ICSC European Retail Property School

Design Principles and Practices

July 2014

Berlin, Germany

Lecturers

Madeleine Gravell, CRX, CDP
GRAMACO
Stockholm, Sweden

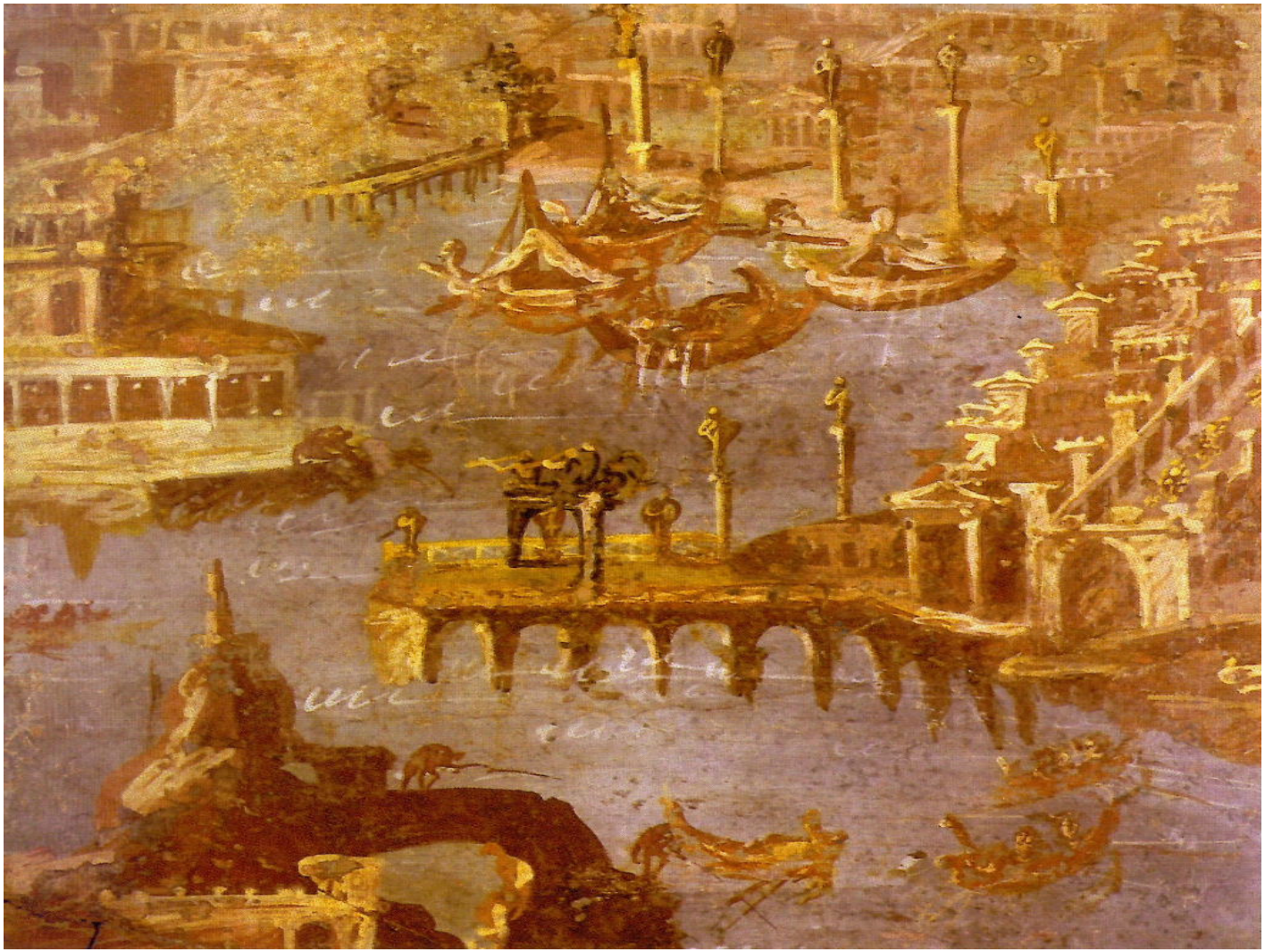
Agenda

- Shopping Environments – History, Types, Planning and Design
- Role and Responsibility of Designer / Architect
- Design Phases and Deliverables
- Design Guidelines
- Shopping Centers Design Trends

Shopping Environments

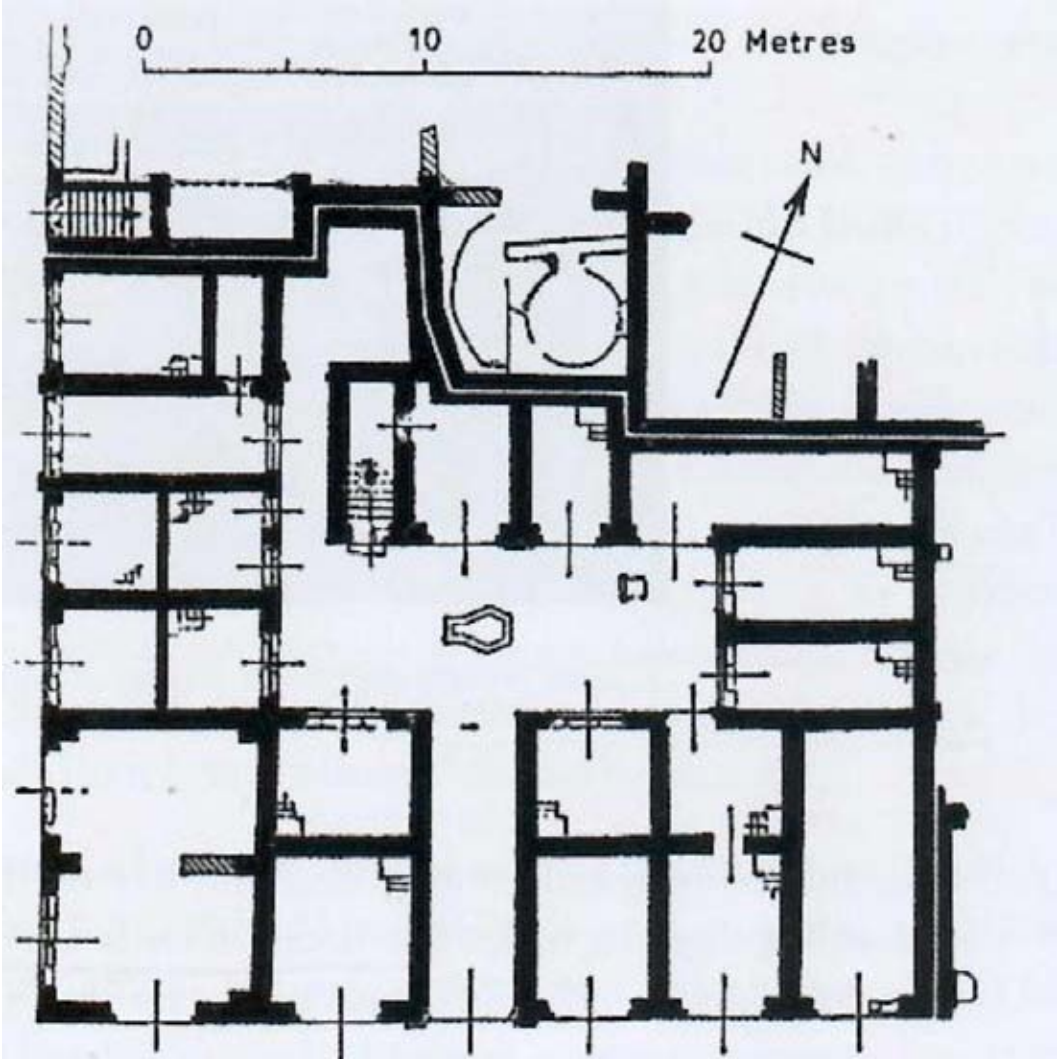
History, Types, Planning and Design

Santorini
2000 B.C.



Harbour of Pompeii
200 B.C.

Ostia
200 B.C.



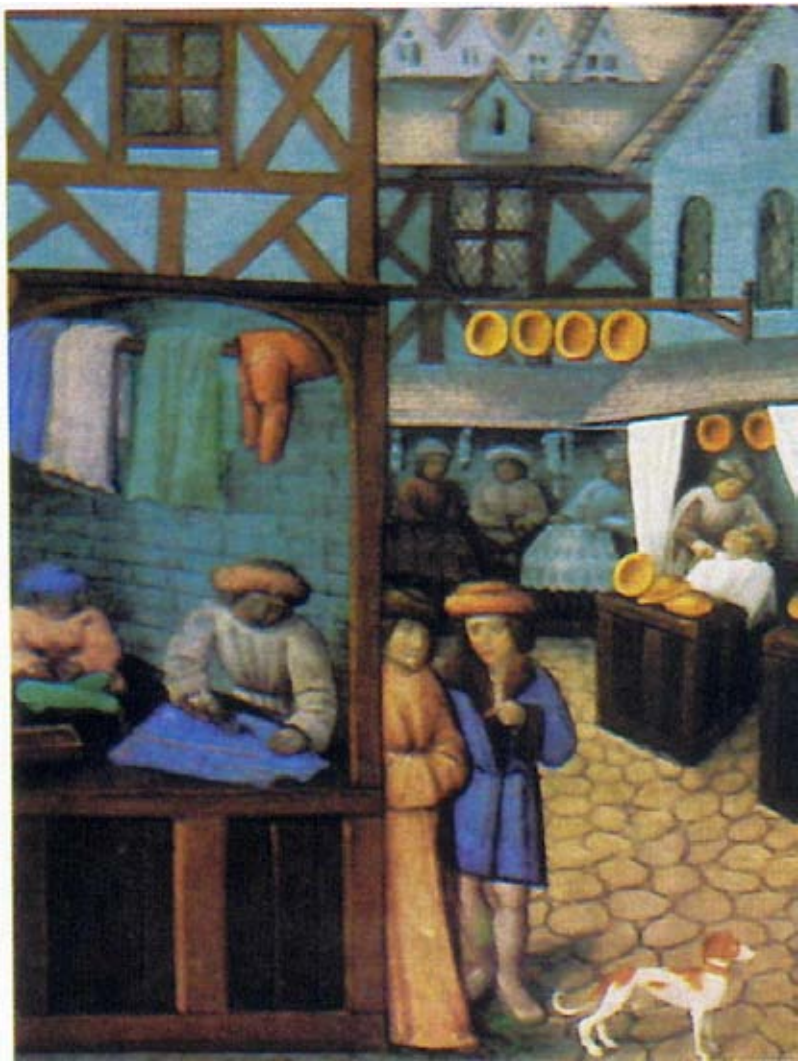
Ostia
200 B.C.

Pompeii
70 A.D.

Pompeii
70 A.D.

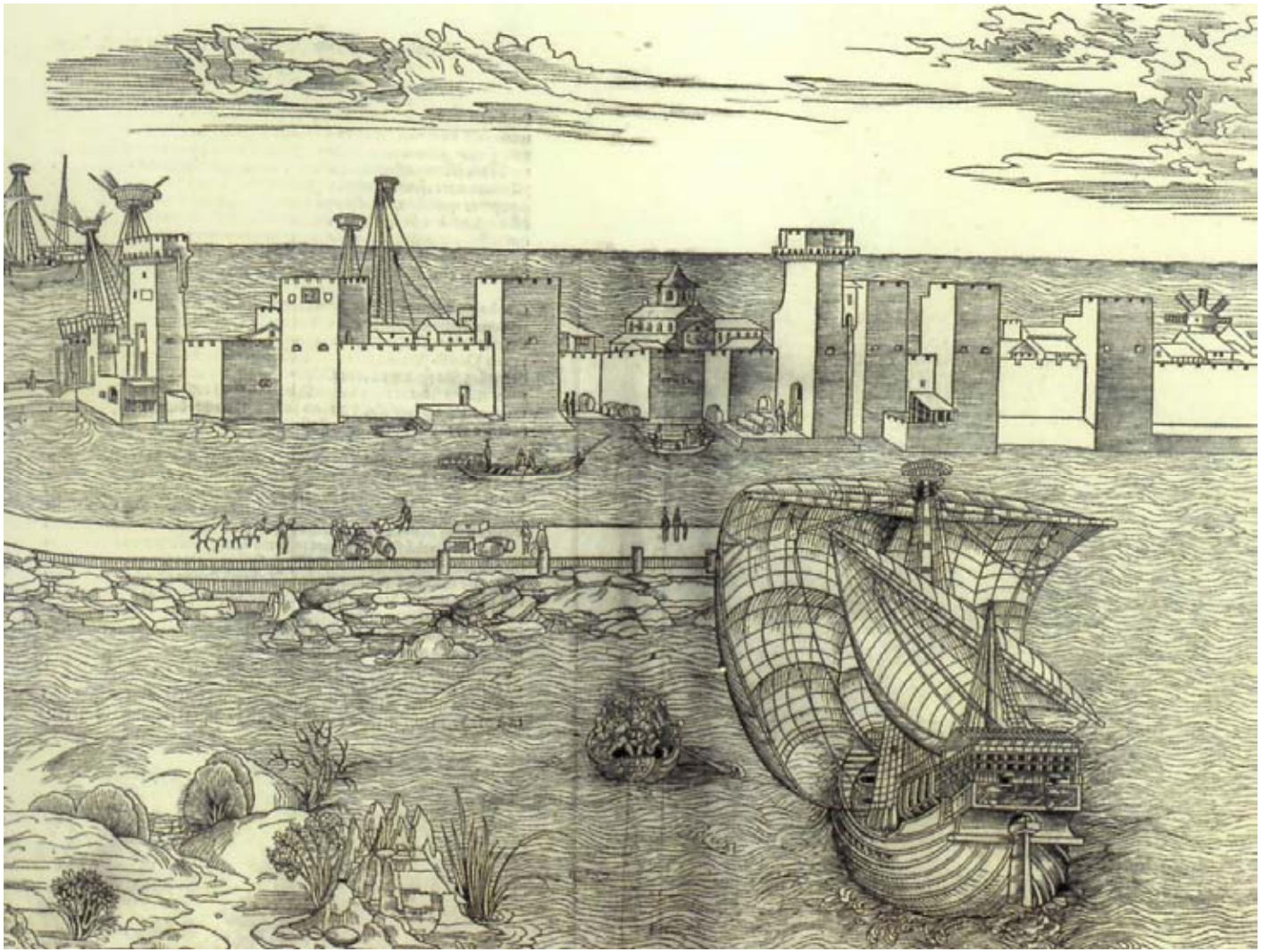
Trajan`s market
100-110 A.D.

Trajan`s market
100-110 A.D.

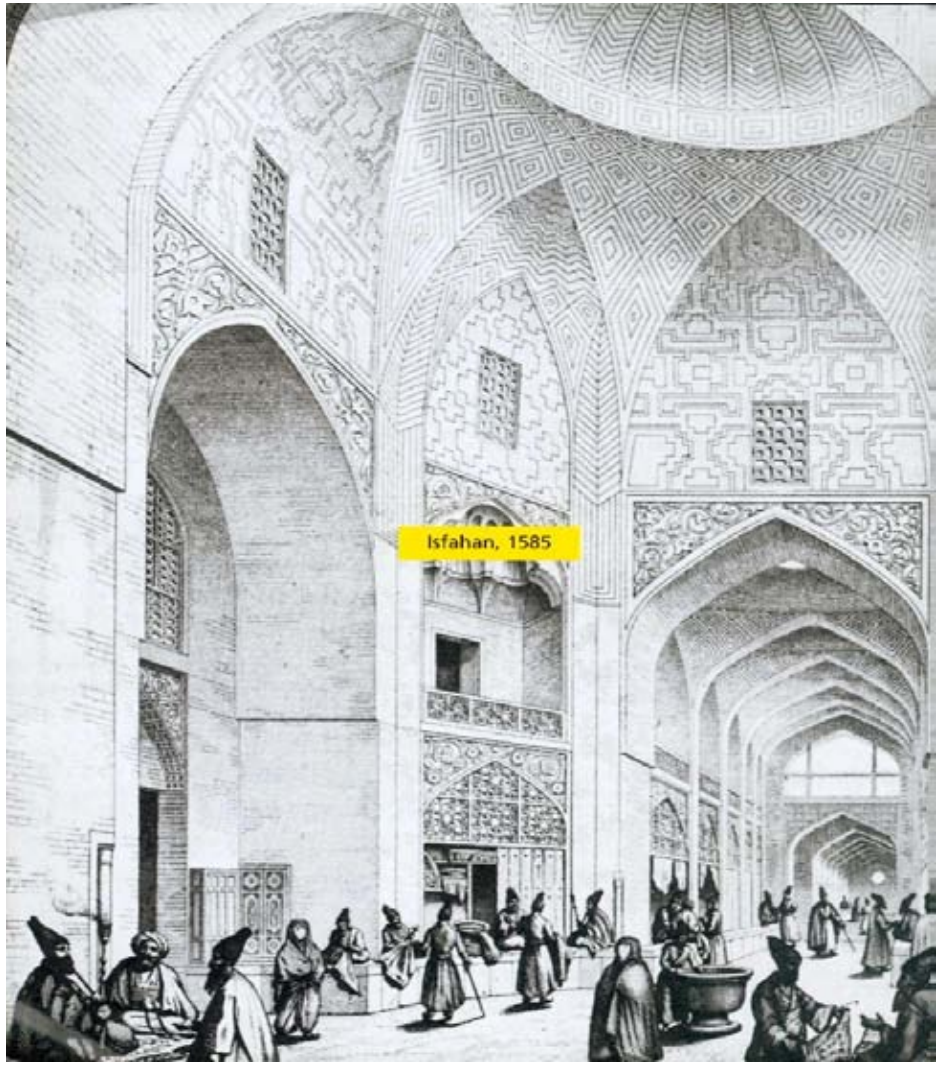


Medieval local market

Trade face to face



Hansa trade harbour, 1486.



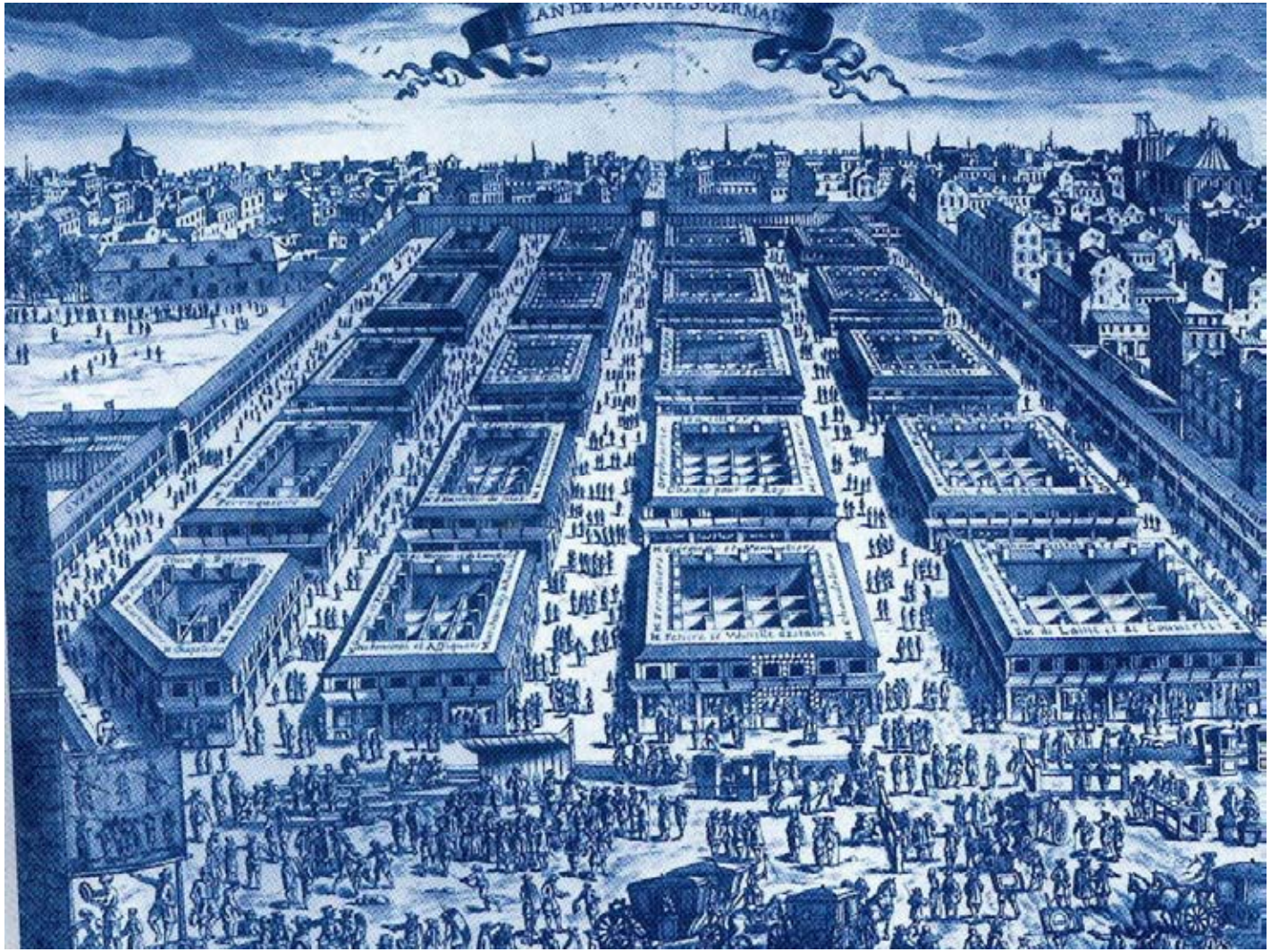
Isfahan, 1585.

Bazaar in Goa,
1595.

Holland, ~1600.

China, 17th century

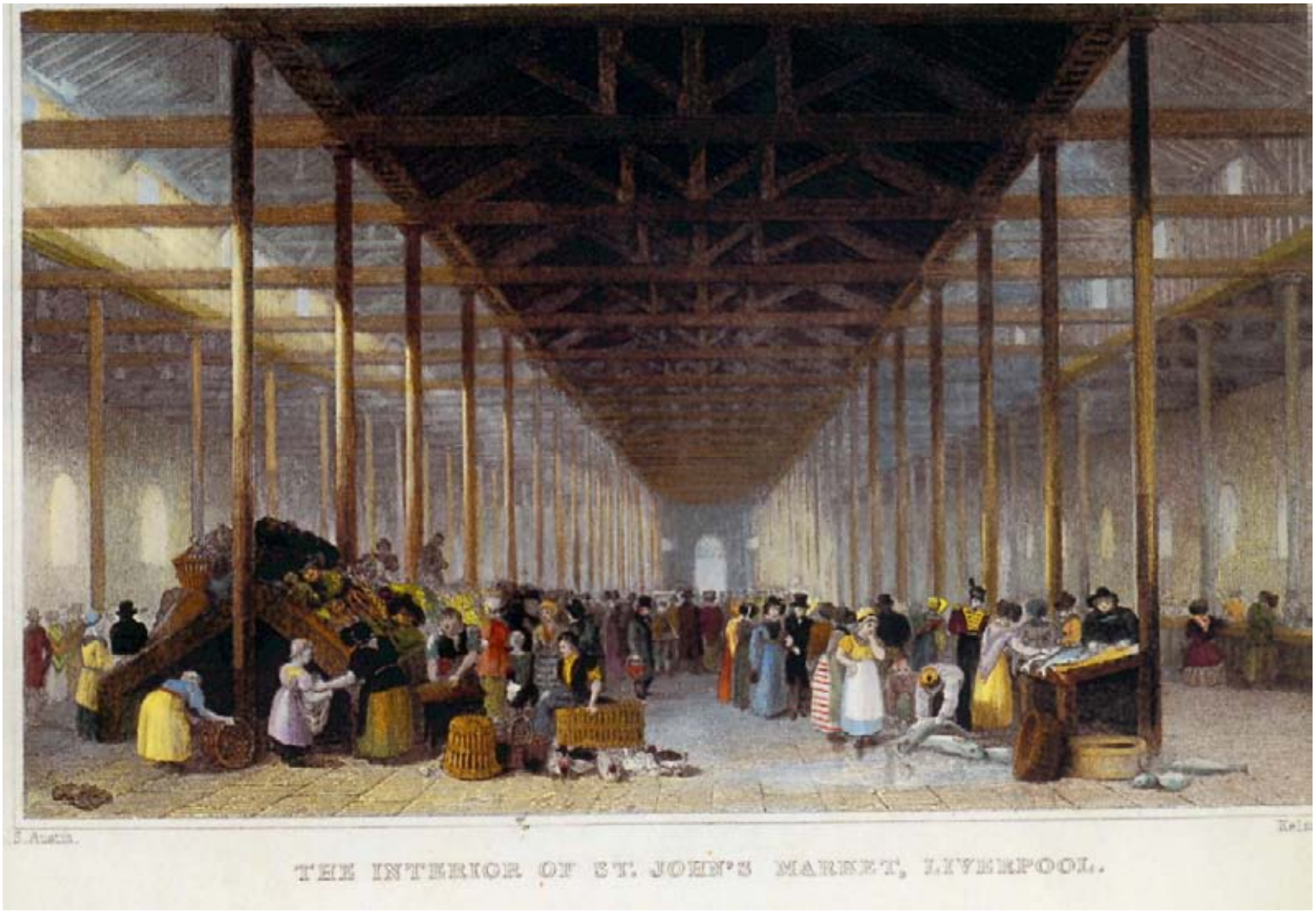
Gloucestershire's Marketplace, 1627.



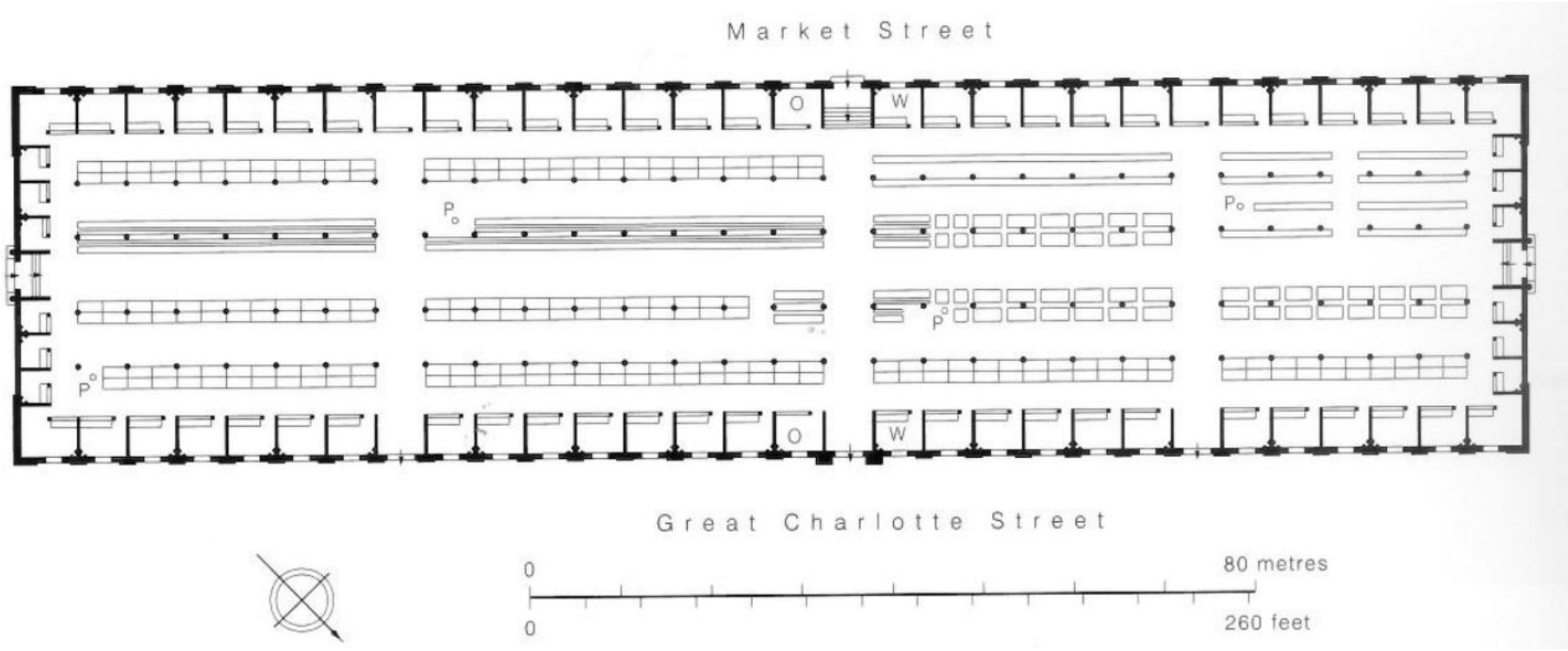
Fairs, St Germaine, 1650.

Spice shop,
Holland 1717.

Burlington Arcade, 1818. (photo 1905.)

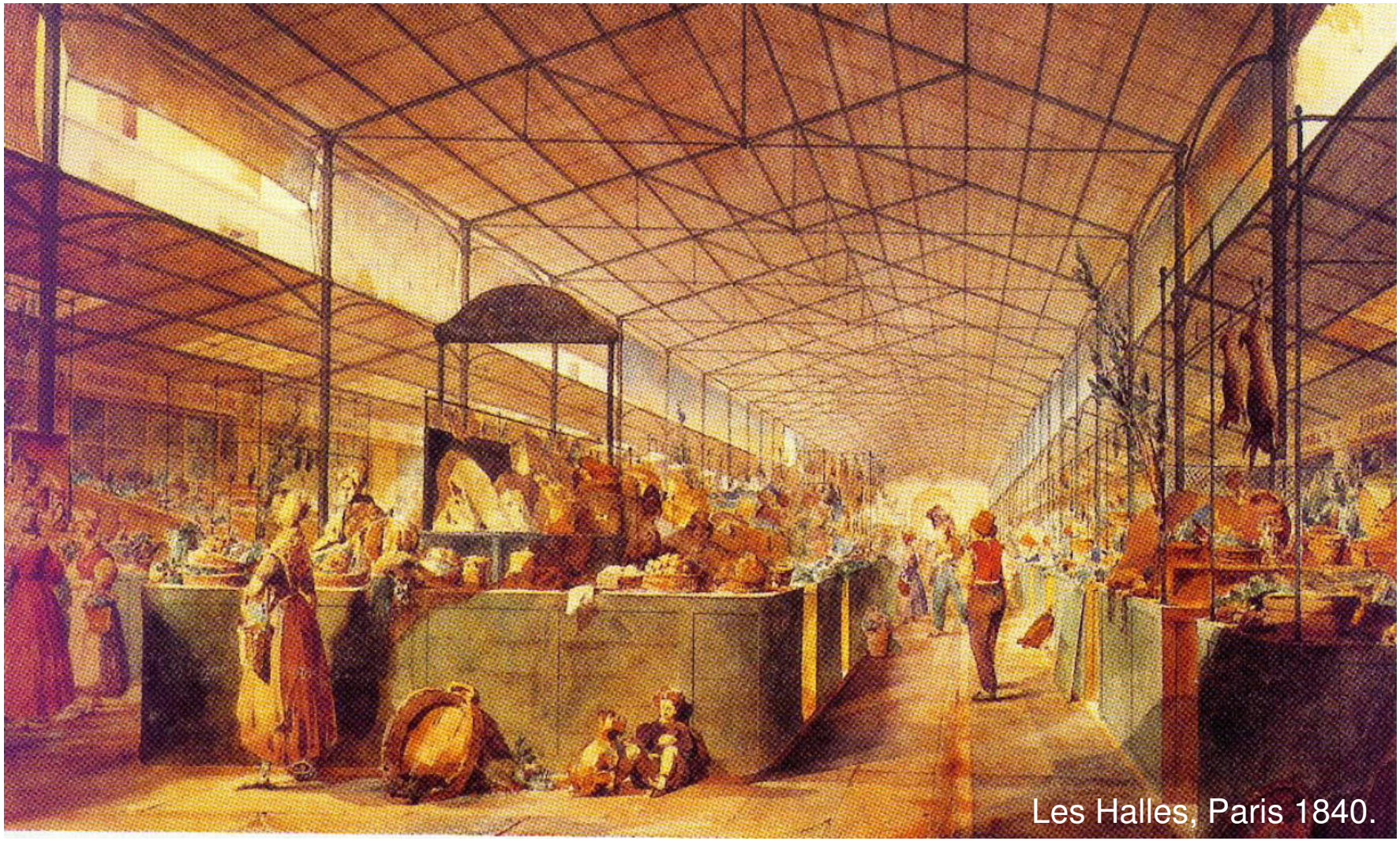


THE INTERIOR OF ST. JOHN'S MARKET, LIVERPOOL.



St Johns Market,
Liverpool 1822.

The Queen's Bazaar, London 1833.



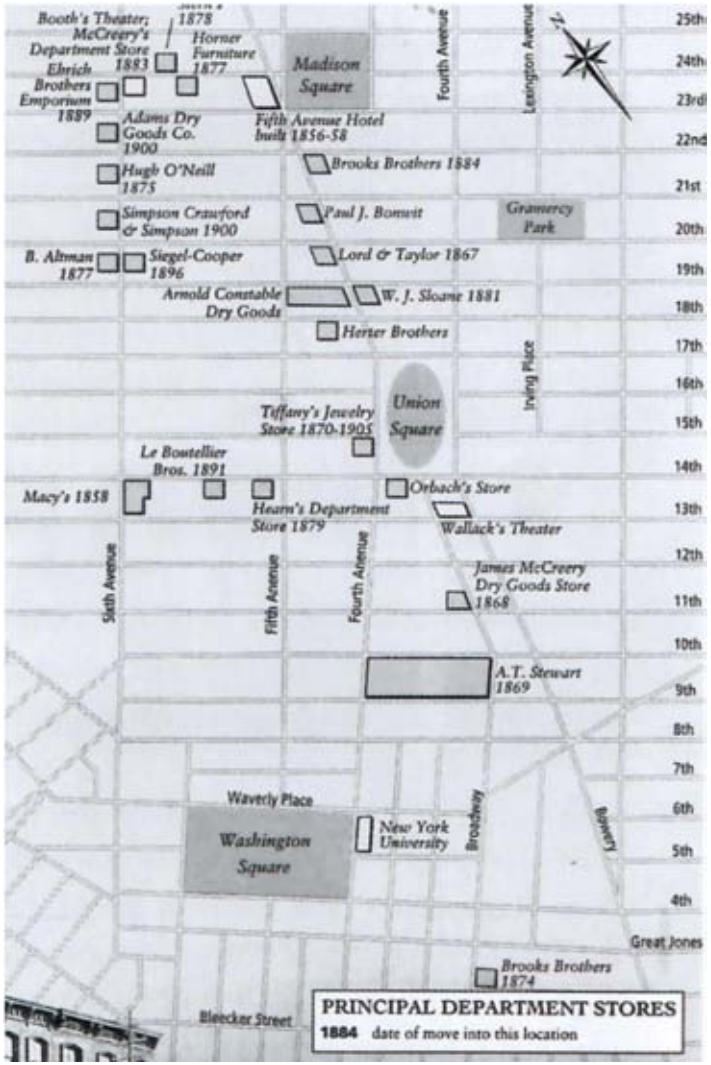
Les Halles, Paris 1840.

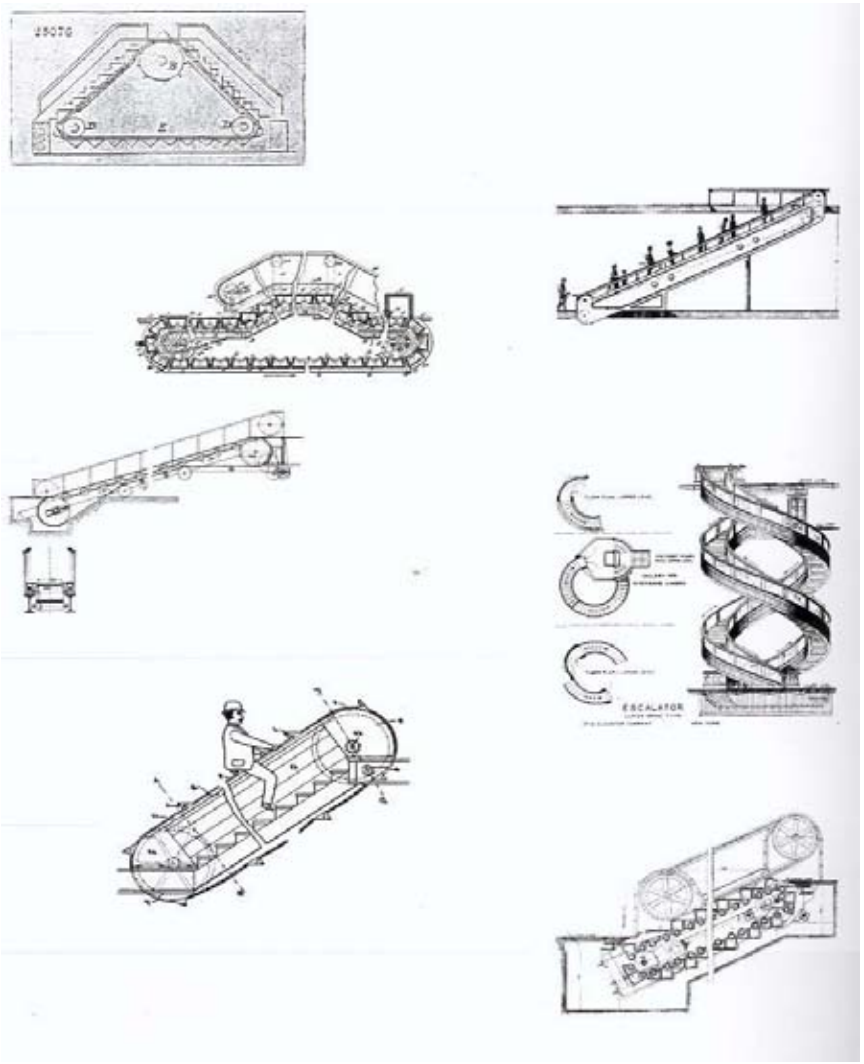
Constantinople,
15th century

Crystal Palace
London, 1851.

Au Bon Marche
Paris, 1852-54.

Department stores NY, 1858-1900.





Escalators, 1859.

Galleria Vittorio Emanuele
Milan, 1865-67.

Les Grand Magasins
Paris, 1875.

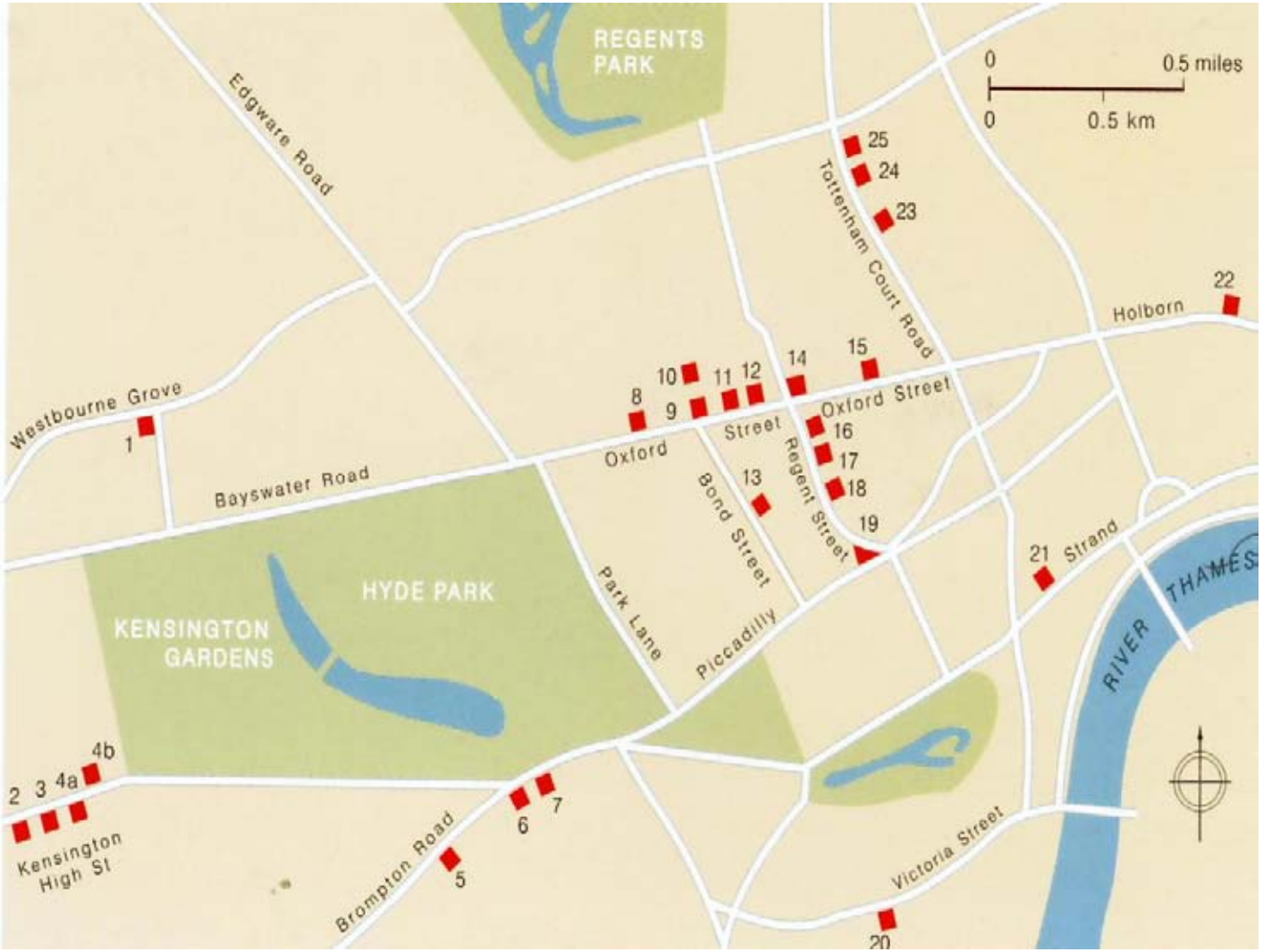
Le Prinstemps Paris

Harrods escalator, 1898.

Boots, 1903-04.

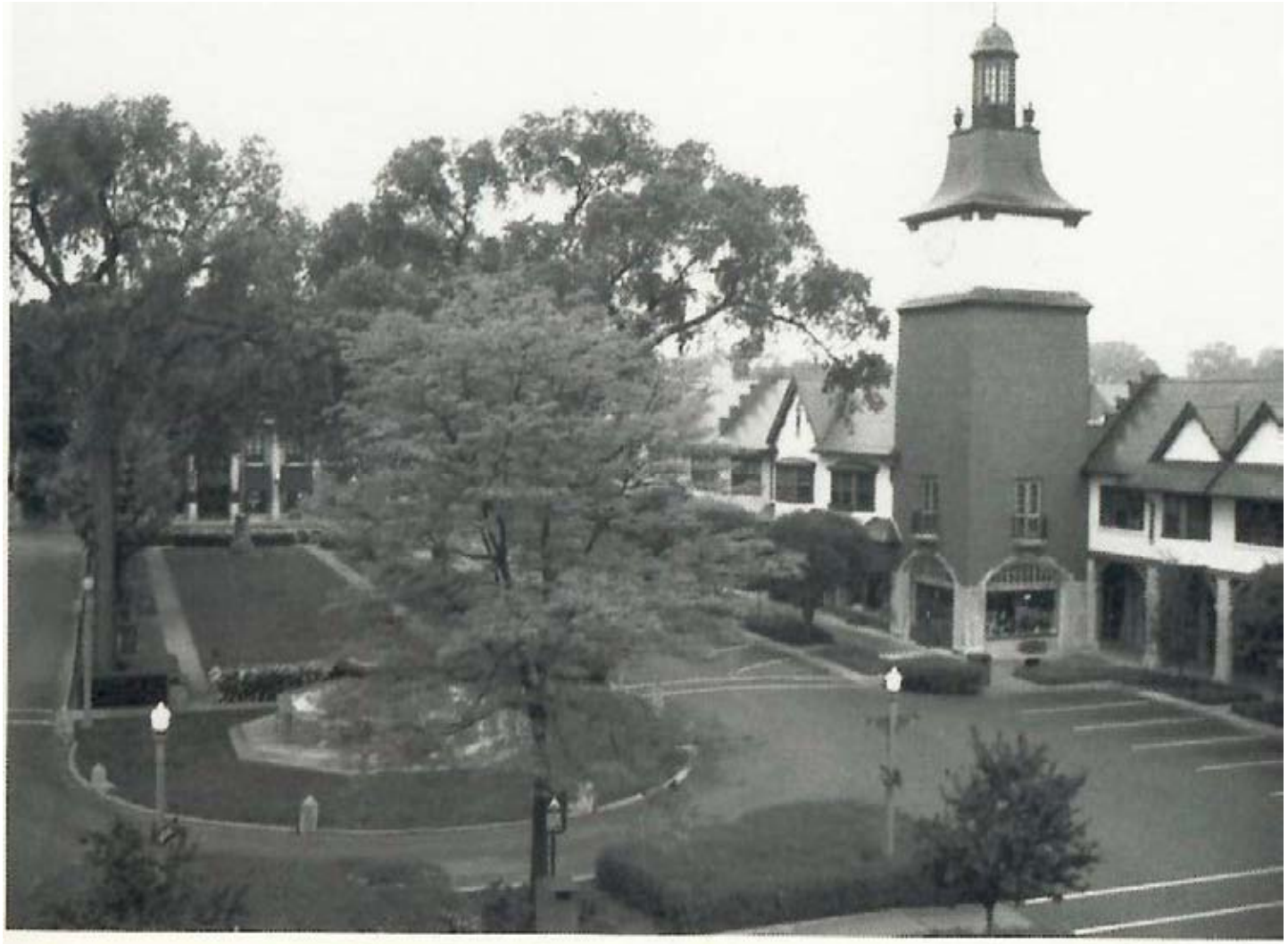
Marks & Spencer, 1906.

Marshall Fields
Chicago, 1902.



Department stores in London, 1914.

Boots, 1915.



Lake Forest, 1916.

Lake Forest, 1916.

Lake Forest, 1916.

Piggly Wiggly 1918

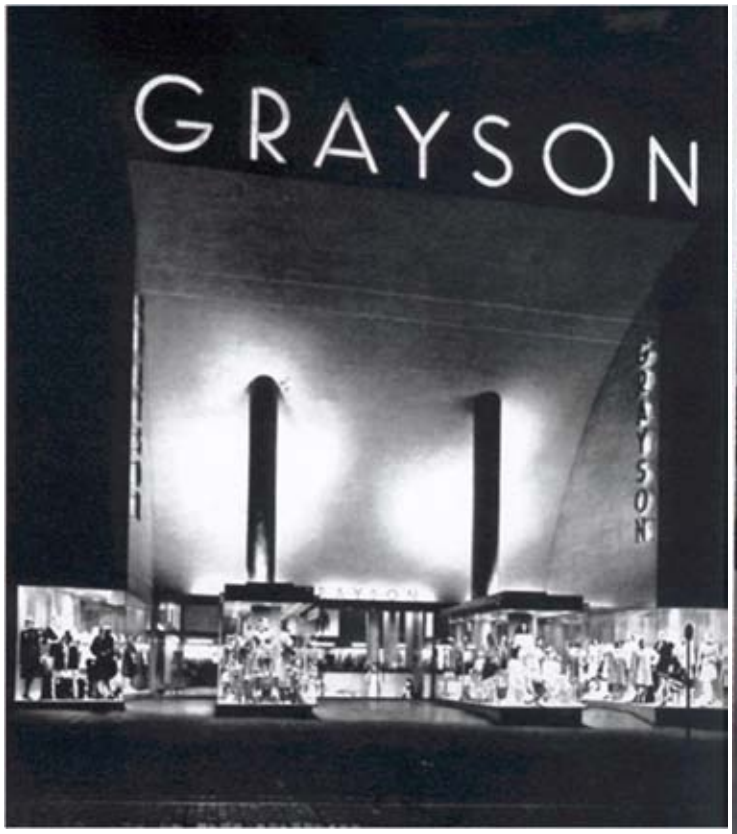
Marks & Spencer
1922

Country Club Plaza
Kansas City 1923

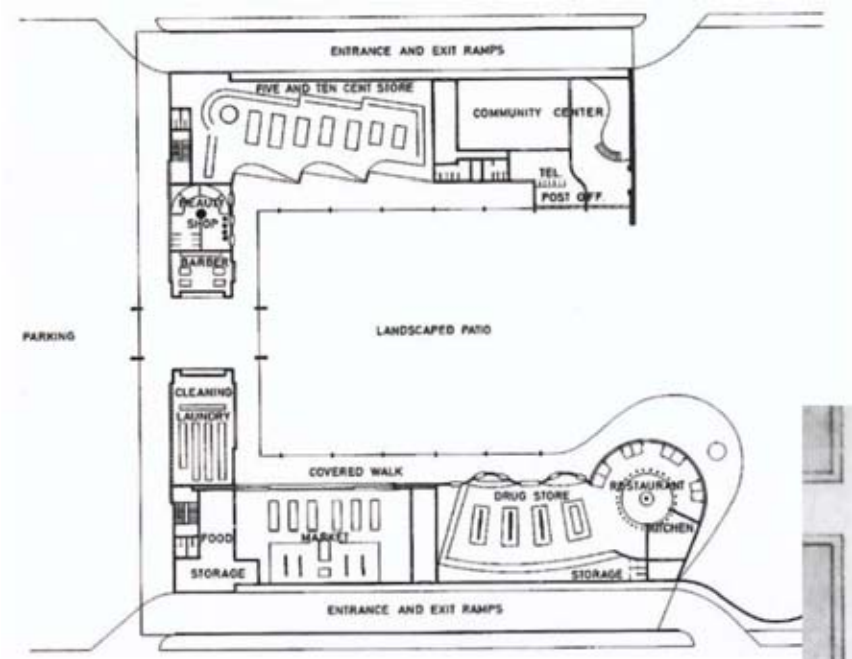
DH Evans
London, 1934-37

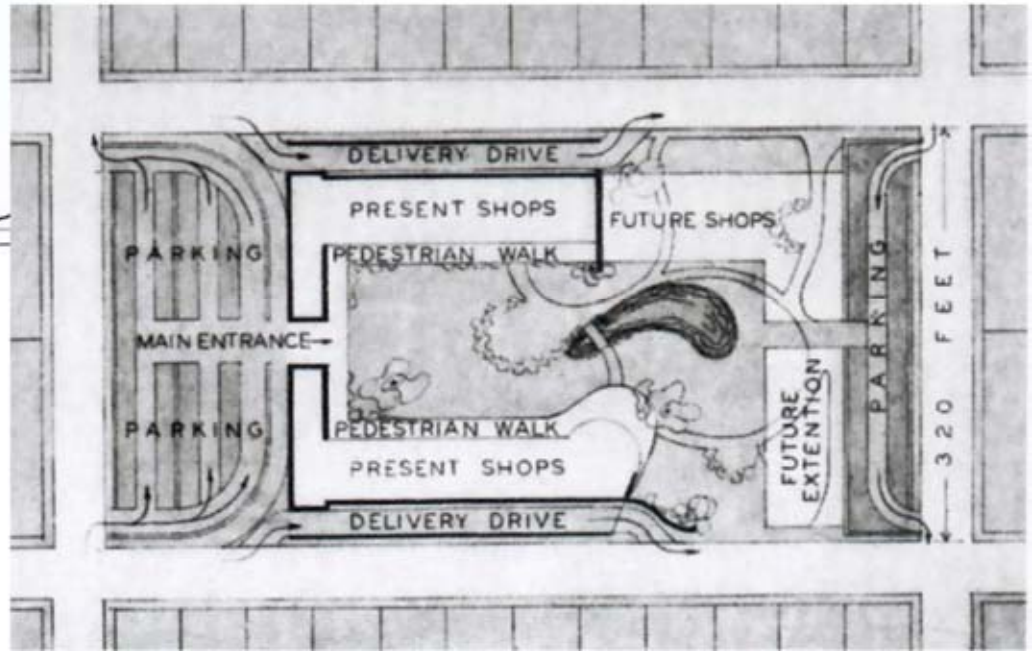

M. HARPNER SCHWARZ.C
ROBES
ROBES
ROSENBERGER
STERN
SENSATIONS-
PREISE
Teppichhaus H.SCHEIN
SINGER

Vienna, 1930



Seattle 1941



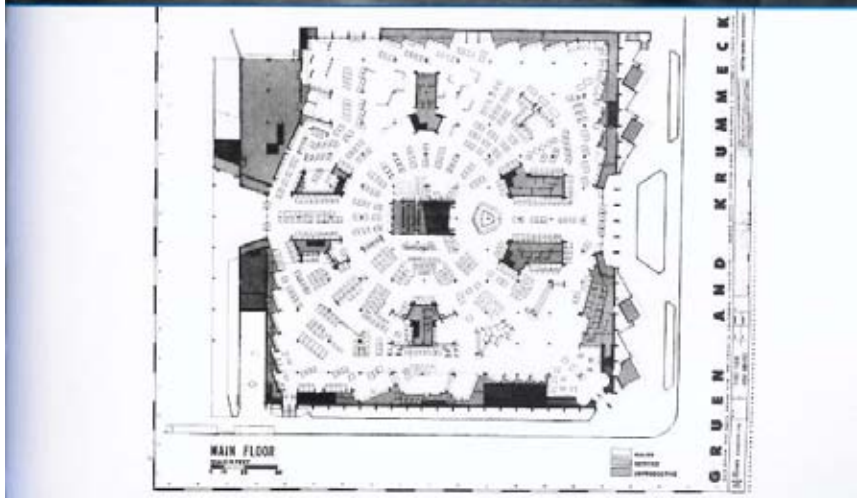


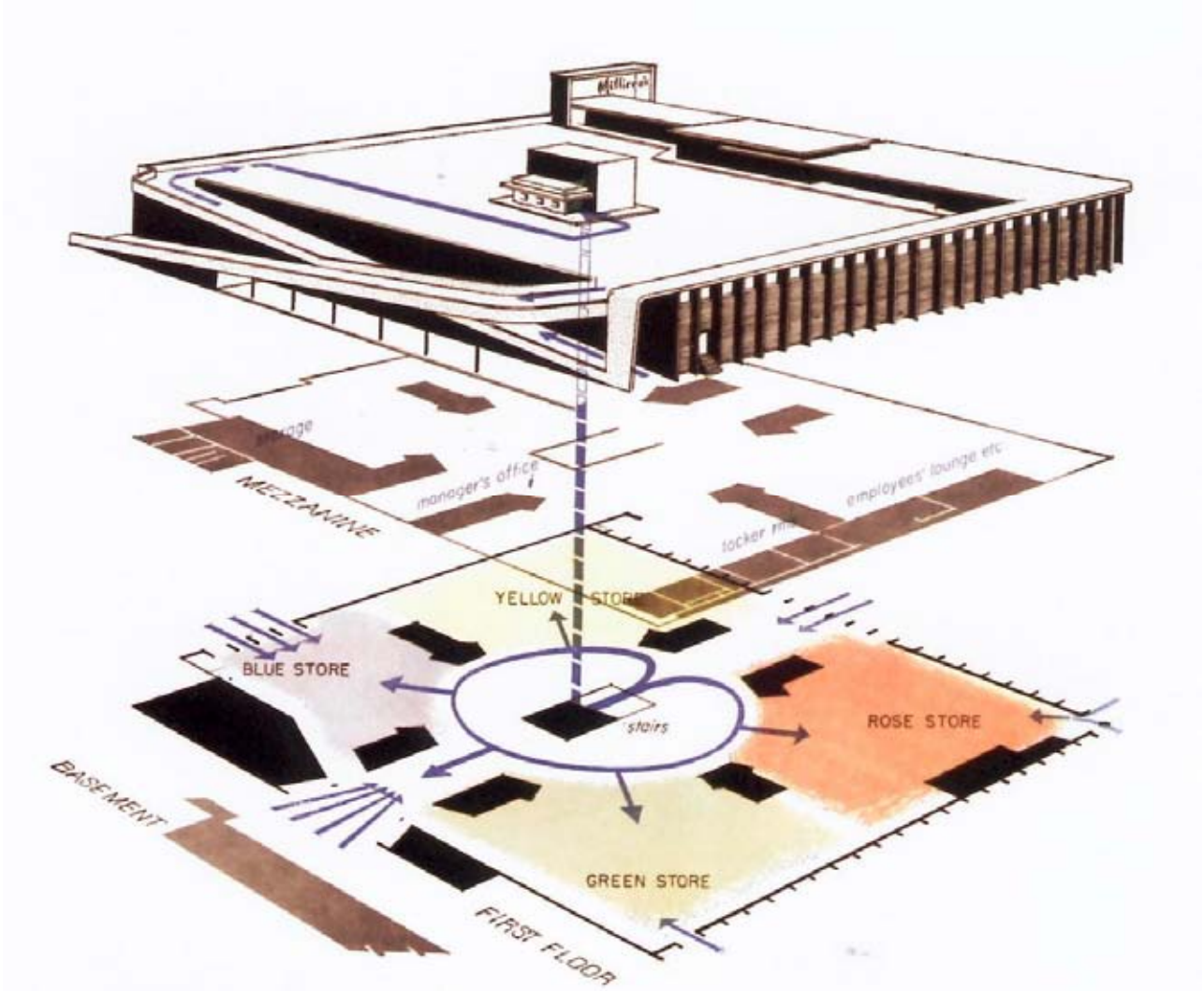
Seattle 1943

Marks & Spencer
1948

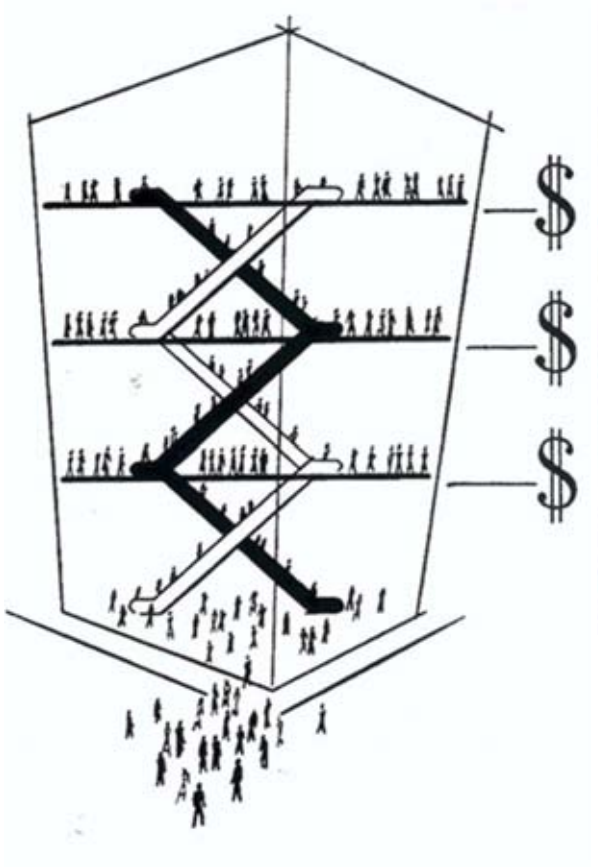
Los Angeles
1948

Los Angeles
1948



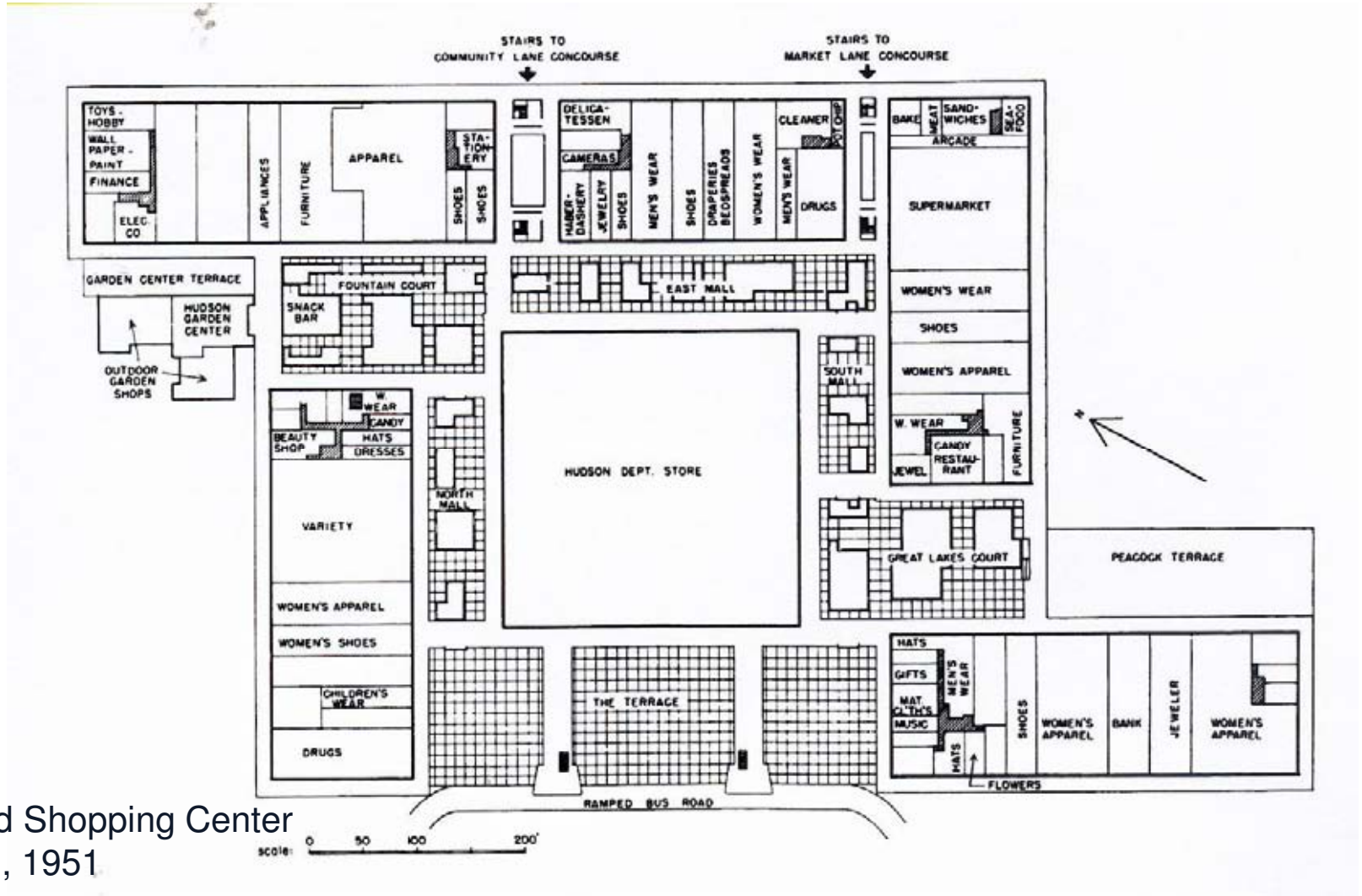


Los Angeles
1948

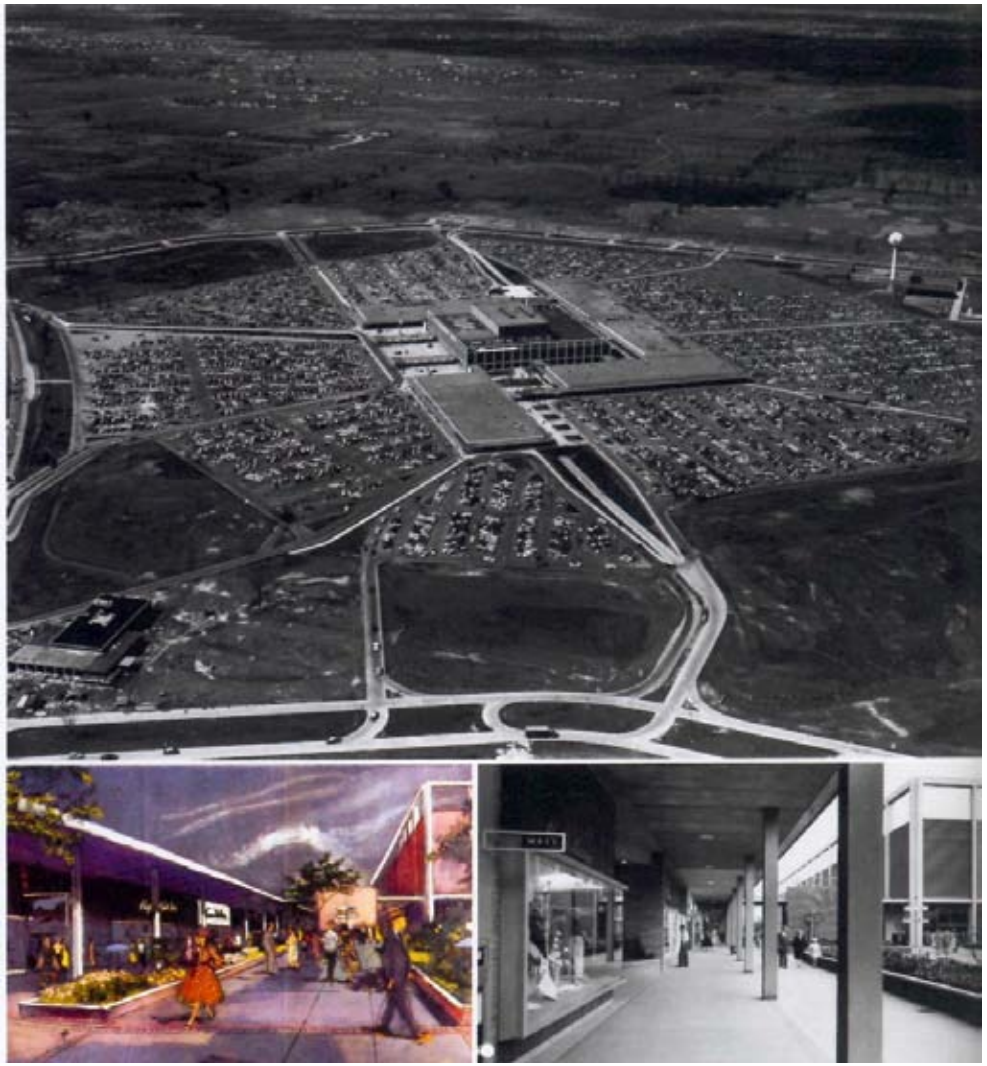



Reach down and bring shoppers up
...to the top floors, too!
OTIS ELEVATOR COMPANY
merchandise that can be seen
...can be sold
Otis
Free-Flow
ESCALATORS
increase store-wide sales

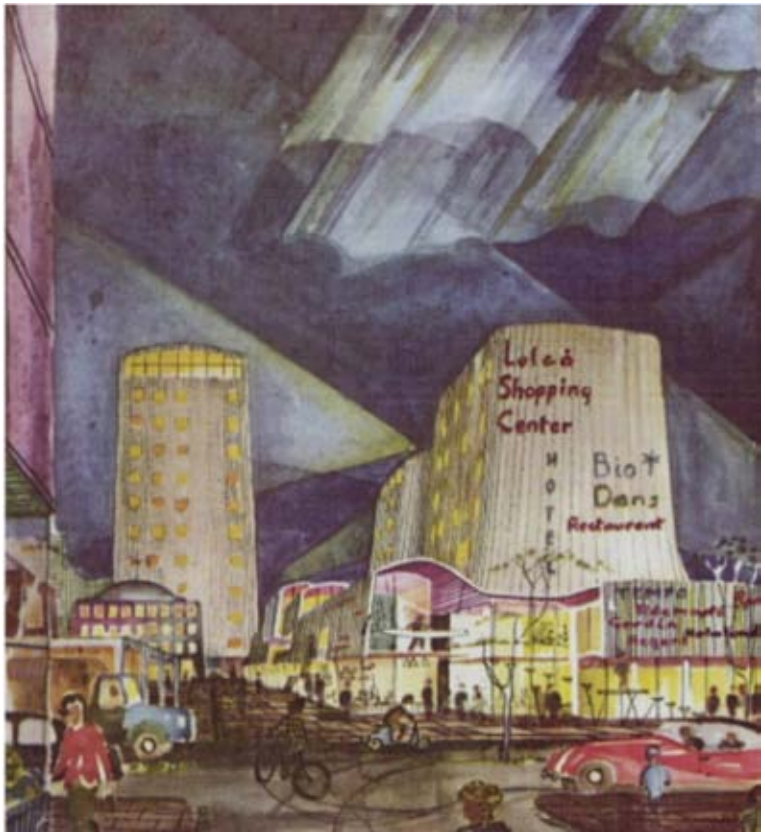
Northland Shopping Center
Michigan, 1951



Northland Shopping Center
Michigan, 1951



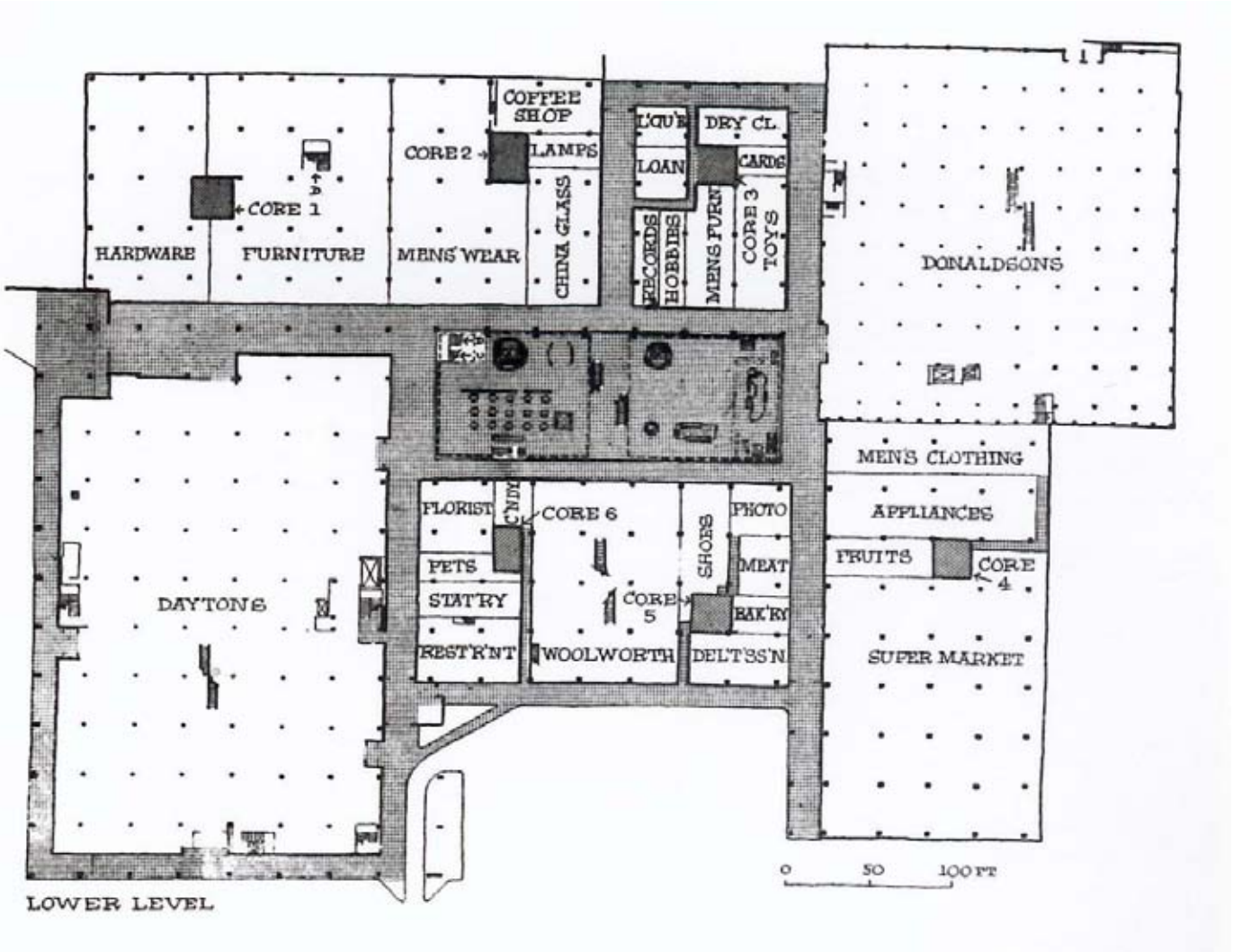
Northland Shopping Center
Michigan, 1951


Luleå
Shopping
Center
HOTEL
Bio
Dans
Restaurant

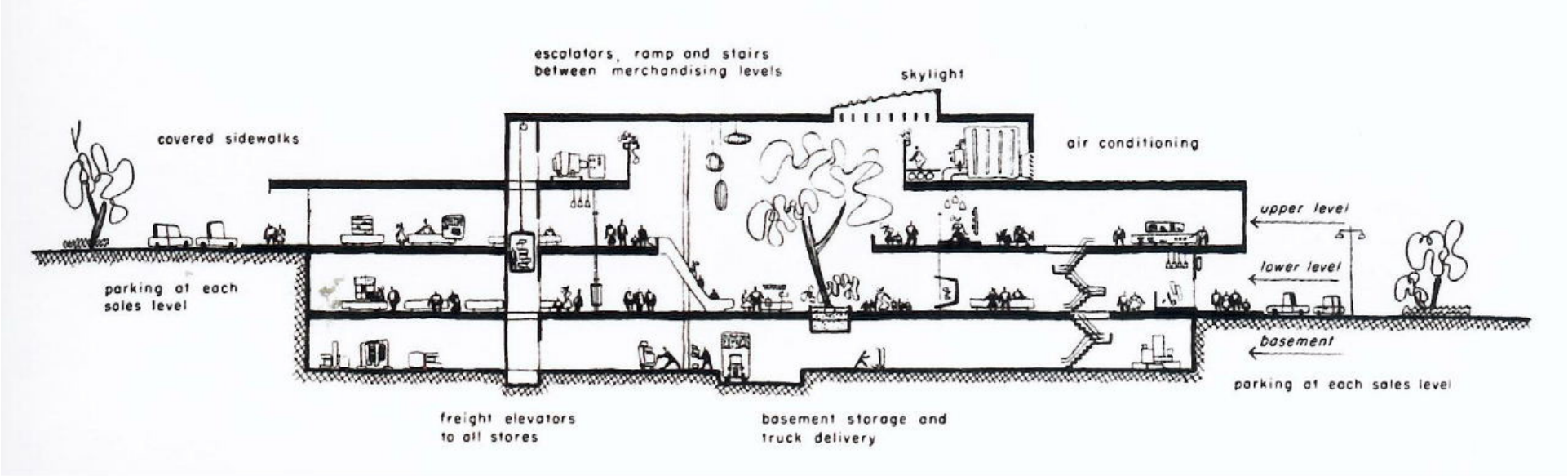

SAS
DC-7C
Stockholm
1 tim 55 min
SAS
BIO

Luleå, 1955

Southdale
Minneapolis, 1956



Southdale
Minneapolis, 1956



Southdale
Minneapolis, 1956

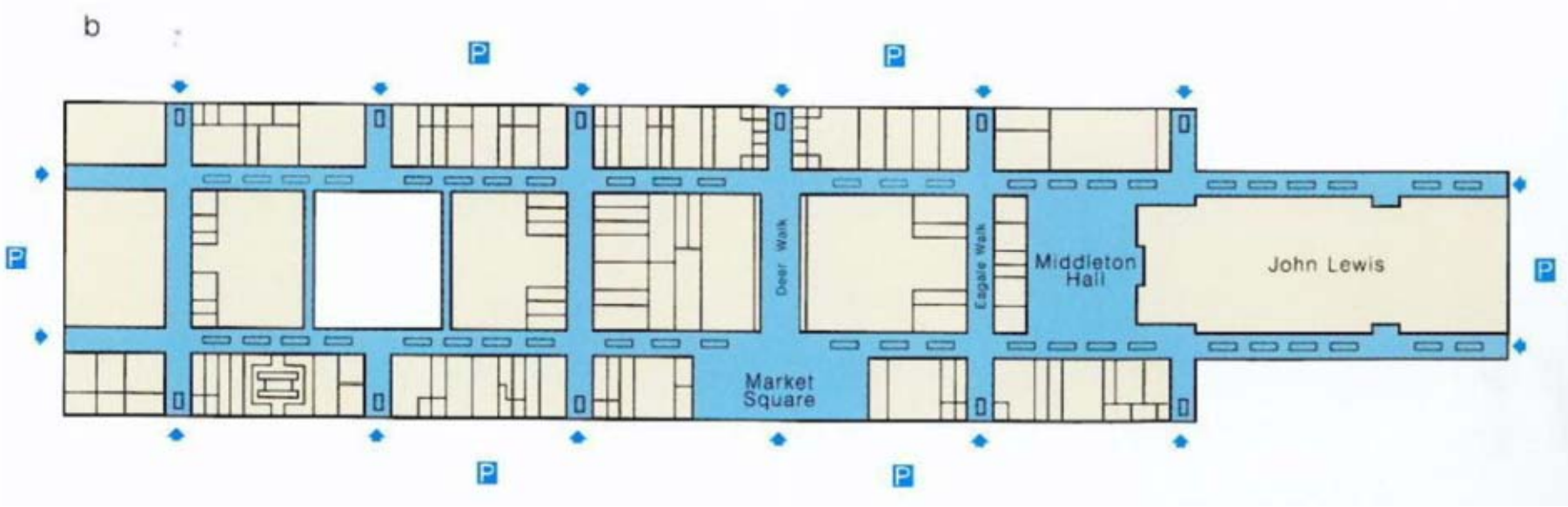
Southdale
Minneapolis, 1956

Southdale
Minneapolis, 1956

Southdale
Minneapolis, 1956

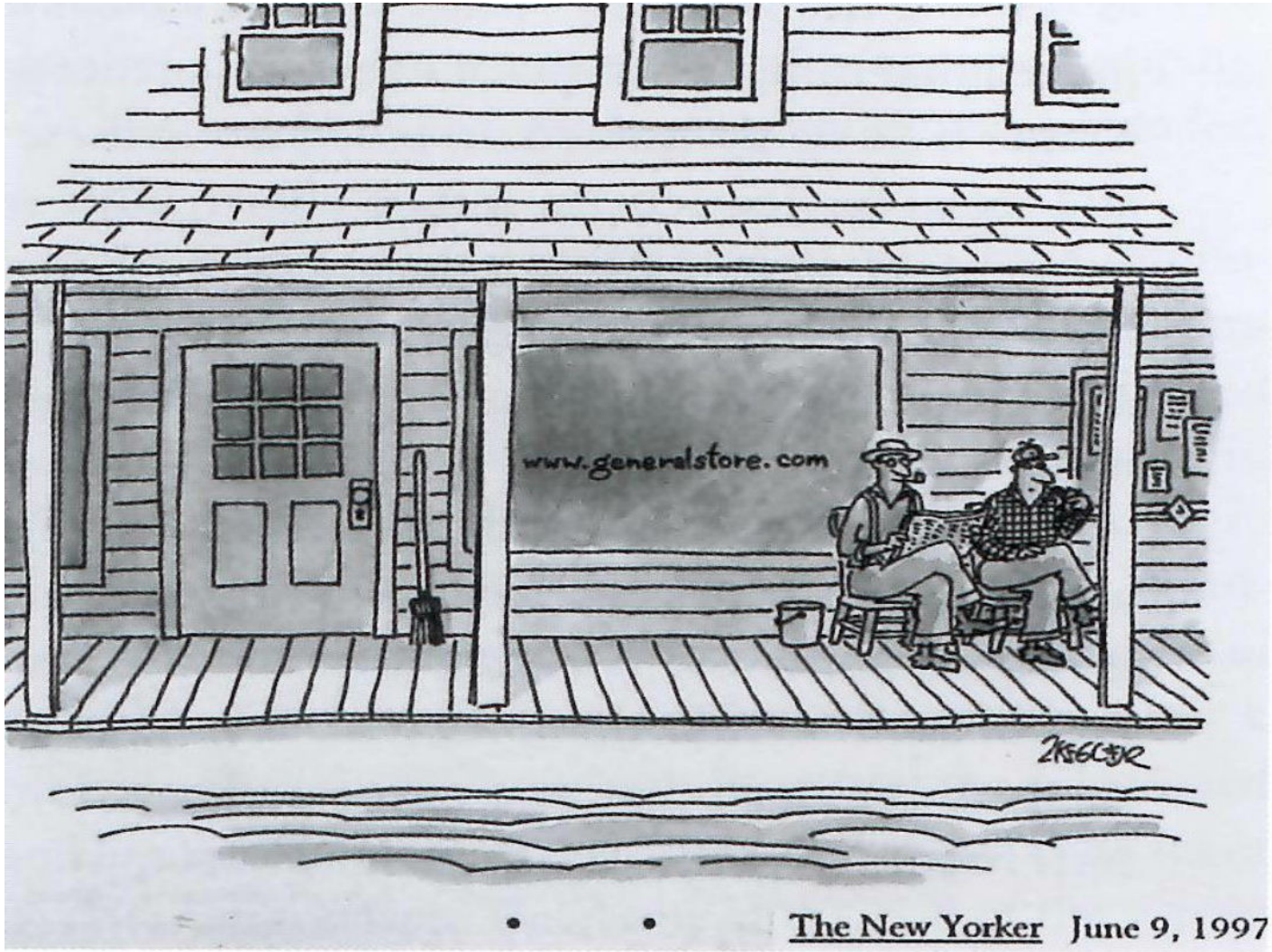
Victor Gruen 1959

Milton Keynes 1979



Milton Keynes 1979

Xian 1994


www.generalstore.com
The New Yorker June 9, 1997

Whiteley Village
England ~2000

The New Yorker
1997

Types of Shopping Centers

International Standard for European Shopping Center Types			
Format	**Type of Scheme**		**Gross Leasable Area (GLA)**
Traditional	Very Large		80,000 m² and above
	Large		40,000 – 79,999 m²
	Medium		20,000 – 39,999 m²
	Small	Comparison-Based	5,000 – 19,999 m²
		Convenience-Based	5,000 – 19,999 m²
Specialized	Retail Park	Large	20,000 m² and above
		Medium	10,000 – 19,999 m²
		Small	5,000 – 9,999 m²
	Factory Outlet Center		5,000 m² and above
	Theme-Oriented Center	Leisure-Based	5,000 m² and above
		Non-Leisure-Based	5,000 m² and above

One Step Closer to a Pan-European Shopping Center Standard
Illustrating the New Framework With Examples
Jean Lambert

Types of Shopping Centers

A mixed-use development is a real estate project with planned integration of some combination of retail, office, residential, hotel, recreation or other functions. It is pedestrian-oriented and contains elements of a live-work-play environment. It maximizes space usage, has amenities and architectural expression and tends to mitigate traffic and sprawl.

U.S. Shopping-Center Classification and Characteristics

Type of Shopping Center	Concept	Center Count	Aggregate GLA (Sq. Ft.)	% Share of Industry GLA	Average Size (Sq. Ft.)	Typical GLA Range (Sq. Ft.)	Acres	# of Anchors	% Anchor GLA	Typical Number of Tenants	Typical Type of Anchors	Trade Area Size
General-Purpose Centers		**110,353**										
Super-Regional Mall	Similar in concept to regional malls, but offering more variety and assortment.	687	842,591,069	11.3%	1,226,479	800,000+	60-120	3+	50-70%	NA	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-25 miles
Regional Mall	General merchandise or fashion-oriented offerings. Typically, enclosed with inward-facing stores connected by a common walkway. Parking surrounds the outside perimeter.	828	485,962,137	6.5%	586,911	400,000-800,000	40-100	2+	50-70%	40-80 stores	Full-line or junior department store, mass merchant, discount department store and/or fashion apparel store.	5-15 miles
Community Center ("Large Neighborhood Center")	General merchandise or convenience- oriented offerings. Wider range of apparel and other soft goods offerings than neighborhood centers. The center is usually configured in a straight line as a strip, or may be laid out in an L or U shape, depending on the site and design.	9,518	1,864,667,209	24.9%	195,910	125,000-400,000	Oct-40	2+	40-60%	15-40 stores	Discount store, supermarket, drug, large-specialty discount (toys, books, electronics, home improvement/furnishings or sporting goods, etc.)	3-6 miles
Neighborhood Center	Convenience oriented.	32,295	2,325,911,410	31.1%	72,021	30,000-125,000	5-Mar	1+	30-50%	5-20 stores	Supermarket	3 miles
Strip/Convenience	Attached row of stores or service outlets managed as a coherent retail entity, with on-site parking usually located in front of the stores. Open canopies may connect the store fronts, but a strip center does not have enclosed walkways linking the stores. A strip center may be configured in a straight line, or have an "L" or "U" shape. A convenience center is among the smallest of the centers, whose tenants provide a narrow mix of goods and personal services to a very limited trade area.	67,025	894,687,318	12.0%	13,349	< 30,000	<3	Anchor-less or a small convenience-store anchor.	NA	NA	Convenience store, such as a mini-mart.	<1 mile
Specialized-Purpose Centers		**2,969**										
Power Center	Category-dominant anchors, including discount department stores, off-price stores, wholesale clubs, with only a few small tenants.	2,040	839,561,057	11.2%	411,550	250,000-600,000	25-80	3+	70-90%	NA	Category killers, such as home improvement, discount department, warehouse club and off-price stores	5-10 miles
Lifestyle	Upscale national-chain specialty stores with dining and entertainment in an outdoor setting.	400	127,605,868	1.7%	319,015	150,000-500,000	10-40	0-2	0-50%	NA	Large format upscale specialty	8-12 miles
Factory Outlet	Manufacturers' and retailers' outlet stores selling brand-name goods at a discount.	344	75,003,558	1.0%	218,034	50,000-400,000	10-50	NA	NA	NA	Manufacturers' and retailers' outlets	25-75 miles
Theme/Festival	Leisure, tourist, retail and service-oriented offerings with entertainment as a unifying theme. Often located in urban areas, they may be adapted from older--sometimes historic--buildings and can be part of a mixed-use project.	185	26,197,926	0.3%	141,610	80,000-250,000	5-20	Unspecified	NA	NA	Restaurants, entertainment	25-75 miles
Limited-Purpose Property		**33**										
Airport Retail	Consolidation of retail stores located within a commercial airport	33	3,569,424	0.0%	108,164	75,000-300,000	NA	NA	NA	NA	No anchors; retail includes specialty retail and restaurants	NA
Total Industry		**113,355**										
Total Industry	**Traditional + Specialty + Special Purpose**	**113,355**	**7,485,756,976**	**100.0%**	**66,038**							

Sources: Appraisal Institute, CoStar Realty Information, Inc . (www.costar.com) and the International Council of Shopping Centers.

April 2013

Definitions Matrix

	Malaysia	Thailand	Singapore	Indonesia	Australia	US	Asia Pacific (hypothetical)
Neighborhood							
Size (sf)	up to 200,000	50,000-100,000	up to 200,000	up to 300,000	up to 100,000	30,000–150,000	<200,000
No. of anchors	1	1	1	1	1		1-2
Type of anchors	supermarket, (delete dept store	supermarket	supermarket	supermarket	supermarket	supermarket	mainly supermarket
Primary trade area	10 mins drive time				<5 kms	3-5 miles	<5 miles
Community (or sub regional)		(normally department store operator)		not defined			
Size (sf)	200,000-400,000	400,000-500,000	200,000-400,000		100,000-400,000	100,000-350,000	200,000-400,000
No. of anchors	1+				2+	2+	2-3
Type of anchors	supermarket,small department store / junior anchor	supermarket,cineplex			supermarket, discount dept store	supermarket, drug store, discount dept store	supermarket, drug store, discount dept store
Primary trade area	15-20 mins drive time				up to 10 kms	3-6 miles	<10 miles
Regional							
Size (sf)	600,000-800,000	500,000-800,000	400,000-800,000	600,000-800,000	400,000-800,000	400,000–800,000	400,000-800,000
No. of anchors	2+	2+	2+	2+	2+	2+	2+
Type of anchors	supermarket, dept store,cineplex	supermarket, dept store,cineplex	hypermarket, dept store, supermarket	supermarket, dept store,cineplex	dept store, discount dept store	dept store	discretionary (e.g. dept store)
Primary trade area	20 mins drive time				up to 15 kms	5-15 miles	<15 miles

	Malaysia	Thailand	Singapore	Indonesia	Australia	US	Asia Pacific (hypothetical)
Super regional							
Size (sf)	1,000,000+	1,000,000+	800,000	1,000,000+	800,000+	800,000+	800,000+
No. of anchors	3 to 4+	4+	3+	4+	4+	4+	4+
Type of anchors	hypermarket, dept store, supermarket, cineplex	supermarket, dept store,cineplex	supermarket, dept store	hypermarket, dept store, supermarket, cineplex	supermarket, dept store, discount dept store	dept store	mainly discretionary (e.g. dept store)
Primary trade area	30 mins drive time				up to 20 kms	5-25 miles	<25 miles
Lifestyle			not defined	not defined	not defined		
Size (sf)	600,000	100,000-450,000		200,000-300,000		150,000-500,000	<500,000
No. of anchors	none necessary but strongly F&B driven	entertainment &F&B driven		entertainment ,F&B		0-4	0-4 discretionary (e.g. dept store)
Type of anchors							
Primary trade area	30 mins drive time						<15 miles
Power							
Size (sf)	300,000	200,000-400,000	not defined	not defined	30,000-500,000	250,000–600,000	<600,000
No. of anchors							0-multiple
Type of anchors		homes,hardware , IT			Home goods	entire range of discretionary	mainly discretionary
Primary trade area	up to 30 mins drive time				up to 15 kms	5-10 miles	<10 miles

	Malaysia	Thailand	Singapore	Indonesia	Australia	US	Asia Pacific (hypothetical)
Retail podium/plaza					not defined	not defined	not defined
Size (sf)	up to 300,000	50,000-250,000	up to 300,000	up to 300,000			
No. of anchors	none necessary	none necessary	none necessary	none necessary			
Type of anchors							
Primary trade area	immediate						
Hypermarket					not defined	not defined	
Size (sf)	150,000-500,000	100,000+	100,000-200,000	150,000-300,000			<300,000
No. of anchors	1	1	1	1			1
Type of anchors	hypermarket	hypermarket	hypermarket	hypermarket			hypermarket
Primary trade area	up to 30 mins drive time						<5 miles
Niche/destination retail					not defined	not defined	not defined
Size (sf)	300,000	300,000	200,000	300,000			
No. of anchors	none	none	none	none			
Product classifiation	IT	unique-wholesale/retail mall	IT,homes	unique-wholesale /retail mall			
Primary trade area	> 30 mins	> 30 mins	> 30 mins	> 30 mins			
CBD center	not defined, not typical			not defined		not defined	
Size (sf)		150,000-400,000	300,000-1,000,000		10,000-600,000		<1,000,000
No. of anchors		1	3+		0-2		0-3
Type of anchors		supermarket, department store	supermarket, dept store		varies		discretionary (e.g. dept
Primary trade area					CBD		CBD

	Malaysia	Thailand	Singapore	Indonesia	Australia	US	Asia Pacific (hypothetical)
Factory outlet center							
Size (sf)		300,000-400,000			50,000-250,000	50,000-400,000	<400,000
No. of anchors		none			none	none	0-2
Type of anchors					none	none	dept store clearance
Primary trade area		> than 30 mins & tourist			up to 20 kms	25-75 miles	<60 miles

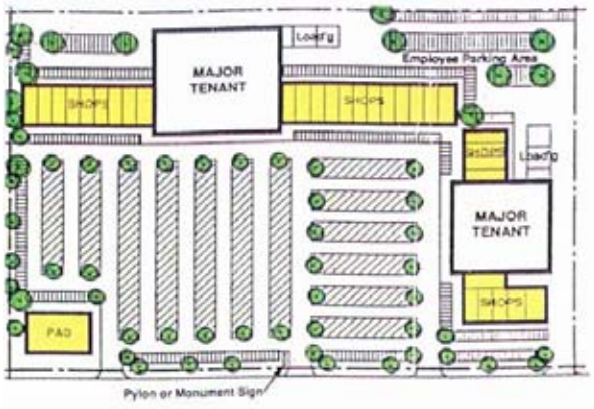
First Steps Toward a Shopping Center Typology for Southeast Asia, Asia-Pacific and Beyond

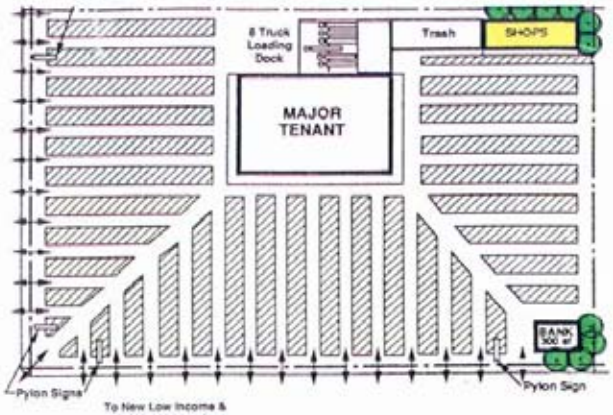
Ungku Suseelawati Omar
DTZ Debenham Tie Leung

Michael Baker
Michael Baker Independent Retail Consulting

Role of Designer / Architect

A Typical Open Air Shopping Center





A Shopping Center as seen by Major Tenant

A Shopping Center as seen by the Developer

A Shopping Center as seen by The City

Role of Designer / Architect

The Design Architect is a **Creative Thought Leader** on the development team, responsible for Managing, Planning, Designing and Observing / Monitoring the Construction of a larger vision, usually buildings.

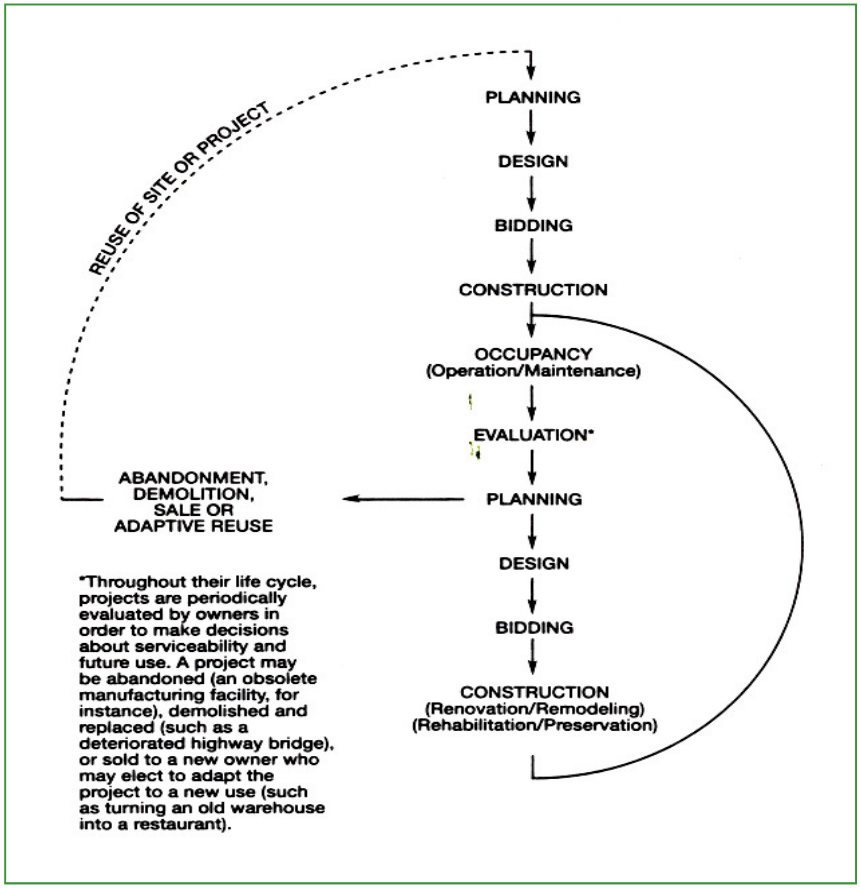
Design can and should be a **collaborative process** of three primary parties: the Owner, the Designer and the Contractor.

Architect is being affected with external influences - public or private owner, community, regulations, environmental concerns, tenants retail requirements - trying to shape architect`s services.

Role of Designer / Architect

Design and Project Life Cycle

- Phases
- Participants
- Architects Role within the Phases



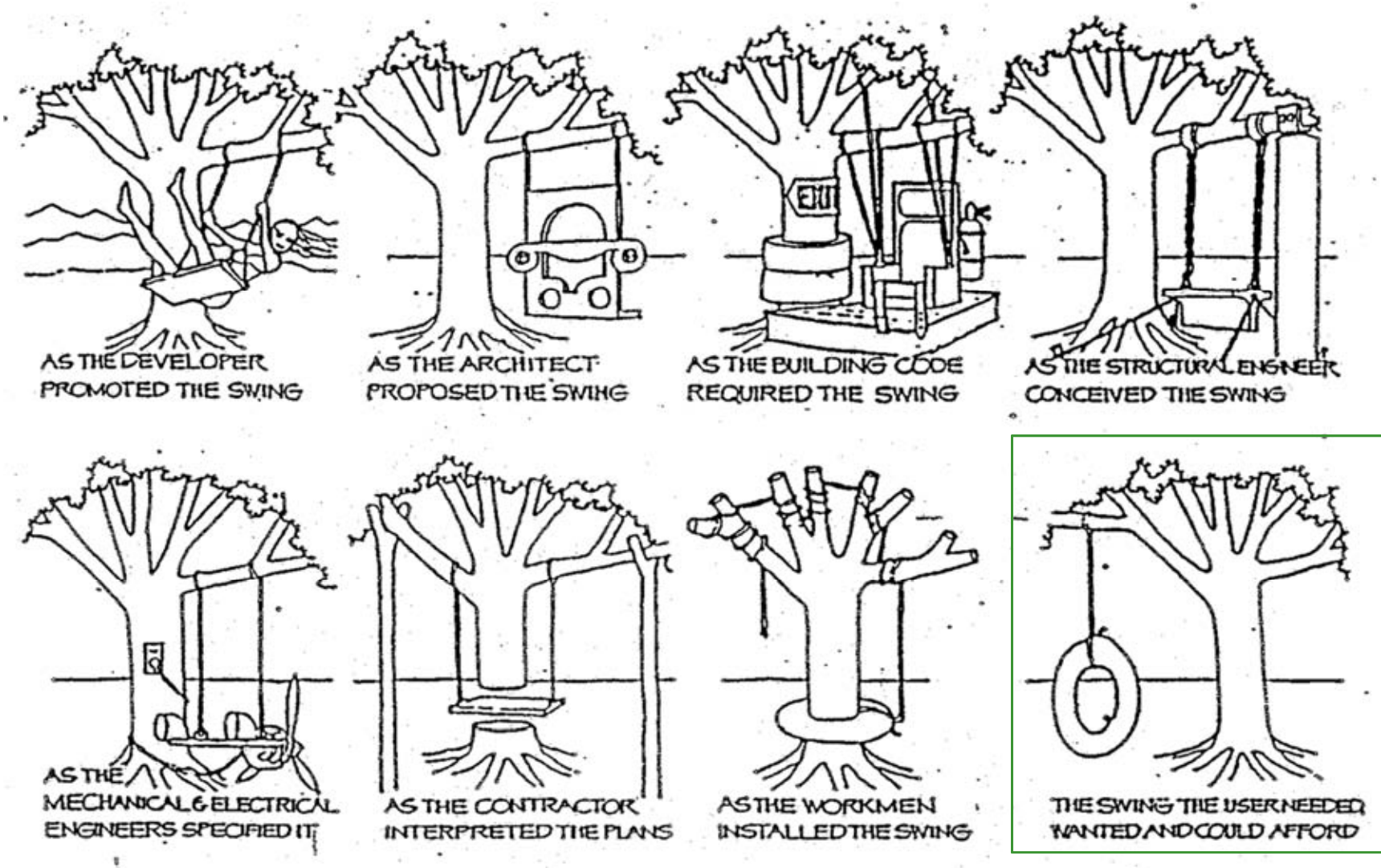
Role of Designer / Architect

Design Team

An **Architect** is said to be a man who knows very little about a great deal and keeps knowing less and less about more and more until he knows practically nothing about everything.

On the other hand an **Engineer** is a man who knows a great deal about very little and goes along knowing more and more about less and less, until finally he knows practically everything about nothing.

A **Contractor** starts out knowing practically everything about everything, but ends up knowing nothing about nothing, due to his association with architects and engineers.


AS THE DEVELOPER PROMOTED THE SWING
AS THE ARCHITECT PROPOSED THE SWING
AS THE BUILDING CODE REQUIRED THE SWING
AS THE STRUCTURAL ENGINEER CONCEIVED THE SWING
AS THE MECHANICAL & ELECTRICAL ENGINEERS SPECIFIED IT
AS THE CONTRACTOR INTERPRETED THE PLANS
AS THE WORKMEN INSTALLED THE SWING
THE SWING THE USER NEEDED WANTED AND COULD AFFORD

Role of Designer / Architect

Design Team Selection

- **Link to stakeholders** – Most often developers select architect they have already know and have worked with successfully. It can also be prudent to work with architect who has a link to neighborhood, knowledge of the government relationships or requirements as well as to community leaders.

- **Comparative Selection** – Several architects are considered on a comparative basis. Selection based on the interview process alone is the simplest form. A more sophisticated approach is for the owner to distribute a request to qualified Architects. Submissions are evaluated and a “short list” of firms are then interviewed. The interview allows the Owner to evaluate how each firm will approach the project and more importantly how strong the “chemistry” is between the Owner and the Architect.

Role of Designer / Architect

Design Team Selection

- **Design Competitions** – This approach enables the Owner to decide which design firm has the appropriate talent, skills, experience or attitude for a particular project. Often, the work completed is of little use in future phases of design as decisions were made without Owner.

- **Competitive Bidding** –The Architect provides a cost for service, which is a function of time. Bidding requires that the least amount of time possible be spent on the project. Even a well qualified firm may be forced to cut corners in order to be competitive.

- **Design/Build Selection** – The Owner may leave the selection of the Architect up to the selected Contractor. In this case, Designer reports to Contractor not to the Owner or Developer.

Role of Designer / Architect

20 Questions to ask your Architect

1. Whom will I be dealing with directly? Is that the same person who will be designing the project? Who will be designing my project?
2. How will the architect(s) approach our project?
3. How will the architect(s) gather information about our firm's operations, project site and so forth?
4. How will the architect(s) establish priorities and make decisions?
5. What does the architect see as important issues or considerations in the project? What are the challenges of the project?
6. What is the architect's design philosophy?
7. What are the steps in the design process?
8. How busy is the architecture firm?
9. How interested is the architect in this project?
10. What sets this architect/architecture firm apart from the rest?

Role of Designer / Architect

20 Questions to ask your Architect

11. How does the architect/architecture firm establish its fees?
12. How does the architect organize the process?
13. What does the architect expect us to provide?
14. What is the architect's experience in obtaining local government approvals? Handling public hearings?
15. What is the architect's experience/track record with cost estimating?
16. What will the architect show us along the way to explain the project? Models? Drawings? Sketches?
17. Inevitably there are changes that occur with a project. How does the architect handle change orders? Who pays for changes?
18. If the scope of the project changes later in the project, will there be additional fees? How will these fees be determined?
19. What services does the architect provide during construction?
20. Ask for list of clients the architect/architecture firm has worked with in the past.

Responsibilities of Designer / Architect

Basic Services

Basic Services **include** the disciplines of Architecture, Structural, Mechanical, Electrical and Plumbing engineering for the phases of design, including:

- Schematic Design
- Design development
- Bidding
- Contract documents
- Contract administration

Basic Services **do not include** the design phases of pre-design, master planning or concept design.

Responsibilities of Designer / Architect

Additional Services

- Changes to the site
- Changes to the scope of work
- Changes to the schedule
- Changes to the budget/financing
- Tenant required changes
- Changes to the regulatory and review process (?)
- Post occupancy evaluations
- Lease Outline Drawings
- Tenant Design Guide and Manuals
- Tenant Store design consultations
- Graphic Design
- Lighting Design
- Sustainability
- Marketing material, renderings, models

Role of Designer / Architect

Compensation

- **Stipulated (lump) Sum** – This method establishes a fixed amount of compensation tied to a specific set of services to be provided. Used when project scope and quality are well defined.

- **Cost-Plus-Fee** – Compensation based on time and expenses. This method is used when there are many unknowns about the project and the required scope of work. Variations of this method include: Multiple of direct salary expense (DSE); Multiple of direct personnel expense (DPE); or hourly billing rates.

- **Percentage of Construction Cost** – Compensation based on the cost of construction, not on the scope of work. Usually 6-8% for commercial buildings.

- **Unit - Cost Method** – Fee based on cost per square meter.

Role of Designer / Architect

Standard Agreement Terms

- Details for adding professional services
- Compensations details
- Time requirements
- Owner responsibilities
- Construction costs and fixed limits to costs (designing per budget)
- Ownership of documents
- Dispute resolution
- Termination of the agreement
- Governing law, etc.

Responsibilities of Designer / Architect

Design Team

Leading architect / Author / Concept designer + Local architect support

Structural, Mechanical, Electrical, Plumbing Engineering

- Most often contracted through the Architect
- Architect coordinates the efforts

Others most frequently requested or included trades:

- FP Consultant
- Landscape Architecture
- Graphic Design
- Lighting Design
- Sustainability

Role of Designer / Architect

Design Team

Others – usually contracted directly by the Owner / Developer:

- Civil Engineering
- Tenant Coordination
- Marketing
- Branding
- Merchandizing / Tenant Mix planning
- Leasing
- Facility Planning and Programming

The client's design team of consultants and specialist advisers

Archaeology adviser	
Architect	may be more than one
Acoustic consultant	
Building surveyor	
Catering consultant	
Civil engineer	
Commercial agent	retail planning and leasing strategy leasing may be divided between several agents land and property acquisitions
Commercial viability adviser	
Conservation and historic buildings consultant	
Construction planning adviser	
Cost planners and surveyors	
Customer research analysts	
Environmental impact adviser	
Fabric engineer	external façade design
Fire safety consultant	
Graphic designer	
Health and safety supervisor	
Highway and transport engineers	
Hydraulic engineer	water table, flooding and rivers
Interior designer	
Landscape architect	
Legal adviser	lawyer
Lighting designer	
Planning consultant	strategy
Planning lawyer	can be separate from planning consultant
Political analyst	
Project planners and programmers	
Public art adviser	
Public relations adviser	
Retail demand analyst	can be commercial agent
Services engineers	
Structural engineers	
Tenant shop fitting designer and coordinator	
Topographical surveyors	
Wind tunnel test analysts	

Source: Peter Coleman

Role of Designer / Architect

Design Team Coordination

- **Good communication**
- **Organization** – selecting team members and establishing procedures
- **Execution** – project design and production of documents
- **Quality assurance** – project and design meetings, checklists, maintaining communication, cross checking documentation

Common problems

- Omissions
- Discrepancies
- Terminology differences

Design Phases and Deliverables

Project Delivery Approach

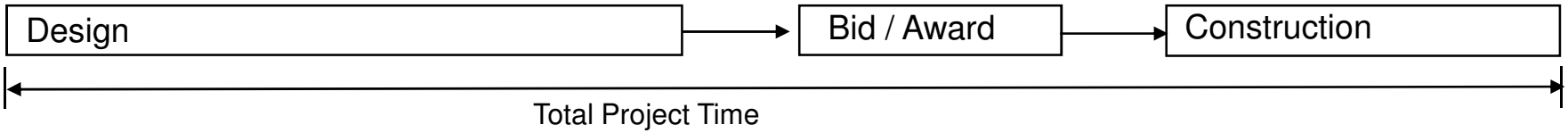
- Traditional - Design Bid Build
- Fast Track
- Design / Build

	CONTRACTUAL	
	Separate Responsibility For Design and Construction	**Single** Responsibility For Design and Construction
PROCESS		
Sequential Design and Construction	Design-Bid-Award-Build	Design/Build
Overlapped Design and Construction	Fast-Track	Design/Build (Fast -Track)

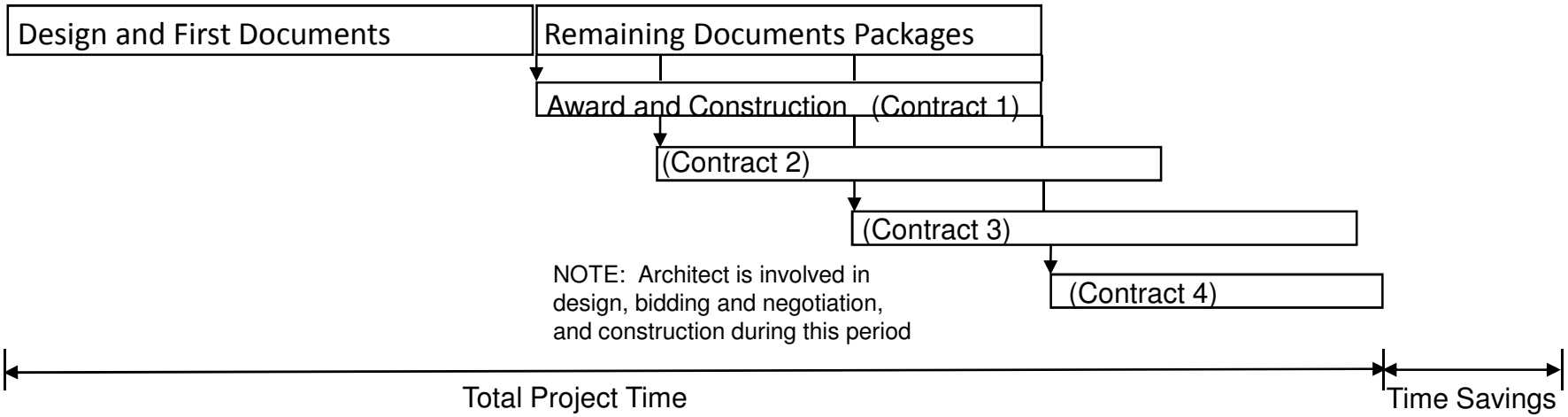
Design Phases and Deliverables

Project Delivery Approach

Sequential Design and Construction

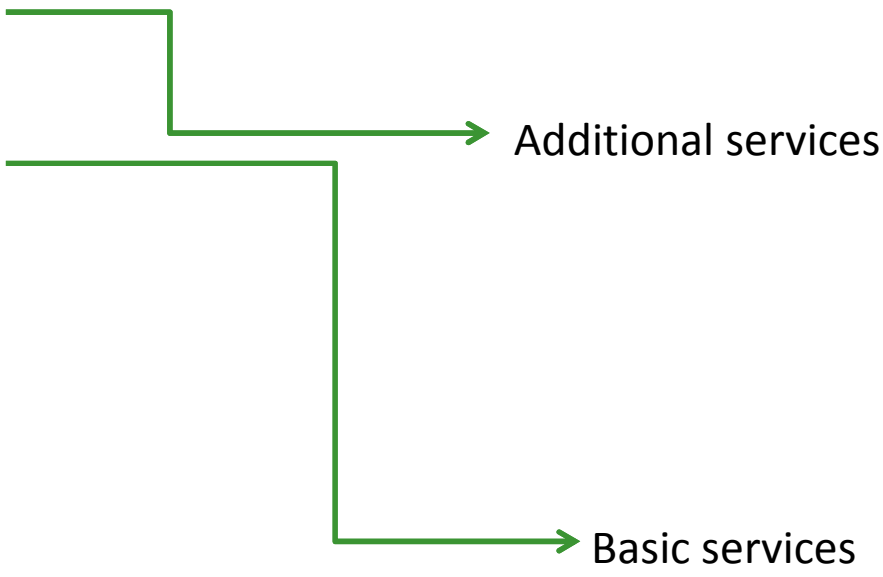


Overlapped Design and Construction



Design Phases and Deliverables

- Pre Design & Programming
- Master Planning & Concept Design
- Schematic Design
- Design Development
- Construction Documents
- Bidding
- Construction Administration
- Best Practices and Examples



Design Phases and Deliverables

Pre Design & Programming

- Contextual Analysis
- Site Analysis
- Building footprint requirements
- Open space requirements
- Alternative site feasibility studies

Design Phases and Deliverables

Pre Design & Programming

Contextual Analysis

- Climatic
- Geography
- Urban context (Urban pattern, Zoning, Transportation)
- History (Tradition, Style, Prior use)
- Social (Culture, Community, Religion, Economy, Political situation)

Site Analysis

- Topography
- Geotechnical survey (soil)
- Visibility, Views
- Easements (right of use)
- Setbacks
- Access/Egress
- Public Transit
- Roads
- Utilities
- Environmental contamination

Design Phases and Deliverables

Pre Design & Programming

Building footprint requirements

- Boundary Survey (Construction line of the building)
- Parking requirements (5 spaces per 93m2 retail GLA, shared parking analysis to reduce number of spaces, parking distances, organization and position – teaser parking)
- Landscape Requirements (as per local regulations, % of lot area)
- Ground Coverage (% of lot area)
- Floor Area Ratio

Studies are done in order to determine GBA, GLA, number of floors, configuration of building, area per floor.

Design Phases and Deliverables

Pre Design & Programming

Open space requirements

- Setbacks
- Wetlands
- Landscaping buffers
- Service docks
- Site circulation
- Utility easements
- FP requirements (distances, fire fighting access)

Design Phases and Deliverables

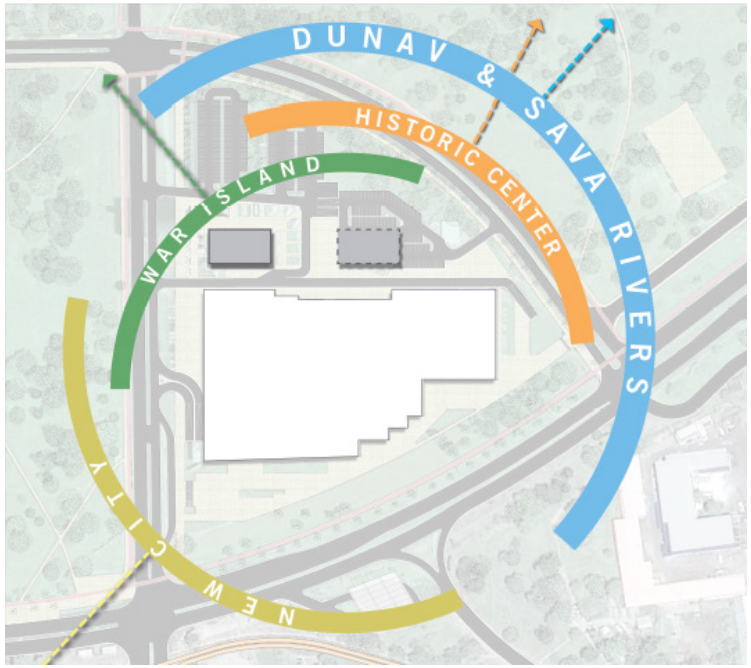
Pre Design & Programming Objectives

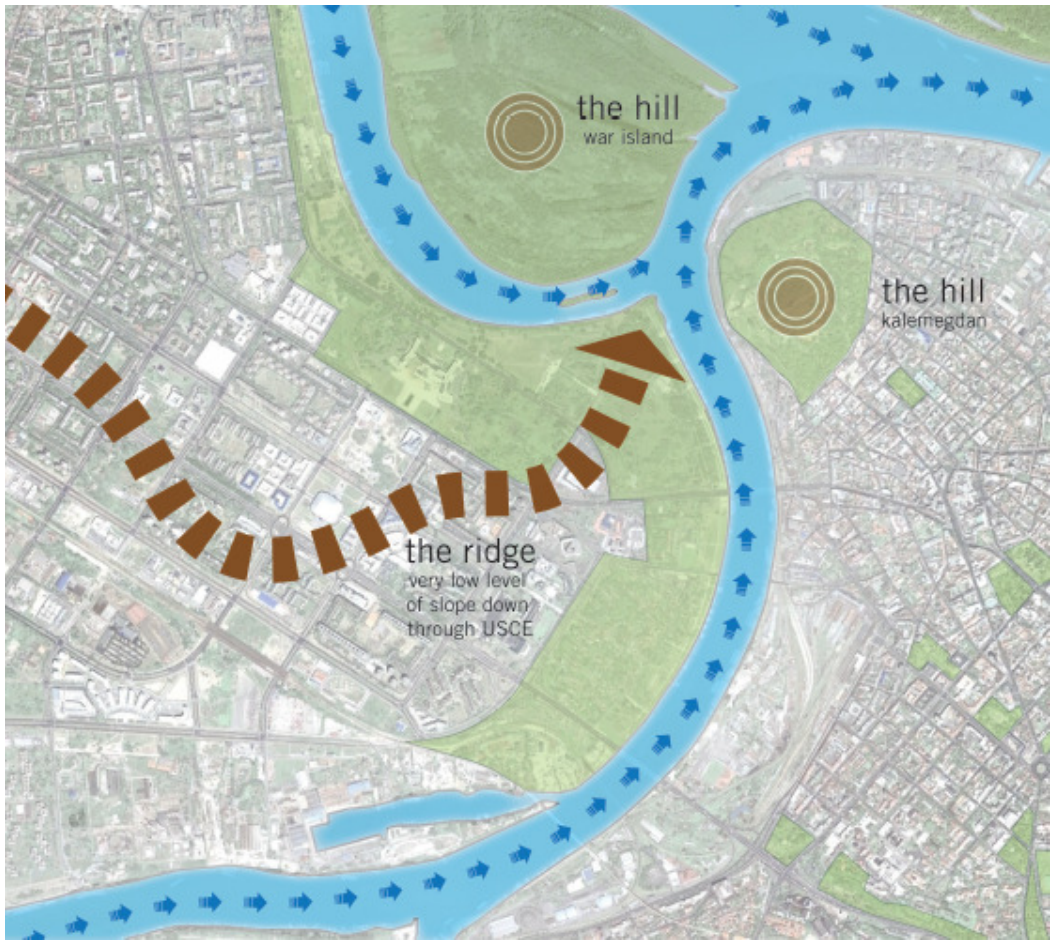
The Pre Design process can help owner/architect/contractor team to determine the general cost and schedule for project - financial viability.

- Establishing strategic planning constraints
- Analyzing relationships with other developments
- Reviewing the type of shopping format (to match the location)
- Agreeing the overall size
- Testing the fit with site
- Preparing a wish list of tenants
- Balancing the mix between unit shops, anchor stores and catering (food-court)
- Establishing relationship with the different modes of public transport
- Establishing the type and nature of shopping environment

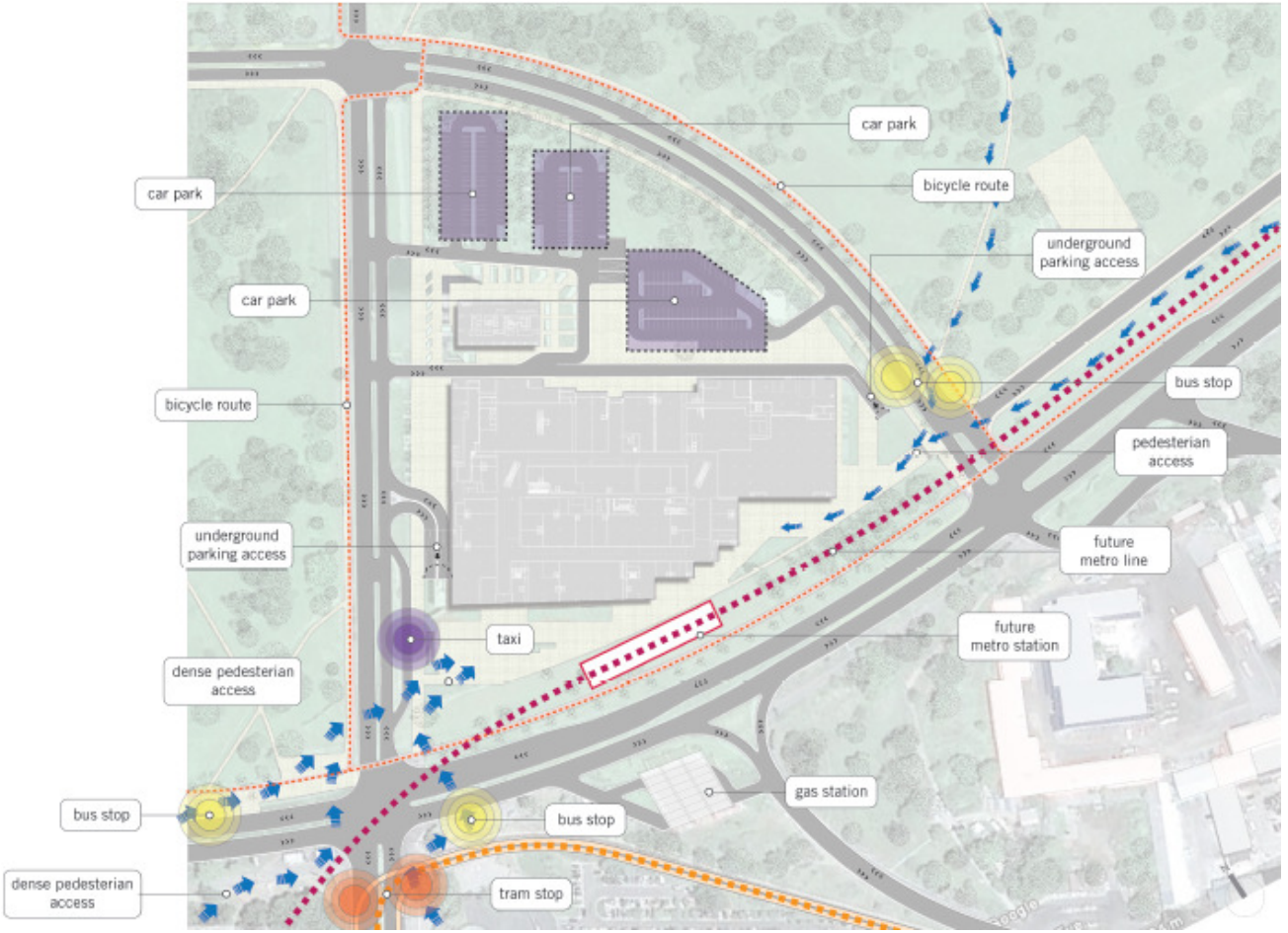
Example
Site Analysis: Position, Surroundings, Traffic, Transportation

Example
Site Analysis: Topography and Views

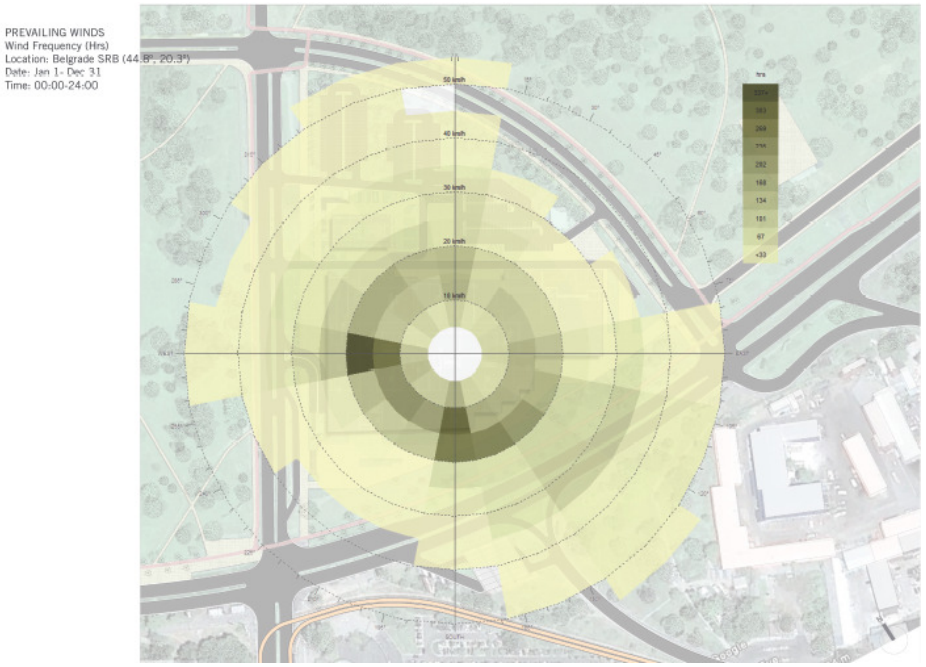


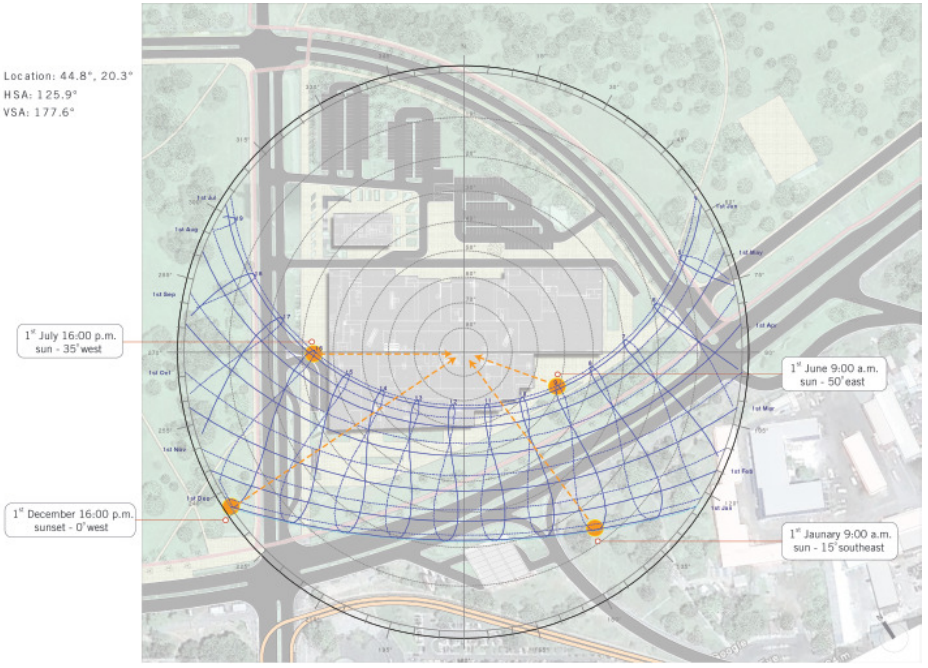


Example
Site Analysis: Traffic and external movements



Example
Site Analysis: Solar and Wind profile

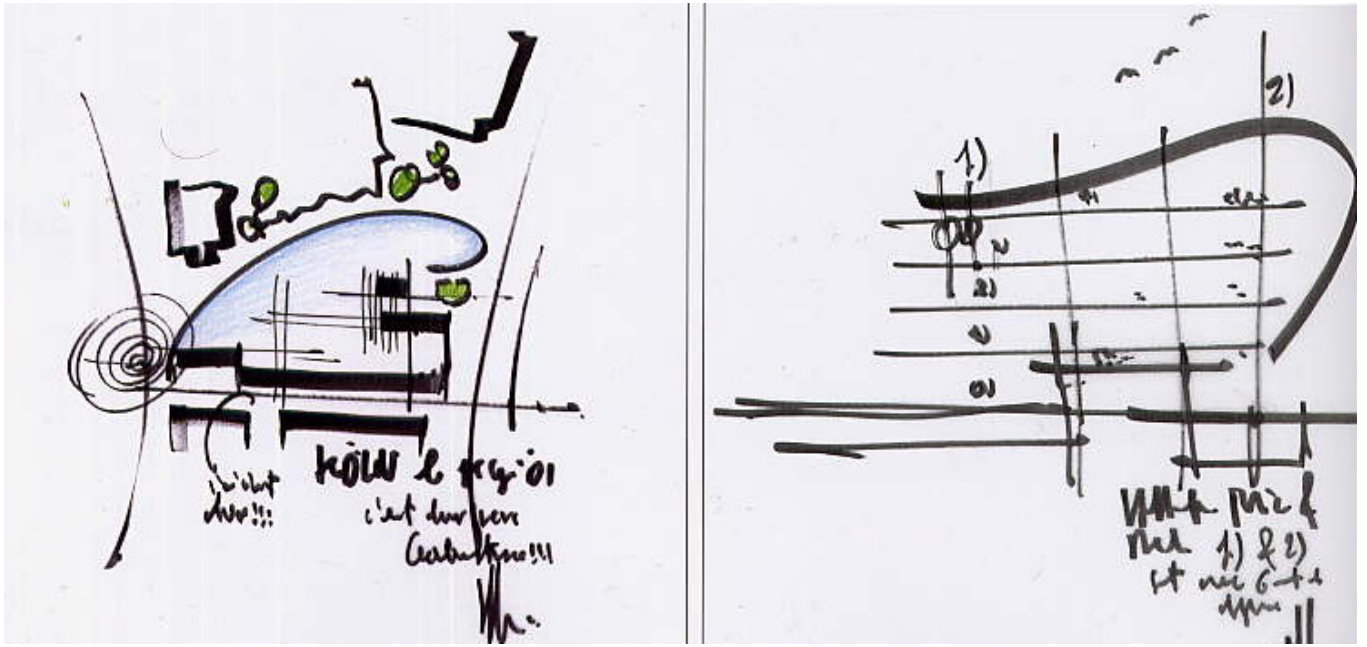




Design Phases and Deliverables

Master Planning and Concept Design

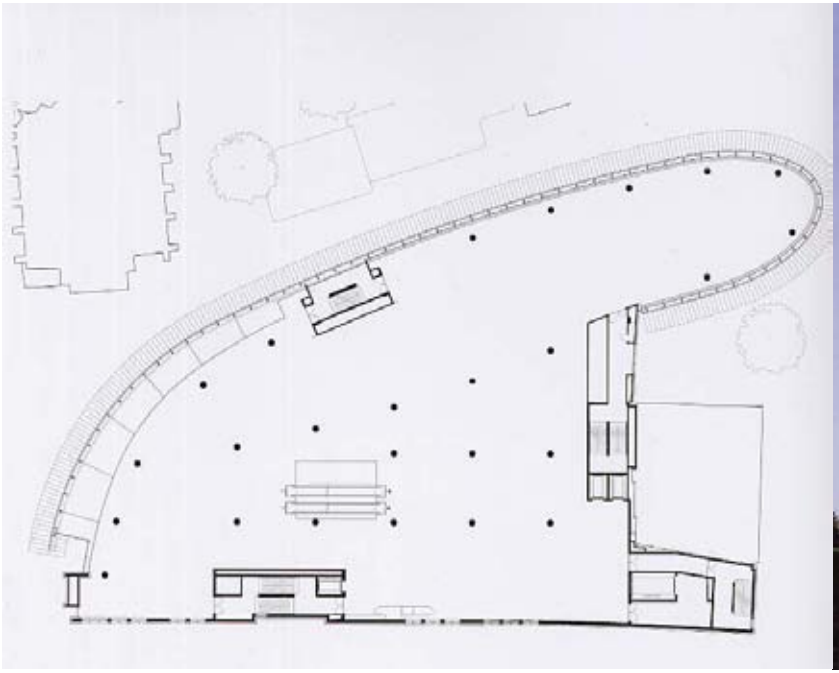
"Napkin Design"

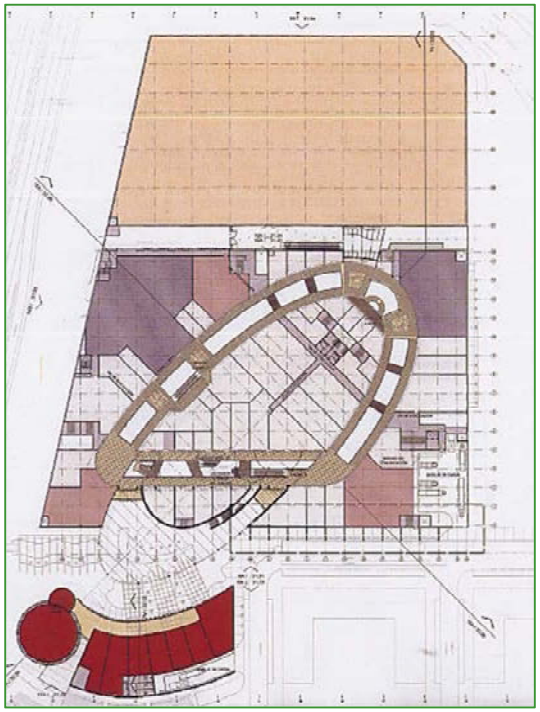


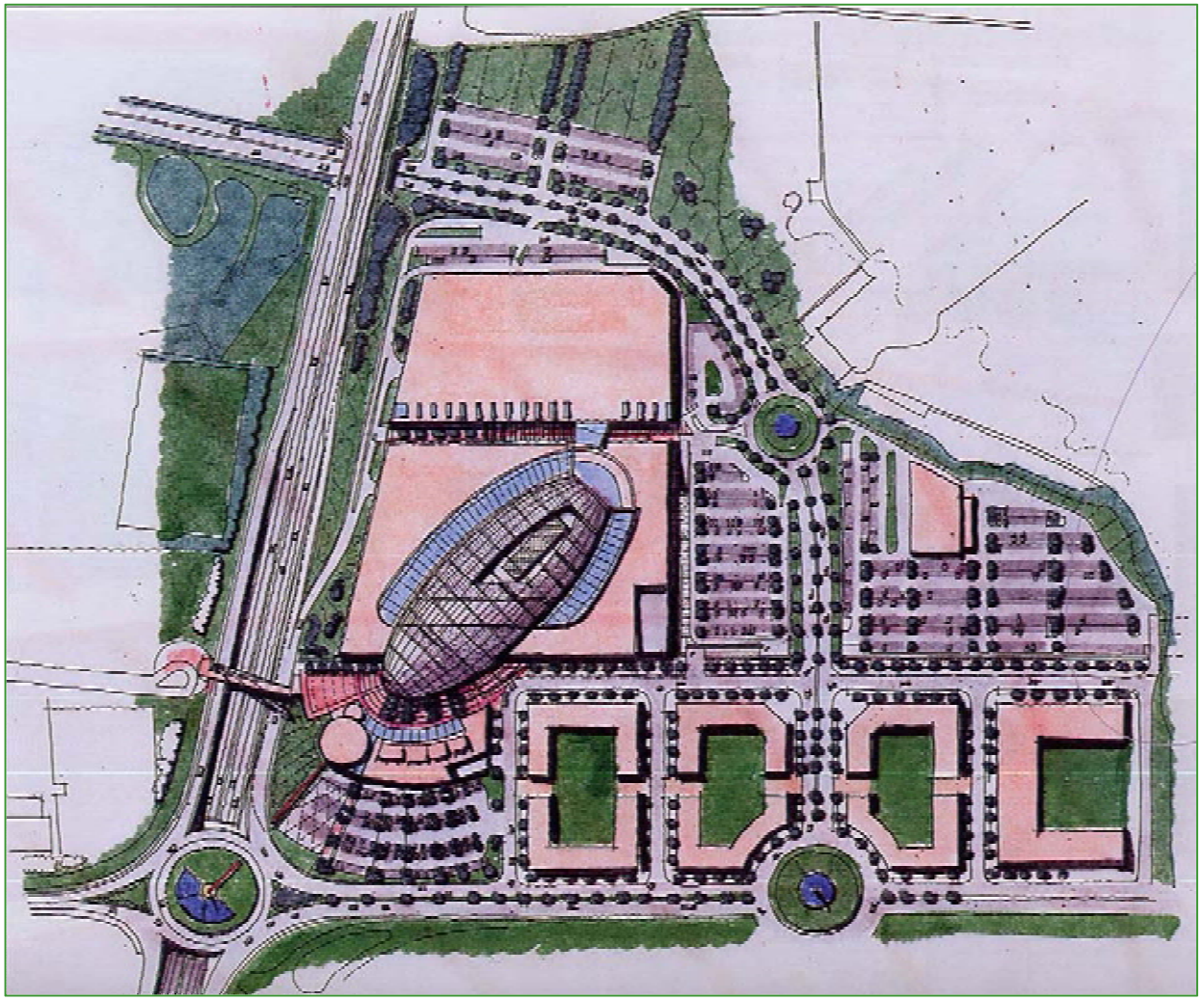
Arch. Renzo Piano
P&C Department Store
Cologne, Germany

Design Phases and Deliverables

Arch. Renzo Piano
P&C Department Store
Cologne, Germany







Arch. RTKL
ING Real Estate
BERCEO Retail Centre
Logrono, Spain

Design Phases and Deliverables

Schematic Design

- The architect establishes the general **scope**, **scale** and **relationships** of a project (buildings, their location, size and relationships to each other), delivering the overall lot plan
- Architect explores options for design and construction based on owners program and budget, considering zoning constrains and requirements

Deliverables

- Site plans : plot plans indicating placement of buildings, streets, parking …
- Floor plans
- Elevations and Building Sections
- Renderings, Models and other presentations and specifications to explain overall project concept

Design Phases and Deliverables

Schematic Design

Question:
What might be the impact of a Fast Track delivery approach in Schematic Phase of Design?

Design Phases and Deliverables

Design Development

- Establishes the **character** and **size** of each phase of development and adds more details and coordination to produce a real project
- This phase takes into account compliance with life safety codes, zoning implications and surrounding infrastructure

Deliverables

- Site plans
- Floor plans
- Enlargements of plans, elevations, sections
- Detailed sections of critical material and building intersections
- Material defined and specified
- Detailed Renderings, Models and other presentations and specifications to explain design direction and introduce major building system into the design concept

Design Phases and Deliverables

Detailed Design

Again:
What might be the impact of a Fast Track Construction process in Detailed Design phase?

Design Phases and Deliverables

Construction Documents

- **ARE** drawings and specifications created by an architect that set forth in detail requirements for the construction of the project, and assist the owner in preparing the necessary permitting, bidding and contractual information for construction
- **ARE NOT** intended to be a complete set of instructions on how to build the project or to define means, methods, techniques, sequences, procedures, and site safety precautions. Construction Documents are not Shop Drawings

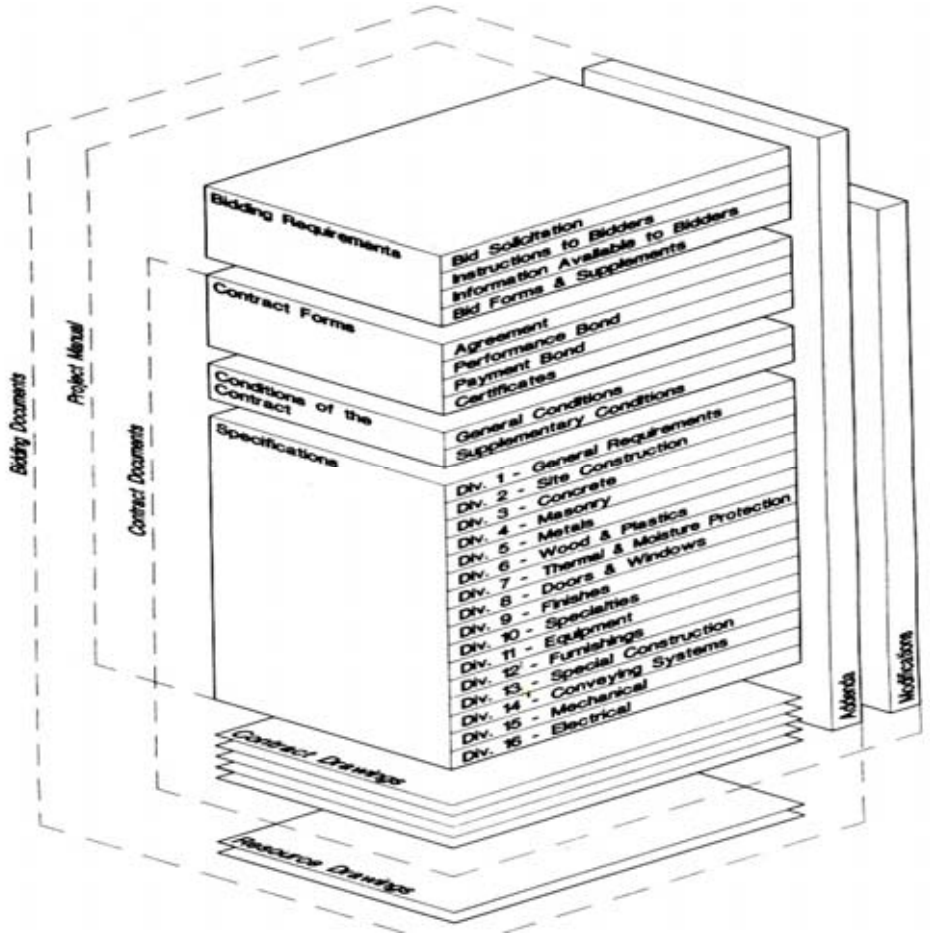
Design Phases and Deliverables

Construction Documents

- Drawings annotating the size and scope of the project
- Specifications outlining the quality standards for construction
- Contract Forms and Conditions outlining the rights, responsibilities and duties of the owner, contractor and others involved in the process (including the architect)
- Bidding Requirements information and bidding forms

Design Phases and Deliverables

Documentation Organization



Design Phases and Deliverables

Bidding

- The drawings and specifications created by an architect that set forth in detail requirements for the construction of the project and assist the owner in preparing the necessary bidding and contractual information for construction.

Design Phases and Deliverables

Bidding Documents include:

- Bid solicitation form
- Instructions to bidders
- Information available to bidders
- Bid forms and supplements

Bidding Documents establish following goals:

- Project Delivery
- How contracts will be structured
- Contract award system
- Contractor compensation

Design Phases and Deliverables

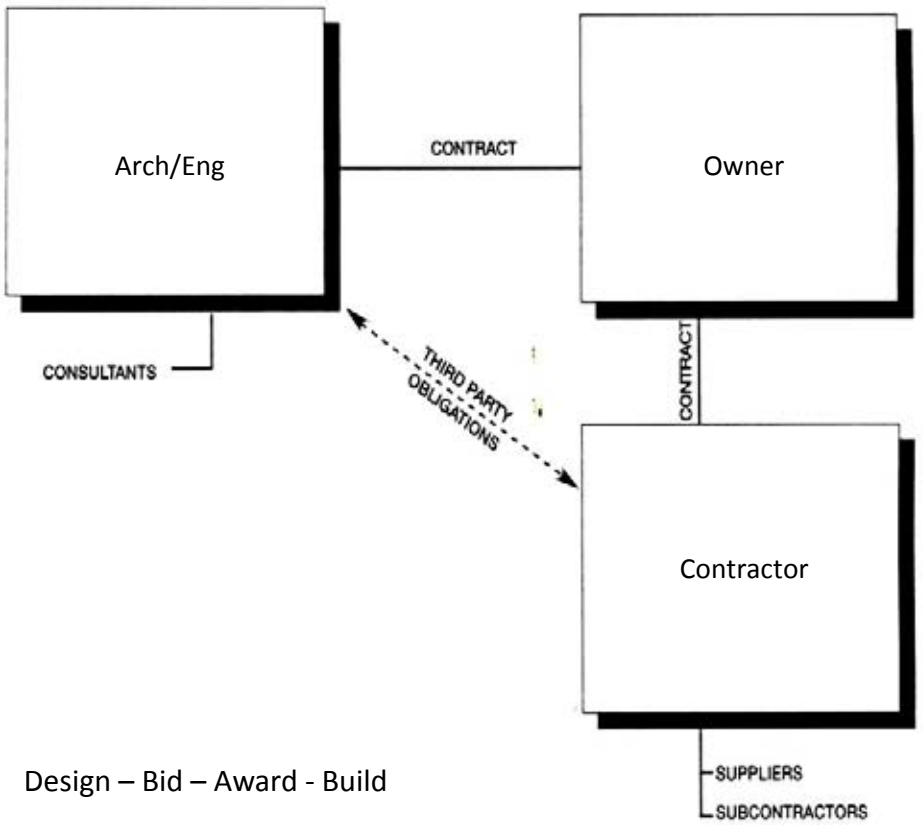
Budgeting During Design

	Documents and Information	Pricing Type	Pricing Accuracy	Schedule Type
Conceptual Design	▪ Napkin	▪ Data Bank	+/- 15%	▪ Past Projects
Schematic Design	▪ Site Plan ▪ Preliminary Layouts ▪ Systems	▪ Systems Pricing	+/- 10%	▪ Bar Chart ▪ Master Schedule
Design Development	▪ Systems Complete ▪ Some Details ▪ Building Sections	▪ Quantities ▪ Trade Items	+/- 5%	▪ Long Leads ▪ Preliminary Cost
Final Design Construction Documents	▪ "Complete" (no such thing as a complete set of CD's!)	▪ Detailed Quantities Unit Prices ▪ Sub Bids ▪ GMP / Final Budget	+/- 2%	▪ Detailed Cost

Design Phases and Deliverables

Construction Administration

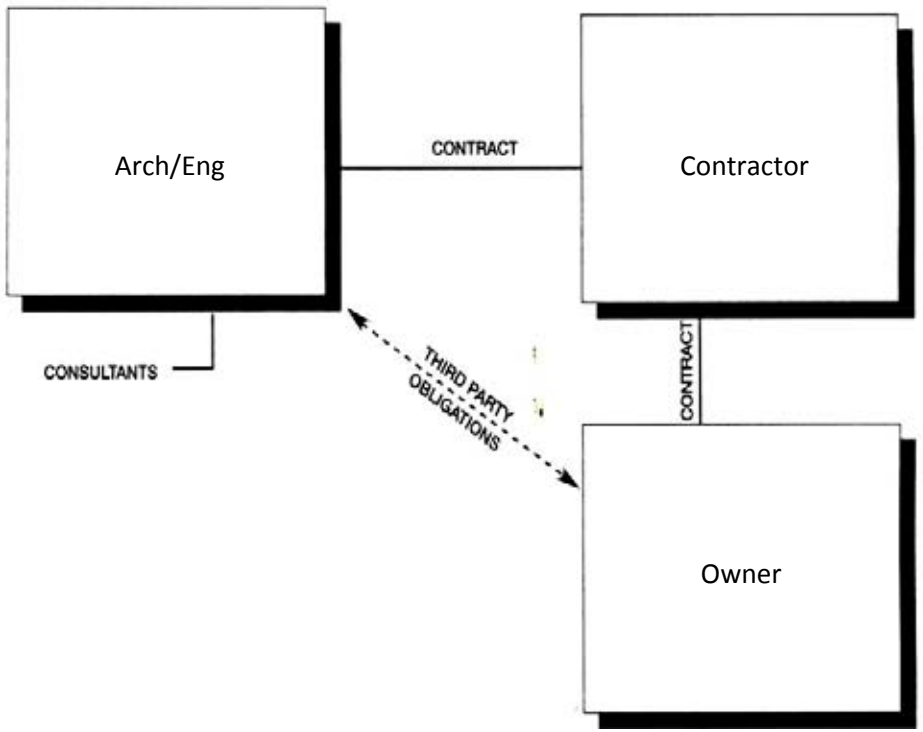
- Realization
- Design intention maintenance
- Adjustments
- General activities coordination
- Tenants` design issues hendling



Design – Bid – Award - Build

Design Phases and Deliverables

Construction Administration



Design/Build

Design Phases and Deliverables

Construction Administration

Architect responsibilities

- Observing construction work for conformance to drawings and specifications
- Processing contractors shop drawings, product data, submittals and samples
- Review the fabrications and materials from shop fabricators to ensure design intent
- Review results of construction tests and inspections
- Evaluate contractors request for payment
- Handle requests for changes during construction
- Address and resolve claims brought by contractor and owner
- Responses to contractors for information

Design Phases and Deliverables

Construction Administration

Owners responsibilities

- Site information
- Selecting and awarding contract
- Construction insurance
- Legal notices
- Notifying of defects and deficiencies
- Compensation
- Making decisions during construction

The **Tenant Criteria Manual** (Design and Site coordination Manual) is issued, by the owner, to coordinate work of Tenants` design and construction for the center. It has heavy input from design team.

Design Phases and Deliverables

Construction Administration

Contractor responsibilities

- Following contract documents and laws and regulations effecting construction
- Selecting construction means and methods
- Supervising and coordinating the work
- Paying for labor, materials, equipment, utilities and services
- Fulfilling contractual responsibilities for permits, bonds and other written notices approvals and submittals

Design Phases and Deliverables

Construction Administration

Terminology

- RFI – Request for Information
- RFC – Request for Change
- CO – Change Order
- Shop Drawings

Design Phases and Deliverables

Tenant Criteria Manual

/Tenant Design Guide or Tenant Coordination Manual/

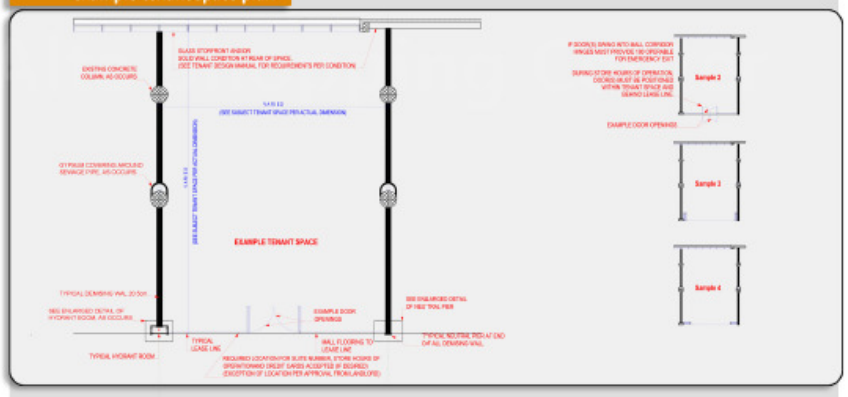
- Document establishing criteria to ensure tenant`s improvements completion on time, and achieve appearance of tenant space in accordance with overall design and ambiance of the Center

Tenant Criteria Manual

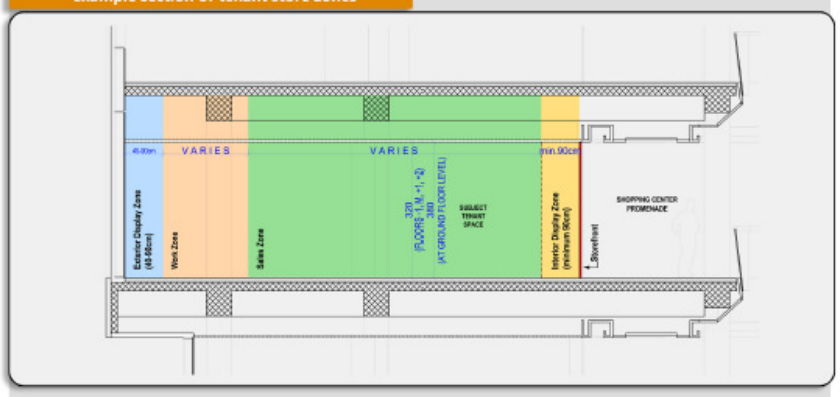
- General Mall Information
- Tenant submission requirements
- Shopping Center design guidelines
- Tenancy Design guidelines
- Tenancy Fit-out guidelines

storefront examples

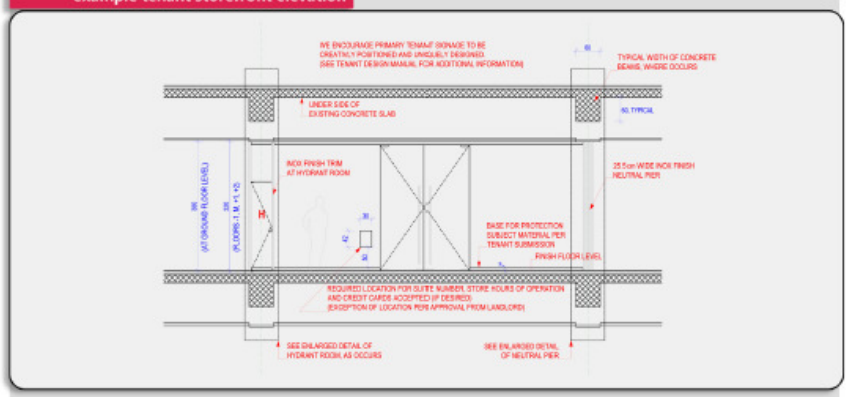
example tenant space plan



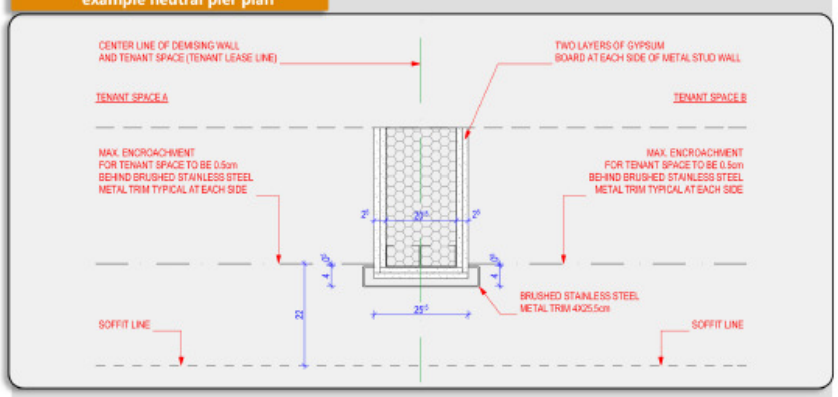
example section of tenant store zones



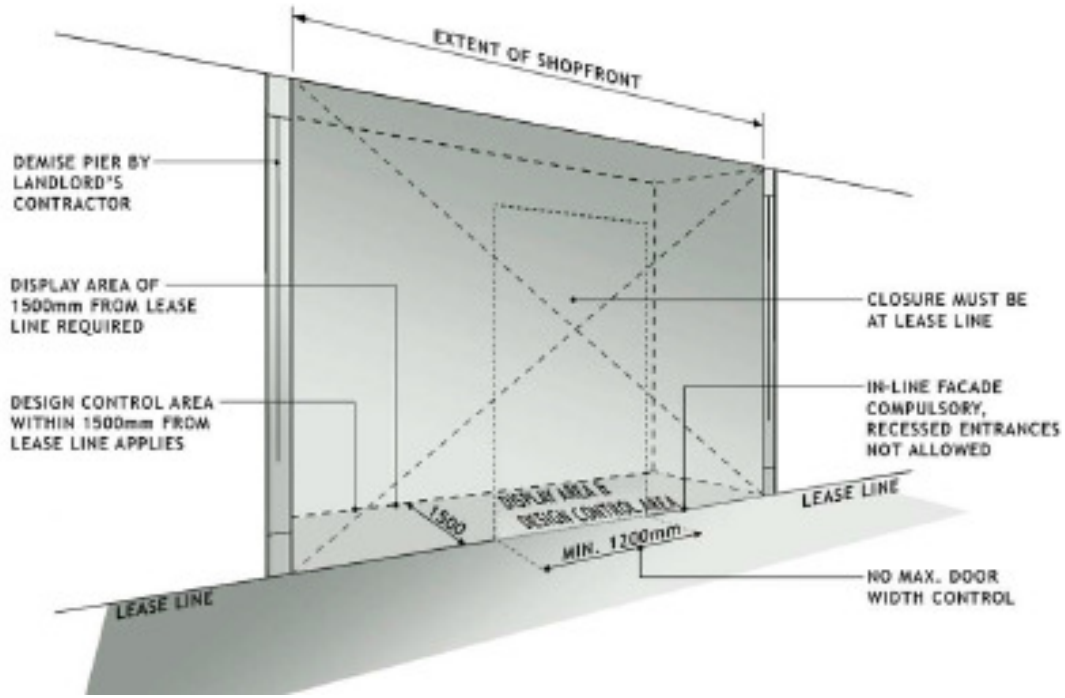
example tenant storefront elevation



example neutral pier plan



Tenant Criteria Manual



DESIGN GUIDELINES

Shopfront Design Controls

In-line facades compulsory

Recessed entrances are not allowed

Closure must be maintained at the lease line

No maximum door width control

Minimum door width allowed is 1200mm

Minimum 60% transparent shopfront is required

Display area of 1500mm from the lease line is required

Design control area within 1500mm from the lease line is applicable

Signage

Creative signage format is encouraged subject to SSA review and approval

Signage is subject to individual design parameters and is not restricted to fixed signage zoning control

Horizontal bulkhead signage across the full width of the shopfront is not allowed, vertical signage is encouraged

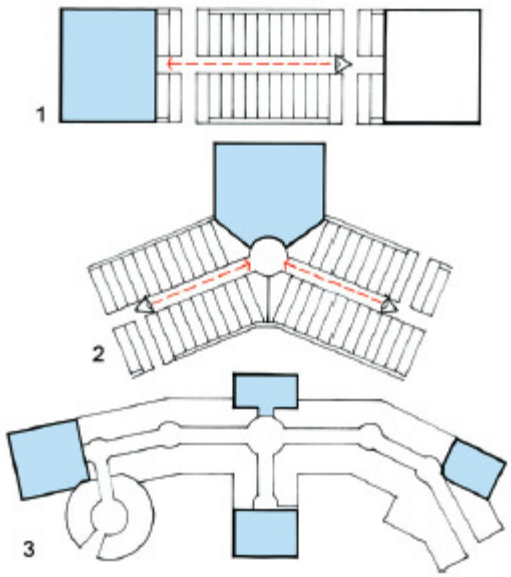
Design Guidelines

General Layout objectives

- Layout should form unique and interesting place that is convenient, safe and enjoyable to use
- It should be easy to understand
- The arrangement should establish strong pedestrian flows which will allow customers to pass along all the retail frontages
- Anchor stores and other major attractions should be positioned to generate and reinforce pedestrian flow

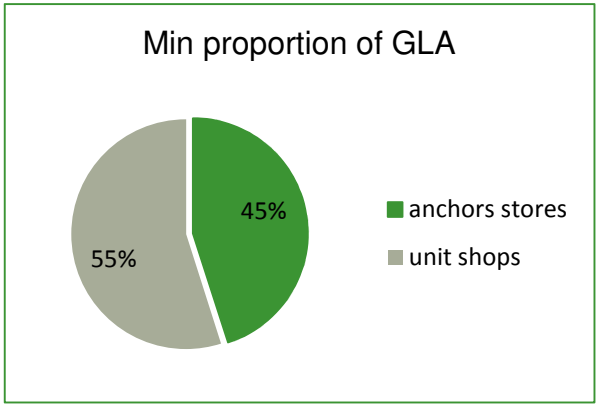
- at the end of a run of shops, thereby drawing customers past the shopfronts
- located at a change of direction in the layout in a way which is clearly visible and draws customers in from both directions
- strategically positioned to form a focus and point of punctuation in a large complex layout.

Anchor stores should be located in positions that are easily understood and achieve good visibility within the internal layout and have an external presence.



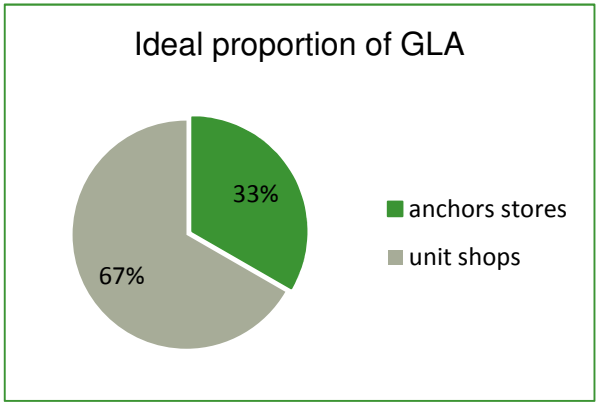
Design Guidelines

Shop Units



Size requirements

- Majority of tenants (63%) seek floor space of 95-380m2
- Strong preferences for units in range 190-325m2
- Small proportion (19%) require unit less than 95m2
- A proportion (18%) require larger than 380m2



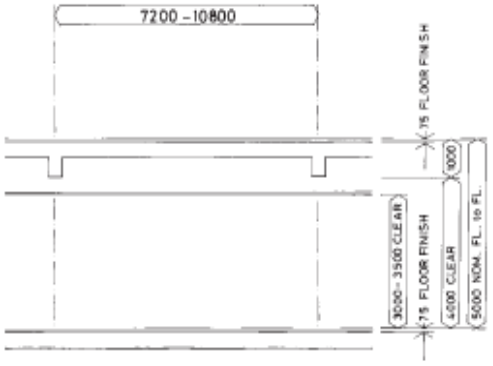
For large and regional shopping centers to be viable ideal proportion of unit shops to the total should range between 55-70% of GLA

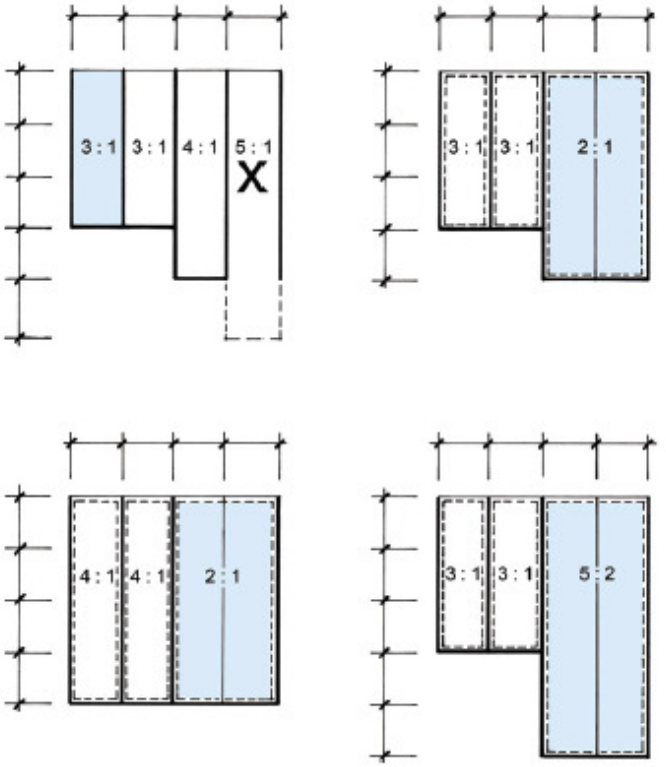
Design Guidelines

Shop Units

Frontage Module

Another key consideration in shop unit planning will be the dimension of the frontage module. Frontage size has similarly increased with the evolution of shopping centres. The typical shop unit frontage accepted today by tenants is a module between 7.5 and 8 m (24–26.2 ft).



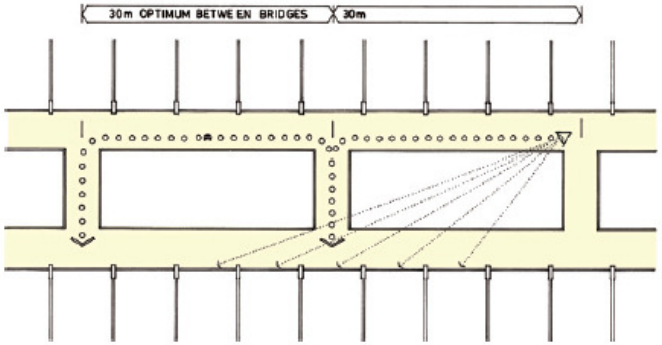


Typical shop unit proportions: single shop unit width to depth proportions should not exceed 3:1 or 4:1. Where units are combined to make larger units these proportions still apply. *(Source: Peter Coleman)*

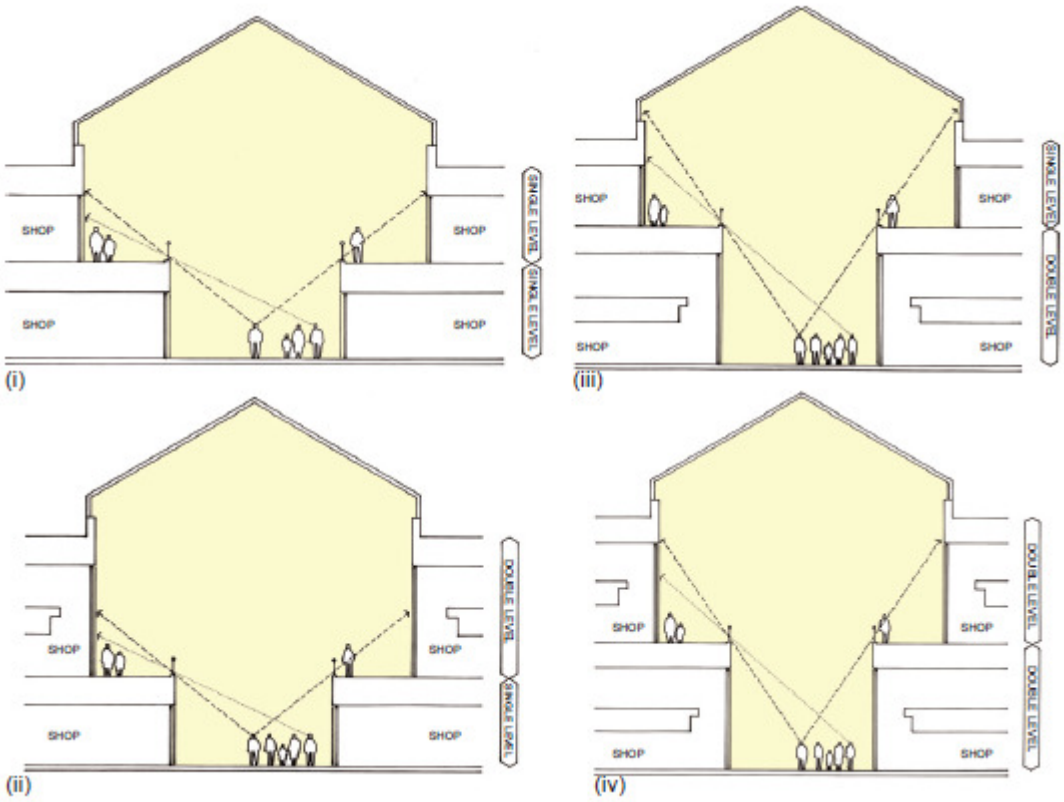
Design Guidelines

Vertical visibility

Dimensional requirements



The optimum spacing of bridges for convenient crossovers between gallery walkways. *(Source: Peter Coleman)*



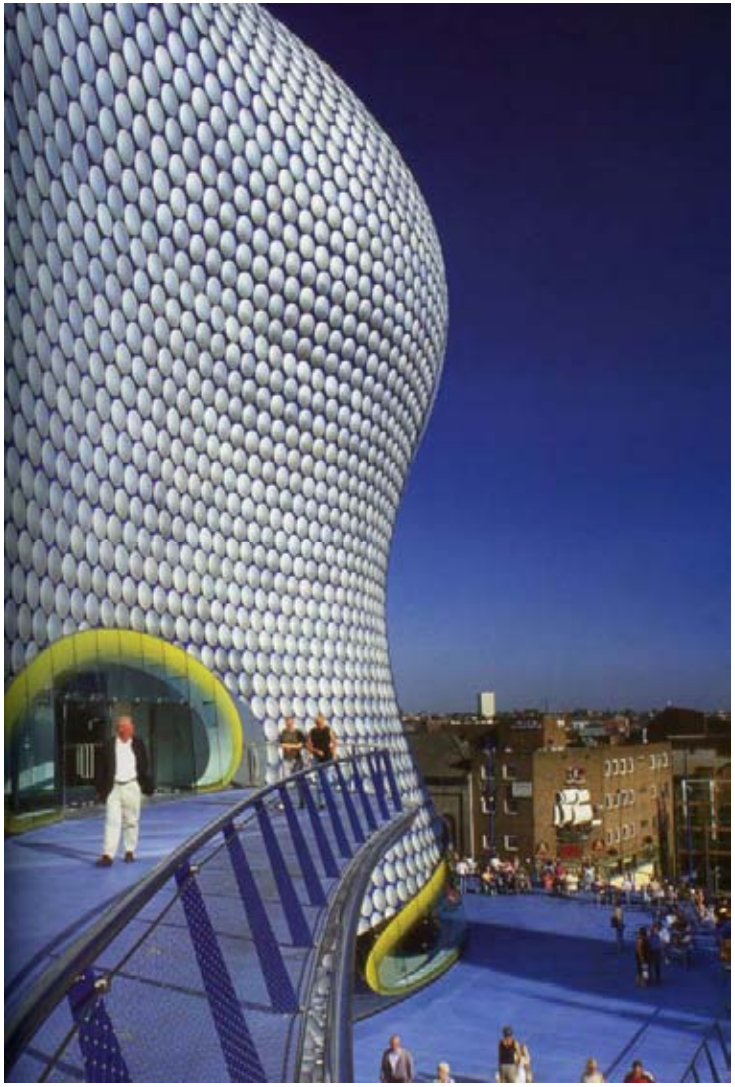
Shopping Centers Design Trends

- Landmark Architecture - Form Over Function
- Colors and Lights
- Vertical Retailing
- Sustainable Design & Green Roofs
- Discovery Spaces
- Technology: Facades and Interiors

Landmark Architecture

Selfridges
Birmingham, UK
Department Store

Arch. Future Systems



Landmark Architecture

Selfridges
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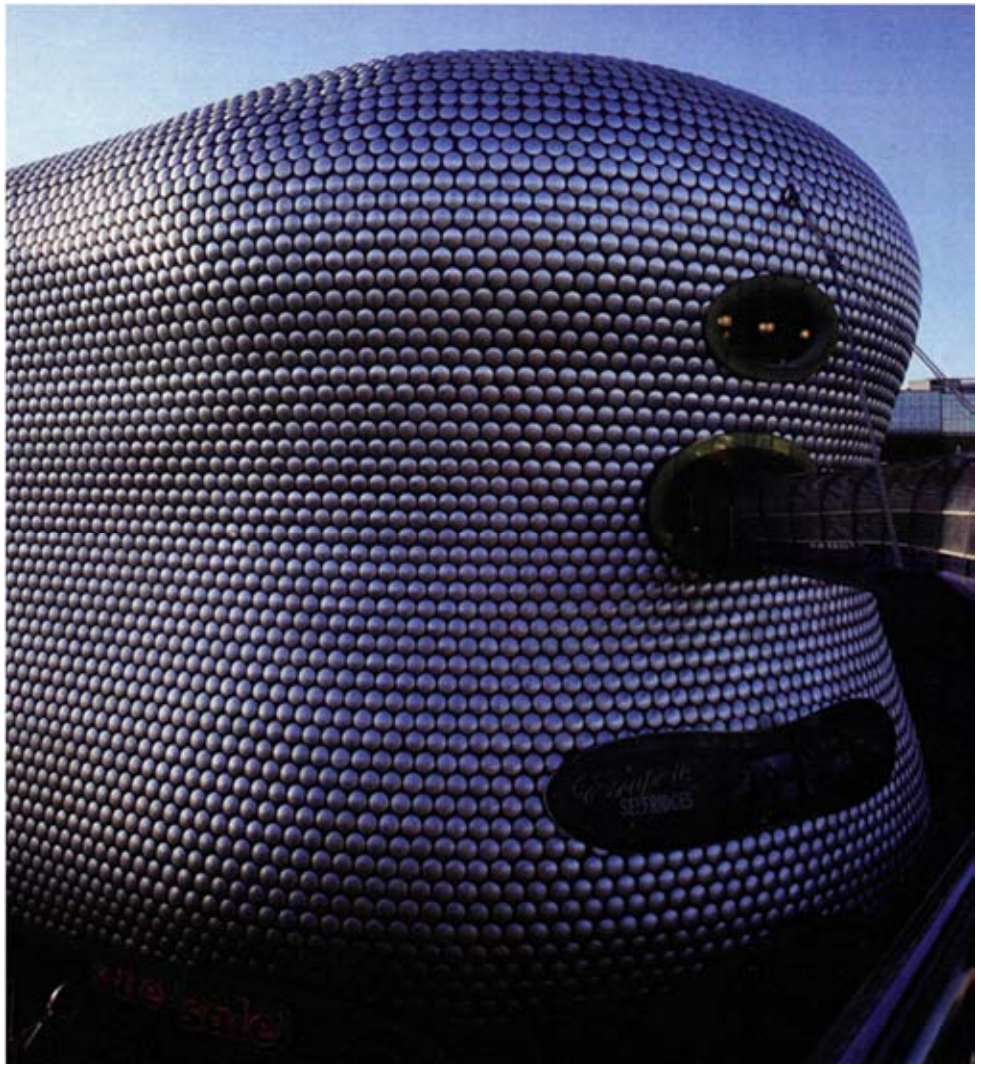
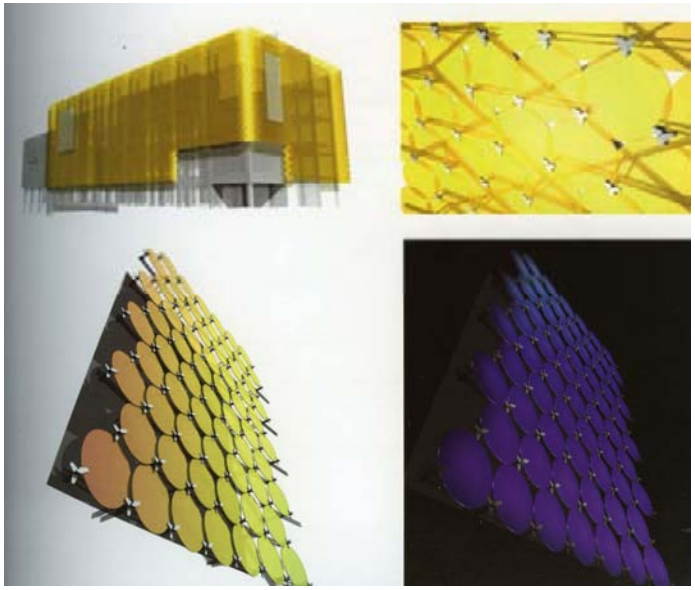
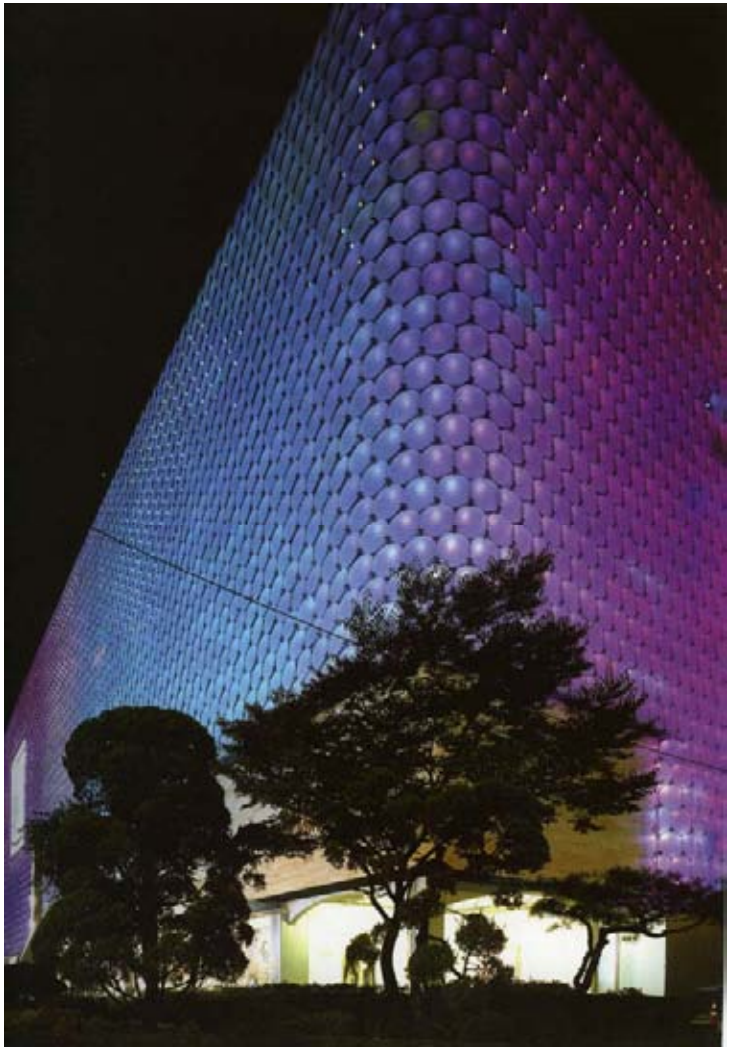


Colors and Light





Galleria Hall West
Department Store
Seoul, South Korea

Arch. UN Studio
2004

Sevens
Department Store
Dusseldorf, Germany

Arch. RKW

Vertical Retailing

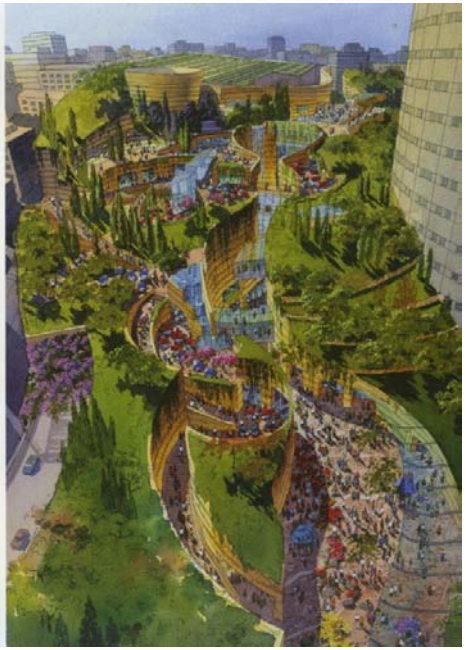
ICSC

European Retail Property School

Green Roofs

Namba Parks
Mixed use development
Osaka, Japan

Arch. Jerde Partnerships

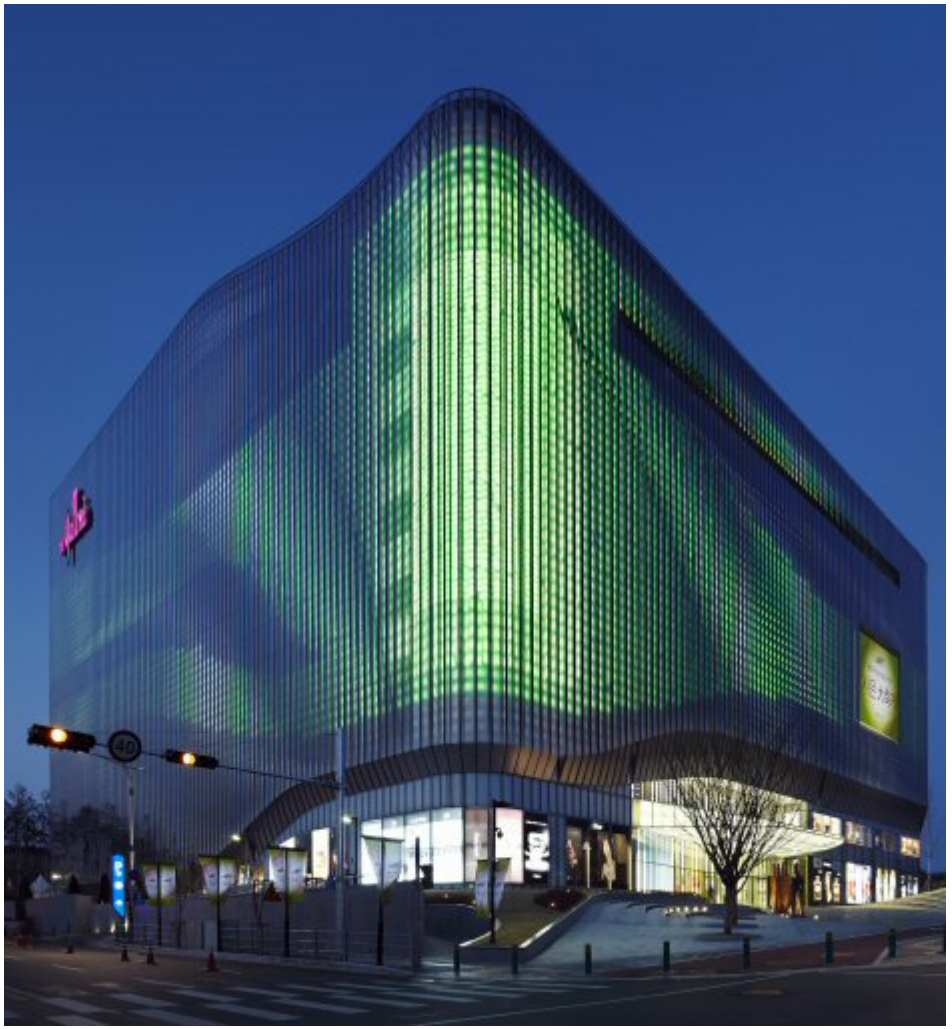


Hi – Tech

" a shopping mall with dancing façade"

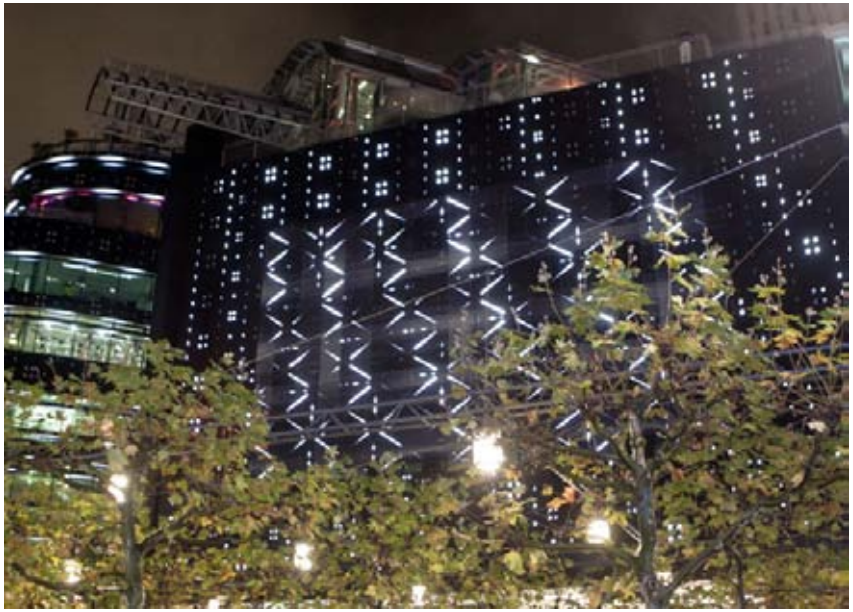
Galleria CenterCity
Department Store
Choenan, South Korea

Arch. UN Studio, Ben van Berkel, Amsterdam
2011



Hi – Tech

LED dynamic facade



Zeilgalerie
Frankfurth, Germany
3delux Company

Hi – Tech

Mall Taman Anggrek, Jakarta, Indonesia
Arch. Altoon and Porter

Liverpool One
2008

Mediacité
Liege 2009

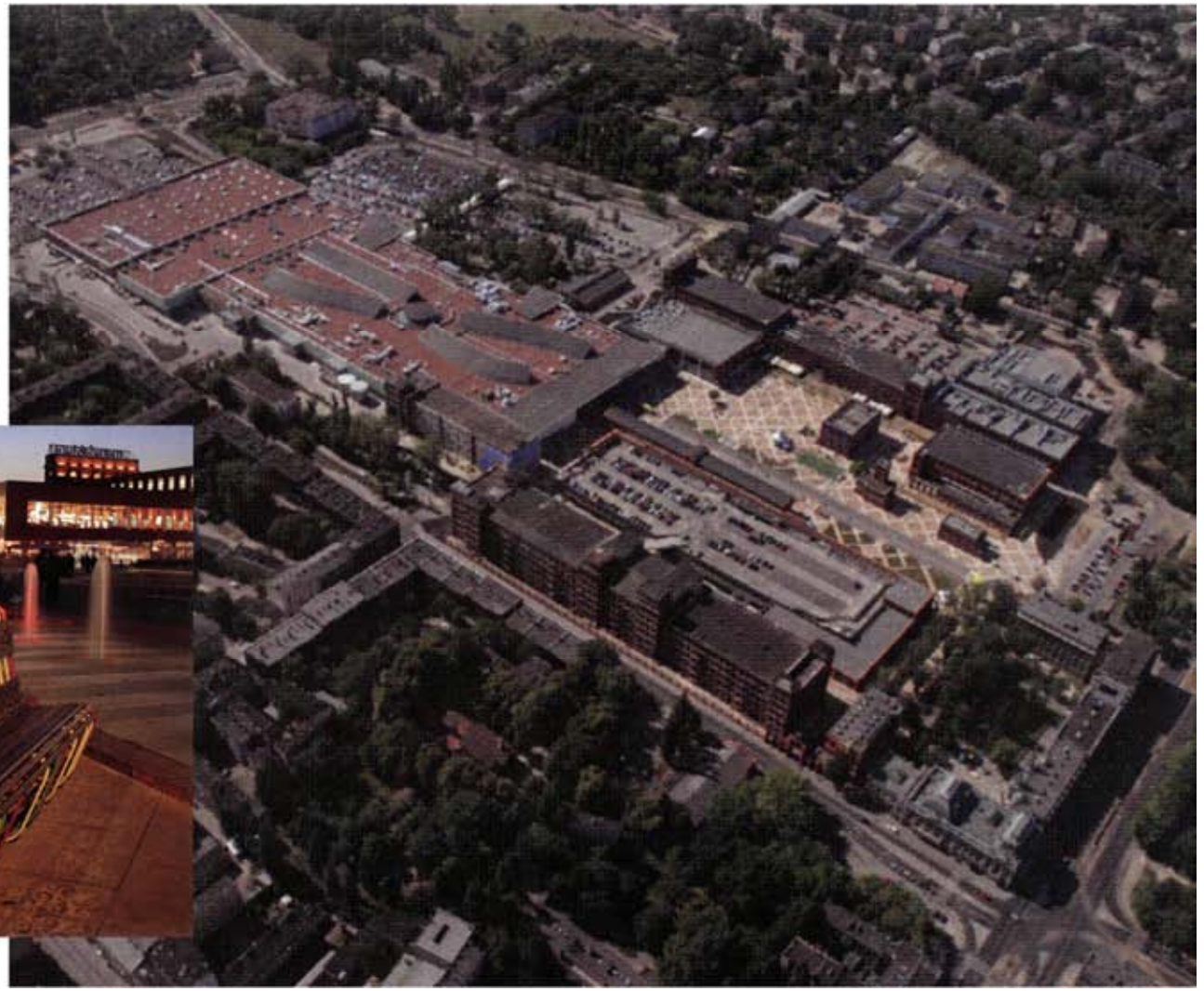
Mediacité
Liege 2009

Mediacité
Liege 2009

Mediacité
Liege 2009

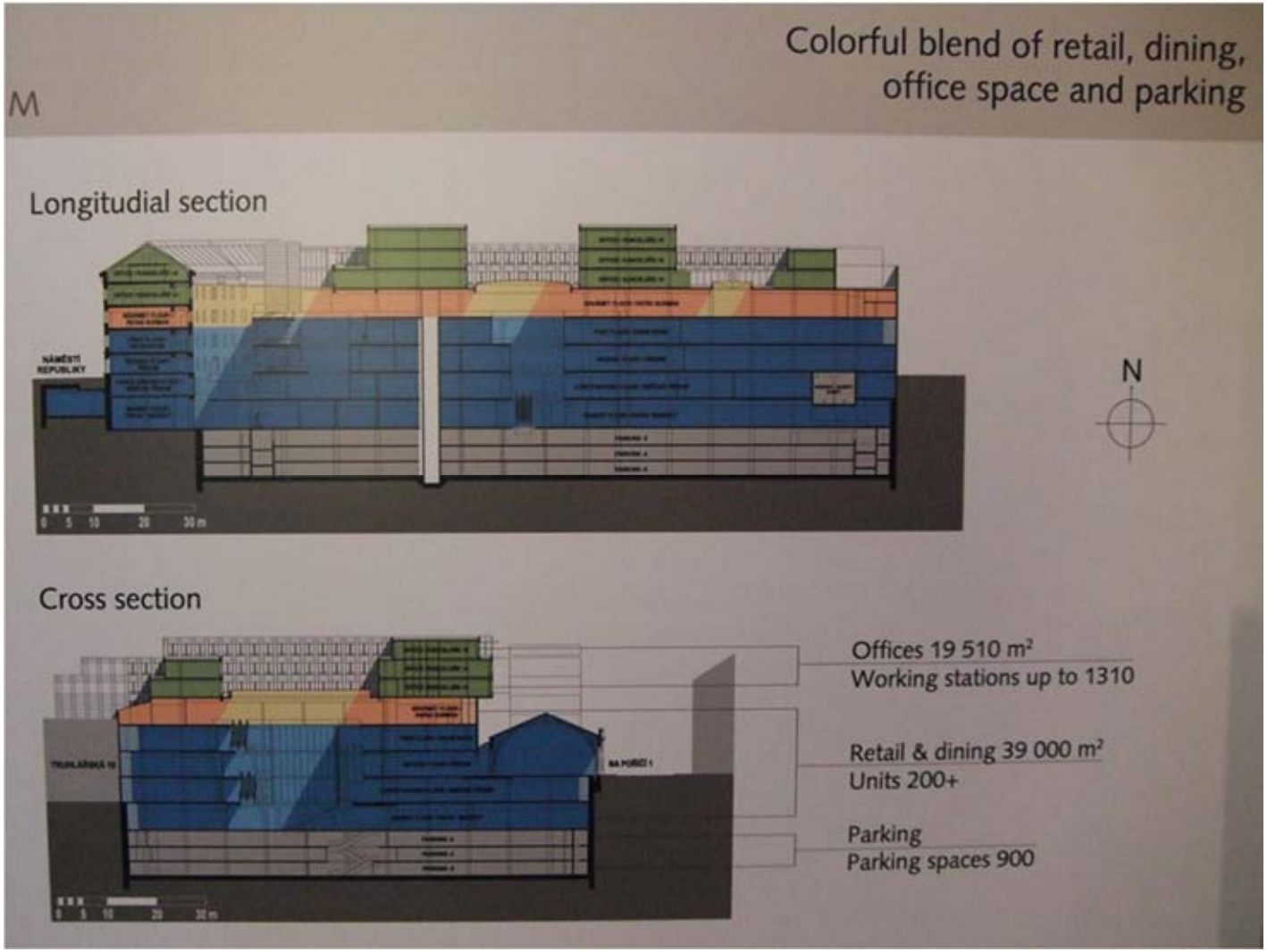
Manufaktura
Lodz, Poland 2005

Manufaktura
Lodz, Poland 2005



Manufaktura
Lodz, Poland 2005

Palladium
Prague, 2006



Palladium
Prague, 2006

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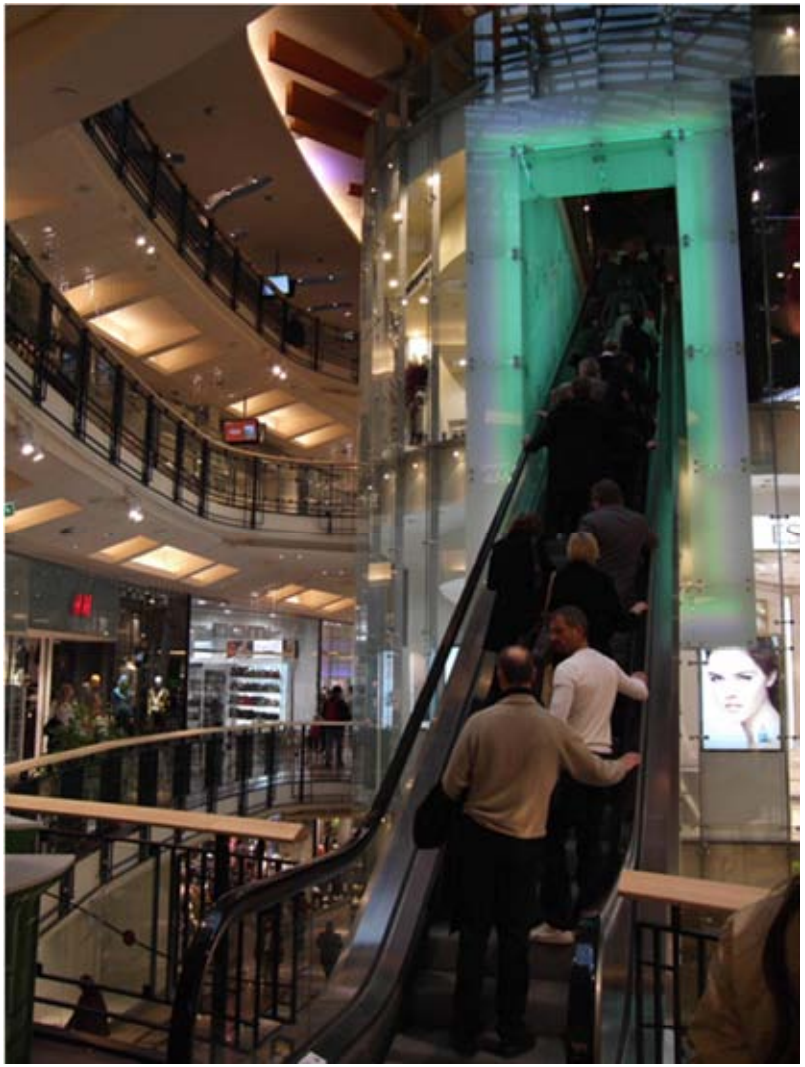
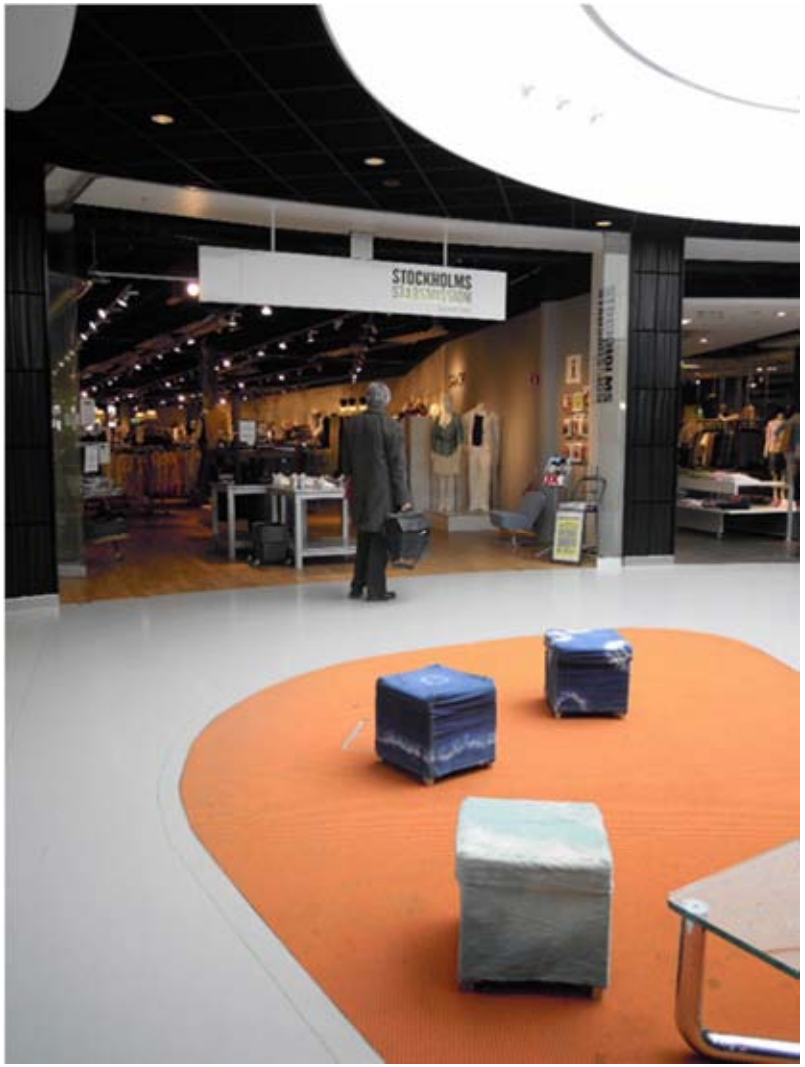
Palladium
Prague, 2006

Palladium
Prague, 2006

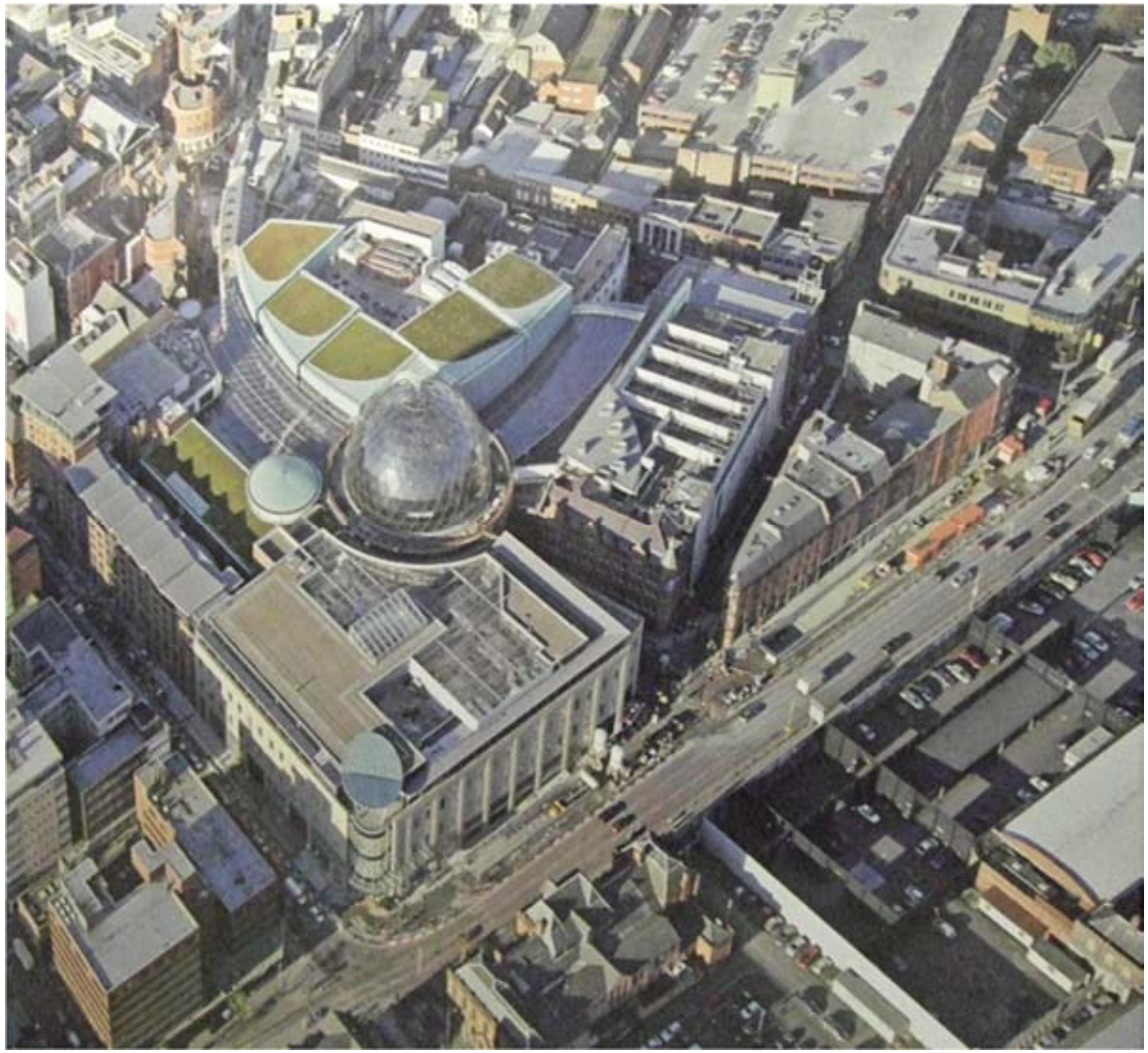


Liljeholmstorget
Stockholm, 2009

Liljeholmstorget
Stockholm, 2009

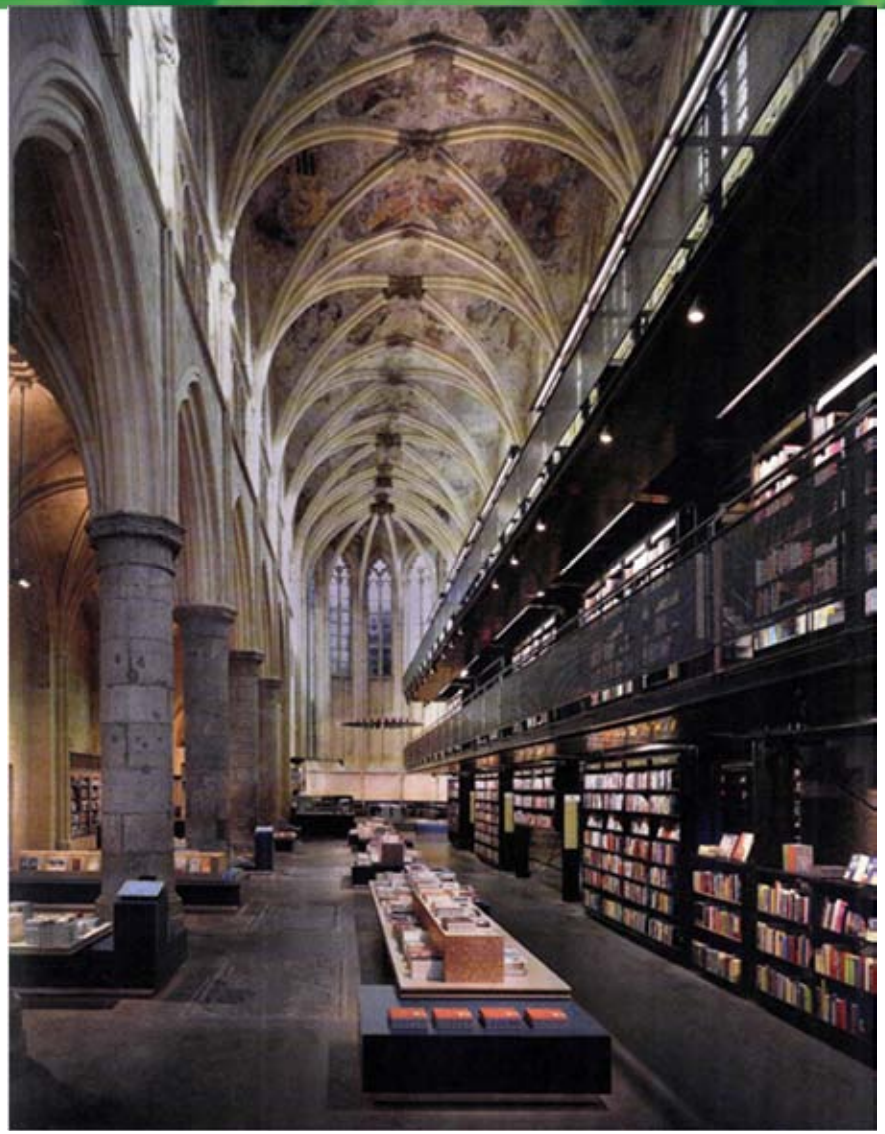


Liljeholmstorget
Stockholm, 2009



Victoria Square
Belfast, 2007

Victoria Square
Belfast, 2007



Maastricht Bookstore
2006

City North Arizona
2008

City North Arizona
2008

European Retail Property School

Briardiff Village
Kansas City, 2006

Iconic Architects

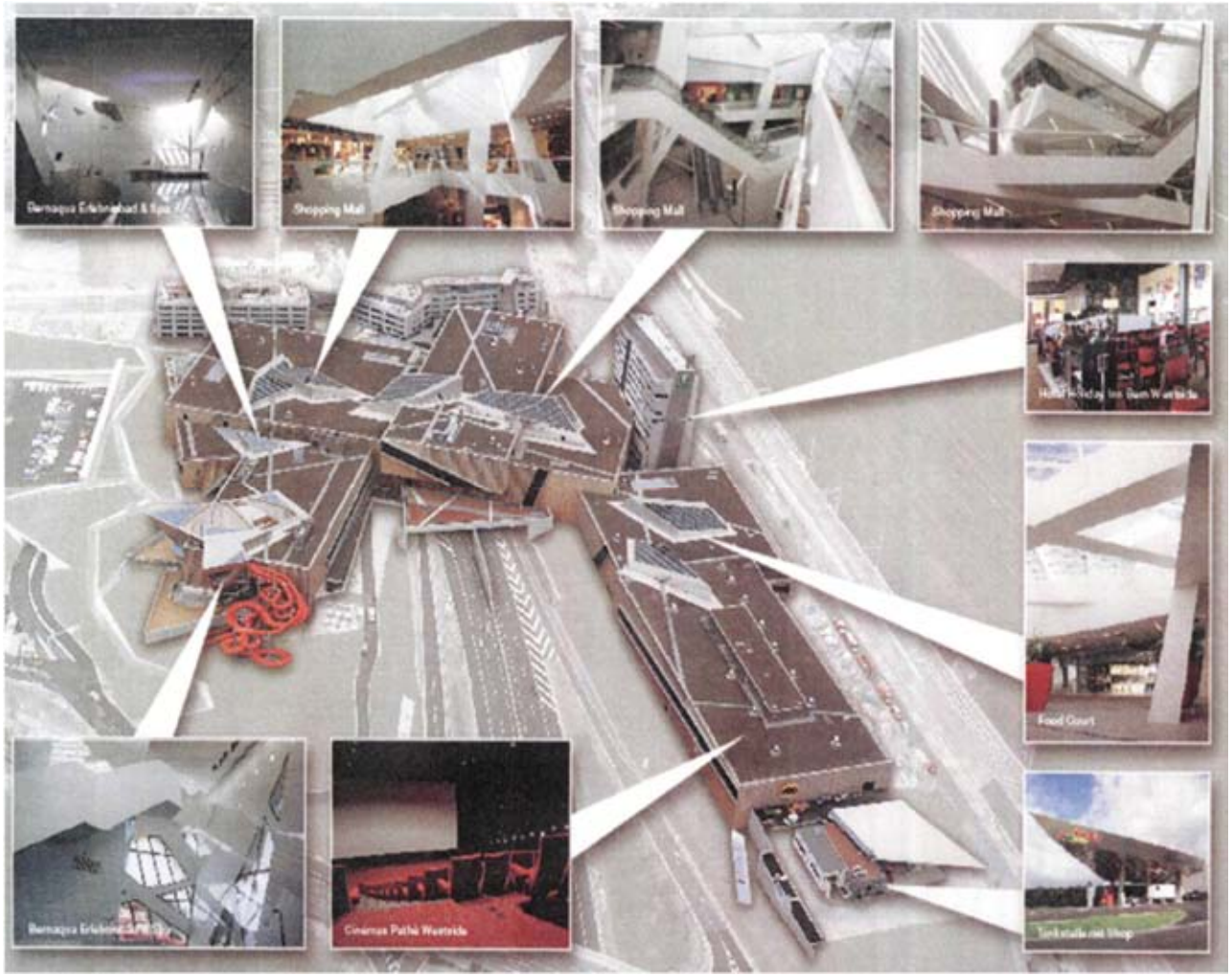
Vällingby City
Kfem, 2008

Iconic Architects

Vällingby City
Kfem, 2008

Iconic Architects

Westside
Bern, Switzerland, 2008



Top 5 Tips

1. **Have 2 Architects:**
   one international with solid retail commercial knowledge and experience
   one local with solid knowledge of local construction law, regulations and requirements

2. **If you are fast tracking the design and building process** have a person on site specifically checking drawings prior to going out to bid, to catch the errors and omissions of the drawings rather than these turning up later as expensive change orders

3. **Build strong communication lines between design team trades/members** – ensure all trades are informed about each and every change proposed

4. **Provide more time in schedule** – complete design earlier so that plans are available sooner

5. **If you want to keep your project competitive –** build sustainable building as per latest design trends

Literature and Sources

- CDP Handbook – ISCS
- Shopping Environments – Peter Coleman, Architectural Press 2006
- Shopping Malls and New Shopping Malls – Carles Broto, 2007
- Going Shopping – Ann Sattertwaite, Yale University
- Histoire du Commerce – 3000 ANS d`Histoire en Travers la peinture par SEGECE Les Editions du Mecene
- Harvard Design School Guide till Shopping
- Mall Maker Victor Gruen – M. Jeffrey Hardwick, Pennsylvania University Press
- Victor Gruen from Urban Shop till New City – Alex Wall
- English Shops and Shopping – Kathryn A. Morisson, Yale University Press
- Marchall Field`s – Jay Pridmore, Chicago Architecture Foundation
- Personal photo collection Madeleine Gravell

Note: Examples taken from Confluence PM business portfolio

Class Evaluation:

Please remember to complete the class evaluation by using your smartphone or tablet.

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survey.icsc.org/2014ERPS

European Retail Property School

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