



TEACHER'S DAY IN SAINT-DENIS, PARIS

MULTI COMFORT
STUDENT CONTEST 2020



Saint ★
Denis



GRAND PARIS

INTRODUCTION

As part of the Multi Comfort Student Contest 2020, Saint-Gobain organized the Teacher's Day in Saint-Denis, Paris.

This event creates the opportunity for professors to visit the site where the task takes place, get a better understanding of the project and a real overview of the city, its daily life, social aspects and culture. Participants took part of the discussions and contributed to the creation of the task.

During this edition, 15 professors from 13 countries had actively participated. Through this document, they share with all the participants their experience and advices.



Visit to Domolab, Paris

ZUZANA PESKOVA Czech Technical University in Prague Czech Republic

Living in Paris is extremely expensive, so suburbs of Paris are now valuable and sought-after locations. Saint-Denis is less than 10 kilometers from central Paris. It is a place intensively connected with the history of France. The Christian community was founded here in the 3rd century by Italian missionaries headed by Bishop Saint Denis of Paris (+250 AD) who, according to legend, was beheaded in Paris and brought his head to this place, where were built up a temple. The Benedictine Abbey and the women's monastery were founded here. Saint Denis is known as the burial site of the kings. In the 19th century, Saint - Denis became an important industrial zone, to which the possibility of using the Seine shipping also contributed. Now Saint - Denis is a place of many contrasts: Old parts (the historical center around the Basilica of Saint-Denis - considered the first purely Gothic architecture - and its significant historical context for the history of France, place of industrial areas and workers' houses) and newly developing modern parts, large and small scale buildings, nationality and culture of the population.

The population in Saint-Denis is growing rapidly... but there are mainly people under 30, of different nationalities and cultural habits. For many, this place is just a transitional station - the local council wants to change it. The town is easily accessible from Paris in many ways: by metro line 13, RER B, RER D and train. The motorways A1 and A86 are also here. This is an essential prerequisite for good accessibility to work. Concurrently Saint-Denis offers a pleasant small-town atmosphere and the possibility of pleasant living with sports - along the Seine there is a cycle path. The Paris Summer Olympics (2024) will be held in Paris and Saint Denis is a location that will be one of the Grand Paris sports zones: swimming, synchronized swimming, water polo, diving, modern pentathlon / swimming.

The selected plot is now a bit on the edge of the main activities in the town. It is an industrial brownfield after the François Coignet factory, which was a pioneer in the development of structural precast and reinforced concrete. Coignet was the first who use iron-reinforced concrete as a technique for building construction. Now there are large parking lots on the plot,

especially for buses. The construction site is therefore very flat, basically forming an elevated leveled platform in the morphology of the surrounding terrain. It is within walking distance of the station and there is no significant context to follow from the surrounding architecture. The Coignet House and the preserved factory building represent a challenge for future conversion and can give the project an interesting historical and urban context.

From the climatic point of view, the locality is standard and comparable for design conditions in the Czech Republic. In principle, there are no extreme conditions to deal with.

From my point of view, there are several major challenges that a student will have to deal with:

- 1) Context of social housing for different nationalities and cultures. Housing such that will push its inhabitants to "nest" here and not just to pass through the locality. The issue of social housing is very strong in France, and many exceptional architectural examples of projects for new neighborhoods of social housing and experimental architecture can be found (Noisy Le Grand, Les Arenes de Picasso, Les Arcades du Lac, etc.). Not all projects were successful. Therefore, it is necessary to look why they did not succeed and make analysis of this problem. It is not only an architectural and urbanistic aspect, but also a sociological one.
- 2) The heritage of François Coignet - a person who sent himself on the development of modern materials and technologies in construction. This context does not mean exclusively using "concrete" but opens up the possibilities of using and implementing progressive materials, technologies and constructions to create a multi-comfortable living housing of future.
- 3) The context of greenery and pleasant "small-town" housing. France and gardening are very close to each other. The inhabitants of Saint-Denis are no exception - plenty of greenery is everywhere, even in the most incredible places. They enjoy small gardens, balconies, flowerpots are in front of houses, on staircases. Therefore, it is not surprising that about 3 hectares of the plot should form a city park, but students should not forget the private greenery and overall care of the parterre and witty detail in the public space.



IRINA RAUD
TALLINN UNIVERSITY OF TECHNOLOGY
ESTONIA

General context of the city

To me it is important that the development scenario for Saint-Denis is planned for at least a 50-year time-frame. This could be the cornerstone of the architectural and urban planning task and essence of the proposals of the architecture competition works. In order to achieve that, the population characteristics should be added to competition materials including age and gender structure, time spent as an inhabitant of the city, level of education, level of unemployment. The data would help in making proposals for increasing quality of life in the city and thereby also increasing the reputation of the city.

General context of the site

To be added:

- Size and structure of the neighboring school
- Information on surrounding office buildings and including if they are used by local inhabitants
- Information of planned developments in the area

Construction

Clarification to the preferred building materials based on estimated price range of apartments:

- r/b
- block
- wood



Social, cultural and historic aspects

Add a clarification as to the development plans of the local government/municipality. Issues that are considered worth investment in order to best integrate the x, y and z generations.

Key challenges of the task

If the above mentioned explanations and additional data is added, it can be presumed that the competition entries will have enough ideas that can later be used and implemented in the city development plans.

PETRI AARNIO UNIVERSITY OF OULU FINLAND

- The area is flat, but sloping towards the street on the west side few meters
- The area is linked to the urban fabric in the north; to the railway. In the east and to the Seine-River and roads in the west; southward connection remains during the visit unclear. The satellite photos of google maps reveals that there are situated industrial plants, that break the connection possibilities to the south.
- The link between the area and the existing urban structures in the north is based only on the streets on the west side of the area. It seems that there is any current connection trough the block situated in the north side of the area or beside the railways.
- There are two buildings in the area, which are to be renovated. The buildings are important to local history. Other buildings can be demolished.
- Small green areas appear to be solitary oasis; they do not form a network.
- There are new residential buildings on the north of the site (5 – 6 stories, party lower)

Challenges

- How to link the area to an existing urban structure on the north?
- How to take advantage of the river Seine creating river views? The river is clearly on the lower level than the area.
- How to reduce the visual and acoustic challenges posed by the railways?
- The area Saint-Denis is actually a suburb, of Paris and it has the challenge of social characteristics of the suburb, which are accentuated by the railway station

NADER BOUTROS
ENSA VAL DE SEINE
FRANCE

- 1) General context of the city: great
- 2) General context of the site: Complex not easy really challenging for professionals and students!
- 3) Construction: Varied styles giving a large spectrum for solutions
- 4) Social, cultural and historic aspects: Rich industrial site context, maintaining elements from this heritage on site, would reflect in solutions by harmony or opposition positions.
- 5) Climate / Comfort Challenges: Plaine commune is an interesting context for studies on climate changes over the last 50 years. The impact for climate changes have to be considered in adaptive solutions evolving with climate changes. Scale zooming: City/Site/Building/details analysis have to reflect this challenge.
- 6) Key challenges of the task: In our digital era, is the new tools as algorithms aided / computational design can be a clue for form finding in accordance with context constrains criteria? The complexity to consider site planning, park urban and landscape design, residential/educational new buildings and preservation/ revitalization of existing heritage constructions can't be taking in consideration without the identification of a rigorous and flexible matrix that helps finding the varying solutions.

GIANCARLO PAGANIN
POLITECNICO DI MILANO
ITALY

The city of Saint-Denis is now facing a significant development and change in its structure due to the combination of the preparation to the next Olympic games in 2024 and to the fact that the cost of dwellings in Paris is constantly increasing and forces people to move to the surrounding areas with more affordable solutions.



The general context of the city is at the characterized by a population that is young and is subject to an important rate of replacement by new inhabitants. Often Saint-Denis represented a temporary site but nowadays it seems that the trend is changing with the new arrival of people and families intended to stay there for long-time. One of the objectives of the project should be to propose a community that could invite people to foresee a stable living in the city. Within this general framework the contest site represents an area that in the planning activity of the authorities should revitalize an area that formerly was a major industrial site and now is almost an empty space in the urban texture.

The site is bounded by the river and the railway which should be assumed by the proposals in terms of positive and negative risks (e.g. Noise, vibrations, heat source, view, ...). The relation of the project with the river should be taken into account and it may become a characterization of the idea not only for the operation stage but even for the construction stage.

The area includes existing buildings and infrastructures that will have to be eliminated from the site; the amount of demolition waste generated by the project will be important and their reuse on site may be a strategy to reduce the impact of the construction project. There are also two listed (protected) buildings representing the historical and cultural heritage left by the presence on the site area of the Coignet cement factory. These buildings are now abandoned but they represent an important resource for the project and they can be revitalized offering to the city new functions to help creating a community in the new development plan. A way to preserve the intangible heritage – namely the memory of the innovation proposed by Coignet in the use of concrete for building design and construction – could be part of the project proposal.

The site is not flat and the altimetry shall be considered in the masterplan preparation in order to manage in a sustainable way the earthworks and soil preparation works that may become huge. The topography shall also be considered for other two major objectives of the general planning of the municipality, namely the creation of a new connection axis from north to south and the provision of a green belt (the urban park) that shall connect the channel and the railway. The road that at the moment crosses the site area is busy of vehicles and pedestrians that move toward the train station from the industries and offices located south of the site; the actual walkway seems to be too narrow in certain parts within the site area and the movement of people should be improved.

A visual connection between the project and the landmark represented by the Pleyel tower (the tallest building in Saint Denis municipality) should be considered as another opportunity to link the project with the territory.



ANDRZEJ DUDA
SILESIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY
POLAND

This year's design task is extremely interesting. In some of its part, it's a bit like the Milan from the previous year. However, there are significant differences which will make this competition even more interesting.

The competition plot is located in the northern suburbs of Paris in Saint-Denis. This district will host Olympic Games 2024.

In addition to aspects related to: context of the city, context of the site, very important aspects related to construction, climate, comfort etc. I would like to pay special attention to cultural and historic aspects, which seems to be particularly important in this year's edition of the competition task.

The Saint-Denis district is a historical place of great cultural significance for France and Europe. Noticing and emphasizing this by the participants in the competition and showing it in the expression of modern architecture designed by them, in my opinion, would be very valuable.

When we talk about regional architectural tradition, then the following questions become important: On the one hand, do architectural traditions retain their inspirational role in the era of total globalization and unification? And on the other hand, will global values and inventions be able to overcome local stagnation and routine? This is a real dilemma for architects, investors and local authorities.

My advice to the participants taking part in this year's competition is to study theoretical texts dealing with these issues. Perhaps Kenneth Frampton's theory of Critical Regionalism may provide at least partial answers to these questions.

PANA RADU
UAUIM
ROMANIA

This year's Multi Comfort Student Contest site location is very exciting: Paris! The City of Lights is able to fire everyone imagination, ambitions and dreams.

Students should realize as soon as possible that Saint-Denis, however, is not exactly Paris. Even if, from the location, transport, climate and some other points of view, it can be generally considered as part of Paris, Saint-Denis has its own specific that must be discovered, analyzed and included in their designing creative process.

EMA RUHIGOVA
UNIVERSITY OF TECHNOLOGY IN BRATISLAVA
SLOVAKIA

The city of Paris is characterized by its multicultural society. It is a place where for many years, different nationalities from all continents have been mixed because there were job opportunities here. In recent years, however, there has been an even stronger influx of foreign residents due to the migration crisis. Most of them began to settle in the suburbs of Paris, some of them already quite dominated.

Saint-Denis is one of the areas that we can perceive as "border", where original Parisians blend with new immigrant communities. This assignment is very challenging. From a social point of view, the emphasis should be on taking these aspects into account. What is important is that the proposed architecture must be able to deliver the required qualities for both the original Parisians and the immigrant communities and to find a common path between them.



Regarding a specific area to be addressed, it will be crucial to consider in a larger context, to study the evolving pedestrian and cycling axis of supra-regional significance, which will be in contact with the area under consideration. It is also important to determine the limits and potentials of the territory, which will certainly affect the urban structure of the proposed buildings. There is a multi-track train nearby, which, in addition to a huge noise load, also represents a line barrier for pedestrians. For example, the River Seine and the canal are nearby, which are a good opportunity for recreation in their vicinity.

The plot is not in one plane, you cannot forget its height dimensions, as this moment can help to reduce the negative impact of the railway on the acoustic comfort of the premises.

NANDE KORPNIK
UNIVERSITY MARIBOR FGPA
SLOVENIA

The context of the city is inspiring in its diversity. To me, the city seems like a big dynamic formation that is constantly edited and never finally edited. That are areas that are urban and controlled and areas that live their lives somehow. Everything is intertwined and subjected to constant change in the good and the bad. The site itself seems left to itself today, but it has traces of a rich past and at the same time represents a generic point that is important to Saint-Denis and to the wider area.

Construction should primarily be of practical importance and should follow architectural design. The sustainable aspect of construction should be taken into account.

Urban planning and architectural design of individual buildings should be inspired by a rich history, should try to complement the cultural aspect of the environment and be defined to the social context of the chosen location.

Energy and architecture should be in harmony with each other and should represent a unified solution. Living comforts should be achieved, but selected energy systems should be environmentally responsible.

The biggest challenge is how to comment on today's poorly urbanized surface with the new architecture, make it comfortable to live and connected to the content in the narrower and wider social context of Saint-Denis.

CARLOS PEREZ-PLA DE VIU
ALFONSO X EL SABIO, MADRID
SPAIN

The image that anyone has of the city of Paris, whether if they know it first-hand or if the information comes from other means, is that of an example place in all its aspects that define a unique and recognizable city: Monumentality, greatness, tradition and modernity, constant activity, luxury, history, cosmopolitanism, etc.... but also: difficulty of use, street conflicts, excessive size, isolation between areas and among many more concepts, inequalities of all kinds among its inhabitants.



When we knew Saint Denis, thanks to the visit organized, we discovered a small city almost absorbed by the large city, but still retains characteristics of what was once, a peaceful city, pedestrianly accessible to all its parts, with its small shops (already of another type different from the original ones), with small houses with their part of garden and with a certain almost rural spirit already practically disappeared in the great Paris.

An approach to the place of action, presents a difficult place, strangled on two sides, by the river and the railroad track, empty, with specific interesting buildings and an appreciable social reality at the foot of a complicated street.

Compared to the area on the other side of the river, quiet and peaceful, it is bustling and of great street activity by a young and multiracial population especially African-French and Arab-French. The predictably future users of the new actions and residents in them.

In my opinion the objectives to be solved are excessively ambitious and difficult to address for a team of students, even by a multidisciplinary team that was formed, as usual, by: architects, engineers, sociologists, and more specialists from many disciplines.

On the other hand, the program contemplates resolving at least the following issues:

- An Urban Plan, which providing identity to the area of action, follows the guidelines contemplated in the Global Director Plan.
 - A solution of the different housing models that respond to the social and family realities of future users.
 - A nursery school that completes the existing endowment in the area.
 - A recovery - reuse of existing historical buildings.
- Each of them capable of becoming a project in itself.

The climate of the area without being extreme, presents great differences between winter and summer, which should be considered and resolved in an appropriate manner.

We cannot forget that one of the objectives of the contest is that important and difficult agreements have been reached, so that what is projected is realized, is a reality. I think that this and the challenge of working with a problematic that can be extended to many parts of the planet at different scales and situations, are the real strengths and opportunities of the call.

OLEKSANDR PIVOVAROV
KIEV NATIONAL AVIATION UNIVERSITY
UKRAINE

GENERAL CONTEXT OF THE CITY

Paris is a city of traditions and innovations, revolutionary innovations! Advanced urban planning solutions. For centuries, modern development, magnificent parks and natural oasis have been built. Love for water, the river is laid in the urban theme. The river as a transport artery, a place for housing and a recreational resource is typical of Paris. This quality of the city is worth preserving and multiplying. The design site is washed by a river on both sides of this unique place.

GENERAL CONTEXT OF THE SITE

In addition to areas with royal palaces and gardens, the bourgeois quarters of the mountains consist of ordinary residential and industrial areas, neighborhoods. This area is Saint-Denis,



selected for competitive design. Competitive design applications should include design developments for this location. They should identify the main fundamental factors that have already been adopted and need to be taken into account in further design. They should be visible new transport scheme, the trend of new construction, zoning. This will give an opportunity to agree a competitive decision on the local site with the large-scale idea of the district, the city.

CONSTRUCTION

Design and construction will be carried out in accordance with the principles of sustainable development. A green, ecological, energy-efficient, multi-comfort environment should be created. Applying the principles of new urbanism will provide the necessary solutions. Affordable housing is one of the challenges of sustainable development. Production will remain in the area, but it will refocus on high-tech and intelligent. Taking into account the noisy highway from the east and the assumption of a fundamental change in transport. The existing network of bicycle rentals and other environmental vehicles affects the pedestrian and transport scheme. This type of transport should be envisaged. Reduce local traffic. Save the greens and apply all kinds of horizontal and vertical landscaping.

SOCIAL, CULTURAL AND HISTORIC ASPECTS

After a thorough and comprehensive analysis, the territory is divided into functional zones. The main objects and the main factors that need attention and accounting are specified. According to the assignment, P2 is an object of history that needs to be preserved. In my opinion, it can be revitalized, turned into a school - kindergarten. Provided by the task. We will get a great example of the preservation of a building with a new function needed during this period and for this place. This example of the conversion of industrial buildings into a modern green building is DOMOLAB. The division of spaces into public and private ones in the general plan. First-level facilities, local. The population is multi-ethnic and multi-ethnic. Providing services to each other, including providing work. Local labor app. Creating jobs.

CLIMATE / COMFORT CHALLENGES

Taking into account the climate and creating a multi-comfortable environment of natural, urbanized and creating a multi-comfortable indoor climate is the main task and method of design. Seasonal functioning of all institutions and natural objects. All-season comfort. Use alternative energy sources of solar collectors for heat and photovoltaic. Use of waste for controlled heat exchange. Heat pumps to reduce the load of heating. And so on.

KEY CHALLENGES OF THE TASK

A multicultural facility with a multifunction environment that meets the requirements of sustainable development.

GUILLERMO GUZMAN
UNIVERSITY OF NOTTINGHAM
UNITED KINGDOM

This will be a complex task because it requires to have a deep understanding of the current state of the area and what it's expected to happen after it gets revolutionized by the Olympics.

The project involves a lot of functions, and different types of construction: new, retrofit / housing / services / schools / recreation... all together in harmony - a very particular harmony that this neighborhood of Paris requires...

There are a number of urban infrastructure projects on their way that will change the area of the project, but there's no certainty on how this change will be, so this project DEMANDS from

the competitors to MAKE AN INFORMED GUESS on how it would be... But even more important: to realize that their design can INFLUENCE its evolution by intervening the site. Therefore, proposals would have to contain a quite developed narrative to support them...

It's clear that proposals can become either good or bad influence on the site, and this will depend on how the design intentions are reflected in the proposals, and how much the identity of the place has been captured and valued. This neighborhood is very rich and diverse culturally - this must be considered!!!!

This project is NOT about providing a "modern" architectural approach" for this particular area of Paris, BUT to deliver a "realistic" and "human" vision of the "FUTURE" of Paris, and urban living in general: considering a global challenges of mass migration, diversity, climate change, etc...

I would recommend all teams to look at other cities who have held Olympics, cities that have evolved from industrial to habitational areas... There's a lot out there to be inspired and aware of.

Saint-Gobain would like to thank all the people that participated and support the organization of the Teacher's Day 2020.



*Raphaëlle Vert / Charlotte Saint-Jean / Fanny Hermenier / Zuzana Peskovan / Geraldine Falzon / Pana Radu
Irina Raud / Oleksandr Pivovarov / Slawomir Szpunar / Olivier Celnik / Giancarlo Paganin / Ghislaine Bagdi
Pamela Hernández / Edgars Bondars / Carlos Pérez-Plá de Viu / Andrzej Duda / Roberta Pozzi / Petri Aarnio
Nader Boutros / Ema Ruhigová / Dominique Lefaivre / Guillermo Guzman / Nande Korpnik*

