LUNDS UNIVERSITET

Lund University in Science Village

NAME | LUND UNIVERSITY


Lund
STÅNGBY
Valltuna
Hoby ladugårdsmark
Västragård
Lackalänga ladugårdsmark
Svenshög
Tornhill
67m
BRUNNSHÖG
LUND
Annehem
Norra Gränsvägen
Prästahusen
Norra fäladen
Norra
Nöbbelöv
Brunnshög
Östra Torn
Nöbbelövsvägen
Oscarshem
Magistratsvägen
Möllevången
Tornäs
Norra Ringen
Sliparelyckan
Neversvägen
Kobjärsvången
Baravägen
Smörlyckan
Öresundsvägen
Plantagelyckan
Scheelevägen
Pålsjö
Spelmansvägen
E22
Spoletorp
Sölvegatan
Östra Torn
Fjelievägen
Tuna
Klosterhusen
Olshög
Mårtens fälad
Kulturen
Papegojelyckan
Galjevången
Thulehemsvägen
Pilelyckan
Vipelyckan

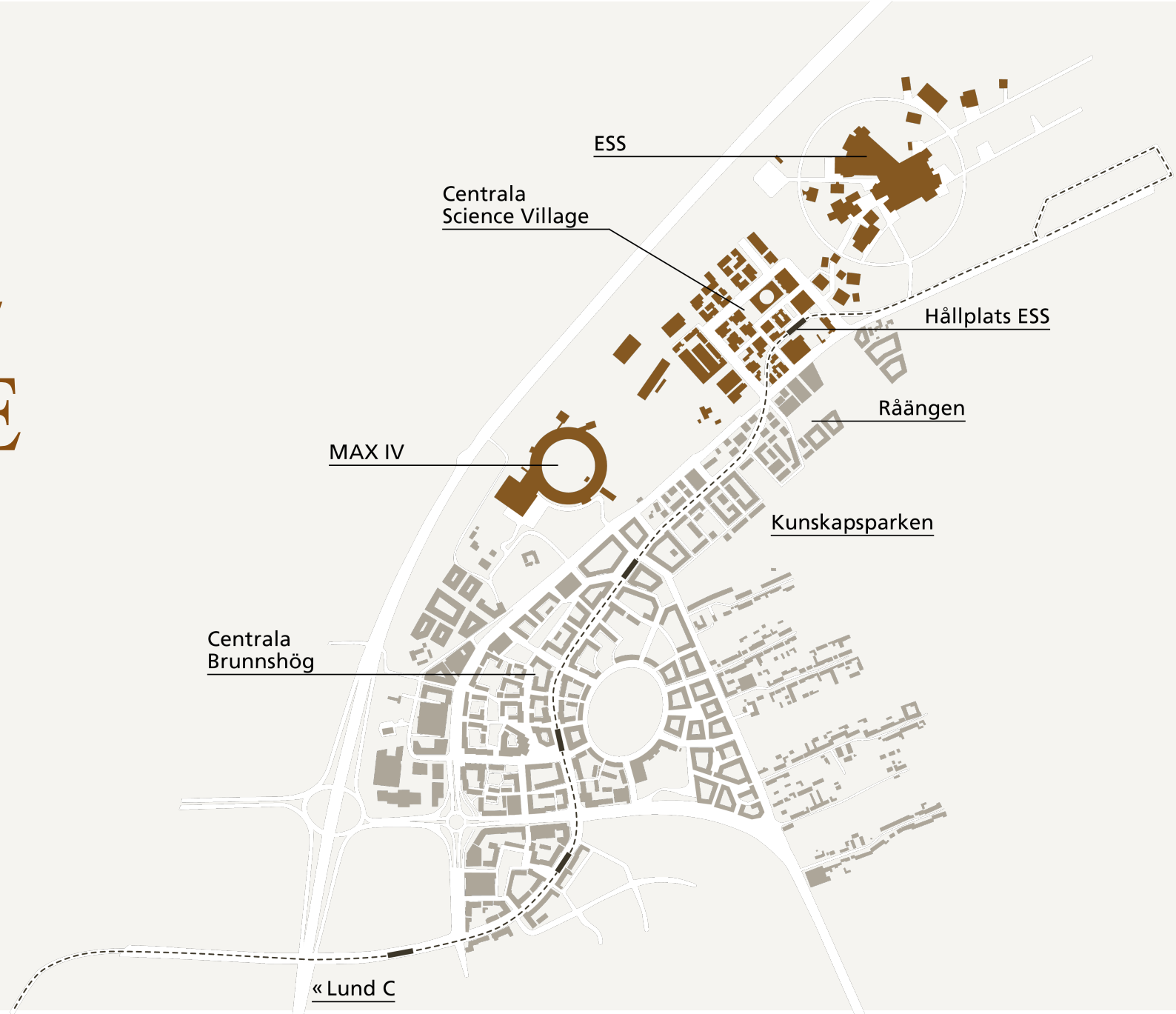
BRUNNSHÖG


ESS
Centrala
Science Village
Hållplats ESS
Råängen
MAX IV
Kunskapsparken
Centrala
Brunnshög
« Lund C

- Brunnshög is located in north-east Lund.
- When the area is fully built with housing, offices, schools, infrastructure etc, around 40,000 people will live and work there.
- Brunnshög aims to be a European model for sustainable urban development.
- Science Village is a part of Brunnshög and includes MAX IV, ESS and the central Science Village.
- The vision for Brunnshög can be summarised as: A world-leading living, innovation and research environment.

ILLUSTRATION: ATKINS

SCIENCE VILLAGE



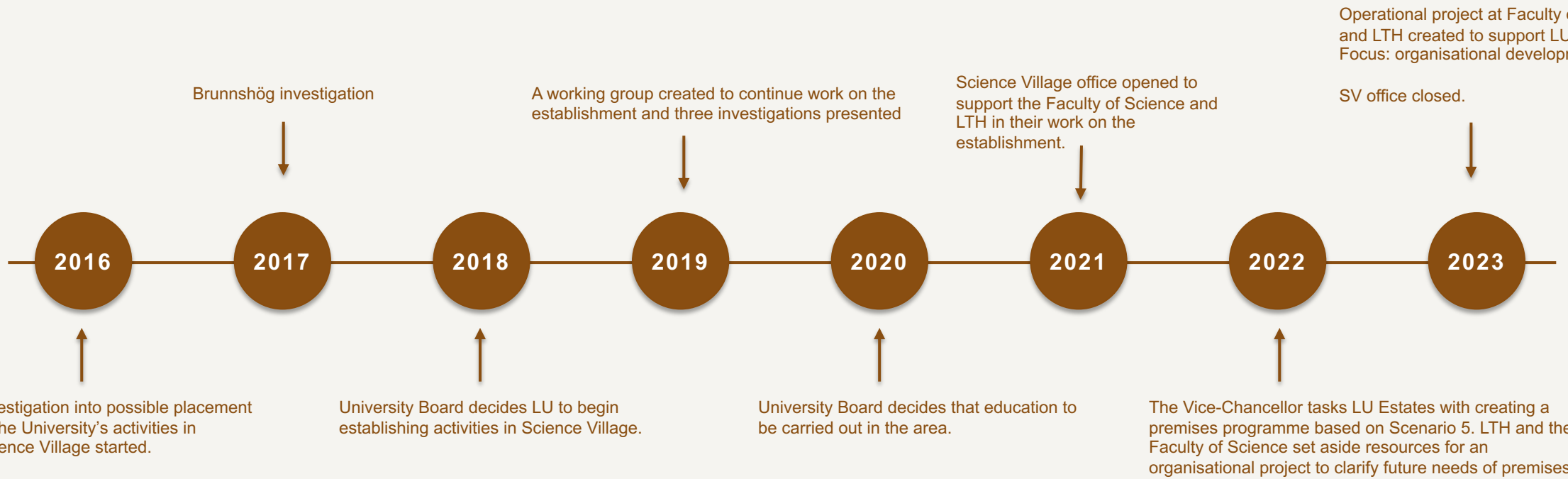
- Central Science Village lies between the research facilities MAX IV and ESS, and is connected to the rest of Lund and the University by Kunskapstråket (the Knowledge Highway).
- Kunskapstråket's physical link is the tramline that runs from the Lund central railway station, through Ideon Science Park and on to Science Village.
- Facilities are planned for the area to cater for research-intensive companies, an establishment of Lund University, the Science Center, concert space in Science Village Hall, laboratories, office space and much more.

ILLUSTRATION: WIHLBORGS


ESS
SCIENCE VILLAGE
SCIENCE CENTER
SPACE
SPEKTRA
LUND UNIVERSITY
FREE ELECTRON LASER (FEL)
MÖLLEGÅRDEN
THE LOOP
NANOLAB SV
CMU
KUNSKAPSPARKEN
SKANSKA
RÅÄNGEN
MAX IV
Alternativ P
Möjlig P
P
VÄG E22
SCIENCE CENTER
LÄRDOMEN 1
MILLIGATAN
NANOLAB
ATTOGATAN
NANOGATAN
ODARSLÖVSVÄGEN

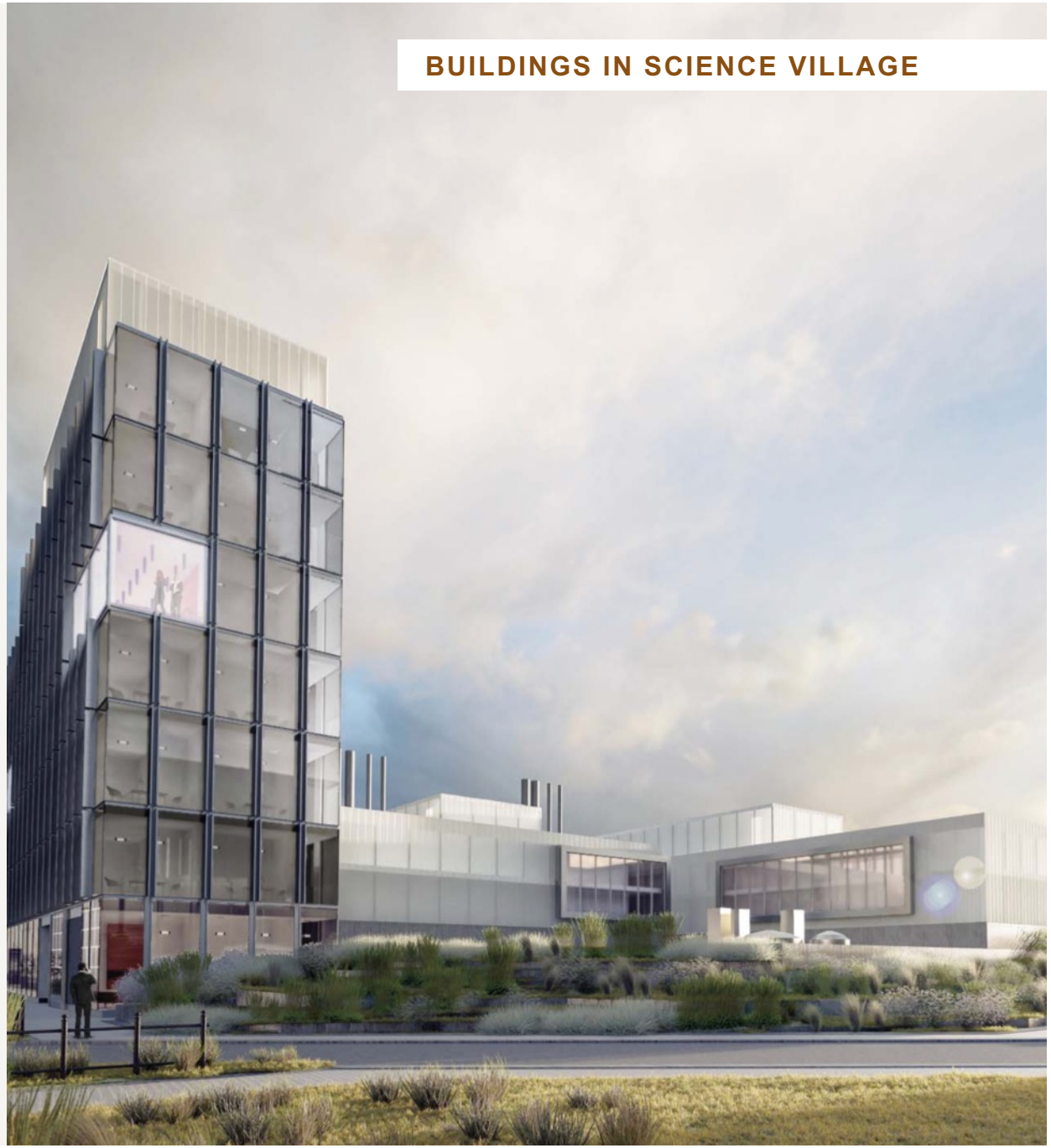
LUND UNIVERSITY IN SCIENCE VILLAGE

SO FAR


2016
2017
2018
2019
2020
2021
2022
2023
Investigation into possible placement of the University's activities in Science Village started.
Brunnshög investigation
University Board decides LU to begin establishing activities in Science Village.
A working group created to continue work on the establishment and three investigations presented
University Board decides that education to be carried out in the area.
Science Village office opened to support the Faculty of Science and LTH in their work on the establishment.
The Vice-Chancellor tasks LU Estates with creating a premises programme based on Scenario 5. LTH and the Faculty of Science set aside resources for an organisational project to clarify future needs of premises.
Operational project at Faculty of Science and LTH created to support LU Estates. Focus: organisational development.
SV office closed.

NANOLAB SCIENCE VILLAGE

- Lund NanoLab is a cleanroom laboratory that is currently located in the premises of the Department of Physics.
- The current lab is used by more than 150 users. The lab must be moved in order to satisfy the needs of all the users and the rapid advances in the field.
- NanoLund's aim is to use nanoscience and nanotechnology to solve big societal challenges such as renewable energy, environmentally-friendly material, etc.
- The building of NanoLab Science Village is part of the first stage of LU's establishment in Science Village.
- Suggestion for appearance (this is not how the lab will look, by KAMIKAZE Arkitekter).
- Ready for moving in around 2028.



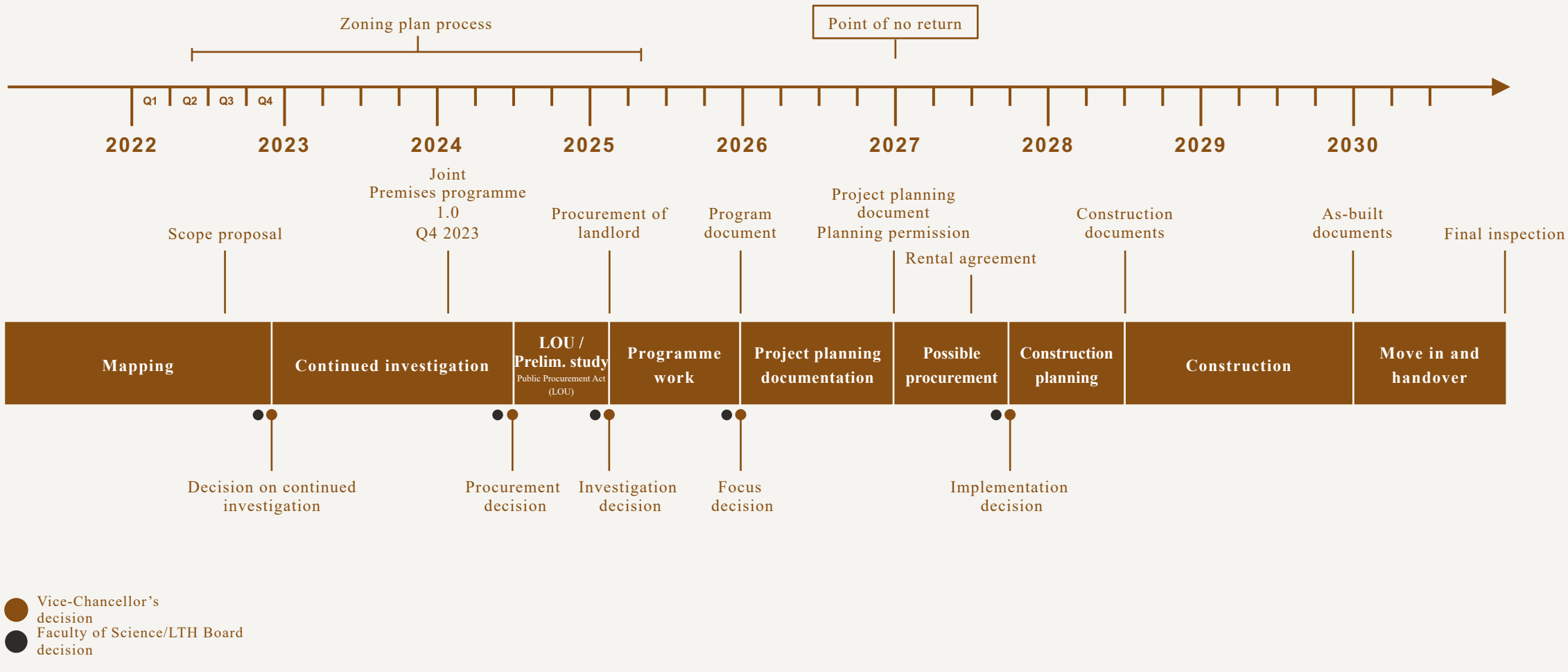
BUILDINGS IN SCIENCE VILLAGE

SCENARIO 5 – STAGE 2

- **Stage 2** => organisations included in the Departments of Physics and Chemistry & parts of Electrical and Information Technology (EIT) will establish operations in Science Village together, moving around 2030.
- Co-location of these activities enables greater possibilities for **increased collaboration and organisational development.**
- The operational project and the design dialogues are focused on creating a premises programme anchored in the organisations and their needs.
- **Why establish operations in Science Village?** To make the most of what the area offers, and to be close to MAX IV and ESS in order to continue to develop research and education.

PRELIMINARY TIMESCALE FOR LUND UNIVERSITY'S ESTABLISHMENT IN SCIENCE VILLAGE STAGE 2

The timescale will be adjusted as the project continues



VISIONS

LU'S VISION FOR ITS ESTABLISHMENT IN SCIENCE VILLAGE

For innovative knowledge environments – and answers to future questions

- **Interaction of environments –** technology, science and medicine
- **A renewal of the University:** organisational structures and collaborative forms
- **Advances in research for the many**
- **Interdisciplinary environment** that shines bright internationally
- **Inspirational study environments** and a rich student life
- **New cross-faculty educational programmes** and educational formats

FROM LTH'S VISION FOR 2035

- LTH is a hub of **collaboration between industry, academia and the large MAX IV and ESS facilities.** It is an international and unique research and innovation environment with global visibility.
- LTH has established an important part of its **research and teaching activities in Science Village**.

THE DEPARTMENT OF PHYSICS' VISION

- Lund University has created a science and technology centre for physics and chemistry in Science Village.
- The centre is home to excellent education at first, second and third-cycle levels and leading research in physics and chemistry.
- The centre has national and international renown for its education and research. It attracts students from all over Sweden and the whole world, as well as lecturers and researchers of high international standing.
- The centre gives rise to spontaneous and planned meetings that create connected educational and research environments.
- The environment offers ultra-modern premises conducive to educational and research activities of a laboratory or theoretical nature.

GOING FORWARD

OPERATIONAL PROJECT

- The next phase in the establishment is to clarify the future need for premises.
- LU Estates has been tasked with creating a premises programme based on Scenario 5, before the end of 2023.
- The Faculty of Science and LTH have created a project group and a steering group in order to help LU Estates identify the future need for premises for research, teaching and collaboration.
- Project manager: Charlotta Turner, researcher chemistry

OPERATIONAL PROJECT DELIVERABLES 2023

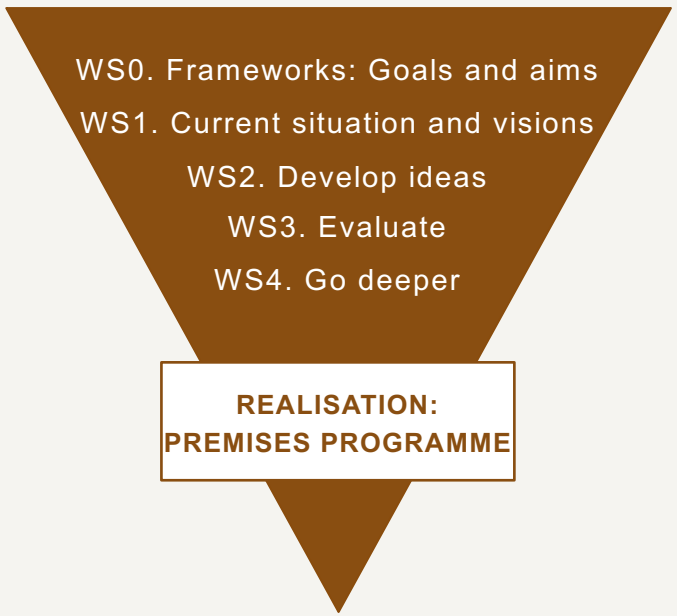
JOINT PREMISES PROGRAMME

1. Joint description of activities
2. Premises list, that is a list of premises requirements
3. Connection diagram, that is, a description of the desired connections between the different parts of the planned activities

IN ADDITION, THERE NEEDS TO BE

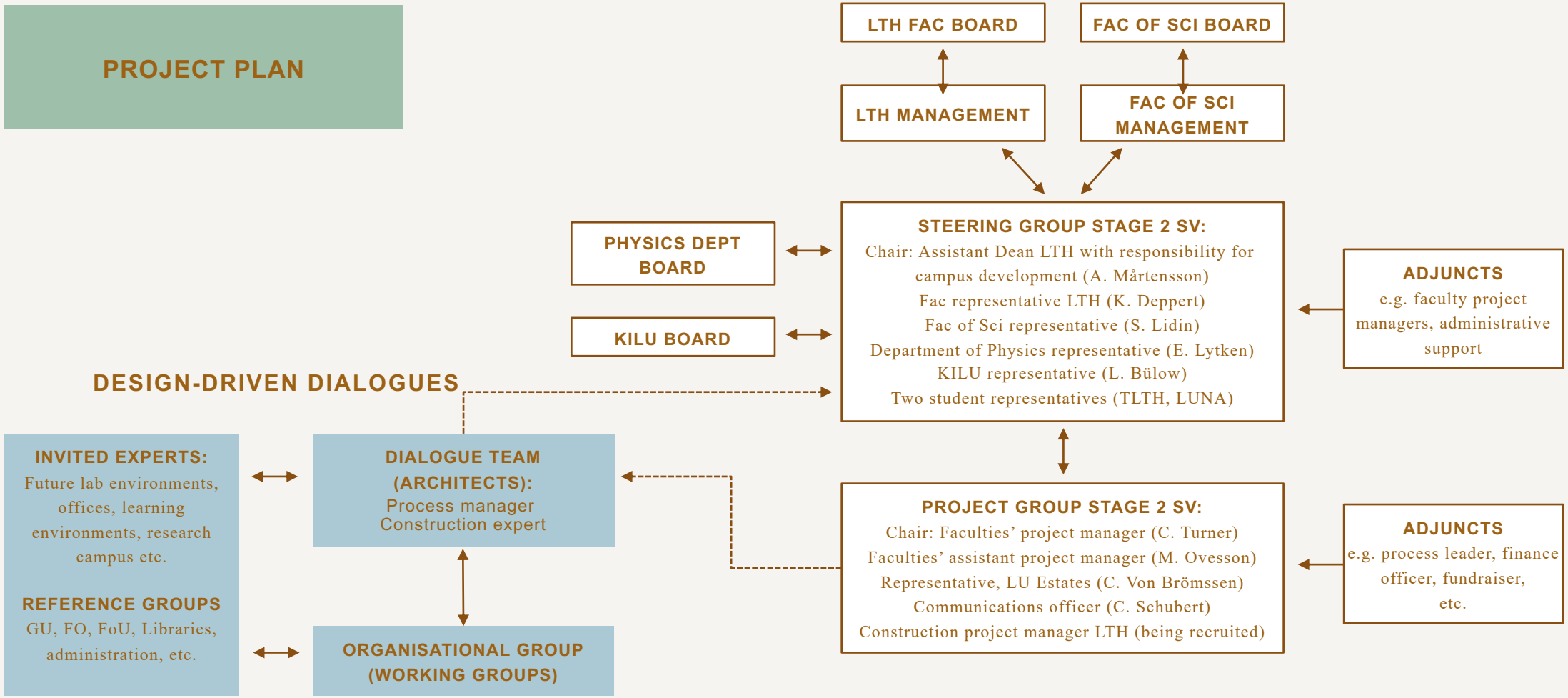
1. Financial calculations based on the points above
2. Test diagram to highlight first and second-cycle activities in terms of logistics and
3. Premises requirements
4. Infrastructure requirements, investment costs. Fundraising!
5. Some form of guarantees that the SV area will be a pleasant place where Lund University wants to operate

DESIGN DIALOGUES

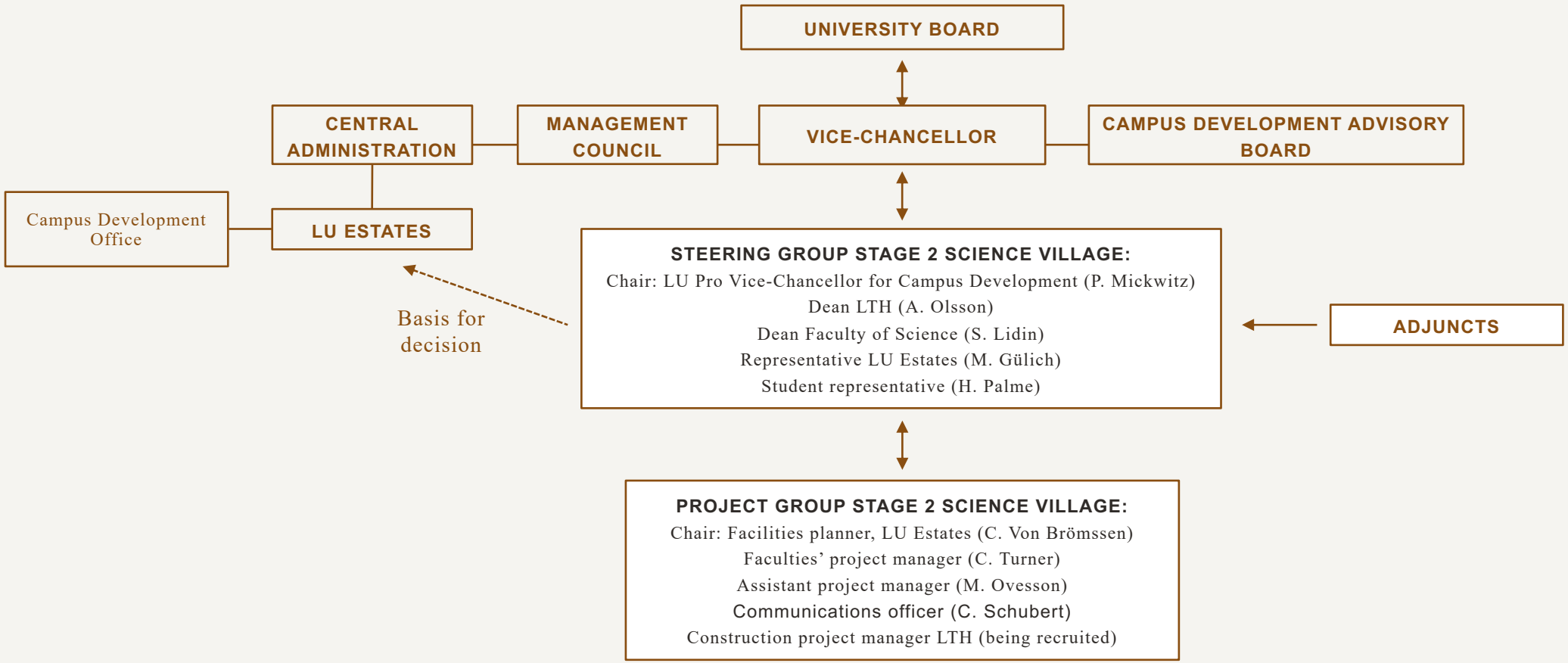


- Dialogues involve collecting expertise from the organisation and are an important tool for the creation of documentation for a premises programme.
- Participants meet and formulate spatial connections, i.e., how offices, labs and study environments relate to each other and what challenges and possibilities emerge from co-location.
- The dialogues are part of the organisational development for the faculties.
- Architect and technology consultants from Sweco lead the processes.

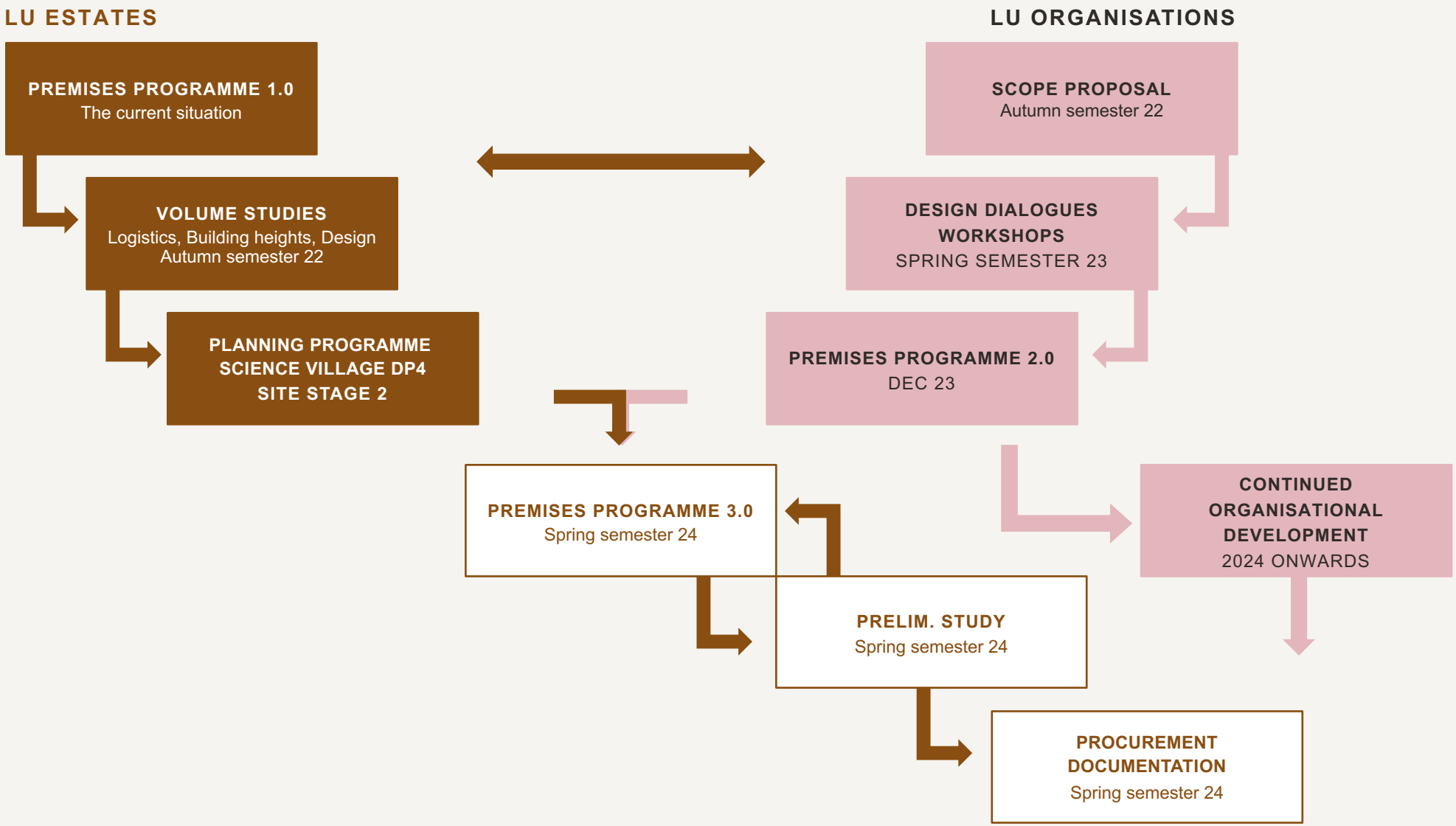
ORGANISATIONAL STRUCTURE FOR THE ESTABLISHMENT IN SV, STAGE 2



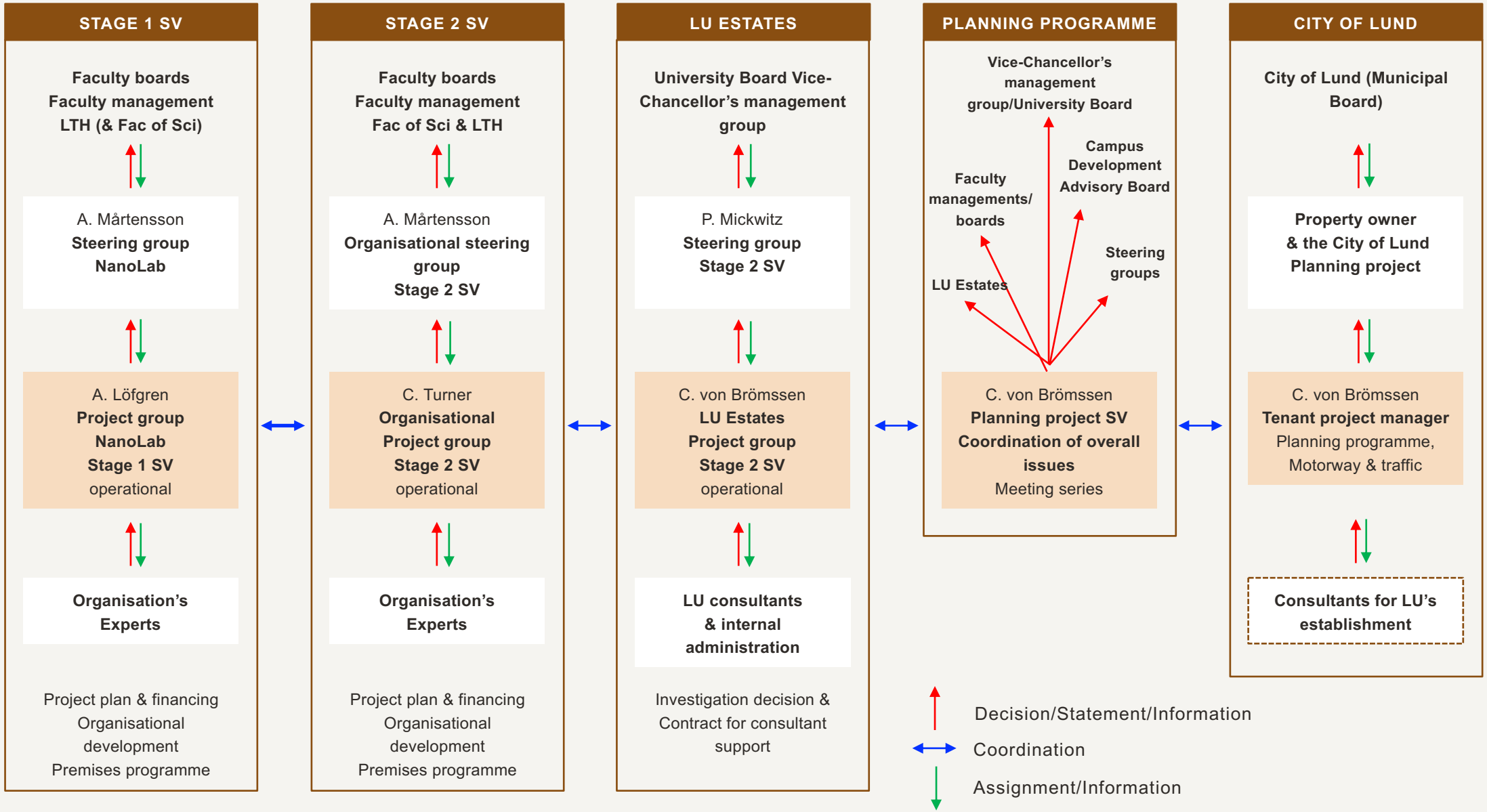
LU ESTATES ORGANISATION FOR ESTABLISHMENT (ACCORDING TO V-C DECISION)



THE PROCESSES

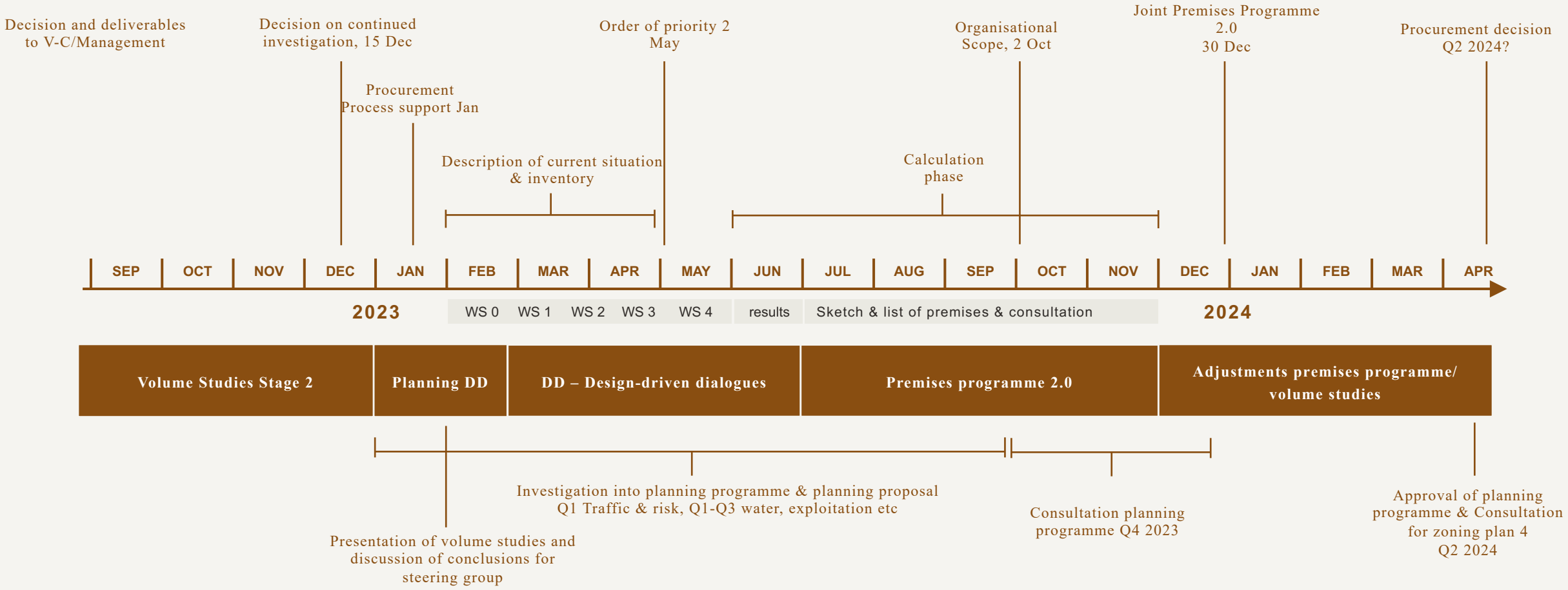


SEVERAL PARALLEL PROCESSES



PRELIMINARY TIMESCALE STAGE 2 SCIENCE VILLAGE

The timescale will be adjusted as the project continues



STUDENTS AND SCIENCE VILLAGE

- Modern study environments
- Student Union activities
- Access to functional labs & infrastructure
- Proximity to potential employers
- Creativity – educational programmes and teaching
- Transport – extended campus
- Living in Brunnshög

PHOTO: HÅKAN RÖJDER

THE CONSTRUCTION PROCESS

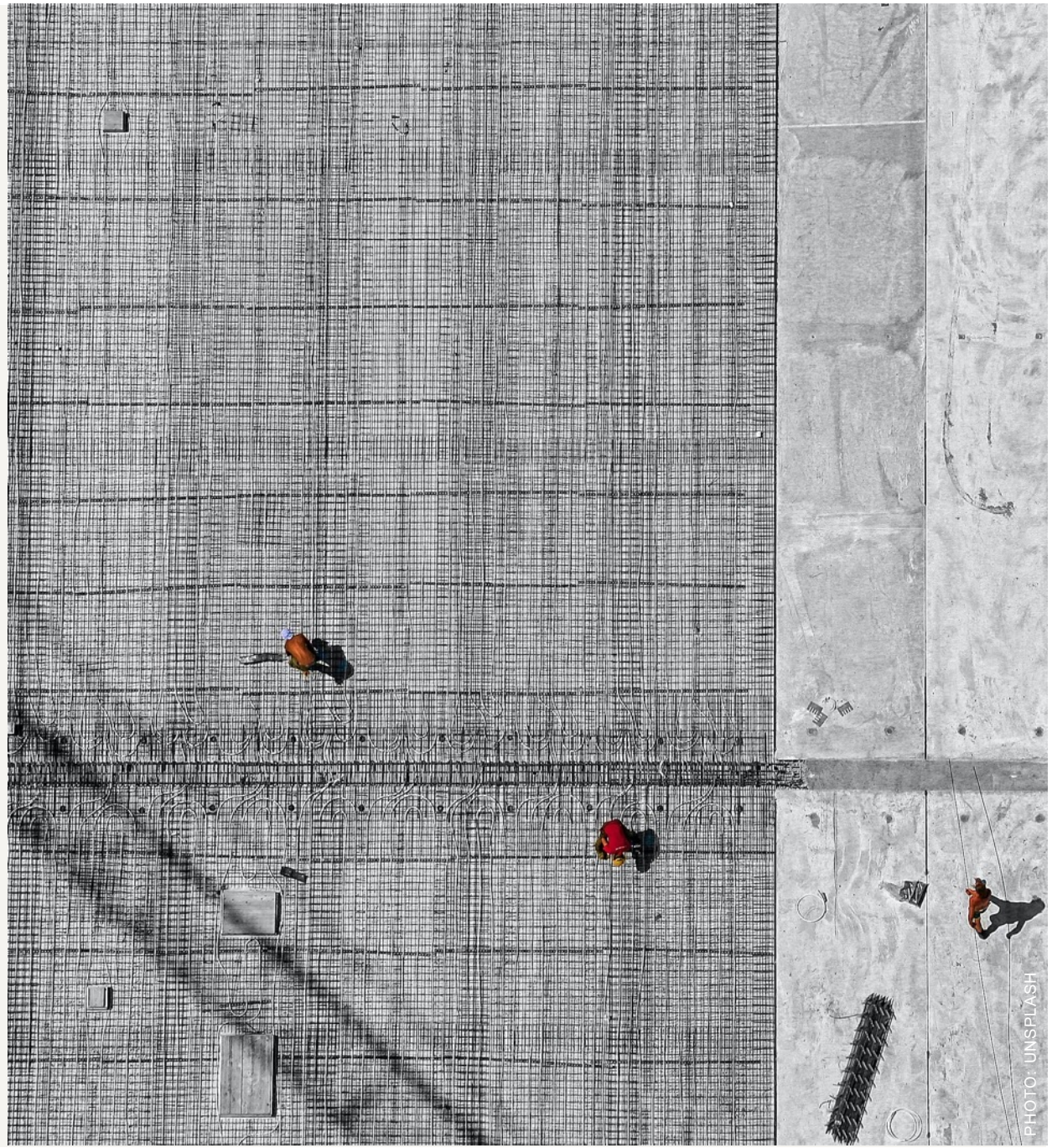
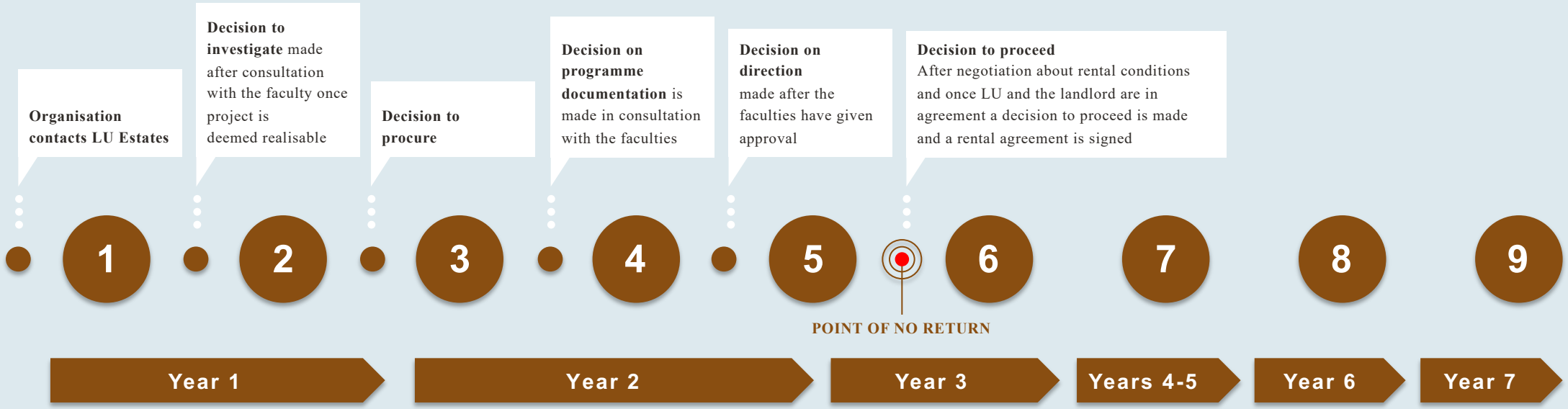


PHOTO: UNSPLASH

THE CONSTRUCTION PROCESS IN NINE STEPS



PROCESS OF DRAFTING THE PLANNING PROGRAMME SCIENCE VILLAGE

- The drafting of the planning programme is undertaken jointly by the City of Lund and the two stakeholders Science Village Scandinavia AB and Skanska.
- The plans will have to relate to Trafikverket, ESS, MAX IV and Råängen. The land east/southeast of Kunskapsparken may also be of national (cultural) importance.
- Planning agreement for zoning plan 4 is underway so that processes can run in parallel.

ISSUES FOR THE PLANS

- Traffic provision (road junction)
- Possibility for free electron laser
- Degree of exploitation
  (and reasonable flexibility in the future?)
- Microclimate
- Green structure
- Management of rain and stormwater
- Wiring, network stations...
- Strategy for public spaces (hierarchies, functions...)
- Risk issues associated with labs and research
- Tram design?

PURPOSE OF THE PLANNING PROGRAMME

Good for complicated plans with many stakeholders and strong counter interests.
The decision is made by the City, cannot be appealed.

The purpose is to investigate conditions and visions for land and water use on an overarching level.

The plans can clarify existing conditions and different proposals. The plans can clarify future structures for buildings, road network and green spaces.

The plans are used for decision-making for zoning plans in the area.

The plans constitute a vision document and are not binding as such.

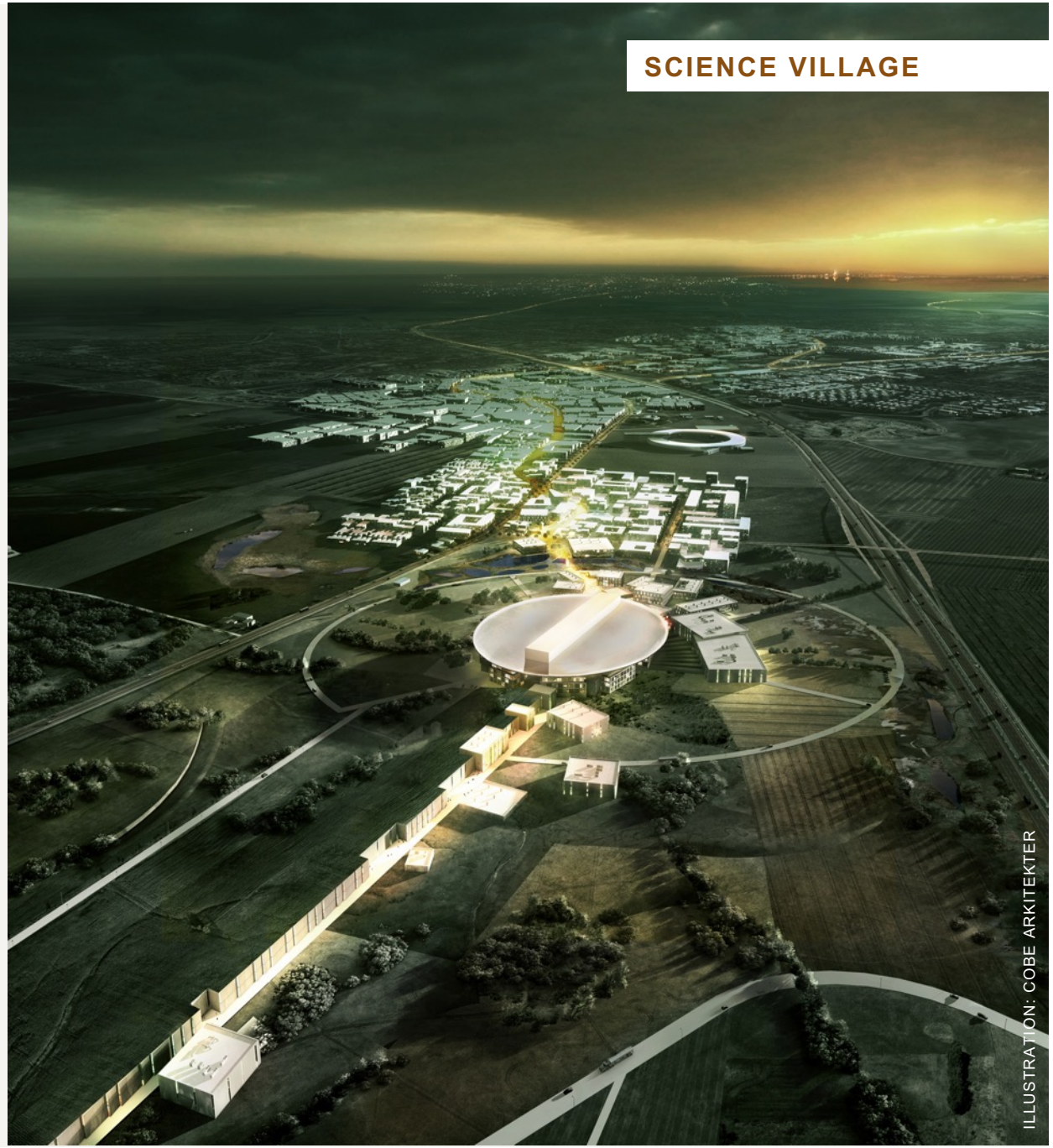
The public, public authorities and organisations can submit their opinions on the contents of the planning programme.

BUILDINGS IN SCIENCE VILLAGE

ILLUSTRATION: FOJAB

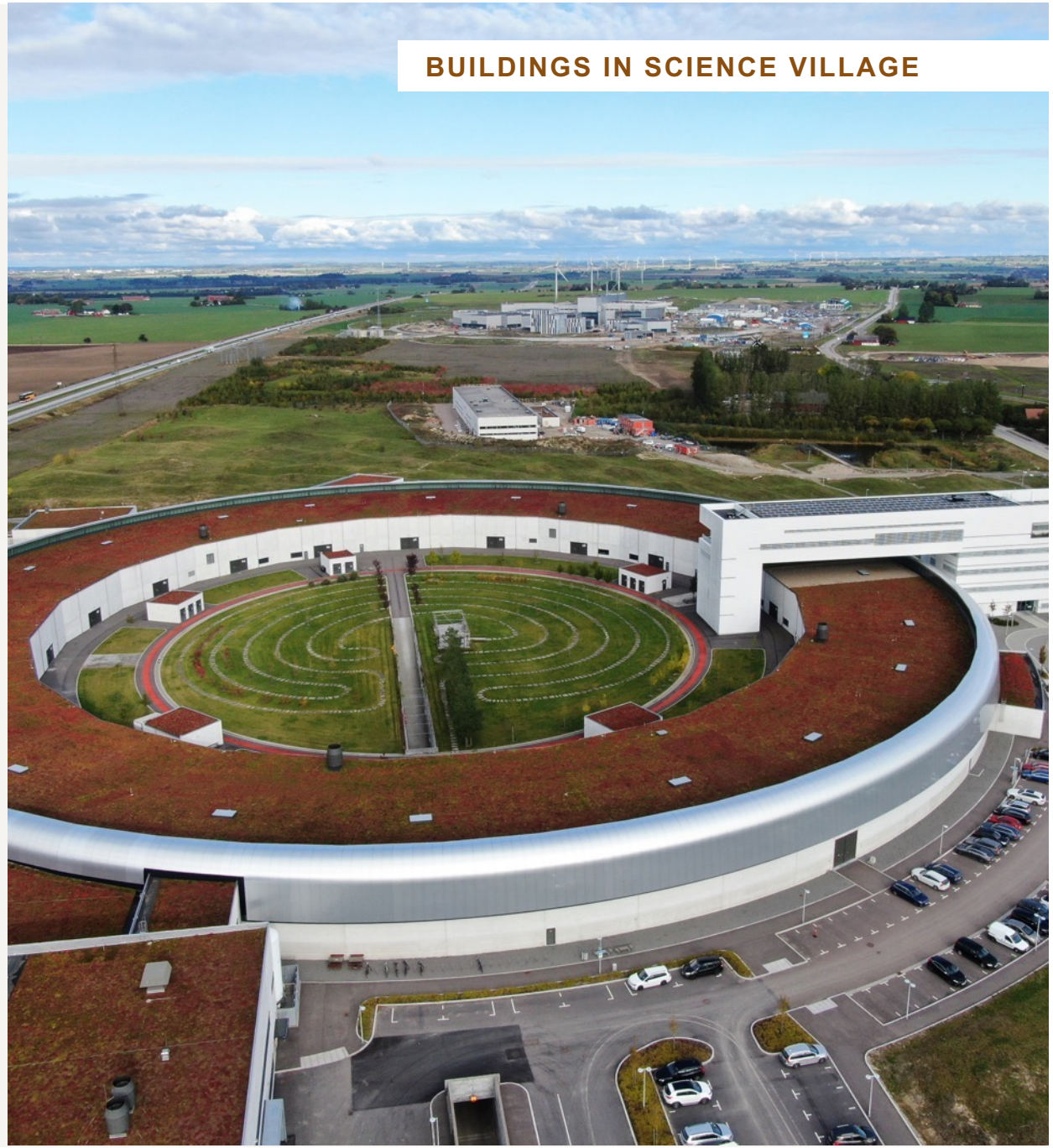
ABOUT SCIENCE VILLAGE SCANDINAVIA AB

- Science Village Scandinavia AB (SVS AB) owns the land in the main Science Village.
- The company was founded in 2009 following the decision to build MAX IV and ESS in Lund, with the aim of supporting the research facilities.
- Science Village Scandinavia AB is owned by the City of Lund, Region Skåne and Lund University through the Akademihemman Foundation.
- The principle remit given to SVS AB is to develop the area for building and sell building rights.
- Another assignment given to the company is to advocate for the building of the Science Center in the area.
- The CEO of Science Village Scandinavia AB is Christian Lindfors. The company headquarters is at Krafts Torg 10b, Lund.
- SKANSKA is a new stakeholder in the area (alongside SVS AB).



MAX IV

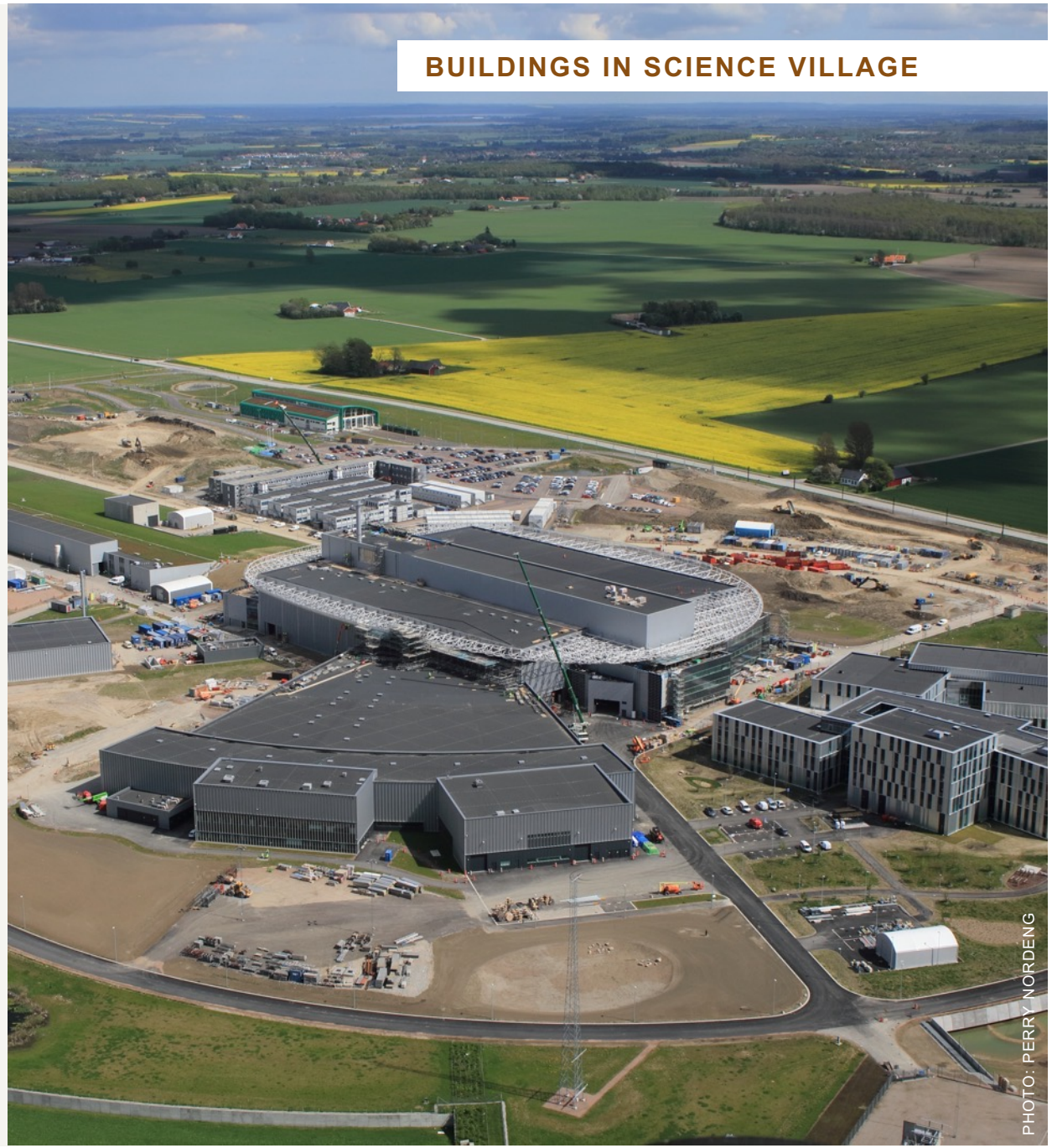
- The laboratory has the world's brightest synchrotron radiation facility and is used by researchers from all over the world.
- MAX IV receives more than 2,000 researchers annually within areas such as materials science, structural biology, chemistry and nanotechnology.
- A new technology building is currently being built (Omformaren), with four new beamlines planned.
- Max IV is an important stakeholder, not just for the Science Village area, but the whole region and Sweden as a whole.



BUILDINGS IN SCIENCE VILLAGE

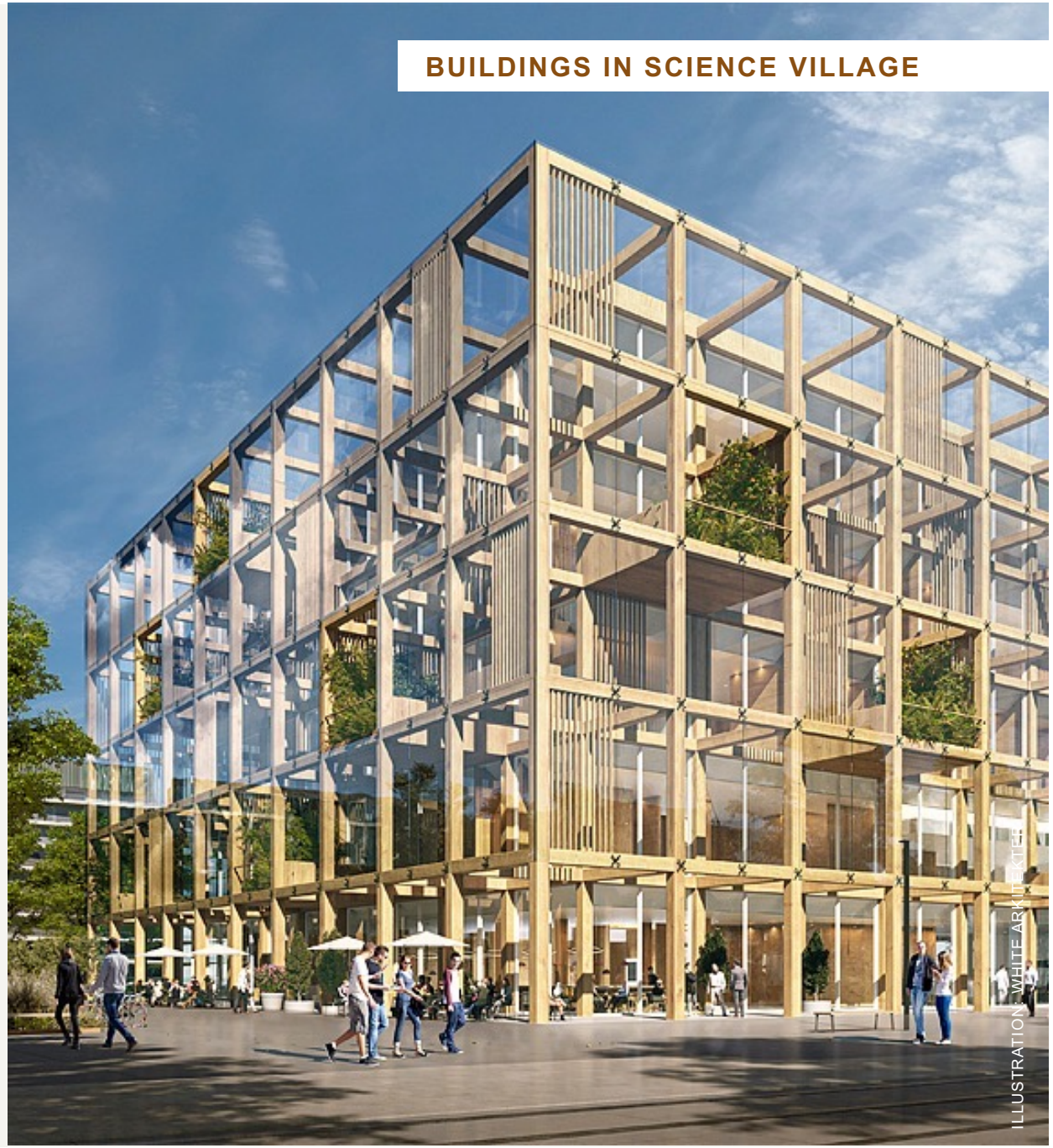
ESS

- The European Spallation Source (ESS) is a multidisciplinary research facility based on the world's most powerful source of neutrons.
- ESS is one of the largest research infrastructure projects in Europe at present.
- The facility makes it possible to study different materials and their molecular and atomic properties and enables research in many areas, such as life science, materials science, archaeology and magnetism.
- Between 2,000 and 3,000 visiting researchers will come every year to use the ESS scientific instruments, in order to conduct experiments that are mostly impossible currently.
- ESS is organised as a European Research Infrastructure Consortium (ERIC) with member countries across all of Europe. The research facility is being built with the help of several hundred researchers and engineers from all over the world.
- ESS is expected to produce its first neutrons before the end of the decade and launch its user programme 2023.
- Like MAX IV, ESS is an important stakeholder for the area, and all of Sweden.



SPACE

- With a facade built of wood and glass, the five-storey building Space will be the first one finished in Science Village.
- Wihlborgs is building Space, together with Veidekke, with a Scandinavian design.
- Expected move-in autumn 2023.
- Space will be a home for innovation, with offices and laboratories. Meeting place for researchers and companies.
- Oatly rents approx. 3,100 sqm over three floors, out of 7,400 sqm in total.
- Architects: FOJAB and Fröslee AB
- The project is aiming for three sustainability certifications.



THE LOOP

- A hub and workplace where business, academia and research meet to turn results in materials research into innovative and practical products.
- Six floors and space for companies, start-ups, conferences, infrastructure, exhibitions etc.
- The Loop will fulfil the infrastructure needs of the research facilities in the form of assembly and meeting spaces, spaces for teaching and potentially also small-scale laboratories.
- Concert space, Science Village Hall, for 1,000 people.
- In addition there will be a gym, restaurant and bar in the building.
- The Loop has been designed as a world class green building and the ambition is that it will be completely climate neutral.
- Expected to be finished in 2024. Owned by Vectura, built by SKANSKA. Designed by WHITE.

SCIENCE CENTER

- The Science Center will house exhibition spaces, a restaurant, shop and auditorium.
- Large courtyard with the possibility to take walks or listen to lectures.
- The roof will be covered in solar panels and will be heated in the winter from excess heat from MAX IV and ESS.
- Architects: COBE

BUILDINGS IN SCIENCE VILLAGE

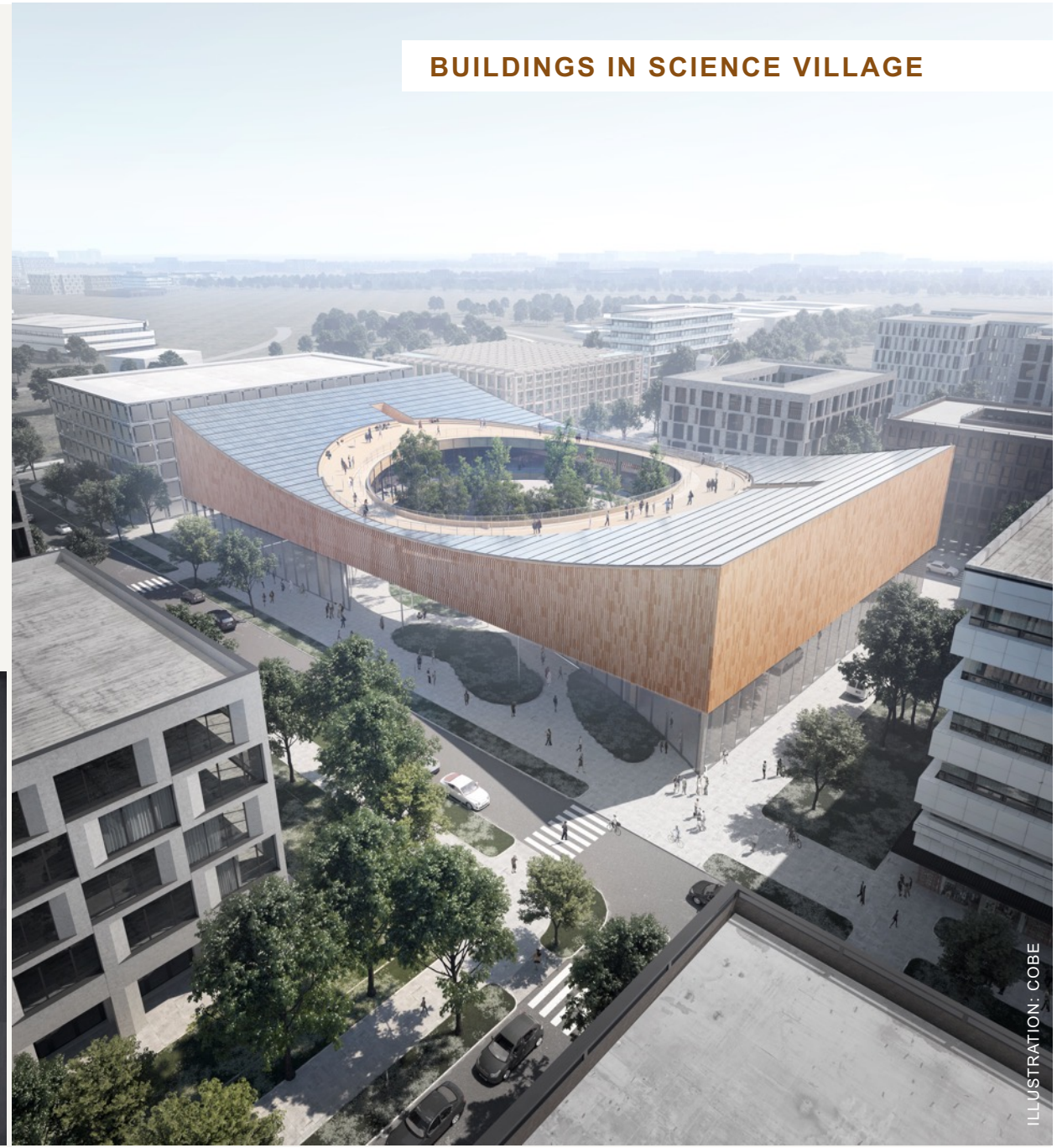


ILLUSTRATION: COBE

LUNDS
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