#### INTRODUCTION

Although studied and analyzed extensively by city planners, architects, historians and urban geographers, Boston still remains a place to be fully discovered, unwrapped and understood in many respects. The little stories, lifestyles, social makeup, changing civic structures and layered urban form that have fossilized over time are sometimes seemingly evident and other times buried beneath its tirelessly re-invented surface calling out to be uncovered. May it be re-invention, preservation, ruins, remnants or simply invisible ghosts of what once existed, they all speak of a lost and present time in the growth, evolution and legacy of the city of Boston. Today, the city continues to ambitiously march into the twenty first century continuing its tradition of radical change in the form of large-scale urban transformations -setting a bold example to the rest of the country and the world.

India Wharf, Boston is one such forgotten story of radical change in the glorious era of industrial mercantile Boston set in the very early 1800's. This tale of wealth, vision, image and prestige is a benchmark in the progressive planning/design at the time to re-invent an aging infrastructure and chart Boston on the global map as a significant and state of the art trade hub. It remains a successful attempt that changed the image of the city bringing it immense prosperity. The narrative is also a grim reminder of the birth, life and decay of resplendent glory that succumbed to modern day urban devices. However, an optimist might argue that it is merely evolution that was realized through many collective urban visions that prospered and disappeared over time much like India wharf.

Coming from India, the name "India" wharf almost immediately aroused my interest and curiosity for enquiry. Deeper research reveals that the name was not a coincidence or an accident like Columbus's fateful error that led him to discover America in his search of India. On the contrary, the wharf was conceived to serve the trade that came in largely from India, China and the pacific. Gold, diamonds, spices and silk were some of the profitable goods that exchanged hands on the wharf. 122 vessels loaded at Calcutta for the U.S. 96 entered Boston at India and Central Wharves<sup>1</sup>. My interests in the wharf also stem from an intrigue in Boston's

<sup>&</sup>lt;sup>1</sup> Bunting, W.H. Portrait of a Port: Boston, 1852-1914 (Cambridge: Belknap Press of Harvard, 1994): 47.

tradition of "land making" by extensive landfill to serve its urban needs over time and the underlying urban forces that prompted them.

India Wharf, today, still sits in its original location as an extrusion of landfill into the sea off the east coast of the main Boston peninsula. It lies perpendicular to the Atlantic Avenue and the much discussed Central Artery of Boston. It now houses East India Row, a privately owned mix of housing and office space with a huge multilevel parking lot that occupies prime waterfront real estate. Today, in essence, only the name remains but one can certainly feel the ghost of India wharf haunting its location, which is completely devoid of activity that once jostled to and fro from India and Broad streets to the busy businesses of the wharf.

This study also forms a compelling case that displays the effects of trade, industry, technology and entrepreneurial citizen initiatives on the urban form and organization of a city. The need for constant re-invention to suit current trends and urban needs is clearly evident as we move through time to analyze the area. The structure of this paper is hence based on the chronological mapping of the origin, life, and decline of India Wharf at various levels. Conclusively, recommendations are made bearing in mind the present urban forces and a sustainable vision for the future of the site.

## **BOSTON: 1680 – 1800's**

Serving as the gateway to New England, Boston always had the advantage of its location on the Atlantic. By around 1680, the once independent Massachusetts Bay Colony had been brought firmly under British control. At this time, Boston was evolving and emerging as a seaport equal to many of the world's largest, with over 6,000 residents and 800 houses located near its shores. This was indeed the changing face of colonial Boston where the Puritans had first settled in the 1630's making a living out of farming and agriculture. The commercial zeal of the promising mercantile class in Boston could now be seen as the driving force that would influence the urban form of the city, which was running out of land for growth and expansion. The Massachusetts riparian Law<sup>2</sup>, passed in the 1640's was a key force in this urban transformation. It allowed the shoreline property owners rights to adjacent tidal flats down to the low tide line or 1650 feet from the line of the high tide; whichever is closest to the shore – in effect encouraging the building of wharves.

As trade with Britain and its colonies prospered, rich merchants began to wharf out further to cash in on the maritime boom. The sea trade hence led to a parallel boom in the real estate industry. Land on the coastline was now very valuable where wharves extended ceaselessly outward as the slips and docks between them were filled in to accommodate the growing population of the peninsula. The creation of land was not merely due reasons for expansion and trade. Land was also created as a result of changing technology. Several enclosed docks, which had been excavated in the 17<sup>th</sup> century to provide shelter for the small ships of that era, were filled in both because they could not accommodate larger 18<sup>th</sup> century ships and since their enclosure prevented them from being adequately flushed out by the tide, they had become odiferous receptacles for sewage and filth<sup>3</sup>. John Bonner's 1722 map (First detailed contemporary map of Boston) and William Price's 1743 map illustrate all these changes that were taking place on Boston's shores. Bonner's map shows the extension of the town's principal street, King Street (now State Street), far into the Bay forming the two thousand feet long

<sup>&</sup>lt;sup>2</sup> Kreiger, Alex and Cobb, David and Turner, Amy. (ed.) *Mapping Boston*. (Cambridge, USA: MIT Press, 1999): 119.

<sup>&</sup>lt;sup>3</sup> Kreiger et al, 119.

"Long" wharf that was built under the direction of Captain Oliver Noyes in 1711<sup>4</sup>. A comparison of this map with the 1743 map reveals how half of the Town Dock was filled in to create land for Faneuil Hall. The "Old Wharfe" that extended from South Battery to Clark's wharf intersecting the Long wharf is what remained of the barricade built in the 1670's during the war with the Dutch.

Despite the bustle in the trade arena, Boston suffered many blows on the political and social front. The 18<sup>th</sup> century came to Boston with the Great Fire in 1711, Boston Massacre in 1770, the Boston Tea Party in 1773, Bunker Hill assault in 1775 and finally its independence in 1776.

<sup>4</sup> Kreiger et al, 147.

There was a significant decrease in population after the Revolution and once again Boston needed to be rebuilt, re-invented and reorganized. It still had its immense trade potential but a dilapidated infrastructure with a confusion of wharves and fills that competed for space on the much-desired coastline. Osgood Carlton's 1796 map<sup>5</sup> clearly shows how the Boston shoreline had moved forward.

South Battery was now replaced with Rowe's wharf and more of the Town Dock was filled up north of Faneuil Hall. King Street became State Street. Ropewalks had been relocated from Fort Hill to newly created land at the Foot of the Common

Abbott Lowell Cummings<sup>6</sup> best summarized the prevalent situation in his text for the Bostonian Society Proceedings – " That mythological and much exercised "visitor to Boston" had he wandered down to the city's waterfront at the beginning of the nineteenth century, would have seen a ragged collection of wharves of all sizes and shapes jostling for space along the crowded shoreline."

5 Kreiger et al, 189.

ε

<sup>&</sup>lt;sup>6</sup> Cummings, Abbott Lowell. Bostonian Society Proceedings (1962): The Beginnings of India Wharf. (Boston; 1962): 17.

# THE BEGINNING: 1800's

The turn of the century brought with it new trade (from Asia) and new technology (clipper ships) giving birth to a new generation of merchants whose shrewd business instincts were combined with ambitious schemes of civic improvements to make trade more efficient. They recognized the symbiotic relationship between sustenance of wealth through trade and the need for an improved civic and urban infrastructure. Once again this was to become the underlying current for radical urban change towards improvements and reinvention of Boston's antiquated urban form.

The physical solution sought was to again make more land by filling in large expanses of tidal flats that surrounded the peninsula. It remains interesting to explore where Bostonians acquired the concept of land making by landfill. Whether it came from the Dutch model of reclamation or from the traditional stonewall with fill dump process, it is very clear that Boston embarked upon massive land making projects during this time<sup>7</sup>.

The story of India Wharf applauds one such entrepreneurial vision of these new merchants and shows their role as quasi planners in implementing new improved development that brought Boston a fresh image, wealth and prosperity during that era. After the success of tearing down Mt. Whoredom<sup>8</sup> (later renamed Mt. Vernon) to create Charles Street and the Front Street

- 7 Kreiger et al, 119.
- Kreiger et al, 120.

improvements between 1803-1805, India Wharf was the most spectacular large-scale landfill project to modernize Boston's waterfront. It was begun in the flush years of the Jefferson's first administration and completed just before the embargo of 1807 impeded commercial architecture in New England.<sup>9</sup>

## THE BIRTH - 1800-1807

In 1805, on the premise of improvement in the area between Battery March Street and adjoining piers extending from Long Wharf to Rowe's Wharf, 5 sundry gentlemen by the names of Uriah Cotting, James Lloyd, Francis Cabot Lowell and Harrison Gray Ottis formed the "Broad Street Association<sup>10</sup>" (later incorporated as "The Proprietors of India Wharf in 1808".) The ambitious vision of the developers was to be given form by the expertise of architect Charles Bulfinch who had incidentally become bankrupt with the failure of his residential crescent development of Franklin Place. Bulfinch was apparently paid a sum of \$40 for his plans<sup>11</sup>. "How did they work together, this architect with his "purity of character and his "temperate philosophic turn" and these profit seeking developers with their instinct for their purse? Was Bulfinch more forceful than the architects of our day? Were Ottis and Cotting more civic minded than the rapacious developers who succeeded them."<sup>12</sup>

 <sup>&</sup>lt;sup>9</sup> Kirker, Harold. The Architecture of Charles Bulfinch (Cambridge: Havard University Press, 1969): 188.
<sup>10</sup> Whitehill, Walter Muir. Boston, a Topographical History (Cambridge: Havard University Press, 1963): 180.
<sup>11</sup> Kirker, 188.

<sup>12</sup> Holtz, Jane, Lost Boston. (New York: Mariner, 1963): 98 .

Bulfinch's scheme involved the creation of a uniform shoreline by filling in the flats around the older wharves<sup>13</sup>. He envisioned the creation of a single spacious wharf held out into the bay by two new streets (India and Broad Streets) that served as new thoroughfares for the city. Broad Street came out of a widened Battery March Street extended in a straight line to Milk Street and beyond while India Street was born out extending Milk Street on to the water edge leading to the wharf. India Street formed the commercial dockside connection from Long wharf to the newly conceived India wharf while Broad St. provided a residential thoroughfare almost parallel to it.

It was interesting to note that the construction of Broad Street and India Wharf projects were undertaken by 2 separate corporations whose directors were the same men<sup>14</sup>. As Rev. William Bentley<sup>15</sup> noted while on a visit to Boston in 1803- "The New Wharf near Battery March is begun." It is fairly evident from the text of Cummings that most of the construction contracts and specifications are well documented to a good amount of detail<sup>16</sup>. The intention of the developers was to very speedily complete the construction of the project in order to rake in the returns. There is sufficient evidence that quite a few of the stores had been already sold before the completion of the project. The speedy and enthusiastic process of construction was however slowed down in the summer of 1805 with concerns regarding the strength of the foundations. Cummings sites a surviving snippet found in the Francis Lowell documents as verification for the impedance.

15 Cummings, 19.

<sup>&</sup>lt;sup>13</sup> Cummings, 18. <sup>14</sup> Cummings, 18.

<sup>16</sup> Cummings, (photocopy of micro-text available).

"To the Proprietors of India Warfe

Gentleman (sic) we are of the Opinion that the Walls Under Your Stores are Not Sufficient to Support them. Yours Gentleman (sic)

> Nath Heath Daniel Hewes John Vinton Benajah Brigham"

Additional contracts were finally drawn out to take down and re do the work prior to resumption of construction in the spring of 1805. It was unfortunate that the contractors had to bear the entire expense of this exercise. The exact cost of the entire project is still unknown, however papers in the Massachusetts Historical Society reveal that the developers shared equally, a sum of \$206,000 resulting from the sale of the 30 stores<sup>17</sup>. Lubow<sup>18</sup> writes, " In 1807, Ottis reported that the gross income from the project was \$323,460, leaving a net profit of \$117,295." Given the financial risks involved in a project of this kind, the Proprietors of India Wharf made a fair profit in a short time span of this realized project.

#### THE MAGNIFICENCE: 1807-1850's

The handsome buildings of India wharf were completed and ready for occupancy by early 1807. It extended 425 feet into the bay with a width of 75 feet. Its brick façade (Flemish bond) was finely complimented with a slate roof, stone trimmings on the east end, marble trimmings on the ocean facing end and red sandstone trimmings on the other elevations. The base course was granite while the floor framing throughout was of hewed pine<sup>19</sup>. It boasted of a long tier of buildings five stories high that ran from the south Battery, in a southeast direction towards the channel. People walked on a well laid out cobbled stone paved surface as they admired the magnificence of the 32 stores what stood for the new commercial image of Boston and its

<sup>&</sup>lt;sup>17</sup> Kirker, 190.

 <sup>&</sup>lt;sup>18</sup> Wright, Conrad Edick and Viens, Katheryn P. Entrepreneurs – The Boston Business Community 1700-1850. (Boston: Northeastern University Press, 1997): 199.
<sup>19</sup> Kirker, 191.

improved waterfront. Broad Street was completed a few years later and was chiefly occupied by as stores and warehouses constructed in uniform elegant style. India Street was subsequently completed. The principal cross street (Custom – House Street) that intersected India and Broad Streets became the location of the new Custom House that was also built by Cotting.

India Wharf had turned out to be Bulfinch's most ambitious commercial project till date. He had truly transformed the face of Boston with his elegant and powerful architectural work. Robert Campbell<sup>20</sup> critically examines Bulfinch's architecture of India wharf in his book - " There is play – a little ironic? – With the motif of round arches in this basically square cut, no nonsense commercial building, for instance in the astonishing thrust of a chimney through the arch at the high front gable, or placement of arched windows inside other arches at the second floor." According to Harold Kirker, "Architecturally the Wharf recalls Bulfinch's earlier work; the central bay with its pedimented and pilastered pavilion through which an arched passageway was cut suggests the Toutine crescent; the recessed arches in the eastern end of the block – which survived until 1962 – are reminiscent of much of the domestic building on Beacon Hill."<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> Cambell, Robert and Vanderwather, Peter. Cityscopes of Boston: An American City Through Time (New York: Houghton Mifflin Company, 1992): 29.

<sup>21</sup> Kirker, 191.

With respect to planning, India wharf was also an urban "place-making" success. The proximity of Faneuil Hall and State Street (formerly King Street) and the thriving businesses of the wharf kept this area alive and full of citizen activity for the first half of the nineteenth century. India wharf was also possibly the largest private sector cooperative commercial development project in the States at that time. The waterfront had a new look, the district was revitalized and the city was at the pinnacle of its international sea trade with a new improved image.

There are a series of quotes that aptly describe the public opinion about the glory of the wharf during that time.

"I reconnoitered the town which I found surprisingly improved, particularly about Broad Street and India Wharf which displays the handsomest show of warehouses I ever beheld..."<sup>23</sup>

"An address on Bulfinch designed India wharf was currency around the world."22

"The completion of this undertaking, unparalleled in commercial history, is a proof of enterprise, the wealth and the persevering Industry of Bostonians."<sup>24</sup>

For the next 50 years India wharf was the headquarters of trade with the Orient and many valuable cargoes from Calcutta, Canton, Russia and the Mediterranean ports were discharged here. Other significant developments in this era included the construction of Central Wharf (3<sup>rd</sup> deepwater wharf) between India and Long wharves as seen in Annin and Smith's 1826 map. The old town dock was now completely filled in to make land for Quincy market. The Mill Pond had almost been filled in and the entire Back Bay of the Charles River had been cut off by a dam built on the line of present Beacon Street to produce power for tide mills. There were other areas that were also filled in by private developers. After completing many large-scale urban projects, Uriah Cotting had become bankrupt and died of consumption in 1819.<sup>25</sup>

<sup>&</sup>lt;sup>22</sup> Holtz, 100.

<sup>&</sup>lt;sup>23</sup> Quote by Samuel Breck in Stanley, Ramond W. Mr. Bulfinch's Boston (Boston: Old-Colony Trust Company, 1963): 42.

 <sup>&</sup>lt;sup>24</sup> Quote by Shubael Bell in Freeman, David. Boston Architecture B.S.A. (Cambridge: MIT Press, 1971): 69.
<sup>25</sup> Whitehill, 80.

## THE DECAY AND DECLINE: 1855-1880's

Towards the end of the 1850's, Boston had once again exhausted the physical means to cope with new urban forces of changing technology, capacity and trade. There was a sharp rise in population from 93,383 to 136,881 (increase of 46.6%) with the coming of the Irish immigrants who were fleeing the potato famine in Ireland<sup>26</sup>. The Mill Dam project was not successful as it not only failed to provide adequate power for the mills but also prevented sewage, which drained into the receiving basin from surrounding areas, from being carried off by the tide.<sup>26</sup> Extending out the wharves had considerably reduced the size of the harbor. The larger new steamships could not longer dock on the narrow waterfront and docks were being filled in once again. In effect, history of the latter end of the 18<sup>th</sup> century was repeating itself and compelling the citizens of Boston to once again devise a plan to cope with the urban challenges.

The invention of the steam engine locomotive was an important development that had prompted a shift in trade and commerce throughout America. "Prewar shipping had not involved railroads to any significant extent, while postwar shipping was very largely dependant on them.<sup>27</sup> As major shipping activities moved to the railroad terminals of East and South Boston, the once glorious wharves of the central waterfront of Boston faced decay and decline.

- 26 Kreiger et al, 124
- 27 Bunting, 48.

India wharf suffered its fate accordingly. To make matters worse, for the wharves in that area, there was talk of connecting the North and South end depots by a rail connection for the transport of shipping freight as Boston was steadily loosing its sea commerce to New York due to the same reason. The immediate casualties would be the decaying wharves to which there was little of no resistance. Atlantic Avenue was hence born in 1869. The dirt from tearing down the nearby Fort hill provided the fill needed for construction.

"....early 1870's Atlantic Avenue was constructed right across these docks and wharves, drastically truncating them and slicing the wharf buildings in two in order to lay a railroad track – a vivid demonstration of decreasing importance of the central waterfront and the rising ascendancy of railroads over ships".<sup>28</sup> India and Central wharves were hence sliced to connect Broad Street to Commercial Street across the harbor. The truncated part of India wharf was

28 Kreiger, 127.

retained reducing it to a faded memory of past glory. The intended railroad on Atlantic Avenue never materialized and the remainder of India wharf was indefinitely exiled into desolation.

# A STIRRING RESURGENCE: 1960's

Following the invention of Atlantic Avenue, most of the property of India wharf had been sold off in smaller parcels. Due to market forced subdivisions and poor maintenance real estate values in the area were at a record low. With the radical shift in industry towards the railroad and aviation in the future, the old and tired wharves of the central waterfront had become the unused back end of the city.

The new force that would command the cityscape in the twentieth century was the automobile. Huge federal investments were being made on interstate and intra-city highways, which were seen as the vitalizing tools to jump-start Boston's declining economy. There was definitely some equity provided in terms of real estate by these urban devices that would reach most corners of the city. The first transit in the U.S. had been introduced in 1909 and was expanding its network fairly rapidly. The downtown was steadily developing and there were new possibilities of growth vertically with the invention of the elevator. New York had already begun to follow this model of growth and re-densification. This was also the era of formalized planning. The BRA had been formed with Ed Logue advocating his comprehensive planning for a more desirable Boston. Neighborhoods were being identified and plans for urban renewal were being churned out by the day. This had certain important implications for India Wharf. The site was included in a Federal urban renewal project and a deal was worked out with Premier constructions Inc. In a time of

٩.,

progressive renewal (early 20<sup>th</sup> century), historical preservation was given little or no thought. Eminent domain and clearance was the new power wielded by the government. By 1962 the remnants of Bulfinch's structures were cleared for development under the renewal plan. There were numerous plans laid out for the redundant site primarily in the form of residential developments.

In 1971, a young architect by the name of I.M. Pei was appointed as the design consultant to execute the Harbor Towers development on India Wharf. His proposal, although it sat on the waters edge, seemed more intrigued by the sky. This residential 42-storey cast in place concrete apartment block boasted of dramatic views out to the sea. The development also paid its respects to the automobile with a 4-storey parking lot that sat beside it.

A new scale was introduced to the waterfront and the area was "revitalized" in comparison to the previous desolation of the wharves. It may have been valid to think so at the time as Harbor Towers was certainly an improvement to the prior conditions of the site. Concurrently, the BRA had acquired the neighboring Rowe's wharf property as a part of the downtown Urban Renewal Plan. By the 1980's this site was developed into a mixed use residential and office space by the Rowe's Wharf Associates and its architects – Skidmore, Owings and Merrill. This development today forms a proud picture postcard of Boston.

# PRESENT DAY BOSTON

Today, India wharf is the home of the twin Harbor Towers and its 4-storey parking lot. This private enclave of luxury condominiums sits on prime real estate with 3 bedroom apartments costing almost \$2,000,000.<sup>29</sup> The bland, brutalist, exposed concrete monoliths (reminiscent of 70's architecture) stand tall completely ignorant of their interface at ground level. Their disconnection from their immediate surroundings is further compounded by the private hold of the property. This has aroused fierce public debates in the Boston community. The notions of the waterfront have now evolved into a public domain that forms a recreational resource for the entire city. A lot of public use buildings (Aquarium, Museum, hotels etc.) have been thus placed on the waterfront to encourage such activity. The Harbor towers stand out as a sore thumb and a major planning issue for Boston today. Although reinvented, yet again India wharf has gone into a state of redundancy in activity and use that it once commanded over the area.

<sup>&</sup>lt;sup>29</sup> Boston Harbor Towers. "Boston Harbor Towers," Real estate, www.bostonharbortowers.com (7 October, 2003).

# CONCLUSIONS

It seems apparent from this study that, from its early years Boston has aggressively created new land for commerce and living spaces. From the 1700's wharves to filling of the Mill Pond and now the Big Dig, Boston continues to move forward with ambitious large-scale public works projects. A dynamic urban equation between market, trade, technology changes, real estate developers and architects has always existed that seemed to direct Boston towards its present urban form.

India Wharf is one of the best examples of evolution in the biography of Boston. Its influence can be mapped physically to its site & surroundings and also as a model, repeated throughout history. The credibility won by the success of India wharf was the currency for many ambitious projects like the Mül Pond and the turnpike. It helped that the developer of most of these projects was the same man – Uriah Cotting. Commercial Street was an attempt in the North end to continue the success of India wharf. Business families like the Amorys, Perkins and Higginsons that occupied India wharf were responsible for the financing of landmarks like the Custom House and India Square.<sup>30</sup> India Wharf was not only an image to the outside world but an embedded part of every Bostonian in that era. Strangely, this can be seen repeated in the 1980's in Rowe's wharf, which has become a symbol for Boston and its waterfront. It is also

<sup>&</sup>lt;sup>30</sup> Kirker, 188.

ironic that the architects (SOM) were inspired by Bulfinch's design elements and traditional wharf structures in their rendering of Rowe's wharf. It is unfortunate that few Bostonians know the story of India wharf, which is no longer a public place, or in public memory.

## RECOMMENDATIONS AND VISIONS FOR THE FUTURE

Impetus to create or modify on India wharf always lay outside the immediate site. Almost always it originated in Boston's downtown or business district. It was the need for better trade facilities that created the wharf, the expansion of downtown onto Fort hill that destroyed it and the urban renewal to revitalize downtown in the 1960's that spurred new development. Tomorrow can be read in downtown's intentions today. Today, it is the real estate markets that will dictate the course of India wharf. The Central artery project that is currently underway will play a key role in the transformation. The Harbor Park and the Kennedy Rose projects when implemented will challenge the present land use of the site. The return of the wharf to public domain is inevitable as it shall no longer be profitable to retain space for private commune alone. I foresee a more a vibrant and mixed land use for the area. There is already significant pedestrian activity on the central waterfront. The proposed Boston horticultural arboretum and landscaped Central Park will generate a market for various uses like entertainment, food and retail. India wharf needs to lend itself to providing a contiguous and consolidated waterfront. A more human scale approach in the treatment of surfaces and response to the waterfront context is essential to the integration of the project. Milk and Canal Streets (once blocked by the elevated Central Artery) have the potential to pull pedestrians to the coastline from the inner city.

The imposing scale of the Harbor Towers needs to be broken to encourage public activity. More greenery and a richer palate of materials, texture and color would also enhance the waterfront experience. Water transit could also play a role in tying up the central waterfront together maintaining a linearity of movement with the water's edge. This kind of development is certainly not new to us. In most port cities today, there is a growing consciousness to reclaim the once industrial water edge for recreational and public activity. I think that the wharves are an excellent resource that Boston can call upon to vitalize its waterfront. The city needs to take initiatives to get explicit public access rights all along the edge. Public-Private partnerships can give form to this civic vision of creating a citywide resource. We saw in the past that real estate developers like Cotting in the 1800's realized the potential of India Wharf, campaigned politically and built speedily to rake in the profits. The same potential exists today; it is just that the notion of the waterfront has evolved from trade to recreation. Each wharf can play a distinct role in this new evolution. As architects, urban designers, planners and developers it remains our job to restore the lost glory of these wharves by transforming them into viable and enjoyable public spaces that can once again be the image of a vibrant and prosperous Boston.

F

#### BILBLIOGRAPHY

Bergen, Phillip. Old Boston in Early Photographs (New York: Dover Publications, 1990)

Boston Harbor Towers. "Boston Harbor Towers," <u>Real estate, www.bostonharbortowers.com (</u>7 October, 2003)

Bunting, W.H. Portrait of a Port: Boston, 1852-1914 (Cambridge: Belknap Press of Harvard, 1994)

Cambell, Robert and Vanderwather, Peter. Cityscapes of Boston: An American City Through Time (New York: Houghton Mifflin Company, 1992)

Cummings, Abbott Lowell. Bostonian Society Proceedings (1962): The Beginnings of India Wharf. (Boston; 1962)

Curtis, G.C. A Description of the Topographical Model of Metropolitan Boston (Boston: Wright and Potter, 1900)

Freeman, David. Boston Architecture B.S.A. (Cambridge: MIT Press, 1971)

Holtz, Jane. Lost Boston. (New York: Mariner, 1963)

Kreiger, Alex and Cobb, David and Turner, Amy. (ed.) Mapping Boston. (Cambridge, USA: MIT Press, 1999)

Kennedy, Lawrence W. *Planning the city upon a hill: Boston since 1630* (Boston: University of Massachusetts press, 1992)

Kirker, Harold. The Architecture of Charles Bulfinch (Cambridge: Havard University Press, 1969)

McNulty, Elizabeth. Boston Then and Now (Thunder Bay Press, 1999)

Stanley, Ramond W. Mr. Bulfinch's Boston (Boston: Old Colony Trust Company, 1963)

Whitehill, Walter Muir. Boston, a Topographical History (Cambridge: Havard University Press, 1963)

Wright, Conrad Edick and Viens, Katheryn P. Entrepreneurs – The Boston Business Community 1700-1850. (Boston: Northeastern University Press, 1997)

# REPORTS

Harbor Park: Interim Design Standards for the Inner Harbor – City of Boston and the Boston Redevelopment Authority.

Municipal Harbor Plan - Central Boston Waterfront District, July 2000.

*The Downtown Waterfront – Faneuil Hall Renewal Plan –* Kevin Lynch and the Greater Boston Chamber of Commerce.

# FIGURES

Figure 1:	http://www.tax.org/Museum/images/boston.jpg
Figure 2:	http://www.fsguns.com/images/Boston.jpg
Figure 3 & 4:	Bonner, John. The Town of Boston in New England (Boston, 1722) – Krieger et. al.: 175
Figure 5:	http://www.evisum.com/gallery/bostontea.jpg
Figure 6:	http://www.masshist.org/bh/0120attackonbunkerhill_lg.jpg
Figure 7:	Carlton, Osgood. A Plan of Boston from actual Survey (Boston, 1796) - Kreiger et. al.: 189
Figure 8:	http://www.hawthorneinsalem.org/images/image.php?name=MMD211
Figure 9:	Carlton, Osgood. A Plan of Boston from actual Survey (Boston, 1796) - Kreiger et. al.: 189
Figure 10:	Stanley, Ramond W. Mr. Bulfinch's Boston (Boston: Old Colony Trust Company, 1963)
Figure 11:	Hales, John G. Map of Boston in the State of Massachusetts (Boston, 1814) - Kreiger et. al.: 191
Figure 12:	Kirker, Harold. The Architecture of Charles Bulfinch (Cambridge: Havard University Press, 1969)
Figure 13:	World Wide Web
Figure 14:	Holtz, Jane. Lost Boston. (New York: Mariner, 1963) 98-99

- Figure 15: Annin, William B. and Smith, George G. Plan of Boston Comprising a Part of Charlestown and Cambridgeport (Boston, 1826) Kreiger et. al.: 193
- Figure 16: Kreiger et. al.: 124
- Figure 17: Kreiger et. al.: 129
- Figure 18: Kreiger et. al.: 130
- Figure 19: McNulty, Elizabeth. Boston Then and Now (Thunder Bay Press, 1999) 32
- Figure 20: Cambell, Robert and Vanderwather, Peter. Cityscapes of Boston: An American City Through Time (New York: Houghton Mifflin Company, 1992) 22-23
- Figure 21: World Wide Web
- Figure 22: World Wide Web
- Figure 23: http://www.bostonharborsailing.com/images/bhcover.jpg
- Figure 24: World Wide Web

Figures 25, 26, 27, and 28: www.chankrieger.com/frames/ projects/ud/ca/ca.htm