The Problem (...what is)

The goal of this project is to design a mid-rise, mixed-use urban infill building. This problem prompts a question: if the former role of architect as master builder is unlikely to emerge again, and the current role of architect as secondary to the contractor and client is responsible for the current, dismal state of building, then what options are left for architects? This has been a question that many have avoided due to the over-arching implications it may have in the architectural profession, because for as long as architects have existed, they have served a client. The only viable option left to restore architects to a place of prominence in the building community and to ensure a better built environment is for the architect to become the client. Such an incongruous suggestion causes many architects to become uneasy, just as any idea that will upset the status quo will be resisted with contempt. John Portman was practically run out of the AIA for doing this very thing decades ago. While things have become far easier in recent decades, a stigma still exists in the architectural profession about architects serving as developers. In reality, nothing is going to stop properties from being developed, the issue is with who is developing the properties. Jonathan Barnett notes, “Although the real estate industry is the major force shaping our surroundings, it has done little to recognize its responsibility to the environment. With some honorable and infrequent exceptions, developers have been selling the public a very inferior product.”

Disconnection
The art of architecture and the practical necessities of real estate are not necessarily antagonistic.

-Jonathan Barnett

In order to combat this destructive slide into a mediocre built environment, architects must find a new outlet for their subversive talents. Barnett notes, “The art of architecture and the practical necessities of real estate are not necessarily antagonistic.” Barnett begins to uncover the need for a hybrid role to fill the aforementioned void. One possible small step to take towards a solution to this problem could be through a mixed-use development I propose in Boston, Massachusetts. This development project will not only look into producing a beautiful, sustainable and socially-responsible building, but also demonstrate that these concerns are not mutually exclusive from good business and the “practical necessities of real estate” that Barnett noted. The goal is not to produce a design that can solve all of the problems mentioned earlier, but to demonstrate the viability of a system than can have widespread impact.
Site Context

The goal of this project is to design a mid-rise, mixed-use urban infill building. This problem prompts a question: if the former role of architect as master builder is unlikely to emerge again, and the current role of architect as secondary to the contractor and client is responsible for the current, dismal state of building, then what options are left for architects? This has been a question that many have avoided due to the overarching implications it may have in the architectural profession, because for as long as architects have existed, they have served a client. The only viable option left to restore architects to a place of prominence in the building community and to ensure a better built environment is for the architect to become the client. Such an incongruous suggestion causes many architects to become uneasy, just as any idea that will upset the status quo will be received with contempt. John Portman was practically run out of the AIA for doing this very thing decades ago. While things have become far easier in recent decades, a stigma still exists in the architectural profession about architects serving as developers. In reality, nothing is going to stop properties from being developed, the issue is with who is developing the properties. Jonathan Barnett notes, “Although the real estate industry is the major force shaping our surroundings, it has done little to recognize its responsibility to the environment. With some honorable and infrequent exceptions, developers have been selling the public a very inferior product.”
Subtract for Bulfinch
Open up for Cafe
Maximum Volume
Carve Out Entry
Differentiate Program
Allow Views Through
Minimize Shadows
Maximize Outdoor Space
Express Floorplates
Create Balconies
Screen Facades
Views Through Screen

Massing

112 BROAD STREET
In order to combat this destructive slide into a mediocre built environment, architects must find a new outlet for their subversive talents. Barnett notes, “The art of architecture and the practical necessities of real estate are not necessarily antagonistic.” Barnett begins to uncover the need for a hybrid role to fill the aforementioned void. One possible small step to take towards a solution to this problem could be through a mixed-use development I propose in Boston, Massachusetts. This development project will not only look into producing a beautiful, sustainable and socially-responsible building, but also demonstrate that these concerns are not mutually exclusive from good business and the “practical necessities of real estate” that Barnett noted. The goal is not to produce a design that can solve all of the problems mentioned earlier, but to demonstrate the viability of a system than can have widespread impact.
### Condominium Sales Price in Financial District

<table>
<thead>
<tr>
<th>Address</th>
<th>Asking Price</th>
<th>Square Footage</th>
<th>$/square ft</th>
<th>Condo Fee</th>
<th>Distance From Site (miles)</th>
<th>Floor</th>
<th>Bedroom #</th>
<th>Bathroom #</th>
<th>Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 Broad Street</td>
<td>$519,000.00</td>
<td>$990</td>
<td>$682.00</td>
<td>$490/mo</td>
<td>0.05</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Loft Rental Prices in Financial District

<table>
<thead>
<tr>
<th>Address</th>
<th>Asking Price</th>
<th>Square Footage</th>
<th>$/square ft</th>
<th>Security Fee</th>
<th>Distance From Site (miles)</th>
<th>Floor</th>
<th>Bedroom #</th>
<th>Bathroom #</th>
<th>Parking Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>45 Province St</td>
<td>$7,500.00</td>
<td>$1,107</td>
<td>$4.00</td>
<td>$8,000.00</td>
<td>0.7</td>
<td>23</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>117 Milk St. #5A</td>
<td>$1,800.00</td>
<td>$990</td>
<td>$2.00</td>
<td>$1,800.00</td>
<td>0.2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>126 State St</td>
<td>$2,575.00</td>
<td>$900</td>
<td>$2.00</td>
<td>$2,575.00</td>
<td>0.2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Financial District Statistics

**Median Household Income**: $149,900.00  
**Median Rent**: $2,645.00  
**Median Age**: 22.2  
**Average Household Size**: 1.6  
**Average Value of Housing Unit 5-or-more-unit Structure (92.3% of all units)**: $691,143.00  

**Proposed 112 Broad St**  
**Existing 112 Broad St**

<table>
<thead>
<tr>
<th># of Floors</th>
<th>Land Value (FY2012)</th>
<th>Building Value</th>
<th>Probable Asking Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>$904,300.00</td>
<td>$1,870,900.00</td>
<td>$2,780,000.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FY2012 Tax Rates (per thousand)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
</tr>
<tr>
<td>Commercial</td>
</tr>
</tbody>
</table>
Greenway Guidelines

1. The Wharf Street sites should align in height with the adjacent buildings, approximately 130'. Existing Town Cove architectural features including cornice lines should be complemented by new development.

2. The built front edge of these parcels should extend to the property line.

Programmatic Goals

1. Visual and physical access to Wharf Street, Franklin Street and Well Street should be maintained. These small streets are integral to the character of Town Cove and provide multiple venues for pedestrians to "discover" the Greenway. The area between the two buildings would benefit from a café or other use capable of animating the park edge.

2. The over-sized sidewalk in front of the Grain Exchange could provide area for an outdoor café, public art, or similar program to enliven what for years was the back door of this important building.

3. While the edges of these wharf structures have been restored and in one case are partially occupied by balconies, further activation at the ground level is possible.

Connectivity

1. Broad Street, the first Crossroad to be reconstructed, anchors the southern portion of Town Cove with a rich array of restaurants, shops and diverse uses. Development at 112 Broad Street and the adjacent parcels should provide a bridge from these uses to the activity on the parks.

2. As a major Crossroad, State Street provides a rare moment of direct visual connection between the Financial District and the water. There are already significant retail uses on the northeast corner of this intersection. To the extent that reciprocal active uses can be created on the southeast corner without undermining the historical character of the existing wharf building, these would help frame State Street as the "gateway" to Downtown.

3. Small scale streets are an integral part of the unique character of Town Cove. New development should retain and enhance these connections.
A Modular Solution

In order to combat this destructive slide into a mediocre built environment, architects must find a new outlet for their subversive talents. Barnett notes, “The art of architecture and the practical necessities of real estate are not necessarily antagonistic.” Barnett begins to uncover the need for a hybrid role to fill the aforementioned void. One possible small step to take towards a solution to this problem could be through a mixed-use development I propose in Boston, Massachusetts. This development will not only produce a beautiful, sustainable and socially-responsible building but also demonstrate that the “practical necessities of real estate” that Barnett noted do not need to produce a beautiful, sustainable and socially-responsible building. The goal is not to produce a design that can solve all of the problems mentioned earlier, but to demonstrate the viability of a system than can have widespread impact.
## Pro Forma

### Development Pro Forma

**Project Summary**

- **Debt-to-Equity Ratio**: 60/40

### Project Cost

- **Total Construction Cost**: $17,392,222.00
- **Percentage of Debt**: 0.6
- **Land Cost**: $2,500,000.00
- **Percentage of Equity**: 0.4
- **Fees**: $870,000.00
- **Construction Interest**: $1,121,160.00

### Total Project

- **Total Project Cost**: $21,883,382.00

### Unit Economics

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>No of Units</th>
<th>Avg sq ft</th>
<th>Construction Cost</th>
<th>Sale Price</th>
<th>Sale Price Total Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Bedrooms</td>
<td>8</td>
<td>1,604</td>
<td>$128,000</td>
<td>$65.00</td>
<td>$104,260</td>
</tr>
<tr>
<td>1 Bedroom</td>
<td>8</td>
<td>1,247</td>
<td>$128,000</td>
<td>$65.00</td>
<td>$81,055</td>
</tr>
<tr>
<td>Penthouse</td>
<td>1</td>
<td>2,851</td>
<td>$128,000</td>
<td>$65.00</td>
<td>$185,315</td>
</tr>
</tbody>
</table>

### Construction Loan

- **Total Construction Loan**: $13,130,029
- **Construction Loan Interest Rate**: 9%

### Units Sold

- **Total Units Sold**: 0

### Total Financing

- **Total Financing**: $21,883,382

### Retail Economics

<table>
<thead>
<tr>
<th>Retail</th>
<th>No of Units</th>
<th>Total sq. ft</th>
<th>Construction Cost</th>
<th>Rental US$/sq ft</th>
<th>Rental US$/unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Café</td>
<td>1</td>
<td>1,223</td>
<td>$128,000</td>
<td>$25.00</td>
<td>$31,825</td>
</tr>
<tr>
<td>Rooftop Bar</td>
<td>1</td>
<td>6617</td>
<td>$128,000</td>
<td>$25.00</td>
<td>$165,425</td>
</tr>
<tr>
<td>Office</td>
<td>1</td>
<td>1,032</td>
<td>$128,000</td>
<td>$25.00</td>
<td>$165,425</td>
</tr>
</tbody>
</table>

### Infrastructure

- **Internal Roads (mi)**: 14.5
- **Land Make Ready (s.f.)**: 400,000

### Legal/Permitting

- **Contingency**: $1,750,000.00

### Professional Fees

- **Insurance and Bonding**: $150,000
- **Surveying**: $10,000
- **Architect - Engineering**: $300,000
- **Environmental**: $50,000
- **Landscape Architect**: $50,000
- **Project Management**: $60,000
- **Legal on Land Purchase**: $60,000
- **Other**: $300,000

### Loan Fees

- **Closing Fee**: $225,000
- **Investment Banking Fee**: $500,000
- **Legal**: $100,000
- **Bank Appraisal/Administration**: $150,000

### Total

- **Total Professional Fees**: $870,000
- **Total Loan Fees**: $975,000