URBAN DESIGN CODE AS A TOOL OF CREATIVE CONSERVATION AND REVITALIZATION OF HISTORIC TOWNS – CASE OF FREMANTLE, WESTERN AUSTRALIA

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Sustainability of the historic city

Sustainability is about prolonging the useful life of a building (city) in order to contribute to a saving of energy, money and materials
(Sir Bernard Feilden)

Sustainability includes continuity of socio-economic and environmental functionality; continuity of use of the material resources and products in infrastructure and buildings that have already been extracted and manufactured; avoidance of unnecessary use of finite reserves of fossil fuels in the transportation of goods and people; and avoidance of all related waste and pollution. Embraced within these is respect for, and continuity of, cultural identity and diversity.

Sustainable communities are places where people want to live and work, now and in the future. They meet the diverse needs of existing and future residents, are sensitive to their environment, and contribute to the quality of life. They are safe and inclusive, well planned, built and run, and offer equality of opportunity and good services for all.
(Dennis Rodwell, 2007 “Conservation and Sustainability in Historic Cities”)
Area of potential increased density
- Sites with greatest development potential
- Can support the viability of adjacent precincts
- Mix of uses and horizontal ‘zoning’
Strategic sites

- Appropriate development of the key strategic sites and their related precincts provides the major opportunity for the city to achieve its Primary Centre aspirations.
The current spread of the planned high-density developments is driven largely and arbitrarily by the property market type and the motivating market-defined goals and origins. The developers include Fremantle Council, Fremantle Ports, State Government and private owners. The evident focus on the north area and river shoreline creates a disruption to the original urban structure. (Agnieszka Kiera)
Quality Development by Good Design

Older towns and cities have been created over time, usually organically, and they embrace different periods and architectural styles. The most attractive among them are the cities that developed culture of good urban design expressed in the agreement to differ within a recognised tolerance of behaviour” (Gordon Cullen, Townscape, 1961)

The origins of the concept of townscape are, likewise, unrelated to the wider socio-economic and town-planning context, but the analogy between good urban design and “the agreement to differ within a recognised tolerance of behaviour” is core component of the harmony, attractiveness and cohesiveness of historic cities.

The art of producing good architecture depends on the sponsors’ care about things around them and on the willingness and ability of their architects to nurture this care and translate it into the inspiring yet good manners architecture.

(Dennis Rodwell, 2007 “Conservation and Sustainability in Historic Cities)

Local Identity Code

The Local Identity Code is also about complex or “deep” sustainability, which is primarily about care. In relation to historic cities it means care taken of the ‘old’ by ‘new’. Deep sustainability involves two intertwined (hence complexity) components of sustainability: a survival of the natural environment that sustains life on earth and survival of culture in a much wider sense of embracing every aspect of the legacy of traditions of humankind.

In urban terms this kind of sustainability refers the society’s culture of organizing itself in cities built in harmony with nature. Complex or ‘deep’ sustainability is based on a dialogic as opposed to the customary evolutionary, paradigm. Dialogic sustainability refers to the balance i.e. ongoing ‘dialogue’ between its natural and man made components, between old and new. While evolutionary paradigm defines changes to the natural environment and cities through a sequence of developments, one after another, not necessarily connected by harmonious evolution or continuity of stories expressed in the urban form. (Dr Jacek Dominiczak, 2010)
This chapter includes a photographic catalogue which separates the following elements of the façade seams:

- Seams of façade heights
- Seams of pilasters and intermediate cornices above the ground floor
- Seams of top cornices
- Seams of entablatures
- Seams of bases
- Seams of eaves
- Details of seams
- Other seams

Seam of façades with no gap (or 0 cm gap)
Façades literally and visually touch each other, and, sometimes, partially overlap. See also chapter C.02, the Caps of Urban Walls.

Seam of façades and/or 0 cm gap
When a gap is filled with masonry, façades literally touch each other, yet visually may remain detached. Nevertheless, overlaps may occur. See also chapter C.02, the Caps of Urban Walls.

Seam of façades and/or 0.4 cm gap
When a gap is filled with masonry, façades literally touch each other, yet visually may remain detached. Nevertheless, overlaps may occur. See also chapter C.02, the Caps of Urban Walls.

Seam of façades and/or 6 cm gap
Seams of pilasters and intermediate cornices above the ground floor

Seam of façades and/or 10 cm gap
Seams of pilasters and intermediate cornices above the ground floor

Seam of façades and/or 24 cm gap
Seams of pilasters and intermediate cornices above the ground floor

0.03.01, seams as gaps
Learning from the prototype

The new City Centre boundary. This City boundary expands the area of the City Centre, merging into Goole's town centre to create a complementary urban form.

8.8.11: Recommended boundary of educational activity areas in the south of West Molesey.

The cases of recommended height and its deformation. On the basis of 12 recognized areas and their detailed characteristics, the Code recommends the following cases of height for urban walks:
The height of urban walls. The Code recommends the following height for urban walls:

<table>
<thead>
<tr>
<th>inland areas</th>
<th>recommended</th>
<th>accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>area 001</td>
<td>zone 1a - High St</td>
<td>15.5 m</td>
</tr>
<tr>
<td></td>
<td>zone 1b</td>
<td>12.5 m</td>
</tr>
<tr>
<td>area 002</td>
<td>zone 2</td>
<td>13.0 m</td>
</tr>
<tr>
<td></td>
<td>zone 3a</td>
<td>14.0 m</td>
</tr>
<tr>
<td>area 003</td>
<td>zone 3b</td>
<td>17.5 m</td>
</tr>
<tr>
<td>area 004</td>
<td>zone 4a - High St</td>
<td>15.5 m</td>
</tr>
<tr>
<td></td>
<td>zone 4b</td>
<td>10.5 m</td>
</tr>
<tr>
<td>area 005</td>
<td>zone 5a</td>
<td>6.3 m</td>
</tr>
<tr>
<td></td>
<td>zone 5b</td>
<td>outside the study area</td>
</tr>
<tr>
<td>area 006</td>
<td>zone 6</td>
<td>outside the study area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>waterfront: riverfront areas</th>
<th>recommended</th>
<th>accepted</th>
</tr>
</thead>
<tbody>
<tr>
<td>area 007</td>
<td>zone 1</td>
<td>8.0 m, gabled roof</td>
</tr>
<tr>
<td>area 008</td>
<td>zone 8</td>
<td>8.5 m</td>
</tr>
<tr>
<td>area 009</td>
<td>zone 9</td>
<td>8.0 m</td>
</tr>
<tr>
<td>area 010</td>
<td>zone 10a</td>
<td>9.0 m</td>
</tr>
<tr>
<td></td>
<td>zone 10b</td>
<td>west side of Marine Terrace: 10.0 m, gabled roof</td>
</tr>
<tr>
<td>area 011</td>
<td>zone 11a</td>
<td>9.0 m</td>
</tr>
<tr>
<td></td>
<td>zone 11b</td>
<td>west side of Marine Terrace: 10.0 m, gabled roof</td>
</tr>
<tr>
<td>area 012</td>
<td>zone 12</td>
<td>north bay shore of Fishing Boat Harbour: 7.5 m, gabled roof</td>
</tr>
</tbody>
</table>
Paddy Troy Mall Urban Block in the context of five Urban Areas. The West End Area 001 and East End Area 004 (violet and light green) with the axis of High Street, Area 002 (grass green), The Prison Area 005 (dark green), and the Area 010 (blue).

The buildings of Paddy Troy Mall Urban Block. In its N-E corner the vacant lot of Spicer Site. (Figure-ground drawing). Colour lines show the complex and overlapping geometries of their urban prototype.

Project by Malgorzata Zurowska, Joad Martis and Sergio Santos
The boundaries of Planning Area no. 1 under Local Planning Scheme (green) and the centre of Fremantle as defined by the Local Identity Code (red) (Dr Jacek Dominiczak). The 1830’s town grid was surveyed to fit the topography and this determined development of the port city equally balanced along three axes, two of each horizon determined by the shoreline. This in turn influenced the associated area’s distinct individual characters.
The boundaries of Planning Area no. 1 under Local Planning Scheme (green) and the centre of Fremantle as defined by the Local Identity Code (red) (local area downwards). The initial survey grid was superimposed on the topography and the 1830's town grid was surveyed to fit the topography and this determined development of the port city equally balanced along three axes, two of which had been determined by the shoreline. This in turn influenced the associated areas' distinct individual characters.