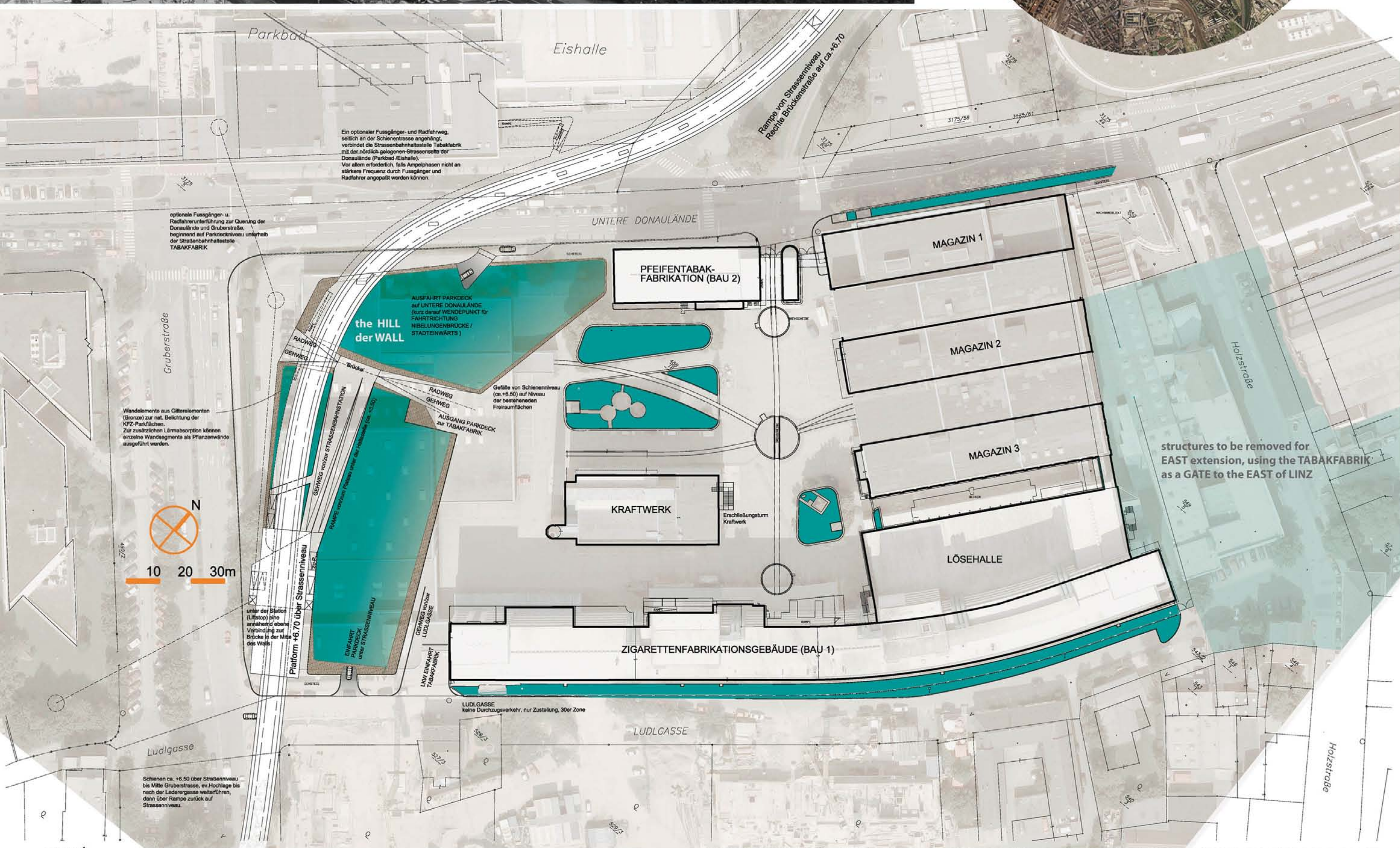


# TABAKFABRIK LINZ



**concept**

Latin quotes on cigarette boxes rarely bear any obvious meaning related to the product, yet the one of the ‚Memphis‘ brand, an ‚Austria Tabak‘ classic since the 1950ies, boils down the architectural concept developed for the Tabakfabrik to three words - **e pluribus unum** - ‚out of many, one‘ or **transferred to the site : remove-convert-unite**.

The following measures -amongst others - are essential to achieve this goal, separated in three construction phases : dismantling - conversion - addition

**Phase 1 - dismantling**

- by removing the 1980ies structures along Gruberstraße the site turns from an enclosure to a U-shaped square, or horseshoe magnet, open towards the city. (Concrete beams in mint condition of the 1980ies buildings should be reused elsewhere.)
- Removal of the late 1960ies warehouses, structurally separated from the three listed warehouses. This has a major impact on the town-planning strategy of Linz towards the East, where industrial and trade companies will have to give way to the urban extension in the long term.

**Phase 2 - conversion**

All suggested conversions take into account the preservation order put on the buildings in 1982 and the prospect of being inscribed as a UNESCO World Heritage Site. It was deemed essential not to interfere with the requirements set by the department of conservation.

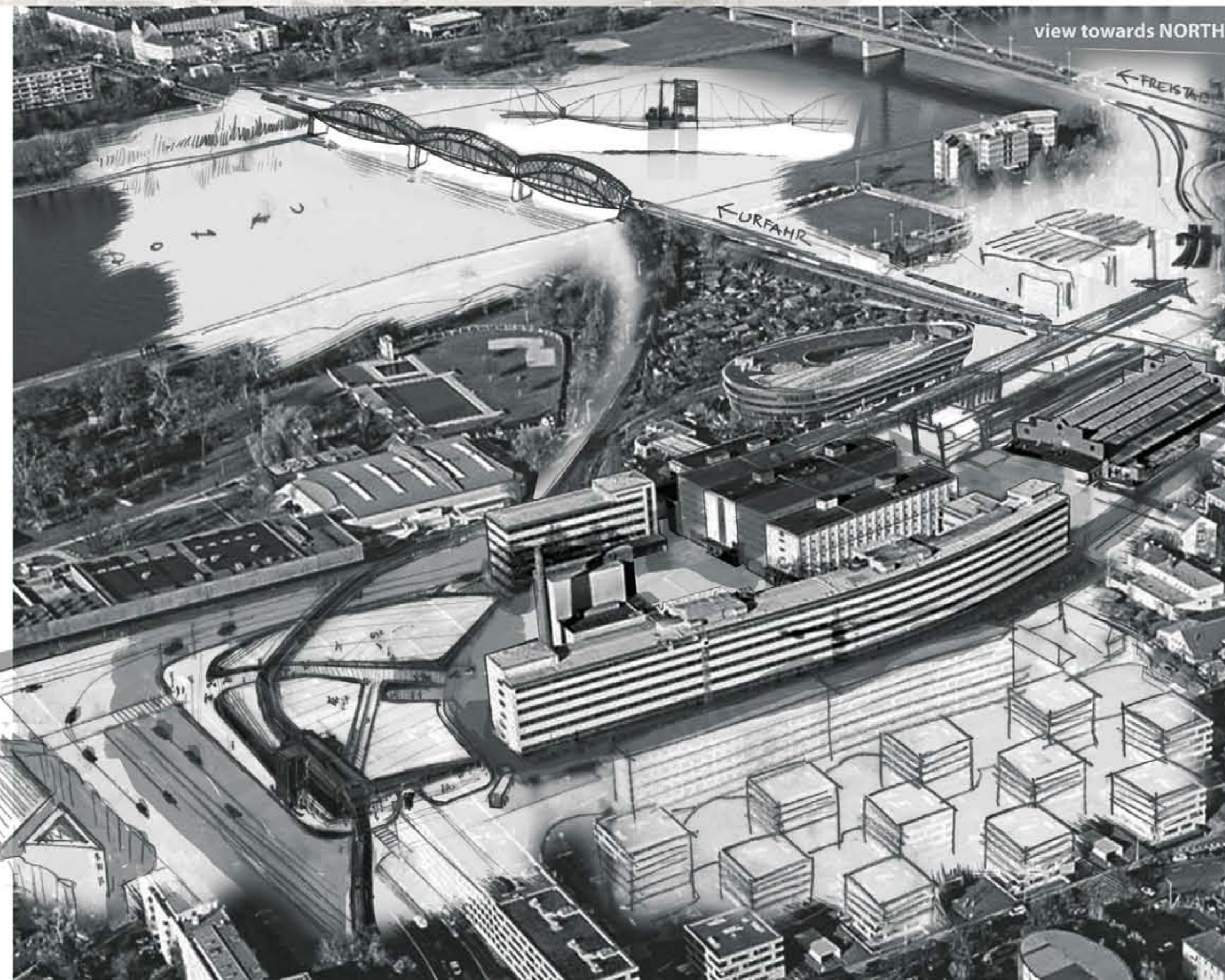
- a glass facade, on north side of warehouse 3 facing warehouse 2, with its design related to the grid of the power house glazing.
- replacement of interior glazing elements to suit modern standards at the power station (PS), the Cigarette-Tobacco-Factory (CTF), and Pipe-Tobacco-Factory (PTF).

**Phase 3 - addition**

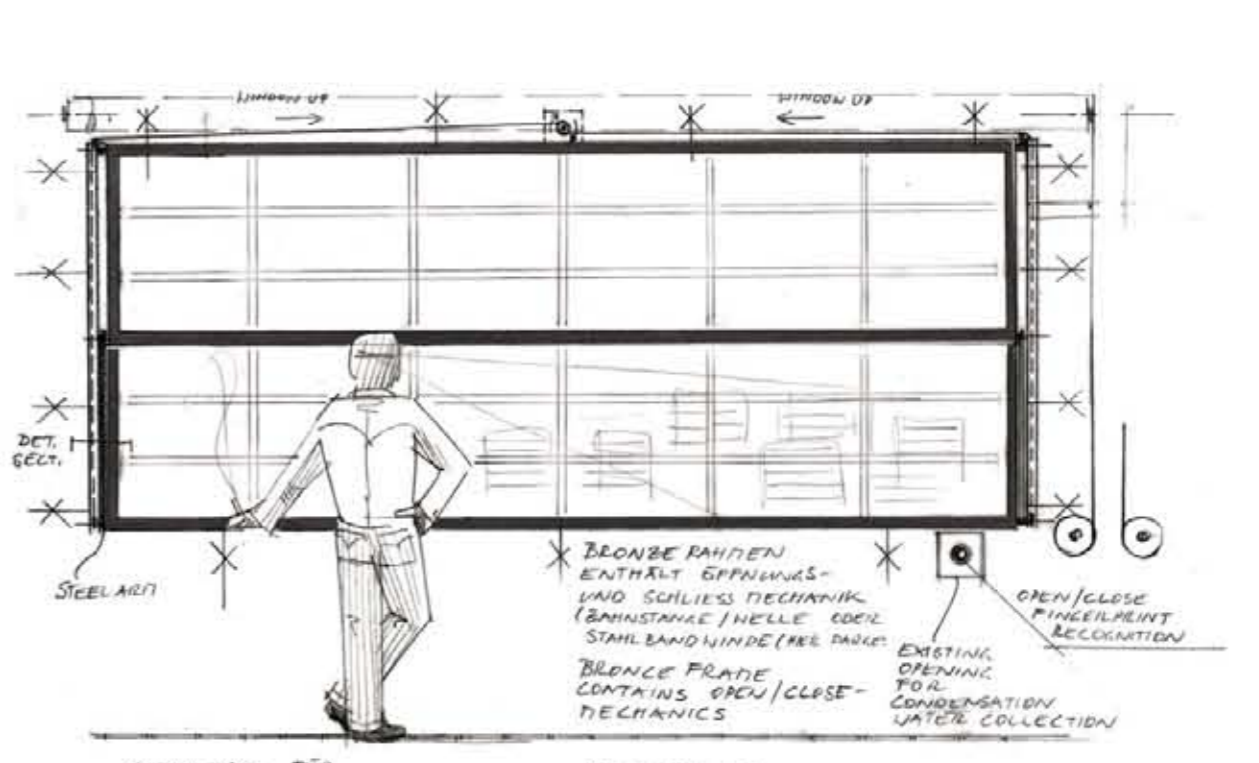
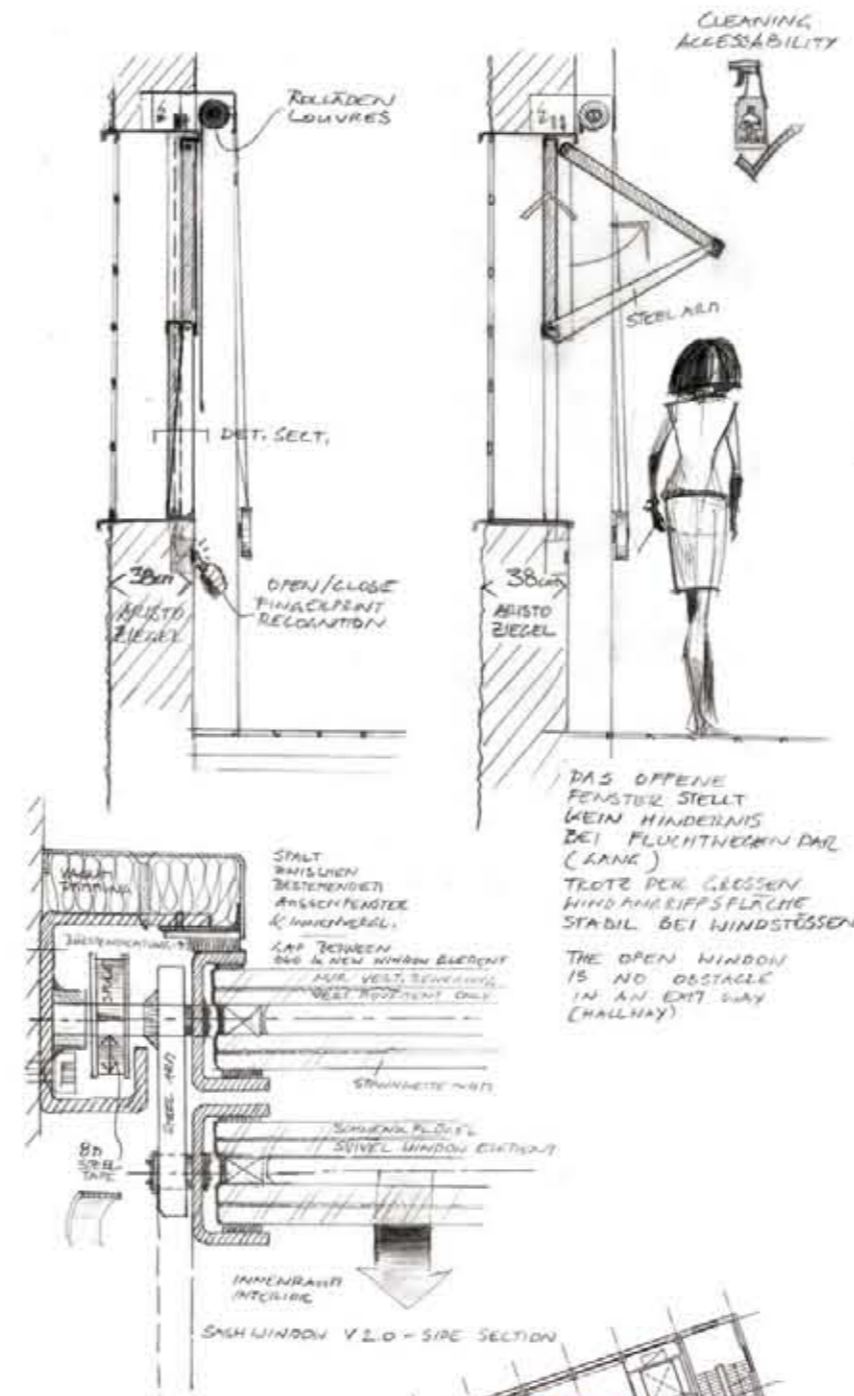
Implementation of new structures only where this is required to convert the listed buildings to suit their future prime purpose. These implementations comprise of

- a vertical access unit to the power stations boiler house and roof terrace, housing a restaurant and bar.
  - an elevated tramway station at the corner of Gruberstraße and Ludlgasse.
  - An add-on footbridge besides the elevated tramway tracks will be the pedestrian and cyclist link to and from the Parkbad (public bath) on the opposite side of the heavy frequented Donaulände (street).
  - an artificial flat ‚hill‘ keeping traffic noise out and covering a park-deck, which absorbs parking lots of the Tabakfabrik site and adjacent Ludlgasse (which should become more of a bike trail, with through traffic permitted).
- Future inhabitants, visitors and commuters of the Tabakfabrik area will use the park-deck's roof as main access hub to the site. In addition to described functional aspects of the ‚hill‘, it encloses the space within the Tabakfabrik without separating it from its surroundings, as currently the case.
- No matter which means of transport are used to get there - tramway, car, bike or on foot - one descends and approaches the square with a changing perspective.

The conversions and new structures provide improved natural daylight conditions, access and thermal standards for permanent use of the Tabakfabrik. The 54.000 sqm floor space in the listed buildings should once again be occupied by the people of Linz on a daily basis and yet maintain the constellation intended by the architects in the 1930ies and described by Behrens ( in profil magazine, 5/1933 ) : ‚The monumental nature of this structure lies in the fact that each small-scale, petty division was avoided, and that it was only important to create good proportions of the individual elements, which can be the only architecturally valuable part of a building. Industrial buildings that create such a unified effect are again and again the proof that engineering functionality by far does not need to determine the aesthetic beauty of a building. Here there is a need for the shaping hand of an architect, who creates the higher unity out of design and form.‘



# TABAKFABRIK LINZ



**proposed future prime use of the Cigarette-Tobacco-Factory (CTF)**

Two types of apartments – with or without conservatory (winter garden) towards the South-East (Ludlgasse). Levels 1,2,3, and 5 fulfil the requirements regarding height, whilst level 2 should remain in its original state.

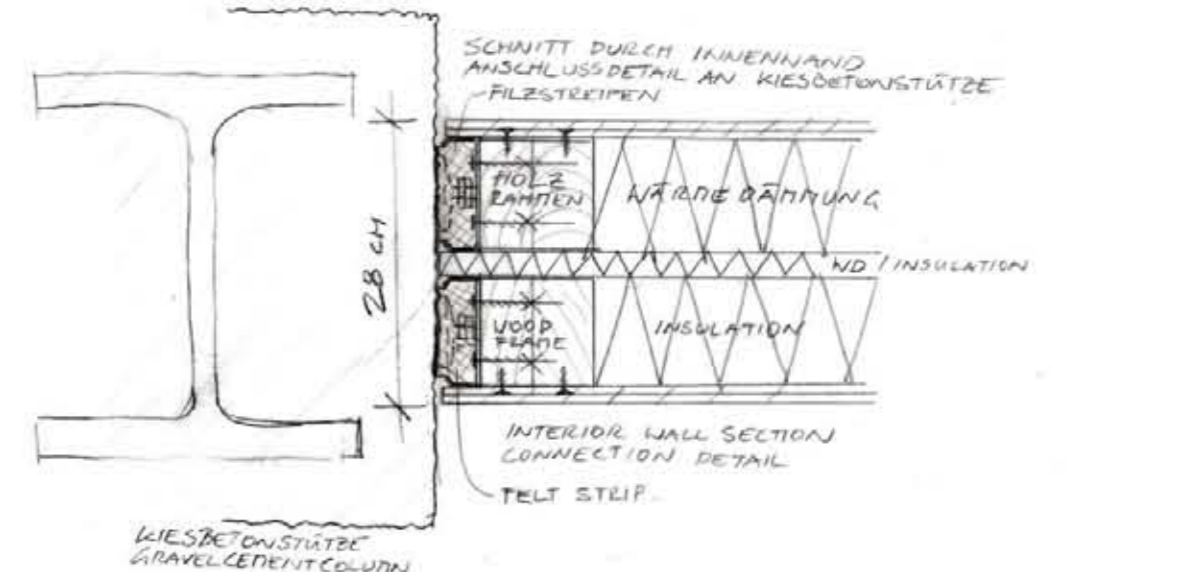
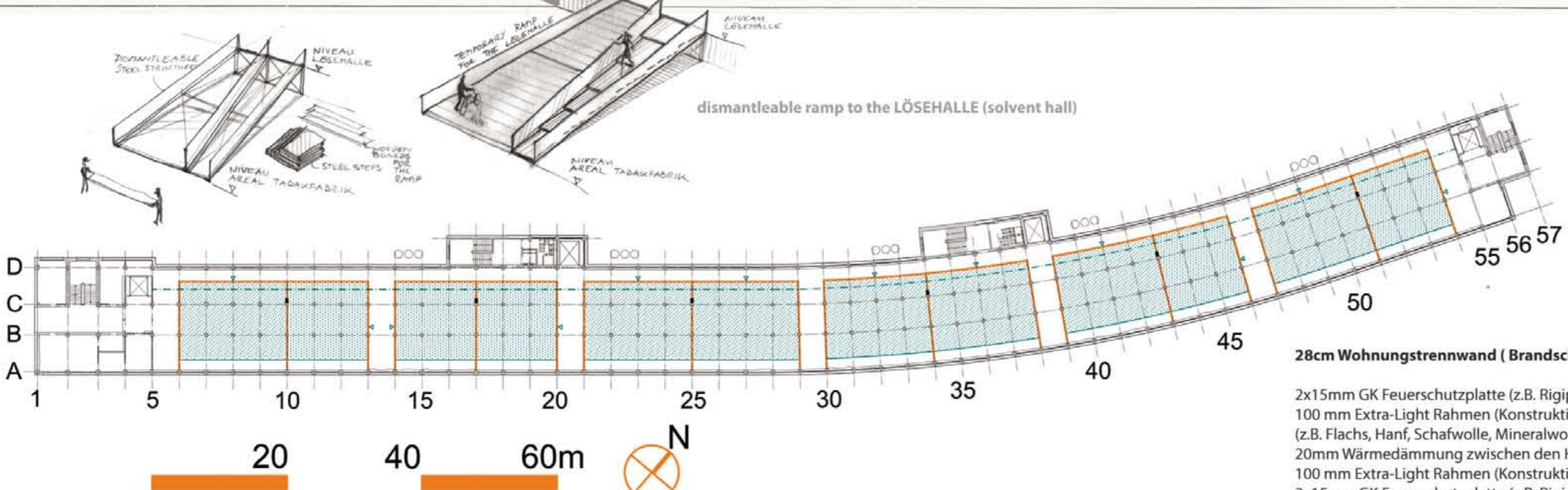
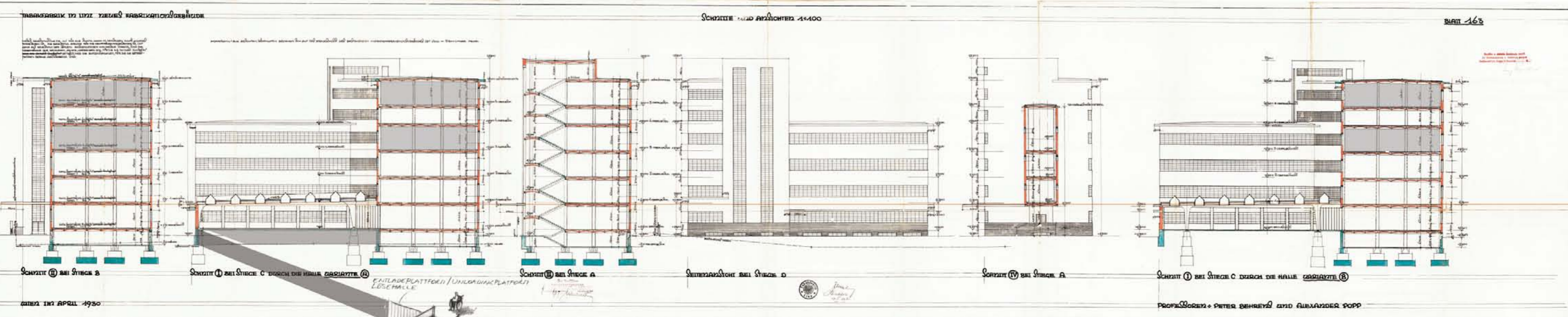
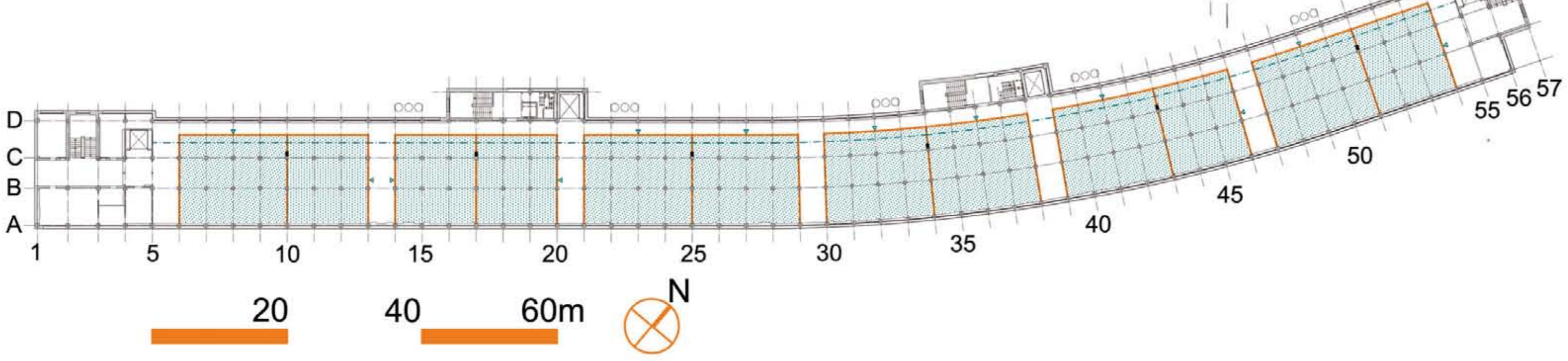
A hallway on the north side of the building connects the 4 towers housing staircases and elevators. Freight elevators need to be replaced with passenger elevators.

Exterior window frames will only be restored, while the interior windows (approx. size 4x1,7m) towards the South (within the apartments) are replaced, using a sophisticated, purpose made mechanism, developed to sort out the problem of accessibility for window cleaning. This was done in the past by two slim workers squeezing into the gap between the windows.

The heat transition coefficient of the original window is around 3 W/m²K. This should be lowered to at least 1,2 W/m²K with the new interior glazing elements, which equals the HTC of the (non-insulated) 38cm exterior walls.

**Pipe-Tobacco-Factory (PTF)**

The five floor levels, each around 750 sqm are ideal to be let as open plan office space after floors and interior windows have been renewed according to the procedure in the CTF building. As the PTF is exposed to traffic noise from the Donaulände, the acoustic insulation will be an issue on the upper floors while the ground floor could house less noise sensitive tenants, a low profile gym for example.



**28cm Wohnungstrennwand ( Brandschutz EI 90, Schallschutz Rw >61dB ) :**

- 2x15mm GK Feuerschutzplatte (z.B. Rigips RF)
- 100 mm Extra-Light Rahmen (Konstruktionsholz) gefüllt mit Wärmedämmung (z.B. Flachs, Hanf, Schafwolle, Mineralwolle).
- 20mm Wärmedämmung zwischen den Holzrahmen
- 100 mm Extra-Light Rahmen (Konstruktionsholz) gefüllt mit Wärmedämmung
- 2x15mm GK Feuerschutzplatte (z.B. Rigips RF)

**33 cm Wohnungsaußenwand zum unbeheizten Gang ( Brandschutz EI 90, Schallschutz Rw >61dB )**

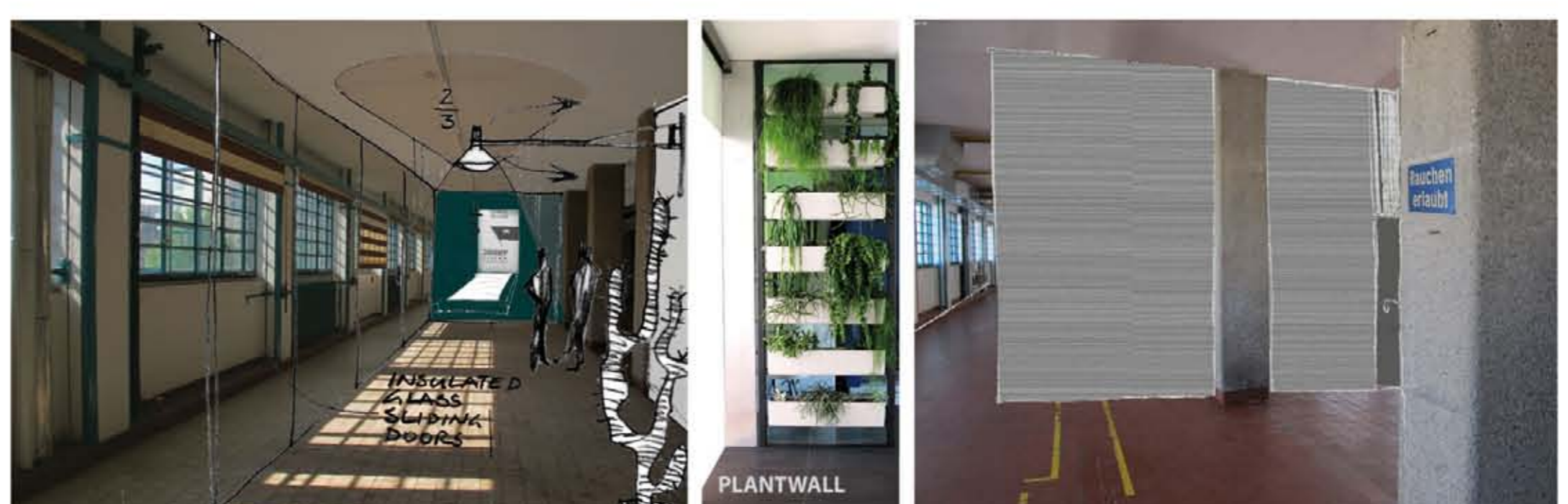
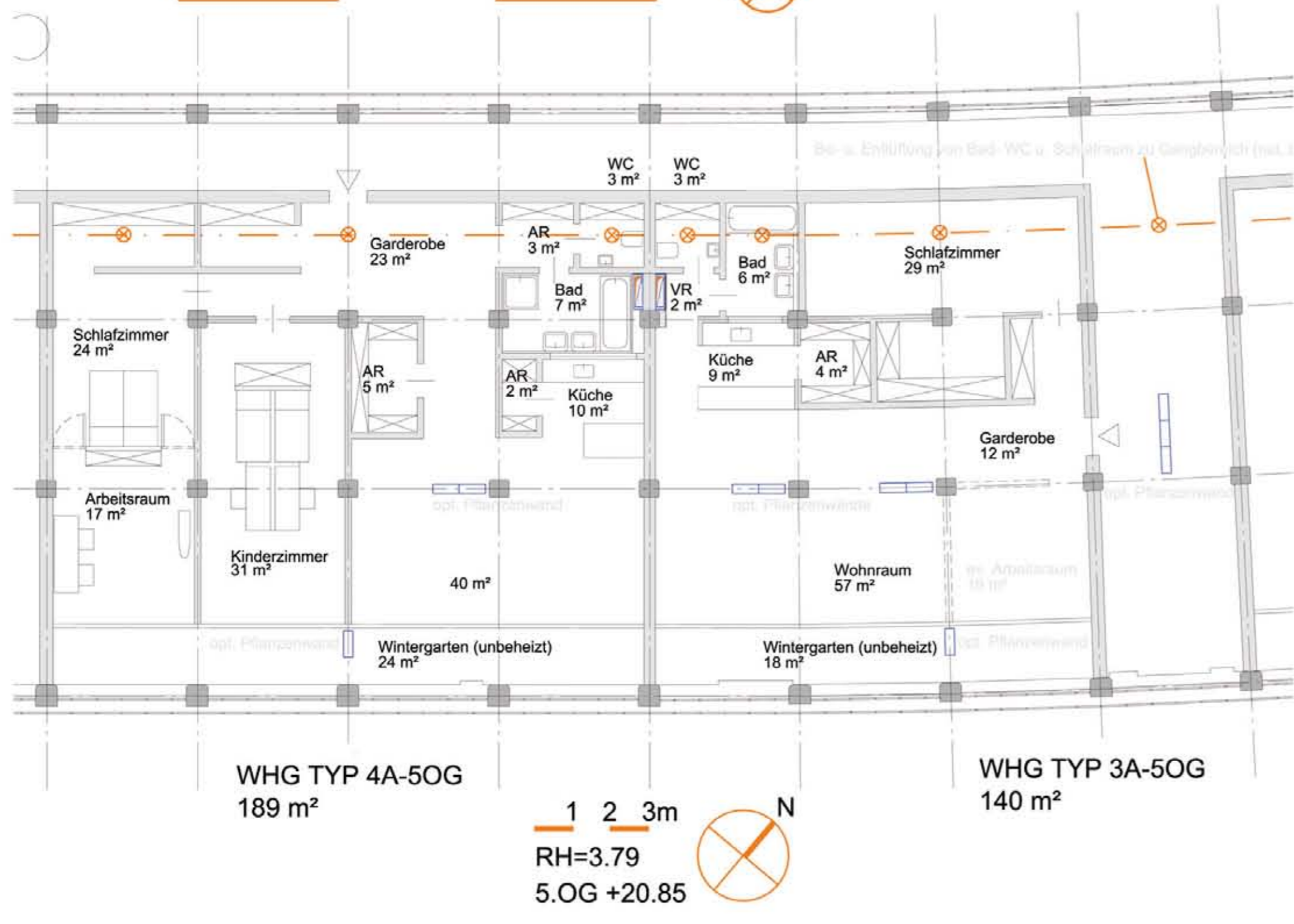
Wie oben nur gangseitig zusätzlich  
5cm Betonfaserplatten (1,3-1,5cm + Unterkonstruktion)  
raumhoch, vorgehängt, naturfarben (hellgrau).  
z.B. 1,3cm Rieder Fibre-C oder Eternit.

**17cm Innenwand ( Brandschutz EI 120, Schallschutz Rw >46dB ) :**

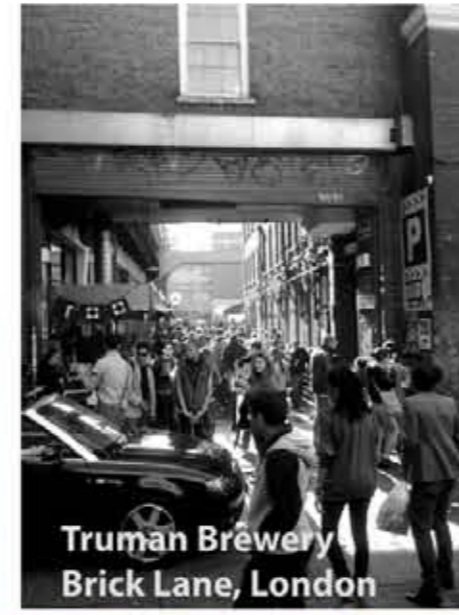
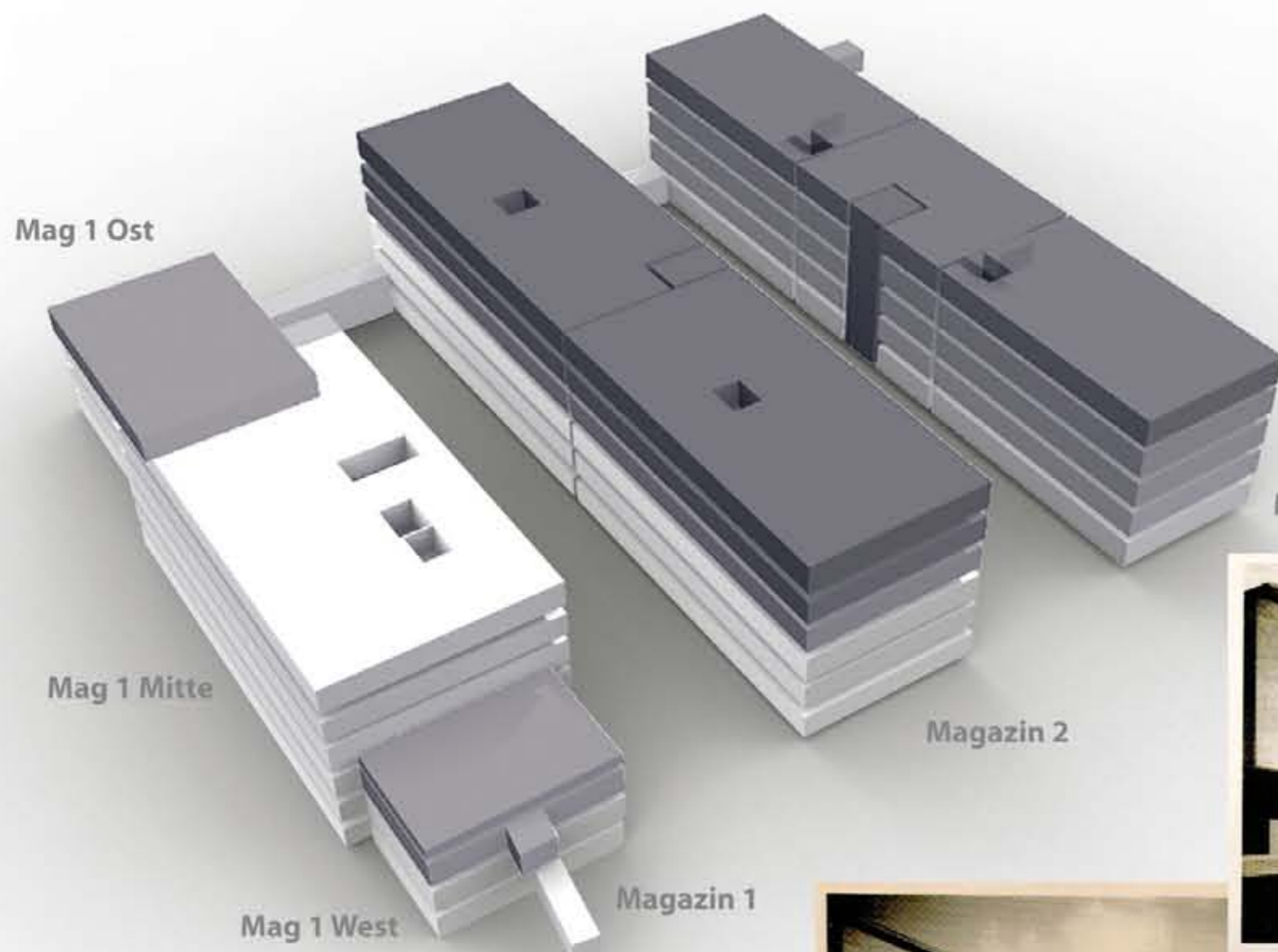
- 12mm GK Platte geeignet für Feuchträume – bei Bad/WC/Küche (z.B. Rigips Hydropanel)
- 12,5mm GK Platte (z.B. Rigips Rigidur H)
- 120 mm Extra-Light Rahmen (Konstruktionsholz) gefüllt mit Wärmedämmung (z.B. Flachs, Hanf, Schafwolle, Mineralwolle).
- 2x12,5mm GK Platte (z.B. Rigips Rigidur H)

Die von Behrens (im profil 1933/5) erwähnte 5cm Korkdämmung an der Innenseite der 38cm Außenwände (Aristo-Ziegelmauerwerk) sollte im Bereich der Wohnungen durch eine hochwertige, etwa gleichstarke verputzbare Dämmung ersetzt werden (z.B. Foamglas).

Wärmedurchgangswert (U-Wert) im Bereich Außenwand mit Korkdämmung dzt. ca. 0.5-0.6 W/m²/K  
Wärmedurchgangswert (U-Wert) im Bereich Außenwand ohne Korkdämmung dzt. ca. 1-1.2 W/m²/K



# TABAKFABRIK LINZ



new glass facade  
Magazin 3

	MAGAZIN 1			MAGAZIN 2	MAGAZIN 3
	Mag 1 West	Mag 1 Mitte	Mag 1 Ost		
Durchgangshöhe in Metern unter den Unterzügen*					
1.0G	2,41	2,06	2,25	2,21	2,55
2.0G	2,26	2,02	2,25	2,20	2,56
3.0G	2,31	2,07	2,48	2,36	2,58
4.0G	0,81	2,37	2,55	2,74	2,71
5.0G		2,08	2,46	2,70	
6.0G		2,40		2,83	2xTWR LPH

\*Die Unterzüge wurden größtenteils in zwei Richtungen (N-S & O-W) zwischen den Stützen gespannt. Das Durchgangsmass bezieht sich auf den jeweils niedrigeren, kritischeren Unterzug.  
Quelle: aktuelle Aufmasspläne der Magazin-Gebäude

RESULTIERENDE MASSNAHMEN um ohne wesentlichen Abbruch denkmalgeschützter Bauzustand den Anteil an Nutzflächen mit einer Raumhöhe von mind. 2,6 Metern zu vergrößern und die natürliche Belichtung zu verbessern.

MAGAZIN 1	
Mag 1 West	Mag 1 Ost
3.0G	die Geschosshöhe zwischen 3.Rd & 4. 0G (Dachboden Mag 1 West) sollte entfernt werden um eine RH von ca. 3,2m (Nutzfläche ca. 167m <sup>2</sup> ) zu erhalten
4.0G	0,81
Mag 1 Ost	
4.0G	2,55 Unterzüge nur in N-S Richtung gespannt. Gesamtnutzfläche mit RH min. 2,55m beträgt ca. 377m <sup>2</sup> zwischen den Unterzügen 6 Bereiche mit jeweils ca. 16x3,4m und RH 2,81-3,08m

MAGAZIN 2	
4.0G	2,20 Unterzüge nur in N-S Richtung gespannt; dazwischen ca. 1066m <sup>2</sup> mit RH 2,80m (558+612m <sup>2</sup> - 15 UZ x 6,75m <sup>2</sup> )
5.0G	2,20 Unterzüge nur in N-S Richtung gespannt; dazwischen ca. 1083m <sup>2</sup> mit RH 2,84m (565+620m <sup>2</sup> - 15 UZ x 6,75m <sup>2</sup> )
6.0G	2,63 Die Durchgangshöhe beträgt im Traufenbereich 2,63m und steigt bis zum First auf 2,9m an. Nutzfläche ca. 1203m <sup>2</sup> .

MAGAZIN 3	
1.0G	2,55
2.0G	2,58
3.0G	2,58
4.0G	2,71 Unterzüge nur in O-W Richtung gespannt; Gesamtnutzfläche mit RH min. 2,71m beträgt ca. 1050m <sup>2</sup> (380+290+380m <sup>2</sup> )
5.0G	2,70 Unterzüge nur in O-W Richtung gespannt; Gesamtnutzfläche mit RH min. 2,70m beträgt ca. 908m <sup>2</sup> (380+255+273m <sup>2</sup> )

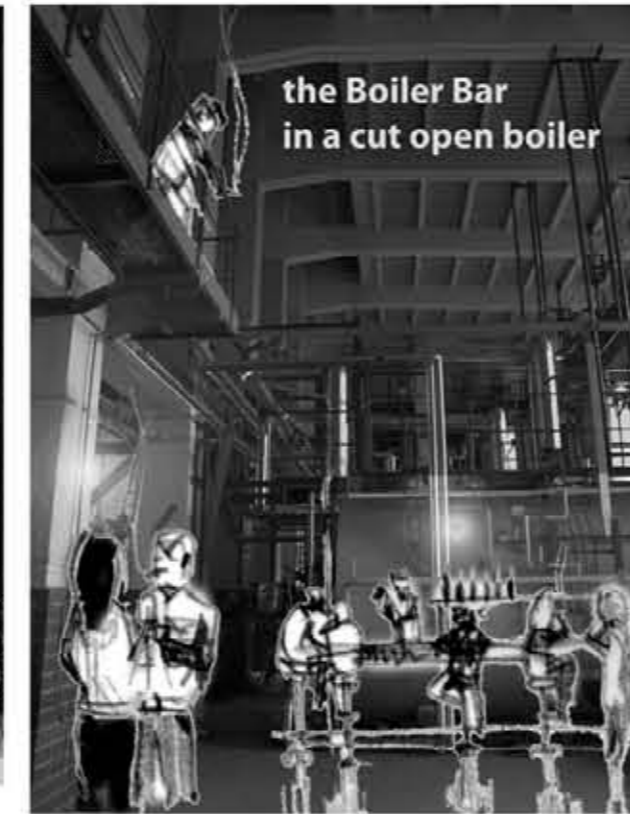
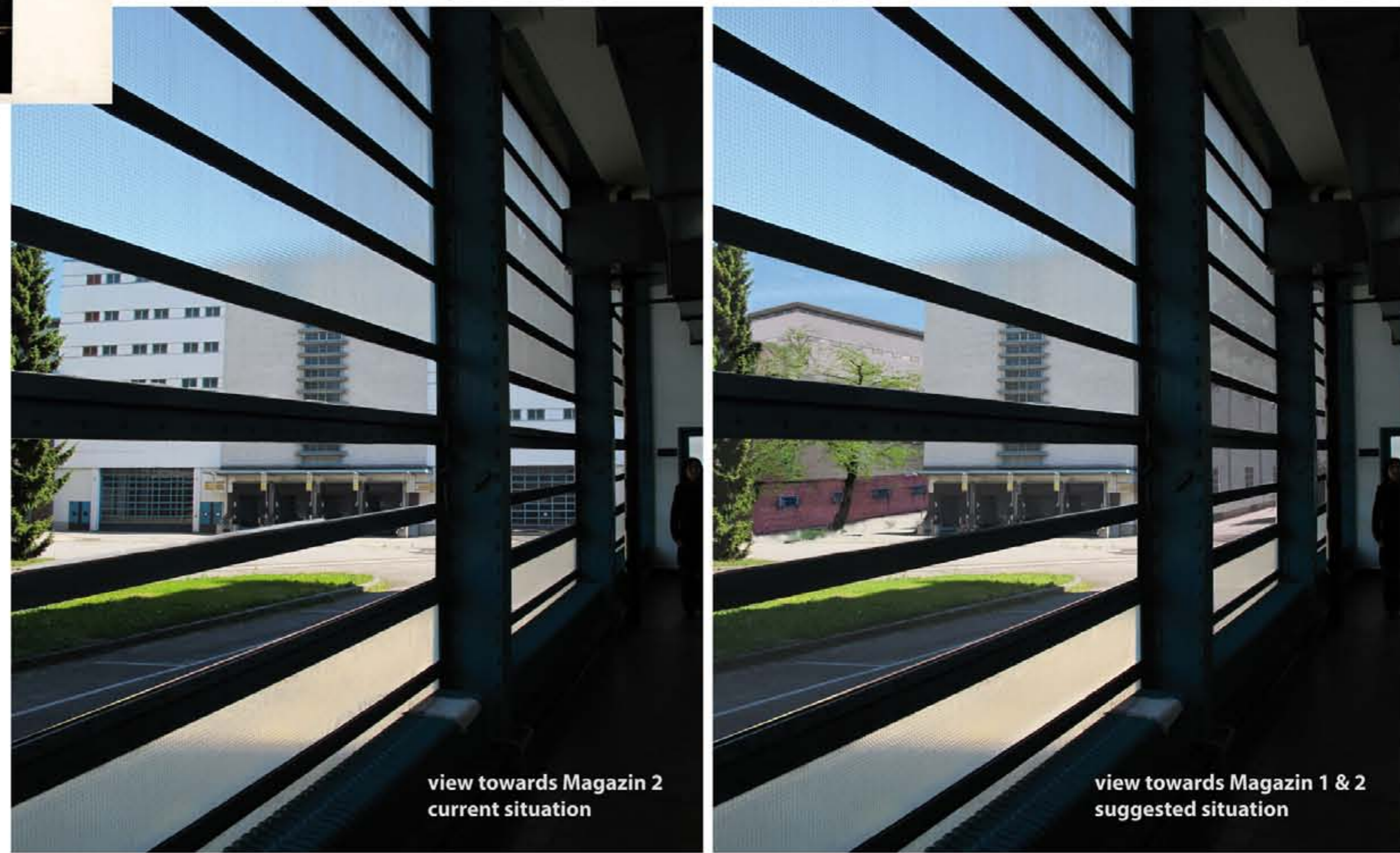
### Further joint use scenarios

a server farm in the basement of the warehouses, using the heat loss of the servers for tempering the air in other parts of the building(s).

a food hall, common in Asian cities, and for example in the converted Truman Brewery in London.

fostering the migrant culture is an important issue which could be dealt with by using parts of the former warehouses as worship spaces, or comparable to the Brick Lane Jammie Masjid – even a mosque.

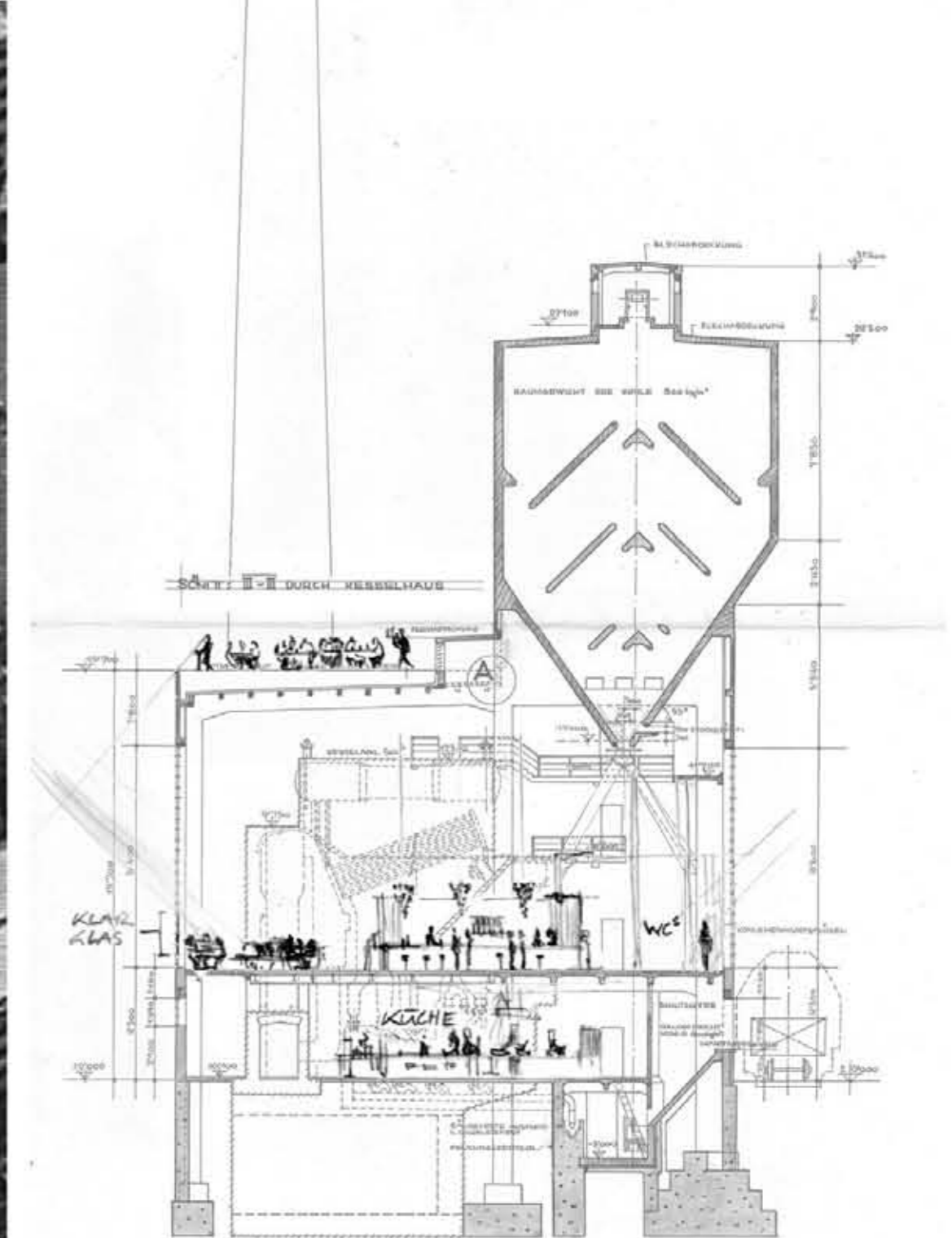
The ground floor areas of the warehouses could occupy a mix of craftsman-workshops and the occasional creative industry workplace. In return to low rents, 'school-workshops' are held by crafts(women working in the warehouses. The groups of pupils stay overnight in a hostel type accommodation within the Tabakfabrik area, located either in the first floor of CTF or in warehouse 2 or 3.



the Boiler Bar  
in a cut open boiler



The Wapping Project  
Restaurant, London

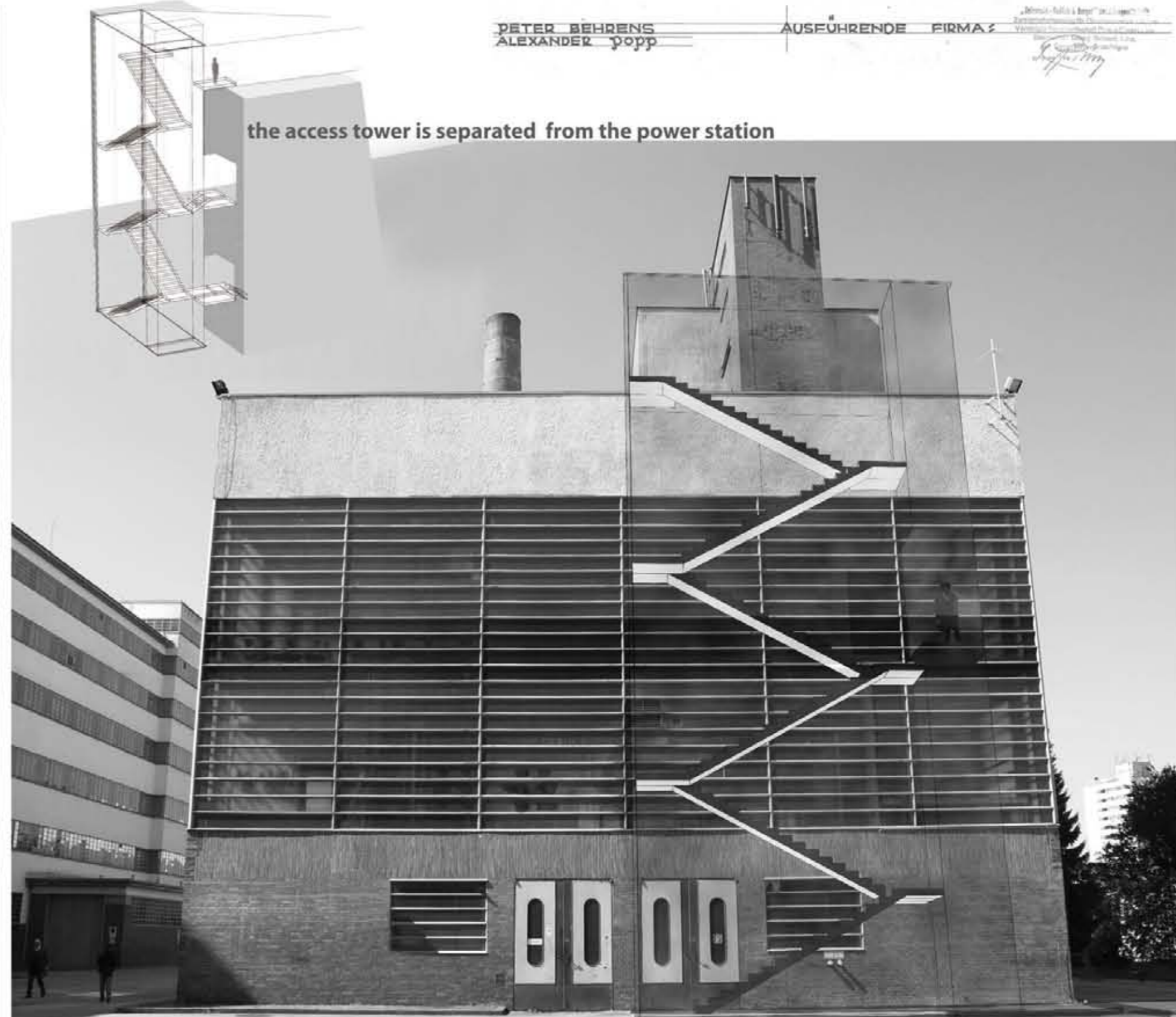


PETER BEHRENS  
ALEXANDER Popp  
AUSFÜHRENDE FIRMA



the opaque glass panes will be replaced by clear glass in the lower parts of the boiler house

vertical access to boiler house  
and roof top restaurant and bar



the access tower is separated from the power station