

Urban Design and Infrastructure

An Overview

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Municipal Urban Designers roundtable

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Urban Design and Infrastructure - Overview

1. Introduction – Urban Design and Public/Civic Infrastructure
2. Urban Design and Major Public Infrastructure
3. Urban Design and Community Education Infrastructure
4. Urban Design and Open Space, Culture and Recreation Infrastructure
5. Urban Design and Transportation Infrastructure
6. Urban Design and Utilities
7. Urban Design and Engineering Infrastructure
8. Urban Design and Sustainable/Green Community Infrastructure
9. Case Study: Mount Pleasant Village
10. Conclusions

2. Urban Design and Major Public Infrastructure

- Universities, Colleges, Hospitals, Justice/Courthouses, Government offices



3. Urban Design and Community Education Infrastructure

- Schools, libraries: The challenge of prototypes and programming, retrofit of existing schools



4. Urban Design and Open Space, Culture and Recreation Infrastructure

- Open space/Parks systems
- Recreation amenities
- Cultural amenities – performing arts, museums



5. Urban Design and Transportation Infrastructure

- Transit, active transportation: mobility hubs, transit system and structures
- Roads and streets



6. Urban Design and Utilities

- Energy, hydro, gas
- Communication infrastructure



7. Urban Design and Engineering Infrastructure

- Stormwater management: stormwater ponds, ditches
- Bridges, flood protection, water/riverfronts



Integrative Design: Complete Streets for Public Health and Sustainability

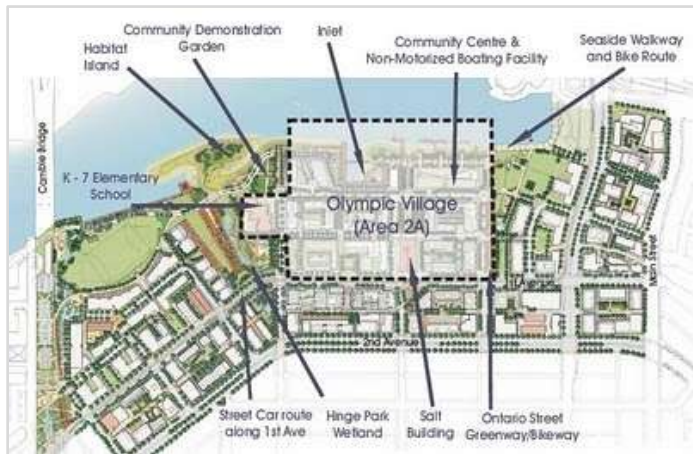


8. Urban Design and Sustainable/green Community Infrastructure

- Sustainability and public health issues, “green” infrastructure



Masdar City - Foster



8. Urban Design and Sustainable Community Infrastructure

Eco-Districts concept (from ULI)

- Energy – solar, geothermal, thermal
- Transportation
- Storm, sewer, water
- Amenities, social sustainability



Urban Land Institute

Sustainable/Green Infrastructure: Case Study

Sustainable Infrastructure

- Energy
- Storm Water
- Utilities
- Waste

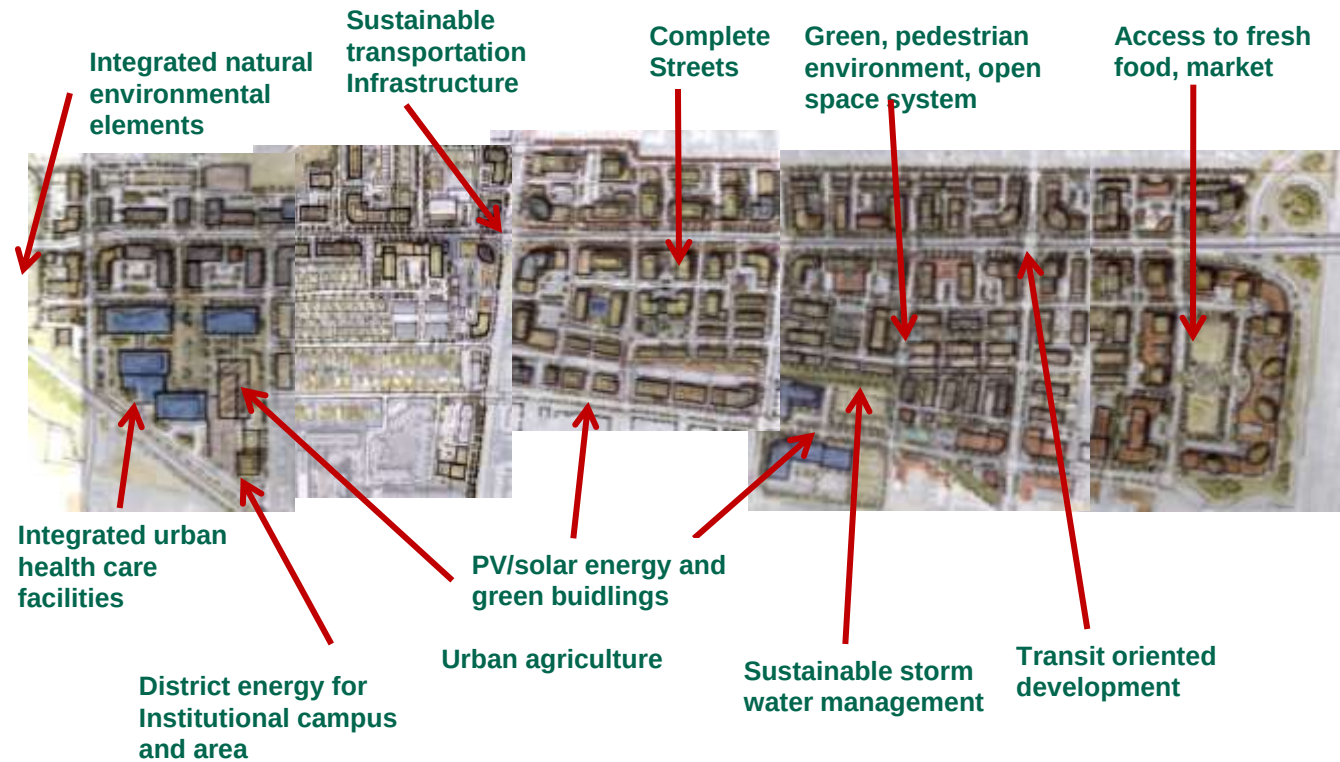
Green Development

- Green buildings, green roofs

Development for Public Health

- Active living, walkability, active transportation/ reduced car usage
 - clean air and water, noise reduction, safety
 - access to amenities
 - public realm for social and mental health

Queen Street East - Proposed Urban Design Concept Plan



9. Case Study:

Mount Pleasant Village Urban Transit Village, Brampton

1. City and Area Context

- Role and place of MPV in the city's structure
- MPV and the Mount Pleasant Secondary Plan

2. Neighbourhood Plan and Concept

- General layout and functional areas
- Central square, parkettes, streets

3. Built Form, Character and Identity

- Mixed use and residential
- Cultural amenities

4. Urban Design and Civic Infrastructure

- Community Centre/Library/School
- Transit infrastructure, streetscape

5. Innovation: Sustainability, Liveability and Public Health

- TOD, walkability, ADS

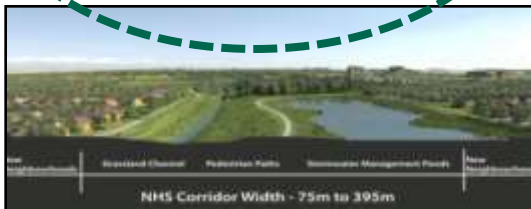
6. Innovation : Delivery Process

- P3 delivery, funding, planning and development process

Mount Pleasant Community, Mount Pleasant Village

1. City and Area Context

Role and place in the city's structure; MPV and the Mount Pleasant Secondary Plan

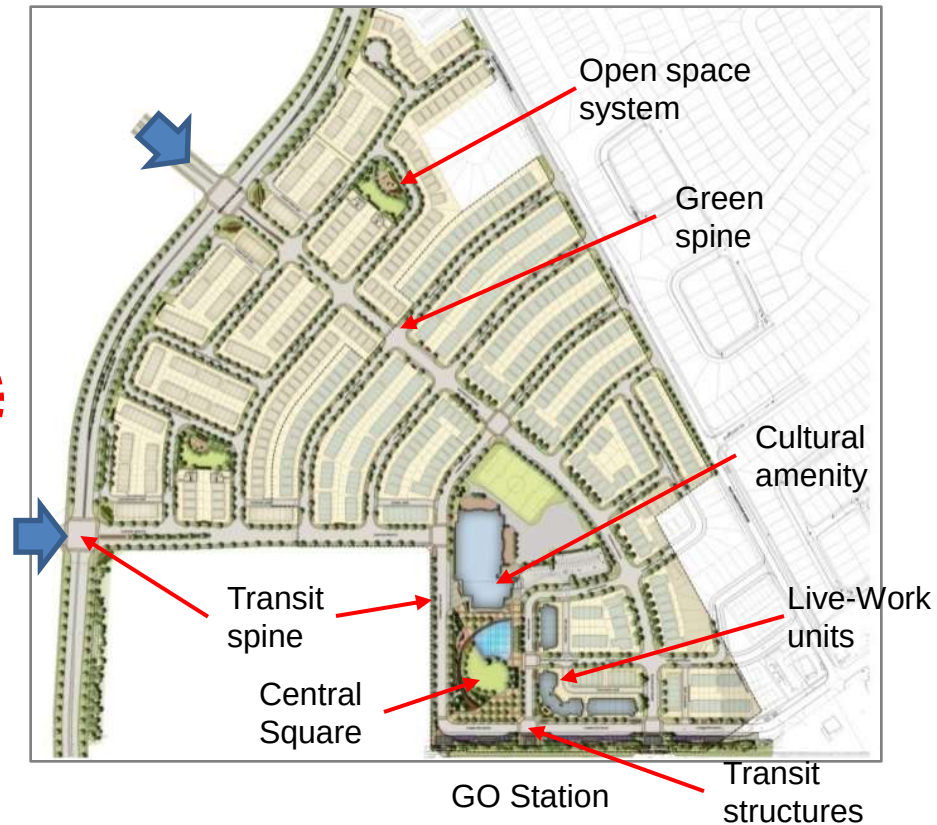


Mount Pleasant Village

2. Neighbourhood Plan and Concept General layout and functional areas



Aerial views – courtesy Mattamy Homes



Mount Pleasant Village

3. Built Form, Character and Identity

- Mixed use and residential
- Cultural amenity space



Mount Pleasant Village

4. Urban Design and Public Infrastructure:

- Cultural amenity space: library, community centre (former CPR train station), public school



Mount Pleasant Village

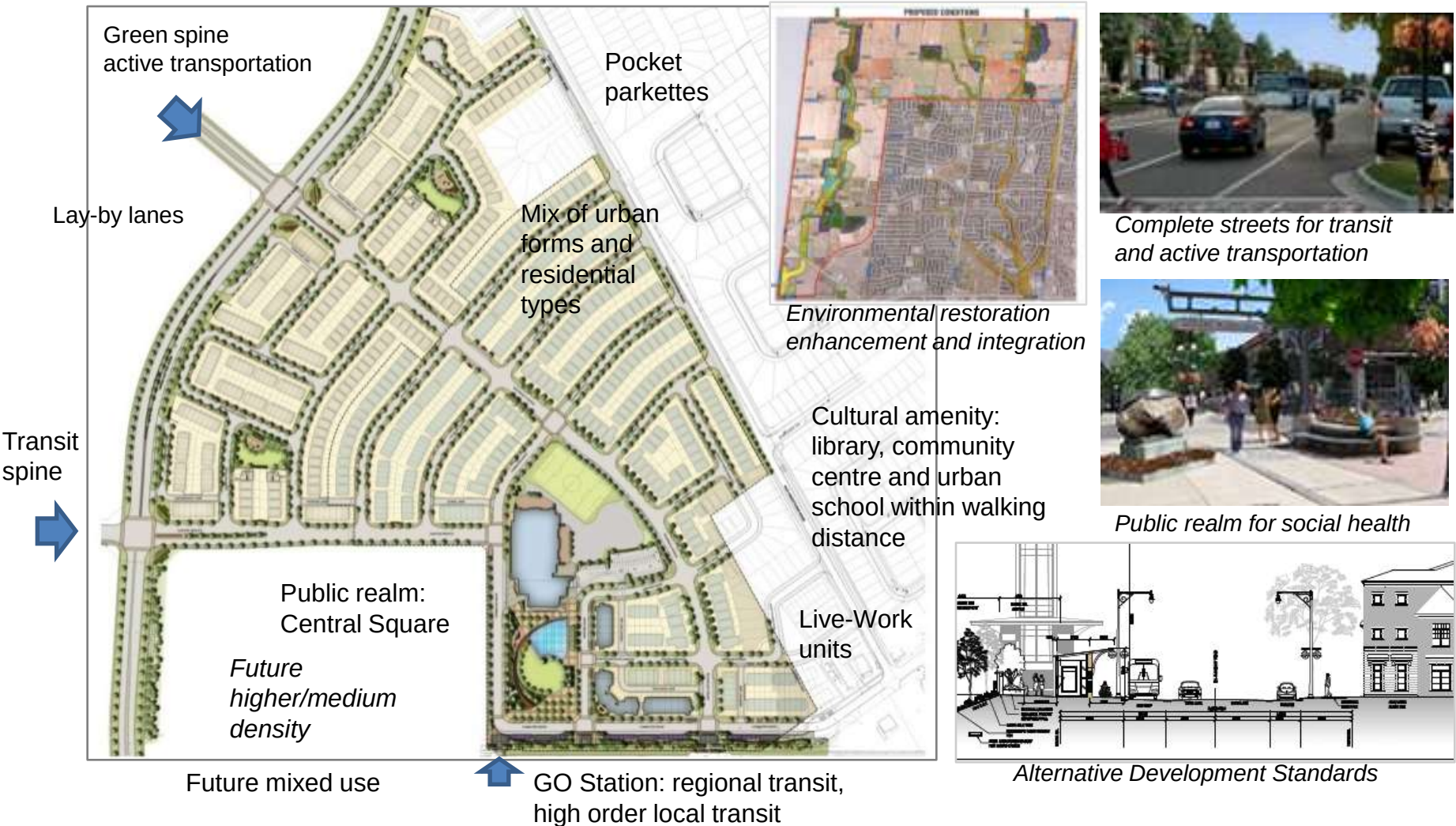
5. Urban Design and Public Infrastructure: Transit infrastructure, streetscape, public art



Mount Pleasant Village

6. Innovation: Sustainability, Liveability and Public Health

- TSD/TOD/active transportation, walkability, public realm, ADS



Mount Pleasant Village

6. Innovation – Delivery Process

- Innovative partnership between the City of Brampton, the developer (Mattamy Homes), Peel District School Board , Library Board
- Funding coming from the Federal Action Plan and provincial government (transit, cultural amenity, square), City (cultural amenity/library) and School Board
- Fast tracking delivery with very limited timelines and strong organization, dedicated resources, frequent team meetings and tight coordination
- Innovative planning and approval process with Block Plan, detailed guidelines, design review, alternative development standards (ADS)

