

## **PROVA ORALE 1**

Il candidato illustri gli argomenti e/o risponda alle domande di seguito elencati:

- 1) Iter di realizzazione di un'opera pubblica
- 2) Gestione della sicurezza di un'opera pubblica
- 3) Cosa si intende per interoperabilità in ambito BIM?
- 4) Il contenimento energetico nella realizzazione degli edifici pubblici
- 5) Come si inserisce una formula numerica su excel?

### **TREES AS DESIGN INSPIRATION**

Franklin & Marshall College is an historic private liberal arts college in Lancaster, Pennsylvania. The Herman Arts Center, a building dedicated to artistic education, was built on campus in 1969. However, due to a lack of funds, the original masterplan was never completed, in 2016, the College decided to replace the old structure with a new building – the Winter Visual Arts Center. The design concept's geometric shapes were inspired by woodland, the oldest element on site. The new building's main pavillion is raised above ground to the canopy level of the trees in the surrounding gardens, mimicking the pattern of their foliage.

The ground floor is visually permeable to visitors on their way in and out of the gardens and college.

The roof's load-bearing structure was made out of thin trusses that lend it lightness and a dynamic rhythm. Reinforced concrete walls offer a material reference, channeling the contrast between the grandeur of the tree trunks and the lightness of their foliage.

The external infill panels are made out of a new material: high technical performance 100%-recycled expanded glass. Internal rooms are heated and cooled by a cutting-edge geothermal system that, thanks to insulation of the external envelope, helps bring the project close to the NZEB (Nearly Zero Energy Building) architectural standard.

Finally, a large reflecting pool offers potential overflow, obviating any excess water if it rains heavily in the gardens.

## **PROVA ORALE 2**

Il candidato illustri gli argomenti e/o risponda alle domande di seguito elencati:

- 1) La programmazione dei lavori pubblici
- 2) Le procedure previste dal D. Lgs 50/2016 per la scelta degli operatori economici nell'ambito dei lavori pubblici
- 3) Quali sono i principali vantaggi dell'utilizzo del BIM in ambito edilizio e le criticità
- 4) Il quadro economico dei lavori di un'opera pubblica
- 5) Quali sono i vantaggi dell'utilizzo di riferimenti esterni XREF su Autocad?

### **A MUSEUM FOR THE STATUE OF LIBERTY**

New York's most iconic structure, the Statue of Liberty, attracts million of visitors to Liberty Island each year. Over the years, however, the museum at the base of the statue became unable to service the thousands of visitors arriving each day. It was therefore decided to create a new museum for Liberty Island, making it a free access building without restrictive security clearances, able to accomodate all visitors. The new project will cover almost 2.500 sq. m and offer incomparable views across to Ellis Island and the skylines of Manhattan, Jersey City, and Brooklyn.

Starting from the pathway leading from the statue, the museum complex has been designed to follow the natural lay of the land with a monumental granite staircase leading to a panoramic terrace looking across to Manhattan. At the base of the terrace are the new sections of the museum, the entrance marked by an intresting replica of the torch held aloft by the statue.

Museum and staircase are sorrounded by indigenou plants while the new structure in the garden will provide visitors with an immersive experience. The angular forms of the whole plan echo the irregularity of the water's edge and create a range of different vistas.

The materials to be used for the new building are a deliberate weave of past and future. For example, apmle use will be made of granite, bronze and copper, the materials chosen some 130 years ago by Richard Morris Hunt for the statue's base.

The new museum is the most important intervention on Liberty Island since the statue was installed. It will continue the original aim of keeping alive the nation's history and its message of freedom.