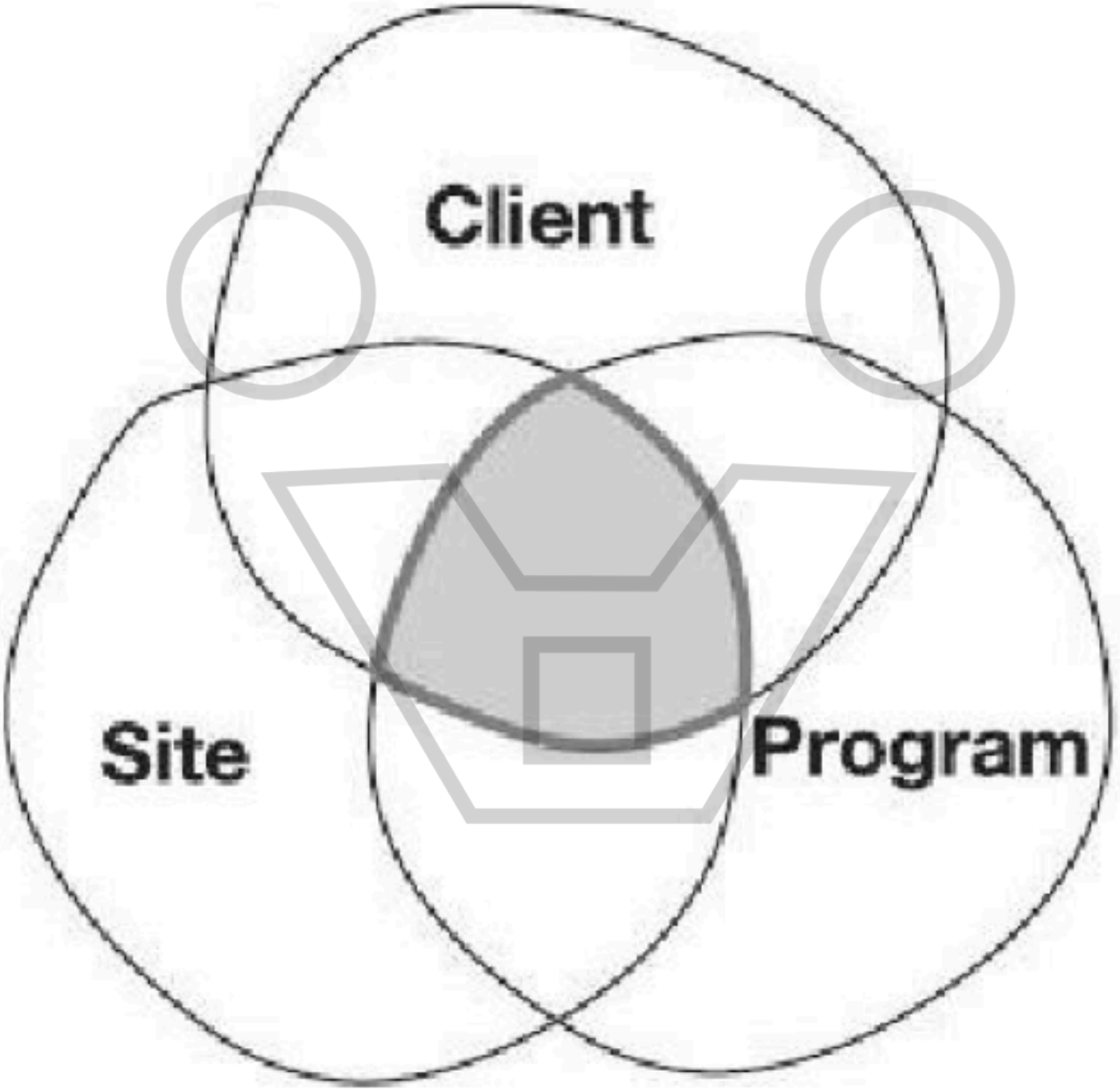
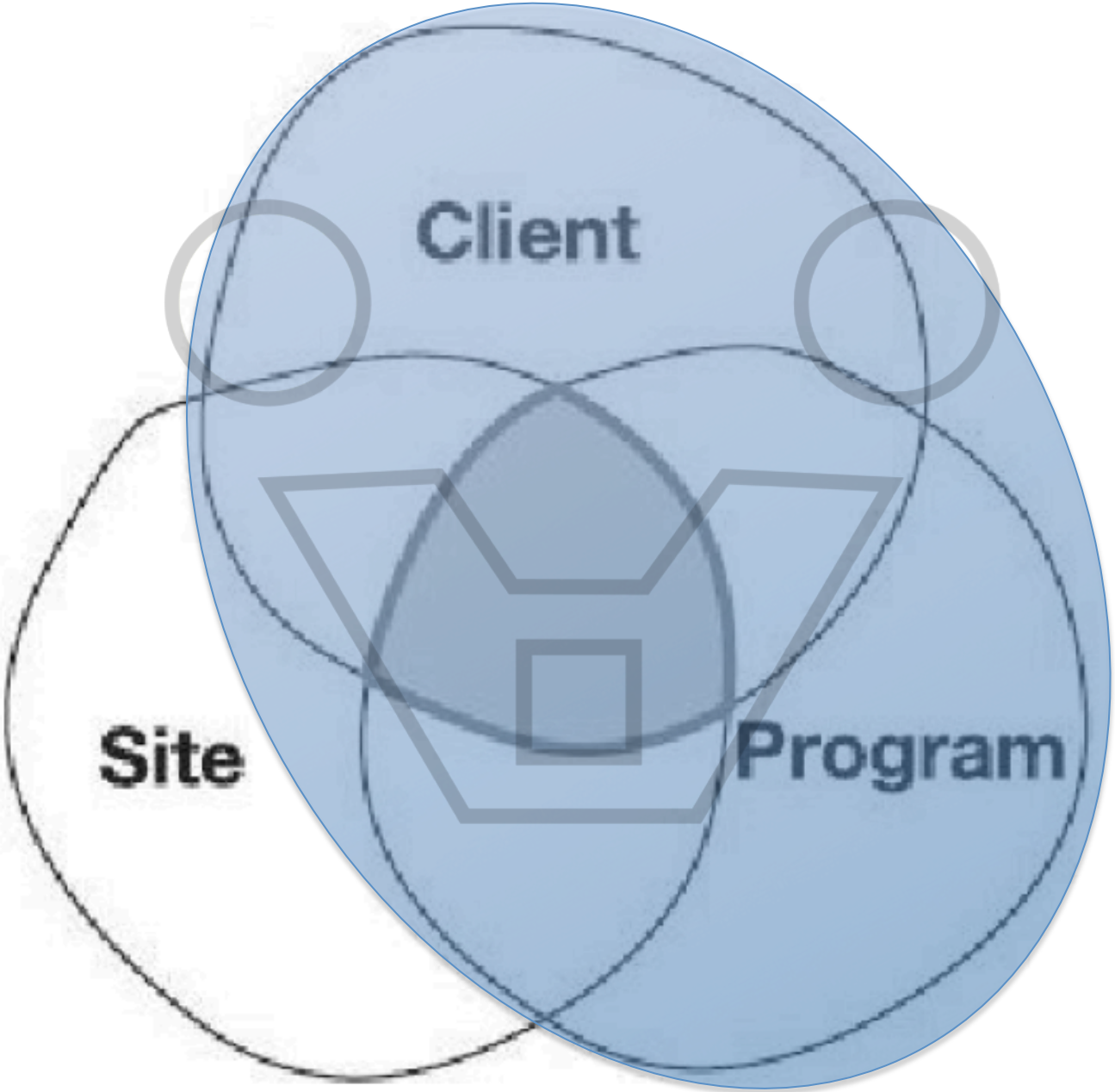

Client
Site
Program


Client
Site
Program

DIMENSIONARE GLI SPAZI

http://www.mailab.biz/space-planning-concept/

PROGRAMMA EDILIZIO: DIMENSIONAMENTO DEGLI SPAZI

Area Worksheet

	A	B	C
1	Name	Projected Area	Actual Area
2	Office 1	350	
3	Office 2	250	
4	Conference Room	400	
5	Reception	300	
6			

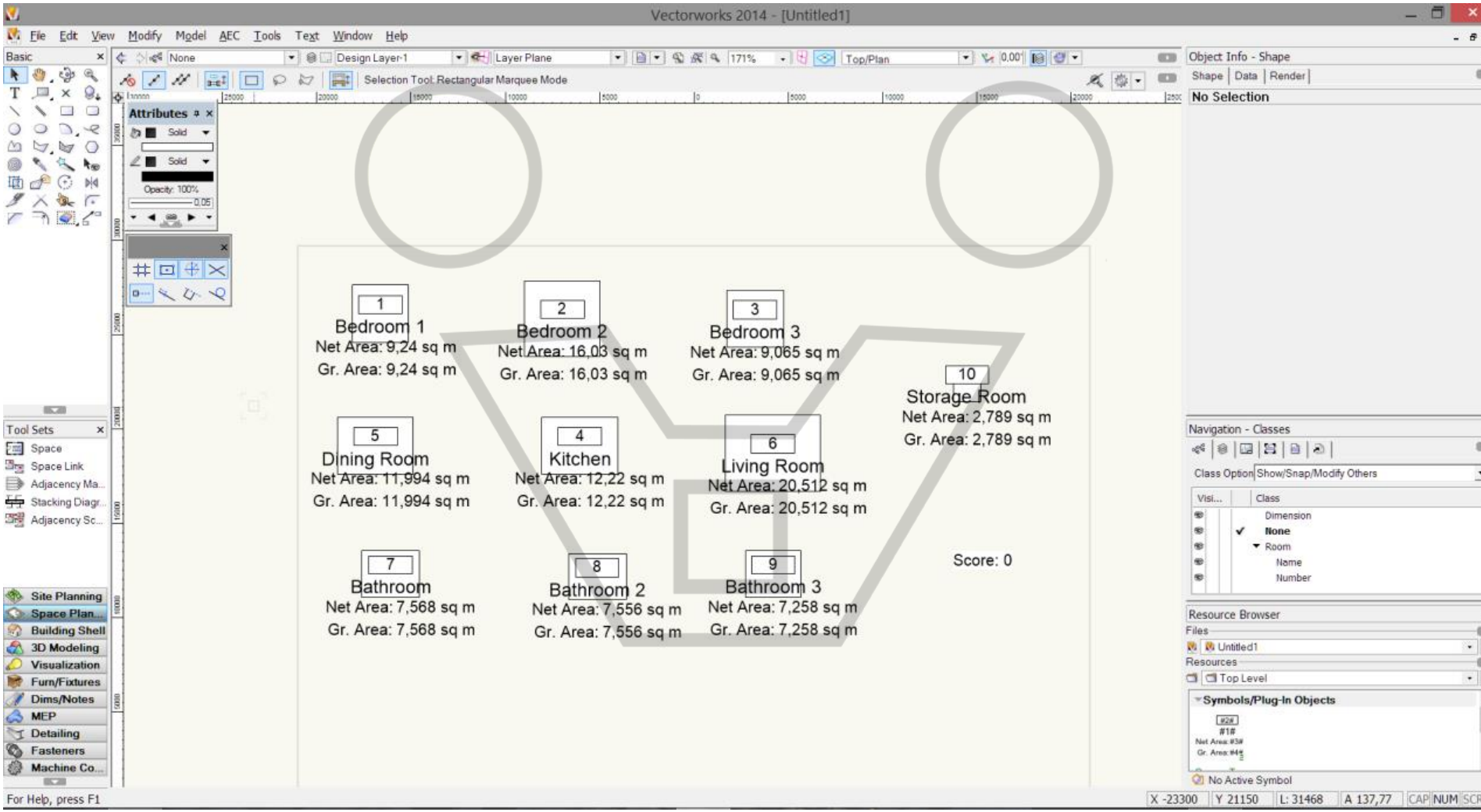
Worksheet Entry

B5 300

PROGRAMMA EDILIZIO: DIMENSIONAMENTO DEGLI SPAZI

Area Worksheet

	A	B	C
1	Name	Projected Area	Actual Area
2	Office 1	350	350
3	Office 2	250	250
4	Conference Room	400	517.46
5	Reception	300	300
6	Vestibule		230.48
7			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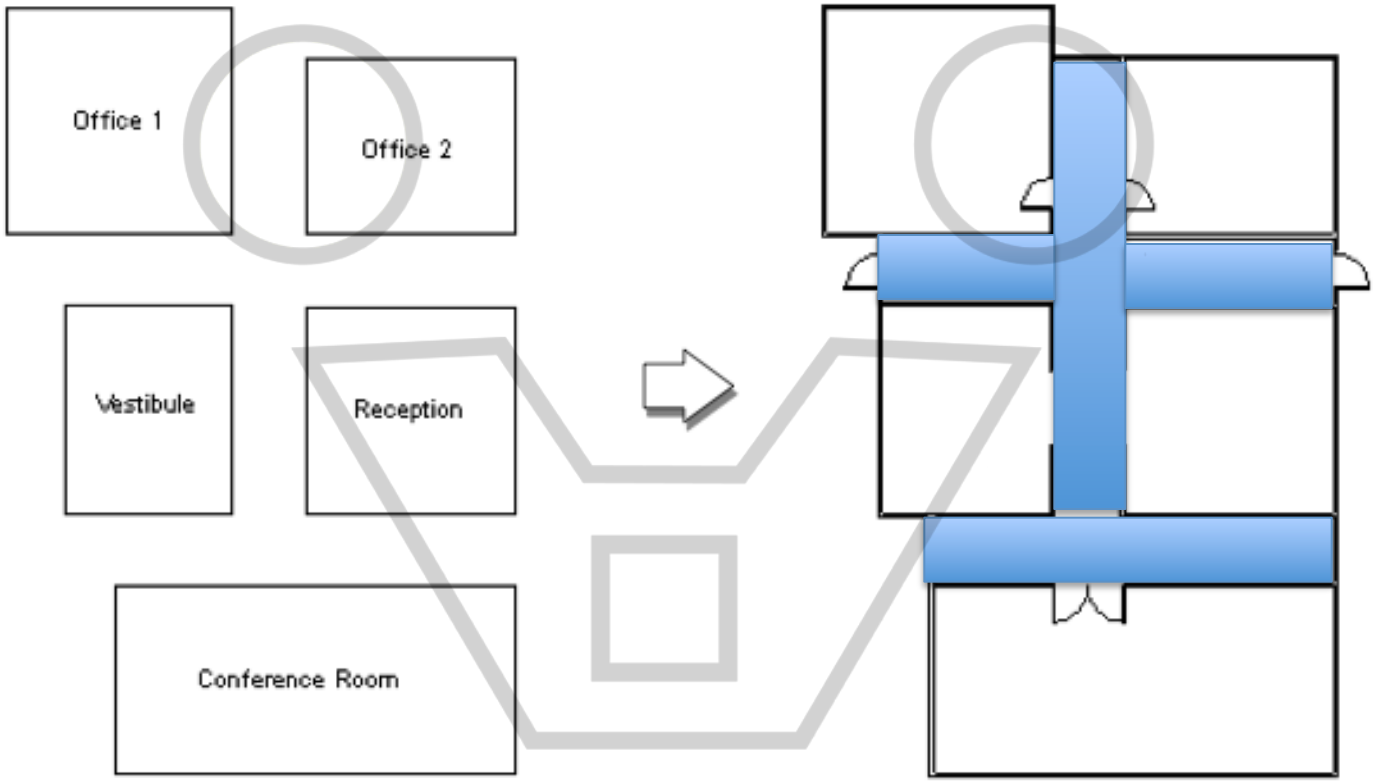
File Edit View Modify Model AEC Tools Text Window Help
Selection Tool: Rectangular Marquee Mode
1
Bedroom 1
Net Area: 9,24 sq m
Gr. Area: 9,24 sq m
2
Bedroom 2
Net Area: 16,03 sq m
Gr. Area: 16,03 sq m
3
Bedroom 3
Net Area: 9,065 sq m
Gr. Area: 9,065 sq m
10
Storage Room
Net Area: 2,789 sq m
Gr. Area: 2,789 sq m
5
Dining Room
Net Area: 11,994 sq m
Gr. Area: 11,994 sq m
4
Kitchen
Net Area: 12,22 sq m
Gr. Area: 12,22 sq m
6
Living Room
Net Area: 20,512 sq m
Gr. Area: 20,512 sq m
7
Bathroom
Net Area: 7,568 sq m
Gr. Area: 7,568 sq m
8
Bathroom 2
Net Area: 7,556 sq m
Gr. Area: 7,556 sq m
9
Bathroom 3
Net Area: 7,258 sq m
Gr. Area: 7,258 sq m
Score: 0
Object Info - Shape
No Selection
Navigation - Classes
Resource Browser
For Help, press F1



Connettivo e Circolazione 20-35%

Murature e strutture 8-15%

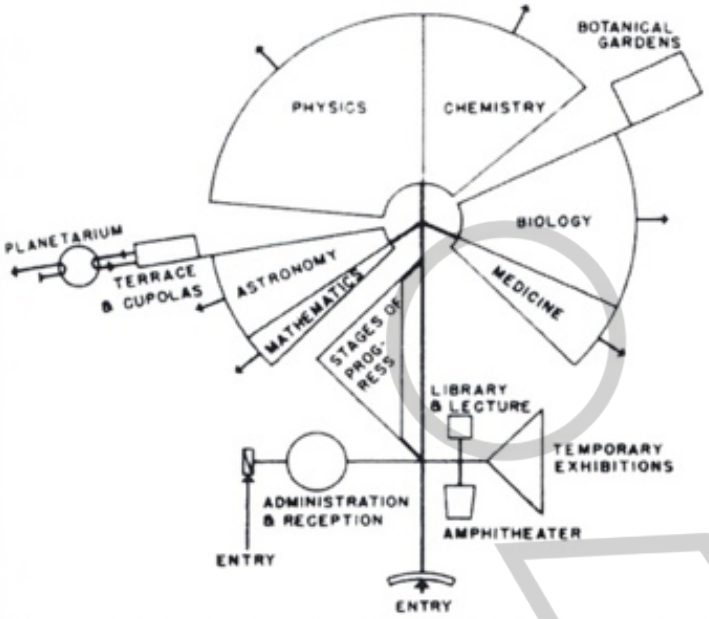
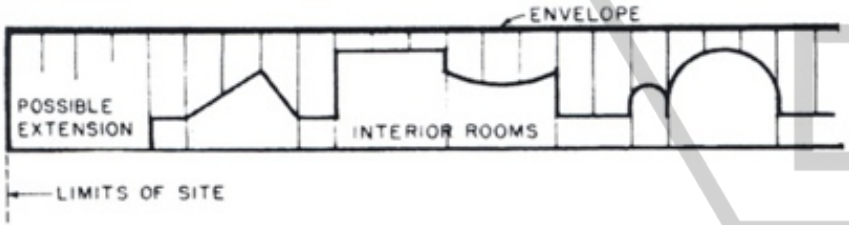
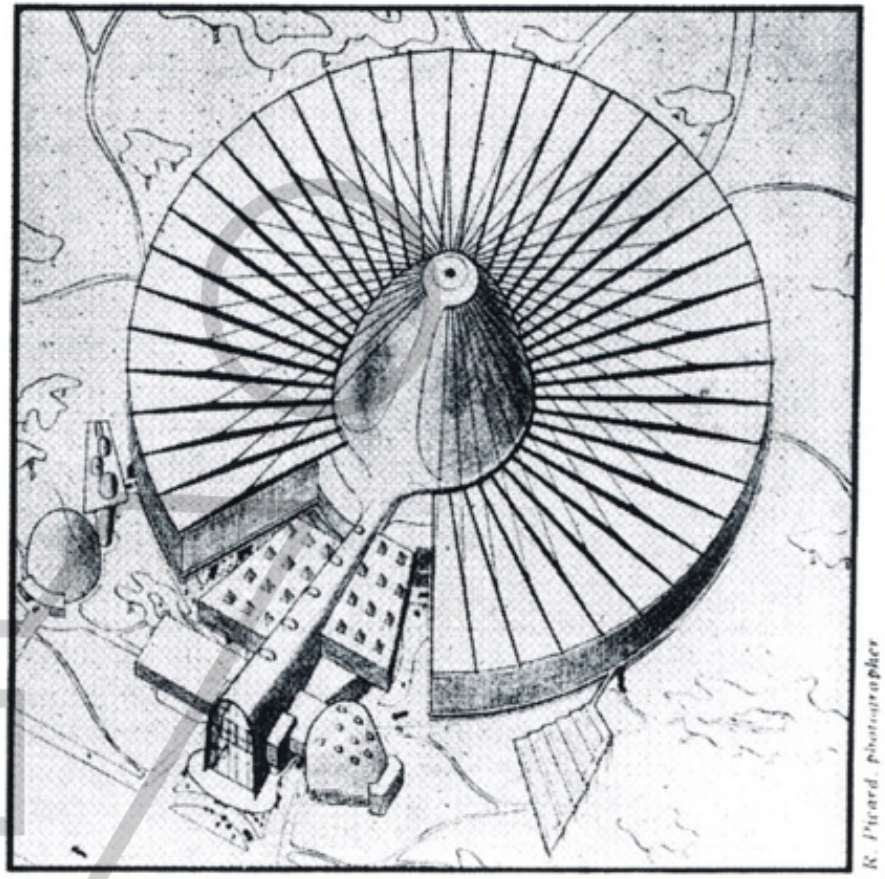


Diagram showing functional relationships of areas

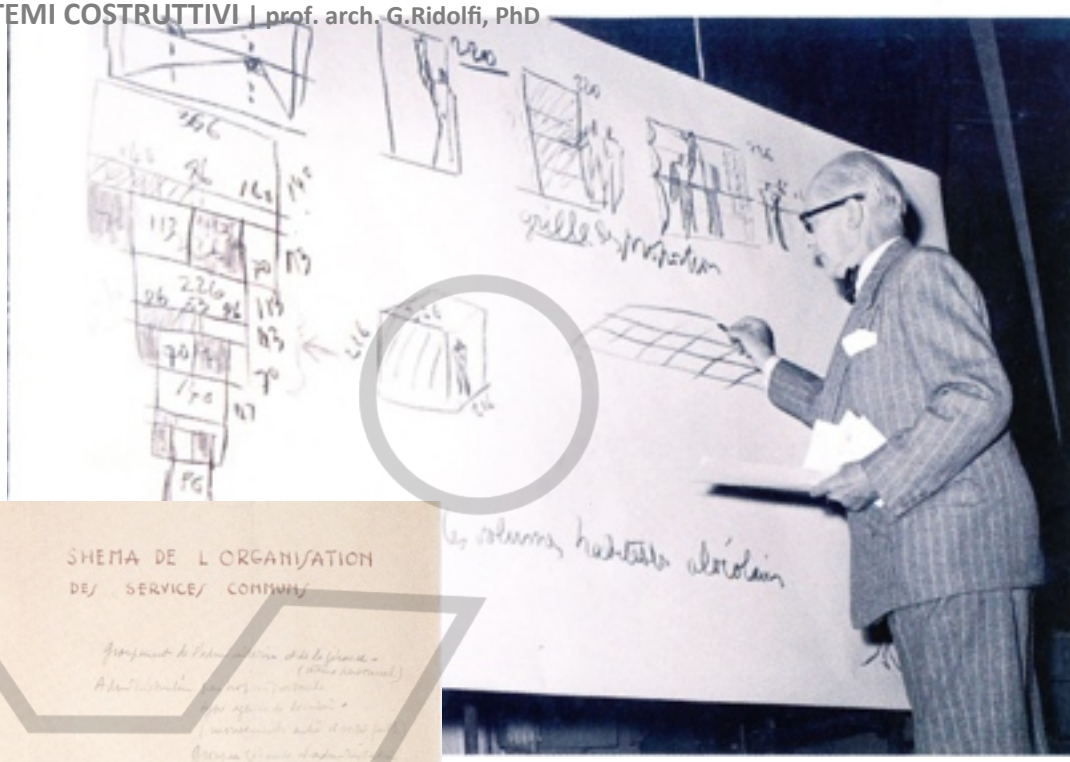


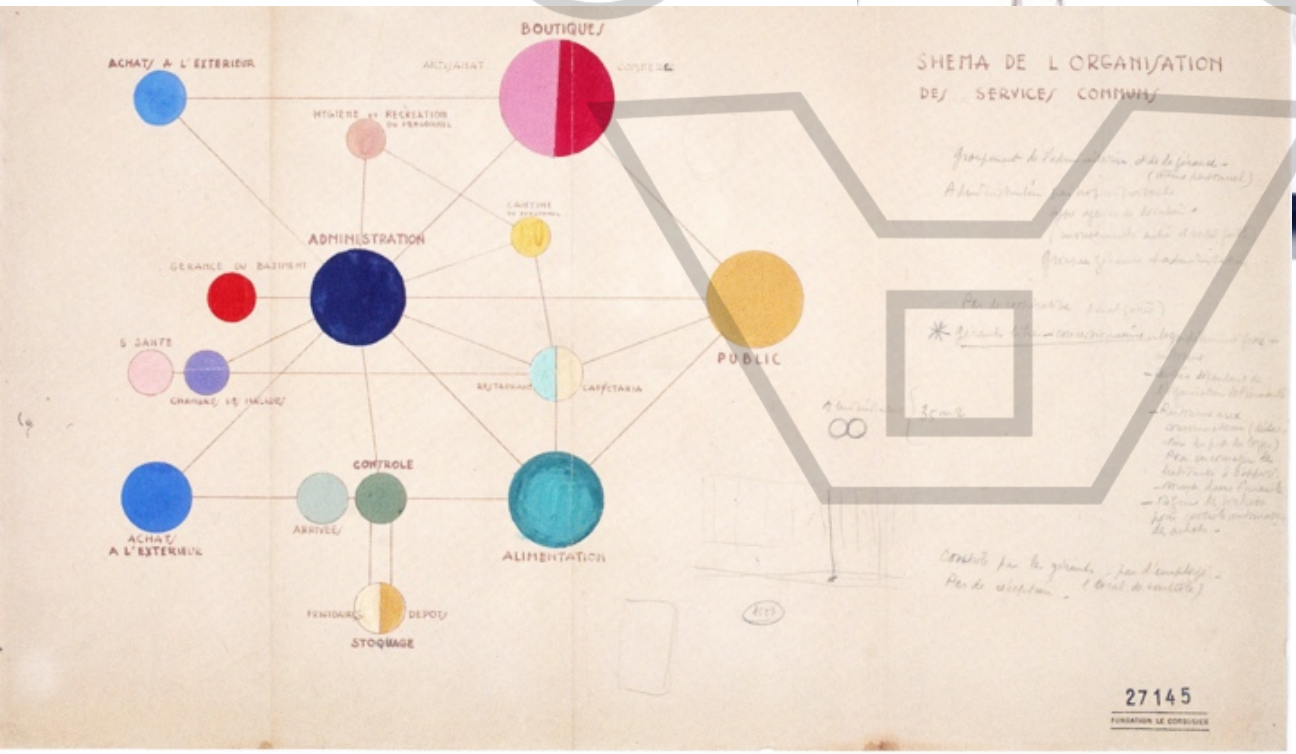
Envelope



Perspective view from entrance side

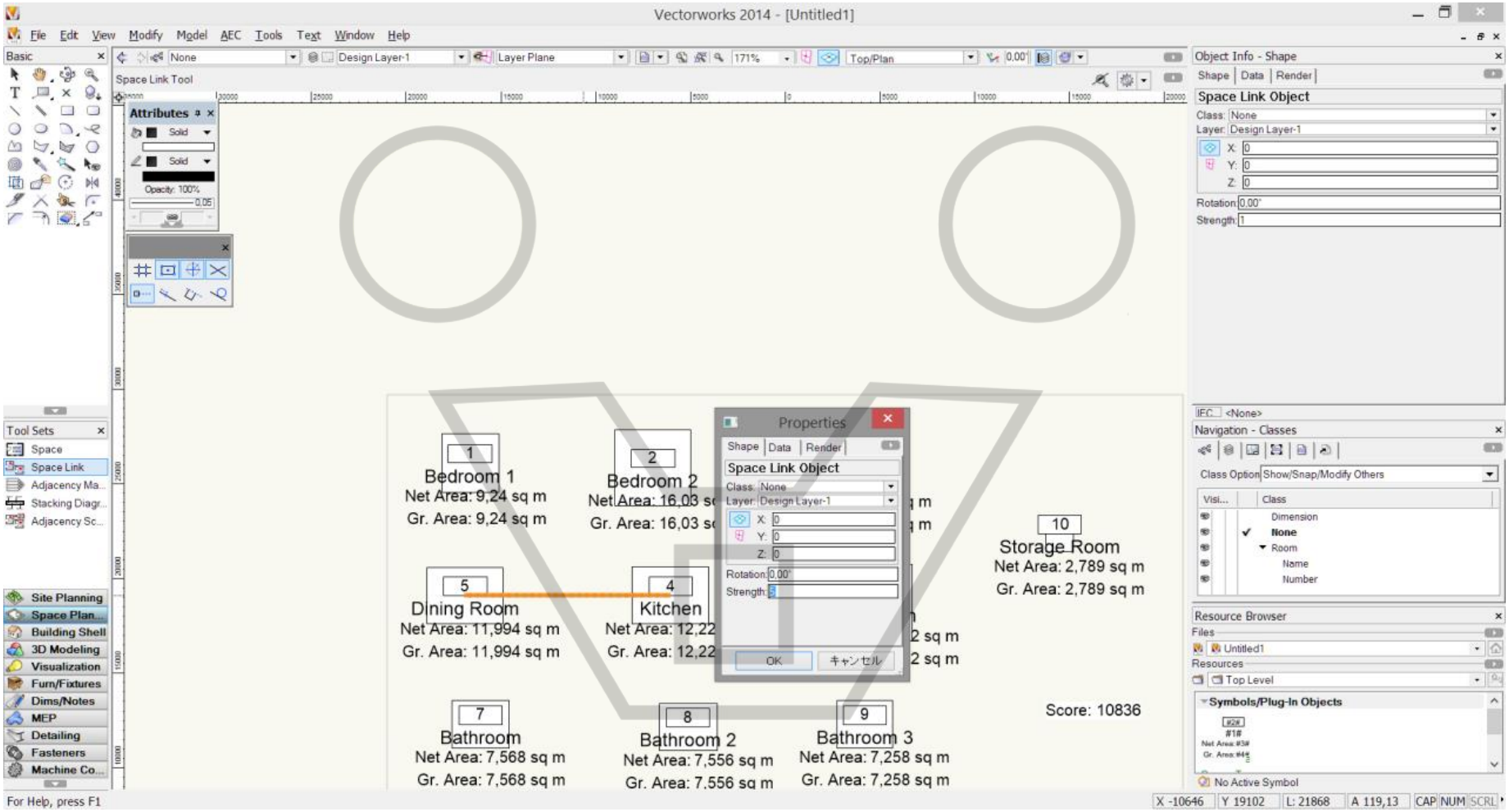
Figure 8 Paul Nelson, 'Museum of Science' (or Palace of Discovery). From *Architectural Record*, February 1939. Proposed for the 1937 Exposition Internationale, Paris.



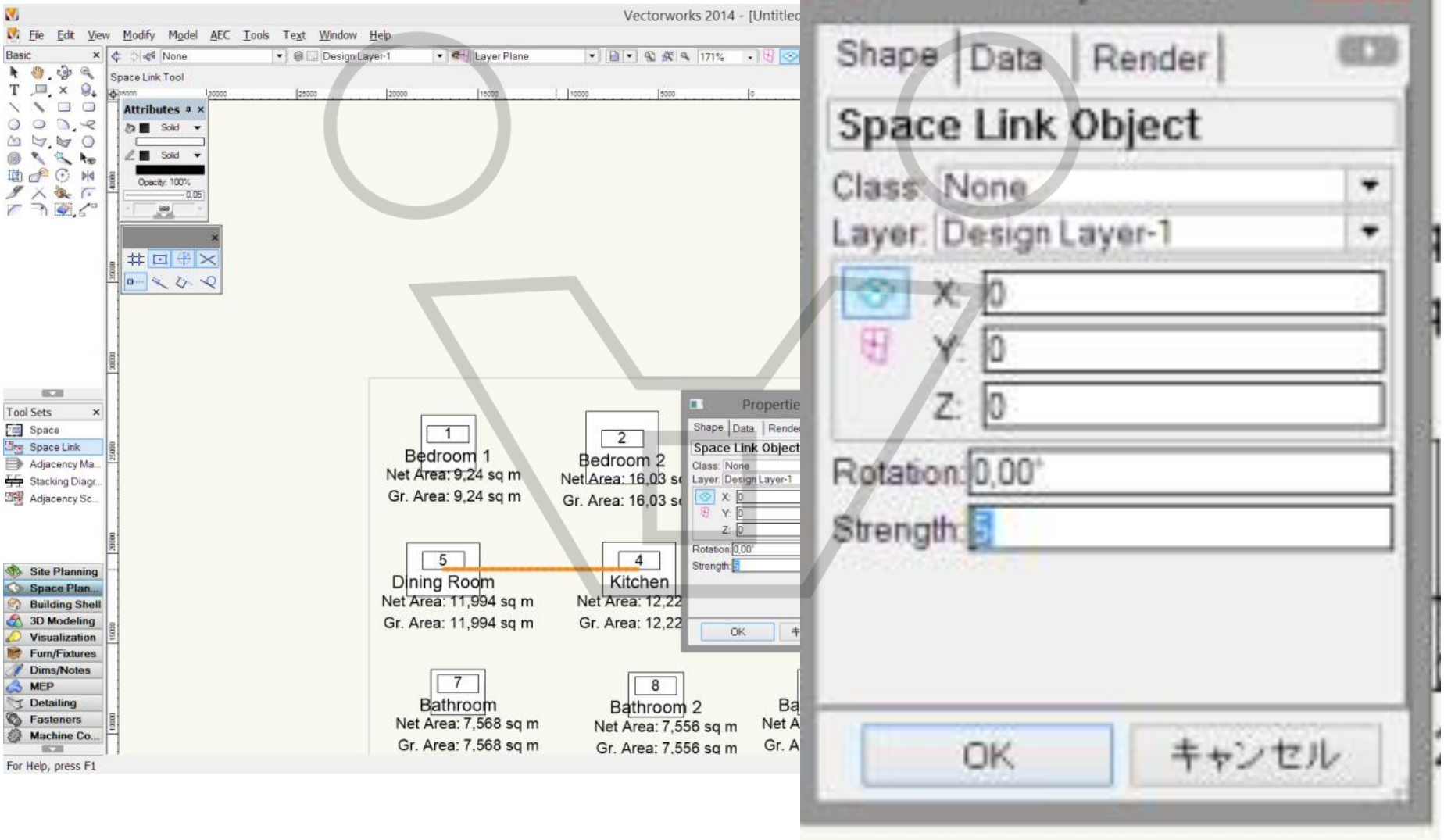


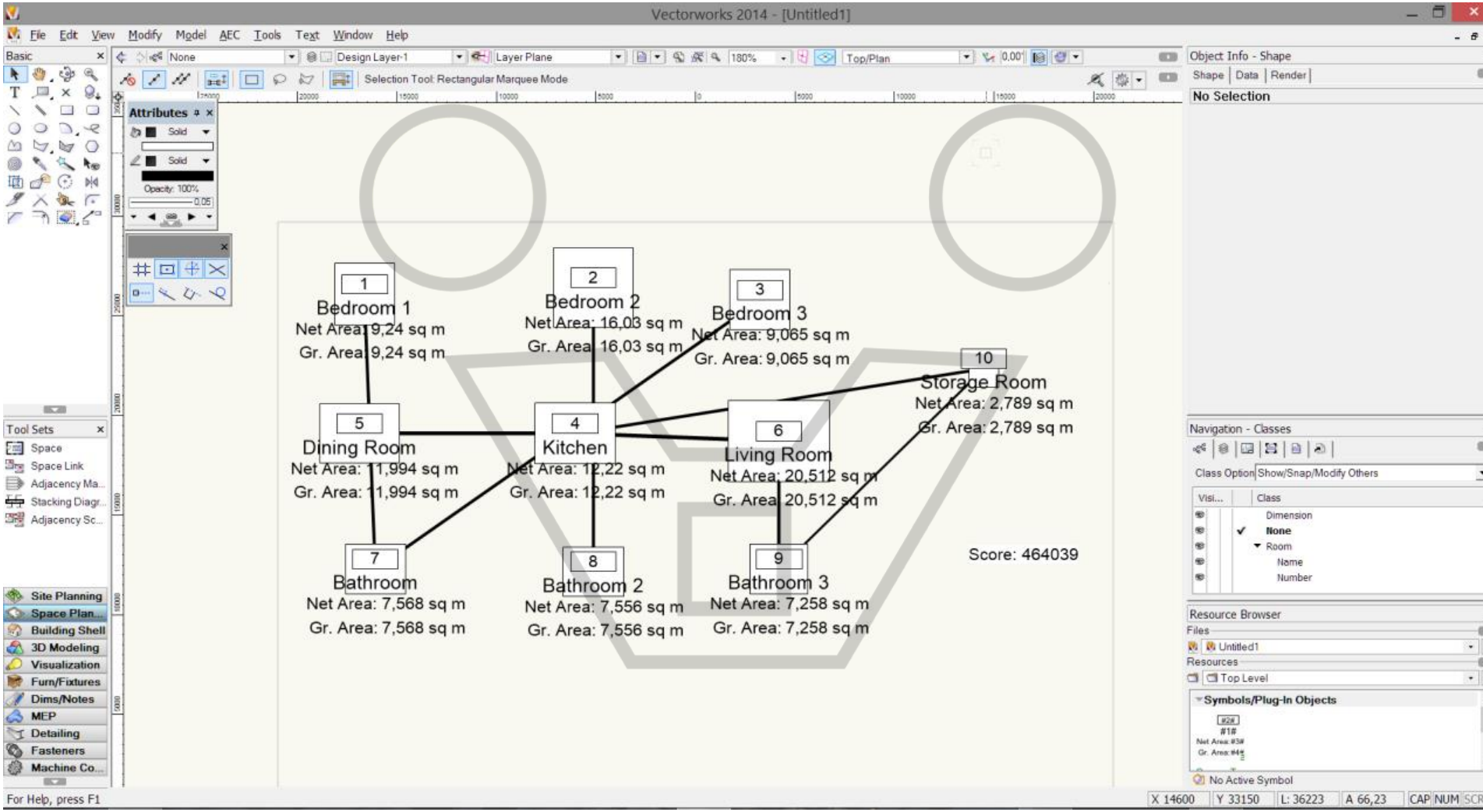
Le Corbusier, Marseille: Unité d'habitation, 1945. Bubble diagram of communal services for the building complex. © FLC/ADAGP, Paris and DACS, London 2008.

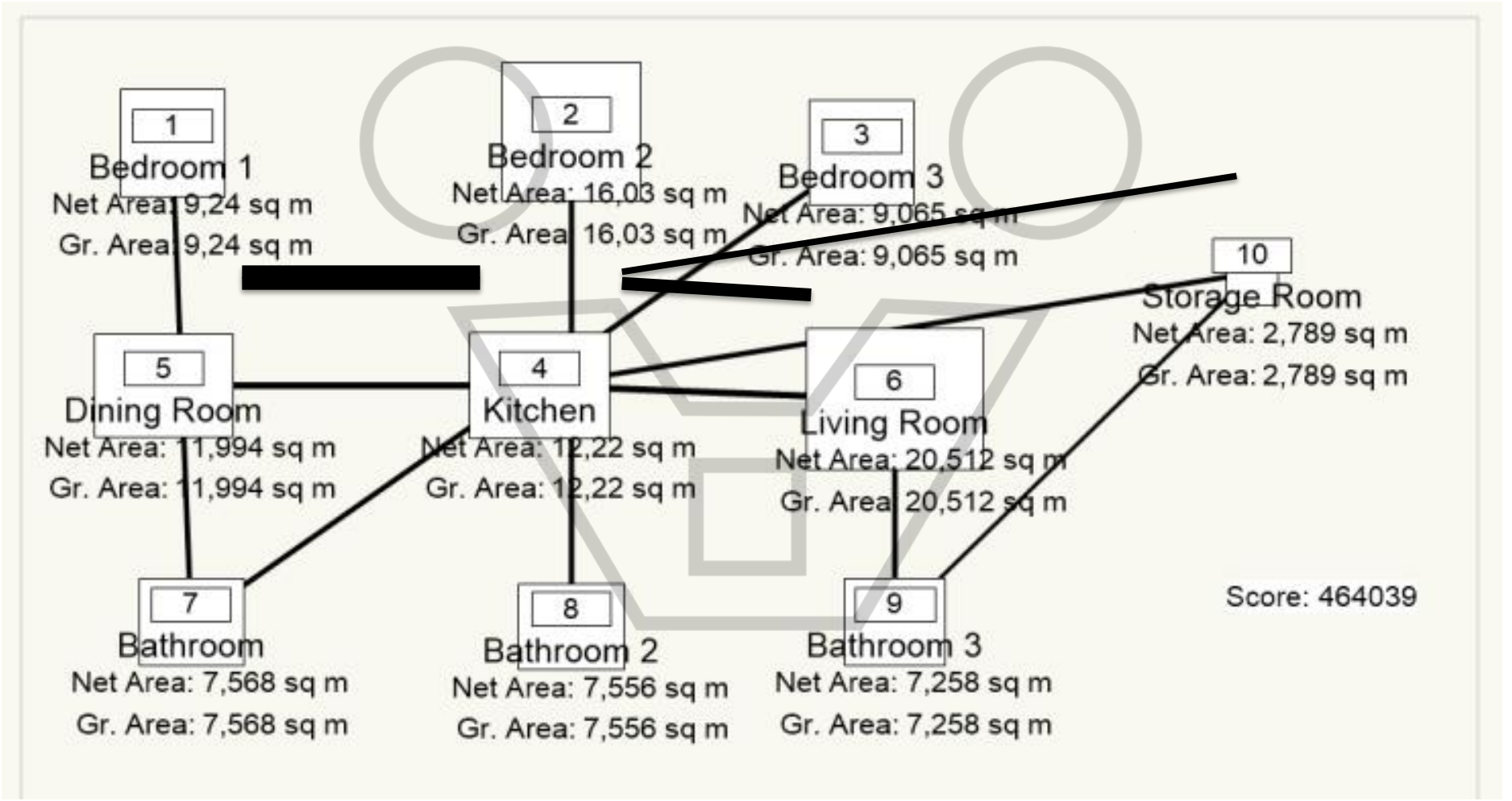
PROGRAMMA EDILIZIO: ORGANIZZAZIONE DEL LAYOUT



PROGRAMMA EDILIZIO: GERARCHIE CONNESSIONI




Vectorworks 2014 - [Untitled1]
File Edit View Modify Model AEC Tools Text Window Help
Selection Tool: Rectangular Marquee Mode
Attributes
Object Info - Shape
No Selection
Navigation - Classes
Resource Browser
Tool Sets
Space
Space Link
Site Planning
Space Plan...
Building Shell
3D Modeling
Visualization
Furn/Fixtures
Dims/Notes
MEP
Detailing
Fasteners
Machine Co...
1
Bedroom 1
Net Area: 9,24 sq m
Gr. Area: 9,24 sq m
2
Bedroom 2
Net Area: 16,03 sq m
Gr. Area: 16,03 sq m
3
Bedroom 3
Net Area: 9,065 sq m
Gr. Area: 9,065 sq m
10
Storage Room
Net Area: 2,789 sq m
Gr. Area: 2,789 sq m
5
Dining Room
Net Area: 11,994 sq m
Gr. Area: 11,994 sq m
4
Kitchen
Net Area: 12,22 sq m
Gr. Area: 12,22 sq m
6
Living Room
Net Area: 20,512 sq m
Gr. Area: 20,512 sq m
7
Bathroom
Net Area: 7,568 sq m
Gr. Area: 7,568 sq m
8
Bathroom 2
Net Area: 7,556 sq m
Gr. Area: 7,556 sq m
9
Bathroom 3
Net Area: 7,258 sq m
Gr. Area: 7,258 sq m
Score: 464039
For Help, press F1


1
Bedroom 1
Net Area: 9,24 sq m
Gr. Area: 9,24 sq m
2
Bedroom 2
Net Area: 16,03 sq m
Gr. Area: 16,03 sq m
3
Bedroom 3
Net Area: 9,065 sq m
Gr. Area: 9,065 sq m
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Storage Room
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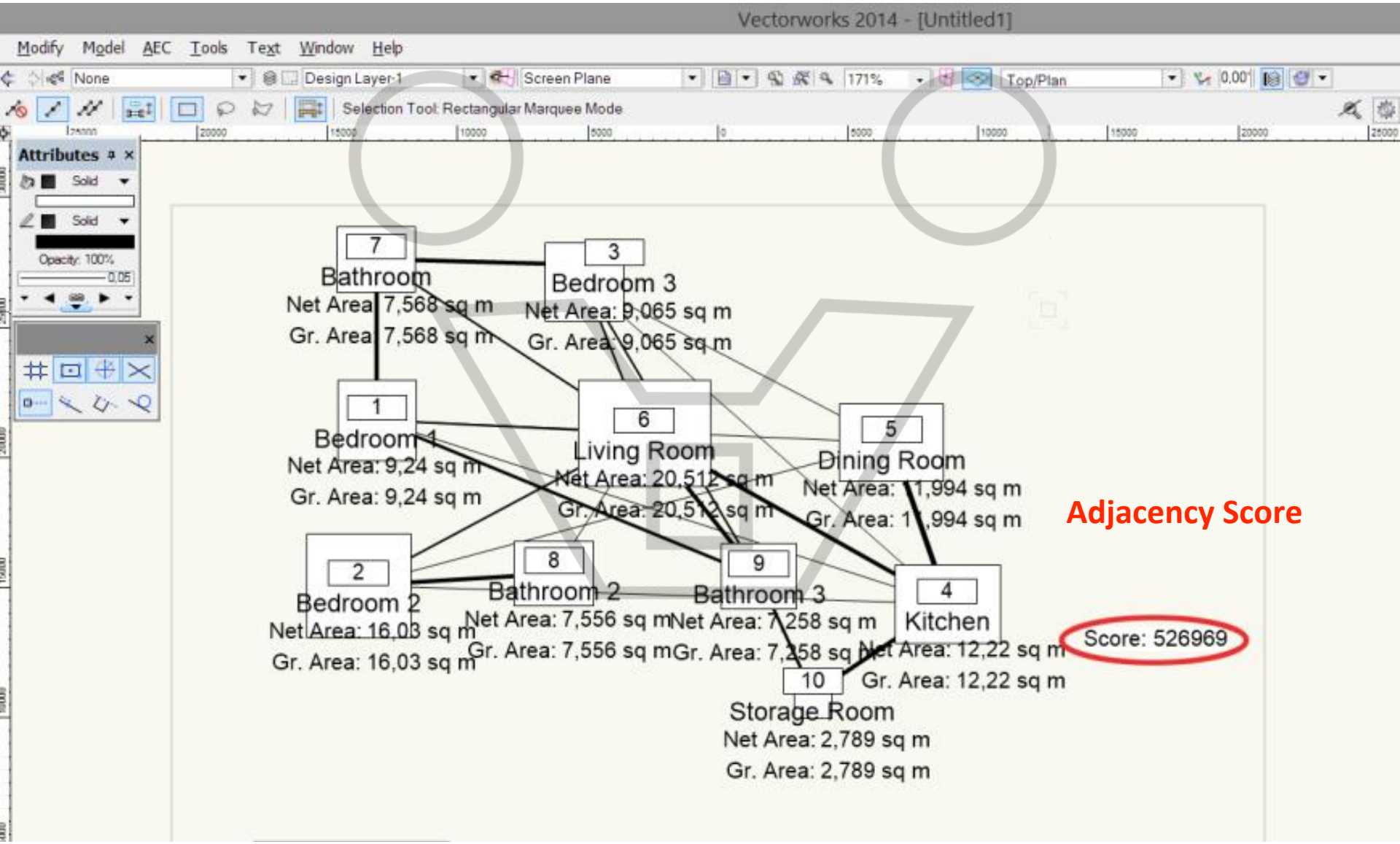
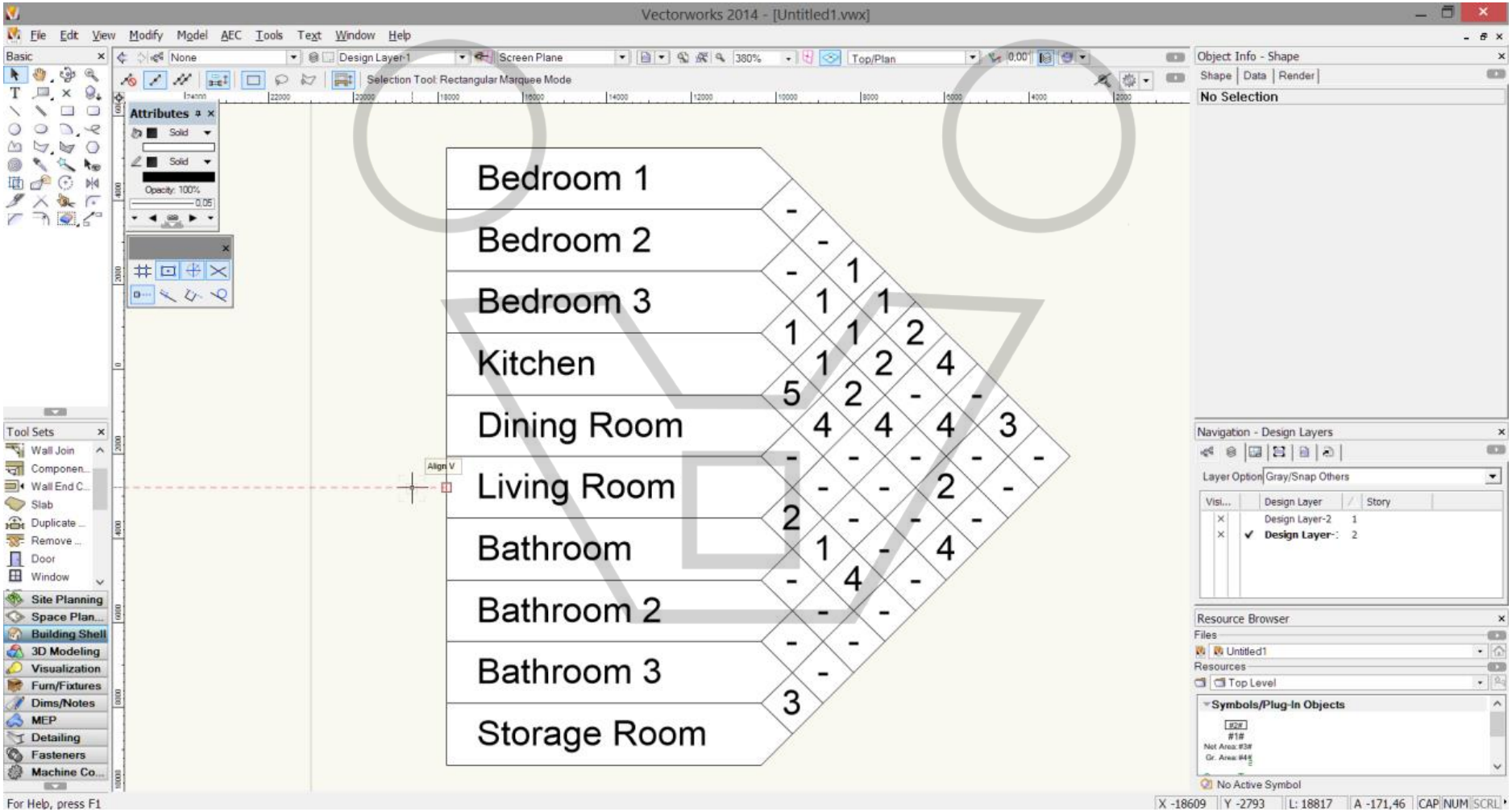
Bathroom 2
Net Area: 7,556 sq m
Gr. Area: 7,556 sq m
9
Bathroom 3
Net Area: 7,258 sq m
Gr. Area: 7,258 sq m
Score: 464039

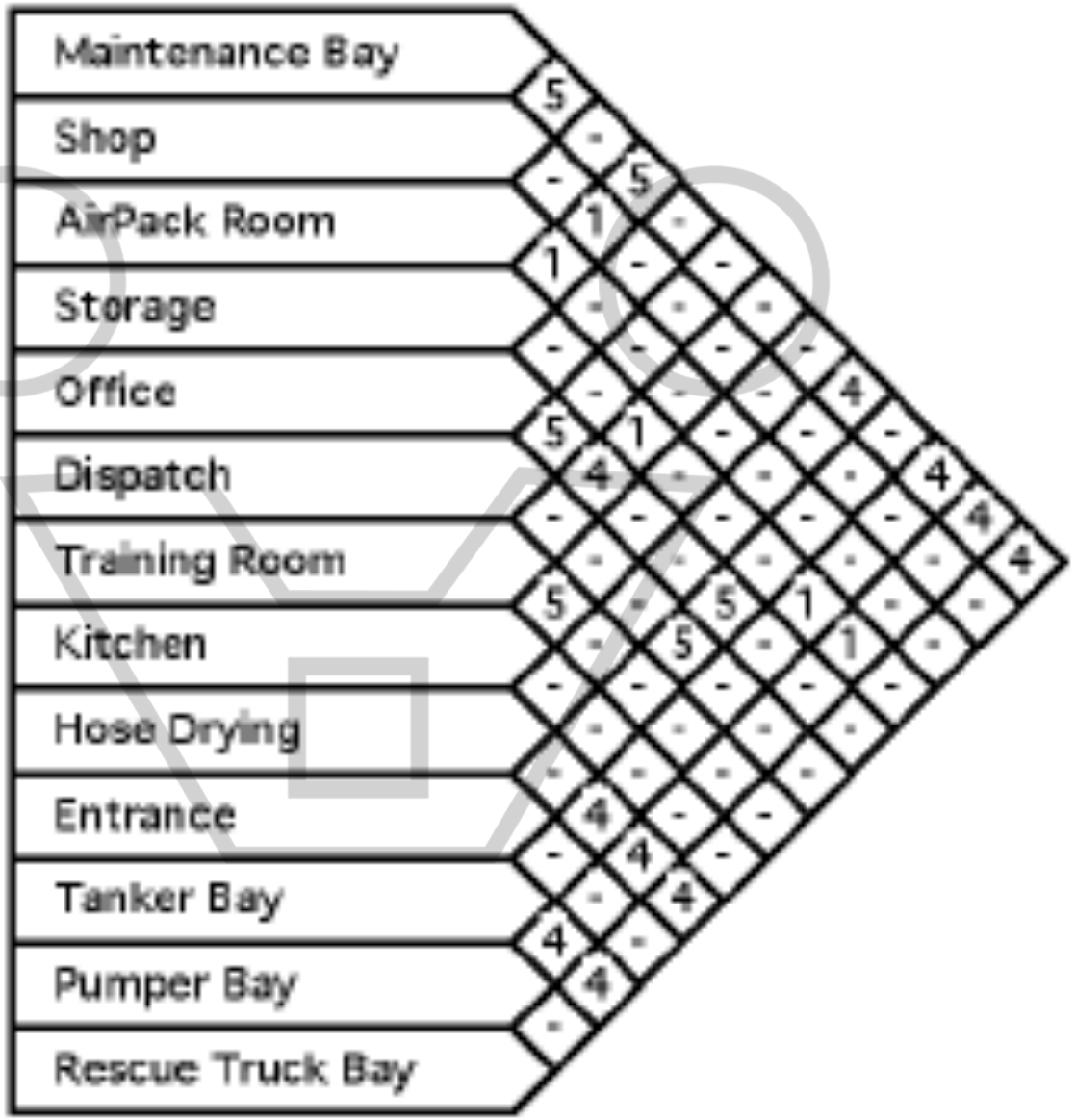
EFFICIENZA FUNZIONALE DEL LAYOUT: CENTRALITA' DEL GRAFO

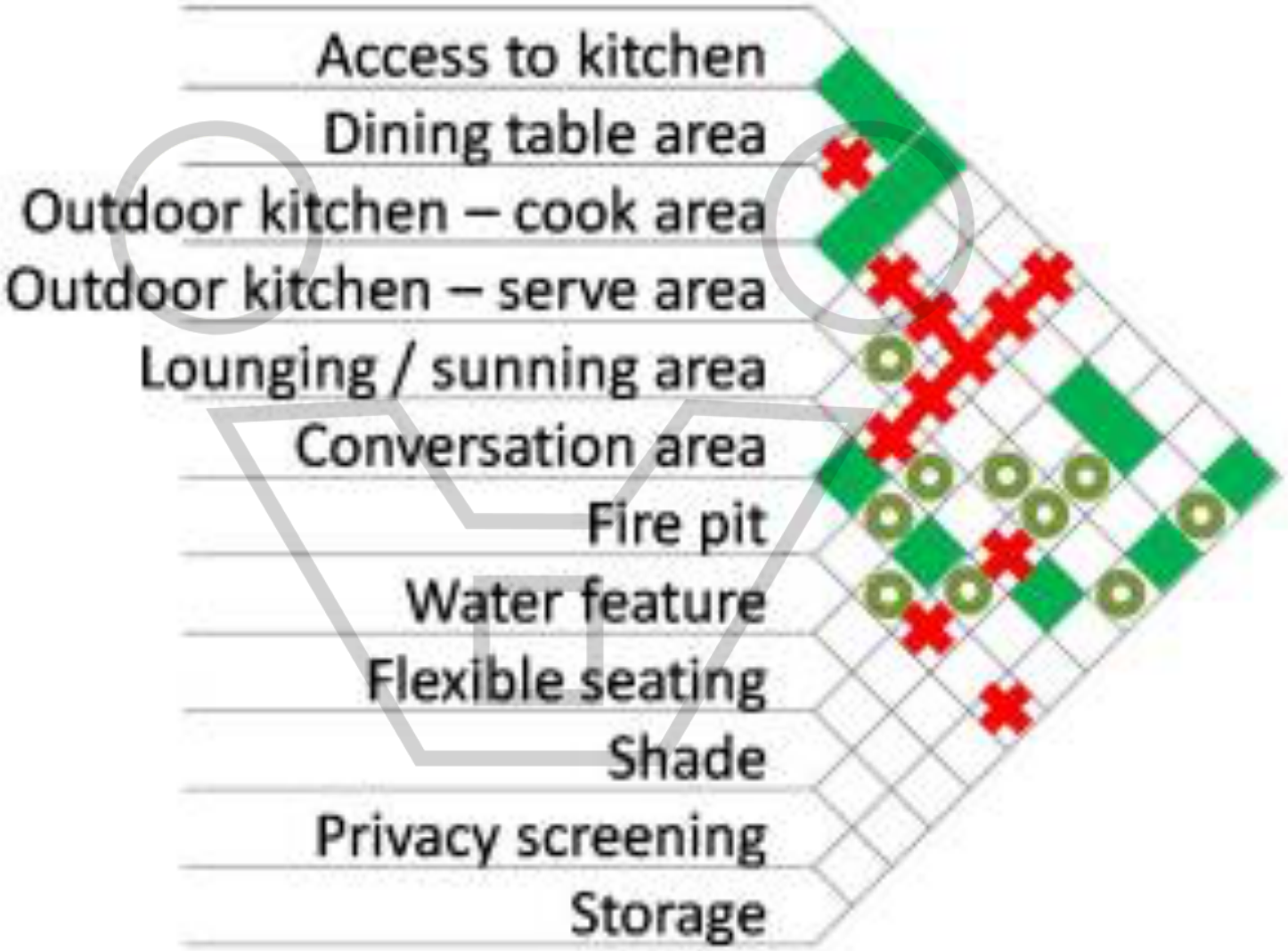


ADJACENCY MATRIX



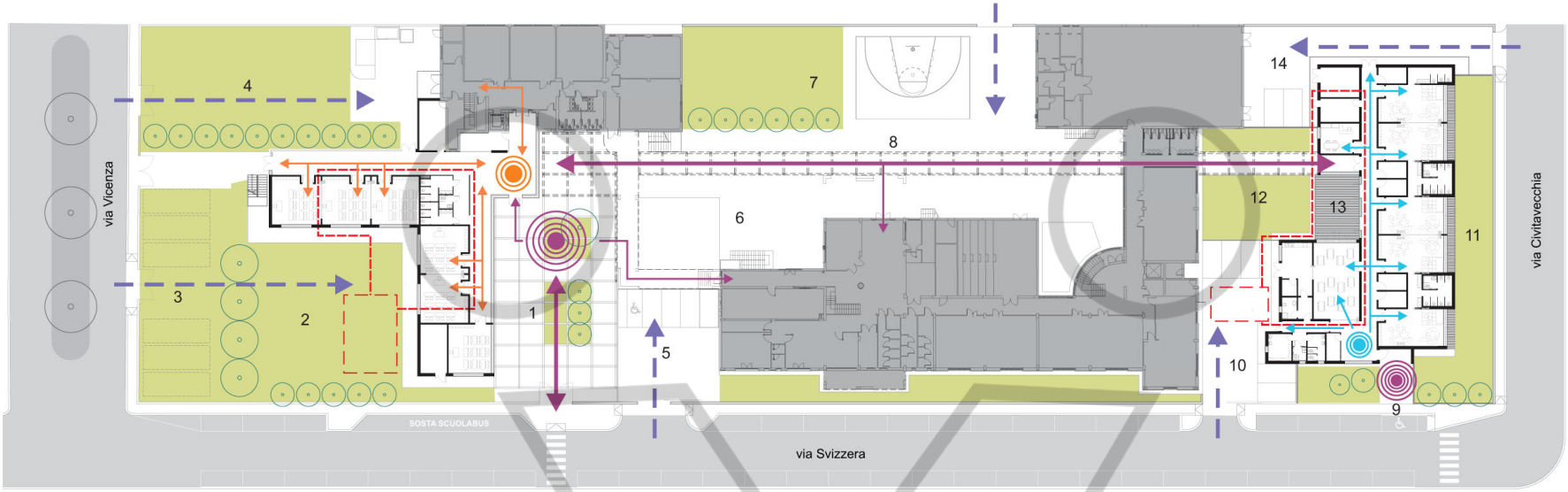
ADJACENCY MATRIX




Access to kitchen
Dining table area
Outdoor kitchen – cook area
Outdoor kitchen – serve area
Lounging / sunning area
Conversation area
Fire pit
Water feature
Flexible seating
Shade
Privacy screening
Storage

LABORATORIO DI PROGETTAZIONE AMBIENTALE

PROGETTAZIONE DEI SISTEMI COSTRUTTIVI | prof. arch. G.Ridolfi, PhD



Schemi dei percorsi nelle aree esterne

- direttrici principali tra i plessi scolastici
- punti di aggregazione alunni
- direttrici di accesso per i mezzi di soccorso, di servizio e manutenzione

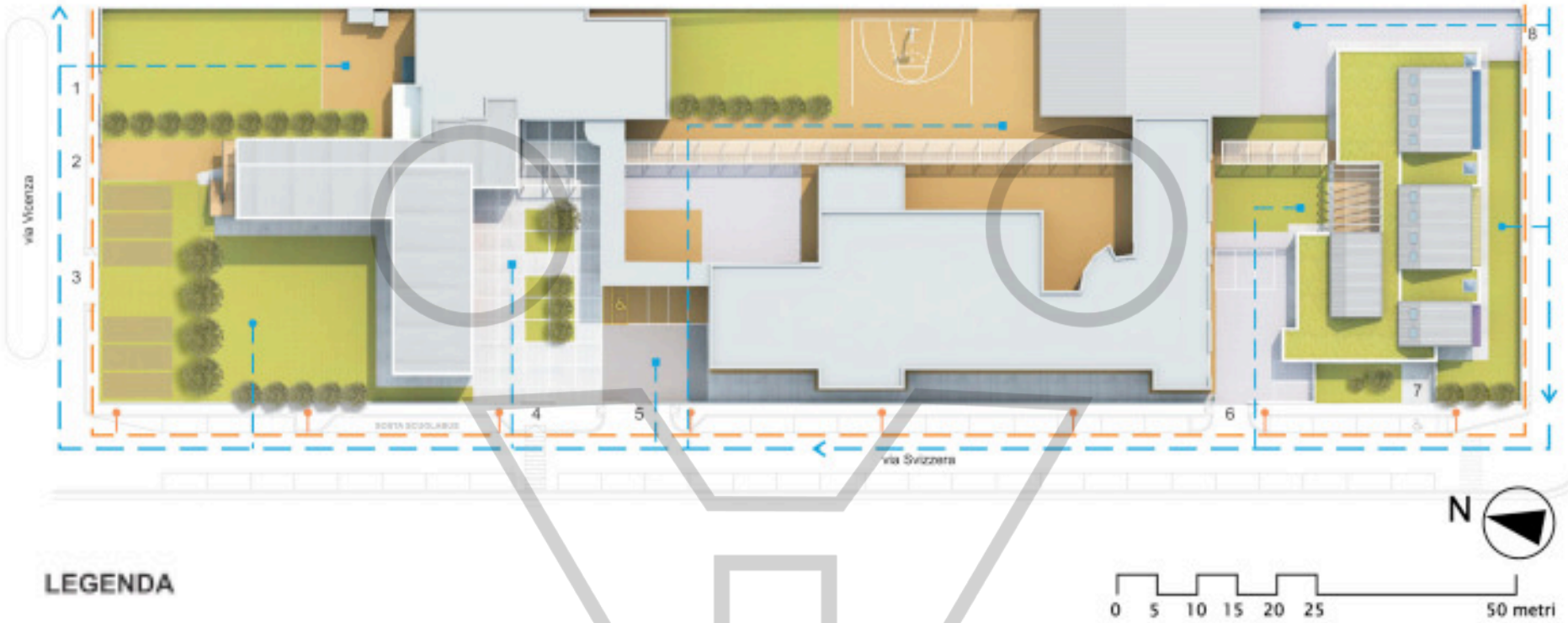
Schemi dei percorsi di distribuzione interna alla scuola primaria

- direttrici connettive
- punti di accoglienza alunni

Schemi dei percorsi di distribuzione interna alla scuola primaria

- direttrici connettive
- punti di accoglienza bambini

PROGRAMMA EDILIZIO: ORGANIZZAZIONE DEL LAYOUT



LEGENDA

1) accesso carrabile di servizio (mezzi di soccorso/manutenzione)
2) accesso pedonale secondario
3) accesso carrabile di servizio (mezzi di soccorso/manutenzione)
4) ingresso pedonale principale scuole primaria e media
5) accesso carrabile parcheggio di relazione
6) accesso carrabile di servizio (mezzi di soccorso/manutenzione)
7) ingresso pedonale principale scuola per l'infanzia
8) accesso carrabile di servizio (mezzi di soccorso/manutenzione)

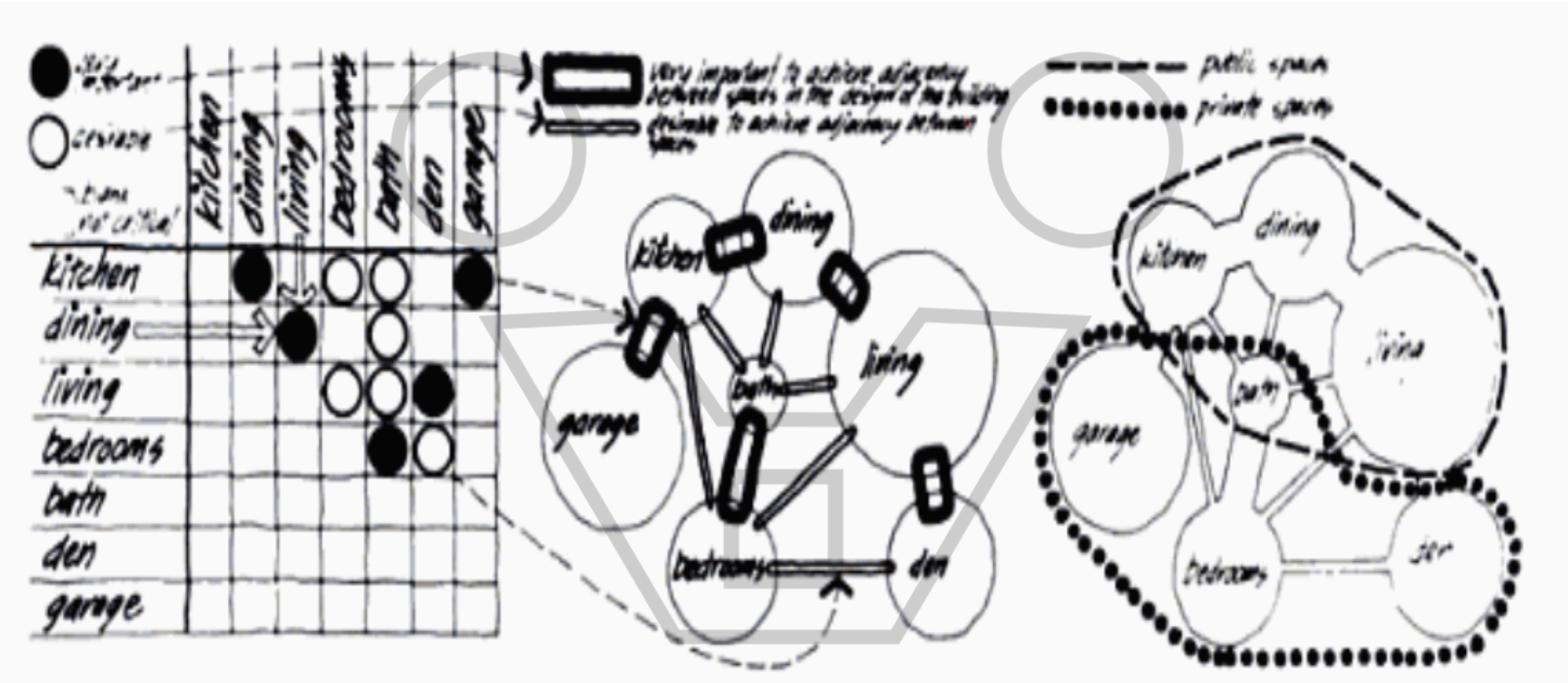
Smaltimento acque meteoriche

- rete fognaria principale
- rete fognaria smaltimento acque meteoriche aree pavimentate
- drenaggi smaltimento acque meteoriche aree permeabili

Illuminazione pubblica

- cavidotto principale
- pali di illuminazione stradale

CLUSTER ANALYSIS



CLUSTER ANALYSIS

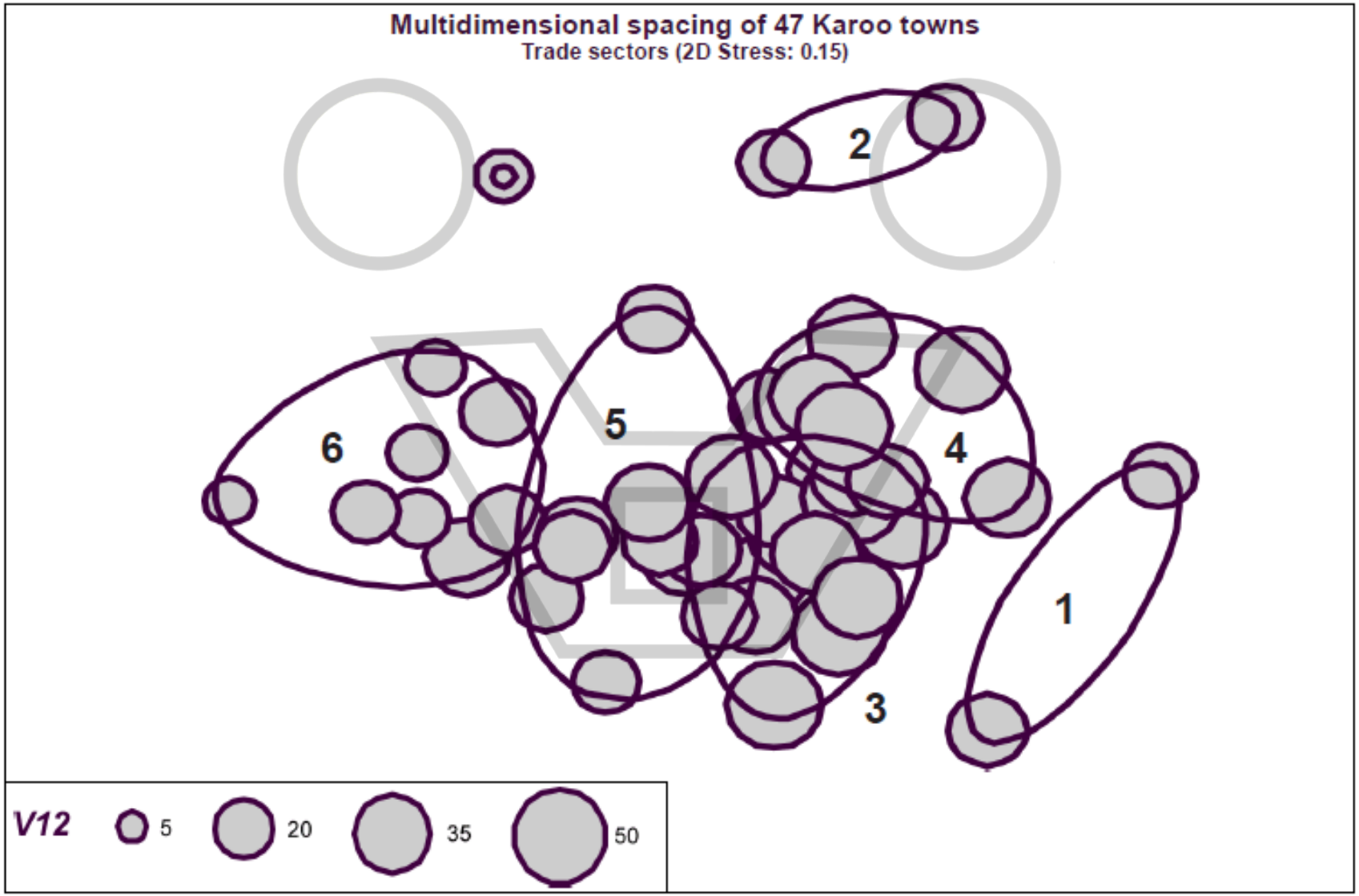
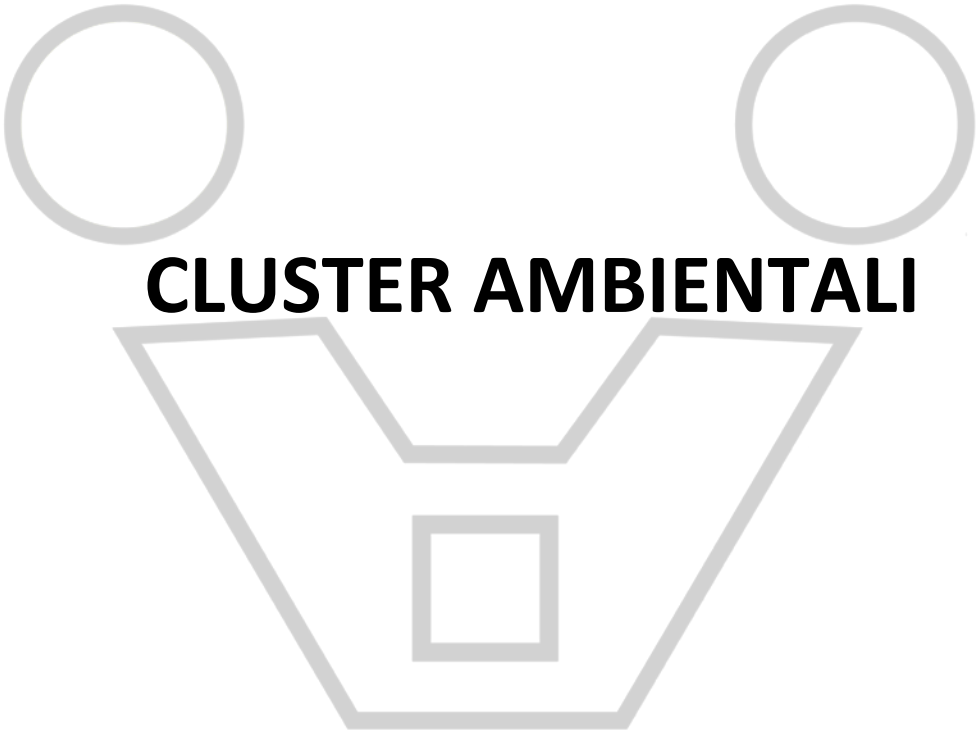


FIGURE 6
Multidimensional spacing plot of the trade sectors of the different clusters



CLUSTER AMBIENTALI

QUADRO DEI REQUISITI AMBIENTALI ESPRESSI IN MANIERA QUALITATIVA

Source IESNA, 9th Edition Lighting Handbook, Reference and Applications, Chapter 10

I. INTERIOR LOCATIONS AND TASKS — Very Important | Important | Somewhat important | Blank = Not important or not applicable

Design Issues	Appearance of Space and Luminaires	Color Appearance (and Color Contrast)	Daylighting Integration and Control	Direct Glare	Flicker (and Strobe)	Light Distribution on Surfaces	Light Distribution on Task Plane (Uniformity)	Luminances of Room Surfaces	Modeling of Faces or Objects	Point(s) of Interest	Reflected Glare	Shadows	Source/Task/Eye Geometry	Sparkle/Desirable Reflected Highlights	Surface Characteristics	System Control and Flexibility	Special Considerations	Notes on Special Considerations	Illuminance (Horizontal)	Category or Value (lux)	Illuminance (Vertical)	Category or Value (lux)	Notes on Illuminance - see end of section	Reference Chapter(s)
Reading (16)																								Ch. 11, 12
Copied tasks																								
Microfiche reader																				A		A		
Photograph, moderate detail																				E				
Thermal copy, poor																				F				
Photocopies																				D				
Photocopies, 3rd generation																				E				
Data processing tasks																								
VDT screens																				A		A		
Impact printer																								
good ribbon																				D				
2nd carbon and greater																				E				
ink jet/laser printer																				D				
keyboard reading																				D				
Machine rooms																								
Active operations																				D				
Tape storage																				D		B		
Machine area																				C				
Equipment service																				E		C		
Thermal print																				E				
Handwritten tasks																								
#2 pencil and softer leads																				D				
#3 pencil																				E				
#4 pencil and harder leads																				F				
Ball-point pen																				D				
Felt-tip pen																				D				
Handwritten carbon copy																				E				
White boards																						B		
Chalk boards																						E		
Printed tasks																								
6-point type																				E				
8- and 10-point type																				D				
Glossy magazines																				D				
Maps																				E				
Newsprint																				D				
Typed originals																				D				
Telephone books																				E				

REQUISITI LUMINOSI

IES ILLUMINANCE CATEGORIES and VALUES - for GENERIC INDOOR ACTIVITIES

ACTIVITY	CATEGORY	LUX	FOOTCANDLES
Public spaces with dark surroundings	A	20-30-50	2-3-5
Simple orientation for short temporary visits	B	50-75-100	5-7.5-10
Working spaces where visual tasks are only occasionally performed	C	100-150-200	10-15-20
Performance of visual tasks of high contrast or large size	D	200-300-500	20-30-50
Performance of visual tasks of medium contrast or small size	E	500-750-1000	50-75-100
Performance of visual tasks of low contrast or very sm size	F	1000-1500-2000	100-150-200
Performance of visual tasks of low contrast or very sm size over a prolonged period	G	2000-3000-5000	200-300-500
Performance of very prolonged and exacting visual tasks	H	5000-7500-10000	500-750-1000
Performance of very special visual tasks of extremely low contrast	I	10000-15000-20000	1000-1500-2000

A-C for illuminances over a large area (ie lobby space)
D-F for localized tasks
G-I for extremely difficult visual tasks

REQUISITI LUMINOSI

Activity	Illumination *(lux, lumen/m²)*
Public areas with dark surroundings	20 - 50
Simple orientation for short visits	50 - 100
Working areas where visual tasks are only occasionally performed	100 - 150
Warehouses, Homes, Theaters, Archives	150
Easy Office Work, Classes	250
Normal Office Work, PC Work, Study Library, Groceries, Show Rooms, Laboratories	500
Supermarkets, Mechanical Workshops, Office Landscapes	750
Normal Drawing Work, Detailed Mechanical Workshops, Operation Theatres	1,000
Detailed Drawing Work, Very Detailed Mechanical Works	1500 - 2000
Performance of visual tasks of low contrast and very small size for prolonged periods of time	2000 - 5000
Performance of very prolonged and exacting visual tasks	5000 - 10000
Performance of very special visual tasks of extremely low contrast and small size	10000 - 20000

REQUISITI ACUSTICI

Indoor Design Conditions[3]

Type of Area	Summer DB[1]	RH[2]	Winter DB[1]	RH[2]
General Office	24 (75)		22 (72)	
ADP Rooms[9]	22 (72)	45[4]	22 (72)	
Corridors	24 (75)		22 (72)	
Building Lobbies[10]	24 (75)		22 (72)	
Toilets	24 (75)		22 (72)	
Locker Rooms	26 (78)		21 (70)	
Electrical Closets	26 (78)		13 (55)	
Mech. Spaces	35 (95)[5]		13 (55)[8]	
Elec. Switchgear	35 (95)[5]		13 (55)	
Elevator Mach. Room[10]	26 (78)[5]		13 (55)	
Emerg. Gen. Room	40 (104)[6]		18 (65)	
Transformer Vaults	40 (104)[5]			
Stairwells	(none)		18 (65)	
Comm./Tel. Frame Room[7]	24 (75)	45	22 (72)	30[12]
Storage Room	30 (85)		18 (65)	
Conference Room[11]	24 (75)		22 (72)	
Auditorium[10]	24 (75)		22 (72)	
Kitchen[10]	24 (75)		22 (72)	
Dining[10]	24 (75)		22 (72)	
Cafeteria[10]	24 (75)		22 (72)	
Courtrooms	24 (75)		22 (72)	454*

*Requires humidification in the winter.

Notes:

1 Temperatures are degrees Celsius (Fahrenheit), to be maintained at +/-1 °C (+/-2 °F).
2 Relative humidity is minimum permissible, stated in percent. Maximum permissible relative humidity is 60 percent in conditioned areas.
3 Dry bulb and relative humidity are to be maintained 150 mm (6 inches) to 1800 mm (6 feet) above the floor.
4 Relative humidity should be maintained at +/-5 percent in ADP spaces.
5 Maximum temperature. Space to be mechanically cooled if necessary.
6 Room must not exceed temperature with generator running.
7 Must comply with EIA/TIA Standard 569.
8 Minimum temperature in the building must be 13 °C (55 °F) even when unoccupied.
9 Confirm equipment manufacturer 's requirements as more stringent. Provide in-room display and monitor device (such as wall mounted temperature and humidity chart recorder),
10 System shall be designed for process cooling. Cooling system shall be a dedicated independent system.
11 Provide independent temperature control.
12 Minimum relative humidity requirements may be omitted in moderate southern climate zones upon approval of local GSA representatives.

RESTITUIRE LA LETTURA DEL SITO E DEL LUOGO

SWOT ANALYSIS

Aspetti in atto

Aspetti potenziali

Aspetti positivi

Aspetti negativi

LAYERING

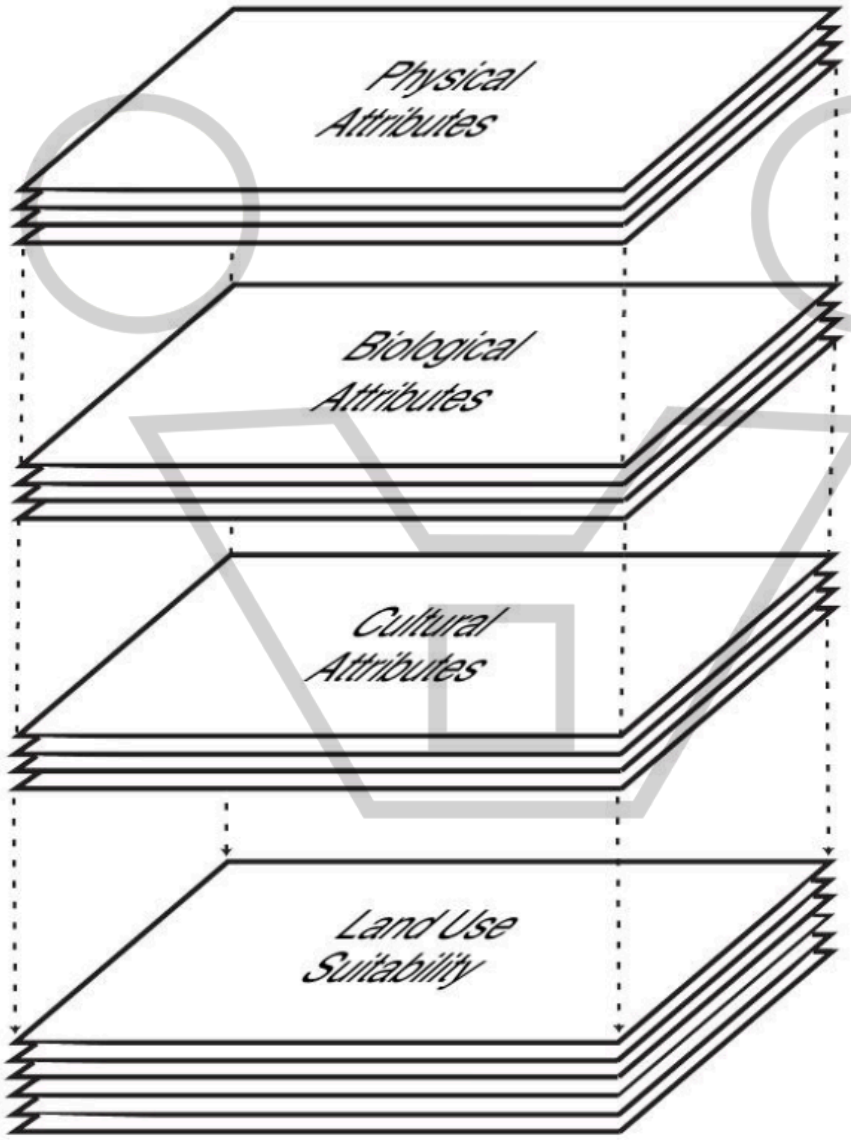

Physical Attributes
Biological Attributes
Cultural Attributes
Land Use Suitability

TABLE 1-5 Hazards, constraints, or nuisances that may influence site selection and development

Categories	*Hazards*	*Constraints*	*Nuisances*
Physical	Flooding	Shallow bedrock	
	Storm surge	Shallow water table	
	Hurricane	Erosion susceptibility	
	Earthquake	Hardpan soils	
	Landslide	Expansive clay soils	
	Volcano	Open water	
	Avalanche	Wetlands	
		Aquifer recharge areas	
		Springs and seeps	
		Steep slopes	
Biological	Wildfire	Endangered Species	Insects
Cultural	Toxic waste	Wellheads	Harsh views
	Unstable fill	Historic sites	Odors
		Archaeological sites	Noise

http://eganbimresources.com/space-planning-help.html

TABLE 1-4 Examples of physical, biological, and cultural attributes that may be mapped at the site scale.

Categories	*Subcategories*	*Attributes*
Physical	Soils	Bearing capacity
		Porosity
		Stability
		Erodibility
		Fertility
		Acidity (pH)
	Topography	Elevation
		Slope
		Aspect
	Hydrology	Surface drainage
		Water chemistry (e.g., salinity nitrates or phosphates)
		Depth to seasonal water table
		Aquifer recharge areas
		Seeps and springs
	Geology	Landforms
		Seismic hazards
		Depth to bedrock
	Climate	Solar access
		Winds (i.e., prevailing or winter)
		Fog pockets
Biological	Vegetation	Plant communities
		Specimen trees
		Exotic invasive species
	Wildlife	Habitats for endangered or threatened species
Cultural	Land use	Prior land use
		Land use on adjoining properties
	Legal	Political boundaries
		Land ownership
		Land use regulations
		Easements and deed restrictions
	Utilities	Sanitary sewer
		Storm sewer
		Electric
		Gas
		Water
		Telecommunications
	Circulation	Street function (e.g., arterial or collector)
		Traffic volume
	Historic	Buildings and landmarks
		Archaeological sites
	Sensory	Visibility
		Visual quality
		Noise
		Odors

OVERLAY ANALYSIS

Although complex spatial analyses are possible with a GIS, a small number of analytical functions are most useful for land planning purposes. A site suitability analysis typically involves overlaying two or more attribute layers (Figure 8-5). The intersection and union analyses are two of the most common, and useful, algebraic functions for analyzing multiple attribute layers. For a comprehensive review of these GIS operations, see Chrisman (1997).

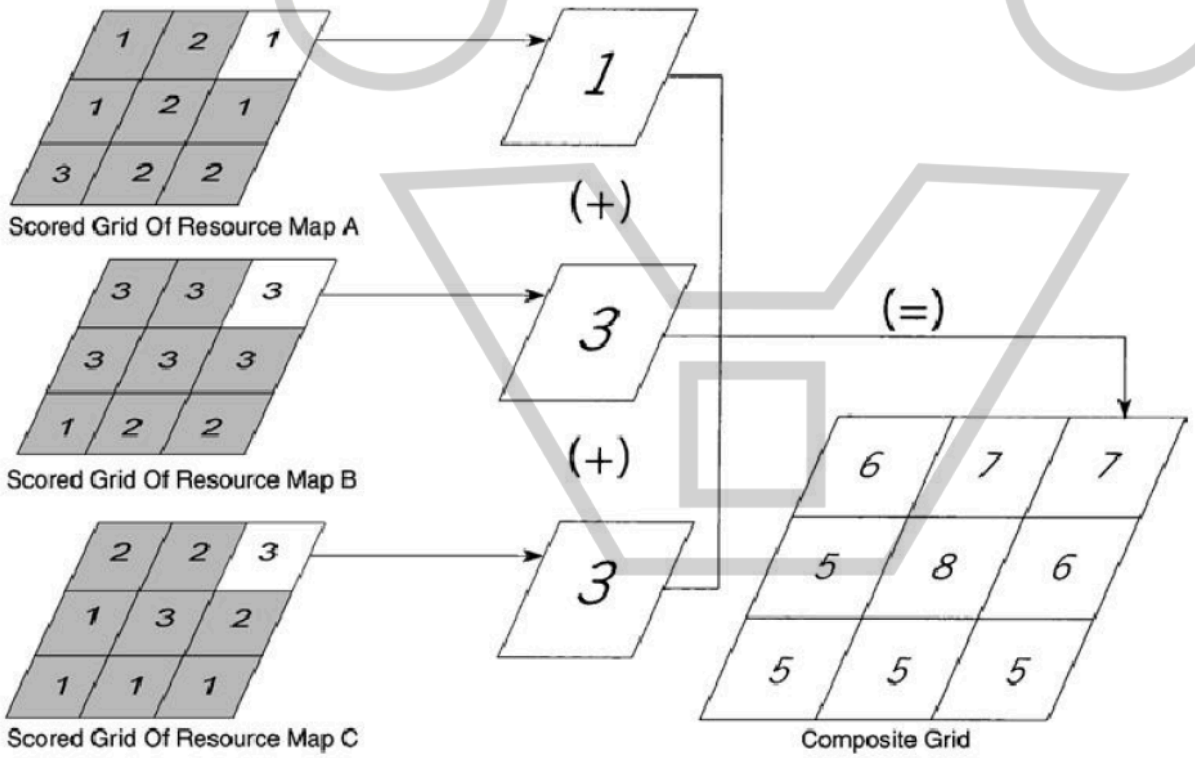


Figure 8-5 Overlay analysis using a linear combination approach. Source: Chrisman, copyright © 1997, p. 132, Figure 5-11. Reprinted by permission of John Wiley & Sons, Inc.

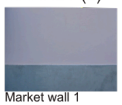
Textures and materials: colours and patterns

PRIVATE/RESIDENTIAL (1)


La Nazione facade


House wall

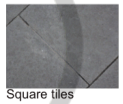
MARKET (2)


Market wall 1


Market wall 2

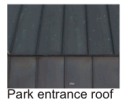

Market covering

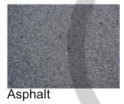
SQUARE/STREET (3)


Square tiles


Car ramp wall


Park entrance wall


Park entrance roof


Asphalt

SHOP/RESTAURANT (4)


Restaurant wall 1


Restaurant wall 2


Restaur. coating 1


Restaur. coating 3


Dehor floor

UNIVERSITY


Demolished wall 1

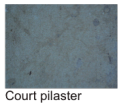

Demolished wall 2


Wall rooms 9/4


Wall back room 4


Courtyard floor


Courtyard ground


Court pilaster


Court wall 1


Stairs structure


Stairs step

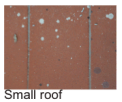

Angle rooms 9/4

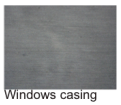

Gutter

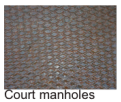

Court wall 2

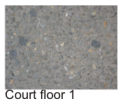

Court wall 3


Court floor 3


Small roof


Windows casing


Court manholes


Court floor 1


Court floor 2

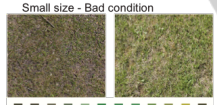
Shiny Viburnum - Viburnum lucidum

Small size - Bad condition

Year colour

5 Mixed grass

Small size - Bad condition



Year colour

Common plane tree - Platanus acerifolia

Medium/big size - Good condition

Year colour

2 Local linden tree - Tilia platyphyllos

Small size - Good condition

Year colour

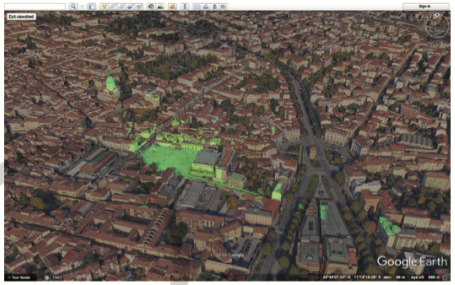
3 White poplar tree - Populus alba

Medium size - Good condition

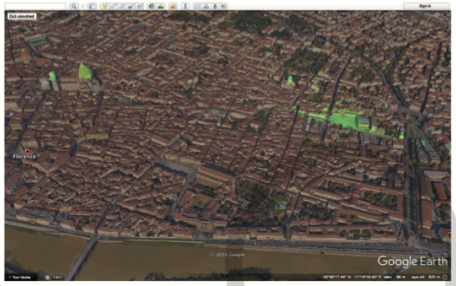
Year colour

VIEW HEIGHT 2 m

VIEW HEIGHT 6 m



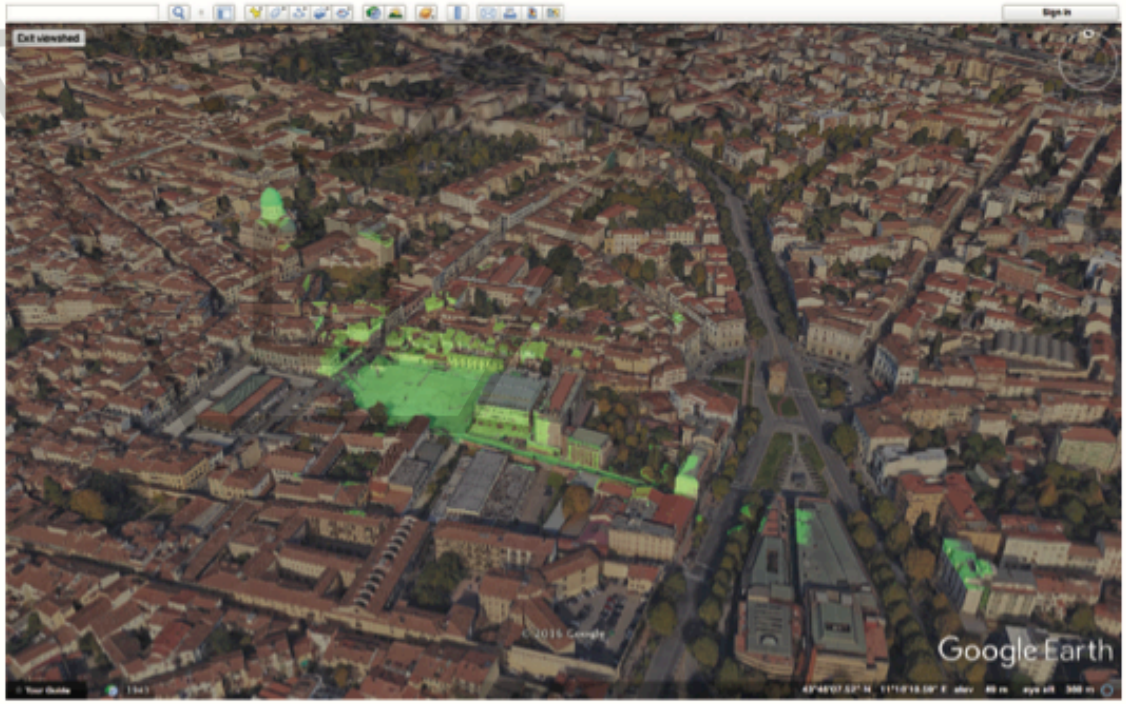
VIEW HEIGHT 10 m



VIEW HEIGHT 14 m

VIEW HEIGHT 6 m

VIEWSHED ANALYSIS



https://vimeo.com/122990587