ETH Zurich, Campus Hoenggerberg

Enhancement of Esri's World Topographic Basemap
and Web Map Application development

Interdisciplinary Project Work

Goals

- Enhance Esri's World Topographic Basemap by enhancing the campus of ETH Hönggerberg
    - Integration of missing or incomplete information

- Create a web map application using ArcGIS Online[1] intended for students or professors of ETH
    - Purpose: Provide overview of the rooms and their equipment for the buildings of ETH Hönggerberg.

[1] Product of Esri

Proceeded Work

Basemap enhancement
New buildings added: HWW, HWO, HCP, HGP, HIB
New parks and places added
Building labels added for $\leq$ 1: 4'500
Added labels for roads and places for the scale $\leq$ 1:1'500
Changed road classification for small roads

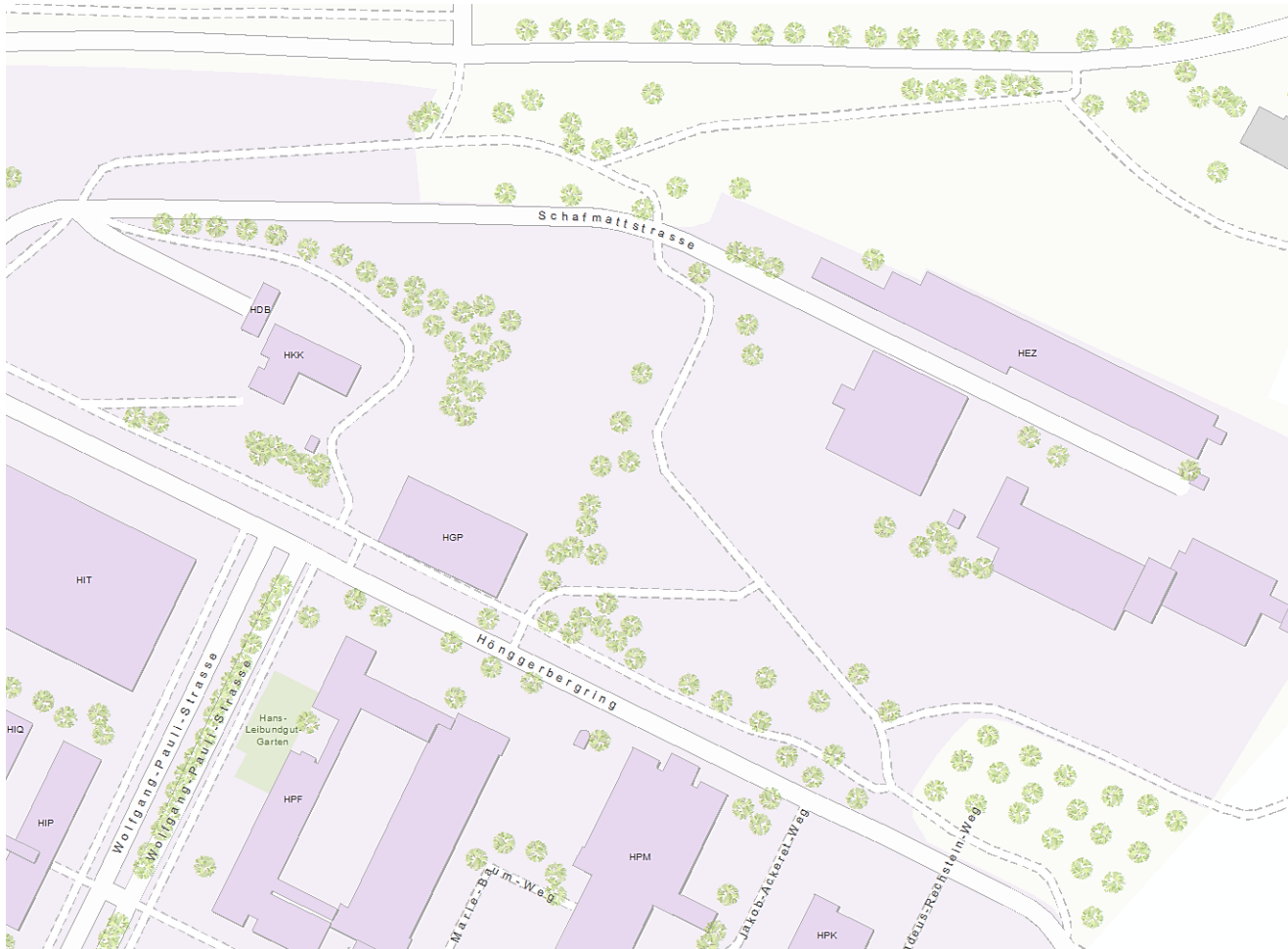| Application development |
|---|
| Converted CAD data to features |
| Rectification of the features |
| Derived new room dataset |
| Joined CAD annotation with the derived room dataset |
| Enhanced the attribute table of the room dataset |
| Created web mapping application in the WebApp Builder for ArcGIS Online |
| ArcGIS for Server used to host room data |

Topographic Basemap Comparison 1:5'000
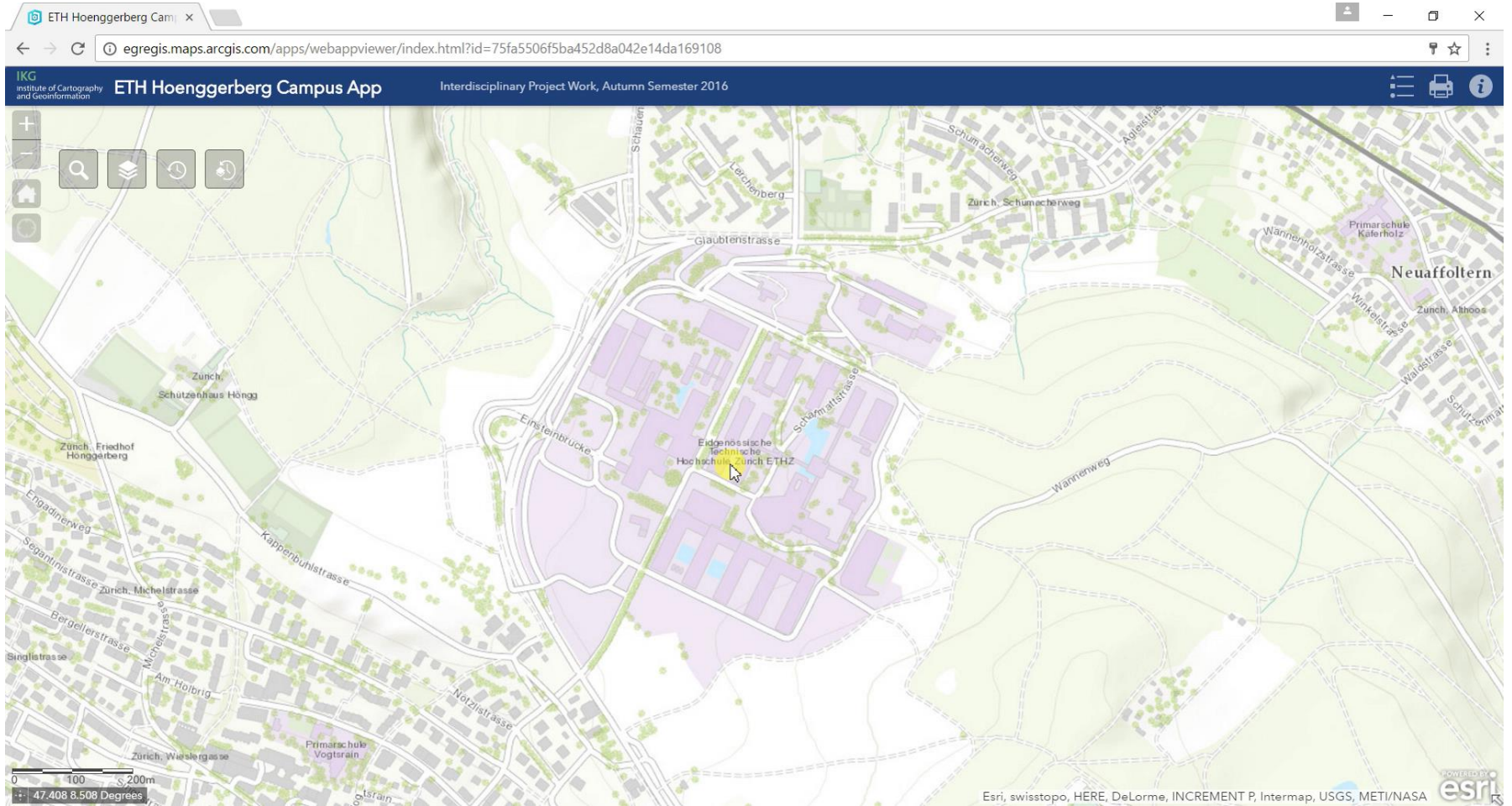
Original

Enhanced

Enhanced Topographic Basemap 1:1'500

Demo application

Outlook

- Modify Widgets with JavaScript
  - Web AppBuilder for Developers

- Include room plans for other buildings

- Deploy the application on a ETH server