



Pogled s S Barjanske ceste / North view from Barjanska road

Kaj je center znanosti in kako to izraziti v arhitekturi?

Zasnova objekta

...ustvarja učni model modularnosti, fleksibilnosti, igre meril, izraza identitete ter povezanosti z naravo.
 -Konstrukcijsko vzpostavlja sodobne konstrukcijske principe lesene gradnje v kombinaciji z betonom in steklom
 -Tehnološko izkorišča naravne vire ter vzpostavlja trajnosten energetsko varčen objekt, ki temelji na preprosti zasnovi
 -Objekt je ekonomičen v smislu organizacije prostora, uporabi preprostih materialov in tehnologij.

Urbanistične umestitve velikih volumnov v območje primernih viš.
 Program ter zahtevani volumni narekujejo objekt večjega merila. S pomočjo modularne zasnove je to merilo v konceptu segregirano na način, da interier vzpostavlja človeku prijazno merilo, eksterier pa se z merilom vklaplja v okolje Trnovskega predmestja.

Koliščarji - Identiteta in zgodovinski spomin
 Nulla kola pritičja izkorišča višinsko razliko med Barjansko in Riharjevo cesto. Tla pritičja so od obstoječega parka dvignjena cca 1m. To ustvarja občutek lebdenja stavbe ter asociira na zasnovo kolišč, vzpostavlja spomin na preteklost tega območja ter ustvarja identiteto prostora. Sedanjost se sreča s preteklostjo in poveže v prihodnost.

What is the center of science and how to express it in architecture?

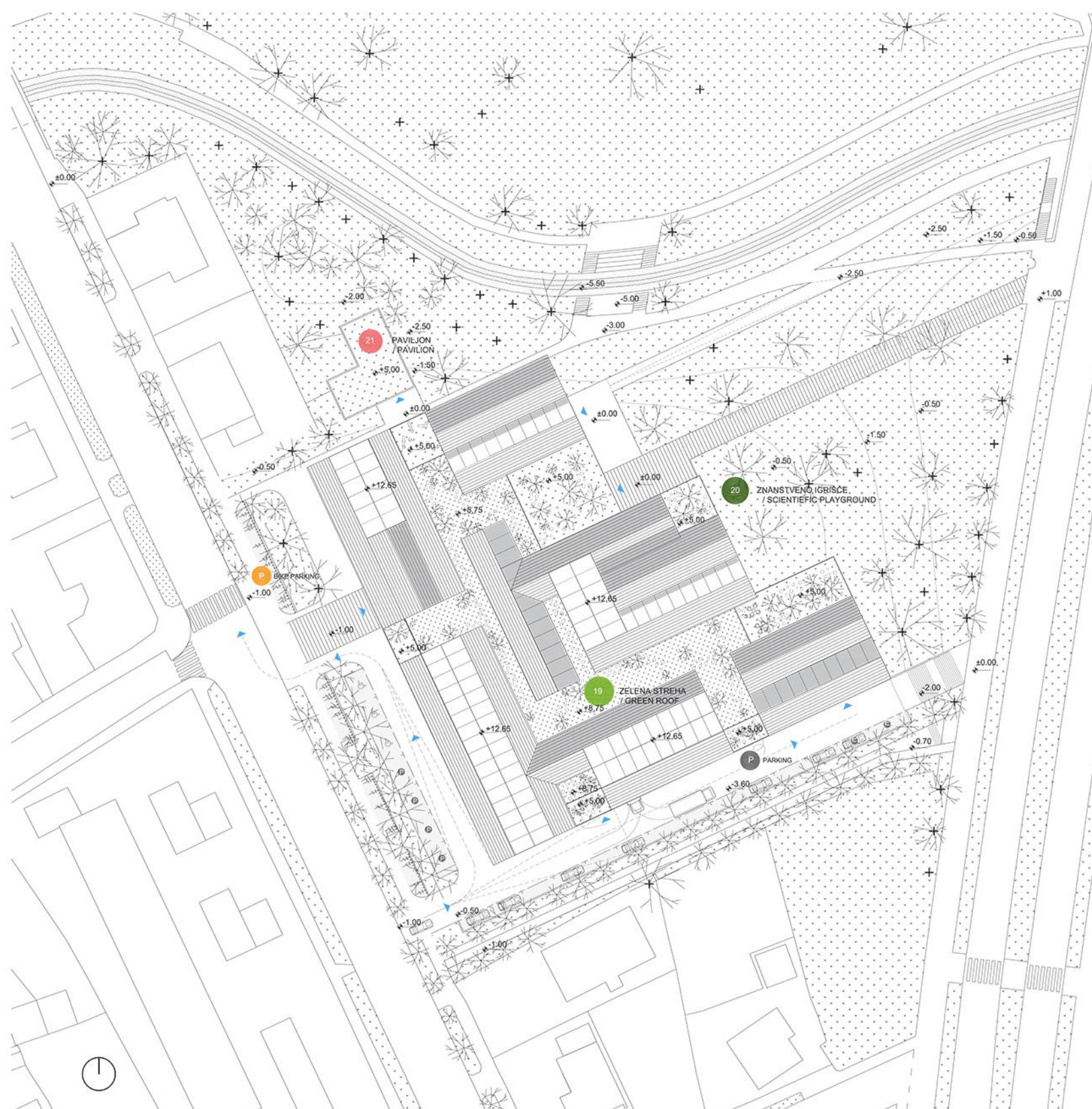
The concept

...creates a learning model of modularity, flexibility, play of different scales, expressing identity and connection with nature.
 - Contemporary structural principles in use of wooden structures in combination with reinforced concrete and structural glass
 - Technologically exploits natural resources and establishes an sustainable energy-saving facility based on a simple design
 - The building is economical in terms of organizing space, using simple materials and technologies. The design allows economical construction as well as minimum maintenance costs in the future.
 - Innovative use of wood for structure and facade, roof and interior cladding including wooden shading

Urban implementation of large scale volume into the suburban area;
 The program and the required volume dictates a larger scale object. By using modular system and grid, the scale of the volume is visually fragmented in the way that creates a human-friendly interior, and externally fits into small scale of Trnovo suburb.

Piledwellings - Identity and historical memory

The ground zero of the ground floor uses the height difference between Barjanska and Riharjeva road. The floor of the ground floor is approximately 1m from the existing park. This creates floating effect of the building, and associates with the design of piles. By doing so it establishes a memory of the past and creates the identity of the space. The present meets the past and connects to the future.



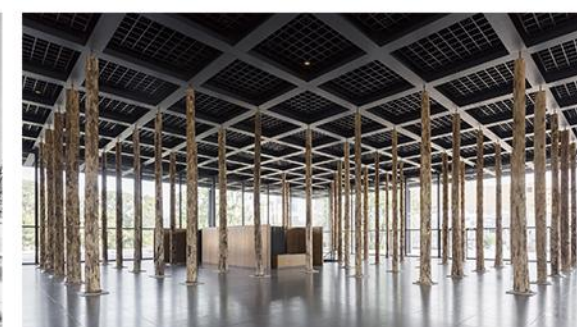
prazgodovinska kolišča na ljubljanskem barju / piled dwellings



oton jugovec, lebdeča streha / floating roof, otok pri dobravi



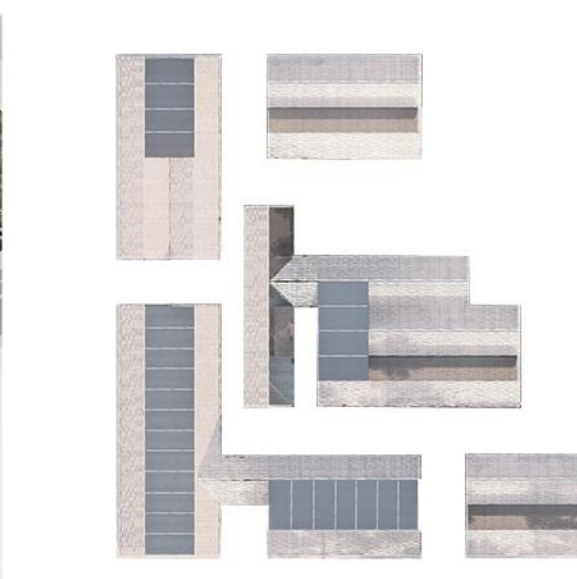
mies van der rohe, neue nationalgalerie, berlin



mies van der rohe, interior, neue nationalgalerie, berlin



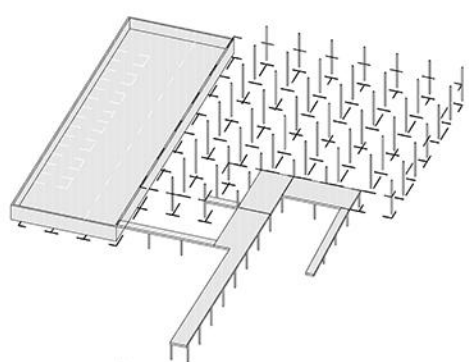
mies van der rohe, interior, neue nationalgalerie, berlin



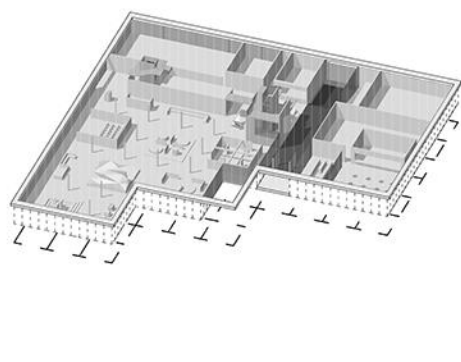
mies van der rohe, interior, neue nationalgalerie, berlin



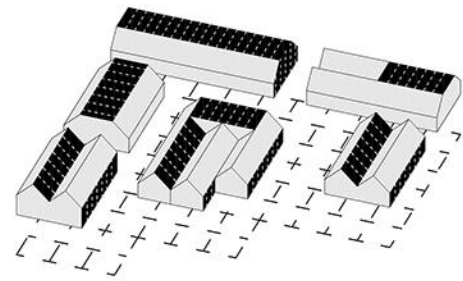
Interier vhodnega dela / Interior view of the entrance hall



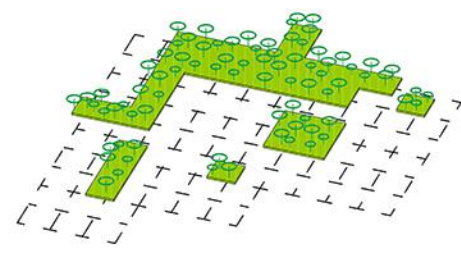
MODULARNA REŽJA / 7.5 X 7.5 GRID PILARS



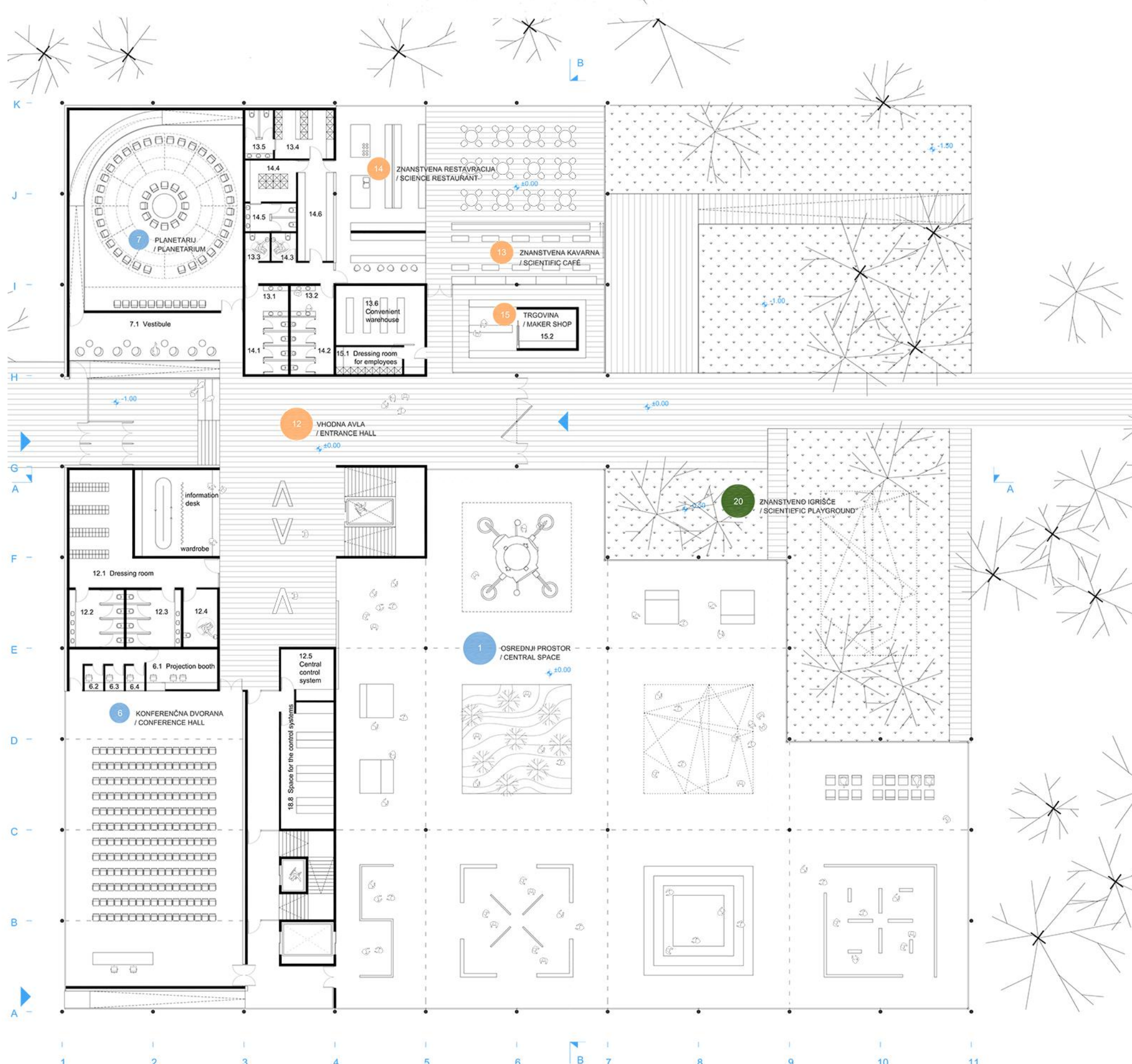
DVIIGNENA PLATFORMA / ELEVATED PLATFORM



DVOKAPNI PAVILJONI NA STREHI / PITCHED ROOF PAVILIONS

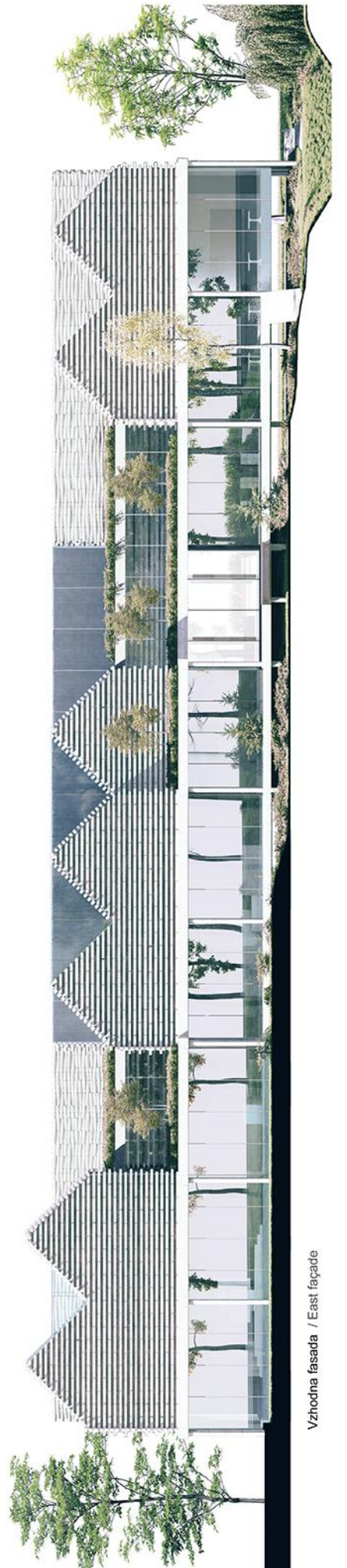


LUČNI VRTOVNI NASTREHI / GREEN ROOF EDUCATIONAL GARDENS



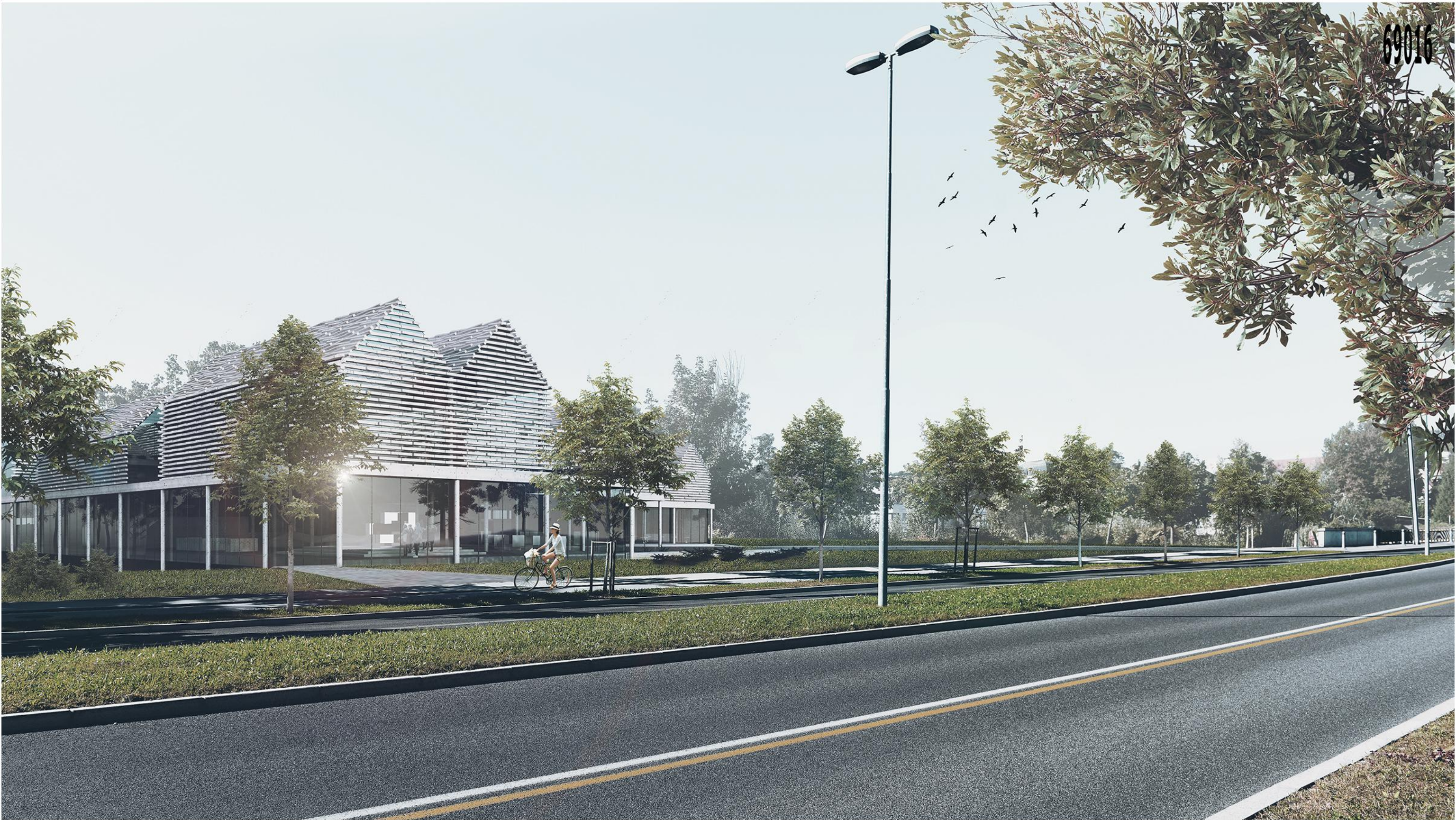
	neto
1. Osrednji prostor	1850,0 m ²
6. Konferenčna dvorana	400,0 m ²
6.1 Projekcijska kabina	19,5m ²
6.2 Prevaljska kabina	3,2 m ²
6.3 Prevaljska kabina	3,2 m ²
6.4 Prevaljska kabina	3,2 m ²
7. Planetarij	245,0 m ²
7.1 Predprostor	56,0 m ²
12. Vhodna avla	370,0m ²
12.1 Garderoba	60,0 m ²
12.2 Sanitarije ženske	35,0m ²
12.3 Sanitarije moške	35,0m ²
12.4 Sanitarije za funkcionalno ovirane osebe	13,0 m ²
12.5 Centralni nadzorni sistem	17,2 m ²
13. Znanstvena kavarna	150,0 m ²
13.1 Sanitarije ženske	15,0 m ²
13.2 Sanitarije moške	15,0 m ²
13.3 Sanitarije funkcionalno ovirane osebe	4,7 m ²
13.4 Garderoba za zaposlene	19,4 m ²
13.5 Sanitarije za zaposlene	12,0 m ²
13.6 Priročna sklopišča	35,8 m ²
14. Znanstvena restavracija	150,0 m ²
14.1 Sanitarije ženske	15,0 m ²
14.2 Sanitarije moške	15,0 m ²
14.3 Sanitarije funkcionalno ovirane osebe	4,7 m ²
14.4 Garderoba za zaposlene	14,3 m ²
14.5 Sanitarije za zaposlene (moški, ženske)	12,0 m ²
14.6 Priročna sklopišča	24,5 m ²
15. Trgovina "Maker shop"	80,0 m ²
15.1 Garderoba za zaposlene	16,3 m ²
15.2 Priročna sklopišča	15,7 m ²
18.8 Prostor za krmilne sisteme	51,0 m ²
SKUPAJ	3760,7 m²

	neto
1. Central space	1850,0 m ²
6. Conference room	400,0 m ²
6.1 Projection booth	19,5m ²
6.2 Translation booth	3,2 m ²
6.3 Translation booth	3,2 m ²
6.4 Translation booth	3,2 m ²
7. Planetarium	245,0 m ²
7.1 Vestibule	56,0 m ²
12. Entrance hall	370,0m ²
12.1 Dressing room	60,0 m ²
12.2 Women's restroom	35,0 m ²
12.3 Men's restroom	35,0 m ²
12.4 Restroom for functionally impaired persons	13,0 m ²
12.5 Central control system	17,2 m ²
13. Scientific café	150,0 m ²
13.1 Women's restroom	15,0 m ²
13.2 Men's restroom	15,0 m ²
13.3 Restroom for functionally impaired persons	4,7 m ²
13.4 Dressing room for employees	19,4 m ²
13.5 Restroom for employees (men,women)	12,0 m ²
13.6 Convenient warehouse	35,8 m ²
14. Science restaurant	150,0 m ²
14.1 Women's restroom	15,0 m ²
14.2 Men's restroom	15,0 m ²
14.3 Restroom for functionally impaired persons	4,7 m ²
14.4 Dressing room for employees	14,3 m ²
14.5 Restroom for employees (men,women)	12,0 m ²
14.6 Convenient warehouse	24,5 m ²
15. "Maker shop"	80,0 m ²
15.1 Dressing room for employees	16,3 m ²
15.2 Convenient warehouse	15,7 m ²
18.8 Space for the control systems	51,0 m ²
TOTAL	3760,7 m²

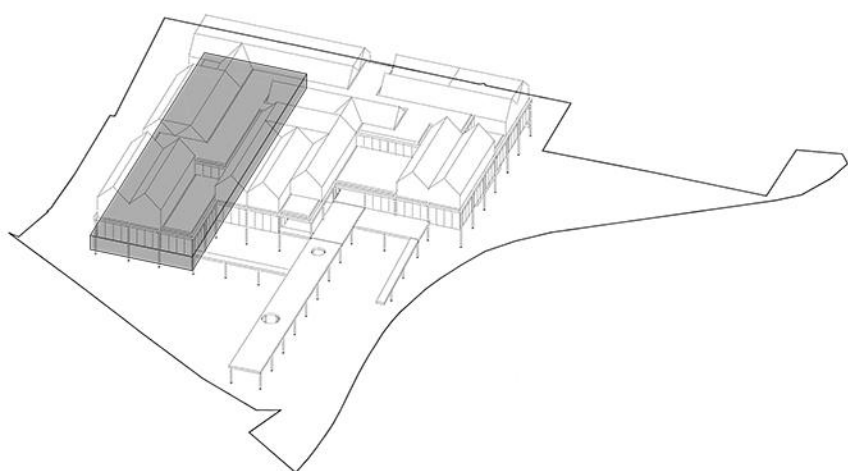


CENTER ZNANOSTI / SCIENCE CENTRE

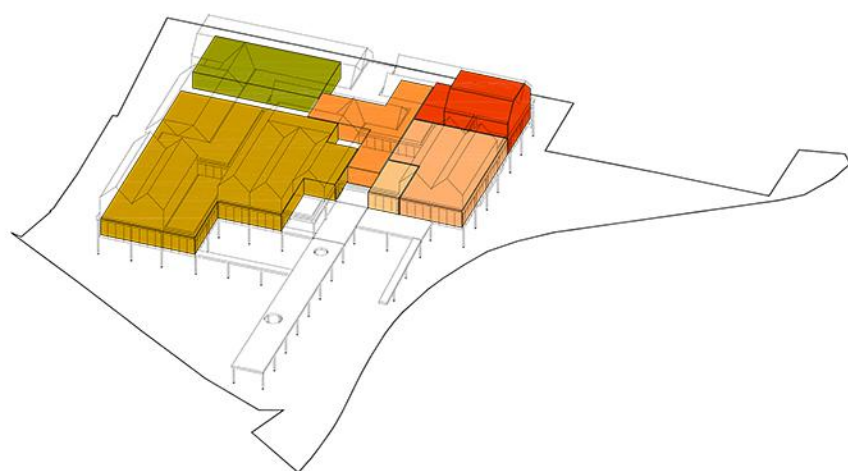
Pritličje M 1:200 / Ground floor 1:200



Pogled z Barjanske ceste / View from Barjanska road



TEHNIČNI PROSTORI / TECHNICAL SPACES



- OSREDNJI PROSTOR / CENTRAL SPACE
- KONFERENČNA DVORANA / CONFERENCE ROOM
- PLANETARIJ / PLANETARIUM
- VHODNA AVLA / MAIN ENTRANCE HALL
- RESTAVRACIJA IN KAVARNA / RESTAURANT AND CAFE
- TRGOVINA / MAKER SHOP

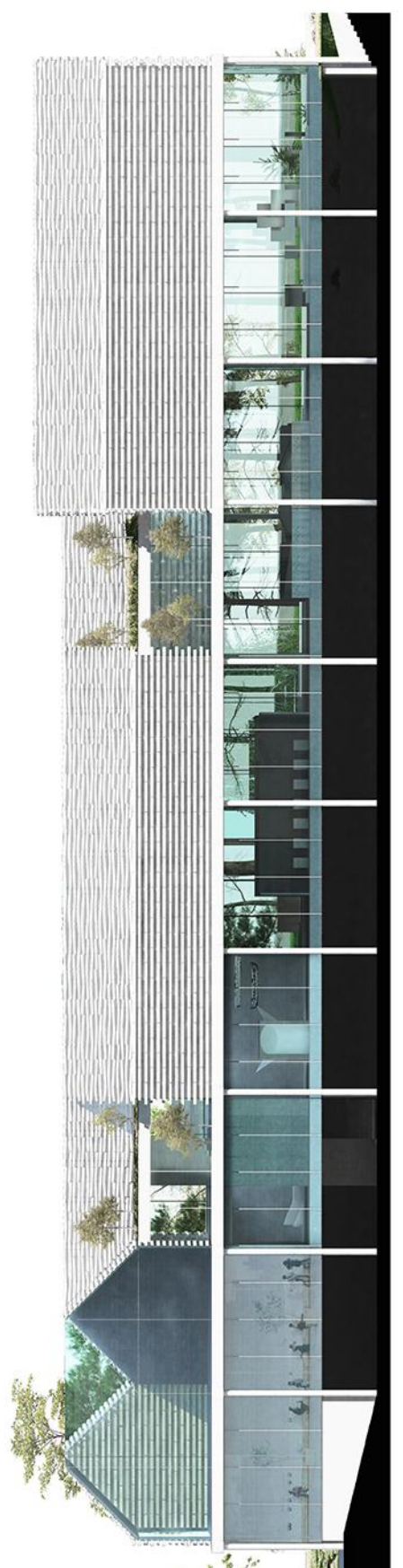


- FAB LAB / FAB LAB
- LABORATORIJI / LABORATORIES
- DEMONSTRACIJSKO SREDIŠČE / SHOWROOM
- GALERIJA / GALLERY
- SESTANKOVALNICE / MEETING ROOMS
- UPRAVNI PROSTORI / ADMINISTRATION



	neto
2. Fab Lab	623,0 m ²
2.1 Pisarna	53,0 m ²
2.2 Priročno skladišče	88,0 m ²
3.1 Laboratorij za fiziko	70,0 m ²
3.2 Laboratorij za kemijo	60,0 m ²
3.3 Laboratorij za biologijo	62,3 m ²
3.4 Laboratorij za materiale	70,0 m ²
3.5 Pripravljalnica	50,0 m ²
3.6 Tehnik v laboratoriju	54,5 m ²
4. Demonstracijsko središče	500,0 m ²
4.1 Tehnični prostor	50,0 m ²
5. Galerija	500,0 m ²
5.1 Tehnični prostor	50,0 m ²
8. Sestankovalnice	175,0 m ²
8.1 Čajna kuhinja	12,3 m ²
8.2 Garderoba	5,4 m ²
9. Medijsko središče	55,5 m ²
10. Virtualno središče	100,0 m ²
10.1 Prostor za krmilni sistem	54,0 m ²
11. Mini eksperimentalnica	140,0 m ²
16.1 Direktor	28,0 m ²
16.2 Pomočnik direktorja	28,0 m ²
16.3 Tajnica in asistent v tajništvu	30,0 m ²
16.4 PR 2x, grafični oblikovalec	51,0 m ²
16.5 Financnik	24,0 m ²
16.6 Kadrovnik in pomočnik	26,3 m ²
17.6 Čajna kuhinja	20,0 m ²
17.7 Garderoba za zaposlene	16,2 m ²
17.8 Sanitarje moški	19,4 m ²
17.9 Sanitarje ženske	19,4 m ²
18.8 Prostor za krmilne sisteme	51,0 m ²
TOTAL	3083,3 m²

	neto
2. Fab Lab	623,0 m ²
2.1 Office	53,0 m ²
2.2 Convenient warehouse	88,0 m ²
3.1 Physics laboratory	70,0 m ²
3.2 Chemistry laboratory	60,0 m ²
3.3 Biology laboratory	62,3 m ²
3.4 Laboratory for materials	70,0 m ²
3.5 Preparing room	50,0 m ²
3.6 Technician in the laboratory	54,5 m ²
4. Demonstration centre "Showroom"	500,0 m ²
4.1 Technical space	50,0 m ²
5. Gallery	500,0 m ²
5.1 Technical space	50,0 m ²
8. Meeting rooms	175,0 m ²
8.1 Kitchennettes	12,3 m ²
8.2 Dressing room	5,4 m ²
9. Media centre	55,5 m ²
10. Virtual hub	100,0 m ²
10.1 Space for the control system	54,0 m ²
11. Mini experimental room	140,0 m ²
16.1 Director	28,0 m ²
16.2 Assistant director	28,0 m ²
16.3 Secretary and assistant in the secretariat	30,0 m ²
16.4 PR 2X, graphic designer	51,0 m ²
16.5 Finance officer	24,0 m ²
16.6 Staff manager and assistant	26,3 m ²
17.6 Kitchennettes	20,0 m ²
17.7 Dressing room for employees	16,2 m ²
17.8 Men's restroom	19,4 m ²
17.9 Women's restroom	19,4 m ²
18.8 Prostor za krmilne sisteme	51,0 m ²
TOTAL	3083,3 m²



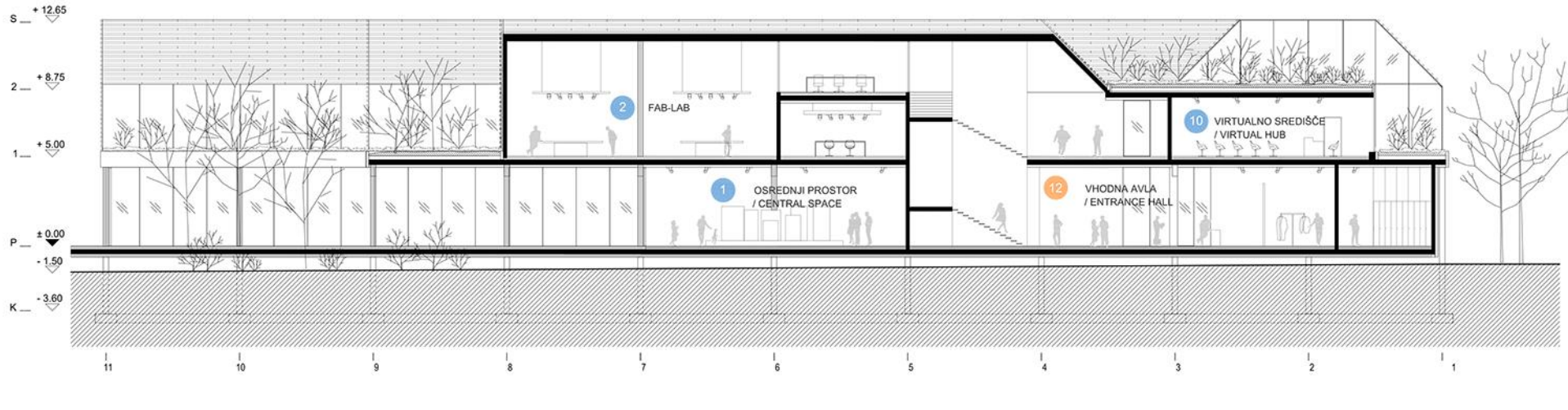
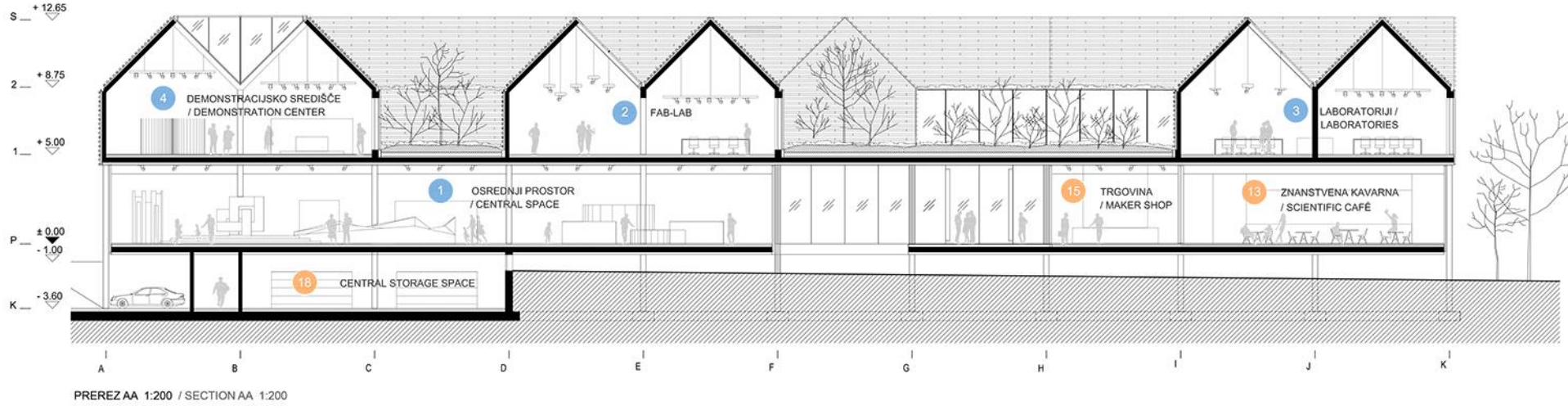
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Tloris Nadstropja M 1:200 / First floor 1:200

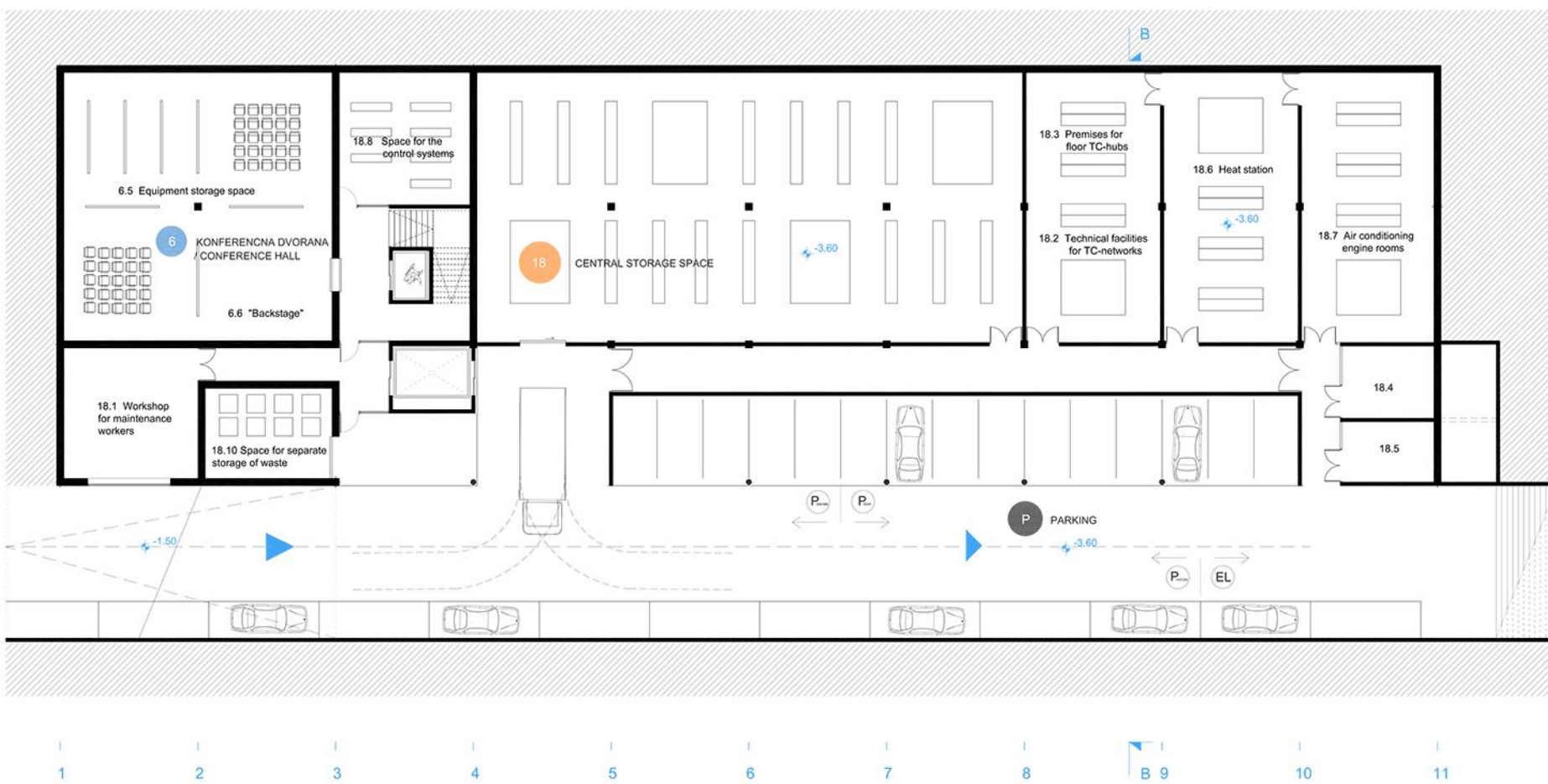
0 5 10



Pogled na Vhodni del / View of the entrance hall



0 5 10



0 5 10



1. strešna konstrukcija / roof construction
 - lesene letve / wooden battens
 - prečne letve 5/6cm / cross wooden battens
 - EPDM folija / EPDM foil
 - toplotna izolacija mineralna volna / mineral wool thermal insulation
 - lesena nosilna konstrukcija - CLT / wooden slab construction - CLT
2. zbir / gutter
3. okno s kovinskim profilom / window ALU profile
4. toplotno izolativno steklo / thermal insulated window
5. lesene letve / wooden battens
6. medetazna konstrukcija / floor construction
 - parket / parquet
 - estrih / screed
 - PE folija / foil
7. toplotna izolacija EPS / thermal insulation EPS
 - lesena nosilna konstrukcija - CLT / wooden slab construction - CLT
 - toplotna izolacija mineralna volna / mineral wool thermal insulation
8. toplotno izolativno steklo / thermal insulated window
9. medetazna konstrukcija / floor construction
 - industrijski tlak / concrete finishing
 - toplotna izolacija EPS / thermal insulation
 - AB plošča / reinforced concrete slab
 - toplotna izolacija EPS / thermal insulation EPS
 - zunanji fasadni omet / facade plaster
10. okno s kovinskim profilom / window ALU profile
11. AB stebri / reinforce concrete columns

	neto
6.5 Prostor za shranjevanje opreme	100,0 m ²
6.6 "Backstage"	30,0 m ²
18. Osrednji skladišni prostor	400,0 m ²
18.1 Delavnica za vzdrževalce	52,0 m ²
18.2 Tehnični prostori za TK-omrežja	54,0 m ²
18.3 Prostori za etalna TK vozlišča	53,3 m ²
18.4 Zunanje klimatske naprave	60,0 m ²
18.5 Zunanji prostor za toplotno črpalko	45,0 m ²
18.6 Toplotna postaja	107,5 m ²
18.7 Klimatske strojnice	106,0 m ²
18.8 Prostor za krmilne sisteme "Technologies of the Future"	51,00 m ²
18.9 Engine room for the pavilion	150,0 m ²
18.10 Prostor za ločeno shranjevanje odpadkov	34,0 m ²
TOTAL	1242,8 m²

	neto
6.5 Equipment storage space	100,0 m ²
6.6 "Backstage"	30,0 m ²
18. Central storage space	400,0 m ²
18.1 Workshop for amaintenance workers	52,0 m ²
18.2 Technical facilities for TC-networks	54,0 m ²
18.3 Premises for floor TC-hubs	53,3 m ²
18.4 Outdoor air conditioning	60,0 m ²
18.5 Outdoor space for the heat pump	45,0 m ²
18.6 Heat station	107,5 m ²
18.7 Air conditioning engine rooms	106,0 m ²
18.8 Space for the control systems	51,00 m ²
18.9 Engine room for the pavilion	150,0 m ²
18.10 Space for separate storage of waste	34,0 m ²
TOTAL	1242,8 m²

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