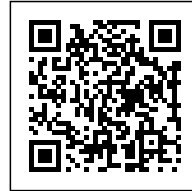




TROLLSTIGEN NATIONAL TOURIST ROUTE

Posted on November 25, 2016 by urbanNext



Categories: [Energy and sustainability](#), [Low Density](#), [Project](#), [Reiulf Ramstad Arkitekter](#), [Territory and mobility](#), [Total Landscape](#), [Urban Paradigms](#)

Tags: [Architecture&nature](#), [Built landscape](#), [Cast-in-place concrete](#), [Cor-ten steel](#), [Ecological agencies](#), [Ecological researches](#), [Energetic Approach](#), [Energy consumption](#), [Landscape Architecture](#), [Natural dialogue](#), [Natural metaphor](#), [Natural Park](#), [Norway](#), [Project](#), [Rauma – Møre og Romsdal](#), [Return to nature](#), [Sustainability](#), [Sustainable tourism](#), [Territorial Approach](#), [Topography](#), [Tourism](#), [Trollstigen](#), [Urban Paradigms](#), [Water recycling](#)



Located on Norway's west coast, Trollstigen is perched within a dramatic pass between the deep fjords that characterize the region. This panoramic site can only be visited and constructed in summer, due to severe winter weather. Despite – or perhaps because of – the inaccessible nature of the site, the project entails designing an entire visitor environment ranging from a mountain lodge with restaurant and gallery to flood barriers, water cascades, bridges and paths, outdoor furniture, and pavilions and platforms meant for viewing the scenery. All of these elements are moulded into the landscape so that the visitors' experience of place seems even more intimate. The architectural intervention is respectfully delicate and was conceived as a thin thread that guides visitors from one stunning overlook to another. *All architecture should be perceived as built landscape rather than conventional houses, which constitute foreign objects in such a context.*



















Materiality

The Trollstigen plateau is a robust facility, dimensioned for durability with minimal maintenance and large static stresses. The major contrast between the seasons has been handled with the choice of materials. The area receives up to 7 meters of snow during winter, placing extreme demands on static strength. Structures and details are designed to withstand the extreme stress without compromising on visual slenderness. Working with resistant materials felt natural. Cast-in-place concrete and cor-ten steel are the main materials used in the project. The steel oxidizes and takes



on its own a patina over time. The concrete has been treated with several different techniques; polished, steel troweled, flushed, broomed, spot hammered, or cast in different types of formwork. With the nuances the treatment gives the material, it is possible to address each micro-context in relation to the use and placement. All the materials are carefully chosen to ensure the project is characterized by clear and precise transitions between the architecture and the natural landscape.









Size

The Trollstigen plateau is a very comprehensive architectural project in terms of program, complexity and extension. It covers an area of approximately 600,000 m²; it takes about 20 minutes of continuous walking to cross it from one end to the other.



Plan

At the same time, the complex is dimensioned to receive a lot of people in a short time. Around 600,000 people distributed in 100,000 vehicles visit the site during the summer months. This presents serious demands regarding infrastructure and logistics.

The architecture should underpin the site's unique character and give visitors an added value in relation to the travel experience. All project elements support the experience of nature and submit to the context, interacting with, as opposed to competing with, the dramatic landscape. Because of the structural qualities of steel and the surface of cor-ten, it was a natural choice for this environment.

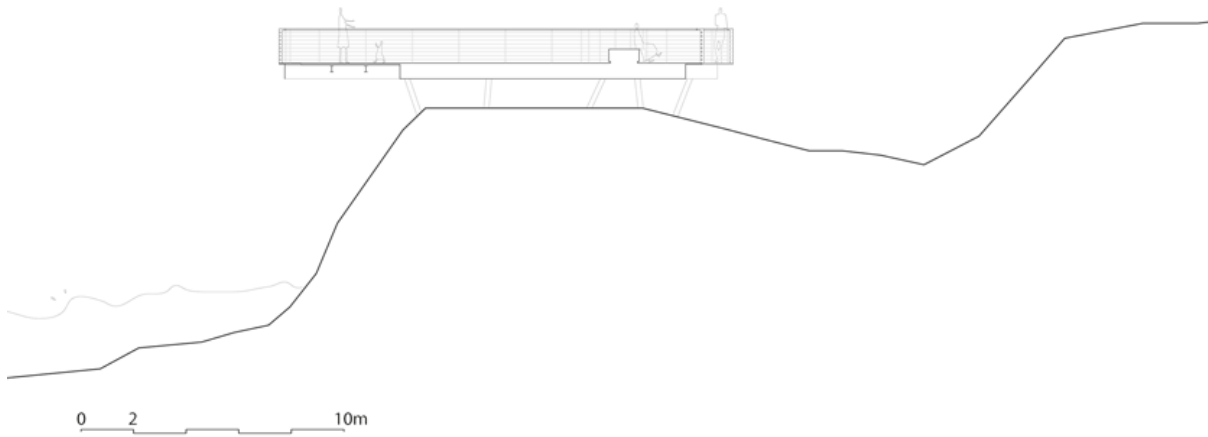


Service Building Plan



Service Building Elevations

There are always some difficulties in the construction of an installation such as this. Because of the extreme weather conditions and the difficulties of access for the construction equipment, most of the material had to be transported via helicopter out to the outlook plateau. However, our main concern as architects was always the structural challenge of attaining a structure robust enough to ensure public safety, which would appear simple and elegant at the same time.





Panoramic Platform Elevations



Sustainability

The following issues are important for the sustainability of the project:

Durability in all details / The architectural installations have been built so they can withstand the violent forces of nature. In summer, autumn and spring, there have been major floods causing extensive damage. The amounts of snow in the winter months are so large that extraordinary



static, solid solutions are required. Since the project consists of a number of individual measures, it is organized into a system of sub-site development.

Grey water / All grey water is filtered locally at the site through a series of sand reservoirs, recycled directly back into nature.

Black water / This is extremely reduced by using vacuum sanitary systems.

Self sufficient energy consumption / Trollstigen will be energy self-sufficient thorough the use of a local mini hydropower plant, which is a part of the project.

Low energy consumption / The project is provided with low infrastructure consumption energy installations in all areas.





Extract from coming-soon
Total Landscape

Related publications:
Total Housing
Total Latin American Architecture

ISSN : 2575-5374



Total China
Total Singular Housing

