeological resources of Boston and established priorities for future research and survey in Boston. While the report requires updating today, it still



Fig. 13.1 Data Recovery (Phase 3) excavations by the Public Archaeology Laboratory, Inc., at the City Square Archaeological District in the Charlestown neighborhood of Boston, 1985. Image courtesy of the Massachusetts Historical Commission

stands as the document from which the City of Boston establishes archaeological priorities and background including the most-recent open space planning document.

In 1987, PAL left the laboratory, which was taken over by the City Archaeology Program creating the City Archaeology Laboratory (the lab). As a city-owned building housing a city program, the laboratory was able to exist rent-free. The entirety of the City Square assemblage, now processed and cataloged, remained at the laboratory and formed the core of the city's curated collections.

Steven Pendery (1985–1993)

In 1985, Mrozowski left the City Archaeology Program to pursue employment with the National Park Service and was replaced by Steven Pendery, a Harvard Ph.D. candidate in anthropology and an active principal investigator of numerous ongoing archaeological projects within the Central Artery/Tunnel archaeological digs in Charlestown. Pendery was the City Archaeologist between 1985 and 1993. During Pendery's early tenure, the position of City Archaeologist was funded with state and federal funds from the Big Dig project and he served primarily in a consulting position focused on providing archaeological review and enforcing archaeological compliance for numerous large and small investigations related to both the Central Artery/Tunnel project and other projects throughout the city.

Pendery's tenure was marked by the considerable number of field projects he conducted throughout the city. These projects include both CRM-style and research-oriented excavations, primarily on city park land. Through his role in the Landmarks Commission, in 1986, Pendery required and executed an archaeological survey of Boston Common, a landmark-designated property, ahead of a proposed lighting project, which otherwise would not have required state or federal archaeological review due to lack of funding and permitting triggers. Over 100 new light fixtures as well as a network of electrical wires and junction boxes were planned throughout the Common. Pendery's CRM-style excavations documented the presence of numerous significant archaeological deposits in the Common including a Revolutionary War-era British encampment, two intact Native American shell middens, an early colonial camp site, the early eighteenth-century town powder house, and thousands of artifacts from the Common's long history as Boston's "back yard" (Pendery 1988). A significant aspect of the project was the inclusion of local community volunteers who actively participated in all aspects of field excavation and laboratory processing and cataloging, a model that would persist throughout the program's history. Pendery was able to receive temporary funding from the Parks Department to hire two professional archaeologists as project supervisors to manage and direct the volunteers during the excavations.

Toward the end of Pendery's tenure, he joined Harvard professor Robert Preucel for an archaeological field school on the Brook Farm site, a designated Boston Landmark, National Historic Landmark, and National Register-listed property. Brook Farm has been a state-owned park since 1988, but is known historically as an

experimental mid-nineteenth-century Transcendentalist utopian community with a prolonged history that included two 3000- to 5000-year-old Native American camp sites, a colonial farm, almshouse, a Civil War camp, and two orphanages. The field school was in operation during the summers of 1991–1994 producing large quantities of archaeological materials from the entire occupation of the site (Preucel and Pendery 2006). The materials were brought back to the City Archaeology Laboratory where some of the collection received washing and cataloging, other unwashed artifacts were stored in cardboard trays. Soon after completing the excavations, Pendery left the City Archaeologist position to pursue work with the National Park Service. To date, no final report has been completed. Recently, a small grant has funded the still-ongoing cleaning, sorting, and cataloging of the Brook Farm assemblage.

If Mrozowski's legacy as City Archaeologist was marked by the formative groundwork of the early City Archaeology Program, Pendery's legacy lies within the massive quantity of archaeological assemblages he produced in city parks. Between the portions of the Charlestown Big Dig, Pendery excavated when he was previously employed at Harvard's Institute of Contemporary Archaeology (ICA), the excavations on Boston Common, Brook Farm, the Dorchester Pottery Works, and other smaller projects, over two-thirds of the City's 1800 boxes of archaeological materials in the Laboratories' repository are direct results of Pendery's archaeological work.

A significant contribution of Pendery's work was his cultivation of a partnership between the BLC and the city's Parks department. As part of the BLC, Pendery did not have direct jurisdiction over all city property, only the landmark-designated portions. Pendery's work on non-landmark parks not only successfully demonstrated the archaeological integrity and significance of parks without formal landmark designation, but also created a positive partnership between two City agencies that would prove beneficial in future work.

Though Pendery was employed by the City, he was not technically staff. Until the early 1990s, his position was paid by funds set aside as part of the archaeological mitigation of the Central Artery/Tunnel project and through state Survey and Planning grants from the MHC. It was only during his final years as City Archaeologist that the significance of the work and impact of the City Archaeologist was realized and the City transformed the position into a full-time, benefited, staff-level job within the BLC. In 1993, Pendery left the position for a role in the National Park Service's Northeast Region Archeology Program creating the first of two prolonged vacancies in the program's history.

Ellen Berkland (1996–2010)

Ellen Berkland, whose first interactions with the City Archaeology Program were as a volunteer excavator at Pendery's Boston Common dig in 1986, was hired as City Archaeologist in 1996 after a nearly three-year vacancy in the position. Berkland

had participated in numerous professional field surveys in Boston including the majority of the sites in the Big Dig. At the time, Berkland was pursuing a M.A. in archaeology at Boston University.

Several significant changes occurred during the three-year hiatus. First, the requirement for the City Archaeologist to approve archaeological permits in Boston was eliminated due to the prolonged vacancy in the position. Second, the position lost its full-time status though kept the title of “City Archaeologist” and remained within the Boston Landmarks Commission. Berkland’s early years in the position were funded by ongoing Big Dig transportation funding for the City of Boston, but her position was part-time, being limited to 25 h per week (Fig. 13.2).

With the approval of the Boston City Council, the City Archaeologist position was made full time and opened to applicants in 1998. Ellen Berkland, who already had the position for two years, had to re-apply for the position alongside stiff competition, but was eventually selected, again, as the full-time staff archaeologist of the Landmarks Commission. Unlike Pendery’s tenure, Berkland’s time as City Archaeologist was not dominated by excavations, but instead focused on collections management, public education, and outreach. The City Archaeology Laboratory was transformed into a part-curation center and part-classroom. The centralized location of the laboratory in Boston’s North End made it especially accessible to Bostonians. Thousands of volunteers participated in stabilizing and processing archaeological collections, and thousands of students visited the laboratory over Berkland’s 14 years as City Archaeologist.

Toni Pollock, the Commissioner of the Environment Department and of the Parks Department, added a new role to the City Archaeologist position. When the City Archaeologist was again made a permanent staff position, Pollock added the role of “Manager of Rainsford Island” to the tasks of the City Archaeologist. This vacant and undeveloped island had once been the home of the City’s quarantine hospital, almshouse, boys and girls reformatory, and even a resort. Fire, misuse, and demolition have cleared any aboveground structures from the island, but under Berkland’s direction, the first archaeological management plan was drafted that documented over a dozen historic terrestrial and submerged archaeological sites including hospital structures and a cemetery whose headstones had been removed (Claesson 2002).

A significant milestone in the program’s history was the Intermodal Surface Transportation Enhancement Act (ISTEA) grant awarded to the Massachusetts Historical Commission in 2006 for the purpose of cataloging and improving the curation standards of the State’s transportation-related collections, including more than half of the collections stored in the City Archaeology Laboratory. This grant, for the first time, allowed for the hiring of full-time contractors in the position of laboratory assistants. These funds paid for the creation of the Massachusetts Artifact Tracking System (MATS), the in-house Microsoft Access-based digital artifact catalog system used by the State of Massachusetts and City of Boston. Funding did not allow for the moving of the laboratory from the now-dilapidated Tunnel Administration Building basement home, but it provided for the purchase of archival boxes, an archival artifact tag printer, computers for digital cataloging, and

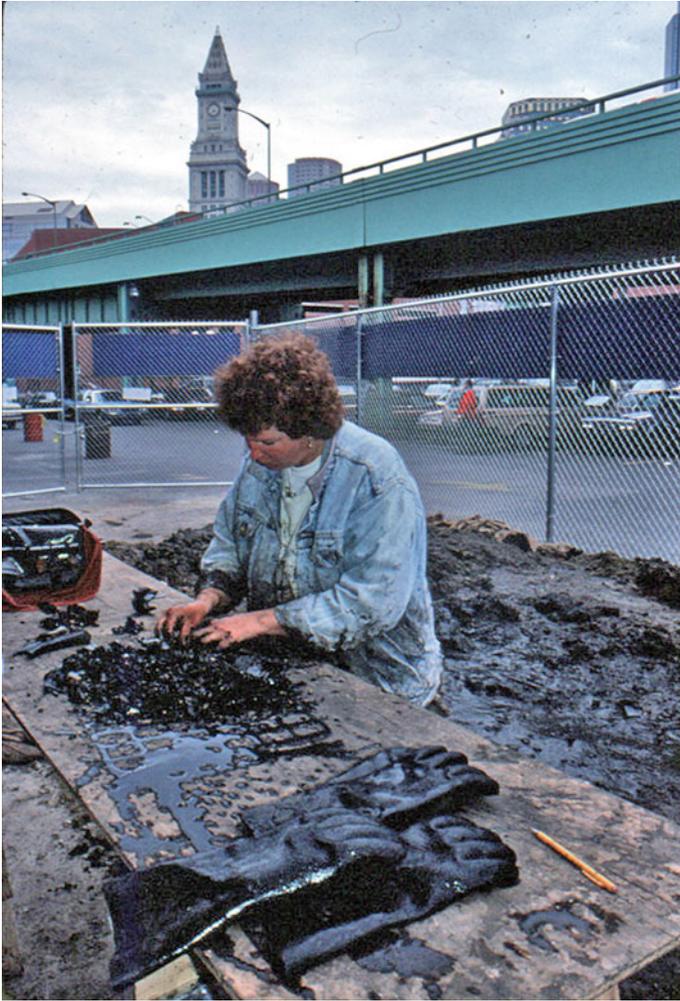


Fig. 13.2 Ellen Berkland excavating at the cross-street backlot as part of archaeological mitigation ahead of Boston's Big Dig in 1992. Image courtesy of the Massachusetts Historical Commission

archival plastic bags. With these supplies and staff, portions of the Charlestown Big Dig collection were digitally cataloged.

Berkland's outreach into the community was immense and resulted in a much more widely known City Archaeology Program, especially among school children and historical groups. Her research focused a great deal on the Boston Harbor Islands, where the National Park Service had established a formal recreation area comprised of an amalgamation of various city, state, and privately owned islands and lands in Boston Harbor. Beyond her outreach with members of the community,

Berkland's greatest contribution to the program was her ability to maintain and increase the interactions within and among various governmental, educational, and private groups.

In 2010, Thomas Malhstedt, the long-term senior archaeologist of the State's Department of Conservation and Recreation (DCR), retired. Berkland applied and was chosen to replace Malhstedt. Due to the economic upheaval of the previous years, then-mayor Thomas Menino had issued a hiring freeze on non-essential city employees just prior to Berkland's departure, and due to the fact that the position of City Archaeologist is not mandated in any legislation, there were no legal justifications for filling the position during the hiring freeze. Ironically, the Great Recession that caused the prolonged vacancy eventually led to the position being filled.

Joseph Bagley (2011-Present)

In December 2011, two months after starting graduate school at UMass Boston, the author was selected to be the next City Archaeologist, continuing the trend of the position going to active graduate students. Prior to this, in the summer of 2011, the City of Boston decided to sell some of its excess property, which included the Tunnel Administration Building, whose basement housed the City Archaeology Program. Ellen Lipsey, then the Executive Director of the Boston Landmarks Commission, had been trying to convince the City to allow the position of City Archaeologist to be filled so that ongoing Landmark review projects would have an archaeologist on-staff to conduct their review. During this time, landmark-designated properties with projects impacting known or potential archaeological sites received no archaeological review or mitigation. With the upcoming sale of the building housing the laboratory, the laboratory had to be moved. The City chose to move the laboratory to the City Archive Building located across town, and with this decision, Lipsey had the leverage to convince the City that they needed a qualified archaeologist to not only pack the mothballed laboratory, but also set up the new space and manage the laboratory moving forward.

The position came with two initial orders: pack the laboratory and restart the City Archaeology Program. The laboratory-packing was completed in early January of 2012, but the move itself would not occur until April leaving months of time when the laboratory was closed, no public programming was occurring, and winter caused a relative paucity of projects to review. This relatively quiet period allowed for a thorough change to much of the outward-facing online components of the City Archaeology Program.

On January 18, 2012, the City Archaeology Program's Facebook page opened. Posts to social media included interesting artifacts that were found while working with the collection, something a volunteer found while he or she was processing, updates from the field, or generally interesting stories related to Boston archaeology and history seen online. Seven months later, the page had its first 100 "likes" or

followers. This grew steadily to the first 1000 about one year later, doubling to 2000 seven months later, and again to 4000 in July of 2015.

The Facebook page is carefully curated ensuring a consistent tone and appropriate quantity of posts to engage without overwhelming the public and other archaeologists alike. No single aspect of the work done since becoming City Archaeologist in 2011 has had a more beneficial outcome from the standpoint of public perception, appreciation, media outreach, engagement, and attention from other archaeologists than the program's Facebook page. For example, the 44 posts made in October to the program's Facebook page during the 2014 Archaeology Month (all of which were prescheduled in a single day in September) were viewed over 138,000 times. With an audience composed of an even mix of men and women with a majority being between 25 and 44 years old and residents of Boston, the City Archaeology Program's online presence, through Facebook alone, is reaching the people in the community it serves.

Today, the role of City Archaeologist is similar to a combined SHPO, CRM principal investigator, laboratory supervisor, and corporate spokesperson, though these roles are not defined in legislation. One way the City Archaeologist differs significantly from the role of a SHPO is his engagement with the local Native American community. The Massachusetts' SHPO is limited in its legal interactions with Native American communities to those tribes that are recognized by the state or federal governments. As a municipal government, Boston is not limited to these groups. The Massachusetts people, a vibrant and active tribal community, are the obvious namesake for the Commonwealth of Massachusetts, but they are not a formally recognized tribe. While this excludes them from legal considerations by the SHPO, the City does not have such restrictions. Boston has been actively discussing issues of City recognition and appreciation of the Massachusetts community with tribal elders. The City is also engaged in consultation on various aspects of the archaeological collections currently stored in the laboratory to ensure their proper handling and storage as defined by the Massachusetts people. One major issue that has not arisen, but will undoubtedly someday, is the fact that with regard to human remains, jurisdiction is defined by the State. In Massachusetts, a statewide unmarked burial law requires that State Police are called if human remains are ever encountered in an unmarked location. The law's protocols require that the remains be defined as either archaeological or a crime scene, depending on whether they are 100 years old or more, as determined by the State Medical Examiner. The remains become either the jurisdiction of the State Police if less than 100 years old or the State Archaeologist. Once under the jurisdiction of the State Archaeologist, state and federal rules automatically eliminate participation by the City Archaeologist and exclude the Massachusetts People from *ever* having a direct say in the treatment of their ancestor's remains, regardless of where they are found.

The lack of these types of clearly defined or legislative roles presents some interesting issues with the City Archaeologist's relationship with the SHPO. The City Archaeologist can ask, but has no ability to legally require that certain aspects of mitigation be followed such as determining the appropriate test pit interval, having the collections transferred to the City Archaeology Laboratory upon

completion of the report, or having a public outreach component to an archaeological dig. However, the City Archaeologist through the BLC can stipulate these requests be incorporated into the permit proposal, which when issued by the SHPO creates a legal document mandating the stipulations in the SAP permit proposal be followed.

The City Archaeologist has required all archaeological work in the City to be done under a SAP to ensure the high standards of a Massachusetts' SHPO report review (the City Archaeologist has no legal means to reject reports) as well as the maintenance of legal ownership of collections with a public agency (the state) where the artifacts can be made available to researchers. The SHPO has concurred with all requests by the City Archaeologist to conduct archaeological mitigation on landmark-designated areas, but the City Archaeologist has no legal means to require the SHPO to require archaeological mitigation on projects outside of BLC review but within the SHPO's jurisdiction.

A recent example of a project where SHPO and the City Archaeologist differed on opinion included a proposed development on a large multi-acre parcel in the Roxbury neighborhood of Boston. This project included a portion of a BLC historic conservation protection area "donut" buffer zone surrounding the seventeenth-century landmark-designated burying ground. The entirety of the development project was within SHPO review jurisdiction due to state and federal funding and permitting, but only a small portion was within BLC jurisdiction. The entire project area, about half a city block, was archaeologically sensitive as it abutted the original and only road into Boston, contained dozens of nineteenth-century properties, and historic maps showed structures in the project area during the eighteenth century. While the City Archaeologist preferred that the entire project area be surveyed, only the eastern-most extreme of the project area lay within the review of the BLC.

A Phase I survey (called an "Intensive (Locational)" survey in Massachusetts) was required in a relatively small 100 × 10 foot surface that was the only area within the protection area not formerly occupied by a structure. The SHPO chose to not require any archaeology outside the protection area. Unfortunately, the protected area was not the most sensitive part of the parcel and the survey did not identify significant deposits within the BLC jurisdiction area. The remainder of the archaeologically-sensitive property outside of the protection area was developed without archaeological survey.

Conversely, a similarly-sized parcel directly across the street and entirely within the protection area was in his jurisdiction. As such, the City Archaeologist preemptively required archaeological mitigation through a formal letter submitted to the developer and the SHPO, and the SHPO concurred. It was surveyed in its entirety by a private CRM firm in the winter of 2014/15 producing over 100,000 artifacts (report in progress). Sites found included a buried nineteenth-century factory housing development relating to early Irish workers and evidence of a highly stratified seventeenth–nineteenth-century landscape created by massive filling episodes separating each significant period of occupation.

The lack of a defined jurisdiction is beneficial in some cases; in many of these, the City Archaeologist serves a role similar to a SHPO requiring archaeological survey, but also functions much like a CRM firm as individual City Archaeologists have been responsible for executing the surveys triggered by their review. By not formally restricting the role of City Archaeologist to properties that lie within the jurisdiction of the Boston Landmarks Landmarks Commission, this allows for partnerships with outside agencies, other city departments, and excavations on private land. As the work is all done pro bono and often as part of formal review by the Boston Landmarks Commission, payment for services is not possible without creating a conflict of interest.

In 2013, at the request of the local Charlestown preservation community, the City Archaeology Program was brought in to survey a small city park that once contained the training field for the local militia. While no Revolutionary War deposits or artifacts were found, a buried fountain, evidence of several school houses, a massive early nineteenth-century refuse deposit, and two intact Woodland-period Native American sites were encountered on the 0.8 acre parcel (Bagley 2015) (Fig. 13.3). All City Archaeology programs are open to the public, encourage public interaction with the volunteers excavating the site, and are deliberately timed whenever possible to occur when the site is most visited by the public and tourists.

Partnerships with outside groups are also possible with this non-defined jurisdiction. The Old North Church Foundation planned to construct a brick pathway through the rear yard of a c. 1715 house owned by the Church. The parcel was immediately behind the Old North Church, best known for its role as a signal tower in the Revolutionary War, and made famous by Longfellow's telling of *Paul Revere's Ride*. Though the property is not a designated City Landmark, it does have a very broad Preservation Restriction on the buildings and landscape requiring that modifications to either be reviewed by the SHPO. The Foundation came to the BLC for consultation on the project prior to submitting it for review by the SHPO. While the City Archaeologist was not a participant in the initial meetings, the project came up during a BLC group meeting, and concerns were stated for archaeological resources in an undeveloped early eighteenth-century backlot. The more than 40,000 artifacts eventually recovered from the ten 1 × 1 m units excavated in the impact area from the house's complete 300-year history demonstrated the importance and integrity of this tiny rear parcel (Bagley 2015) (Fig. 13.4).

During roughly the last fifteen years, the City Archaeologist's office has participated in several excavations on properties that were not designated landmarks. The City Archaeologist has instituted an informal policy to provide small archaeological surveys, pro bono, when required by the City Archaeologist or SHPO. These include some of the recent excavations at the Old North Church, the site of the 1645 Boston Latin School in front of Boston's Old State House, and the excavations of the 1859 Industrial School for Girls site. Scale and budget are important aspects of this pro bono work, all properties owned or leased by a nonprofit or the City of Boston. Because the program receives no operational budget, all of the field and laboratory labor, including artifact cataloging, is done by



Fig. 13.3 Volunteers and members of the public during excavations at the Training Field Park survey in 2013. *Photograph* by J. Bagley

volunteers. The lack of a budget imposes a limit to the scale of the project that can be executed by the volunteer crew, and actual costs such as bags, Sharpies, and boxes must be accounted for through donations, and to avoid conflicts of interest, the City Archaeologist does not require or request supplies or funds for supplies to be donated by the owners. Being pro bono as a standard also avoids financial conflicts, whereby the City Archaeologist requires an archaeological excavation and then either bids against CRM companies for the project or otherwise accepts or charges money from the institution or group that is being made to do the excavations.

This informal policy has greatly benefited the City Archaeology Program. As projects on landmark-designated properties with both belowground impacts and required archaeological review are relatively infrequent (1–2 a month), this means



Fig. 13.4 Volunteers excavating at the Clough House site in Boston's North End in 2012. *Photograph by J. Bagley*

there is greater time allowed for outreach, field, and laboratory work. By conducting the pro bono archaeological surveys, the City Archaeologist creates opportunities for public education, outreach, and involvement, while also increasing the likelihood of archaeological excavations within project areas both within and outside of SHPO and City Archaeologist review. This visibility and relevance to the public has greatly increased the public awareness of the both the City Archaeologist's existence, the program as a whole, and the relevance of archaeology in Boston today. The drawback to these excavations is the increased demand on the City Archaeologist for laboratory processing and report creation, which are difficult without a paid staff or operations budget.

Though the position of City Archaeologist is funded by the City, the lack of any other type of funding has been a major issue for the program as a whole. Funds

provided by the previously discussed ISTE grant in 2007 purchased a quantity of archival plastic bags and boxes that had lasted until 2013. After these ran out, supplies have been purchased only through donations. On average, the City Archaeology Program has functioned each year since 2011 on approximately \$1000 in donations from the public each year. These funds must keep an archaeology laboratory stocked with supplies for the entire year. A lack of funding has not been an issue with regard to artifact processing (washing, sorting, labeling, bagging, and organizing) as dedicated, and enthusiastic volunteers from the local community and numerous local university archaeology programs (Boston University, UMass Boston, Harvard, etc.) under the constant supervision of the City Archaeologist have resulted in high-quality and relatively swift processing of artifacts. Cataloging, however, has become a major bottleneck and Achilles heel of the program. Not paying trained individuals with specialized skills for their labor creates a professional, ethical, and moral dilemma and has resulted in these individuals who come to volunteer at the laboratory leaving as quickly as possible for paid work elsewhere.

To accommodate the growing need for review of projects and meetings to plan upcoming projects and collaborations, the laboratory has been reduced to part-time hours with the City Archaeologist spending two days a week at City Hall and only opening the laboratory for the remaining three. The 4000-square-foot City Archaeology Laboratory is located 10 miles away from downtown and sometimes struggles to attract its ideal volunteer: archaeology students, who often have to spend over an hour each way commuting via public transportation. The laboratory nevertheless averages 200 h of volunteer labor each month. These volunteers, while critical to the work of the laboratory, require near constant supervision and assistance due to their relative lack of experience in identifying artifacts. As cataloging requires concentration and the ability to be able to catch artifact identification mistakes, the City Archaeologist cannot enter items in the digital catalog while at the laboratory due to constant interruptions and requests for assistance.

One successful method for swift catalog production has been requiring graduate students who are interested in pursuing thesis projects using assemblages recovered by the City Archaeologist to first catalog the entirety of the assemblages prior to commencing their analysis. This has resulted in one 40,000 artifact site being cataloged in less than three months by volunteers. The pressing need to complete outstanding reports and the continuing requirement for catalogers has recently resulted in allowing inexperienced but promising volunteers, especially those in college programs, to catalog the artifacts using the identifications already written on each artifact lot bag with the presumption that mistakes have been addressed by the project supervisor—the City Archaeologist—during the initial artifact sorting and bagging process.

In the past, Steven Pendery was successful in collaborating with agencies, specifically the City's Parks Department, in efforts to fund archaeology on parks properties. More recently, the Parks Department has insisted that the Environment Department (where the BLC is located) funds their own projects, as archaeology is outside of the Parks Department budget requests. Budget cuts within all

departments have not opened new sources of funding for emergency archaeological digs, and since 2011, funding requests for the City Archaeology Program have been denied by the Boston City Council. As a result, all parks projects and all other projects on city-owned land conducted by the City Archaeologist have been conducted without a budget and only with volunteers.

More recently, projects conducted by the City Archaeologist have focused on sites without landmark designation. These are particularly variable as the work that is being proposed on these sites does not fall within Landmark review, though there are extremely sensitive sites on the property (Boston Latin School at Old City Hall and the Industrial School for Girls are two examples). A successful method for achieving archaeological mitigation where absolutely no archaeological review is required has been to offer all City Archaeology Program work pro bono, with the agreement that the work be done completely within the public realm and with as much press, public outreach, and direct public involvement as physically possible. This technique, while by no means solving funding or cataloging problems, has dramatically increased the visibility and public awareness of the City Archaeology Program to local and sometimes national audiences. This may, someday, lead to greater funding opportunities.

Today, the City Archaeology Program is treated as a separate entity from the review and compliance work done through the BLC. The program is the sum of the volunteers who give their time, the archaeological collections, efforts to make the materials available to researchers and the public, social media outlets, and the public talks and tours given by the City Archaeologist throughout the region. As the only staff of the program, and as the only archaeologist employed by the City of Boston, the program's recent and past success is only made possible through the support of the incredible and dedicated volunteers who put up with irregular hours, and constant laboratory closings, all while managing to keep a positive attitude when faced with varied duties such as sorting of redware to helping run a hands-on archaeological ceramic booth on a hot summer's day on Boston Common.

Fundamentally, the lack of defined jurisdiction and enabling legislation makes the City Archaeologist position and the program vulnerable. It is this lack of legislation that allowed for the prolonged vacancies between Pendery and Berkland, and after Berkland's departure. For this reason, the need for public outreach and the resulting public *support* is clear. The preservation community in Boston benefits greatly from the general appreciation of Boston's history. While the Museum of Fine Arts, the universities, and the various public parks—all tax exempt—are large tourism draws, it is historical tourism that brings billions of dollars to Boston and the surrounding area. A distinct advantage for the City Archaeologist of Boston is never needing to make an argument for why Boston's history matters, why archaeological sites are important, or why the community should support historic preservation. People “get it.”

Public relations are still critical, as the position of City Archaeologist is not a requirement, and the City Archaeology Program only truly exists in the mind of the City Archaeologist. A great deal of time is spent giving public talks, providing historic walking tours of archaeological sites, visiting schools, participating in large

education events and fairs, and providing media interviews. The disadvantage of many of these is that with a staff of one, all other aspects of archaeological review and laboratory work cease when doing public outreach or fieldwork. This trade-off is essential, however, because without public awareness of the archaeological importance of Boston's known and potential sites, this position can be eliminated. If ever threatened, the only thing that will save the position of City Archaeologist and the program as a whole is the relative low cost of the one person who runs the entire thing and the overall popularity and visibility of the program among the public. You cannot cut a budget that does not exist.

The Future

The long-term success of the City Archaeology Program and the role of City Archaeologist lie in funding. It is clear that the program is growing, but this growth is resulting in an increase in the awareness of the program in the public, the demand for public events, and an overall increase in inclusion of archaeology in development projects. With a schedule that is often booked at least two months in advance, it is no longer possible to do more public events, participate in meetings at City Hall, or spend more time at the laboratory without one aspect of the program suffering. Unfortunately, that aspect tends to be the laboratory.

The laboratory, relative to other aspects of the work, is the least visible, but the nearly 2000 boxes currently held in the repository are some of the most significant historic resources in the country. Nearly all of these collections require resorting and digital cataloging in order to make these materials accessible to researchers. Since most of these collections were excavated more than 20 years ago, the need for this labor-intensive work is less demanding than the need for active review of new projects and public outreach (Fig. 13.5).

The collections recovered and stored in the laboratory present both a challenge and an opportunity for the City Archaeology Program. The contents of the laboratory are the source of information in public talks and outreach through social media. From a collections point of view, it is absolutely critical to demonstrate that the materials already recovered are significant to the history of Boston; otherwise, it is impossible to justify digging up even more. Many of these collections remain in the realm of gray literature through CRM reports that are not allowed to be released by the SHPO in an attempt to protect sites from looting. However, as many of the larger projects related to the Big Dig have since been destroyed after archaeological mitigation, these reports as well as those from other protected or developed properties will be digitized and placed online with minor redactions. These collections and reports represent an incredible wealth of data that have yet to be thoroughly processed or addressed. There is ample material for numerous M.A. and Ph.D. level projects.

In earlier years, the lack of resources and space in the previous laboratory at the Tunnel Administration Building meant it was almost impossible for researchers to



Fig. 13.5 Volunteers processing artifacts from the Clough House site. *Photograph by J. Bagley*

access the collections or find a place to lay out artifacts. These problems have been addressed with the new location, but this overall lack of access to reports and digitized data has prevented scholarship based on the laboratories' collections from being published in academic journals, theses, or dissertations. As of the writing of this chapter, since reopening the laboratory in its new location in 2012, two doctoral dissertations have been completed with contributions using the laboratory's collections (Hardesty 2014; Keim 2015), one Master's thesis has been completed on the Brook Farm site (Savory 2015), two theses are nearing completion on the Clough House site, and two more are beginning on the Industrial School for Girls site.

The program is at a critical point as growth is increasingly difficult without additional time and funding. The City Archaeologist and his volunteers are actively attempting to address this in four ways: grants, a new laboratory, a new nonprofit support group, and a book. Applying for private and public grant applications has become a major priority of the City Archaeologist to support staffing of field and laboratory activities. If successful, this will allow the City Archaeologist to complete archaeological reports and pursue additional funding opportunities while

volunteers are managed by grant-supported staff. Time to write grants and reports is currently lacking, but is achieved through laboratory closings and working off-hours.

Recognizing the success of the program, leadership of the program's parent agency, the Environment Department, is pursuing a new home for the City Archaeology Laboratory. The laboratory's significant distance from City Hall severely limits its accessibility for laboratory volunteers and visitors. The existing facility also lacks sufficient artifact processing and analysis space and display area for future growth. As City funding for property improvements is easier to access than funding for additional staff, a new larger location is actively sought closer to downtown Boston that will be renovated to include larger laboratory facilities, a larger collections storage facility, and a new public archaeology museum.

A group of long-term volunteers have joined together to independently found the Friends of Boston Archaeology (FOBA). This group has begun meeting and is actively pursuing nonprofit status and will assist the City Archaeologist in volunteer coordination and fund-raising. As the City Archaeologist is limited in his ability to fund raise, FOBA will be able to pursue greater funding opportunities that will directly support the program.

Finally, the current City Archaeologist has written his first book titled *A History of Boston in 50 Artifacts* (Bagley 2016). As a public employee, he cannot receive income from publications written about his position or using his position; therefore, a legal memorandum of agreement has been written formally declaring that all author proceeds of this and any future books the author releases while City Archaeologist will be turned over to the City Archaeology Program to be used to purchase supplies.

Regardless of the current funding and time restraints, the City Archaeology Program is thriving, it is growing, and most importantly, it is enjoyed by the people of Boston. Its overall popularity among the public and other archaeologists is critical to its success and long-term viability. Public talks are regularly filling venues beyond capacity, venues are actively seeking speaking engagements by the City Archaeologist, and Archaeology Month talks are requested eleven to twelve months in advance. While growth is reaching a maximum capacity, positive outcomes of future funding and staffing efforts will greatly improve the program's ability to grow. When compared to cuts in similar programs, however, or even to the program's own recent past during the "gap years" between city archaeologists, Boston's archaeology program finds itself well positioned for future success.

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Chapter 14

Phoenix Rising: The Development of a Municipal Archaeology Program in Arizona, USA

Todd W. Bostwick

Introduction

Despite its modern appearance, the City of Phoenix, Arizona, has a deep heritage. Buried to a depth of up to 10 m underneath the paved and landscaped surfaces of today are the abundant archaeological materials of ancient and historic people spanning the last 6000 years. Archaic hunter-gatherers, Hohokam farmers, and historic pioneers left behind architectural remains and trash deposits that are continuously being uncovered by archaeologists working on private and government construction projects. Dozens of these sites are very large, covering hundreds of hectares and multiple City blocks, and some contain literally millions of artefacts.

The very name of the City—Phoenix—implies a debt to the past. The incredible pace of development from 1990 to 2008 threatened to obliterate much of that archaeology. During the early years of this period, private development and even some City projects did not undergo archaeological review, and sites were sometimes destroyed as a result. The archaeology component of the City's Historic Preservation Ordinance was ambiguous and unenforceable. Consequently, it was necessary for a compliance archaeology program to be developed by the author, City Archaeologist from 1990 to 2010, to prevent the loss of a considerable amount of scientific information, preserve hundreds of thousands of artefacts, and assure the respectful treatment of thousands of human burials.

In addition to establishing a set of policies and procedures relating to archaeology requirements, two strategies were pursued that played a significant role in enhancing the preservation ethic of the City: (1) raising the profile of the city archaeology position and increasing awareness of archaeological projects undertaken within the City through public programs, publications, and exhibits; and

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(2) fostering good relationships with various City departments, the Arizona State Historic Preservation Office (SHPO), and local Native American communities.

The development of the city archaeology Program from 1990 to 2010 is described below. The role of the City Archaeologist is discussed, and the shortcomings of the City Historic Preservation Ordinance are outlined. Then early successful projects are summarized that established the importance of archaeology, followed by the development of a burial agreement that brought an awareness of the potential for the destruction of human remains during construction. Other sections discuss the impact of a new City General Plan, the process of establishing project reviews within various City departments, cultural resource training for City employees, the creation of a GIS database system, guidelines for archaeology projects and standardized treatment plans, difficult federal projects, and the importance of sharing archaeology with the public.

City Archaeologist

In 1929, the City of Phoenix created the position of City Archaeologist, the first in the USA, whose purpose was to develop the ancient Hohokam ruins called Pueblo Grande into a City museum and park (Downum and Bostwick 1993). The main focus of the City Archaeologist was the ongoing development of the museum and park, and thus, the position has always been administered by the City's Parks and Recreation Department. In 1990, Phoenix created a Museum Director position separate from the City Archaeologist position, which facilitated the increased involvement of the City Archaeologist in the planning of the City's extensive capital improvement programs, and in developing a citywide archaeology compliance program.

The City of Phoenix has more than 12,000 employees working in three dozen different departments, many of them engaged in activities which can impact archaeological sites. But few departments consulted with the City Archaeologist in 1990. One of the first steps of the author was to raise the profile of the City Archaeologist position through guest speaker programs at various department staff meetings and in public venues, such as the City libraries and museums. From 1990 to 2009, the City Archaeologist presented more than 300 public programs to more than 225 different public organizations and City departments, including the Aviation, Street Transportation, Neighborhood Services, Housing, Planning, and Water Departments.

City of Phoenix Historic Preservation Ordinance

The City Archaeologist and a Historic Preservation Officer have been authorized to review proposed developments within Phoenix since 1985 based on the City's Zoning Ordinance, which is designed to "aid in the harmonious, orderly, and

progressive development of the City” (Chap. 1, Sect. 102). The purpose of the City’s Zoning Ordinance is to:

establish standards and regulations to govern the use of land and structures in the City and for review and approval of all proposed development of property in the City, and to provide a development review process that will be comprehensive, consistent, and efficient in the implementation of the General Plan and other adopted goals, policies and standards of the City (Chap. 1, Sect. 102).

Keywords in this declaration when applied to archaeology are “establish standards” and “review and approval of all proposed development.”

The Zoning Ordinance includes a separate section on Historic Preservation. This section acknowledges the significance of archaeological resources within the City:

It is hereby declared as a matter of public policy that the protection, enhancement and preservation of properties and areas of historical, cultural, and archaeological and aesthetic significance are in the interests of the health, prosperity and welfare of the City of Phoenix (Chap. 8, Sect. 102).

Archaeological materials include artefacts, architecture, rock art, human graves, and other ancient and historic features at least 50 years of age.

The City Zoning Ordinance language is ambiguous in regards to the archaeological evaluation process. For example, the ordinance uses the words “encourage” in reference to the identification of prehistoric and historic archaeological resources, “where appropriate” for preserving archaeological materials which are to be recovered “when applicable.” There is no explanation of appropriateness or applicability, nor are there criteria for triggering any required action. These procedures had to be established before a viable, citywide archaeology program could be developed.

Successful City Archaeology Projects

Several high profile archaeological investigations undertaken at the request of the City Archaeologist were highly successful and created a positive attitude towards archaeology within City government. These projects also revealed challenges in the development of a citywide compliance program.

Phoenix Chinatown Project

In 1990, the Phoenix Suns Basketball team negotiated with the City to build a new arena in the downtown area. This arena was plotted on top of the historic Phoenix Chinatown. Suns management agreed to allow archaeology to occur before construction, but did not want to be responsible for funding the archaeology. To raise money for the Chinatown Archaeology Project, the author organized a committee composed of several prominent members of the Chinese–Asian Community in Phoenix, which raised more than \$22,000 through private donations, including money

from the Desert Jade Women's Club and the Taiwanese government. A Heritage Fund Grant of \$15,000 was also awarded by the SHPO.

A cultural resource firm was then hired with the donations to conduct excavations, and more than 350,000 artefacts were recovered. In addition to a technical report on the project (Rogge et al. 1992), two exhibits were created, one of which travelled to schools and libraries throughout Arizona, and another exhibit which was located in the eastern lobby of the basketball arena for 16 years. Because of its community involvement and scholarly contribution to local Chinese history, the project won a Special Recognition Award in 1995 from the SHPO and the Arizona Governor, Fife Symington, III.

The Phoenix Historic Chinatown project was, by all accounts, a great success. However, the need to raise money through donations for archaeological investigations was not considered a viable long-term preservation strategy. Therefore, it was decided that each individual project sponsor or land owner, whether private or government, should be responsible for funding archaeological investigations deemed appropriate by the City Archaeologist. The next step was to institutionalize a process whereby archaeology was part of the early planning for development projects. Two other projects reinforced the importance of conducting archaeology before construction occurred, and the role of the public in developing an archaeology program.

Pioneer and Military Memorial Cemetery

In 1992, the City proposed a new fence and walkways for the Pioneer and Military Memorial Cemetery and Park, a contiguous group of seven cemeteries that date from 1884 to 1912. Archaeological excavations were recommended by the city archaeology Office, and subsequently funded by the Parks and Recreation Department, because a review of old maps revealed that the historic cemeteries had been established in the middle of a large prehistoric Hohokam village called La Villa, which itself contained ancient cemeteries.

A professional archaeologist was then hired by the City to supervise volunteers from the Arizona Archaeological Society and the Pioneer Cemetery Association to undertake the archaeological excavations. More than a dozen Hohokam pit structures and two human burials dating from the sixth to ninth centuries AD were discovered (Schroeder 1994). The results of this project had long-term implications for the city archaeology Program, demonstrating that archaeology can be found in previously developed properties, and it confirmed the need for a program of systematic project review by the City Archaeologist.

Heritage Square Project

The early 1990s also saw the City begin redevelopment of the downtown area, including Heritage Square, the location of several important historic buildings.

Underneath the historic properties was an ancient Hohokam settlement known as Pueblo Patricio. Using both City and federal funds to hire a cultural resource management (CRM) firm, an archaeology program was developed by the city archaeology office which included public involvement. One component of that program was a series of public lectures and tours at the excavation project called *Ruin Your Day*. Another component was a popular archaeology report entitled, *Layers of History: The Archaeology of Heritage Square* (Henderson et al. 1995) (Fig. 14.1). The tour program received good media coverage and was well attended by various school groups and the public, resulting in the project winning an award

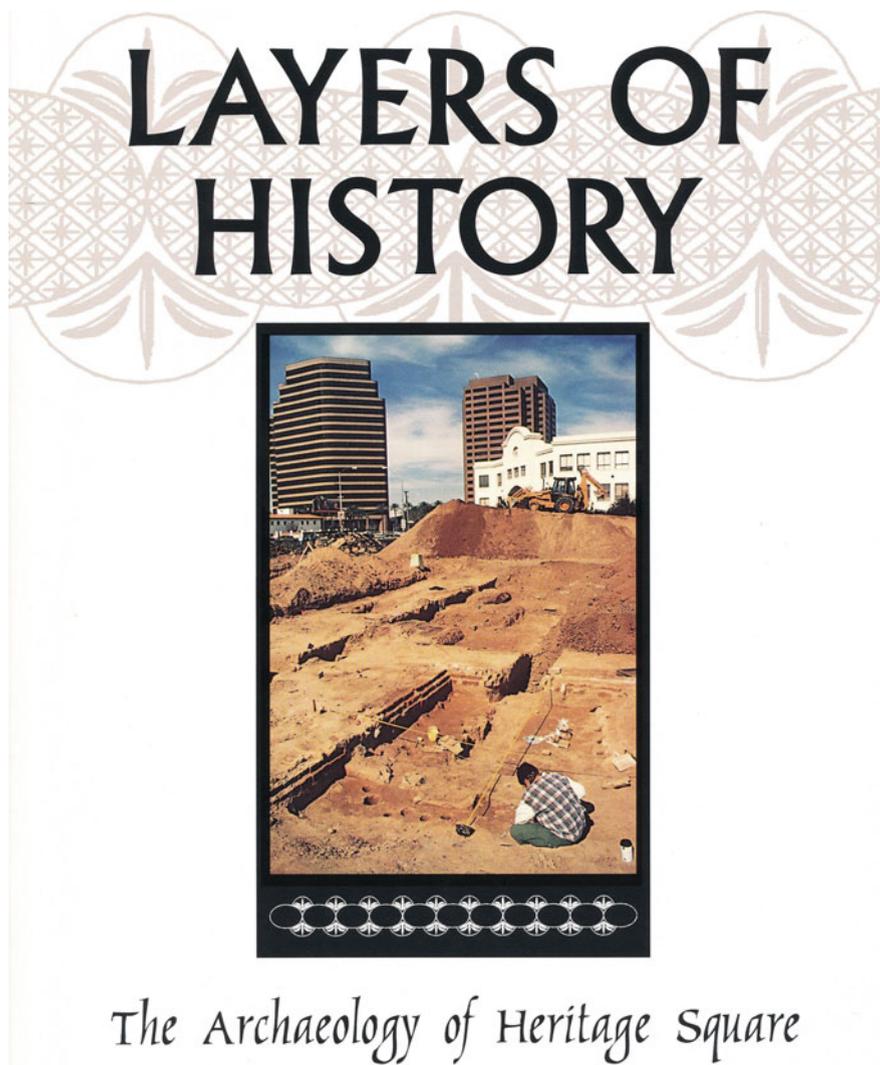


Fig. 14.1 Heritage Square popular report, *Layers of History* (1995)

from the Governor's Archaeology Advisory Commission. The success of this project reinforced the value of sharing the results of archaeology projects with the public and had a positive influence on City officials.

City of Phoenix General Burial Agreement

The State of Arizona passed a state burial law (Arizona Revised Statutes 41–844 and 865) in 1990 that regulated the removal of human burials from all public and private property in Arizona. Because archaeological sites in the City often contain burials, the state law increased the awareness of the potential for human burials to be destroyed through unregulated construction. Therefore, the City Archaeologist worked with the Arizona State Museum (ASM) to develop a General Burial Agreement that implemented the terms and conditions of the state's regulations, and was applicable to both City funded and private developments. This document outlines a set of policies and procedures concerning the care and treatment of human burials in Phoenix. The General Burial Agreement was written after consultation with seven Native American communities who claim affinity with ancient and historic cultures in Phoenix. These groups are the Gila River Indian Community, Ak-Chin Indian Community, Salt River Pima–Maricopa Community, Zuni Pueblo, the Tohono O'odham Nation, the Hopi Tribe, and the Fort McDowell Yavapai Tribe. The City's General Agreement identified the Salt River Pima–Maricopa Community at the lead tribe, and stipulated that all burials would be blessed by one of their religions specialists before being disinterred and then reburied on their reservation after the analysis of the burials was completed.

Phoenix General Plan

A major opportunity to strengthen the city's archaeology compliance program occurred in 2001 when the City adopted a new General Plan as required by the state's Growing Smarter legislation of 1998 and 2000 (Arizona Revised Statutes Title 9, Article 4, Chap. 6). The City's General Plan provides comprehensive directions for the growth, conservation, and redevelopment of the City. The City Archaeologist was part of the planning team that contributed language to Conservation, Rehabilitation, and Redevelopment Element of the Plan. Goal 1 of the Conservation element is to preserve and protect the City's rich heritage. Policy 4 of Goal 1 states that "development should be compatible with architectural, archaeological, and historic resources and their setting." An important recommendation of that goal is for the City to "investigate regulatory and voluntary methods to identify, assess, and preserve archaeological and historic resources in both public and private development projects." These policies and recommendations provided strong support for an archaeology review and evaluation program for both public and private development within Phoenix.

Archaeology and City Department Project Review Process

The creation of a comprehensive citywide archaeology program required working with individual departments to establish or improve their cultural resource review processes consistent with their internal policies and procedures. City department projects were the initial focus of this effort, and then private projects regulated through the Zoning Department were addressed. These two tasks took several years to accomplish, in part because each department had its own management history that had to be changed and because the scale of construction was overwhelming, with as many as 100,000 constructions permits being issued by the City annually.

Neighborhood Services Department HUD Program

The Neighborhood Services Department (NSD) receives millions of dollars in grants annually from the federal Department of Housing and Urban Development (HUD) to improve unsightly neighbourhoods. The NSD is required to follow Sect. 106 of the National Historic Preservation Act (NHPA) to determine potential adverse effects on historic properties, but an audit by HUD in 1994 uncovered inconsistencies in NSD's compliance process. A new position was created, Environmental Quality Specialist, to coordinate and improve their environmental and cultural resource compliance actions. Working with the City Archaeologist, NSD initiated a project review process which utilizes a standardized, two-sided evaluation form for all HUD-funded projects. One side of the assessment form is for historic buildings and structures and the other side is for archaeology. HUD previously requested a full report for each project review, which was often redundant and not cost-effective. The City's two-sided form contains check boxes and blank spaces to be filled in, and proved to be very effective for reviewing 4500 HUD projects from 1994 to 2009, approximately 300 a year. Based on the success of the NSD archaeology evaluation form, a general archaeology assessment form was created for use by all City departments (Fig. 14.2). Between 2000 and 2009, more than 125 NSD projects involved archaeological monitoring and/or excavations conducted by consulting firms and funded by HUD.

NSD also negotiated a Programmatic Agreement for Historic Properties in 1995 with HUD and the Advisory Council on Historic Preservation. This programmatic agreement, authorized by NHPA Sect. 800.14, allows the NSD Environmental Quality Specialist to prescreen all NSD HUD-funded projects during the review process to determine whether there will be no subsurface disturbance (e.g. fixing roofs or replacing windows), with those projects not requiring a cultural resource review. Due to the success of this review process, several years later the City signed a new Programmatic Agreement that took four years of negotiation with the Advisory Council. Under the 2007 Programmatic Agreement, the City's Historic Preservation Officer and the City Archaeologist are given authority to oversee the entire NHPA Sect. 106 process without review by the SHPO, or the development of

 **City of Phoenix**
PARKS AND RECREATION DEPARTMENT

Archaeology Section
Pueblo Grande Museum
4619 E. Washington St.
Phoenix, AZ 85034

Archaeology Assessment Request

Project Name: _____ **Cost Center or CIP No.:** _____

Project Type: _____

Project Components: _____

Project Manager: _____ **Phone No.:** _____

City Department(s): _____

Project Consultants: _____

Location (T/R/ ¼ Sec or major streets): _____

Land Ownership for all Project Components (specify department, etc.):
 Private: _____
 City of Phoenix: _____
 State of Arizona: _____
 Federal: _____

Permitting or Funding Agencies (specify):
 Maricopa County: _____
 State of Arizona: _____
 Federal: _____
 Other: _____

Anticipated Construction Schedule:
 Subsurface Excavations (grading, trenching, etc.): _____
 Other: _____

Extent of Construction Activities:
 Anticipated depth of disturbance below present ground surface: _____
 Length and width of ground surface disturbance: _____
 Utility Trenches (types): _____
 Other: _____

Print Name: _____ **Date:** _____
Signed: _____

Saving the past for the future...

Fig. 14.2 City of Phoenix archaeology assessment request form

Memoranda of Agreement for each project. Rather, an annual report is submitted by the City to SHPO that summarizes all projects conducted that year under the Programmatic Agreement, and the public is notified of the availability for review of this summary report. This Programmatic Agreement cut down on the amount of

time for the review and approval process for each project from up to 12 months to no more than 4 months.

Street Transportation Department

With more than 7500 km of City-owned streets, there is a high potential for buried archaeological sites under or adjacent to many City streets. In order to expedite archaeology requirements for street construction projects, several archaeology consulting firms were hired on annual services contracts by the Street Transportation Department (STD). Furthermore, archaeology discovery clauses were put into all street construction contracts to ensure that contractors reported archaeological materials encountered during construction. On more than four occasions contractors have reported finding prehistoric human burials under City streets or sidewalks, which were then removed within 48 h by the City's annual services consultants for eventual reburial on the Salt River Pima–Maricopa Indian Community Reservation.

Between 2002 and 2006, STD sponsored 66 archaeological projects, including surveys, testing, data recovery, and monitoring. More than \$1.5 million was spent by the STD on archaeology during that five-year period. Monitoring costs ranged from about \$750 to \$3300 per day depending on the logistics of the project and the amount of archaeological materials that were recorded. Around 45% of the STD projects that were monitored found archaeological and historical archaeological materials.

Engineering and Architectural Services Department

At the recommendation of the City Archaeologist, the City Engineering and Architectural Department (EAS) expanded its *Environmental Checklist* to include cultural resource inventory responsibilities for all EAS construction projects. Moreover, beginning in 2003, archaeological assessments were included in the City's Environmental Phase I Reviews required for all properties purchased by the City. From 2003 to 2009, more than 1600 Phase I environmental assessments for City properties included archaeological reviews by the City Archaeologist. CRM firms were then hired by the City for those projects requiring archaeological survey, testing, or data recovery.

Other City Departments

Thousands of archaeology assessments were also done for projects sponsored by the Aviation, Development Services, Housing, Parks and Recreation, Public Works,

Street Transportation, and Water Services Departments. Some of these projects had substantial archaeological investigations undertaken because of federal funding, such as the improvements to three runways at Sky Harbor International Airport (Aguila 2007; Henderson 2003). Federal funds were used to hire CRM firms to undertake the archaeology.

Zoning Department

A major effort of the City Archaeologist was to ensure that the Zoning Department included archaeology as part of their private project reviews, which the department agreed to do only if the City Archaeologist conducted the reviews and managed all the subsequent complaints and concerns. Consequently, each private project was negotiated by the City Archaeologist with the developer and their archaeological consultant. Not all developers were pleased with having to fund the archaeology for their projects, but City management consistently supported the City Archaeologist when developers lodged formal complaints. One of the key issues was to avoid construction delays, which was accomplished by having archaeology requirements issued early in the planning process. From 2003 to 2009, more than 1150 archaeological assessments were conducted for City Zoning cases. Excavation strategies for private development were undertaken in a manner similar to state or federally funded projects in Arizona, with archaeological excavations conducted in phases (testing, then data recovery). Some of the private archaeology projects in Phoenix were very large in scale. For example, archaeology at a warehouse development in south-west Phoenix in 2007 uncovered nearly 600 archaeological features in the Hohokam village called Pueblo del Rio, resulting in the recovery of 22,000 artefacts. Archaeological features that were examined included 72 pit-houses, 81 human cremations and 7 inhumations, 5 hornos (cooking ovens), and an ancient irrigation canal (Gage and Craig 2009).

Cultural Resource Training for City Departments

Because of several violations of Sect. 404 of the Clean Water Act, in March 1999, the US Army Corps of Engineers (ACOE) directed the City to develop and implement a citywide employee education and training program to address the importance, identification, avoidance and protection of environmental resources encountered in the course of normal City business activities. The City Manager then instructed the City Office of Environmental Programs to form a Steering Committee that would address the concerns of the Corps. The City Steering Committee, which included the City Archaeologist, evaluated all City departments' involvement in environmental and cultural resource compliance and submitted a detailed report with recommendations for improvements (Office of Environmental Programs

2001). One of those recommendations was to implement a program to train City supervisors and project managers on environmental and cultural resource permits and programs.

Seven training courses were developed, including *Introduction to Cultural Resource Management*, taught by the City Archaeologist. More than 500 City employees received cultural resources training 2001 and 2009. Another training course, called *Consultant Informational Workshop*, was designed to inform local environmental and cultural resource consulting firms about the City's protocol, procedures and professional resources.

GIS Database System

Ancient ruins in the Phoenix area have been mapped and dug for more than 125 years, creating a large quantity of data. To better manage and access these data, a GIS database system was created by a private consultant for the city archaeology Office at Pueblo Grande Museum. The City GIS archaeological database has proved to be a valuable asset to many archaeologists working in Phoenix. Within minutes, any property in the City can be located to determine whether it is within a known archaeological site, or if it needs to be surveyed to locate any potential sites. Boundaries of known archaeological sites can be displayed on top of detailed street maps, updated aerial photographs, or county property records, and then printed in color. These electronic maps are linked to lists of all archaeological reports written on each site, and site summaries that note if human remains have been found at the site. The database is updated daily to ensure its completeness at all times. In addition, hard copies of the vast majority of the archaeology reports listed in the database are kept on file at the museum for those researchers who need to gather additional information.

Guidelines for Archaeology

In 2004, the City Archaeologist created a set of written guidelines for conducting archaeology in the City of Phoenix to ensure consistency in the various investigations being conducted by as many as 15 different consulting firms and to provide a resource for developers and consultants who have not previously worked in Phoenix. These guidelines were revised two years later and posted on the City's Web site (Bostwick 2006). Included in the 45-page guidelines are statements regarding the role of the City Archaeologist, archaeology project management issues, report content and format requirements, report submittal procedures, site records management, and fieldwork protocol. For example, one of the fieldwork

requirements states that whenever human burials are found, archaeologists must excavate an area of 10 m in diameter around the burial to ensure that there are no other burials nearby. This policy has proved to be very effective in ensuring that all human burials within a project area have been found.

Also included in the guidelines are statements about the collection policies and procedures at Pueblo Grande Museum (Young 2004), a City-owned repository accredited by the American Association of Museums. The materials recovered and information generated for all city archaeology projects are curated at Pueblo Grande Museum, and private projects undertaken within the City also were accepted for curation at the museum. From 2000 through 2009, more than 250 projects were curated at the museum.

General Archaeology Treatment Plans

All archaeology monitoring, testing and data recovery projects undertaken in Phoenix by municipal departments and private developers are required to have a written scope of work and research design. Over the years, similar research designs were being prepared over and over again. In an effort to increase cost-effectiveness and reduce redundancy of information, three different general archaeology treatment plans were prepared between 2004 and 2008 by consultants at the request of the City Archaeologist. These general archaeology plans were funded by the Street Transportation Department since many of their construction projects and maintenance activities trigger small-scale archaeological investigations.

The City's general archaeology plans summarize previous research, describe the environmental and cultural settings, and outline general field methods and laboratory procedures. One of them is a general monitoring and discovery plan (Walsh 2004), another one is a plan for recording and excavating prehistoric canals (Stubing and Turner 2007), and the third general plan is for exploratory (testing) excavations in prehistoric and historic sites (Montero et al. 2008). Each plan is used in conjunction with a project specific supplemental letter that describes the characteristics of that project, identifies specific regulatory responsibilities for the project, and addresses other relevant research issues beyond those in the general plan.

Difficult Federal Projects

Some federally funded archaeology projects in the City had unique challenges. Two of those included the Federal Courthouse Project and the Valley Metro Light Rail Project.

Federal Courthouse Project

In 1994, a two-City block federal courthouse building was proposed for a location within the Original Phoenix Townsite, established in 1870. However, the project administrators at General Administration Services (GSA) did not consider historical archaeological deposits in Phoenix to have national significance, and in their opinion, did not warrant federal funding. The SHPO and City Archaeologist disagreed with that position, but the GSA still refused to sponsor the archaeology.

Learning that the GSA was purchasing City-owned land to build their courthouse, the City Archaeologist worked with the City Law Department to write an archaeology requirement into the land transfer provisions, forcing the GSA to sponsor the archaeology if they wanted the land. The GSA subsequently agreed and as a result a significant amount of information and artefacts were recovered. Excavations even revealed the remains of the blacksmith shop and boarding house of Frank B. Moss, Mayor of Phoenix, from 1905 to 1906. Mayor Moss died of a heart attack at City Hall after riding his bicycle there from his shop (Thiel 1998).

Valley Metro Light Rail Project

One of the largest archaeological investigations undertaken in the Phoenix region was the federally funded Valley Metro Light Rail project, a new rail line 19.6 miles in length designed in 1994 to traverse through three Cities—Phoenix, Tempe, and Mesa. Management of the archaeology was a challenge at first because Phoenix was the only City of the three to have an archaeology staff. It was decided that the Phoenix City Archaeologist would oversee the work done by an archaeology consulting firm hired by federal government for the entire project. Excavations were then conducted in several Hohokam villages and canals. The analysis of more than 11,150 archaeological features and 300,000 artefacts were reported in four volumes (Schilz 2011), at a cost of nearly \$3 million. A popular report was also written for the public (Stuart 2011).

Sharing Archaeology with the Public

An important role of many government archaeology programs, since they are publicly funded, is to find ways to distil the results of research into accessible and informative stories that can be shared with the public. Publications and exhibits are a common means to do so and Pueblo Grande Museum is an ideal setting for both.

Museum Publication Series

In 1993, the author initiated three museum publication series for archaeological and historical studies on Phoenix and the Southwest. *Anthropological Papers* present recent studies with significant results, mostly archaeological investigations in Phoenix. *Occasional Papers* include historical and archaeological studies of interest to scholars and the educated public. *Technical Reports* summarize the results of archaeological studies that are less likely to be of interest to the public. Both of the first two publications series are registered with the US Library of Congress and, to ensure the reports never go out of print, are reprinted with money from their sales deposited into a special publication fund. From 1993 to 2009, more than 35 reports were published in these series, with each report paid for by the project sponsor.

The results of the larger archaeological projects also continued to include popular reports written for the public. For example, based on data contained in three technical reports on Pueblo Grande National Historic Landmark, a popular report was prepared (Andrews and Bostwick 2000) which has gone through multiple printings (Fig. 14.3).

Public Exhibits on City Archaeology

Pueblo Grande Museum first began presenting exhibits and public programs on local archaeology projects in the early 1930s (Bostwick et al. 2004). This tradition has continued to the present. In 1995, five years of work on the Pueblo Grande archival project, a comprehensive examination and publication of the last 120 years of investigations at Pueblo Grande, was exhibited as *Southwest Culture: The Pueblo Grande Renaissance*.

In the early 1990s, the City Archaeologist began a long-term reconnaissance of the rock art in the South Mountains, enlisting the aid of a professional photographer. The preliminary results of that study were displayed as fine art photographs in a 1995 Pueblo Grande Museum exhibit, *Set in Stone: Rock Art Photography of South Mountain Park* by Peter Krocek. This study and exhibit resulted in a book on South Mountains rock art published by the University of Arizona Press (Bostwick and Krocek 2002).

During the 1980s and 1990s, downtown Phoenix underwent a major redevelopment program sponsored by the City and by private development. Archaeological excavations subsequently revealed large quantities of buried materials from the past. Downtown is the location of a prehistoric settlement called Pueblo Patricio, which covers five City blocks. Here native people farmed the rich soils along the Salt River, building numerous pit structures for shelter from the sun. On top of the buried remains of those ancient houses are building foundations, privies, wells, and artefacts from historic pioneers who settled or operated businesses in the original Phoenix Townsite, first established in 1870. Materials from that era were displayed

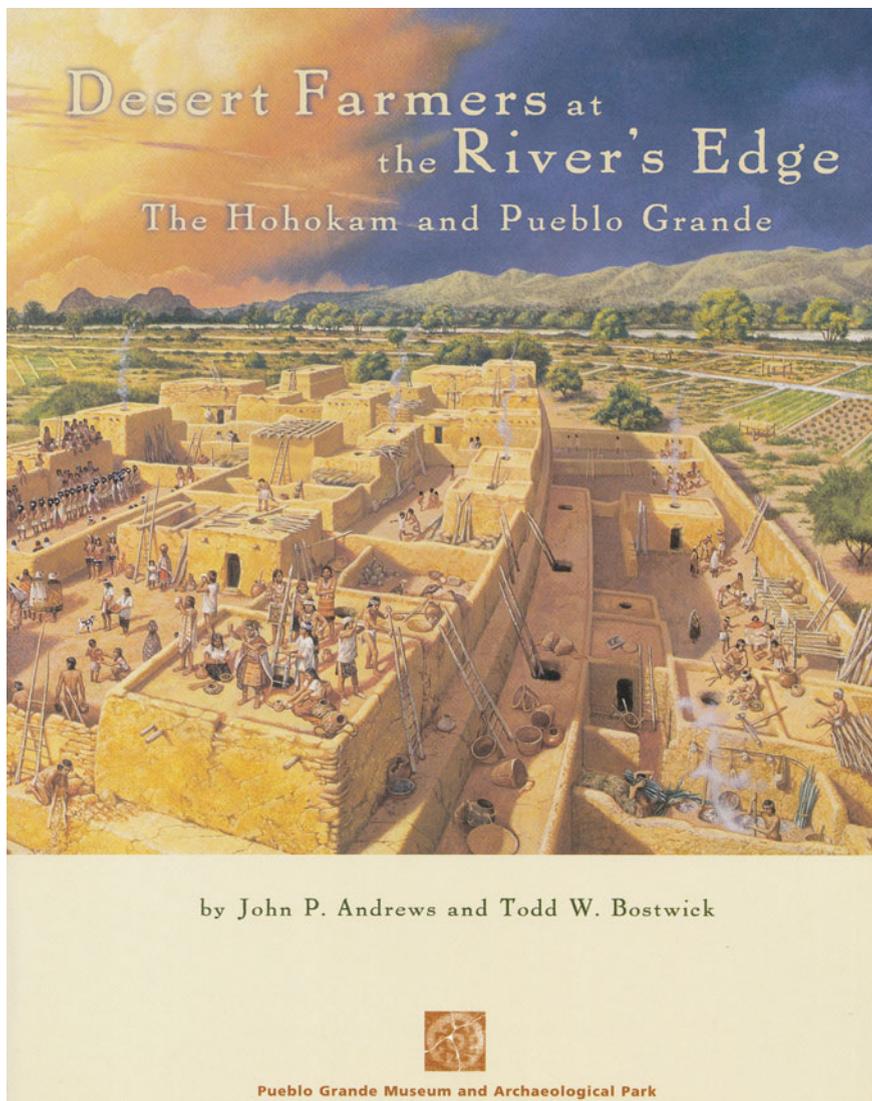


Fig. 14.3 Popular archaeology report on Pueblo Grande, *Desert Farmers at the River's Edge: The Hohokam and Pueblo Grande* (2000)

in a 2001 exhibit at Pueblo Grande Museum and titled, *Hidden History: Archaeology of Territorial Phoenix*.

Another exhibit on downtown archaeology was constructed inside the east lobby and south concourse of the new Phoenix Convention Center. This mosaic of historic and modern photographs, interspersed with videos, takes up five large wall spaces and is affectionately called “The Archaeology Wall” (Fig. 14.4). Designed as a permanent

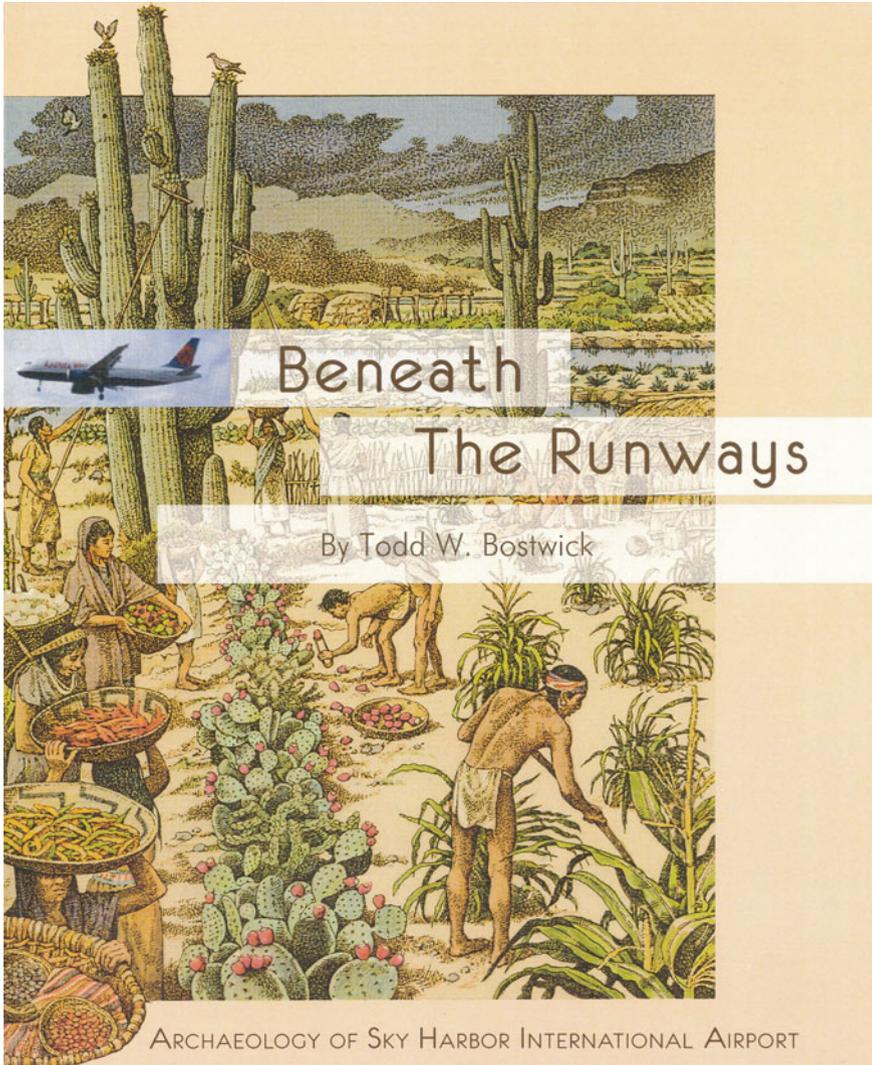


Fig. 14.4 Archaeology popular report on Phoenix sky harbor international airport, *Beneath the Runways* (2008)

exhibit, it is based on the 2007–2008 excavations of a two-block area within Pueblo Patricio and the Original Phoenix Townsite where the old Convention Center was located. Forty pit structures were excavated, some dating back to AD 200. Historic materials from the Territorial period were also found, including the remnants of the first ice factory in Phoenix, built in 1879. The Archaeology Wall provides a unique opportunity for out-of-state visitors attending events at the Convention Center to learn about the prehistory and early history of Phoenix.



Fig. 14.5 Archaeology wall exhibit in the lobby of the Phoenix Convention Center. (Photograph by T.W. Bostwick)

Two other major exhibits were put on display at Pueblo Grande Museum based on current archaeological projects in Phoenix. A 2005 exhibit, *Flight Over Phoenix: 1930 Aerial Canal Survey*, resulted from enthusiastic interest from the public in the acquisition by Pueblo Grande Museum of more than 700 aerial photographs of Hohokam sites and canals taken by the Army Air Corps in 1930. These photographs show the Phoenix region before explosive growth obscured much of its natural landscape.

Finally, nearly 25 years of archaeological digging at Sky Harbor Airport was summarized in a 2008 exhibit titled *Beneath the Runways: Uncovering the Past at Sky Harbor Airport*. This exhibit covered almost 1000 years of occupation at two different Hohokam settlements located in the midst of one of the busiest airports in the nation. Excavations in these two settlements—Dutch Canal Ruin and Pueblo Salado—revealed changes in use of the prehistoric landscape over time, reflecting fluctuations in the flow patterns of the Salt River. A popular report was written to accommodate the exhibit (Bostwick 2008) (Fig. 14.5).

South Mountains Rock Art Project

Towering high above the southern edge of Phoenix, South Mountain Preserve is one of the largest municipal parks in the world, covering more than 15,000 acres of rugged mountains strewn with public trails. The South Mountains contain a

considerable amount of archaeological materials, especially rock art, but they have not been systematically surveyed (Bostwick and Krocsek 2002; Snyder 1965). Vandalism, especially graffiti and theft of artefacts, is a problem in some parts of the Preserve (Golio and Snyder 1993; Bostwick 1998). Challenges to the management of rock art in the South Mountains were discussed by the author in the 1994 Museum of Northern Arizona video, *Marks of the Ancestors: Ancient Indian Rock Art of Arizona*.

A comprehensive survey and inventory of the South Mountain Preserve is needed, but the cost of such an effort is substantial and has not been a high priority for the Parks and Recreation Department with its public demands to build new ball fields, swimming pools, and recreation centres. Consequently, the City Archaeologist partnered with the School of Human Evolution and Social Change at Arizona State University (ASU) on a grant proposal called *Preserving the Petroglyphs at South Mountain Park*. In 2005, this proposal was awarded a three-year Heritage Fund grant for nearly \$100,000 from the SHPO. Arleyn Simon of Archaeological Research Institute at ASU and the City Archaeologist were Co-Principal Investigators of the South Mountain Rock Art Project (SMRAP). Other organizations involved in the project include the Arizona Archaeological Society, Mesa Community College, Northern Arizona University (NAU), and Washington State University (Bostwick 2009).

The SMRAP consists of three main components: Research, Management, and Education. A detailed recording manual with several sets of forms was created, based on a four-stage approach to recording, each more intensive (Swanson and Bostwick 2007).

Field consultations were conducted with Barnaby Lewis, Tribal Historic Preservation Officer for the Gila River Indian Community, who identified shrines and sacred trails and sang O'odham songs about the South Mountains to the research team and students.

Educational components of the project focused on graduate student research. A Master's degree student at NAU conducted a comparative survey of two canyons and tested the SMRAP project recording forms (Carpenter 2007). In addition, the Center for Desert Archaeology sponsored a four-year Preservation Fellowship for a Ph.D. student from Washington State University to write his dissertation on the South Mountains, the first one on Hohokam rock art (Wright 2014).

Saving Our Heritage Piece by Piece

Archaeologists working in Phoenix over the past two decades have obtained various kinds of data from more than 35 Hohokam sites, generating 228 reports. All of those reports were reviewed and approved by the City Archaeologist and his two staff members. More than half of the prehistoric sites investigated contained human remains, which resulted in the respectful disinterment and repatriation of more than 2200 human burials to the Salt River Pima–Maricopa Indian Community. Careful

Table 14.1 Archaeology projects coordinated by City of Phoenix archaeology office from 2000 through 2009

Calendar year	No of new projects*	Survey	Monitoring	Monitoring/testing	Testing/data recovery
2000	45	10	14		14
2001	58	9	36		11
2002	66	14	36		20
2003	41	7	25		11
2004	52	13	24		12
2005	113	34	44		35
2006	137	43	23	27	45
2007	130	30	43	27	24
2008	105	21	40	34	10
2009	56	10	21	13	5
Total	792	191	306	101	187

*Does not include ongoing projects from previous years

analysis of those burials has yielded a wealth of information on Hohokam health, diet, and social status. The human remains themselves, and their associated grave items, have been reburied on the Salt River Pima–Maricopa Indian Community so they can again rest in peace.

Overall, no more than 10% of the reviewed projects in any one year by the city archaeology Office require further archaeological actions, but those projects represent a considerable amount of archaeological investigations over time (Table 14.1).

Archaeology projects ranged from survey to monitoring, testing, and data recovery. Carefully written contracts and tight management by the City Archaeologist Office ensured that archaeology projects did not linger for years. More than \$12 million was spent on archaeology in Phoenix from 2000 to 2009; some of the archaeology projects at Sky Harbor International Airport and in the downtown area cost as much as \$1 million to excavate a large site and prepare a report.

Excavations in Phoenix have revealed that some sites are larger than originally mapped, and that important differences between sites are related to the sites' location within the Hohokam's extensive canal systems that delivered water to their ancient farmland (Howard and Huckleberry 1991). Hundreds of cross sections have now been exposed by archaeologists in many of these canals, as a result of investigations required by the city archaeology Office, providing detailed data on Hohokam engineering skills and hydrological knowledge.

Summary and Conclusions

An astounding amount of development has occurred in Phoenix over the last two decades. During that time, a set of project review procedures and archaeology standards were established by the City Archaeologist that saved many

archaeological sites and human burials from complete destruction. Increased public awareness of the importance of archaeology was accomplished by a steady stream of lectures, popular reports, exhibits, videos, and news stories. In addition, training was provided to hundreds of City employees, using successful archaeology projects as examples. Phoenix's heritage has been well served by a formal process of systematic review. Archaeology is now a major component in the recently adopted Historic Preservation Plan for Phoenix (City of Phoenix 2015). Developers, planners, archaeologists, Phoenix citizens, and Native Americans are all contributing as a unified community in the protection and promotion of the amazing heritage of the City of Phoenix.

Acknowledgments Many people contributed to the development of the city archaeology program. Special recognition is given to Lonnie Thacker, Andre Best, April Carroll, Roger Lidman, Stephen Savage, and Barbara Stockland. Since 2011 Laurene Montero has continued the archaeology program as developed by the author.

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Chapter 15

Municipal Archaeology Policies as a Vector in Public Outreach Programs: Digging Up Dirt for the Masses in St. Augustine, Florida

Carl D. Halbirt and Sarah E. Miller

Archaeology. At the municipal level, the word conjures spasms among contractors and thoughts of dread for property owners. A tacit assumption is that archaeology will disrupt plans, scheduling, and most importantly augment costs related to commercial or residential dreams. Another concern is whether construction will stop if anything important is discovered, which in turn would raise the question of who owns the artifacts. These are just some of the most obvious issues that have been expressed by those affected at the municipal level. Yet it is at this level that most unregulated archaeological impacts happen, as the majority of municipalities in the USA do not even consider a community's archaeological heritage in their planning policies or permitting procedures. The question is begged: Can archaeology be incorporated into a community's mind-set so that the buried heritage of that city or county is preserved without placing limitations on growth and development? Concordantly, can costs be restricted and scheduling be planned such that attempts at regulating construction activities at the municipal level are not shot down in flames?

Municipal archaeology is not a new term. Its antecedents lie in cultural resource management as well as public archaeology policies and programs. What is becoming evident is that municipal archaeology as a concept is emerging in academic circles and being recognized for its own unique merits toward: (1) fostering community preservation efforts and assets, (2) encouraging public involvement and empowerment as stakeholders—be it active or supportive, (3) shaping local government regulatory processes, and (4) rescuing those deposits threatened by construction projects—be they large scale or small scale—for the public trust. In

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defining “what is municipal archaeology,” Douglas Appler (2012) examined various nuances of the concept. One in particular sets this field apart within the realm of cultural resource management and public archaeology:

[M]unicipal archaeology programs benefit from their position within local government for the simple reason that local government possesses certain powers and legal tools that can be extremely beneficial when used for the protection of archaeological resources (Appler 2012, p. 42).

In other words, local government has more oversight in regulating development, especially as it relates to private property and municipal infrastructure improvements that are not under the purview of federal and state oversight. This is particularly relevant in those communities where the demographics are more transient, with descendant groups in the minority, and stakeholder interest in protecting a municipality’s buried heritage taking a backseat to project costs and scheduling.

In this chapter, we examine the practice of municipal archaeology in the City of St. Augustine (COSA), a city of approximately 13,500 residents on the northeast coast of Florida. The program’s primary goals are to protect and preserve the city’s archaeological heritage through documentation and engaging the public. The city’s heritage is complex spanning 450 years of European occupation that postdates a prehistoric occupation encompassing 4000 years. Four time periods are distinguished during the historical era, with each representing particular administrative agendas and ethnic groupings that defined the urban landscape. The most well known is the First Spanish Period (1565–1763) when St. Augustine served as a garrison presidio (Chatelaine 1941; Deagan 1983; Halbirt 2004a). During the subsequent British occupation (1763–1783), St. Augustine became the staging area for entrepreneurial endeavors focusing on the development of plantations in northeast Florida (Griffin 1999) and later for Revolutionary War activities along the Southern Frontier (Smith 2011). In the nineteenth century, the city hosted various enterprises, such as railway systems and tourism industries, which helped shape the development of Florida after becoming a state in 1845 (Graham 1978, 2014).

St. Augustine’s municipal archaeology program is a direct result of the city’s implementation of the Archaeological Preservation Ordinance (APO) that passed in 1986 (COSA 2017; Piatek et al. 1989). The ordinance mandates that an archaeological review of all building and right-of-way permits involving ground-penetrating construction activities—private or public—be evaluated for potential impacts to cultural resources. The city Board of Commissioners tweaked the APO over the years, making it more inclusive in terms of adverse impacts, financial viability, scheduling, and addressing aspects of curation and ownership. The APO can be accessed through <http://www.citystaug.com/archaeology/index.php>.

The processes by which the ordinance came into existence is the culmination of decades of developing policies to protect and preserve St. Augustine’s unique cultural heritage, which are expressed in the Historic Preservation Element of the Comprehensive Plan (COSA 1986) and discussed in detail by Appler (2011, 2013) and Piatek et al. (1989). Reasons for the ordinance’s adoption can be readily equated with “a perfect storm” of events and players coming together in 1985 and

1986 to create a policy statement protecting the city's archaeological heritage. Involved were as follows: (1) a newly established avocational group known as the St. Augustine Archaeological Association (SAAA) who not only provided a labor pool for field investigations but formed a corpus of community activists who attended countless city commission and citizen board meetings advocating for the ordinance passage; (2) a large development within that part of the colonial downtown district dating from 1572 onward that focused attention on the city's fragile and non-renewable archaeological record; (3) intergovernmental cooperation between staffs at the city and a local state agency known as the Historic St. Augustine Preservation Board (HSAPB); and (4) a descendant Menorcan community led by Mayor Kenneth Beeson that could trace its ancestry in Florida to the late 1760s and, therefore, was motivated to protect the city's buried heritage (Rogers 2003; Howard 1986).

Since 1987, more than 800 archaeological responses to new ground-penetrating construction projects have occurred within the city limits under the APO. Without the ordinance, these resources would have been destroyed or covered by development. The vast majority of these projects occurred after the city created an Archaeology Division within the Planning and Building Department in 1990. Initially, the HSAPB was contracted by the city (Piatek et al. 1989) to undertake daily operations; however, the partnership was dissolved within two years due to administrative concerns and differences of opinion centered around funding allocations, staffing levels, and authority issues that ultimately resulted in enmity between city and HSAPB administrative personnel overseeing the execution of the ordinance (Appler 2011).

Since April 1990, the city's Archaeology Division has consisted of a staff of one (the City Archaeologist), with part-time assistants or consultants hired as funding becomes available. This staffing void is offset by a dedicated corps of volunteers who have assisted the city's archaeology program in various capacities. Many volunteers are members of the St. Augustine Archaeological Association (SAAA)—a chapter of the Florida Anthropological Society—who graciously donate thousands of hours each year to facilitate fieldwork, laboratory analysis, curation issues, photography, and reports. Furthermore, most volunteers are retirees who commit between 8 and 12 years with the program, although some have been with city's Archaeology Division for almost as long as the program has existed (Extraordinary volunteer service recognized 2014). Recently, the Advisory Council on Historic Preservation (ACHP) acknowledged this partnership through its Preserve America Stewards—a “designation program that recognizes programs that have demonstrated a successful use of volunteer time and commitment in order to help care for our historic heritage (Preserve America 2015).”

Volunteers engage in almost all field projects from new additions and pools associated with existing single-family residences to large-scale commercial projects. One commercial project that occurred over the course of three years (2000–2003), with intermittent breaks to work on other projects, was the Hilton Inn on the Bayfront, a development that adversely impacted 1½ historic blocks within the colonial downtown district (Halbirt 2004b; Guinta 2001). Over the course of three

years, more than 25 volunteers and a part-time consultant were involved at different times in data recovery, as well as artifact processing and identification. A small-scale project that lasted only two weeks was the discovery of a 200-year-old horse burial found prior to the installation of grease traps for a new restaurant (Rare horse unearthed in colonial St. Augustine 2015). Four volunteers participated in field investigations and two in curating the skeletal remains.

Cooperation between the Archaeology Division and other city departments engaged in field activities (e.g., public works, police, and fire) also is an important component in the recovery and protection of archaeological deposits. These municipal agencies provide necessary equipment and expertise in dealing with urban issues in a coastal environment and provide another level of oversight as impromptu monitors of construction activities.

Mechanics of the Ordinance

More than four centuries of continuous development and growth have left St. Augustine with a staggering quantity and diversity of archaeological deposits within a 12.7 square mile (33 km²) area of which 26% is tidal and subject to daily water inundation. As the city continues to evolve, avoidance of archaeological deposits is impossible due to centuries of urbanization and the shallow depth of archaeological deposits. Most archaeological deposits extend from the ground surface to a depth of approximately four feet, which is near the existing water table. A zone map created from the Historic Preservation Element of the Comprehensive Plan (COSA 1986) assists in identifying and managing areas containing significant archaeological resources (Fig. 15.1).

Three basic zones are recognized based on the probability of exposing archaeological deposits and on the significance those deposits represent in interpreting St. Augustine's past (Halbirt and Carver 1992). These zones are further divided into a series of subzones that delimit certain temporal associations or cultural affiliations (Table 15.1). Zones are based on historical maps, archaeological surveys from the 1970s and 1980s, and a multitude of excavations dating from the 1930s to 1980s (COSA 1986).

The city commission vetted the ordinance with the goal of preservation through documentation. While excavation is a destructive process in any investigation, by understanding and documenting the various nuances associated with a property's archaeological record (i.e., soil stratigraphy, artifact provenience, and context) one is preserving the past, thus meeting the challenge of protecting St. Augustine's buried heritage from the continual onslaught of urban development.

With the exclusion of one project where human remains were found, no construction plans have ever been modified in St. Augustine based on archaeological criteria. The exception was the discovery of an eighteenth-century mission church and cemetery of *Nuestra Señora del Rosario de la Punta* (Halbirt 2005), which was set aside as a conservation zone easement—never to be developed (Appler 2011;

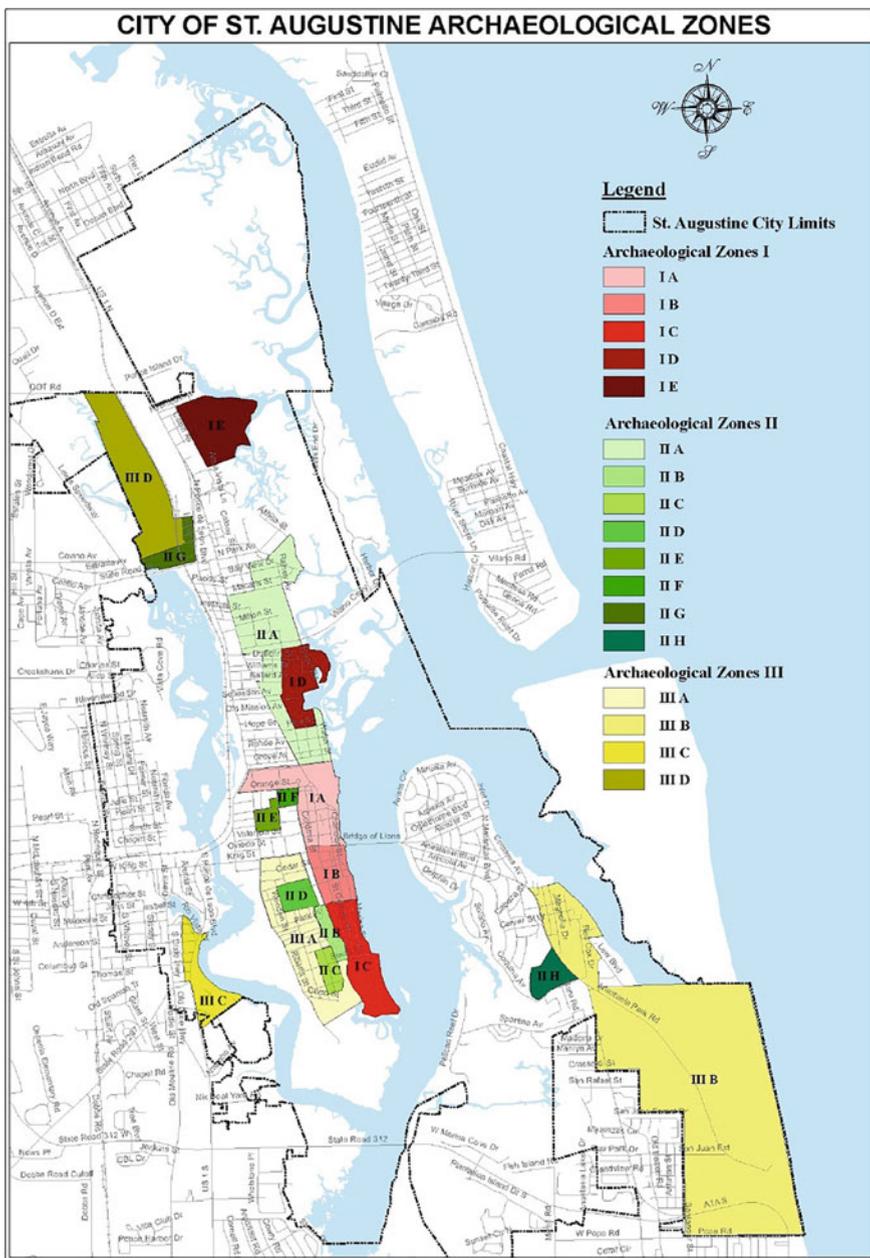


Fig. 15.1 Archaeological zones of St. Augustine, Florida. *Source* the City of St. Augustine Archaeology Program

Table 15.1 Designated archaeological zones in St. Augustine, Florida (adapted from Halbirt and Carver 1992)

Zone I—High archaeological significance and sensitivity*Subzones*

- IA Since the early seventeenth century in the colonial downtown district
 IB Since the mid-sixteenth century in the colonial downtown district
 IC Since the late sixteenth century in the colonial downtown district, as well as the eighteenth-century Native American mission community of Nuestra Señora de Rosario de la Punta
 ID The original 1565 Menendez encampment, late sixteenth- to eighteenth-century Native American mission community of Nombre de Dios, and prehistoric Native American occupations dating from circa 4000 B.P. to the historical era
 IE The eighteenth-century African American military site of Fort Mose
-

Zone II—Moderate archaeological significance and sensitivity*Subzones*

- IIA Prehistoric and historical occupations along hospital creek or the intercoastal waterway
 IIB The nineteenth-century dump site along the banks of Maria Sanchez Creek dating from the late eighteenth century to the late nineteenth century
 IIC The eighteenth-century Yamassee mission community of Nuestra Señora de la Concepción de Pocolalaca, as well as nineteenth-century plantations and the African American community of Lincolnvilke
 IID The eighteenth-century Timucua mission community of Nuestra Señora de la Assunción, de Palica
 IIE The eighteenth-century Guale mission community of Nuestra Señora de Guadalupe de Tolomato
 IIF The late eighteenth- to late nineteenth-century Catholic cemetery of Tolomato including the church/cemetery of Nuestra Señora de Guadalupe de Tolomato
 IIG The nineteenth-century Fairbanks plantation site and portions of the defensive line, known as the Mose Line, associated with Fort Mose
 IIH Colonial-era campsites and roads leading from the coquina stone quarries on Anastasia Island to ferries, as well as prehistoric Native American sites dating from circa 4000 B.P. to 1000 B.P.
-

Zone III—Low archaeological significance and sensitivity*Subzones*

- IIIA Post-civil war African American community of Lincolnvilke also contains portions of eighteenth-century mission communities and nineteenth-century urban plantations/farms
 IIIB Anastasia Island historic area, which includes colonial and territorial era coquina stone quarries
 IIIC Oyster Creek archaeological area containing prehistoric and colonial-era deposits
 IIID San Sebastian River archaeological area containing prehistoric deposits and Flagler era industries
-

Note significance and sensitivity refers to the probability of adversely impacting archaeological deposits and the relative value placed on those resources toward interpreting the city's cultural heritage

SAAA to oversee conservation easement at La Punta Church and Cemetery Site 2005). Toward this goal, administration of the easement involves partnership between the City of St. Augustine, the SAAA, and the homeowner association as the property is a gated Planned Unit Development (PUD). The policy enacted represents a unique tool available to municipal governments in limiting development at archaeological sites.

Execution of the ordinance is through the city’s permitting process, which is under the auspices of the Planning and Building Department. Established guidelines are applied to all new construction projects—building, utility, or rights-of-way—and each is evaluated for potential impacts to archaeological deposits. Three basic questions determine whether a project trips the ordinance. If the answer to all three is “yes,” then an archaeological response is necessary.

- (1) Does construction involve ground-penetrating activities?
- (2) Does project occur in an archaeological zone?
- (3) Does project area exceed the ordinance size and depth specifications for significant impacts (i.e., more than 100 square feet in area and more than three inches in depth)?

This initial evaluation is the responsibility of the city’s Permit Coordinator in consultation with the City Archaeologist. The actual sequence of criteria specified by the ordinance to determine whether a project trips the ordinance is illustrated for a new single-family residence, the primary construction activity triggering the APO (Fig. 15.2).

Subsequent to this initial review, the property owner or contractor will be informed as to whether an investigation is needed. A City Archaeological Permit Application (A-14) must then be completed (COSA 2015), with an accompanying proposed site development plan. A fee is assessed the owner or contractor before any archaeological efforts occur. The fee is based on estimated construction costs and the archaeological zone in which the project is located (Table 15.1). In no instance has the fee exceeded \$25,000—the maximum specified in the APO—whether it be a multi-million dollar commercial endeavor or single-family residence, although the ordinance does allow for additional costs to be levied with proper documentation (APO, Sect. 6-8: Fees). Over the past 28 years, the archaeological permit fee assessed commercial and residential property owners has averaged \$1550, with the median fee at \$600. While the fee structure was increased in the APO, the funds collected do not cover the total costs for maintaining an

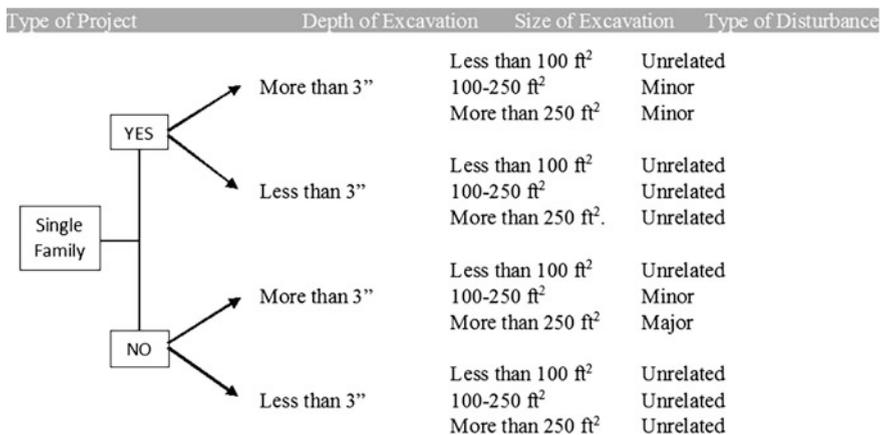


Fig. 15.2 Archaeological disturbance matrix (Halbirt 1993)

in-house archaeology program, nor are any fees assessed for city infrastructure improvements. To offset this discrepancy, the program is funded through the city’s General Fund—a revenue stream supported by taxes. Permit fees recovered go into the General Fund to help administer and support the program.

The ordinance does enable property owners to hire outside consultants for either big or small development projects. The caveat is that an archaeological permit is still necessary, as it is part of the overall building permit system, and corresponding fees are still assessed (see APO, Sect. 6-8c). For nonprofits “engaged in the preservation of historical and archaeological resources of St. Augustine,” the cost is 50% of the actual permit fee. For all others, the cost is the total permit fee.

Ordinance in Action

The Ordinance defines the time frame allotted for an archaeological response based on two criteria (Table 15.2): (1) whether the project disturbance is identified as being major or minor and (2) the archaeological zone in which the project occurs.

Table 15.2 Archaeological field efforts and time schedules according to city response categories (Halbirt 1993)

Archaeological response categories			
Zone	Fees	Major disturbance	Minor disturbance
I	1½% of the cost of construction (\$50 minimum)	4 weeks minimum	4 weeks maximum
	Additional fee of up to 50% of the initial fee as approved by City Manager	+up to 4 additional 2-week periods with written approval from property owner as approved by City Manager	
		+unlimited additional 2-week periods with written approval from property owner as approved by City Manager	
II	1¼% of the cost of construction (\$50 minimum)	4 weeks minimum	3 weeks maximum
	Additional fee of up to 50% of the initial fee as approved by City Manager	+up to 2 additional 2-week periods approved by City Manager	
		+unlimited additional 2-week periods with written approval from property owner as approved by City Manager	
III	1% of the cost of construction (\$50 minimum)	2 weeks minimum	2 weeks maximum
	Additional fee of up to 50% of the initial fee as approved by City Manager	+up to 2 additional 1-week periods as approved by City Manager	
		+ unlimited additional 1-week periods with written approval from property owner as approved by City Manager	

Major impacts are associated with commercial projects and utility right-of-ways that exceed 250 square feet in area. Minor impacts refer to all other construction activities, which include all single-family residences. The time allotted to investigate a property can vary from two weeks in Zone 3 for a single-family residence to 12 weeks for a commercial structure in Zone 1, with extensions approved by the City Manager and property owner.

Different types of data recovery strategies are used to investigate a property depending on the archaeological zone, extent of impact, scheduling concerns, and whether previous investigations have occurred on the property (Halbirt and Carver 1992). It is not uncommon for multiple permits to be issued for a single property in response to different periods of development. For example, the city issued eight separate permits for one property—the Cathedral Parish School—from 1992 to 2014 in response to different construction projects. For each permit, archaeological efforts are limited to the general area of impact.

The intent of any investigation is to address two basic questions. First, what types of archaeological deposits are present in the impact area? Second, will those deposits be impacted by construction? The database created by the ordinance has created unique opportunities to address a myriad of research questions related to St. Augustine's growth and development, changes in European and Native American material culture, subsistence strategies, and land-use patterns, none of which are mutually exclusive. Also examined are sites and areas outside of the city's primary heritage tourism designations (such as the eighteenth-century colonial downtown district) that had been overlooked by academics. These include late eighteenth-century British military sites (Guinta 2002), eighteenth-century Native American refugee mission communities (Halbirt 2014), and late eighteenth- to early nineteenth-century urban plantation sites occupied by laborers of African descent (Guinta 2005; Beck 2006). The APO encompasses those peripheral sites and areas.

While most city investigations deal with historical deposits dating after 1565, prehistoric sites also fall under the auspices of the APO. Most of the prehistoric sites documented precede European colonization by a few hundred years, which is known as the St. Johns cultural period (Deagan and Halbirt, in press). A few, however, date back to ca. 3000–4000 B.P. Archaeological efforts at prehistoric sites are afforded the same level of inquiry as historical sites.

Program Outcomes

The primary purpose of the city's Archaeology Division is to administer the policies set forth in the APO (COSA 2015). As such, municipal archaeology as applied in St. Augustine is responsive to construction and thus field driven. An 8- to 10-month field season is not uncommon, especially during periods of economic prosperity (Fig. 15.3). Since 1987, thousands of features and hundreds of thousands

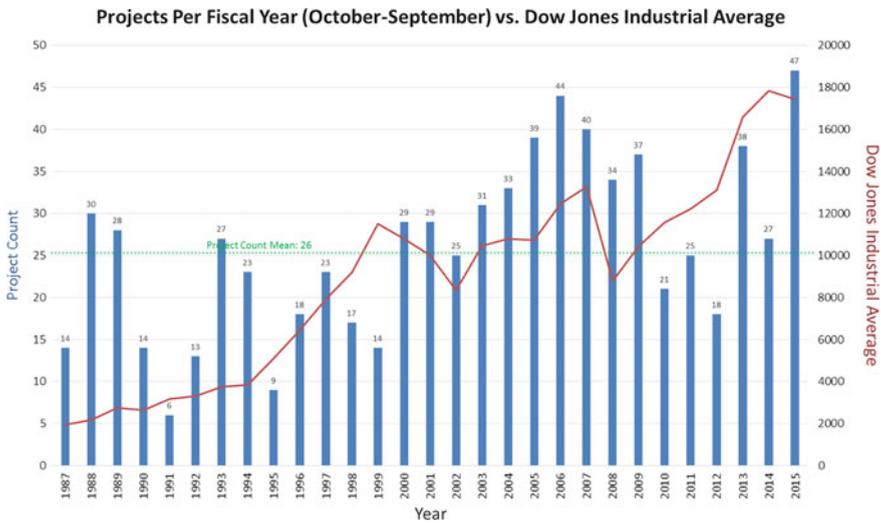


Fig. 15.3 Comparison of archaeological permits issued and Dow Jones industrial average since 1987

of artifacts have been unearthed through systematic procedures showcasing the city’s prehistory and history.

The archaeological information uncovered through the APO provides a new and exciting layer of “historical authenticity” for a community that prides itself on being “America’s Oldest City” (Waterbury 1983; Adams 2009). At the end of St. Augustine’s colonial period in 1821, when Spain ceded Florida to the USA, the city consisted of 300 structures (Griffin 1977). Structures were arranged according to the *cedulas* or decrees set forth for Spanish town planning in the New World during the sixteenth century (Couch et al. 1982). Conflagrations and modernization since the late 1800s have destroyed the majority of these structures leaving only 32 buildings that still maintain some evidence of their colonial past including the Castillo de San Marcos, as well as the town plan. The latter is represented by the street layout that has been in existence since the eighteenth century, though some streets have been archaeologically dated to the late sixteenth/early seventeenth century (Halbirt 2011). It is the city’s archaeological resources that represent the tangible physical link to the past, whose 450th anniversary took place on September 8, 2015. An example of archaeology’s contribution to “historical authenticity” is described in detail in the section on archaeology and public outreach (see below).

Investigations conducted under the aegis of the APO provide the city with a unique promotional tool (Appler 2011; Pope 2008). This is especially warranted given St. Augustine’s “heritage-based economy” according to the City Manager, who views the ordinance as “protecting and promoting city’s assets (J. Regan 2013, personal communication).” According to the Assistant City Manager, “the information unearthed adds to our identity and is a consideration in zoning issues and

preservation agendas (T. Burchfield 2013, personal communication).” The ability of the City’s Archaeology Division to function effectively, however, would not be feasible without a strong public outreach policy.

Public Outreach

Archaeologists share information gained by collecting data with the public in a variety of ways. Broadly, this is referred to under the umbrella of public archaeology, arguably best defined by Gabriel Moshenska as “the study of archaeology in context. This includes social, political, economic and intellectual contexts... Archaeology is produced and consumed: by studying these processes in all their dimensions public archaeologists are the conscience of the discipline (Sanchez 2012).” Recently, archaeologists have put a name to these varying types of outreach with 21 distinct types of outreach on a continuum, most of which have been applied in St. Augustine to engage the public in archaeology (Bollwerk et al. 2015). Archaeology as a science depends on public funding; therefore, outreach is a requirement of professionals working in the field. In addition to ethical requirements, most archaeologists believe in producing a benefit for the public as contributing to the greater good (Little 2002). In broad strokes, public archaeology outreach requires three components: a public to engage with, a willing professional, and authentic data from which to draw content for public programs or products.

While the main objective of city archaeology projects is one of compliance, the city’s Archaeology Division operates beyond its regulatory requirements to advance public archaeology practice and engage in collaborative archaeology. Due to the structure of the Ordinance and the program that developed over the years, public engagement is how the city carries out its program: (1) by collaborating with multiple landowners who triggered the ordinance since its inception; (2) by sustained volunteers who help carry out and conduct field excavation and laboratory process and analysis; (3) public outreach in the form of lectures, displays, and online resources provided and updated on an annual basis; and (4) collaborative partnerships with other heritage organizations including, but not limited to, the St. Augustine Archaeological Association, Flagler College, Florida Public Archaeology Network, St. Augustine Lighthouse & Maritime Museum, St. Augustine Historical Society, St. Augustine Art Association, University of Florida, and the Florida Museum of Natural History. This complicates the discussion of collaborative archaeology outcomes as professional and non-professional participants represent a full array of heritage partners.

Rosenblatt’s (2010) engagement pyramid as applied by Little and Shackel (2014) is used to further organize the discussion of community engagement by the city’s Archaeology Division. The pyramid starts with the broad level of *observing* at the base of the pyramid and then continues in ascending order of *following*,

endorsing, contributing, and owning, ultimately capped off with *leading*. The lowest level is *observing*, which includes any passive or engaged visitor that pauses to stop at ongoing digs, panels highlighting significant archaeological sites displayed around the city, or exhibits showcasing archaeological discoveries. It is not possible to track the number of people who stop and visit one of these locations as engagement is sporadic. More than six million tourists annually visit St. Augustine, with the estimated economic impact of 1.5 billion dollars (Wilson 2015). Some may seek out digs or displays, but most just happen upon them while walking by on their way to somewhere else. City projects also are regularly featured in media outlets, and visitors may happen upon an article or photograph through print or social media.

In *following*, the public may make a repeat visit to the dig encouraged by SAAA or one of the heritage programs that feature the city archaeological efforts, or visit the City of St. Augustine's Web site. Social media sources that regularly feature city archaeological projects and discoveries are FPAN Northeast platforms (Facebook, Twitter, Tumbler, and *Going Public* blog), Jessica Clark from First Coast News, and *The St. Augustine Record* Facebook page.

Endorsements to the city archaeology program most often happen in the form of membership paid to the SAAA. The organization publishes a newsletter and administers a closed group page on Facebook. Currently, SAAA has more than 200 members, with many joining or renewing their membership as a way to contribute to the city's archaeology program. Endorsements also come via newspaper and magazine articles, published letters to the local newspaper the *St. Augustine Record*, and comments on the online articles. Voters may also endorse political candidates that include historic preservation in their platform.

Contributing to the city's archaeology program is the next step in engagement. The public may volunteer on a dig or serve on the SAAA board (Fig. 15.4). Some volunteers show up with great regularity, and others are seasonal or sporadic as their schedules allow. And not all volunteers help out in the field; some choose to volunteer in the laboratory, helping process material from sites and doing analysis. A landmark of *contributing* is performing multi-step assignments. For example, the SAAA board forms committees to help with developing historical markers, hosting conferences, donating equipment, and attending a series of meetings in conjunction with a city archaeology event. By attending monthly meetings of SAAA or the bimonthly board meetings, members of the public demonstrate a habitual contribution to the city's program. SAAA and other volunteers have donated more than 4000 person hours per year for over 25 years and contribute funds to the city's archaeology program, many times over the budget allotted by the City for staff and supplies.

Owning is the fifth level of engagement and often involves collaborative actions between the city and other heritage organizations and professionals. This level can include property owners who apply for an archaeological permit, such as the St. Augustine Art Association described in greater detail below. In brief, the Art Association puts a substantial amount of time and investment into developing a mission-relevant exhibit of the work done by the city at the property. This example



Fig. 15.4 Author Sarah Miller and volunteer Nick McAuliffe mapping a typical sized archaeological test unit in St. Augustine. *Source* the City of St. Augustine Archaeology Program

embodies the characteristic that contributions by those engaged produce creative expressions of passion (Rosenblatt 2010). Original artwork contributed substantially in the design and meaning of the exhibit. Flagler College’s Public History program also invested several semesters of students’ time into creating projects that highlight and support the city’s archaeology program, from blog posts to walking tours. Intensified volunteer involvement is key at the *owning* level.

The cap of the pyramid, therefore the smallest by number of participants but largest in terms of investment, is *leading*. Here, the talents brought by many of those choosing to retire in St. Augustine are revived as they become sustaining board members, executive officers, and trusted volunteers for the city’s archaeology program. Many choose to mentor new volunteers in archaeological

field and laboratory methods, or some take on major projects and help to organize events that focus on disseminating information relevant to the city's buried past.

Little and Shackel (2014: 92–93) note:

While the pyramid may provide the perception that there is a natural progression up the pyramid, the engagement process also needs to be thought of as nonlinear... people do not necessarily climb the ladder, nor is it necessarily a natural phenomenon that they all start as observers.

In St. Augustine this holds true as the public's interest and investment flows in all directions. And while community engagement serves the city, the volunteers and collaborators also gain from the experience. To borrow from Nicholas (2008: 293 as cited in Little and Shackel 2014: 75), they gain personal satisfaction, contribute to something of value to the larger community, interact with the archaeologists, and contribute to the long-term reciprocal relationship between the city and community toward preserving St. Augustine's heritage.

Archaeology and Public Outreach in St. Augustine

Public outreach is embedded in the city's municipal archaeology program. As alluded to above, this concept is not just about professional archaeologists but also organizations providing interactive and educational opportunities. There are other aspects inherent in municipal archaeology programs that are especially relevant to public outreach and those are *public empowerment* and *ownership*. Here, the public is taking an active role and ownership toward implementing the creation, design, and fabrication of community assets including educational programs rather than a strictly participatory approach, with professional archaeologists or associations providing assistance and support as needed.

Over the past 25 years, St. Augustine's municipal archaeological program has provided various opportunities for local organizations to use documented archaeological deposits in creative ways to showcase various discoveries and increase public awareness and appreciation of St. Augustine's cultural heritage. Capstone *owning* and *leading* examples include the following: (1) funding and developing signage for an eighteenth-century mission church and cemetery, (2) funding the restoration of the nineteenth-century plaza well, and (3) developing an exhibit showcasing archaeological material associated with the 1586 raid on St. Augustine by Francis Drake. In 2004, the city discovered and documented the mission church and cemetery of *Nuestra Señora del Rosario de la Punta* (Halbirt 2005), with signage created and erected in 2008 by SAAA. The plaza well was discovered in 1995 (Halbirt 1996) and restored by the city in 1998, with funds provided from the HP1 Association—a neighborhood organization. Although each has its own merits toward enhancing the visitor experience when exploring the city's historical ambience, the Drake exhibit created by the St. Augustine Art Association is a prime example of the creative synergism possible between archaeology and public initiative.

Showcasing a Pivotal Event in St. Augustine's History

In 1998, two new wing additions were constructed at the headquarters and gallery of the St. Augustine Art Association, a nonprofit organization dedicated to promoting excellence in art for both amateurs and professionals alike since 1924. The property is located in that part of the colonial downtown district that was first settled in 1572. As the proposed project exceeded the size specifications for adverse impacts established by the APO, an archaeological investigation by the city was required. The result of this activity was the discovery of two stratified sixteenth-century deposits, a carbonaceous lens with associated de facto refuse situated atop a large trash pit. A layer of sand representing a possible seal zone separated the two deposits. The carbonaceous lens was posited to represent the remains of a burnt board and thatched structure. A short distance from the carbonaceous lens was a concentration of burnt daub that may represent the remnants of a collapsed wall. Although only a portion of these deposits remained intact—a result of subsequent activities dating to the eighteenth and nineteenth centuries—what had been unearthed was unique as it represented one of the best assemblages of sixteenth-century pottery ever found in the southeastern US (Barrera 2005), as well as its potential association with a pivotal historical event in the city's history.

Ceramic types recovered from the carbonaceous lens and trash deposit date during the initial 15 years (1572–1587) of what was then a nine-block nascent settlement. This represented the colony's third settlement since 1565. The initial settlement situated at what is now the Fountain of Youth Archaeological Park (Deagan 2009) lasted only nine months before it was abandoned in favor of an, as yet, undiscovered location on the coastal side of a barrier island known today as Anastasia Island (Lyon 1997). In 1572, the colony moved back to the mainland. This third settlement was positioned along the largest elevated land mass on the St. Augustine peninsula (Halbirt 2005) identified as a strip of land sandwiched between two tidal systems, Matanzas Bay and Mary Sanchez Creek.

The proposed 15-year bracket is based on similarities between the ceramic inventory found at the Art Association and those recovered at Santa Elena (South and DePratter 1996; South et al. 1988)—a companion sixteenth-century Spanish settlement located near Beaufort, South Carolina, that was occupied from 1566 to 1587 when it was intentionally abandoned. Many of the occupants moved to St. Augustine (Paar 1999). Also of consideration is that ceramic types associated with post-1587 Spanish occupations differ substantially from pre-1587 occupations. Decorated European ceramic types recovered from city investigations at pre-1587 contexts are primarily Iberian (Old World) in origin, whereas ceramics from post-1587 contexts are a mixture of Iberian and *Nueva España* types.

Pottery types recovered from sixteenth-century contexts at the Art Association were Columbia Plain *platos* and *escudillas* or bowls, Yayal Blue-on-White *escudos*, Santo Domingo *platos* and pitchers, Isabella Polychrome *platos*, Sevilla Blue-on-Blue vessels, Ligurian *platos*, Melado vessels, various course earthenware vessels including early Olive Jar types, and Ming Porcelain vessels. Also recovered

were a canvassing needle, aglets or lacing tips, a few Native American ceramics, and numerous animal bone fragments.

What precipitated the burning event is open to speculation; however, the sequence of deposits within this 15-year window (1572–1587) suggests the event dates to the later years, possibly in association with Francis Drake’s Raid on the fledgling settlement in June 1586. After a brief engagement, Drake’s armada of 23 vessels and 2000 men overwhelmed the small Spanish garrison, who along with the town’s residents, fled into the woods leaving the town defenseless (Chatelaine 1941). Rebuilding ensued shortly thereafter, with the town essentially doubling in size (Halbirt and Johns 2012, 2015).

The discovery of archaeological deposits potentially associated with this three-day event, which changed Spanish administrative policies in *La Florida*, initially garnered both public and media attention (Pope 1998). It was not until 12 years later, with the approach of St. Augustine’s 450th anniversary of its founding in 2015, that the City Archaeologist pitched an idea to the Art Association Board of Directors to exhibit the only archaeological signature in St. Augustine of a pivotal event in the city’s history colloquially known as “Drake’s Raid.” The goal was to create a legacy project celebrating the city’s founding utilizing the talents of volunteers from the city’s Archaeology Division and the membership of the Art Association. Volunteers sorted and cross-mended hundreds of potsherds from the burnt structure, some of which were partially reconstructed (Fig. 15.5). Members of the Art Association designed the



Fig. 15.5 Volunteer Lin Masely reconstructs a sixteenth-century Native American ceramic vessel supervised by author Carl Halbirt. *Source* the City of St. Augustine Archaeology Program



Fig. 15.6 Unveiling of “*Art y Facts of Drake’s Raid*” Exhibit at the St. Augustine Art Association. *Source* the St. Augustine Art Association

exhibit in consultation with Sarah Miller of FPAN and created original artwork, which included an original portrait drawing of Drake using charcoal from the burnt layer, and a handmade quilt illustrating the site’s soil stratigraphy. Recovered artifacts found in context were sewn into the tapestry, which is used as an educational tool for visually impaired children. The exhibit not only showcased items whose context was a product of a notorious sixteenth-century privateer, but the Art Association was “empowered to apply artistic elements that represent the “Cycle of Creativity,” an underlying theme that honors artisans of the past and inspires artists of today” (Elyse Brady, Executive Director, personnel communication, 2014). The exhibit was finalized in 2012 and placed directly over the location of the discovery (Fig. 15.6). In 2014, the St. Augustine Art Association was presented the Outstanding Achievement in Archaeology Award by the Florida Trust for Historic Preservation for “*Art y Facts of Drake’s Raid, The Attack—1586*” (Bates 2014).

In 2014, the city’s Archaeology Division once again resumed archaeological investigations at the Art Association, this time in response to the proposed development of Touch St. Augustine Art Garden, a space that will enhance accessibility to the visual arts to the physically disabled and have multisensory appeal. Various sixteenth-century features were unearthed (e.g., trash pits, a daub pit, and postholes) suggesting that this portion of the property functioned in a different capacity than the area investigated 16 years earlier and pointing out spatial differences in how

colonial-era lots were arranged (Halbirt 2014; Manucy 1997). The exhibit will eventually be expanded to include these new items and their relevance toward understanding sixteenth-century lifeways in the section of the colonial downtown district occupied since 1572.

Summary and Conclusion

As no two municipalities are similar in terms of the quantity, diversity, distribution, and extent of archaeological resources within their jurisdiction or the regulatory process and available funding for managing those resources, each entity needs to devise an operational response in the form of its own policy directive for preserving and interpreting its heritage, even though federal and state regulations and guidelines exist. This point has been illustrated by Appler (2011). In essence, the ability of municipalities to allocate resources (e.g., staffing, facility availability, and infrastructure arrangements) is contingent on the annual revenue stream. In St. Augustine, archaeological fees from permit applications are collected, but they do not cover operational costs. Funding for the program comes from the city's General Fund, which has as one of its primary revenue sources *ad valorem* taxes, thus lessening the financial burden for property owners.

Municipal archaeology in St. Augustine is foremost responsive to the APO and, as such, is compliance driven—being geared toward data recovery in reaction to ground-penetrating construction activities on both private and public lands. In order for the APO to be effective, it is integrated into city's permitting process, which oversees and administers most new construction in accordance with state and local regulations and ordinances. The exception is utility right-of-way projects that are under the purview of the Public Works Department. Here, interdepartmental cooperation and communication is essential. The result of these policies is that all new construction is evaluated for potential impacts to both prehistoric and historical archaeological deposits.

When triggered, the APO requires a response by the city's Archaeology Division. As St. Augustine is an urban landscape, most investigations involve some type of testing (be it posthole, test units, or block excavations) followed by monitoring construction associated with groundbreaking activities. As most construction is related to the development of single-family lots and family-owned businesses, the majority of projects are confined to small parcels generally measuring less than 10,000 square feet in area of which only the actual blueprint of the structure is evaluated. A few commercial projects have entailed larger tracts, some incorporating an entire historic colonial block, such as the development of the Hilton Inn at the Bayfront (Halbirt 2004b). More than 2500 lots are represented in established archaeological zones. The myriad of small projects that have occurred has resulted in a kaleidoscope of information related to human occupation within the city limits over the past 4000 years, information that would have been otherwise been destroyed or buried under tons of concrete, fill, and buried utilities.

Public outreach facilitates the city's endeavor to preserve its archaeological heritage through documentation. Compliance archaeology dovetails with public participation and interest in St. Augustine, thus producing a broad spectrum of engagement opportunities that draw from authentic community assets that then reinforce the city's heritage-based economy. We have examined the multiple ways the public can be involved, from observer to leader on an "engagement pyramid," with public empowerment and ownership being at the pinnacle. Municipal archaeology in St. Augustine, then, is an example of hyper-collaboration involving government policy and public involvement.

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Chapter 16

Like No Other Place: Albuquerque's Archaeological Odyssey

Matthew Schmader

Introduction

This chapter describes a process to develop and adopt an archaeological ordinance in Albuquerque, New Mexico. Ordinance adoption took 25 years—from 1982 until 2007—and the ordinance has now been in place for 9 years. This chapter will describe the archaeological and historical background of Albuquerque, which has one of the longest records of human occupation found in any major city in the USA. This record is relevant to demonstrate why heritage laws are needed in urban areas with so much to protect. This chapter describes the context of decades of scholarly research that occurred throughout the twentieth century, and how that research helped in early preservation efforts. The preservation framework changed in the mid-1970s as planning initiatives attempted to keep pace with the city's rapid growth. Those planning efforts produced a preservation context that worked in lieu of an archaeological ordinance for several decades. Several case studies are presented from that time period to illustrate successes that occurred while an ordinance was being formulated. The quarter-century long process of adopting the ordinance is described, including several studies and events that led to a final adoption. With the passage of its archaeological ordinance in 2007, Albuquerque was able to implement more standardized treatment of land parcels as they move through the planning process. The mechanics of the ordinance, considerations that went into implementing it, and the pros and cons of different approaches are presented along with data about the numbers of cases reviewed, acreage, and sites evaluated. A critical analysis is presented, and usefulness of the ordinance's implementation is also discussed.

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A Brief History of Albuquerque

Albuquerque, New Mexico, has one of the longest continuous records of human occupation of any major urban area in the USA (City of Albuquerque 1986, 1995; Schmader 2011a). Situated at the southern end of the Rocky Mountains and the far west edge of the Great Plains, at an elevation of over 5000 ft, Albuquerque has a great diversity of habitats and life zones surrounding it. The city is high desert with mountainous terrain on one side and with the fourth longest river on the continent—the Rio Grande—flowing through its center (Fig. 16.1). On its western horizon are small volcanoes and lava flows dating back over 150,000 years in age.

This extraordinary setting has attracted people for millennia. Beginning with the Clovis era of the PaleoIndian period, about 12,000 years ago, sites from every cultural time period are found within and surrounding the city limits (City of Albuquerque 1995; Cordell 1979). Later PaleoIndian sites from the Folsom and Eden periods (10,000–7000 years ago) were followed by early and middle Archaic sites from the Jay, Bajada, and San Jose phases (7000–4000 years ago). The late Archaic period saw an increase in sites from 4000 to 2000 years ago during the Armijo and Trujillo phases, leading up to the adoption of the first cultigens by around the start of the Christian era. Settled villages built by agriculturalists, with well-constructed dwellings and early ceramics, characterize the ancestral Pueblo

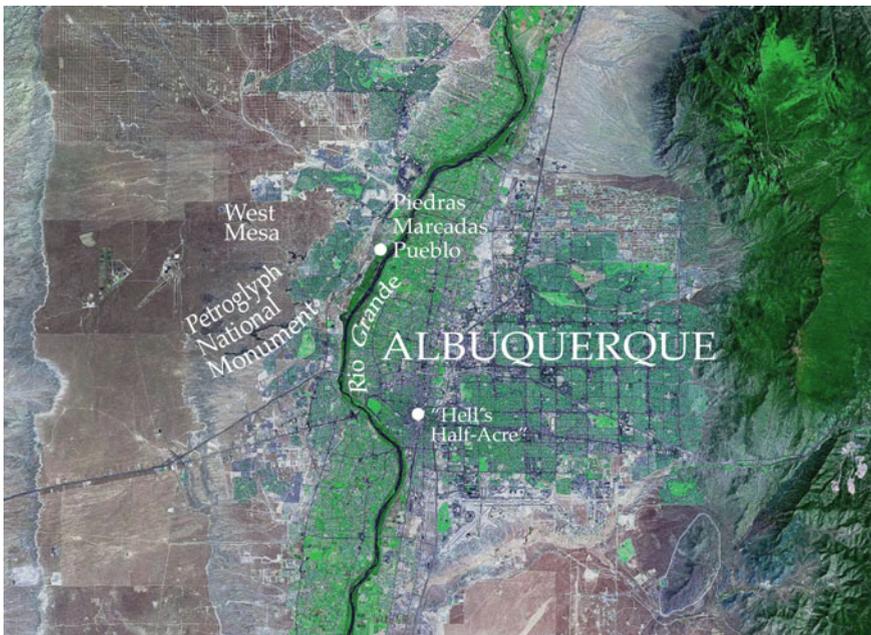


Fig. 16.1 Aerial map of Albuquerque, New Mexico showing major locations discussed in text (Author map)

period from AD 500 to 900 (Cordell 1979). By the end of the pre-European period, AD 1300–1540, populations grew rapidly and multi-storied adobe villages were built along the banks of the Rio Grande. Population estimates just before the arrival of the first Europeans are about 20,000 (Barrett 2002). In 1540, Francisco Vázquez de Coronado led the first major exploration from Mexico into the present-day USA, spending more time in the Albuquerque area than anywhere else along his nearly 4000-mile-long route (Schmader 2011b).

Albuquerque was established as a formal Spanish villa in 1706, and by that time, numerous family-based land grants were recognized by the colonial administration. The interaction between colonists, land grants, settled ranchos, and the surrounding missionized Pueblo peoples set the stage for today's multicultural heritage in New Mexico. Following the United States' war with Mexico in 1846, all of New Mexico along with vast areas of California, Arizona, Nevada, Utah, Colorado, and Texas were annexed into the USA. The railroad arrived in Albuquerque in 1881, spurring an instantaneous new town along the tracks. During the early 1900s, Albuquerque and other southwestern towns attained some notoriety as places to recover from tuberculosis, leading to both a new health industry and an influx of residents. Like many cities in the western USA, Albuquerque did not experience significant urbanization and modernization until after World War I. Outlying areas settled around ranchos and their related family-centered plazas began to fill, especially along historic roadways, to create the first real suburbs. Since Albuquerque has always been a place at the crossroads of great routes—whether the Camino Real or Route 66, or the Transcontinental Highway and the Pan-American Highway—cultures themselves have tended to intersect there (Schmader 2011a).

Early Preservation Activity

Archaeology

The 1920s witnessed the first interest in scientific recordation of archaeological sites in the Albuquerque area (Fisher 1931). Attempts to locate important sites from the 1540s Coronado expedition focused research on major villages along the Rio Grande (Meacham 1926; Vivian 1932). The prominence of these sixteenth-century sites attracted the attention of more scholars, who documented other large pueblo sites (Mera 1933). The noted southwestern scholar Edgar Hewett, whose efforts led to the passage of the Antiquity Act in 1906, established the anthropology department at the University of New Mexico (UNM) in 1927. Shortly after, the university engaged in a series of excavations at large pueblo sites in the greater metropolitan area (Dutton 1963; Tichy 1939). These were conducted as UNM field schools beginning in the 1930s, primarily focused on the late pre-European contact period (AD 1300–AD 1540). Research on PaleoIndian occupation of the area involved controversial finds at Sandia Cave by UNM's Frank Hibben (1941). By the 1950s,

UNM had built one of the nation's best southwestern archaeology programs, noted for the prominence of pioneering women in the field such as Marjorie Tichy Lambert, Bertha Dutton, Florence Hawley Ellis, and, later, Linda Cordell (Cordell and McBrinn 2012). Cordell directed excavations at Tijeras pueblo, in the Albuquerque suburbs (Cordell 1980).

Despite the richness of its resources and its academic history, early preservation efforts in the Albuquerque area were spotty. One early success was Coronado Historic Site, authorized in 1940 in time for the 400th anniversary of the Coronado expedition. The site, also known by its native name Kuaua ("evergreen" in the local Tiwa language), contains the remains of a 1000 room adobe pueblo village occupied for about 250 years prior to the arrival of the Coronado expedition in AD 1540. The UNM field school excavations were funded by the university and were done in hopes of finding evidence of the expedition before the 1940 anniversary celebrations. No real evidence was found, however.

Buildings

The city of Albuquerque established a Landmarks and Urban Conservation Commission in 1977, which now administers a list of 20 landmarked properties and several historic districts with preservation guidelines. Some epic battles were waged, won, and lost, to preserve the city's historic buildings, two of which were the fight for the Alvarado Hotel and the Sunshine Building.

The Alvarado Hotel, one of the finest in the Fred Harvey line of railroad-oriented establishments, was built in 1902 on the tracks of the Atchison, Topeka, and Santa Fe. For over 65 years, the Alvarado was a flagship of culture and grandeur, one of the only places many visitors to Albuquerque would ever see. The rich and famous who stopped at its doorstep included Teddy Roosevelt, Charles Lindbergh, and Buster Keaton. The hotel finally fell onto economic hardship and disrepair, and in February 1970, despite heroic efforts by the preservation community, the building was levelled. It remained a parking lot for decades until redevelopment of the downtown ironically built a replica of the hotel on the same spot to serve as a bus and train depot. Many people in the community never forgot those events and used memories of the demolition as a rallying cry for ensuing preservation efforts.

One of these efforts involved the Sunshine Building, which was just a couple of blocks west of the Alvarado Hotel. Built in 1924 as a multi-purpose office building and 920-seat movie theater, the Sunshine also fell into disrepair and economic hard times. The building was slated for the wrecking ball in the early 1980s, but preservationists, determined not to allow it to go the way of the Alvarado Hotel, succeeded in getting funding to back its National Register listing. In 1978, the city initiated a survey of all pre-1945 buildings, and by the mid-1980s, a comprehensive preservation plan was drafted (City of Albuquerque 1987a). While these efforts

involved the city's historic buildings and related pockets of architectural interest, the very long archaeological record in Albuquerque took a different pathway in the absence of a formal structure such as the Landmarks Commission.

Comprehensive Plan and Open Space

Albuquerque, and its county of Bernalillo, have had master planning guidelines in place for 40 years. The first city-county Comprehensive Plan, published in 1975, may be one of the few urban plans in the country at that time to explicitly recognize the value of cultural resources. For example, the Comprehensive Plan stated that "presently uninhabited archaeological or historic sites should be identified and protected," and that "selected buildings and areas which explain our past and which give Albuquerque identity, individuality and cultural richness shall be preserved" (City of Albuquerque 1975). In the 1988 revision of the Comprehensive Plan, the value of open space areas for shaping the land use of the city and county was recognized. Specifically, one of the stated purposes for the open space system was the "conservation of archaeological resources" (City of Albuquerque 1988: 43), which included major portions of the surrounding cultural landscapes such as the volcanoes, lava flows, and riverine areas. The Comprehensive Plan provided good stopgap measures for averting losses of major sites and resources by identifying lands to be acquired and controlling adjacent land uses. However, the policy statements only provided a planning framework and not the needed regulations for site-specific studies and preservation.

Open space land acquisition throughout the 1970s and 1980s was based on Comprehensive Plan goals and focused on preserving the major landforms of the metropolitan area, principally the volcanoes, lava flows, and escarpments of the West Mesa (Fig. 16.2) and areas at the base of the Sandia Mountains. While not the specific intent of this effort, large-scale areas containing important sites and associated cultural landscapes were also preserved in the open space system through city acquisition. This outcome helped ensure that entire suites of sites were protected in relation to their contexts. The present-day Open space system in Albuquerque is over 29,000 acres and contains an estimated 750 archaeological sites (Schmader 2011a).

Pre-ordinance Case Studies

Several case studies are presented to illustrate the importance of the planning context for preservation efforts prior to the adoption of the Albuquerque archaeological ordinance in 2007. They are used to show that archaeological research can



Fig. 16.2 View of cultural landscape including mesa top, escarpment, and volcanoes in Petroglyph National Monument area (*Photograph* by M. Schmader)

sometimes be accomplished even if no formal ordinances require it programmatically, and to illustrate some preservation success stories that emerged from using the existing pre-ordinance tools and planning framework throughout the 1980s and 1990s.

Petroglyph National Monument

Few large cities in the world are as closely associated with petroglyph sites as Albuquerque—perhaps only Sydney, Australia, is comparable. Vast areas along the city’s western boundary are adorned with thousands of ancient images (Fig. 16.3) pecked into the basalt cliffs formed by 150,000-year-old lava flows. Amateur archaeologists recorded many hundred of images in the 1960s, working with Frank Hibben, an Anthropology Professor at the University of New Mexico (Schmader and Hays 1985). When new development progressed to the west side of town, a landowner dedicated 73 acres for a park site which contained numerous petroglyphs. This was done to meet park dedication regulations, which at the time required setting aside land based on a formula depending on the number of houses in a subdivision. The area was developed into Indian Petroglyph State Park in 1973—one of the first municipal parks of its kind, set aside to interpret petroglyphs, in the country. The park was also a forerunner in providing for trail accessibility. Yet, for its advanced efforts in setting aside archaeological areas as a city park, there were pitfalls. Hibben saw to it that some



Fig. 16.3 Rock image (dated circa AD 1300–1600) in Petroglyph National Monument (*Photograph* by M. Schmader)

petroglyph boulders were moved into the park from nearby areas, destroying their original context in the process (Schmader 2011a).

By the early 1980s, Albuquerque was in another of its periodic growth spurts. Some land purchases helped preserve the cultural landscape of the lava flows and associated volcanoes, known locally as the West Mesa (see Fig. 16.1 for location). In particular, a development proposal to allow 5-acre “ranchettes” across the Albuquerque volcanoes was countered by successful citizen efforts to find city funding for land acquisition (Schmader 2011a). But development pressure and related resource impacts outstripped the city’s ability to buy its way into a preservation outcome for the vast West Mesa, which encompasses thousands of acres. In 1985, the city commissioned a study to determine the extent and importance of the West Mesa’s cliff edge, or escarpment, where the petroglyphs are found. That study covered 1100 acres and documented over 10,500 petroglyphs (Schmader and Hays 1985). Those results concluded that the area had regional and national significance, and it was listed on the National Register of Historic Places (NRHP) as the “Las Imagines” district in early 1986. The NRHP nomination offered recognition to the area, but trash dumping, off-road activity, vandalism, and unregulated adjacent land development were still threats to the resource.

Shortly thereafter, the city engaged in a comprehensive planning effort culminating in the Northwest Mesa Escarpment Plan (City of Albuquerque 1987b). The Escarpment Plan devised a system of overlay zones for over 10,000 acres of the West Mesa. The overlay zones—called conservation area, impact area, and view area—each had different levels of protection through design restrictions. The conservation area included the face of the escarpment itself and a setback of varying widths. No development was to be allowed on the escarpment face, and the conservation area was designated as suitable or desirable for Open space acquisition. Resource protection, trails, and access were the permissive uses. The impact area was a strip generally 350 ft wide to either side of the conservation area. Building heights were limited to 15 ft with some exceptions for needed fill, exterior building colors were restricted to natural hues, and site plans and view analyses were required. An archaeological survey was a requirement of the site plan submittal. Landscaping, lighting, and reflective surfaces were also regulated. Any construction-related disturbances were required to be mitigated. The view area extended for thousands of feet in many directions from the escarpment. Within the view area, specific neutral structure colors and building heights were regulated to a maximum of 40 ft.

Importantly, the Escarpment Plan had very specifically worded discussions of archaeology. For example, “The unique... archaeological and historical qualities... of the escarpment are to be conserved” and the “archaeological/historical resources are recognized as inexorably linked to their setting. The resources and the setting must always be considered in relationship to each other as well as to other influences” (City of Albuquerque 1987b: 41). This latter statement is an early example of cultural landscape orientation, which came into use by the National Park Service in the early to mid-1980s (Page et al. 1998). The Escarpment Plan continued:

Conservation of the escarpment rock art and related archaeological sites allows for further research and discoveries of the people who inhabited the Middle Rio Grande Valley. The art is not only an artistic expression of prehistoric peoples, but it is a record of their history...The escarpment’s archaeological/historical resources are recognized as important to the world as well as the local community. The benefit of having the resource in our community carries with it a corresponding responsibility to the larger world community. (City of Albuquerque 1987b: 42)

The Escarpment Plan turned out to be a very necessary stopgap measure for the immediate threats to the West Mesa, but was not intended to be a full-blown preservation plan. Citizen support for protections emerged when Friends of the Albuquerque Petroglyphs (FOTAP) was formed in 1986. With FOTAP’s support, other groups such as the Sierra Club and the League of Women Voters rallied to a new cause: to establish a national monument on the city’s west side. On June 27, 1990, President George Bush signed the monument into law. It had taken just five years from the first comprehensive study to creating Petroglyph National Monument (Schmader 2011a).

Piedras Marcadas Pueblo

In 1986, the owners of a huge site in northwest Albuquerque (see Fig. 16.1 for location) decided to file development plans. The site is an ancestral village of today's central Rio Grande pueblo communities, called Piedras Marcadas pueblo ("village of the marked stones"). The land had been owned by one family, the Manns, since the early 1950s and, with increasing property values, the time seemed right for a condominium-style development. The long-time property owners decided to develop their property. As it turned out, Piedras Marcadas pueblo had also been known to the archaeological community since 1929 and was widely regarded as the largest of all the Rio Grande pueblos for many miles up and down the river (Fisher 1931; Mera 1933). When the development proposal came before the city's Environmental Planning Commission, several independent archaeologists testified that the site was of irreplaceable local and national significance. Allowing it to be built over in this way, or any way, would result in major loss for the city, the state, and the region.

The Planning Commission did not have an ordinance to back their decision, but it used other criteria such as density and appropriateness of the project to the surrounding neighborhoods. In a resounding decision, the Commission denied the proposed condominium development. In the hallway after the decision, the landowner was truly angry. "I suppose you're proud of yourselves," he told a group of archaeologists attending the Planning Commission meeting, "but what I am supposed to do now? My land is practically useless. If you all think that site is so important, why don't you buy it, then?" Realizing that it was only a matter of time before a new fight would come about, archaeologists worked with the city's open space program and elected officials. City funds were identified, and Piedras Marcadas pueblo was acquired in June of 1988 (Schmader 2011a).

Soon after the site was acquired, and during the planning to establish Petroglyph National Monument, its importance was recognized by including it as an outlying unit of the monument. Ensuing tribal consultations in the early 1990s (Evans et al. 1993) produced some unexpected results. Tribes expressed concerns over past archaeological work that had effectively excavated entire villages of their ancestral patrimony (Schmader 2016). They pleaded instead that research work at Piedras Marcadas emphasize noninvasive or very low-impact techniques such as remote sensing, surface mapping, and limited testing only (Fig. 16.4). Unexpectedly, the Pueblos' request for noninvasive work turned up evidence of major fighting in the sixteenth century. As research has taken place from 2005 to 2015 using appropriate noninvasive techniques, architectural details have become apparent and evidence of the Francisco Vázquez de Coronado expedition has been found. Sixteenth-century metal artifacts, such as lead musket balls and copper crossbow bolt points, found by metal detector surveys have revealed the remains of a major battle between the expedition forces and the pueblo's defenders (Schmader 2011b, 2014).



Fig. 16.4 General site setting and appearance of Piedras Marcadas pueblo during field work (Photograph by M. Schmader)

“Hell’s Half-Acre”

In the absence of a local archaeological ordinance, Albuquerque’s compliance with federal regulations such as the 1966 National Historic Preservation Act was spotty. For example, federal funds for urban renewal or affordable housing did not always consider if archaeological resources might be affected. One particular project, “Hell’s Half-Acre,” demonstrates this. A redevelopment project in the downtown area (see Fig. 16.1 for location) in the late 1980s had received federal funding from the Urban Development Action Grant program. Since the downtown had been built over for decades, not much thought was given to the archaeological potential for a one-block area just southeast of city hall. A new high-rise hotel and office buildings were planned. The block had been the site of the city’s first major department store, called Fedway, which was operated from the early 1950s until 1969. The Fedway store had rooftop parking and was built on huge pilasters sunk into the ground; site disturbance was so extensive, there was no presumed chance of finding anything intact at the site. Almost as an afterthought, the city contracted a cursory check of the construction work (Schmader 1989). Almost immediately, the areas between the pilasters turned up earlier building foundations and layers of turn-of-the-century construction and trash pits. When it was reported that the site seemed very rich and

laden with resource potential, the response was that the work “had to be done in the next two weekends” or else the project would be held up.

The obvious lack of planning was the real problem: earlier resource consideration would have recovered much more evidence given adequate time. Competing with bottle-collecting backhoe operators and huge rumbling bulldozers, a small excavation team documented building foundations and other features such as trash pits. Several test trenches were excavated to expose foundations or features. Recovered materials were tied to known or fixed points on the block so that proveniences could be referenced to older maps of building locations.

The block, as it turned out, was the heart of the city's red-light district from about 1890 until 1920 (Schmader 1989). The red-light district was so notorious, in fact, that it earned the name “Hell's Half-Acre.” Ladies of the night, or “soiled doves,” as they were called, were packed into tiny compartments or “cribs” along the east side of the block. Remarkably, Sanborn Insurance Company maps from 1891 through 1913 (Schmader 1989: 26–40) showed these cribs as “F.B.” which stood for female boarding; city directories listed new residents of the cribs each year with the discreet prefix “Miss” (e.g., Miss Blanche DuPont; Miss Lillie Fox). Whether to outlaw prostitution, or to confine it to a known area of town to control it, became a campaign issue in the hotly contested Albuquerque mayoral race of 1914. D.K. Sellers, the incumbent Democrat mayor, urged confining the activities while his Republican challenger, David Boatright, campaigned to outlaw the red-light district. Boatright won the election (Schmader 1989). Businesses came and went, from early Chinese laundries and livery stables, to butcher shops, shoemakers, auto repair, and a fine stone edifice at the southeast corner of the block. Known as the Montezuma Hotel, this beautiful building was built in 1909 by Italian stone masons (Schmader 1989). The long-time owners of the building were the Domenici family; Pete V. Domenici was New Mexico's longest-serving US senator (1973–2009).

The overriding story of this one downtown block, then, turned to the whole saga of late 1800s Italian immigration from Sicily to New Mexico, and how those immigrants completely changed local history. To be sure, the red-light district was more salacious, and in the end, a high-end restaurant in the new hotel was named McGrath's in honor of the famous madame of the time period, Lizzie McGrath (1862–1922). But for a few twists of fate and some determination, none of this story might have come to light.

Early Groundwork for a Local Ordinance

In August 1982, Kit Sargeant, a well-known Albuquerque area archaeologist, got a phone call about some bones that had been exposed in a waterline trench. Kit owned a house that sat on top of an ancient pueblo village and had been working on her own excavation there since 1979. She and the author went a few miles up the road and found that, indeed, the waterline had gone through an unmarked burial ground of a late 1800s church. The remnants of several burials were scattered about

and the workers and project managers were trying to figure out what to do next. Predictably, the media showed up and it was not long before a television reporter was asking, "Aren't there laws that protect such places?" The long answer was, under certain circumstances such as burial grounds, there were state laws. But to the follow-up question of "What about all the rest of sites?" there was only the less complicated answer: "No, there aren't any ordinances on the books." This one watershed event helped to galvanize a movement aimed at passing a local cultural preservation ordinance. But it would take 25 years to come to fruition.

In the mid-1980s, the city's planning department put together an officially sanctioned body called the Archaeological Resource Protection Advisory Committee (or ARPAC). The committee was made up of planners, archaeologists, developers, and members of the general public. The ARPAC published its results (City of Albuquerque 1986), which opened with an overview of history and pre-history for Albuquerque and the metropolitan area of Bernalillo county and a review of known and projected numbers and types of sites based on geographic information and surveys. It then examined how archaeology could fit into existing planning processes and reviewed the kinds of projects the city and county had with state and federal agencies. Recommended pilot programs to collect site information and geographic data were offered, and a review of archaeological programs in other states was presented. At the time, there were few municipal ordinances from which to draw. Examples reviewed by ARPAC included Philadelphia, Greenwich Connecticut, and Larkspur California. Other prominent ordinances developed at the time included those from New York City and Baltimore. Based on these examples, the committee drafted a plan. Recommended program objectives were developed by the committee including public education and participation; site evaluation and preservation methods; data base management; and incorporation into planning processes. The committee then laid out how a proposed program under a city/county archaeologist would be organized, including qualifications, staffing, duties, costs, and funding. Lastly, it called for an independent body—an oversight committee—to assist and review the program.

Efforts to carry the ARPAC's recommendations forward foundered continually for the next 20 years for a variety of reasons. The late 1980s were dominated by numerous preservation fights, principally the passage of the Northwest Mesa Escarpment Plan and the establishment of Petroglyph National Monument. Those two issues, while resulting in overall preservation victories, caused deep rifts and suspicion within the development community. Passage of an ordinance would have been unpopular at the time. In the early 1990s, economic downturns also hit the development community hard and there was no appetite for more regulation at a time when business was slow. By the mid-1990s, the city council makeup was generally favorable to the new ordinance, but the mayor was not. By the time a new mayor favorable to the ordinance was elected, the makeup of the city council had reversed. The next mayor battled with the state of New Mexico over roadway construction affecting Petroglyph National Monument, and the situation once again was not pro-preservation. And so it went for two decades: neither economics nor

politics could not align in the right way to produce an ordinance-friendly environment.

In 1995, the city of Albuquerque commissioned a study funded by a grant from the New Mexico Historic Preservation Division under the Certified Local Government Program. The study was intended to provide a baseline for planning and land management. The *Archaeological Context for Albuquerque*, as it was called, compiled archaeological and historic information in a literature review, map site locations and areal extent of surveys, and summarized site types by time period and landform (City of Albuquerque 1995). Information was compiled about more than 1800 sites recorded in the Albuquerque area up to that time. Areas of relative site density were identified, numbers of sites were projected, and a research framework was presented. The site density model was one that could have been used to establish zones to be used for future ordinance development, but that ultimately did not happen.

When a proposed archaeological ordinance was revisited in draft form in the early 2000s, much discussion revolved around process and implementation. Two models emerged—one based on a sensitive area concept and the other on a zoning process concept. The sensitive area concept would have required drawing up different zones with different compliance procedures and would have been based on knowledge of the resource base at the time. For example, areas of the city with high potential for cultural sites (such as the West Mesa or the downtown) would require studies to be done at a lower threshold (smaller lot size or lesser zoning actions) than in areas with lower potential. The City of Santa Fe (1987) utilizes this kind of approach.

The zoning process model would have the same requirements for all areas, and the major hurdle was to establish a minimum project size that would require studies. In the end, the zoning process method was chosen because it was easier to understand and implement for the development community, and it was felt to be less arbitrary than the sensitive area model. In other words, disputes could arise over how the boundaries were drawn, or equity issues could be raised about some landowners being required and others not. Developers in particular seemed to favor uniform standards that applied across the board instead of leaving subjective judgements to city staffers or consultants. In addition, many of the city's more sensitive areas had already been surveyed, and so it was not necessary to conduct baseline surveys to determine various zones with different compliance requirements. It was also thought that, in theory, sites could be found nearly anywhere, and so a uniform approach was chosen. A primary reason for the ordinance was that it serve as a check for infill projects and to avoid the loss of newly discovered sites, and not necessarily as a mechanism to conduct baseline inventory.

Albuquerque's approach contrasted with nearby Santa Fe, which started an ordinance process later but enacted its ordinance much faster than Albuquerque (City of Santa Fe 1987). This was due in part to the favorable political and development climate that existed in Santa Fe at the time (two important factors in determining when any local ordinance gets enacted). Santa Fe established three zones, each with different requirements for investigation and survey, and set up a

review committee made up of city staffers, professionals, and informed citizens. That review committee has authority to approve reports and development proposals, which are passed on to the planning department.

In early 2007, a single event effectively ended years of inactivity and lack of progress toward passing an ordinance for Albuquerque. In January, utility crews installing gas and water lines for a new high school on the northern part of the West Mesa had gone through parts of a well-known PaleoIndian site called the Boca Negra Wash (Holliday et al. 2006). These utility lines severed the site into two parts and, while not going through the most important area, called into question the information sharing and coordination efforts needed for utility companies, the school system, planners, and construction oversight. Future Congressman and later US Senator Martin Heinrich, then on the Albuquerque city council, introduced a new ordinance aimed at finally closing these loopholes. Heinrich's direct involvement had at last finished off a quarter-century long effort.

An Ordinance Is Born

The Albuquerque Archaeological Ordinance (AAO), known as O-07-72, was enacted by unanimous vote of the city council on September 19, 2007. A good deal of discussion went into the minimum project size threshold. As originally drafted, projects of two acres or more would have required review, but as a concession to bring along holdouts in the development community, the five-acre limit was adopted. All development proposals of five acres or more, including lot splits and divisions of parcels, are required to have an archaeological review prior to issuance of a building permit. Privately funded developments pay for their own studies, if required, and these are done by local consulting cultural resource management companies. Projects sponsored by or carried out by local governments similarly use cultural resource management firms. An important difference in compliance by local governments is that the state of New Mexico considers all such projects occurring on public land to be a subdivision of the state and subject to state regulations. In such cases, for example, a project occurring on school district land, the compliance is submitted to the state historic preservation division (HPD), and the Albuquerque city archaeologist serves in an advisory capacity only.

The Albuquerque archaeological ordinance created a new position of city archaeologist, to work within the planning department. The city archaeologist was to maintain and consult data bases, determine local significance of resources, inspect areas of ground disturbance, coordinate with other city departments, and maintain lists of qualified archaeological contractors. The ordinance applies whenever an applicant/landowner submits a subdivision plat for an area of five acres or more, and includes a wide variety of zoning categories. Any plat or subdivision plan would require an approval from the city archaeologist in the form of a certificate. A "Certificate of No Effect" is issued when a development proposal has been previously developed, heavily disturbed, or does not contain any

significant sites. Determinations of local significance are delegated to the city archaeologist, as are decisions about the degree of prior land disturbance. Typically, the applicant presents information such as land-use history, an environmental study, or aerial photographs to demonstrate the amount of prior disturbance to the site. The city archaeologist may perform some of this background work when requested by the applicant, or conduct site visits as needed. Most clearances are issued for zone changes or lot splits on totally developed properties, or on land parcels that have been completely disturbed. Testing is not required in these cases, as other documentation is generally sufficient.

If any significant sites are found in a proposed subdivision, the project proponent is required to submit a treatment plan to test, recover data, or preserve the site in-place. Treatment plans are almost always drawn up by private cultural resource contractors working for the applicant. Treatment plans consider various options such as preservation in-place, protection through dedication of easements, or site investigation. Recommendations for further testing, sampling, data recovery, and analysis are required in the plan, along with a timeline and a cost estimate. Usually, landowners and developers choose to investigate the site and obtain clearance to fully develop the property. There have been very few instances of site avoidance or preservation in-place, due to the high value of land. Although there have been some opportunities for archaeological interpretation in some private developments, most on-site interpretation is only done on public projects such as park development.

Once conditions of the treatment plan have been met, then a "Certificate of Approval" is issued. The ordinance also requires that site treatment be bonded or that sites preserved in-place be placed on infrastructure lists, and further provides for penalties and revocation of permits in cases of non-compliance. Discoveries of archaeological resources are required to be reported for any cases where a Certificate of No Effect has been issued. It also requires the city to conform with the ordinance for its own capital projects over five acres in size and sets forth an appeal process.

As discussed, the AAO called for the planning department to create a new position of Albuquerque city archaeologist, whose duties would include not only development review and maintenance of records, but also a wide variety of other duties. As Appler (2012: 41) notes, "municipal archaeologists are concerned primarily with understanding the human events and activities that transpired within their city's modern political boundaries. Municipal archaeologists must become authorities on the entire history of one city, from prehistoric times through the present." A hiring search started in June 2007 as soon as the job description was finalized, and the list of candidates narrowed after a state-wide pool of applicants was screened. Just as the selection had been made and the job about to be offered to the top candidate, the process was dealt another blow. The national recession and economic crisis had impacted all levels of government, and cost-savings measures were being implemented in the face of looming deficits. Albuquerque had no choice at the time except to eliminate all vacant job positions, which included the new city archaeologist. The offer was never sent.

By October 2007, the planning department faced a problem because the ordinance was due to become official, but there was nobody to enforce it. The planning

department had a historic preservation planner who oversaw regulations for historic districts and served as staff to the landmarks commission, but did not meet the qualifications needed for administering the archaeological ordinance. The planning department then asked the author to consider administering the new ordinance, since I already worked for the city and was a qualified archaeologist. I assumed the role of city archaeologist, taking on added duties besides those I already had as a full-time employee in the parks department. In this capacity, I was and have been “on loan” to the planning department. A case file system was needed to track the applications as they came in. The whole Albuquerque metropolitan area is laid out in a grid of one-mile squares called the zone atlas. All development review ties into this zone atlas grid, so the overall organization was not hard to choose. A compliance form was devised which has served well for eight years with very little need for refinement (Fig. 16.5).

The Ordinance in Practice

In the past eight years, 242 cases have been reviewed by the city archaeologist under the ordinance (Table 16.1). The total area covered by all cases is almost 6500 acres. This acreage includes all studies done since the adoption of the ordinance, but also includes some studies done prior to the ordinance which were submitted to comply with it. The density of sites found, about one per 110 acres, is less than one-third the average site density known for more heavily settled areas of the metropolitan area (City of Albuquerque 1986, 1995). This low site density for the aggregate number of cases reviewed is due in part to the high number of redevelopment cases, which are cleared due to previous land disturbance. Areas with high site density, such as the West Mesa, had been studied and preserved long before the archaeological ordinance was passed. In addition, studies of large remaining areas with higher potential site density have tended to be reviewed as state or federal undertakings not subject to the city ordinance.

The large majority of the cases—about 75%—have resulted in negative surveys. Most of these, in excess of 80%, were done for private development clearances paid for by the landowners. Less than 20% have been done by government agencies such as the city, public schools, and flood control agencies. Nearly half of the cases were issued Certificates of No Effect because the subject case was on land that had been highly disturbed by previous development. A typical example might be a parcel split in a shopping center. An interim review category, in which a provisional certificate is given, occurs in about 10% of the cases. These are instances where the applicant has come in early in the process and is given an affirmative review to allow for planning to continue. Since the ordinance only requires a final certificate of no effect before building permit, provisional certificates will enable platting to occur (for example) but will state that a survey or study is required at a later point in time to be provided for and paid by the landowner. About 20% of cases reviewed were negative surveys, where a study was required and no sites were identified.



City of Albuquerque
P.O. Box 1293 Albuquerque, New Mexico 87103
Planning Department
Suzanne Lubar, Director

Richard J. Berry, Mayor
Date

Robert J. Perry, Chief Administrative Officer

SUBJECT: ALBUQUERQUE ARCHAEOLOGICAL ORDINANCE—Compliance Documentation

Project Number(s):

Case Number(s):

Agent:

Applicant:

Legal Description:

Zoning:

Acreage: _____ acres

Zone Atlas Page:

CERTIFICATE OF NO EFFECT: Yes _____ No _____

CERTIFICATE OF APPROVAL: Yes _____ No _____

TREATMENT PLAN REVIEW:

DISCOVERY:

SUPPORTING DOCUMENTATION:

SITE VISIT: n/a

RECOMMENDATION(S):

- *CERTIFICATE OF NO EFFECT IS ISSUED (ref O-07-72 Section 4B(1)-- no significant sites in project area)*
- *(ref O-07-72 Section 4B(2)—extensive previous land disturbance) .*
- *(ref O-07-72 Section 4B(3), information potential exhausted for LA) .*
- *CERTIFICATE OF APPROVAL IS ISSUED (ref O-07-72 Section 4C(1), preservation plan required).*
- *PROVISIONAL CERTIFICATE OF NO EFFECT IS ISSUED to allow platting process to continue.*
- *Archaeological survey required prior to issuance of building permit.*

MJSchmader

Matthew Schmader, PhD
Superintendent, Open Space Division

Fig. 16.5 Form for certificate of no effect or approval used in compliance with Albuquerque archaeological ordinance

Table 16.1 Summary of case review activity in Albuquerque, 2008 through 2014

	Fiscal year 2008	Fiscal year 2009	Fiscal year 2010	Fiscal year 2011	Fiscal year 2012	Fiscal year 2013	Fiscal year 2014	Fiscal year 2015	Total
Cases reviewed	56	37	22	26	23	32	23	23	242
Acres cleared	1802.9	767.0	395.7	856.7	427.1	1330.0	530.8	387.13	6497.3
Previously disturbed	17	21	16	12	15	15	10	16	122
Provisional certificate	3	3	3	4	4	5	2	4	28
Negative surveys	10	8	1	6	2	7	5	2	41
Sites recorded	15	5	3	3	3	25	2	2	59
Eligible sites	10	2	0	0	2	11	0	0	25
Treatment plans	3	3	1	1	1	4	5	0	18

About 10% of the cases were positive surveys, resulting in 57 newly recorded sites. Less than half of those have been determined as being significant or potentially eligible for any register listings. Eighteen site treatment plans have been reviewed for those potentially eligible sites.

Procedurally, each case is first evaluated for applicability of the ordinance. Applicants not familiar with the process often contact the city archaeologist for early determinations about the applicability of the ordinance to their project. Site development proposals under five acres are excluded. Occasionally, applicants with cases less than five acres in size will voluntarily ask for a certificate of no effect depending on the nature of their submittal. Any activity that involves federal funding or permits, or any state action, is referred to the New Mexico historic preservation division (HPD). Local projects with state or federal involvement (usually National Historic Preservation Act Section 106 compliance) are done with HPD as the lead consulting agency. While sign-off for ultimate compliance is done by HPD, that office will sometimes ask for local review from the city archaeologist on technical issues such as adequacy of data recovery plans or project-specific details. In this way, both local ordinance compliance and state or federal projects are well integrated so that review processes cover all types of proposals and coordination occurs between the city and the state. There is no current formal Memorandum of Understanding between HPD and the city, however.

The dual review by the state HPD and the city archaeologist on certain projects has had pros and cons. State guidelines for using mechanical equipment, for example, are more rigorous than local ones. The amount of detail required for a data recovery plan, and the formal approval of these plans by state review committees, is

also more rigorous. Input by the city archaeologist allows for more local expertise to be used, and review times can be much shorter at the local level. The volume of case review at the state level, and the state's review committee meeting schedule (which is bimonthly), can sometimes be seen as a drawback by project proponents. City contact for technical advice, timeliness of response and comments, and knowledge of local planning processes are seen as benefits to having projects administered at the local level. Each municipality will have its own relationship with the state's HPD, and knowing what the strengths of each agency's involvements are can be an advantage so long as dual review procedures do not add to the length of time and effort in getting projects approved and implemented.

Most of the large projects carried out since the AAO was adopted have been under the dual party state and city review process. In one major example, several school sites and a large sports complex are planned on lands owned by the Albuquerque public school district. Lead compliance for this project falls to the HPD because the land is owned by a political subdivision of the state. But technical review of survey reports, testing plans, data recovery plans, and final reports was provided by the city archaeologist. The project covered 688 acres, with 31 sites slated for testing or data recovery; work occurred over a one-year period ending November 2012 (Goar 2015). Sites dated from the middle Archaic period (circa 3300 BC), the late Archaic (circa 1200 BC–200 BC), and the early-to-middle ancestral Pueblo periods (circa AD 600–1200). Residential sites, campsites, and resource procurement sites demonstrated a long continuum of occupation. In another case, data recovery for 23-acre mixed commercial and private residential development on the west side of the city was conducted after the author spotted exposed ash stains (Goar and Hamel 2015). Compliance was similar to the public school project because the HPD had review authority over development along a state road. Late Archaic features and three early Puebloan structures dating circa AD 700–900 were documented.

One of the larger data recovery projects conducted entirely under the AAO was part of a multi-phase housing subdivision located along the boundary of Petroglyph National Monument (Railey 2013). After initial surveys and site identification, the city archaeologist made determinations of eligibility and recommended testing on several sites. The data recovery plan was drawn up by consultants for the landowner and approved by the city archaeologist. The most significant site contained the remains of a small dwelling with hundreds of chipped stone and fire-cracked artifacts. The structure, measuring three meters by four meters, yielded radiocarbon dates to the end of the middle Archaic period (2110 BC–1900 BC).

Retrospective

More than eight years after its passage, the Albuquerque archaeological ordinance has served its purposes well. Routine case review is carried out smoothly and promptly. Staff at the planning department's application counter is practiced in

referring first-time applicants to the city archaeologist for guidance in complying with the ordinance. Most private planning consultant firms are also practiced in the process and contact the city archaeologist directly for compliance on new case submittals. Little is lost due to the appropriate scale of the ordinance's applicability and staff response time. Applying the ordinance is often more administrative than preservation science (i.e., requiring routine paperwork and not necessarily archaeological know-how). Case review can demand flexibility in interpreting the applicant's needs and the planning process; on occasion, reviews are done with rapid turnaround, even on the same day. Having a city staff person familiar with the planning process and with specific areas of the town is a distinct advantage, and one reason why the archaeologist role has not been contracted out. There have been no controversies and no appeals with respect to how the ordinance has been administered since its passage.

The position of Albuquerque city archaeologist has been filled by a paid staff person since the ordinance passed in 2007. It was created with the intent of being a full-time and fully funded position in the planning department, but due to budget cuts the position was eliminated. The current city archaeologist works in the parks department as an open space land administrator but, because of qualifications and expertise, also fulfills the nominal duties of the city archaeologist. These include plan review, issuance of certificates, offering technical assistance to the development community, and providing compliance assistance to the planning department and other city departments. While the basics of administering the ordinance have worked well, there are initiatives that have not moved forward. Plans for public outreach, educational programming, and fuller integration with public and private projects have not begun. As originally conceived, the city archaeologist was to have spent a fair bit of time ensuring that ground-disturbing activities did not accidentally encounter unknown resources.

Albuquerque's experience has some lessons learned and suggested applicability for other municipalities. First, the threshold size of five acres is likely too large for projects occurring in parts of the city with known higher site density. More likely, a hybrid model with a five-acre minimum for the whole city and a smaller threshold (of say, two acres) in sensitive zones would be a more effective approach. Second, on-the-ground inspection of all municipal construction projects should still be done as a routine monitoring effort. This function has not been done consistently and remains a gap in needed oversight. Lastly, despite the cost-savings attitude toward managing the archaeological ordinance, a city of Albuquerque's size and with its resources really should have a full-time staff person devoted to the task. As a start-up solution during difficult financial times, the "fill it with what we have" approach was logical. But eight years later and with financial stability, the part-time approach has become one of convenience as local government priorities have moved on to other issues. Perhaps administering the ordinance has worked a too well for its own good.

Cities considering enacting ordinances need to consider several factors. How large is the city relative to the known or expected historic resource base? Large cities with spread out resources should approach their ordinance development

differently than compact cities with concentrated resources, for example. The nature of the development community and its relationship to the elected officials is also crucial. If there is not a common goal on both ends of that spectrum, then do not expect results in a short period of time. Lastly, the administrative capability of any city, and its ability to merge results of historic preservation efforts, is a sort of bottom-line "reality check" for the ideals of desiring an ordinance. Any regulatory framework is only as good as the responsible use of an ordinance as a tool. The outcomes of that tool use needs to be public, accessible, and beneficial to the community.

Albuquerque may be unique on several fronts when considering its archaeological context and its ordinance. It has a very deep and varied historical record. It has a long history of public involvement with archaeology, and yet efforts to adopt an archaeological ordinance were exceedingly slow. During the 25 years it took to complete the ordinance process from 1982 until 2007, several municipalities have enacted local laws (see Appler 2012: 45). The nearby City of Santa Fe (1987) started later but finished well ahead of Albuquerque. To bridge this gap, Albuquerque relied creatively on the planning process to devise procedures that ensured archaeological resources were considered in certain key areas of the city, such as the future Petroglyph National Monument. With the adoption of Albuquerque's ordinance and its implementation for eight years, protective mechanisms are well-established and new information has emerged. As a result, the ordinance has helped to protect and enhance the cultural fabric that makes Albuquerque a place like no other.

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Index

A

- Aboriginal, 70, 71, 73, 75, 77, 79, 84, 94, 96, 105, 130, 139, 141, 142, 148, 152
- African Burial Ground, 242, 243, 245, 248, 251
- Albuquerque, 7, 9, 10, 196, 227, 321–335, 339–341
- Alexandria, Virginia, 203
- Alexandria Archaeology, 204, 207, 210–213, 215, 221
- Anne Arundel County, 189, 191, 192, 196, 198
- Archaeological protection code, 208, 212
- Archaeological review, 196
- Archaeological trigger, 196
- Archaeological zones, 195, 197
- Archaeology, 2–12, 17, 18, 20–24, 27–32, 38–40, 42, 43, 45, 49, 50, 53, 56, 62, 66, 69, 70, 76, 82, 85, 87, 91–95, 98, 101, 102, 104–106, 108–110, 116–120, 123, 129, 137–143, 145, 146, 148–150, 152–158, 161–171, 174–176, 183–198, 203–205, 208, 210–216, 222, 227, 229, 233, 236, 240, 246–248, 250–252, 257, 259, 260, 263, 266, 267, 270, 271, 273, 275, 278–282, 285–288, 290, 291, 295, 296, 299, 301, 302, 306–309, 311, 312, 315–317, 323, 324, 328, 341
- Archaeology ordinance, 193, 196, 197, 199, 300, 306, 309
- Archaic period, 322, 339
- Archives, 23, 28, 29, 57–59, 61, 62, 64, 216
- Area of Archaeological Importance (AAI), 41
- Arup, 36, 44–48, 50
- Australia, 137, 138, 141, 145, 150, 152, 158
- Avocational archeology, 301

B

- Big Data, 57
- Big Dig, 257, 259–261–264, 270, 273, 275

- Bishop's block, 85
- Boston, 257–259, 261–265, 266–268, 270–272, 275
- Bristol, 7, 8, 56–59, 62–66

C

- Cannon, 173–177
- Chinatown, 280
- City Archaeologist, 277–280, 282, 283, 285–287, 289, 290, 294, 295
- City Archaeology, 266
- City Archaeology Program, 228–231, 234, 236, 238–242, 245, 310
- “City as site”, 186, 187
- City Design Group
- Colonial Archaeology
- City code, 195, 197, 198
- Colonial, 139, 158
- Commemoration, 248
- Community, 46, 47, 49, 50, 56, 59, 62, 64–66, 69, 73, 74, 79, 83, 88, 91, 96, 98, 103–106, 108–110, 122, 124, 130, 137, 145, 156, 183, 185–194, 198, 204, 205, 207–210, 213–216, 219, 220, 237, 239, 240, 243, 245, 251, 262, 264, 266, 268, 271, 272, 279, 280, 282, 285, 294–296, 299, 301, 308, 309, 312, 324, 328, 329, 332–334, 340, 341
- Community activism, 248
- Community archaeology, 203, 204, 221
- Connect Lucknow
- Conservation, 138, 140, 143, 150, 152, 156, 157
- Contrabands and Freedmen Cemetery, 216–218, 222
- Crowdsourcing, 8, 60–62, 65
- Cultural Heritage Act, 117–119, 123, 130–132
- Cultural heritage landscapes, 73, 74

Curation, 83, 84, 87, 105, 210, 259, 288, 300, 301

D

Deposit modelling, 45
 Development, 137, 140, 141, 143, 145, 146, 148–150, 153–157
 Development regulations, 190

E

Ellen Berkland, 262–264
 Environmental review, 228, 229, 237, 242, 245, 246–248, 252
 European Convention on the Protection of the Archaeological Heritage, 118
 Evaluation, 43, 45–49, 50, 71, 73, 93, 119, 206, 227, 228, 231, 239, 246, 279, 282, 283, 305, 332
 Excavation permits, 147, 156
 Exhibits, 231, 234, 236, 237, 239, 242, 252

F

Federal, 278, 281, 283, 286, 288, 289
 Florida, 300, 301, 308, 309, 315
 Florida Public Archaeology Network
 Fort Ward Park, 216, 219, 222

G

GIS, 20, 56, 58, 78, 130, 151, 211, 278, 287
 Government of North-Western Provinces and Oudh, 164, 166–168

H

Hazratganj, 171–177
 Hazratganj Traders Association, 171
 Heritage Act, 82, 139–143, 146, 149, 156, 157
 Heritage planning, 102, 105, 110, 143
 Heritage square, 280, 281
 Historical archaeology, 219, 220, 222, 302, 306, 316
 Historic environment, 18, 20, 28, 45, 50, 60, 65
 Historic Environment Record (HER), 53, 57
 Huron-Wendat, 83

I

India, 161–164, 166–170, 175
 INRAP, 117, 120
 Interpretation, 3, 8, 10, 66, 69, 85–87, 110, 123, 126, 130, 144, 145, 147–149, 152–156, 176, 189, 198, 205, 209, 222, 228, 245, 335

J

Joseph Bagley, 265

K

Kingston, Canada, 91
 Kingston (Ontario, Canada), 91

L

Landmarks, 257–259, 261, 263, 265, 268
 Landmarks Preservation Commission, 229, 230, 242, 250
 Land-use planning, 72, 92, 110, 120, 140
 Localism, 66
 Local priorities, 188
 London, 2, 4, 7, 17–24, 27–32, 83, 93, 191, 236
 London Archaeological Archive and Research Centre (LAARC), 19, 28, 29
 Lucknow, 161, 163, 166–169, 171, 172, 174–177
 Lucknow development authority, 169, 176, 177
 Lucknow Municipal Corporation, 176

M

Mapping, 45, 53–56, 58, 59, 78, 79, 81, 104, 105, 156, 207, 329
 Massachusetts, 258–260, 263, 264, 266, 267
 Municipal planning, 103

N

National Planning Policy Framework (NPPF), 8, 20, 28, 53
 Native American, 278, 282, 296
 New Mexico, 321
 archaeological ordinance, 321, 330, 334, 339, 340
 city archaeologist, 334, 335, 340
 Northwest mesa escarpment plan, 328
 New Mexico historic preservation division, 333
 New South Wales, 137, 138, 140, 142, 143, 146
 New York City, 227–231, 233, 234, 236, 237, 240–243, 245, 247, 248, 251

O

Official plan, 74, 75, 82, 101, 102, 104
 Ordinance, 277–279

P

Petroglyph national monument, 326, 327, 332, 341
 Petroglyphs, 326–328
 Phoenix, 279
 Piedras marcadas pueblo, 329, 330
 Placemaking, 120, 126

- Planning, 5, 8, 10, 17, 18, 20–24, 26–28, 31, 40–43, 45, 47, 49, 50, 53, 54, 56, 57, 59, 61, 62, 64, 65, 69–76, 81, 83–85, 87, 88, 91–94, 101–103, 105–108, 110, 118, 119, 123, 137–141, 152, 155, 156, 169, 171, 175, 189, 196, 197, 204, 219, 220, 222, 229, 237, 238, 242, 250, 261, 262, 278, 280, 282, 286, 299, 301, 308, 321, 325, 328, 329, 331–336, 339–341
- Policy, 37, 42, 46, 47, 49, 50, 72–74, 76, 84, 93, 102, 106, 108, 116, 131, 139, 140, 157, 169, 187, 188, 197, 198, 204, 259, 268, 269, 288, 301, 309, 316, 317, 325
- Polluters pay principle, 42
- Popular report, 289, 290, 292, 293
- Potential modeling, 81
- PPG16, 27, 47
- Preservation, 205, 211, 279, 283
- Preservation in situ, 20, 24, 27, 45, 46
- Preventive archaeology, 120, 130
- Public, 277–279, 281, 282, 284, 285, 289, 290, 294, 296
- Public archaeology, 213, 299, 300, 309
- Public engagement, 5, 23, 24, 105
- Public archaeology network, 309
- Public outcomes, 146, 148, 157
- Public outreach, 228, 231, 234, 235, 239, 247
- Q**
- Quebec City, 1, 3, 7, 8, 115, 116, 120, 122, 130, 131
- R**
- Relics, 138, 141, 142, 146, 147, 149, 155
- Rescue, 22, 23, 39, 92, 101, 119, 123, 205, 249
- Research, 3–5, 10, 30, 37, 39, 42, 45–47, 49, 50, 57, 59, 62, 65, 76, 78, 83, 101, 116, 118, 119, 122–124, 126, 128–131, 143, 147, 152, 157, 162, 169, 175, 186–190, 193, 195, 198, 204, 205, 207, 210–212, 215, 216, 218, 219, 221, 231, 233, 234, 236, 239, 245, 260, 261, 264, 288, 289, 294, 307, 321, 323, 325, 329, 333
- Researching, 176
- Ronson ship, 235, 236, 240, 251
- Rose Theatre, 24–26
- S**
- Section 106, 183, 184
- Site development, 130, 132, 196
- Spanish colonial, 308
- St. Augustine, 303, 304
- Stephen Mrozowski, 260
- Steven Pendery, 261, 271
- Sydney, 137–140, 143–145, 148–150, 152, 155
- T**
- Training, 278, 286, 287
- U**
- UNESCO World Heritage, 74, 115, 128, 139
- Université Laval, 122, 123, 129
- Urban Archaeology, 2–7, 23, 118, 169, 227, 230, 234, 251, 258, 259, 261, 262, 265, 268, 269, 271, 272, 275
- Urban conservation, 171, 176
- V**
- Vázquez de Coronado, Francisco, 329
- Vichy government, 8, 118
- Volunteers, 263, 268–272, 274, 275
- Y**
- York, 2, 4, 7, 8, 18, 35–47, 49, 50, 76, 78, 84, 236
- York Archaeological Trust (YAT), 36
- Z**
- Zoning, 189, 192, 194–198