

Port of Rijeka authority

Riva 1, 51000 Rijeka
(main Promoter)
and

The City of Rijeka

Korzo 16, 51000 Rijeka

In cooperation with

Rijeka Architects Association (DAR)

Dežmanova 2a, 51000 Rijeka

hereby extend an invitation to the following

PUBLIC, INTERNATIONAL, OPEN, SINGLE-STAGE, ANONYMOUS, IDEAS

COMPETITION

**FOR THE URBAN-ARCHITECTURAL CONCEPT DESIGN
FOR THE DEVELOPMENT OF THE DELTA AND PORTO BAROS AREA IN RIJEKA**

Registration number of the competition: 165-13-RI-UA

The Competition Documentation has been prepared by:

The City of Rijeka

City Department of Urban Development, Environment and Land Management
Korzo 16, 51000 Rijeka

and

Rijeka Architects Association (DAR)

Dežmanova 2a, 51000 Rijeka

Rijeka, July 2013

Content:

The Competition Documentation contains the following sets:

A. Competition Rules

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2. Schedule and deadlines
3. Awards
4. Competition jury
5. Documents
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 - C/ Urban zoning indicators for the construction of buildings and surface development
 - D/ Planning Procedures (SP, MP)
 - E/ Urban planning indicators and conditions of location and building according to the typology of buildings and surfaces

C. Competition Basis

1. Historical and urban development of the Delta
2. Detailed spatial plan of the Delta central city park
3. Location of the facility for waste water treatment Rijeka (UPOV)
4. Conservational plan for the Delte and Porto Baroš area
5. Geotechnical report
6. Sea and wind impact on the coastal belt of Delte and Porto Baroš area
7. Drawings:
 - 7.1. Geodetic survey 1:1000 (dwg)
 - 7.2. Facades of the buildings in the complex Delta (dwg)
 - 7.3. Situation UPOV
8. Photo documentation
9. Orto-foto footage
10. Images for photomontage

The content of each set is stated at the beginning of each relevant set of this Competition Documentation.

A COMPETITION RULES

1. GENERAL TERMS

1.1. Legal and regulatory framework:

The competition will be carried out in accordance with Part 2. of the Public Procurement Act of the Republic of Croatia (published in Official Gazette of the Republic of Croatia 90/11, hereinafter referred to as the Public Procurement Act) and the Rulebook on competitions in architecture and urban planning (published in Official Gazette of the Republic of Croatia 112/06) of the Association of Croatian Architects and the Croatian Chamber of Architects, if they are not in contradiction with the law. Competition registration number given by the Competitions Committee is 165-13-RI-UA.

1.2. Competition Promoter is:

Port of Rijeka authority, as the Main Promoter, with registered seat at Riva 1 in Rijeka, represented by the executive director PhD.Vlado Mezak and
City of Rijeka, with registered seat at Korzo 16 in Rijeka, tel +385 51 209333, represented by the mayor mr. sc. Vojko Obersnel

1.3. Competition organizer is:

Rijeka Architects Association (DAR), with registered office at Đure Šporera 8 in Rijeka, represented by the president Igor Rožić, d.i.a.
Competition Custodian is Maja Čukelj, d.i.a., tel: +385 91 672 5371, email:natjecaj@d-a-r.hr

1.4. Type of competition

The Competition shall be public, international, open, single-stage, anonymous, ideas.

Number of public procurement procedure:VV-07/13 L.U.

Based on Article 13 of the Public Procurement Act (Official Gazette no. 90/11), there are no economic operators with whom the Port of Rijeka Authority and City of Rijeka may not execute the public procurement contracts (in the capacity of the tenderers, member of a group of tenderers or subcontractors to the elected tenderer).

This competition is carried as procedure preceding the procedure of award of concession for the areas of Delta and Porto Baroš.

The estimated value of the procurement is based on the total value of the procurement, including awards and payments to the participants and it amounts to HRK 1.300.000,00.

CPV:71000000-8

1.5. Competition purpose and goal

Is to obtain urban design proposals for the Delta area which will introduce an innovative model of viable development, in which qualitative values (the environment), identity values (the history, contemporary urban life) and inclusive values (the society and social expectations) will define the guidelines for the Delta site, triggering the renewal process for of the other suitable waterfront areas in Rijeka as well as the city and the country at large.

The awarded competition entries will serve as an expert basis to produce documents of urban planning.

1.6. The right to participate

The right to participate as authors have all professional individuals and legal persons regardless of the place of residence/seat. The expertise is satisfied if at least one author holds a master or bachelor in the field of architecture and urbanism. Individual authors or a group of authors must include at least one licensed architect registered in the Directory of Licensed Architects in Croatia - HKA.

1.7. Members of the Competition jury, their Substitutes, Expert Consultants, Rapporteurs, Competition Custodian, author of the competition brief, their close relatives and collaborators are not allowed to submit their entries in the competition.

1.8. Each competitor, either an individual or a team, may only submit one entry in the competition.

1.9. The invitation to competition and competition results will be announced in Electronic Public Procurement Classifieds of the Republic of Croatia, and in the Official Journal of the European Union. The invitation to competition and competition results will also be published in the printed media "Novi list", on the web site of Port of Rijeka authority, www.portauthority.hr,

www.mojadelta.com, on web site of the City of Rijeka www.rijeka.hr, the DAR web pages www.d-a-r.hr and international web-portals.

2. SCHEDULE AND DEADLINES

2.1. Competition start date

Competition start date 05. July 2013., and is determined as the date of announcement in Electronic Public Procurement Classifieds of the Republic of Croatia.

2.2. Date and time of submission of Competition Entry

Deadline for submitting the competition entries is on Tuesday 22. October 2013. until 17:00 hours in the Rijeka Architects Association (DAR), Dežmanova 2a, 51000 Rijeka, Republic of Croatia, regardless of the method of delivery, with a note: FOR URBAN AND ARCHITECTURAL COMPETITION DELTA – DO NOT OPEN.

2.3. The jury will conclude with work no later than 25. November 2013.

2.4. Information on the take-over of the Competition Documentation

Competition rules will be announced in Electronic Public Procurement Classifieds of the Republic of Croatia, and on the web site of Port of Rijeka authority, www.portauthority.hr, www.mojadelta.com, on web site of the City of Rijeka www.rijeka.hr, the DAR web pages www.d-a-r.hr.

Complete Competition documentation (rules, assignment and basis) are available for downloads at the web page of the Rijeka Architects Association (DAR) www.d-a-r.hr from 09. July 2013.

The take-over of the Competition Documentation is free of charge. Any further information can be obtained by mail: natjecaj@d-a-r.hr

2.5. Questions and answers

The Competitors may pose questions up to 26. July 2013 at natjecaj@d-a-r.hr.

Answers will be published by 07. August 2013. in Electronic Public Procurement Classifieds of the Republic of Croatia and on the DAR web pages www.d-a-r.hr.

2.6. **Anonymity** will be respected until the jury describes the competition works and make their opinions and decision on awards. Decisions, opinions, reports and records shall be submitted to the Promoter for further action. Authorized representatives of the Promoter, after receiving the decision of the Jury, shall proceed with determination of the ability of the awarded competitors in accordance with formal legal requirements of the tender documents (General Conditions of competition). The Promoter passes the decision on the selection and delivers it to all the competitors.

2.7. **Competition results will be published** within the deadlines prescribed by the Public Procurement Act. Additionally the Promoter shall inform the public on the results of the competition by publishing them on DAR web pages www.d-a-r.hr, on the web site of Port of Rijeka authority, www.portauthority.hr, www.mojadelta.com, on web site of the City of Rijeka www.rijeka.hr and in the printed media "Novi list". Promoter makes the decision about the selection and sends it to all competitors.

2.8. Exhibition of the competition entries

Exhibition of all competition entries and discussion with the competition jury will be organized within one month after the closing date of the Competition jury evaluation process. All competitors will be informed on the date and location of the exhibition and discussion by email, and notice will be published on the official DAR web pages www.d-a-r.hr.

2.9. Unrewarded entries

Those Competition entries that have not been awarded may be taken over by the Competitors within 15 days of the closing of the Exhibition, or at Competitor request, sent by mail, entries can be sent to them on their own expense. After the expiry of this deadline, DAR shall not longer be responsible for the Competition Entries.

3. AWARDS

3.1. On condition that a minimum of ten (10) entries meet both professional requirements and the competition terms and conditions, the Competition jury will award the following prizes

three (3) equal first prizes in the net amount of 26.800,00€

3.2. In case a smaller number of entries are submitted than specified under 3.1., the prize number and amounts will be reduced in proportion to the number of entries submitted

3.3. The Competition jury may award written recognition to specific entries.

4. COMPETITION JURY

To evaluate the entries submitted, the organizer and the promoter appointed as follows:

Members of the Competition jury:

1. Elia Zenghelis, architect, Greece,
2. Srđan Škunca, architect, The City of Rijeka
3. Vedran Mimica, architect, Croatia/USA,
4. Pippo Ciorra, architect, Italy
5. Vasa Perović, architect, Slovenia
6. dr.sc.Vlado Mezak, executive director, Port of Rijeka authority
7. Maroje Mrduljaš, architect, Croatia

Substitutes of the Members of the Competition jury:

1. Miroslav Gudelj, architect, Croatia
2. Siniša Glušica, architect, Croatia

Expert consultants:

1. Ivana Šoljan, consultant for development, Croatia
2. Rene Lustig, civil engineering, consultant for hydrodynamics, Croatia

Rapporteurs:

1. Jana Rozman, architect, Croatia
2. Oliver Čikeš, architect, Croatia
3. Bojan Linardić, architect, Croatia

Competition Custodian

1. Maja Čukelj, architect, Croatia

5. Documents

The competition organizer will make the following documents available to all competitors:

- A Competition Rules
- B Competition Assignment
- C Competition Basis
 1. Historical and urban development of the Delta
 2. Detailed spatial plan of the Delta central city park
 3. Location of the facility for waste water treatment Rijeka (UPOV)
 4. Conservational plan for the Delte and Porto Baroš area
 5. Geotechnical report
 6. Sea and wind impact on the coastal belt of Delte and Porto Baroš area
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 - 7.3. Situation UPOV
 8. Photo documentation
 9. Orto-foto picture

6. Competition entry content

6.1. A competitor is required to follow the Competition Rules and conditions when preparing a conceptual urban and architectural entry with the following appendices:

I THE TEXTUAL PART

1. Description and explanation of the overall concept (maximum 9000 characters)
2. Graphic drawings scaled to A3 format
3. Ispunjena Tablica u prilogu natječajnog programa s iskazom postignutih površina

The textual part must be enclosed in A3 format folders. All graphic drawings scaled to A3 format sheets must be enclosed as supplements to the written part. The written part may contain drawings, schemes, photographs, photomontages and other presentations to ensure that the competition solution is explained and argued effectively. The textual part must also contain a specification of spatial indicators according to the tabel enclosed in competition assignment.

II GRAPHICS

1. Spatial arrangement of the entire area, scale 1:1000
2. Typical sections and views/facades of the intervention, one transverse and one longitudinal section are required, scale 1:1000
3. Conceptual designs of buildings typologies with typical plans, sections and facades, scale 1:500
4. Photo-montages using two given photographs, additional spatial presentations per segment are at the discretion of each competitor
5. Solutions of characteristic public space (square, coast, etc.), scale 1:200/500
6. Schemes, diagrams, analysis chosen by the competitor

6.2. The graphic presentations must be submitted on three (3) coated paper boards, with a format of 1189/841mm (A0). A3 format folders with the textual part and graphic part, scaled to A3, must be enclosed in seven (7) copies.

6.3. The Competition Entries (textual part) must be drawn up in English or bilingual in Croatian and English, while the graphic parts of the entry must be described in English.

7. EVALUATION CRITERIA

The Evaluation Committee shall evaluate the individual Competition Entries solutions in accordance with the following criteria:

Formal criteria:

The competition entries will not be considered if:

- a) they are submitted after the date specified under 2.2,
- b) they do not contain appendices listed under 6.,
- c) the equipment of the competition work is not in accordance with section 8.

The criteria:

- compliance with the spatial planning documentation and competition assignment
- the extent to which the project responds to the aesthetic, social, and economic context of the surrounding community
- the economic feasibility, constructability, and development timeline of the project proposal
- the responsiveness of the project to issues of energy use, water & resource management, and healthy indoor & outdoor living environments
- accessibility and traffic solutions

Based on Article 82, Para 2 of the Public Procurement Act, the criteria are listed from the most to the least important. The relative value of the criteria has not been indicated due to the fact that all the criteria are interrelated and that they are not suitable for numeric valuation.

8. COMPETITION ENTRY FORMAT

8.1. All the constituent components of the Competition Entry must be labelled with the same entry code. The code is made up of five Arabic numbers. It must be placed in the right-hand upper corner and have maximum dimensions of 2.0 cm (length) X 0.5 cm (height). The code number must be indicated on each graphic sheet, sealed envelope and on the cover page of the textual part (it must not be placed on the inside pages!). All entry codes shall be re-coded at opening, and all the constituent components of each Competition Entry shall be allocated a single working code.

8.2. All graphic and textual parts are also submitted on CD-ROM. CD-ROM must contain the following:

Graphic posters in (at three posters in all three formats):

1. pdf (original format A0);
2. jpg or tiff 800x1142 pixels

3. jpg or tiff 70x100 piksela.

The textual part must be in u Word DOC or DOCX format.

8.3. The Competition Entry must be submitted anonymously in a tightly sealed envelope. With the Competition Entry competitor is required to submit three (3) sealed, envelopes marked "AUTHOR", "ADDRESS FOR NOTICE" and " AUTHORIZED DESIGNER ", containing the following information:

A) envelope marked " AUTHOR" must contain the following :

1) The statement of the competitor which shall contain: the names and addresses of the authors of the competition work and experts included in creation thereof. The legal entities must also indicate the authorized representative. The statement needs to be signed by all authors or, in case of legal entity, its authorized representative.

By their signatures the competitors are confirming the authorship of the competition work i.e. that they are authorized to submit it to the competition and that they are empowered for its further use, amendments and, possibly, full or partial transfer of rights of exploitation of the work to the Promoter.

By their signatures, the competitors confirm that, pursuant to the terms and conditions of competition, they have the right of participation, that they agree with assignment of the contract for further development of the competition work and that they hold all required authorizations and capabilities.

In case they are not, they are required to nominate authorized and capable person.

The group of competitors is an association of several economic operators which has timely submitted a joint competition work. In case of a group of competitors, the statement envisaged by this item shall contain the information for each member of the group and the indication which member of the group of competitors is authorized for communication with the Promoter. The liability of members of the group of competitors is joint and several.

2) Data for the payment of the prize

a) Form for prize-winning authors (Croatia)

- Name/names of authors, address/es and telephone/s of authors, e-mail address;
- Author's personal identification number (OIB);
- Pension system pillar
- If author is an individual VAT taxpayer
- Author's bank-account number/s and the bank name;
- Division of prize money among authors in percentages (signed by all authors).

If more than one person participated in the preparation of competition entry, all persons listed on this form are required to personally sign the statement.

b) Form for prize-winning authors (Competition entrants not from the Republic of Croatia):

- Name/names of authors, address/es and telephone/s of authors, e-mail address;
- Passport copy,
- Power of attorney for the purpose of OIB takeover,
- Name and address of the bank, SWIFT (international bank code),
- IBAN (foreign currency account number)
- Division of prize money among authors in percentages (signed by all authors).

3) Certificate of professional capability for one of the authors - architect registered in the Directory of Licensed Architects in Croatia - HKA.

B) envelope marked " ADDRESS FOR NOTICE " must contain the following

1) The name, address, e-mail address and phone number of contact person regarding the refund of the competition work and all information during the competition.

Note: Envelopes marked "AUTHOR" and "ADDRESS FOR NOTICE" are opened by the jury, after the decision on the placement and awards, and after making an explanation for all the work.

C) enveloped marked " AUTHORIZED DESIGNER " must contain the following:

- 1) basic information about the "person in charge of the design" (designer of the urban planning documentation): name, address, OIB number, person in charge, account number
- 2) evidence / documents listed in section 9. and 10.

9. REASONS FOR EXCLUSION OF COMPETITORS AND MANDATORY DOCUMENTS WHICH NEED TO BE ENCLOSED

9.1. Pursuant to Article 67 of the Public Procurement Act, the contracting authority (Competition Promoter) shall exclude a competitor from participation in a public procurement procedure in the following cases:

9.1.1. if the economic operator and/or the person authorised under law to represent the legal person of the economic operator has been the subject of a conviction by final judgment for one or more of the following criminal acts: associating for the purpose of perpetrating criminal offences, accepting a bribe in business activities, offering a bribe in business activities, abuse of position and official powers, abuse in performing governmental duty, illegal intercession, accepting a bribe, offering a bribe, fraud, computer fraud, fraud in business activities or concealing unlawfully obtained money, or the corresponding criminal acts in accordance with the legal provisions of the country in which it is established or from which the authorised person comes,

9.1.2. if it failed to fulfil the obligation to pay all outstanding tax liabilities and contributions for pension and health insurance, unless the economic operator was granted delayed payment of the said obligation under special regulations

9.1.3. if has submitted false information at the time of submitting the requested documents.

Where there is doubt as to the truthfulness of the information in the presented documents or declarations by the economic operators, the contracting authority may address the competent authorities to obtain information concerning the situation of economic operators concerned..

9.2. The documents which must be submitted by competitors based on which the existence or non-existence exclusion reasons is to be established:

9.2.1. For the purpose of proving of the circumstances referred to in paragraph 9.1.1. of this Documentation, the economic operator shall submit in the tender or request to participate an extract from the criminal record of the state in which the economic operator is established and/or the state of citizenship of the person authorised under law to represent the legal person of the economic operator, and if such a record does not exist or is impossible to obtain, an equivalent document issued by the competent judicial or administrative authority of the state in which the economic operator is established and/or the state of citizenship of the person authorised under law to represent the legal person of the economic operator.

Extracts or documents may not be older than six months of the date of commencement of the public procurement procedure.

If in the state in which the economic operator is established and/or the state of citizenship of the person authorised under law to represent the legal person of the economic operator the documents referred to in paragraph 9.1.1. of this Documentation are not issued, are impossible to obtain or if they do not include all the criminal acts referred to in paragraph 9.1.1. hereof, they may be replaced by a declaration on oath or a corresponding declaration made by the person who is authorised under law to represent the legal person of the economic operator before the competent judicial or administrative authority or the notary public or the competent professional or trade body in the state in which the economic operator is established and/or in the state of citizenship of that person. **The form of the Declation (Enclosure 1)** makes a consistent part of these General Conditions.

The declaration shall not be older than six months of the date of commencement of the public procurement procedure.

9.2.2. For the purpose of proving the circumstances referred to in 9.1.2 hereof, the economic operator shall submit in the tender or request to participate a certificate issued by the tax authority concerning the state of debt or an equivalent document issued by the competent authorities of the country in which the economic operator is established, which may not be older than 30 days of the date of commencement of the public procurement procedure.

If the document referred to in the preceding paragraph is not issued in the country in which the economic operator is established, it may be replaced by a declaration on oath or a corresponding declaration made by the person who is authorised under law to represent the economic operator before the competent judicial or administrative authority or the notary public or the competent

professional or trade body in the country in which the economic operator is established, which may not be older than 30 days of the date of commencement of the public procurement procedure.

In the case of a group of candidates, the circumstances of exclusion shall be established for all members of the group separately.

10. PROVISIONS CONCERNING COMPETITORS' CAPACITY AND MANDATORY DOCUMENTS WHICH NEED TO BE ENCLOSED

10.1. The requirements of legal and business capacity of competitors and documents which prove such capacity (Article 70, Para 1, 2 and 3 of the Public Procurement Act):

10.1.1. The competitor must prove its enrolment with the court, trades, crafts, professional or other appropriate register of the county in which the economic operator is established.

The registration in the register is proven by an adequate extract, and if those are not issued in the country in which the economic operator is established, the economic operator may submit a declaration on which the signature is legalised by the competent body.

The extract or declaration may not be older than three months of the date of commencement of the public procurement procedure.

10.1.2. Certificate of professional capability for one of the authors - architect registered in the Directory of Licensed Architects in Croatia – HKA, in accordance with paragraph 1.6. of the General conditions of competition.

All documents which need to be enclosed pursuant to Items 9 and 10 hereof may be submitted in uncertified copy. Uncertified copy also implies uncertified print-out of an electronic document. In the case of a group of competitors all members of the group shall prove their capacity of this paragraph individually.

Note:

The envelope of awarded competition works under the title "AUTHORIZED DESIGNER" shall be opened by the authorized persons of the Competition Promoter and that after ranking of the competition works by the Competition Jury and before passing of the decision on award of the prizes. The authorized persons of the Competition Promoter shall check the documents of Item 9.2 and 10 hereof based on which they shall establish whether any reason for exclusion provided by the Public Procurement Act have been fulfilled.

11. FINAL PROVISIONS

11.1. By submitting their entries, competitors are accepting the competition terms and conditions, and public exhibition and publication of their entries. The competition entrants are required to keep their entry anonymous up until the competition results are made public.

11.2. Competition organizer and promoter are not liable for damage caused during the transport of the competition entries, the work of the Competition Jury and setting the exhibition of the competition entries.

11.3. A competition entrant is the author of the competition entry and has copyrights of the entry. The promoter will by awarding competition prizes acquire the right to use the material submitted for the competition.

11.4. The awarded competition entries will be included in the documentation for international tender for award of concession on Delta and Porto Baroš area. All the bidders in the international tender for concession shall be required to adhere to one urbanistic solution of one of the awarded competition works, at their preference. The awarded competition entries will serve as an expert basis to produce the documents of urban planning.

11.5. The winning authors and the promoter of the competition are required to act in accordance with the recommendations made by the Competition jury regarding further actions and use of the prize-winning entries.

11.6. The competition organizer will present the competition entries upon completion of the competition in an exhibition open to public and a press conference. The competition organizer will deliver the Port Authority of Rijeka and the City of Rijeka the Competition Protocol on the results of the competition in order to unify the professional and public interest. Competition Promoter reserves the right to use and publish prize-winning entries for official purposes.

11.7. Graphic documents made available by the organizers in the competition documentation may be used by competition entrants solely for the purpose of designing their competition entry.

11.8. Any dispute arising from this competition will be resolved primarily by mutual agreement, and in case of failure to reach agreement, the jurisdiction of the court in Rijeka will apply.

11.9. The deadline for submission of the appeal is established by Article 153 of the Public Procurement Act. The appeal is filed to the State Commission for the Supervision of the Public Procurement Procedures, Koturaška cesta 43/IV, 10000 Zagreb with simultaneous delivery to the Promoter by way of a provable method. The appeal which is not delivered to the Promoter shall be considered as untimely appeal pursuant to the provision of Article 154, Para 4 of the Public Procurement Act.

Competition jury
Rijeka, 02. July 2013.

STATEMENT OF NON-CONVICTION

Pursuant to Article 67, Para 3 of the Public Procurement Act (Official Gazette no. 90/11), I declare that **the person authorized to represent the economic operator:**

First and last name of the authorized representative:

Personal identification number of the authorized representative:

and the economic operator

Name of the economic operator: _____

Register seat and address of the economic operator: _____

OIB of the economic operator: _____

which is participating as competitor in this public procurement procedure, has not been subject of a conviction by final judgment for one or more of the following criminal acts: associating for the purpose of perpetrating criminal offences, accepting a bribe in business activities, offering a bribe in business activities, abuse of position and official powers, abuse in performing governmental duty, illegal intercession, accepting a bribe, offering a bribe, fraud, computer fraud, fraud in business activities or concealing unlawfully obtained money, or the corresponding criminal acts in accordance with the legal provisions of the country in which it is established or from which the authorised person comes,

Done at _____, _____ 2013.

For the competitor:
(signature of the authorized person)

seal _____

Competent body: judicial or administrative authorities or notary public or competent professional or trading body in the country of registration of the economic operator and/or country of nationality of the concerned person.

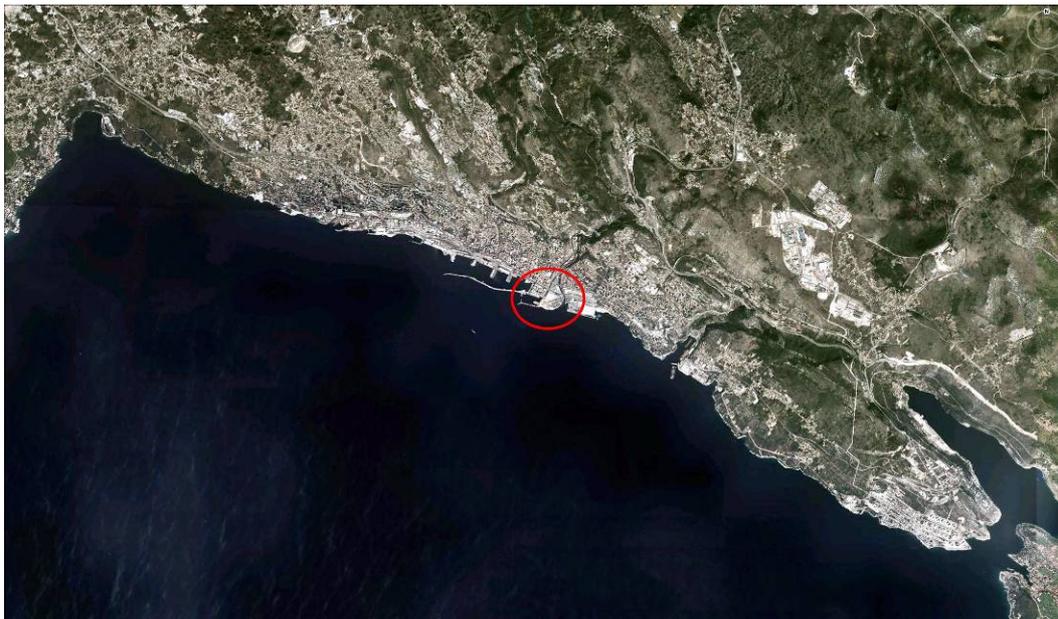
B COMPETITION ASSIGNMENT

1. Introduction
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1. Introduction

Rijeka, perhaps more than any other place along the Adriatic, transmits the concept of border, margin and limes. This border extends far beyond its urban and territorial environment, involving the entire Central-European region, with Rijeka as its symbolic point of representation. Rijeka is a city with a labored and complex history, which has passed one form of domination and occupation to another, from many leading roles to the times of decline, which all were subjected to extinct ideologies and contrasting politics.

Within the changing geo-political conditions, certain regions are acquiring greater importance and a more significant weight, in both cultural and political terms. This is clearly the case with the Euro-Adriatic Region at the moment of Croatia's accession to the European Union, and is destined to become a key region for a new series of relations between East and West, between North and South. Rijeka sees this moment as an opportunity to redefine its significance and the Delta area becomes the central point of this effort.



1.1. Rijeka

The city of Rijeka could once again play a predominant role in this geo-political scenario, as a city located in the key position. Rijeka enjoys the proximity of capital cities like Zagreb, Ljubljana and city of similar genesis, Trieste, creating a sort of quadrangle of regional significance that eventually will link to further European destinations. Moreover, Rijeka is positioned in the most northern part of the Adriatic, giving access to the Mediterranean Sea and eventually providing shorter maritime routes towards the Near, Middle and Far East. It is also a point of access towards a vast northern internal region that includes, other than Croatia itself, Slovenia, Austria, Hungary, Slovakia, Germany, Ukraine etc. Although transition process left a lot of scars, Rijeka is today a relevant port, trying to regain the status as the port of primary importance for the entire region, city with a lot of SMEs looking for their own market niches, city of vivid university and urban life.

The city of Rijeka is also inserted within a distinct natural context, overlooking the sea on one side and surrounded by a largely uncontaminated inland area on the other. The city itself reveals its history in many ways. The Roman period is overlapped by the Medieval Croatian, Austro-Hungarian, Italian, the Socialist era

to the present time of modern Croatian state, member of EU. The succession of these historical phases has left evident and important traces on the urban fabric and its buildings. However, what is currently most visible is the dominant presence of industrial buildings and port structures, that define the present character of the city and of its waterfront. These industrial structures are partially abandoned, partially decommissioned and partially still in use. Almost entire waterfront in Rijeka is occupied by maritime structures, port activity and warehouses, fenced off by the protected custom's zone of the port, thus preventing the public contact to the sea. There is no other city in the Adriatic basin that is separated in such an extensive and continual manner from its sea front. Recent opening to the public of the attractive two kilometer long breakwater, dotted with the remains of cranes once used to move goods, is perhaps the most obvious evidence of the huge potential of Rijeka's waterfront industrial heritage.

This new synthesis between existing urban structure, industrial landscape and its natural counterparts - hills, valleys, river and the sea, concentrated on the rather narrow strip of territory - is the challenge facing proposals for the Delta area.

Rijeka has recently experienced significant social and historical transitions and conflicts, like the transition from a socialist into a post-socialist economy following the war and the independence of Croatia in 90's. All these events have uncovered the political, social and economic contradictions between the systems and the processes of the transition decreasing overall competitiveness and revealing structural problems and the wavering or even missing vision of what city should be. The actual port activities and industries have suffered long the way, even if they are presently gradually recuperating.

As a consequence, the significant urban potential of the Rijeka waterfront still remains to be addressed through planning, research and urban regeneration.

However, it is possible to regard this temporal delay as an important resource.

The fact that Rijeka did not manage to recover abandoned areas and waterfront so far, can be utilized to shift focus from depleted models of speculative developments to the new urban planning techniques and architectural positions where the themes of safeguarding the natural environment, adaptability of the planned structures, saving energy as well as issues of social responsibility become the primary tools for creation of the coherent and sustainable development for a socially inclusive city.

Rijeka is now at the point of significant urban and landscape transformation. It now has the possibility of proposing a new balance between the necessary economic developments with the inalienable valorization of the environmental and the natural resources of its context.

The city of Rijeka with the Adriatic Sea in front and the landscape behind it must reach a new common ground together with the values of its history, tradition and social context as well as how it sees its role as the urban center.

The objective of this competition is to obtain urban design proposals for the Delta area which will introduce an innovative model of viable development, in which qualitative values (the environment), identity values (the history, contemporary urban life) and inclusive values (the society and social expectations) will define the guidelines for the Delta site, triggering the renewal process for of the other suitable waterfront areas in Rijeka as well as the city and the country at large.



1.2. The Site

The South Delta with Baroš Port forms the spatial ensemble which could obviously be treated as an integral zone. It is delimited by the two water streams (Dead Channel and the Rječina River) on the west and east side and by the new vehicular artery D404 on the north. The current planning documentation for a mix-use urban development is characterized by sustainable and ecological concerns, where residential, cultural, recreational and commercial activities, as well as public areas will be integrated within a new district. The adjacent Baros Port should harbor the new marina suitable for mid-size and large-size yachts complemented by touristic and service facilities.

North Delta area is presently occupied with service facilities as well as with central public parking lot. The northern tip of this area is articulated as a small park with the World War II monument. The current Master Plan (General Urban Plan, GUP) designates this area as the major park area of the city centre, combining paved and green areas, water elements, etc. with small facilities for recreational and cultural purposes. This part of Delta aims to connect with the existing main public spaces (Korzo, Tito Square, etc.) and yet continue the transversal relationship along the river from the sea to the Hartera area (ex-Paper mill complex) and further along Rječina canyon to the hinterland. The triangular form of this area is shaped by Chanel and Rječina River as well by D404 road. This area is connected with the city via several existing bridges whereas the connection and integration to the new South Delta district remains an open issue to be addressed by the competition entries.

1.3. The Program

The Delta is part of the "Rijeka Gateway Project", a complex development program run by Port of Rijeka Authority supported by the World Bank, which aims at redeveloping port/city interface and improving the port traffic connection with the international road and railway corridors. The basic assumption on which this project set out its framework for the entire port development is the relocation of the existing port facilities from Delta and consequently, the redevelopment of this area and its transformation into an urban quarter.

The Delta area has been under development for decades, with various proposals, master plans, competitions, workshops and studies produced in the process and illustrated in the competition materials. All this previous work together with the General Urban Plan of Rijeka (GUP) is the foundation for the Delta competition. The program brief following this introduction is extrapolated from the GUP being the singular officially relevant document that sets planning guidelines for this area.

The competition is being published as a call for concepts as opposed to a design competition, thus enabling the competitors to investigate into both the "land-use/gross build-up area" framework as well as the spatial/urban context of the site and propose the ideas which can challenge the general guidelines and requirements set by the General Urban Plan of Rijeka.

Nevertheless, the framework of the "Rijeka Gateway Project" does set the benchmark for the entries in terms of economics of the project. In other words, the feasibility of the proposals shall be one of the criteria for the assessment of the competition entries.

1.4. The procedure

Being part of the maritime domain, Delta area is governed by the Port of Rijeka Authority (PRA). At the same time, the "Rijeka Gateway Project" does include land-use transformation of this area into the city quarter with the PRA remaining the governing office for the area.

Still, according to the local planning regulations and the logistics of land use procedures, the City of Rijeka is the main regulator for the planning issues.

In order to develop the Delta Area in the way that suits the City of Rijeka and the PRA, both parties have reached the agreement to develop the area through two stages.

First stage is the open, international, urban planning competition which calls for the proposals for the master plan of the area. The evaluation of the entries should result in selecting and awarding three entries which will be included in the documentation for the next stage.

Second stage will be the international tender for bids, the process resulting in commissioning a developer with a long-term concession for the area. The three winning entries from the urban planning competition will form the design framework for the developers competing for the concession for the Delta area.

2. Urban Planning Programme for the Construction and Development of the Delta and Porto Baros Area in line with the Physical Plan of the City of Rijeka and the Master Plan of the City of Rijeka

The Physical Plan of the City of Rijeka was adopted in 2003 (hereinafter: SP) and the Master Plan in 2007 (hereinafter: MP), and they represent the basic documents for the spatial development of the City of Rijeka and regulate the following:

- A/ purpose of the Delta and Porto Baros area (SP),
- B/ detailed purpose of the area (MP)
- C/ town planning indexes of the planned buildings and development of the surfaces (MP),
- D/ planner's procedures (SP, MP),
- E/ town planning indexes and conditions of micro locations and construction according to the buildings' and surfaces' typology

The following text elaborates in detail every above listed part.

A/ Purpose of the Delta and Porto Baros Area

According to the Physical Plan the City of Rijeka, the entire Delta area has been allocated as a construction area for urban purposes, under the name GP-5, and a surface area of 17.36 ha. The determination of this area as building land does not mean that at same time the port activities shall stop, but it is to be assumed that further planning of the area will be directed to its development as an integral part of the urban city structure.

Physical Plan of the City of Rijeka - the Porto Baros area is determined to become a construction area for special purposes, that is the nautical tourism port, under the plan name LN-4, with a surface area of 93.000 m², to become a developed marina bay and shore. With regard to this purpose, the further development of the nautical tourism port shall be continued according to the Ordinance on the Classification and Categorization of Nautical Tourism Ports (Pravilnik o razvrstavanju i kategorizaciji luka nautičkog turizma, NN 72/08).



Figure 1. Extract from the Spatial Development Plan of the City of Rijeka (Sl.N. 31/03)

In analyzing the integrity of the area, the influence of the so-called 'Mrtvi kanal' (Dead Canal) should be taken into account. Mrtvi kanal stretches along the western Delta shore, and is directly connected to Porto Baros. This is a historic water flow with developed shores (detailed description in the annex) intended for small boats which belong to citizens; additionally it represents a direct visual connection, as well as a connection for vehicles and pedestrians with the old town, the city centre, which is one of the reasons why it is so important for the citizens, beside its historic, urban and functional value.

Table 1. Areas determined in the Porto Baroš and Delta Area Plan

no.	Development Area	Zone Name	Surface Area (m ²)
1.	Delta	GP-5	173.600
2.	Porto Baroš	LN – 4, M2	104.400
3.	'Mrtvi kanal' Sports Port	LS – 2	41.400
4.	Rječina River	V	-
	TOTAL		319.400

B/ Detailed Purpose of the Delta and Porto Baroš Area

By the Master Plan the Delta area is divided into four (4) purpose units:

- Public City Park, plan name Z1-3, with a surface area of 40.000 m²;
- The corridor of the main city road and the city railway line that leads through Delta and divides the park area into the following purpose areas:
- Area of mixed purpose, M2;
- Area for public utility purposes, plan name K3-6, with a surface area of 30.000 m², meant to accommodate the waste water treatment plant.



Figure 2. Extract from the Master Plan of the City of Rijeka (SI.N.7/07.)

To simplify the spatial relationships, part of the Delta area part of the Delta situated north of the city road (determined in the purpose of the public city park) is called North Delta by the General urban zoning plan, while the area south from the road corridor is called South Delta, as is systematized in the following table:

Table 2. Plan for the detailed purposes of the Delta and Porto Baros area:

no.	Development Area	Name	Surface Area (m ²)
1.	Delta	GP-5	173.600
1.1.	Public Park	Z1-3	40.000
1.2.	Main City Road and Railway Corridor	-	6.250
1.3.	Mixed Area	M2	97.100
1.4.	Area for Public Utilities	K3-6	30.250
2.	Porto Baros		104.400
2.1.	Port for Nautical tourism	LN - 4	93.000
2.2.	Mixed Area	M2	11.400
3.	'Mrtvi kanal' Sports Port	LS - 2	41.400
4.	Rječina Riva	V	-
	TOTAL		319.400

1.1. Public City Park

According to the MP, the Public City Park Delta should become the new Main City Park, which speaks in favour of the importance given to the development of the park for the city centre, as well as for the development of the Delta area.

The form of the future city park will be an elongated triangle. Its northern tip is already developed in 1955, when a monument of the city liberators from 1945 was placed there. The legs of the park are in line with the shores of the 'Mrtvi kanal' Canal and the Rječina River and will definitely be developed together with the works when the new park will be constructed. It is important to mention that there are already good pedestrian connections built through the mentioned shores to surfaces and squares in the city centre at the other side of the waterway. One of the connections runs over the Rječina River Bridge for vehicles and pedestrians and the other over the 'Mrtvi kanal' Canal, which is the 'Most hrvatskih branitelja' Bridge for pedestrians only.

Thanks to the liberators' monument and the 'Most hrvatskih branitelja' Bridge, the Delta area already has qualities of a monument which should be completed with a monument to Pope John Paul II and remind the citizens of his visit in Rijeka in June 2003.

The lack of public green spaces is a problem in the City of Rijeka, although numerous historically important parks exist in the city, with lush vegetation. As the city centre is densely covered with buildings and copes with high traffic volumes, in microclimatic sense, the city centre often behaves as an island of heat which is the reason why the future Delta Park is positioned on the surface between two waterways, that is the 'Mrtvi kanal' Canal (where seawater is mixing with water coming from some wells in the upper riverbed of the 'Mrtvi kanal' Canal) and the Rječina River (most of the year its water comes from the wells around the ex-paper factory), and in the continuing Rječina River Canyon, which is very important and effective, because enormous amounts of fresh air blow above the green parks and are additionally enriched with oxygen and scent and positively influence the microclimate of the wider city centre.

A Detailed Development Plan for the Delta City Park was adopted in 2012.

COMMENT: a summary of the Detailed Development Plan for the Delta City Park is attached to this Programme as a separate unit.

1.2. Main City Road and City Railway Corridor through the Delta

The Spatial Development Plan and the Master Plan of the City of Rijeka regulate also the city highway corridor, with its official name D-404; at the moment the two-way traffic road is constructed and opened for traffic with an ongoing route over the Brajdica area, then into a tunnel under the Pećine district and connected to the city ring road over the Draga traffic node. This route enables a fast and direct connection from the city centre over the ring road to the highway network.

South from the described road a railway line is laid, which comes out of the Railway Station Rijeka (west) and at the eastern end, that is the Brajdica area, and becomes a part of the Brajdica cargo station; it further leads through a spiral tunnel to the Pećine Railway Station which is connected to the main railway line Rijeka-Zagreb.

But according to the Spatial Plan this railway section is meant for one or two lines of the fast city railway with a station in Delta; beside the public bus transportation system, the Spatial Plan foresees the introduction of a fast rail system - the city railway with two routes:

- along the entire city area (it is possible to include the neighbouring municipalities as well). The existing railway Ljubljana-Rijeka-Zagreb within the city area will be used to develop a 18 km long line with the following stations: Pavlovac, Martinkovac, Marčeljeva Draga, Kantrida/Zamet, Krnjevo, Mlaka, Centre (Main Station), Zagrad, Školjić, Sušak, Pećine, Podvežica, Vežica, Draga, Sveti Kuzam.
- The shore will be covered with the line from 3. Maj (shipyard) - Mlaka – Railway station – Riva - Delta – Main station – Pećine station. Passengers will be able to use the fast city railway system running through the Main station and Pećine station.

COMMENT: Scheme of the planned city railway stations shown in the attached map.

1.3. Mixed Purpose Area, M2

The largest part of the South Delta area, almost 10 ha, has been designated as a mixed area, mostly meant for business buildings, with the plan name M2. Part of the Porto Baros – from the 'Senjsko pristanište' Quay to Demetrova Street – has the same purpose. In contrast to the Delta area, the M2 area within Porto Baros is mostly already constructed, where a part of the buildings shows style qualities which demand additional attention in the urban zoning organization of the area.

The Spatial Development Plan of the City of Rijeka and the Master Plan list the areas of Delta and Porto Baros and are understood as areas meant for the extension of the city centre, where the Master Plan proposes a mixed purpose and the following principal ratio:

- approx. 40% of the developed area for residential buildings
- approx. 30% of the developed area for business purposes incl. shops
- approx. 30% of the developed area for other purposes (hotels, culture, leisure etc.).

The ratio of the purposes must be further elaborated through the purpose of the areas, that is through the Master Plan (zoning solution) so that individual buildings or blocks consist of (only) one or more purposes. However, the principle of using mixed purposes shall be developed in a way that will allow the main functions of the area, including the residential, to become visible in strategic locations in order to participate and contribute to the atmosphere of the area itself.

Residential content, that is buildings for permanent and temporary residence are a necessary part for constant living conditions in the area. The apartments and flats should be planned with many different surface areas and different structures, with the aim to meet the market requirements and be situated in many locations. As this area is very exposed, the most attractive apartments will be those with direct shore and sea view, but in order to find the right residential function, it is necessary to take into account all qualities of individual micro locations. The residential standard of apartments will additionally be advanced by wide loggias and terraces (especially terraces on the top floors) atriums, as well as utility rooms, joined thermo-technical heating and cooling systems – the aim is to enhance the attractiveness of the residential buildings and to get away from the image that new buildings could have a degrading impact on the aesthetics and the overall situation of the building during its future exploitation. In order to meet the listed expectations, the aim should be to achieve the quota of at least 8 m²/bed of the surface area of a private or semiprivate open space, such as balconies, loggias, utility rooms etc.

Business contents can be realized in modules, allocated to some floors, as well as in small non-module surfaces mostly in the lower floors, especially in situations where the office is integrated with a sales facility (shop) on the ground floor. Although in the city centre there are many offices and shops currently on offer on the market, the Delta business facilities will be upgraded with additional attractiveness due to its location within the waterfront, many parking lots and a good modular organization which will be flexible to use. Further, the business facilities in Delta will be integrated with flats, too (penthouse), and can become very interesting to businesspersons and be appropriate for their needs.

Shops located within the area cannot be based on the system of a shopping mall, they shall be planned and constructed only as small specialized shops, mostly on the ground floor, and only exceptionally with a first floor extension.

Catering must be based on restaurants as well, not only on traditional cafés, and hotel accommodation should be provided, too. With an attractive offer in food & beverage, catering services on a boat, like in old times the island boats 'trabakula' berthed in the 'Mrtvi kanal' Canal, can become a brilliant additional attraction of the waterfront.

Public and social purpose is represented with the construction of the multipurpose hall – with its flexible surfaces and rooms as well as acoustic equipment and features, it is supposed to become a place to host music and other events, meetings and exhibitions. Galleries and similar facilities as well as entertainment (stand-up comedies, cabaret, mini-theatre etc.) will be based on private initiatives, and complete the cultural and entertainment programme in the Delta and city centre area in general.

The public areas and surfaces organized in South Delta must be treated equally to all the other programmes and needs, as they directly influence the attractiveness of the area. Beside the avenues planted along the 'Mrtvi kanal' Canal and the Rječina River, which will dominate as promenades, it is necessary to provide more avenues axially to the paths and squares which will be visible and represent a fine communication with the city unit on the eastern and especially on the western side, creating an outstanding area of urban quality. Together with Delta, the Brajdica area represents an inseparable unit, which should definitely be incorporated into the development during the ongoing planning process.

In the context of understanding the value of the Delta area as an urban area, care should be taken of interaction relations and how to create them between the already constructed and formed city parts and Delta as an area of new urbanization. Delta is mostly a focus point with good visual communication and composed relations of the inner city centre and the area around it situated on higher city districts (on the surrounding hills).

The Master Plan has determined the views and composition values which the planners have to take care of in the designing process, as is shown in the next table. But it is necessary to stress, that the Delta area opens extraordinary views on the Kvarner Bay in a macro measure, reaching from the Krk Bridge to the Učka Mountain, as well as to some of the city districts; in the micro measure, the views and relations to the marginal areas and the ambience of Delta and Porto Baros will be subject to separate valorisations.

Table 3. Landscape value, points and lines of compositional, panoramic and viewing values

Landscape Values	
B. Valuable parts of the settlement – points and lines of compositional, panoramic and viewing values	
B.1. Complex views within the city centre	
•	Views of the Riva Street to east and west, perpendicular to the harbour maritime area in the north-south direction
•	Views within the theatre block to the port bay and views to be opened towards Delta and Baroš
•	Views from Delta to the front of Fiumara and Kačićevo promenade, the Rječina River Canyon, Bulevard, Trsat Hill and Kozala
•	Views from Delta over the 'Ulica podhumskih žrtava' Street to 'Sušački Neboder'
•	Views from the 'Titov trg' square along the Rječina river and 'Mrtvi kanal' canal to Porto Baros
•	Views and view directions from Trsat to the city centre
•	Views to the city centre along the road from Orehovica to 'Banska vrata' and 'Ulica Rački' Street
B.2. Composition Values	
•	Opening to the Rječina River Canyon to the city centre, the relation of the left and right side of the hill massive next to it with the already existing buildings, surrounded by the rocks of the canyons and the relation to the rocks and the green vegetation.
•	The composition relations emerged from the gradual construction of the back of the Trsat Hill, starting from 'Gradine' and the Old Town, over the 'Park heroja' park as a green island to the residential towers of Vojak (in the Nika Katunara and Drage Šćitara Streets), as an important composition horizontal line of the eastern urban horizon.
•	The Boulevard zone with very exposed public buildings.
•	Composition relation of the Trsat Castle and non-built-up areas (green areas and rock massive) Bošketa and Banska vrata
•	The vertical line of the clock tower in the St. Romuald Church in relation to the height of the buildings in the Kozala and Belveder districts (unfortunately partly irreversibly destroyed with the construction of the residential towers in the Vj. Novaka and A. Kovačića Streets)

The stress should primarily be laid on the establishment of relationships and composition values in the context of positioning and ordering public areas, but it is indisputable that individual buildings and functions too must in their organization and use feel the described values of space.

Also, the planning solution must accept the main pedestrian paths of a broader context and adequately valorise the Rječina River and "Mrtvi kanal" Canal water currents.

COMMENT: the detailed terms for the construction of buildings which are supposed to be constructed within the M2 are described in point E of this Programme.

1.4. Area for Public Utility Services

The area for public utility services – plan name K3-6 – is designated for the construction of a complete waste water treatment plant. But the Master Plan of the City of Rijeka was flexible with regard to the final location, the surfaces and the borders of the public utility and service area. After the Master Plan was adopted, a special study was developed, which compared some alternative solutions to keep the treatment plant within Delta or relocate it to the galleries in the hinterland of the city centre. In relation to the total construction and maintenance costs, in the end the decision was made in favour of keeping the plant in Delta, but on a location close to the D-404 road, with a surface area of about 2 ha. With this micro positioning a big part of the described existing and planned area along the south Delta edge will be free for other programmes, more appropriate in town planning and investment sense; the 'new' location of the plant, in the sense of urban zoning and development of the broad location, is subordinated to the overall town planning project for South Delta.

COMMENT:

1. Location, dimensional features and technology of the wastewater treatment plant is described in the attachment to this Programme.
2. It is not expected from the competitors to solve the wastewater treatment plant location itself due to lack of sufficient and accurate data related to the buildings or other structures dimensions as well as technical and technological requirements which buildings or complex as a whole have to be complied. Because of mentioned, this portion of Delta area will be solved through the further planning process of Delta area.

2. Porto Baros

2.1. Nautical Tourism Port – Baros Marina

The Nautical Tourism Port, which is the future Baros Marina is situated within the bay of the existing port basin, with its mainland part that includes the shore of the Sušak Breakwater, the 'Ružičev gat' Quay and the 'Vinodolsko pristanište' and 'Senjsko pristanište' Piers.

The capacity of the port is determined in the Spatial Plan of the Primorsko-goranska County and amounts to approx. 1,000 vessels, certainly not less than 500. The dimensions of the vessels for the marina are not defined, i.e. all kinds of vessels of different sizes will be able to berth in the marina; the capacity will depend on the length and type of the boats, as well as the marina area itself. However, in relation to the expected amounts of vessels to be berthed, it is recommended to leave the 'Senjsko pristanište' Pier free for vessels of different sizes, especially because it is directly connected to the Passenger Terminal building at the beginning of the Rijeka Breakwater, as well as to the traffic network and the city contents themselves.

The issue of the pontoon bridge which might be constructed in relation to piers and quays is left open, but in any case, it should be taken into account that the maritime zone of the future marina will be used by the vessels berthing in the 'Mrtvi kanal' Canal, and they should have a free waterway.

The Spatial Development Plan of the City of Rijeka provides a possible reconstruction of the final part of the Sušak Breakwater, to be raised as an embankment from rocks and stones, with possible extensions depending on maritime, hydrodynamic and other conditions. After the reconstruction and extension of the breakwater it will be possible to develop a good pre-port with additional berths and the petrol station for the boats (the Spatial Plan foresees the pre-port within the breakwater zone and it is not conditioned by its reconstruction).

Solid buildings which are supposed to serve the marina functions are to be constructed on the mainland marina part, as well as on the M2 zone of the 'Senjsko pristanište' Quay and 'Demetrova Street'. Still, when

in the location of such content (buildings), attention should be paid to the integrity of town planning (in particular its relation to the existing blocks of the Theatre neighbourhood and its communication matrix), as well as to the necessary free access for pedestrians along the shores and berths, including the Sušak Breakwater.

2.2. The Mixed Purpose Area M2

The mixed purpose area M2 is characterized by its location next to the already active Theatre block (separated from it by the Demetrova Street) and by the planned Baros nautical tourism harbour in the hinterland. The described feature imposes the need for this area – by contrast to its present status – to be planned for development in order to increase the interest of all potential users (it is clear that the access to the pontoon bridge and vessels will remain limited in the future nautical tourism port, too).

The other important feature relates to the need to preserve parts of the port warehouses (see the summary of the Conservation Report) and to fit the warehouses in the new town plan (urban zoning solution). Beside the above, the connection of this area with public surfaces in the Theatre block should be taken into consideration, especially along the streets next to the city market pavilions; this could be a way to open very attractive views onto the seaside.

Concerning the plans for new contents, all programmes listed in point 1.3 are can be developed in this area, or they can be planned for port functions of the Porto Baros nautical harbour.

C/ Urban zoning indicators for the construction of buildings and surface development

The Delta area (incl. Porto Baros) with the nearby Brajdica (with the container terminal) represents the most important area resource of the city centre; according to the quality of its location and commercial cost-effectiveness it is one of the best city districts. As is visible from the first part of this analysis, during the last fifty years, the Delta area was regarded as having an integrative function for Rijeka and Sušak, as the urban and functional development of these city districts (units) grew parallel to the port function. That is the reason why in the MP Delta was given the name “face of the city toward the sea”, the city waterfront; the objective is, on one hand, to stress its location in the city centre, and on the other hand its potential in creating the image of the city towards the sea in the continuity from (presently) Žabica over the Theatre block and Porto Baros.

However, the attitude of the Rijeka MP is that Delta shall be planned as mostly loosely constructed area, interlaced with green parks, promenades and public surfaces in general. Within the described and designed unit, called the 'free Delta area', public programmes in a wider spectrum and scope are possible to be planned, as well as shops, restaurants, cafés, offices, maritime & entertainment facilities, with the objective to form the entire zone as a new city breakthrough to the sea.

Furthermore, it is necessary to create a new spatial structure and urban matrix within the given morphology and typology of construction. The conceptual step forward is expected in the application of new models of distinction of public and private. The existing grid, typology and history should not limit the creativity of planners, but rather all that is valuable and has been found within the area, should be valorised to fit it into the newly conceived designs and solutions.

In this sense, the MP determines the following construction and development conditions:

1. North Delta – according to the applicable Detailed Development Plan

2. South Delta:

- the highest allowed construction density coefficient (Kig) shall not exceed 0.35;
- the highest allowed coefficient of utilization (Kis) shall not exceed 2,1;
- the highest mass coefficient shall not exceed 7.

The mentioned space indicators are calculated for the entire **South Delta area** (together with the purpose area M2 and purpose area K3), as well as for the mainland surface area within the boundaries of the nautical tourism port LN-4; the calculation is shown in the following table:

Table 4. Development opportunities with the spatial plan indicators applied

				South Delta	Baros*	TOTAL	
Surface Area				m ²	105.350	38.600	143.950
Construction coefficient (kig)	0,35	Max. footprint	m ²	36.873	13.510	50.383	

Utilization coefficient (kis)	2,10	Total GDA	m ²	221.235	81.060	** 302.295
Mass coefficient (km)	7,0	Max. Volume	m ³	737.450	270.200	1.007.650

* refers to the surface area of the mainland as delineated in the plan

** the calculation does not include the underground floor surface areas

The mentioned construction and utilization coefficients refer to the zone level and shall not apply to individual construction plots.

Further, the statements for the gross developed surface areas relate to the above ground parts of the building. The underground part/parts of the building are not part of the calculation.

Apart from urban zone indicators, it is important to point out the following construction and development conditions important for the planning of buildings and surfaces:

- the surface area of the plots is not determined in this plan, but it proceeds from the urbanistic solution for the area;
- this plan does not determine the height of the new buildings;
However, the Master Plan for the Delta area does not allow the construction of buildings of the tower type. It is recommended that the height of new buildings be adjusted to the height of the existing buildings of the Theatre block.
Exceptionally, a tower building, up to 30 m in height, a kind of Delta landmark, is allowed within the public utility service area;
- due to the expected impact of low and high tide, all traffic and public areas in the Delta must be planned with an absolute height of at least 2,5 m above sea level; consequently, this applies to all traffic and infrastructure surface areas;
- the construction direction of a new building may overlap with the regulation direction of the streets/traffic routes i.e. the public surfaces in general. When ground floors are pulled in, it is not to be considered as a deviation from the construction direction;
- the distance of the construction line from the main roads is at least 6 m. Within that width a tree-line and a pedestrian path should be planned. The term 'main road' refers to roads where construction and regulation directions overlap, that is, within which at least 2/3 of the buildings' facades are to be situated.
- the distance of the construction line from the vehicular surface of the side roads is at least 3 m. The term 'side road' means roads where construction and regulation directions do not represent at the same time the construction line, or those where less than 40% of the buildings' facades are situated on the construction line.
- The final floor of the building is to be built as a set back floor, and the space can be used as a terrace, botanical garden, swimming pool, etc. Depending on the roof type, max. two attic floors are allowed to be constructed, but the final floor shall be planned as a gallery;
- It is necessary to check the exposure to sunlight within the street cross-section in the equinox and solstice during the planning phase of the buildings.
- The construction of the underground garage is allowed only in the underground of one or more building plots, i.e. blocks as a whole; the number of floors is unlimited. The number of parking lots in the underground car-parks (garage) shall be dimensioned according to the needs of the zone and its content and on the bases of the norms from this Plan.
- By contrast to the underground car-park, the parking lots on the surface are open to the public.
- It is possible to plan the underground floor on the entire surface area of the building plot;
- Shops, restaurants, cultural/entertainment facilities and other contents shall be situated in/along the main streets, pedestrian ways and promenades (along the shore);
- The smallest width of the sea promenade is 6 m;
- in order to hold events/gatherings there, it is necessary to plan at least one public square of 5.000 m², which must be used for pedestrians only, and the traffic, if needed, has to be led around it. It should be possible to organize events on the square independently, without causing any interferences to the activities in the surrounding area or cutting it off completely;
- Special attention should be paid to planning and designing of public areas and green spaces.

The listed building terms are explained in detail according to the building type planned for the Delta and Porto Baros area and shown in point E of this report.

D/ Planning Procedures (SP, MP)

The urban transformation of the Delta and Porto Baros area is allocated by the Spatial Development Plan of the City of Rijeka to the group of city projects, which means in the group of projects that have a substantial impact on the spatial and urban organization of the city. This type of plans, on the level of physical planning,

content and location should become a trigger for the future of the city, provide it with a recognizable landmark, and generate the urban transformation of the total macro space.
For the reasons mentioned, the area in question shall be resolved as a whole, as one area, not partially.

1. The first phase of the concept solution is the implementation of the public urban and architectural tender. Numerous researches were made prior to this phase, workshops were held, but the public tender remains the base upon which one or more proposals will become the foundations for the next phase.

2. Creation and adoption of the Detailed Development Plan. The Detailed Development Plan enables the public to participate in time and with a quality input into the planning process, while the adopted Detailed Plan represents the basis for preparations in the field of properties and legal matters in the Delta area, where building plots must be defined, as well as property and legal matters resolved with the future investors.

3. For some specific construction projects it will definitely be necessary to implement individual architectural tenders with the objective of getting the best possible individual building or spaces; which buildings and spaces will be the subject of such tenders shall be determined by the Detailed Development Plan.

E/ Urban planning indicators and conditions of location and building according to the typology of buildings and surfaces

E.1. Multi-family housing unit

Construction of multi-family housing units is defined here as the construction of buildings dedicated to residential purposes only, and the number of apartments cannot be greater than 6.

However, in view of the fact that on the area of the Delta multi-family housing construction is planned within the mixed-purpose areas, in multi-family buildings it is possible to plan other, non-residential purposes on the ground floor, mezzanine and first floor. The basement and underground levels can be planned without spatial restrictions, and they are dedicated to car parks, infrastructure complexes (boiler rooms, transformer stations and the like), storerooms and similar accompanying contents.

The form and area of building plots of multi-family housing units are not defined by the Spatial Plan neither the Master Plan, but they proceed from urban planning solutions of a given area.

Multi-family housing buildings, as a rule, have the number of floors equivalent to the height of 21 m. MP on the Delta area the building of multi-family buildings of the tower type is not allowed, and for the choice of height it is recommended to adjust it to the height of the buildings of the Theatre blocks.

The final floor of a building can be designed as a set back storey, and the surface used as a terrace, roof-garden, swimming pool, etc. Depending on the typology of the roof, the attic of a maximum two floors is allowed, under the condition that the top floor is of a gallery-type.

On the plot of a (multi)-family housing building it is necessary to ensure at least 8 m²/per bed of a private or semi-private open space (balconies, loggias, courtyards, light wells, utility and the like).

E.2. Mixed-purpose buildings – predominantly residential and predominantly commercial use

Mixed-purpose buildings are defined as buildings in which predominant use is residential or commercial, but in a significant proportion (and above the 1st floor) other complementary uses are represented.

With the purpose of protection of functioning of the mixed purpose, within such a typology the MP determines the following recommended relations of purposes:

- in a building of predominantly residential purpose: a maximum of 66% of gross floor area should be residential, and a minimum of 33% of gross floor area should be commercial,
- in a building of predominantly commercial purpose: a maximum of 66% of gross floor area should be commercial, and at least 33% of gross floor area should be residential. Alternatively, there could be a minimum of 40% of gross floor area of commercial, a maximum of 40% gross floor area of residential use and 20% of gross floor area dedicated to other purposes (public and social, hotel accommodation and the like.)

Other conditions of planning of mixed-purpose buildings are:

The minimum plot area for a commercial-residential building must be 2000 m².

The greatest allowed construction coefficient (kig) of the building plot is between 0.25% and 0.75%, depending on the character of the location of building within the purpose area and local conditions. The greatest allowed utilization coefficient (above ground) (kin) varies from 1.5 to 4.5.

E.3. Commercial and business contents

Commercial and business contents, including various services such as catering services, it is possible to plan in several ways:

- by planning the location on the ground floor (or basements) of multi-storey buildings,
- by planning of mixed-purpose buildings, predominantly commercial or predominantly residential,
- by planning buildings dedicated to business – commercial content as an independent building.

On the area of the Delta and Porto Baros the building of a shopping centre is not allowed!

E.4. Hotels

On the area of Delta and Porto Baros the construction of hotels can be planned. Such hotels can be conceived as a part of a block, i.e. an urban matrix (together with other urban contents), or as a self-standing spatial and functional unit. Although on such areas most interesting are the edges of the sea shore (towards the Bay, i.e. towards the Baros Marina) in visualizing a hotel, one should take into account that sea shore is attractive for other contents also, contents from which a high commercial output is expected, such as residential, commercial space in ground floors and the like.

Hotels can be planned also on the area denoted K3-6 in the Plan. If a hotel is being planned on this area, it can be treated as the Delta landmark, i.e. as a building which will by its height and other features stand out in the urban matrix of the Delta.

With respect to the attractiveness of the location, apart from accommodation units with “usual” accompanying contents, in the spatial organization of the hotel it is necessary to foresee and dimension in an optimal measure the conference facilities. Still, with the aim of optimal use of the physical space of the Delta and the rationalization of further use of newly constructed buildings, it is recommended to foresee the possibility of linking hotel contents with the city’s multipurpose hall (see E 5.A).

The following conditions apply for the construction of a hotel building:

- The area of the building plot is not prescribed;
- The greatest allowed height of the mixed purpose building – predominantly commercial is 21 metres, i.e. the height adjusted with the Theatre district blocks. The height may be 30 metres if it is the landmark positioned on the K3 area;
- The greatest allowed construction coefficient (kig) of a building plot varies from 0.25% to 0.75%
- The greatest allowed utilization coefficient above ground (kin) varies between 1.5 and 4.5, and for a tower building between 2.5 and 7.5.

On the building plot it is necessary to secure an adequate number of parking spaces for the employees and users, in accordance with this Plan, access and manipulative areas for delivery and utility service vehicles and other areas depending on the purpose of the building.

Open parking spaces, if they are planned, should be interlaced with trees in a ratio of at least 1 tree per 4 parking spaces. Parking spaces can also be built in the form of underground garage.

It is possible to construct the underground garage entirely within the dimensions of the building plot, if such construction type does not interfere with the construction, statics, installation and other features of the neighbouring buildings, as well as with other public surfaces.

E.5. Public Contents

Public contents imply contents of non-commercial purposes in the segment of the so-called social upgrading. The Master Plan foresees the following public buildings to be built primarily in the Delta area:

- a/ multipurpose hall**
- b/ aquarium**

The spatial indicators necessary for planning are shown in the following table:

Table 5. *Spatial indicators for the construction of public buildings*

Special Indicators	D8 (*)
surface area of the building plot (m ²)	In accordance with the Programme set
greatest construction coefficient (kig)	0,8
greatest utilization coefficient (kis)	4
the greatest possible mass coefficient (km)	16
the shortest distance of the building to the border of the building plot (m)	10
the shortest distance of the construction direction from the regulation direction (m)	10
distance of the regulation direction from the axis of the access road (m)	not determined
the biggest possible number of floors	not determined
the highest possible building (m)	not determined
to plant and maintain green areas (in % of the plot)	10
parking for delivery vehicles and similar services	within the plot
parking lots	within the plot in the public garage

COMMENT:

* during the development of the Detailed Plan, indicators may be elaborated and corrected up to 10% of the above values.

a/ **Multipurpose Hall**

The building of the Croatian National Theatre Ivan pl. Zajc is situated right on the shore of the 'Mrtvi kanal' Canal, opposite of Delta; it was designed by Fellner and Helmer and built in 1884 by these two architects specialized for the construction of theatres in the Austrian-Hungarian Empire, with about 700 seats in the parterre, mezzanine, two floors with theatre boxes and a gallery. Drama, operas and ballet is played there, as well as concerts of classical music (from solo artists to philharmonic orchestras), and modern music. In some cases the theatre hall is used for gatherings, academies and other events, too. Although it is a relatively lushly decorated building, which was restored and modernized during the 80s of the last century, still, a new building for this purpose should be erected in order to meet the location and spatial standards of the City of Rijeka and host the miscellaneous public, social and cultural events.

In accordance with the former practice of town planning for the waterfront area there are many examples of cities which resolved the locations of their most important public buildings within the city boundaries, such as concert halls, theatres, operas etc.; after finalization these cities became additionally well known and recognizable for their special so called iconic buildings (Copenhagen – the Royal Library, Opera, Drama; Oslo – Opera; Dublin – concert hall and others).

With regard to the long termed development and construction Programme for the Delta area, at this moment the City of Rijeka has decided to take into account that the city needs a multipurpose hall and to include it into its town planning.

When looked at from the special and functional standpoint, the hall should be located and planned as an individual special and functional unit accompanied with the respectively dimensioned public area. It is possible, as well as desirable to consider the possibility of finding a functional connection (directly or indirectly, for example via an underground connection), with other appropriate urban contents like hotel complexes, in order to establish the necessary complementary relation important when social events are organized and they need connected space (connection to similar facilities in hotels), as well as functional extensions (to offer catering services) of the hall itself, and the other way round.

Interpreted in functional terms, the multipurpose hall should be planned with dimensions big enough to host various events like concerts, exhibitions, smaller fairs, congresses, festivals, etc. which is the reason why most of its rooms should be planned in order to allow flexible use and organization of the facilities. For the needs of concert events the hall should seat approx. 1000 spectators, while smaller exhibition and similar events should have an area of 3000 – 4000 m². We therefore expect, although detailed analyses of the spatial organization of the hall are lacking, to foresee for its construction a location covering at least 4.000 sqm.

It is important to stress that the hall should be accompanied by appropriate public surfaces which will not only stress its urban role, but also contribute to the quality of its functions. As said before, the possibility of establishing a functional link with other urban content enables a spatial and substantive optimization in the use of both buildings.

Contemplated in the terms of urban planning, situated in the South Delta area, in relation to other contents such a hall would represent a specific destination both of the citizens and visitors of Rijeka, and irrespective of the micro-location, it will represent a challenge in terms of architectural design. Upon the completion of the final Detailed Plan for South Delta, a separate public architectural tender shall be announced for the solution of the hall. In the preparation of the tender the detailed spatial Programme of the hall will be defined, i.e. the spaces of its individual purposes shall be determined and dimensioned.

b/ Aquarium

Aquarium is certainly one building which the city of Rijeka lacks, with respect to its position on the sea shore, and also within the broader North Adriatic area. As a matter of fact, on the entire Croatian side of the Adriatic there is no aquarium which could by its size attract a permanent interest of the visitors. Rijeka's history has a record of attempts to build an aquarium. The first one had 36 basins and was built in 1884, lasting until 1918. After World War II there were several attempts to establish the so-called "Adriatic aquarium" by erecting an independent building (also on Delta), but without success. Parallel to these attempts, a small aquarium was established, though not in continuity within the Natural History Museum. However, restricted space available to the Museum imposed restrictions on the volume of the aquarium which currently has only 3 separate biocenologic units.

The future aquarium in Rijeka is intended to be specialized, focusing on the aquatic environment of the Adriatic Sea. Such focus makes sense from the point of view of research, as well as satisfying the interest of visitors. Under such circumstances, the future Aquarium can contribute to its own cost-effectiveness and become self-sustainable.

As to the location of the future Aquarium, it is very adaptable within the future urban planning of the Delta area, because its content can develop on several floors, and as a building of public interest it can correspond with various types of public spaces and areas like streets, sea shore promenade, sea shore, sea itself and the like. For these reasons the minimum size of the plot of the future building is not given in this Programme, but only essential facts on the potential Programme of its construction.

The future aquarium should consist of:

- | | |
|--|-------------------------------------|
| - exhibition space: basins, exhibition spaces, | approx. area 3.000 m ² , |
| - public spaced dedicated to the spectators
(multi-functional hall, playgrounds, museum shop and coffee shop...), | approx. area 400 m ² , |
| - work spaces of the museum
(offices of museum staff, laboratories, depots and other), | approx. area 2.800 m ² , |
| - technical spaces (technical maintenance, workshops, storage, etc.), | approx. area 1.200 m ² , |

all of which gives a total of around 7,400 m² of gross floor area.

The architectural solution of the aquarium will be the subject of a separate tender, upon the definition of the Detailed Development Plan.

E.6. Roads and traffic network

The area of the Delta directly leans on only one road, the newly constructed four-lane road D-404. The area of Porto Baros has a somewhat greater potential because its northern rim leans on the Demetrova Street, and access is provided also from the Riva Boduli and Wenzelova Streets.

The area of the Delta and Porto Baros are linked by a road-rail bridge over the "Mrtvi kanal" Canal, but this type of connection should be taken with limitations proceeding from a real need to enable this bridge again for turning, so as to bring life again into the area from "Mrtvi kanal" Canal to the Theatre.

With regard to the above condition, it is rational for the new planning solution of the Delta to link it directly to the road D-404, i.e. to its route lain over the Delta, while the existing connection by bridge between Delta and Porto Baros should be treated as an auxiliary carriageway or a mixed vehicular and pedestrian connection.

In the further traffic solutions for the Delta one should bear in mind the route of the rail track which runs parallel with the D-404 road, whose ultimate destiny is the fast city rail service, as is explained above. In this

context, the location of the railway station is of prime importance, relative to its gravitational radius, as well as the adaptation of the railway track zone as a part of the public surface.

Other rail tracks on the Delta can be removed.

COMMENT: It is recommended to keep road D-404 in its present condition, without its horizontal alignment or transverse profile change.

E.7. Public surfaces

Public surfaces are surfaces of streets, both those intended for vehicles and pedestrians or only for pedestrians, squares (with traffic or without), sea shores, promenades, staircases, passages and the like, as well as green areas, inserted into the above or existing as independent urban units. Some of the public surfaces in the immediate surrounding of the Delta and Porto Baros are already adapted and function as pedestrian surfaces such as the Theatre Park complex with Verdijeva Street, and street surfaces between the pavilion of the city market and the area of Vrh Delta, i.e. a broader location of the Liberation Monument (Spomenik oslobođenja).

Public surface should be observed as a physiognomic and constitutive element of the spatial organization of the areas of Delta and Porto Baros. Therefore, within the context of use, it is necessary to design public surfaces as a graded system (carriageway-pedestrian, pedestrian, pedestrian zone and the like) which:

- integrates the area of the central city park on Northern Delta with the already established communication scheme ("Most hrvatskih branitelja" Bridge, "Istočni izlaz" Bridge, shores of the "Mrtvi kanal" Canal and Rječina River) with the area of Southern Delta where, in the functional, technical and designer sense the solution of pedestrian communications over the D-404 road represents no small challenge;
- links to the system of public surfaces of the contact area which in an appropriate way corresponds to the pronounced central and public buildings and functions of the area.

The construction of the Delta and Porto Baros area will surely lead to the formation of new pedestrian zones (especially in the form of waterfront promenades, and along central contents), the increase of existing pedestrian zones and their interlinking which will contribute to the humanization of the ambient of the city centre.

However, even in situations where it is necessary to lead the pedestrians together with vehicles, the quality of public surface should be established by dimensioning of the pedestrian surface (the smallest width of the sidewalk 1.60 m), separation of the same from the carriageway by using green strips, tree-lines and the like.

The Master Plan determines that for the purpose of events in the open, public gatherings (and also in case of accidents which require the provision of care) it is necessary to plan at least one public square, whose dimensions should not be less than 5,000 m². The public square which we can also treat as the main square of Southern Delta, must be used exclusively as a pedestrian surface, while the traffic, if necessary, should be on the periphery. The public square should be planned in such a way that the events taking place on it are autonomous, i.e. do not interfere with activities in the surrounding space. The main square can be linked with some of the representative buildings of Southern Delta such as the multi-purpose hall, hotel with conference centre, aquarium and the like. It would be desirable, but it is not a precondition, that the main square has at least a visual contact with the sea.

The Master Plan sets the condition that all traffic and public surfaces on the Delta, due to the expected raising of the sea level, are planned on an absolute height of at least 2.5 m above sea level. In relation to existing levels of the Delta and Porto Baros area, this requirement will demand a raising of the surface levels between 0 and 1.2 metres.

The set condition is a very demanding one in solving the already formed waterfront stretches, especially the coast of the "Mrtvi kanal" Canal – along which a disproportion in height would appear between the left and the right coast. The same is true also for the coasts within the Porto Baros – especially in relation to the coast gradient in the zone of the turning bridge and connection with Riva Boduli and Demetrova Streets. Therefore the required equalizing of the levels can be planned (and implemented) in grades, i.e. within the context of final purposes of buildings and surfaces on the Delta and within the Porto Baros. For example, within the area dedicated to the construction of the marina, it is possible to keep the embankment which is in the function of direct access to the berths on the existing level (which is appropriate to the expected vessels), and resolve the transition toward the public surface (and buildings) on the required elevation with ramps, stairs, green belts, decks and the like. In general, the waterfront promenades can be resolved by using parts

of existing coast line with existing elevations, and establish the other part of public surfaces on the required elevation. These surfaces can then be used in an “active” way, as e.g. terraces for cafes and the like.

By contrast to public surfaces which use parts of existing coast lines, the system of (new) roads and public surfaces which are designed as parts of new urban planning for the Delta, surely must be resolved on the demanded elevation. However, the planned reference line (or higher than planned) should not necessarily be reached by earthwork, but it can be reached also constructively, i.e. by building underground contents (car parks, storages, transformer stations and the like) over which the public surface is developed.

E.8. Green surfaces

Public green areas should be conceived as a system including:

- the central city park on Northern Delta,
- public green areas (parks, avenues of trees and the like) within the complex of the urban solution of the Southern Delta, which should be conceived as a unified, interconnected system of green surfaces.

Such a demand is being put forth in the context of expectations that newly planned park surfaces will have a pronounced effect on the microclimate of a larger area, because it is precisely over this area that we have strong air currents coming from the Rječina River Canyon which cool and refresh the air masses over a broader city area. This effect should be realized all over Delta, which implies that in the organization of the Southern Delta the effect of the so-called “heat island” should be avoided.

E.9. Infrastructure

With the exception of the waste water treatment plant, which is a self-standing functional and construction unit, the urbanization of the Delta will demand the construction of a new infrastructural system (water supply, sewage, drainage of rainwater, electricity, public lighting, telecommunications). In that sense, the Delta area will orient itself towards the infrastructure built into the D-404 road, and the area of Porto Baros towards the infrastructure within the Theatre District area.

E.10. Parking

When calculating the number of parking lots it is necessary to observe the scales presented in Table 6.

Table 6. Scales for the calculation of the necessary number of parking lots

PURPOSE	1 parking lot (PL)	2 PL	3 PL
RESIDENTIAL			
- apartment	Up to 59 m ² net surface (NS)	60 - 100 m ² (NS)	> 101 m ² (NS)
ACTIVITIES			
- commercial - general	per 25 m ² of gross floor area (GFA)		
- commercial - specialized	per 35 m ² of GFA		
- industrial and utility/service activity	per 40 m ² GFA		
- crafts and services	per 35 m ² GFA		
- catering	per 4 seating places in the catering facility		
	per 3 to 6 persons (visitors / staff) in hotel, motel, pension (*) and similar		
- business (office, commercial and the like)	per 30 m ² GFA		
- cultural	per 5 seating places in theatre, concert hall, cinema or similar		
- sports	per 10 seating spaces in a sports hall and playground (***)		
- recreational	per 500 m ² GFA and area adapted for recreation		
- bathing place	per 25.0 m of length of the coastal edge		

COMMENT:

* It is possible to apply stricter norms posed by a specific hotel chain,

** For other contents (residential, halls for religious classes and other) the parking needs are dimensioned depending on the representation of these contents

*** *For other users and types of use of traffic means (contestants, buses, motor-bikes) the norms foreseen by law shall be applied, i.e. norms according to specific type of competition.*

By application of the scale from the table, we arrive at the total necessary number of parking lots which should be provided in the given area. However, this number should be placed into a dynamic context i.e. brought in relation to the daily cycle of activity of an area. For instance, the parking needs of the users of cultural contents predominates in the evening hours, i.e. in the period when the parking needs of users of business spaces is close to zero. The same dynamic approach should be applied to the residential segment, because not all of the residents will stay within the residential area at the same time.

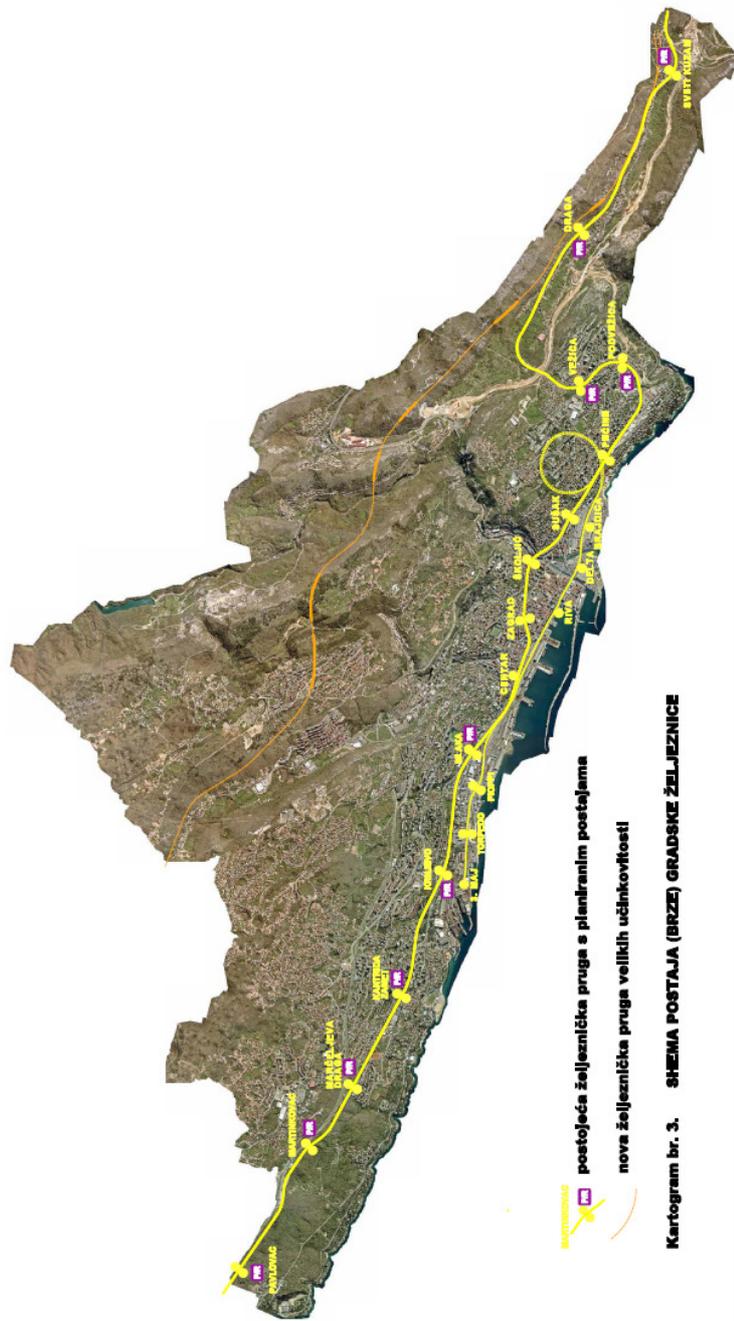
The necessary number of parking lots can be planned in the following ways:

1. public garage (underground and/or above ground),
2. private garage,
3. public parking area.

The public garage is certainly the most favourable form of solving parking problems with respect to openness to its users. In urban planning context, it can be located under ground or above ground.

- 1.1. If the construction of an underground garage is planned, there are no limitations with respect to location and the number of floors. Public garage can be planned in the basement of buildings of any purpose, as well as in the underground of a public area (square, street), even green surface, with the condition to preserve a sufficient thickness of the land cover to maintain and cultivate public greenery. Dimensions of an underground garage do not depend on the dimensions of the structure above ground, but can be increased to the limit of the building plot. The public garage can, exceptionally, be planned as an above ground structure, but in that case non-exposed parts of the area, building block or other type of localization should be chosen.
- 1.2. Private garage, we presume, will represent a rarity within the analyzed area. Typologically, we list it as a possibility of solving the parking needs exclusively of multi-family housing units, and in that sense it can be realized both as an underground or above ground project, with the location conditions stated above.
- 1.3. The model of public parking area can be applied in the first place in the form of street parking intended for short-time stops of the vehicle, not as greater parking areas.

It is important to stress that in the solving of the parking challenge, the condition that the parking need be solved exclusively within the plot of the specific building does not apply. Parking needs can be unified and solved through a system of several public garages, their locations related to the quality of coverage of the needs and accessibility of the garages.



 postjoča železnička pruga s planiranimi postajema
 nova železnička pruga velikih učinkovitosti

Kartogram br. 3. **HEMA POSTAJA (BRZE) GRADSKA ŽELJEZNICE**

SPECIFICATION OF SPATIAL INDICATORS

area	zone name	purpose	area (m ²)	kig	kis	km	floors	max height above the ground (m)	max surface area (m ²)	proposed max surface area (m ²)	max volume (m ³)	proposed max volume (m ³)	max gross floor area	proposed gross floor area
North Delta	Z1-1	park pavilion	25.111	0,02	0,02		P	4,5	200				200	
	Z1-2	underground garage	12.354	0,02	0,02		3Po	0	11.643				34.929	
	IS-1	pedestrian entrance/exit - garage	3.179	0	0		P	4,5	30				30	
South Delta	M2	residential buildings comercial and business buildings multipurpose hall aquarium hotel public square garage	97.100	0,35	2,10	7,0		21	44.573		891.450		267.438	
	K3-6	waste water treatment plant Tower/ landmark	30.250					30						
Porto Baros	LN - 4	Port of Nautical tourism	27.200	0,35	2,10	7,0		21	13.510		270.200		81.060	
	M2	Mixed area	11.400											

kis – floor area ratio - ratio of a building's total floor area (Gross Floor area) to the total are of the building plot

kig – construction density ratio - ratio of a building's total floor area at ground level (building footprint) to the total area of the building plot

km – building mass ratio - a ratio between total built volume to the total area of the building plot

kin – a ratio of a building's total floor area of abovground levels to the total are of the building plot

mixed purpose area	max. tlocrtna površina	(m ²)	proposed (m ²)	total	total proposed (m ²)
South Delta	residential buildings – 40%	81.564		203.910	
	comercial and business buildings– 30%	61.173			
	other – hotel, culture, leisure – 30%	61.173			
Porto Baros (in the function of the marine)	residential buildings – 40%	9.576		23.940	
	comercial and business buildings– 30%	7.182			
	other – hotel, culture, leisure – 30%	7.182			
	boat bindings 500 - 1000				

objekt		(m ²)	predloženo (m ²)
aquarium	basins, exhibition spaces	3.000*	
	multi-functional hall, playgrounds, museum shop and coffee shop	400*	
	offices of museum staff, laboratories, depots and other	2.800*	
	technical maintenance, workshops, storage, etc.	1.200*	
	kig=0,8; kis= 4; km= 16		
hotel	max height 21m (M2) or 30m (K3-6) kig 0,25-0,75 kin !! 1,5-4,5 (M2); 2,5–7,5 (K3-6)		
multipurpose hall	surface area of the buiding plot min 3000 m ² * capacity of 1000* viewers smaller exhibition 3.000 – 4.000* m ² kig=0,8; kis= 4; km= 16		
public city park		40.000	
public square		5.000	

* approximate values

C COMPETITION BASIS

1. Historical and urban development of the Delta
2. Detailed spatial plan of the Delta central city park
3. Location of the facility for waste water treatment Rijeka (UPOV)
4. Conservational plan for the Delte and Porto Baroš area
5. Geotechnical report
6. Sea and wind impact on the coastal belt of Delte and Porto Baroš area
7. Drawings:
 - 7.1. Geodetic survey 1:1000 (dwg)
 - 7.2. Facades of the buildings in the complex Delta (dwg)
 - 7.3. Situation UPOV
8. Photo documentation
9. Orto-foto footage
10. Images for photomontage_author Dean Miculinić