



Construction- and Refurbishing-Projects on the Campus Hönggerberg

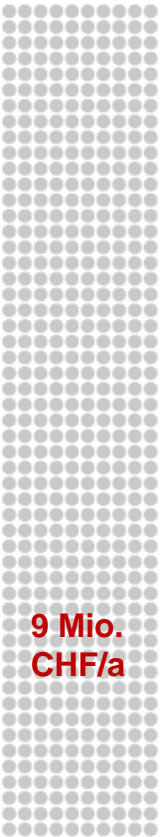
D-PHYS Presentation

Public Real Estate Management Division, Karoline Leuenberger

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Real Estate Management ETH: Overview

530 Projekte
bis 100'000 CHF
pro Auftrag



9 Mio.
CHF/a

260 Projekte
bis 3 Mio. CHF
pro Auftrag



60 Mio.
CHF/a

15 Mio.
CHF/a



20 Projekte
bis 10 Mio. CHF
pro Auftrag

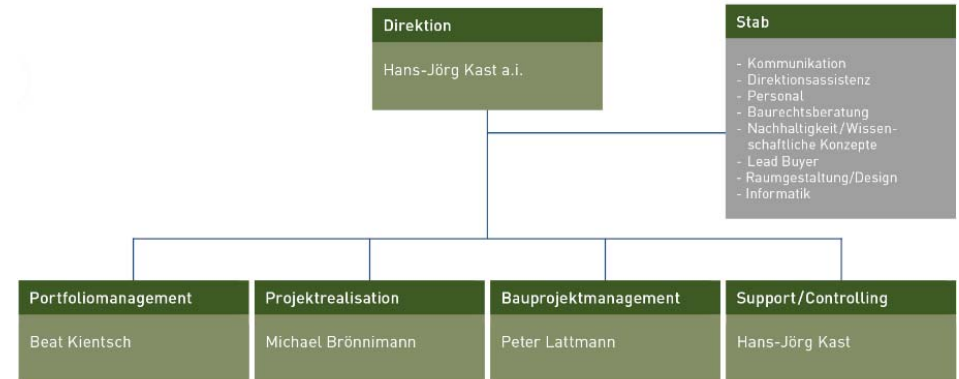


Staff of 74

217 Buildings



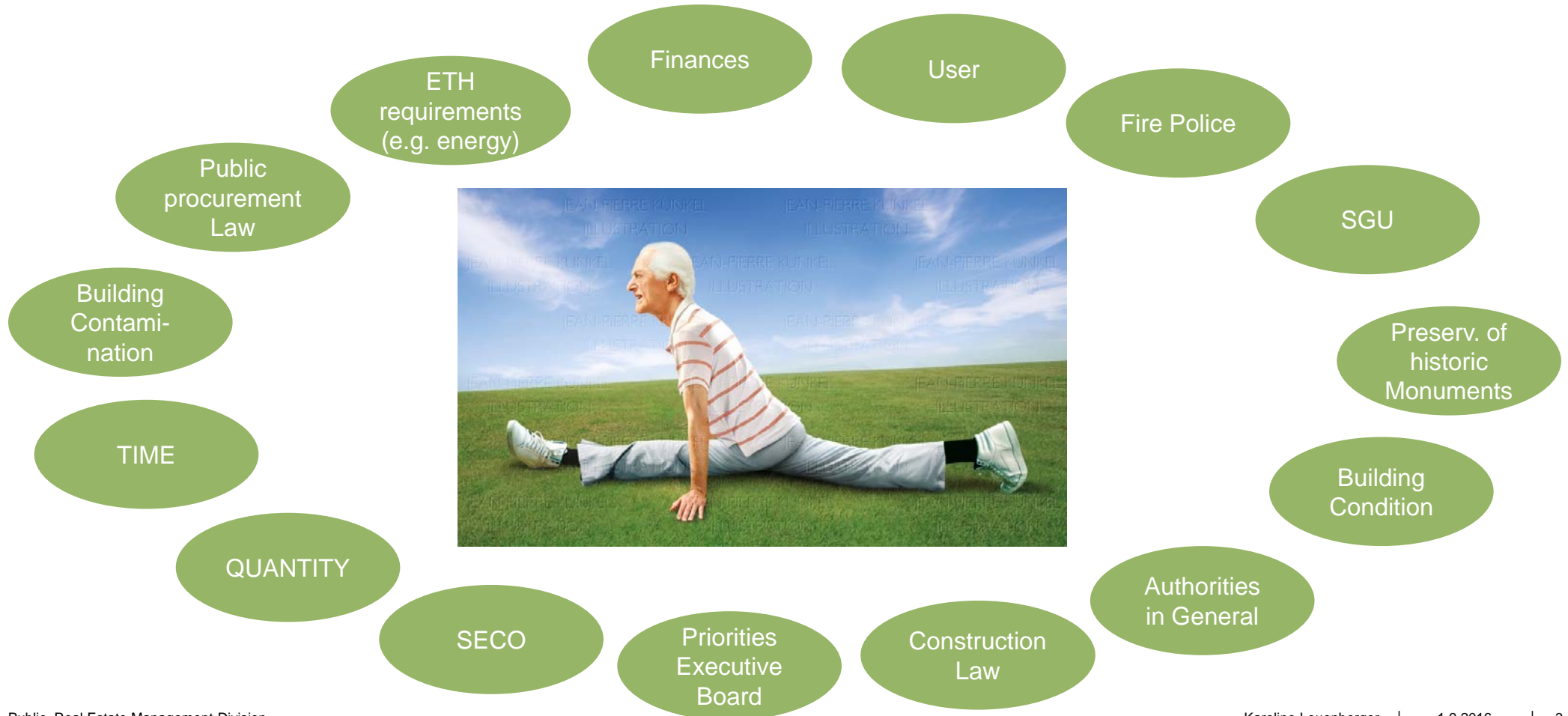
12 Projekte
über 10 Mio. CHF
pro Auftrag



Mission:

- Secure the spatial development of ETH
- Long-term maintenance of value
- Provide adequate space for teaching, research and administration in time
- New buildings, refurbishments, leasing, buying, selling, furnishing
- Financial planning (yearly budget/long-term)

Real Estate Management ETH: Challenges



Projects Overview



- **Masterplan** Höggerberg 2040
- Restaurant-Pavillion **HGP**
- Foodmarket **HPR**
- **HIB** new Building for ITA
- Student Housing **HWW**
- Student Housing **HWO**
- Office- and Seminarbuilding **HCP**
- Refurbishment and extension **HPM2**
- Refurbishment and extension **HIF**
- New D-PHYS Building **HPQ**
- Move of Plant Sciences to **HPT**
- Refurbishment **HIL, HPF, HPT**
- Replacement **HXE, Student Project House**



New Restaurant Pavillion HGP

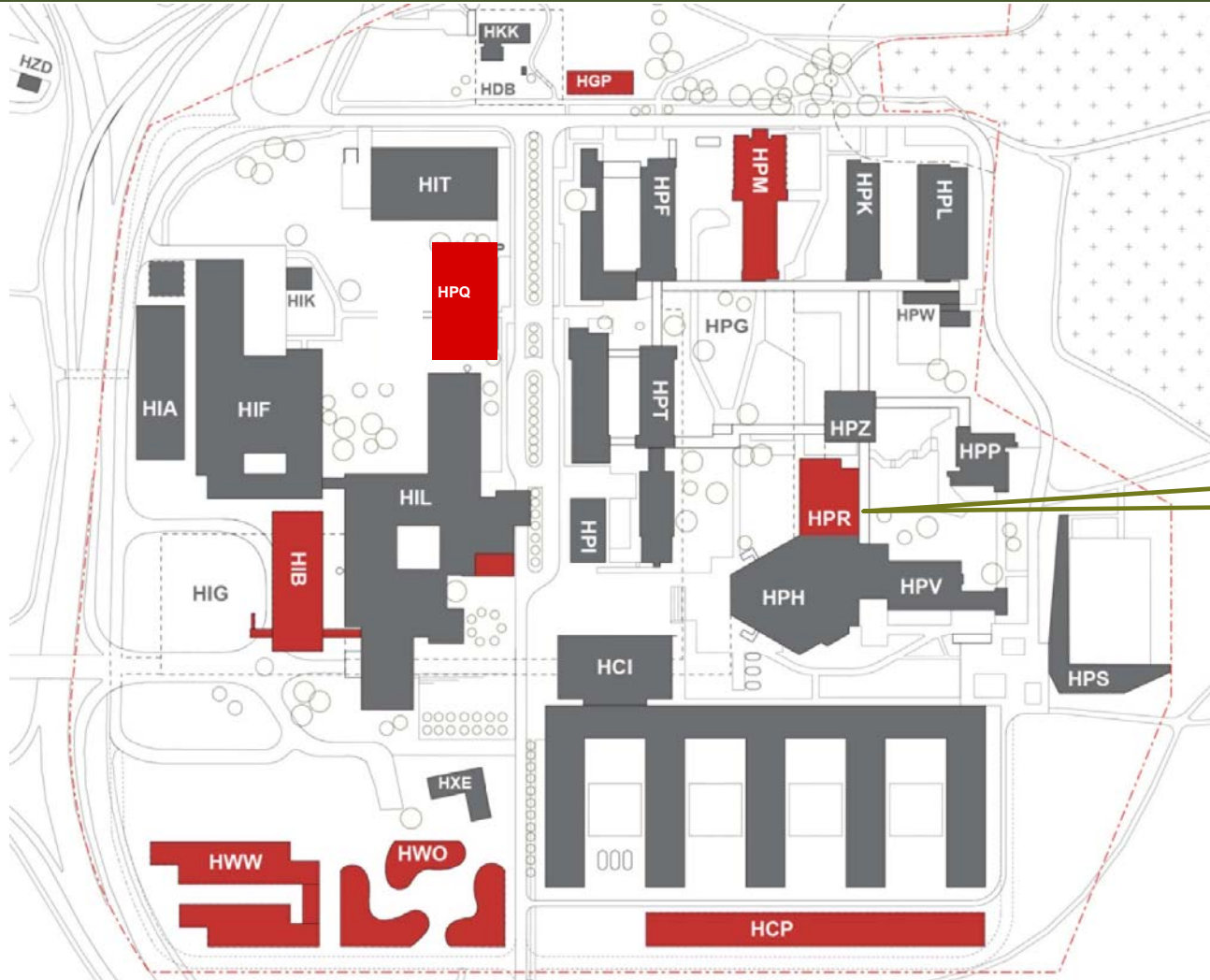
Gastronomy-Pavillon HGP – project specification



- Innovative, modern public Restaurant for academic staff, students and guests
- ETH Zurich extends and modernises its culinary choice continuously
- Elegant steel, wood and glass structure - entirely re-usable at another location
- 2 floors: restaurant on ground floor, production in the basement
- Free standing Pavillon with a wide view over Zürich-Affoltern
- Costs ca. 6.0 Mio. CHF
- Opening in Fall 2016



Foodmarket HPR – Refurbishment of the Physics-canteen



Foodmarket HPR

Foodmarket HPR - project specification



- modern, varied Foodmarket for Staff and Students
- 605 seats indoor, ca. 270 outdoor
- Inventory of protected monuments and gardens high requirements from the authorities
- High energetic requirements; complete replacement of the technical infrastructure
- Connection to the Anergie-Network
- Student-Workplaces with WiFi
- Infrastructure for large events
- costs approx. 14.6 Mio. CHF
- Opened Spring 2016



New Building HIB: Teaching-, Research- and Robotics «Arch_Tec_Lab»

HIB – project specification



- Teaching- and research-hall for the Institut für Technology in Architecture (ITA)
- Enables research at a 1:1 scale
- Offers the possibility to adopt new approaches in the field of construction
- Structure with pillars offers a high flexibility of usage
- Exploration of digital planning- and robotic-based manufacturing-processes in architecture and construction

HIB – project specifications



- Technical equipment-concept «Zero-Emission-Standard» of ETH / ITA
- Digitally produced, free formed roof-surface of 2'300 m²
- Literally no limits to usage, free divisible floor-space
- costs ca. 38 Mio. CHF (excl. Robotics-facility)
- Beginning of operation in course



HWW – new Student-Housing by the «Luzerner Pensionskasse»

HWW – project specification



- Luzerner Pensionskasse as the Investor; MIB AG as the operator
- 4 different Housing-Units with five to six floors for ETH Students
- 404 rooms; housing communities with up to 6 rooms, shared bathroom per housing-community
- Rooms for commercial and communal use (hairdresser, relax-room, language-learn-center...)
- Costs approx. 50 Mio. CHF
- Beginning of operation in course



HWO – new Student-Housing by Swiss Life AG



Student Housing
HWO

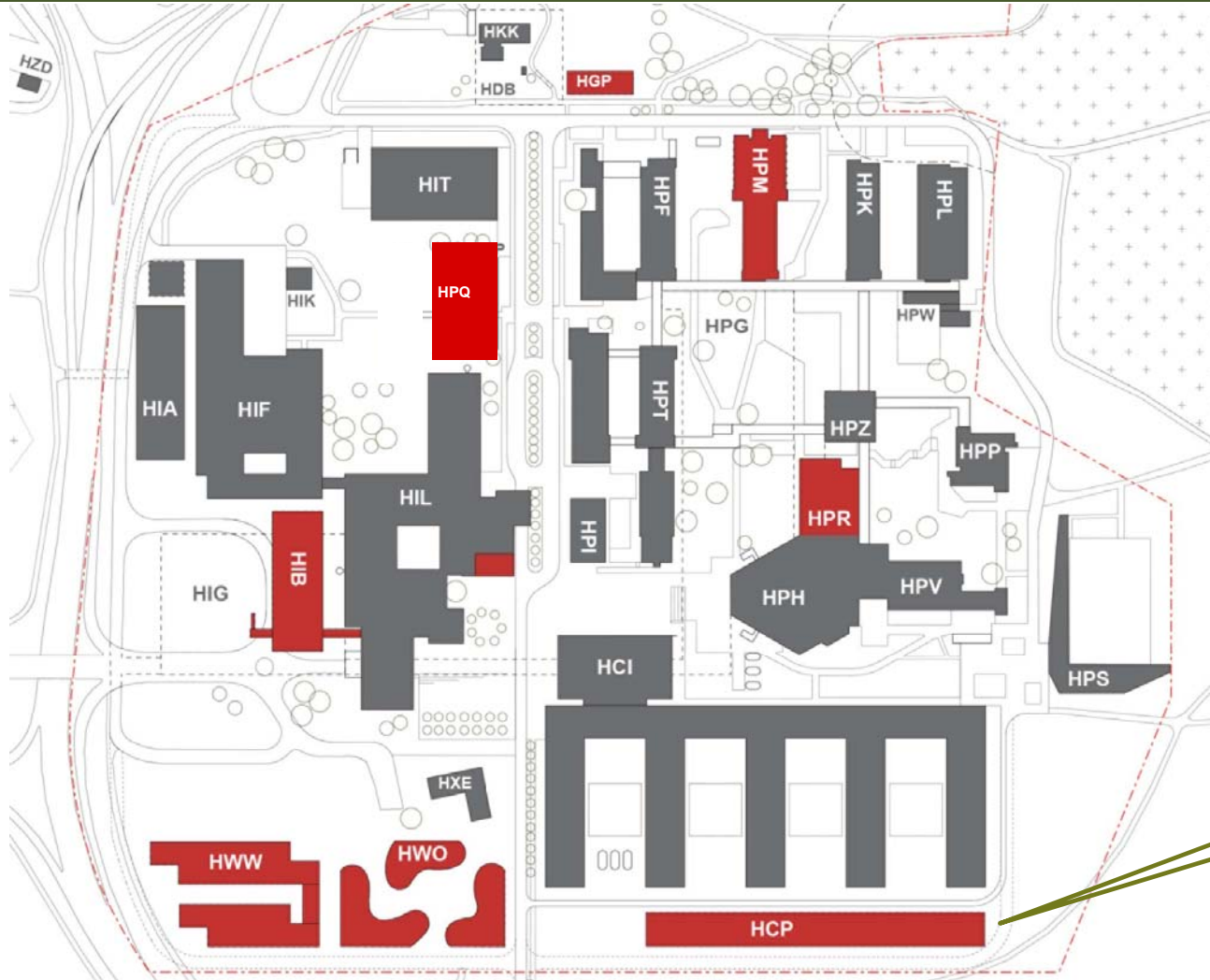
HWO – project specification



- Swiss Life AG as the Investor; Livit AG as the operator
- 3 new Housing-Units for ETH Students
- 490 rooms; partly Housing-Communities, partly independent Studios
- On the ground floor: student-workplaces, nursery
- A geothermal-probe-field with over 200 geothermal probes as a geothermal heat-store (part of the integral ETH Energy-concept)
- Costs approx. 60 Mio. CHF
- Beginning of operations in course



New Office- and Seminarbuilding HCP



Neubau HCP

HCP – project specification



- ETH Foundation as the Investor, ETH as the tenant
- Building-lease for 30 years
- Very simple building-equipment-standard
- Space for several Departements, e.g. D-MATL, D-HEST and for temporary use during building-refurbishments
- Student Workplaces + Seminarrooms
- Terraces and communal-spaces
- Costs approx. 17.1 Mio. Franken
- Beginning of operations in Summer 2015



Refurbishment and enlargement Lab-building HPM (HPM2)

HPM2 – Das Projekt



- Overall-refurbishment of the northern part of the building
- Raised by two additional floors
- Wetlabs and offices for several D-BIOL Institutes; Mass-Spectrometer-Platform, Microscopy-rooms for Scope M, large, multifunctional Seminarroom on top floor
- Connection to the Anergie-Network
- Decontamination und Earthquake-reinforcement
- Costs approx. 55 Mio. Franken
- Beginning of operations 2018



Refurbishment and Enlargement HIF

HIF – project specifications

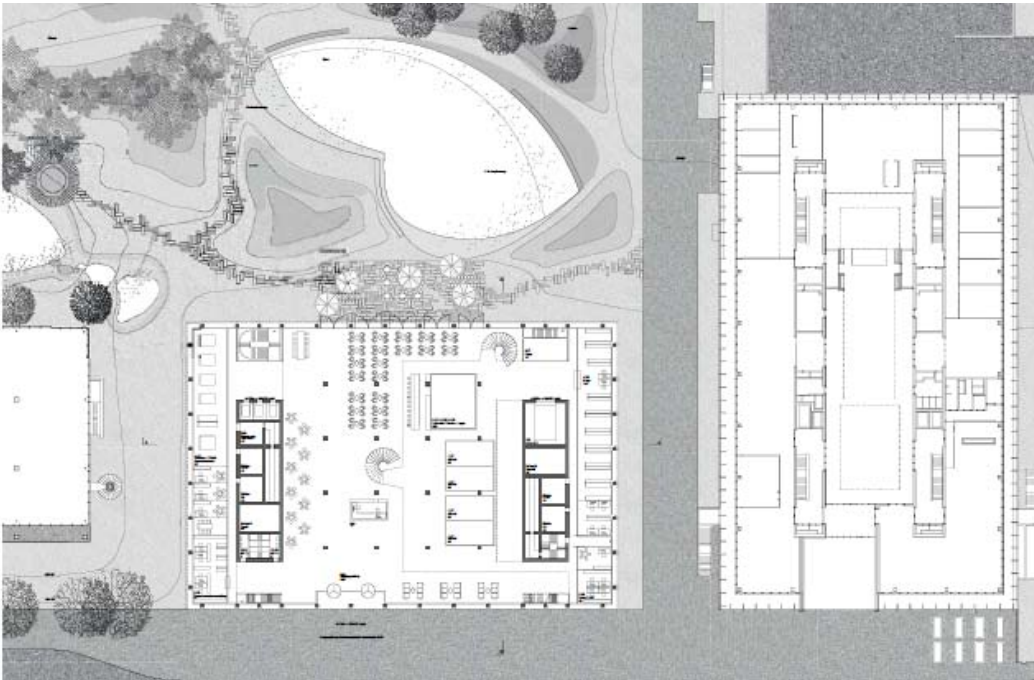


- Lab-, Office- and Workshop-building with construction-hall; main user D-BAUG
- Overall refurbishment and building extension
- Complete replacement of Facade, technical Equipment; Fire-Protection and Earthquake-reinforcement
- The new annex covers the need for temporary space during refurbishment in several stages
- New main entrance from Wolfgang-Pauli-Strasse
- Connection to Anergie-Network
- Pilot project for BIM (Building Information Modeling)
- Estimated costs approx. 150 Mio. CHF
- Beginning of operations planned for 2022



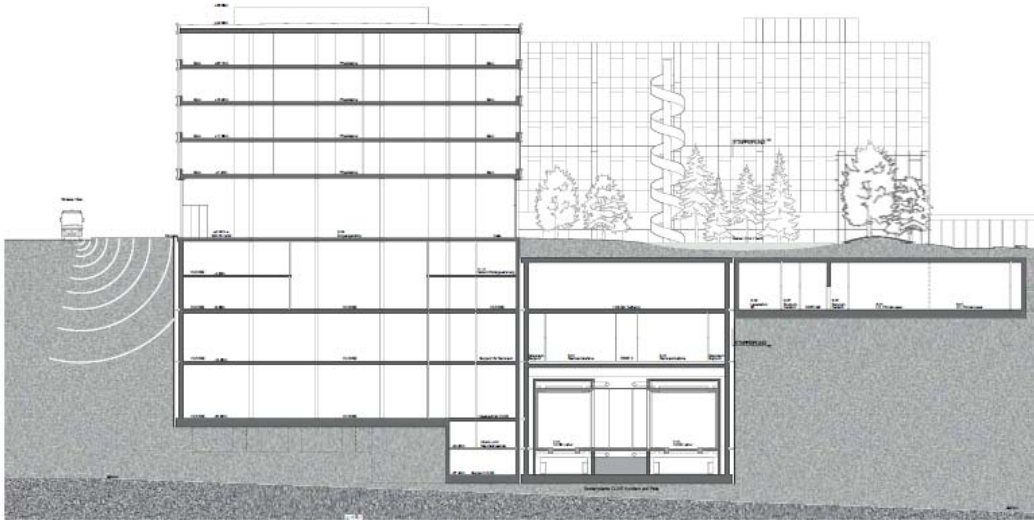
HPQ - new building for D-PHYS

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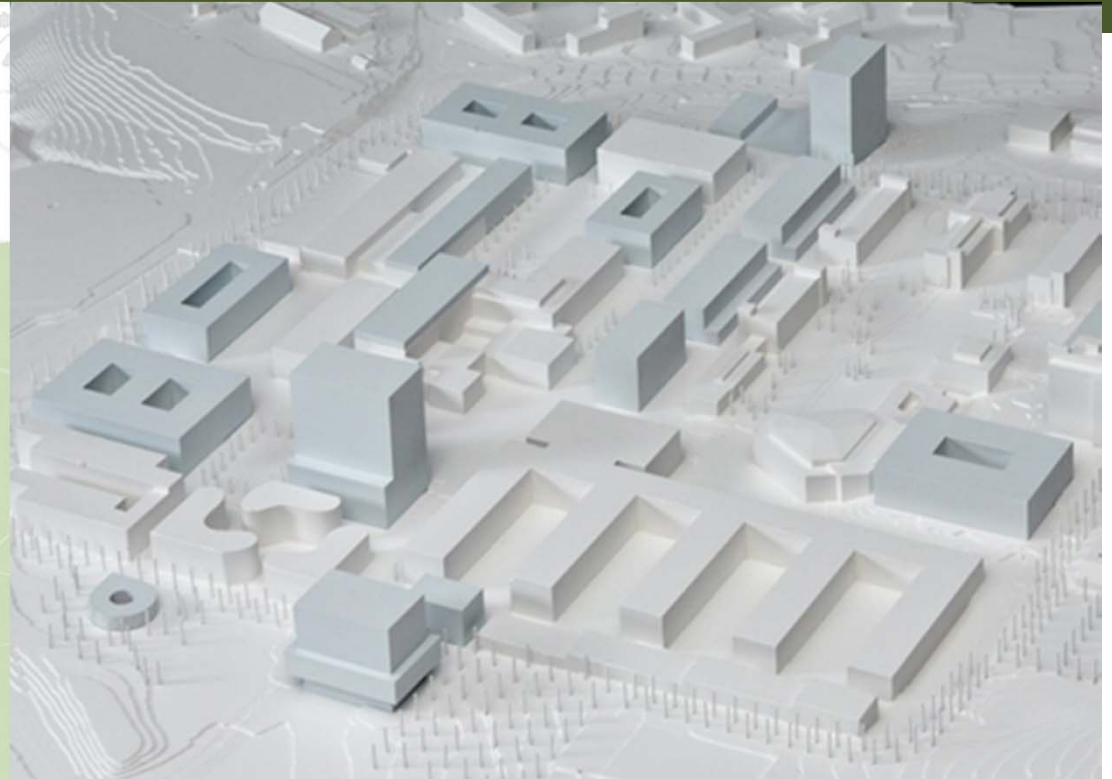
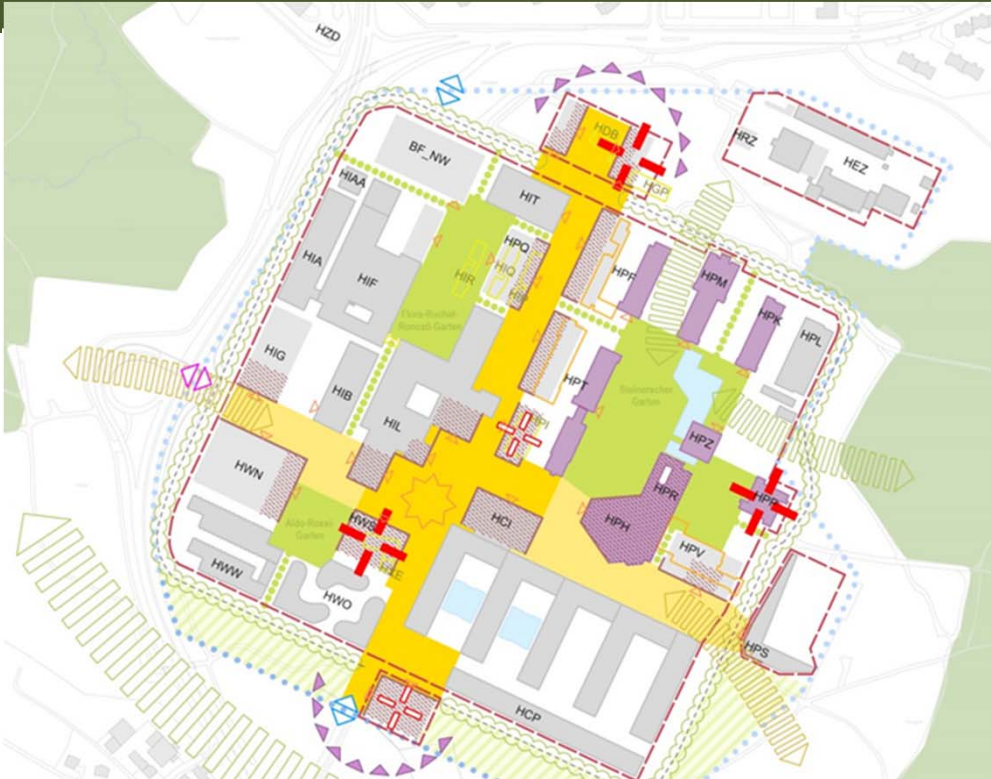


- Architectural competition completed
- Until end of 2016: precision of requirements + costs
- Until 2019: planning phase, permit
- 2020-24 execution
- 2025 beginning of operation

HPQ – new Building for D-PHYS



- Highly challenging Low Noise Building
- At the limit of today's technical possibilities
- Winner project
 - Good integration into the campus in terms of urbanism
 - Highly functional (and thus economic) layout
 - Structural separation of the technology platforms



Masterplan Hönggerberg 2040

Masterplan Hönggerberg 2040



- The allowed maximal surface from the actual Masterplan Hönggerberg 2005 and building law is insufficient for the realisation of needed floor-space
- 20'000 Staff/Students estimated by 2040 on Hönggerberg
- Only limited growth possible in the Center
- Reserves for long-term development of ETH on Hönggerberg are at hand but need to be «legalized»
- Planning in course for the Masterplan Hönggerberg 2040 in collaboration with the City and Canton of Zurich
- Concentration with a high-quality urban development is the goal



Thank you for your attention!