

<https://orthoslogos.fr/architecture/salginatobelbruecke/>

Drawing Structures I

Civil 126- GC Autumn 2024, Civil Engineering
11th Sep 2024

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The **Drawing Structures I** will introduce the basic drawing techniques (sketch, plan, section, elevation, and axonometry) to the first-year engineers.

Based on these techniques, we will further investigate analytical drawing methods capable of exploring projects, structural concepts and their solution

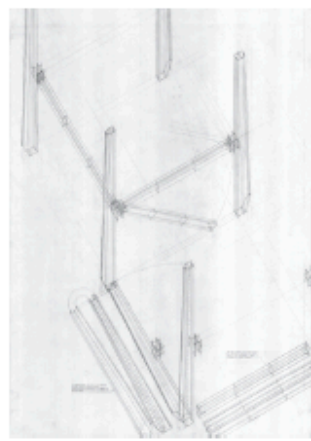


Fig. 13 bis



Fig. 179

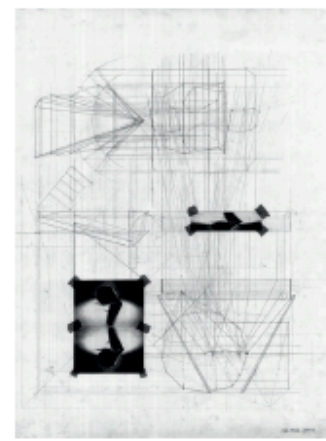


Fig. 181

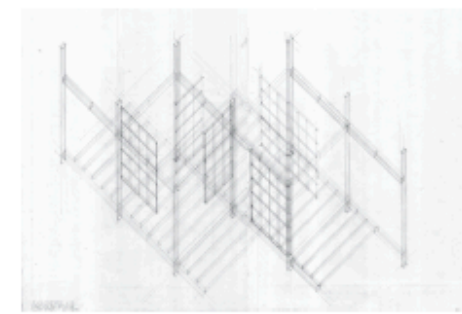


Fig. 188

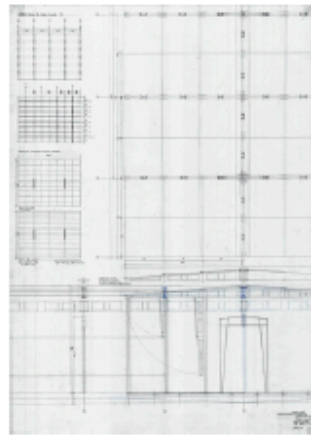


Fig. 189

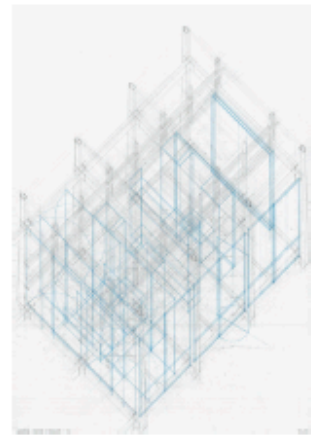


Fig. 192

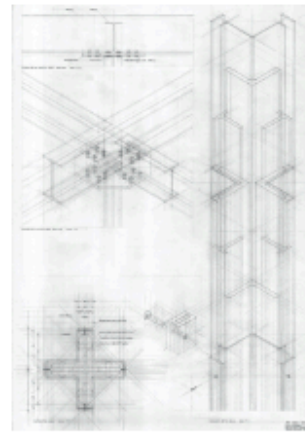


Fig. 193

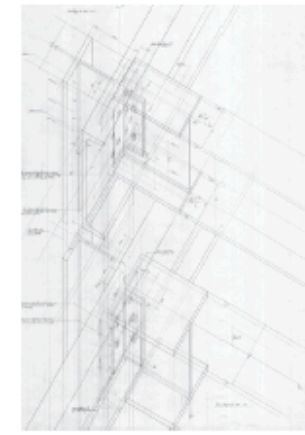


Fig. 195



Fig. 199

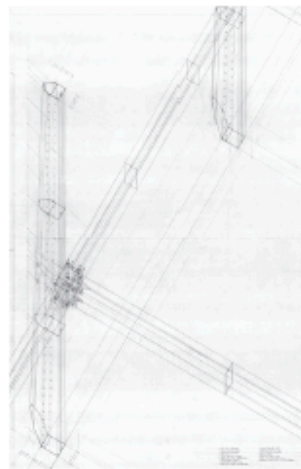


Fig. 200

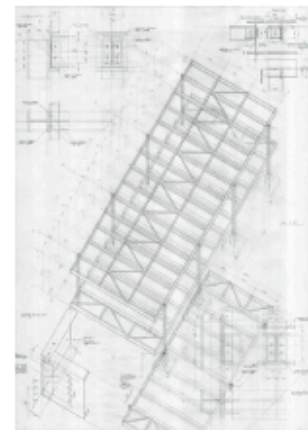


Fig. 201

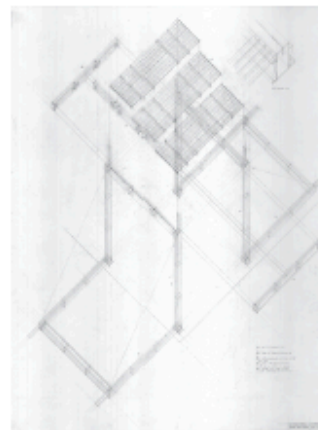


Fig. 203

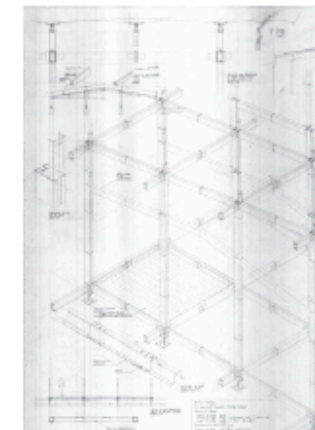


Fig. 205

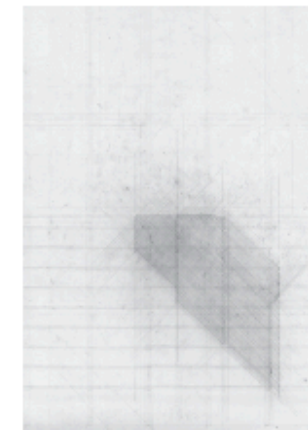


Fig. 206

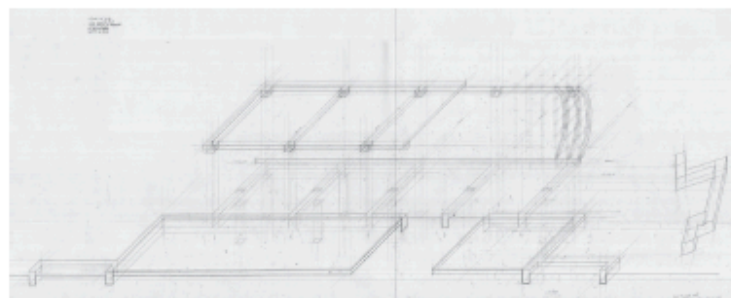


Fig. 207

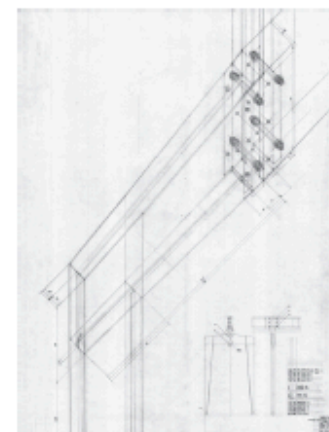


Fig. 212

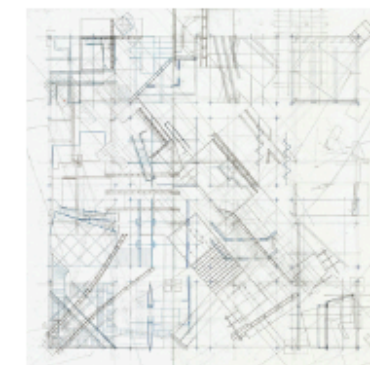


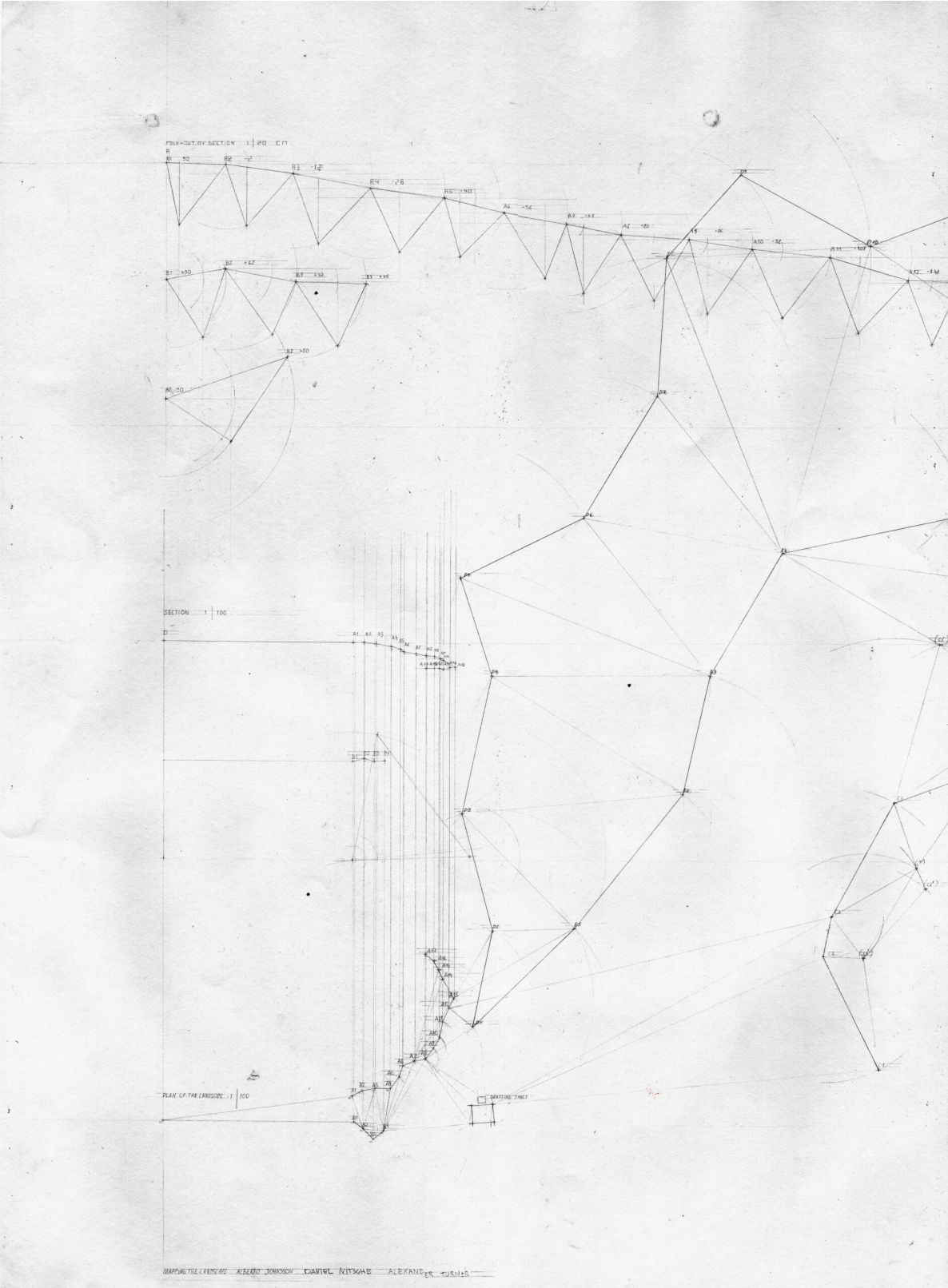
Fig. 215

PENS-491 /MA, opt.
“Drawing Research Platform“

ENAC Summer Workshop
2023 at Drawing Matter,
Shatwell, UK
Archive
workshop, 2023



Students with Patricia Guaita
in the haybarn. Shatwell, UK



Drawing in process (survey) by Alberto Johnsson,
Daniel Nitsche and Alexander Turner.

ENAC Summer Workshop 2023
at Drawing Matter, Shatwell, UK

1. Linear projections

We will begin with the "*projections de Monge*", a technique that allows to construct plan, section and elevation simultaneously and in reciprocal relation.

Learning to read a three-dimensional reality in two dimensions without immediate visualization in 3D fosters essential skills such as spatial relationship, visualization and precision.

Monge's projection technique helps to construct points and lines on the paper. It introduces the first concepts of scale, proportion, transparency, and composition. With only points and lines, the relationships between plan and sections are established. The construction lines remain and create other unforeseen spaces.

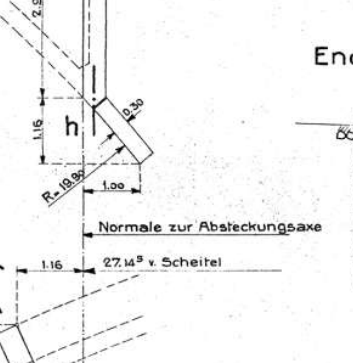
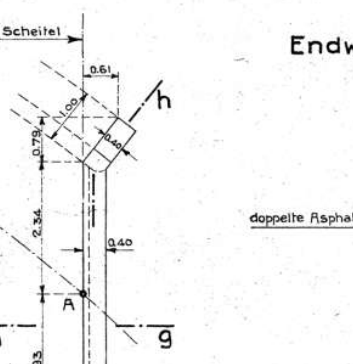
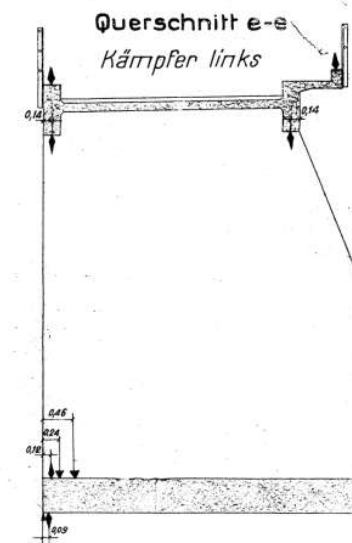
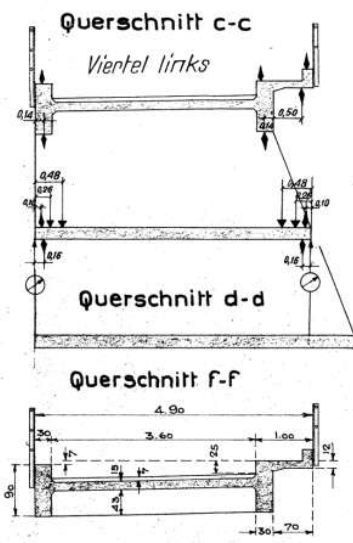
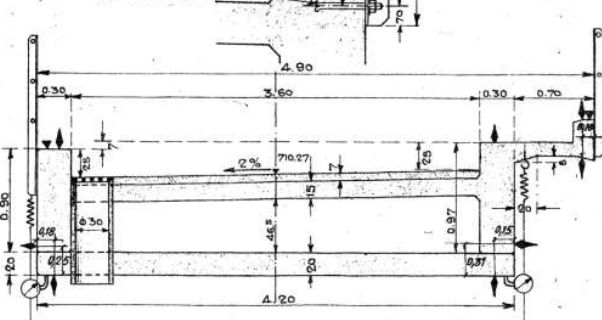
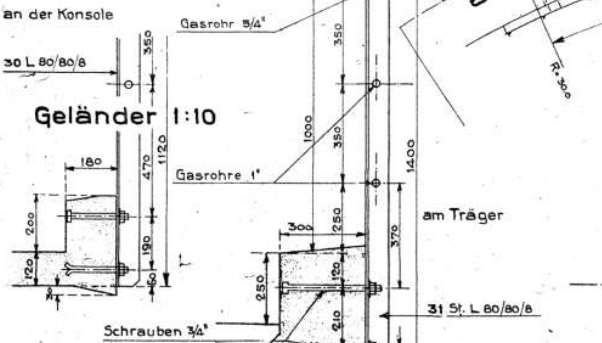
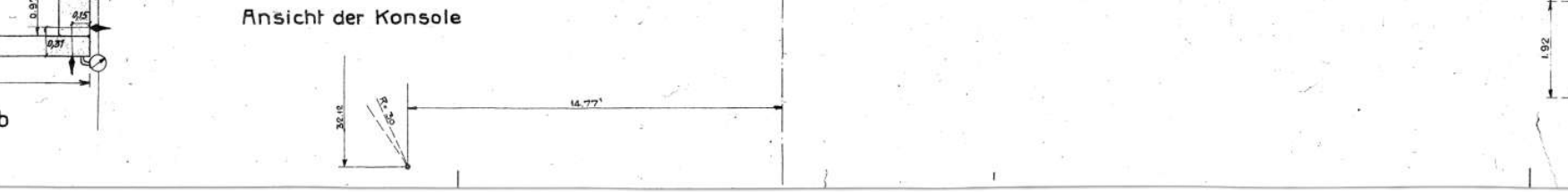
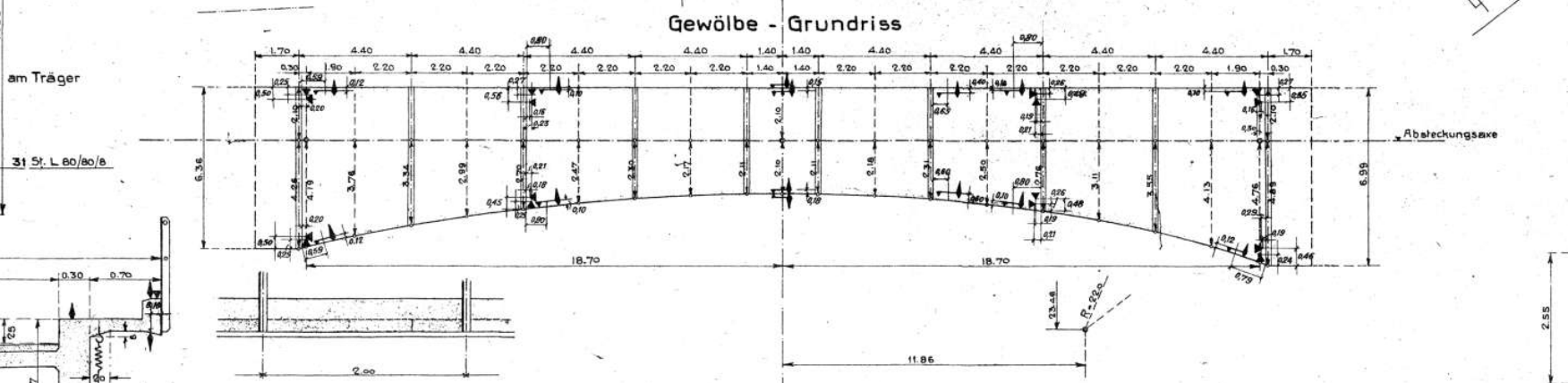
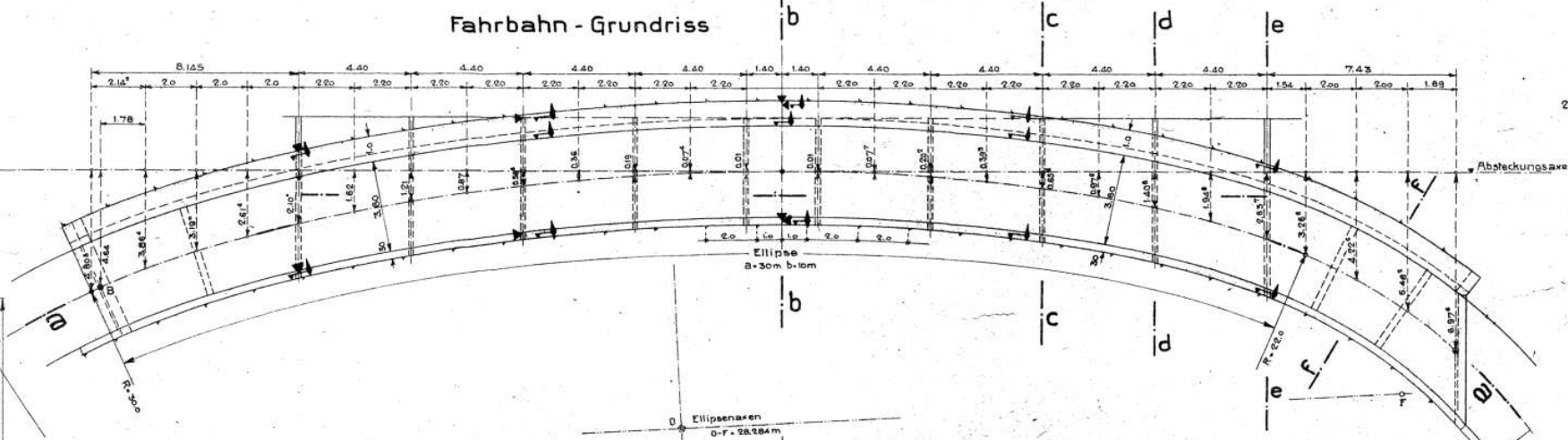
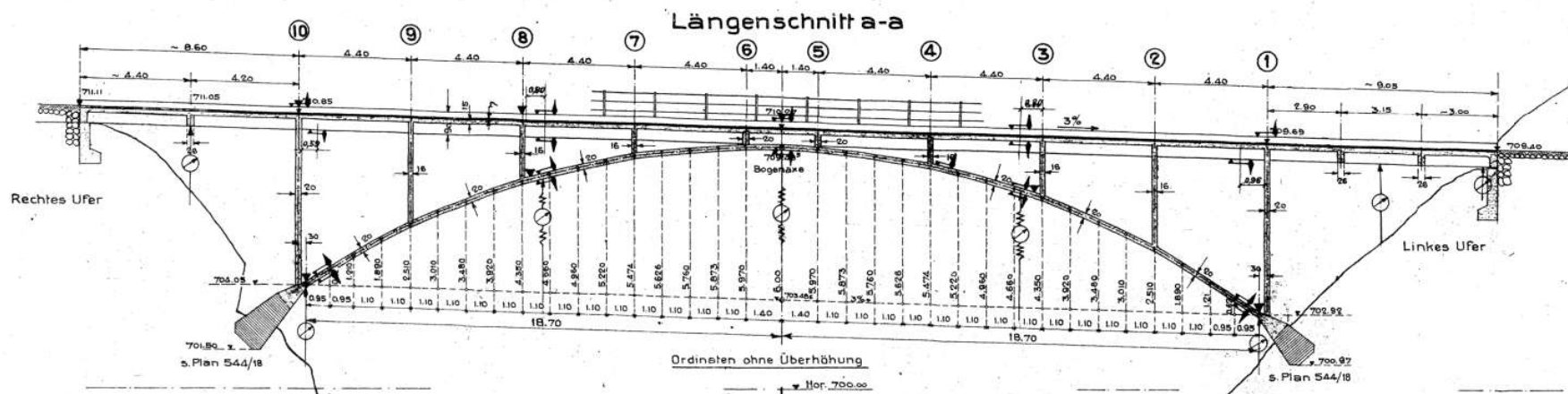
Bergweg
Hinterfultigen - Schönenfannen
544/5/EMPA
abgeändert 24. Aug. 33
Nachtrag entsprechend der
Ausführung 1. Dez. 1933.

Schwandbachbrücke

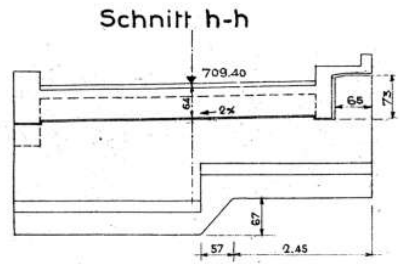
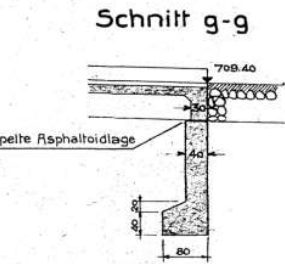
Schalungsplan

1:100

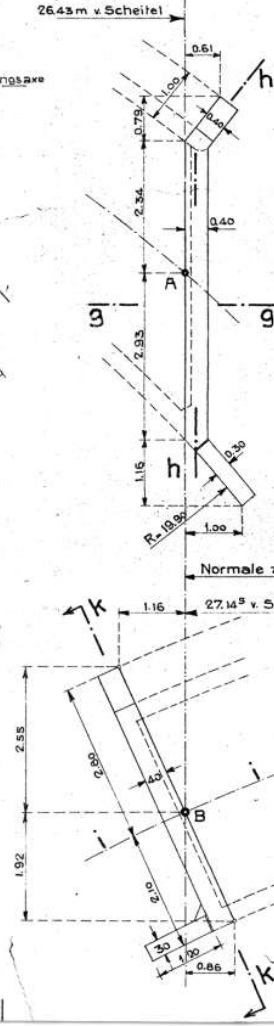
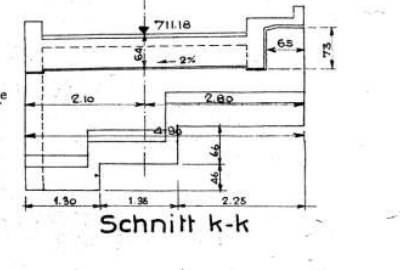
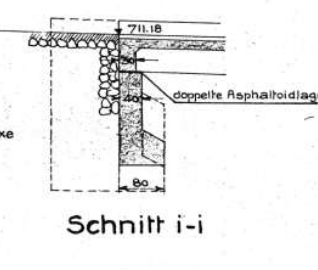
Ingenieurbureau
Maillart
Bern, den 29. Juni 33



Endwiderlager am linken Ufer 1:50



Endwiderlager am rechten Ufer 1:50



Schwingungsmesser
Durchbiegungsmesser
Klinometer
Dehnungsmesser

1933:2

EMPA 9236

Schwandbachbrücke
1933, Robert Maillart, in <https://orthoslogos.fr/architecture/schwandbachbruecke/>

Salginatobel Bridge (1928-29) from Robert Maillart, static drawingfirst working-drawing.

