



STIFTUNG

LEBENDIGE STADT

10.-12. SEPTEMBER 2008
KONGRESS 2008

DIE RESSOURCEN DER STADT

KLIMASCHUTZ, GRÜN UND LEBENSQUALITÄT

Was können die Städte gegen den Klimawandel tun?

ENVIRONMENTAL REGARD OF THE PROGRAM OF THE DOUBLE REFORMATION OF REGIONS BOTANICOS- ALEXANDRAS AV.



Municipality of Athens

The Municipality of Athens has worked out the Special Project for the concretisation of Program of Double Reformation of Regions Votanicos - Alexandras Av. and is in the process of concretisation of most ambitious project of reformation in the city of Athens.

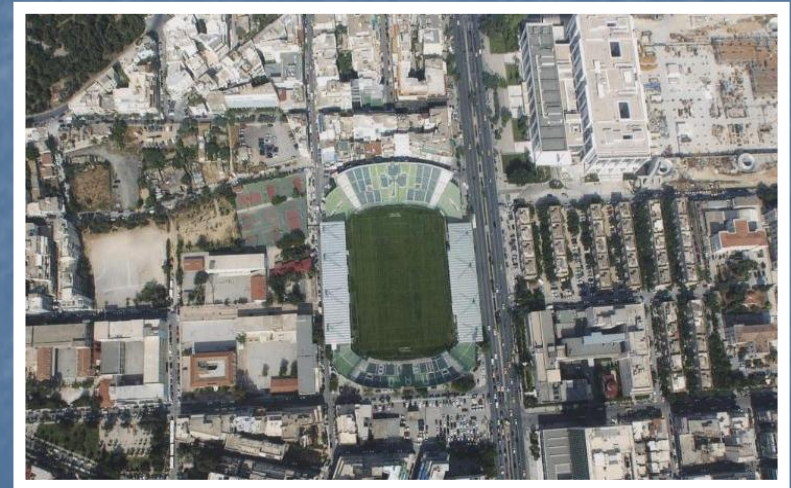
The Project concerns in the concretisation of two Supralocal Metropolitan Poles of recreation, sports, cultural, open spaces, green and other additional operations.

More specifically, it processes and specialises the principals and the basic terms for the biggest multifaceted and completed intervention of the bigger municipality of country, Municipality of Athens, 'the double reformation of region Votanicos and Alexandras Avenue,

- Votanikos



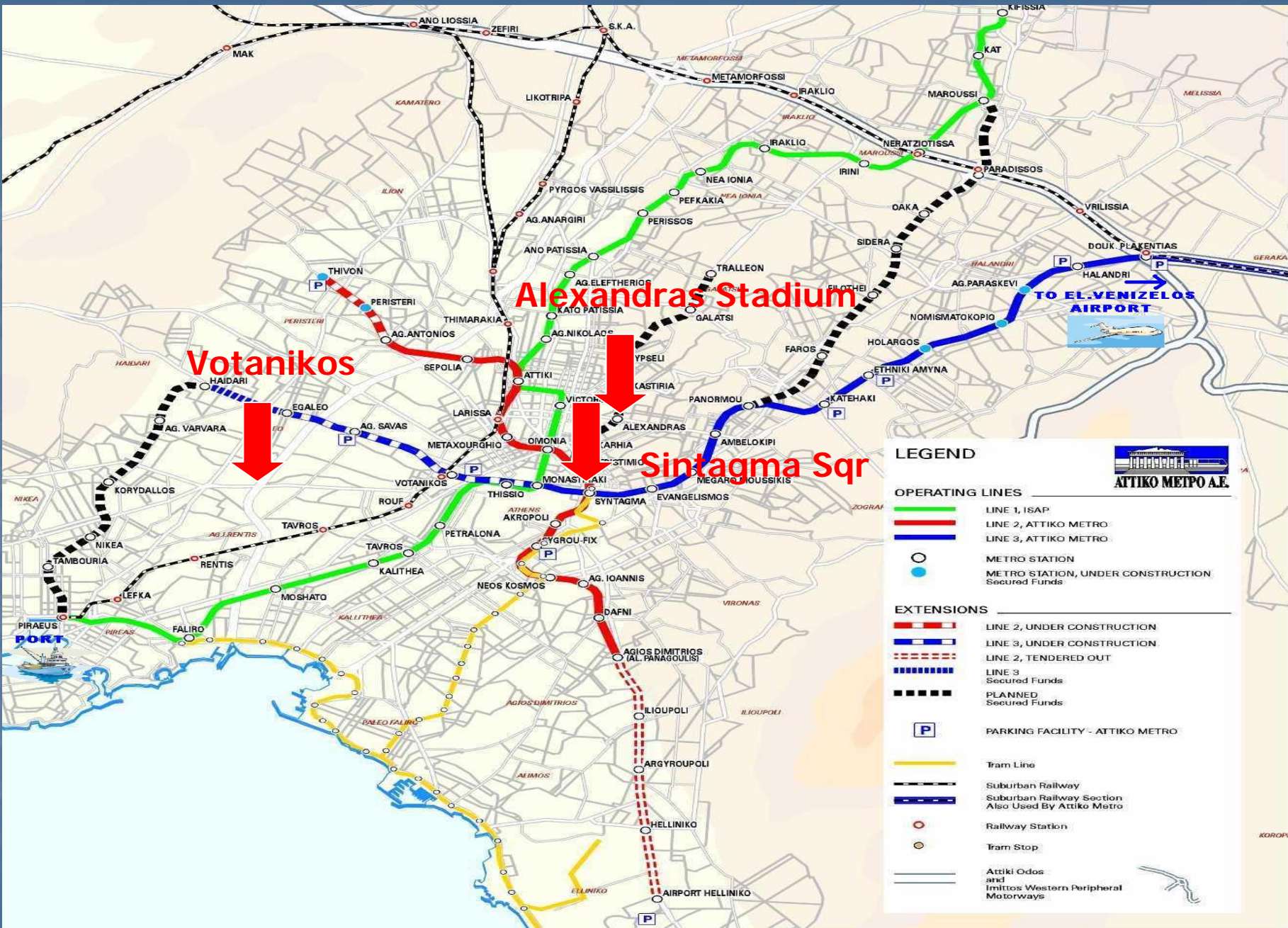
- Alexandras Avenue



The excuse



- Panathinaikos Football team.
Need of a new – modern football field



Alexandras Stadium

Votanikos

Syntagma Sqr

TO EL. VENIZELOS AIRPORT

LEGEND



OPERATING LINES

- LINE 1, ISAP
- LINE 2, ATTIKO METRO
- LINE 3, ATTIKO METRO
- METRO STATION
- METRO STATION, UNDER CONSTRUCTION
- Secured Funds

EXTENSIONS

- - - LINE 2, UNDER CONSTRUCTION
- - - LINE 3, UNDER CONSTRUCTION
- - - - - LINE 2, TENDERED OUT
- - - - - LINE 3 Secured Funds
- - - - - PLANNED Secured Funds
- P PARKING FACILITY - ATTIKO METRO
- Tram Line
- - - - - Suburban Railway
- - - - - Suburban Railway Section Also Used By Attiko Metro
- Railway Station
- Tram Stop
- Attiki Odos and Imittos Western Peripheral Motorways

Votanikos



ΒΟΤΑΝΙΚΟΣ



Alexandras Stadium



Λ. ΑΛΕΞΑΝΔΡΑΣ



ΟΑΚΑ



ΓΟΥΔΙ



ΕΛΛΗΝΙΚΟ



Botanikos Area

- Existing Situation



- Area after the Double Reformation



Double Reformation

Votanikos – Alexandras Avenue

Eleonas site history

- What is today called Eleonas, concerns in a extent of 8.500 acres It administratively belongs in 5 municipalities of (Athens, Peristeri, Aigaleo, Tavro and Renti).
- Has a very strategic site, only 2 km from Sintagma Sq.
- The area name comes from the many olive trees in the site
- Is the place Plato chose for his famous Academy in ancient years
- The whole economic and social life of ancient Athens took place in the area. Since the ancient years and until 1950 maintained it's character
- Iera Odos Str., crossing the area from east to west, still follows the same track from east to west, as the ancient road

Double Reformation Votanikos – Alexandras Avenue

Eleonas site character

The major picture today consists of:

- ❖ Complete urban planning and transport anarchy
- ❖ Area illegal occupation
- ❖ Trash
- ❖ Noise pollution
- ❖ Air pollution
- ❖ Lack of open spaces
- ❖ A picture of neglected and underdeveloped city

Double Reformation

Votanikos – Alexandras Avenue

- Since 1954, and more consistently after 1985, the government issued various legislative initiatives for the area regeneration:
- Law 1515/1985
- Law 1955/1991
- Law 2052/1992
- Presidential Decree 1995 (Government Press D'1049/30.11.95)
- Presidential Decree (Government Press D' 742/11.7.96)
- Law 2730/99

Lycabettus Hill



City centre –
Syntagma sqr

Votanikos



Double Regeneration Votanikos – Alexandras Avenue Eleonas site - today



Double Regeneration Votanikos – Alexandras Avenue Eleonas site - today







Double Regeneration Votanikos – Alexandras Avenue



Double Reformation

Votanikos – Alexandras Avenue

Alexandras Avenue area

- The area extended from Lycabettus Hill to the “refugees” block of flats of Alexandras Avenue.
- The area is known with the name “Kountouriotika”
- The Regulative Plan of Athens (Law 1515/1985) foresees the regeneration of the extended area.
- Effort was made for the Alexandras Avenue Regeneration under the Presidential Decree 1/20.3.2002
- Supreme Courts’ decision nr. 2556/2005 abrogates Presidential Decree 1/20.3.2002, as it was composed bypassing the provided procedures of law 2508/1997. The regeneration was cancelled.



Lycabettus Hill



Alexandras Avenue

2008

block of flats

Alexandras Avenue area

- The field is within space limits on the Avenue Alexandras in the wider region “Peribola” , now “Ampelokipoi”. The region was developed (former dump) with the arrival of refugees. in 1922, the space was granted for use of field of Panathinaikos.
- The wider region, found in the limits of ring, on the most important perimeter road of Alexandras Avenue. Region which has all characteristics of growth of city of in the decade 50 and 60. Dense layout, minimal spaces of green, absence of spaces of parking, most important environmental and circulatory harmful effect.
- Conditioned the region from General Regulating (Law of 1515/85 o as it was modified with Law 2052/92).
- Situation which is overloaded in suffocating point during operation of the football field.
- Simultaneously and the field, today does not have nothing to offer in the team and the city, apart from the enormous piece of history of the first association (football club) of the city of Athens.
- Its manufacture began in 1932 and was completed, roughly in its current form in 1958. There they found roof the Panathinaikos club, who remains with his certain sports up to in 1983 and returning from 1985 up to 2007. The current faculty of service of the field is judged no simply insufficient but at least minimal to entertain any athletic department or association.

Alexandras Avenue area

Today the field:

- Does not serve no aim, urban or recreation.
- It occupies free space, which is hard to find and valuable for the city.
- It causes particular harmful effect in the residents of region and in the operation of city (exclusion of Avenue Alexandra from the movement of vehicles etc).
- The supralocal importance and place of team of Panathinaikos, is not covered by the existing building of ground.
- It has very small capacity (13000-16000) concerning the crowd and the needs of team.
- The installations are obsolete, dysfunctional and insufficient, particularly for association that makes championship in all his departments.
- The limited extent of installations of ground, complicate the operation, for Panathinaikos, more specifically on issues administration, athletic spaces, training etc.
- Not existence of spaces of parking.
- Small retributive faculty of ground (small capacity - big cost of maintenance of aged building)
- Not acceptable from the conditions of operation of fields for the conduct of matches from FIFA/UEFA.
- Non-existence of constants of safety of sports fans

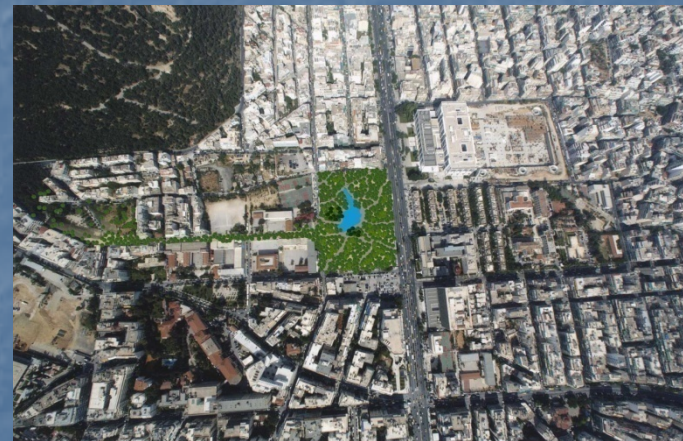


Alexandras Avenue

- Existing situation



- Area after the Double Reformation



The Project is aiming at:

1. On one side the creation of united free space with the form of urban park and underground space of quartering in the place of existing ground of Panathinaikos the Athletic Group on the Alexandra's Avenue,

2. On the other hand the creation of a big united free space with the form of an urban park, connected with the network of spaces of green of region of Eleonas and specifically the areas of green at length of Iera Odos Street and the stream of Prophet Daniel , as well as the possibility of manufacture of infrastructures and installations for the local government (Town hall), sports (ground of football, ground basket-volleyball, spaces of exercising) and commercial uses in extent of 200 roughly acres in the region of Eleonas, that raises in the limits of the Municipality of Athens.

It is appreciated that:

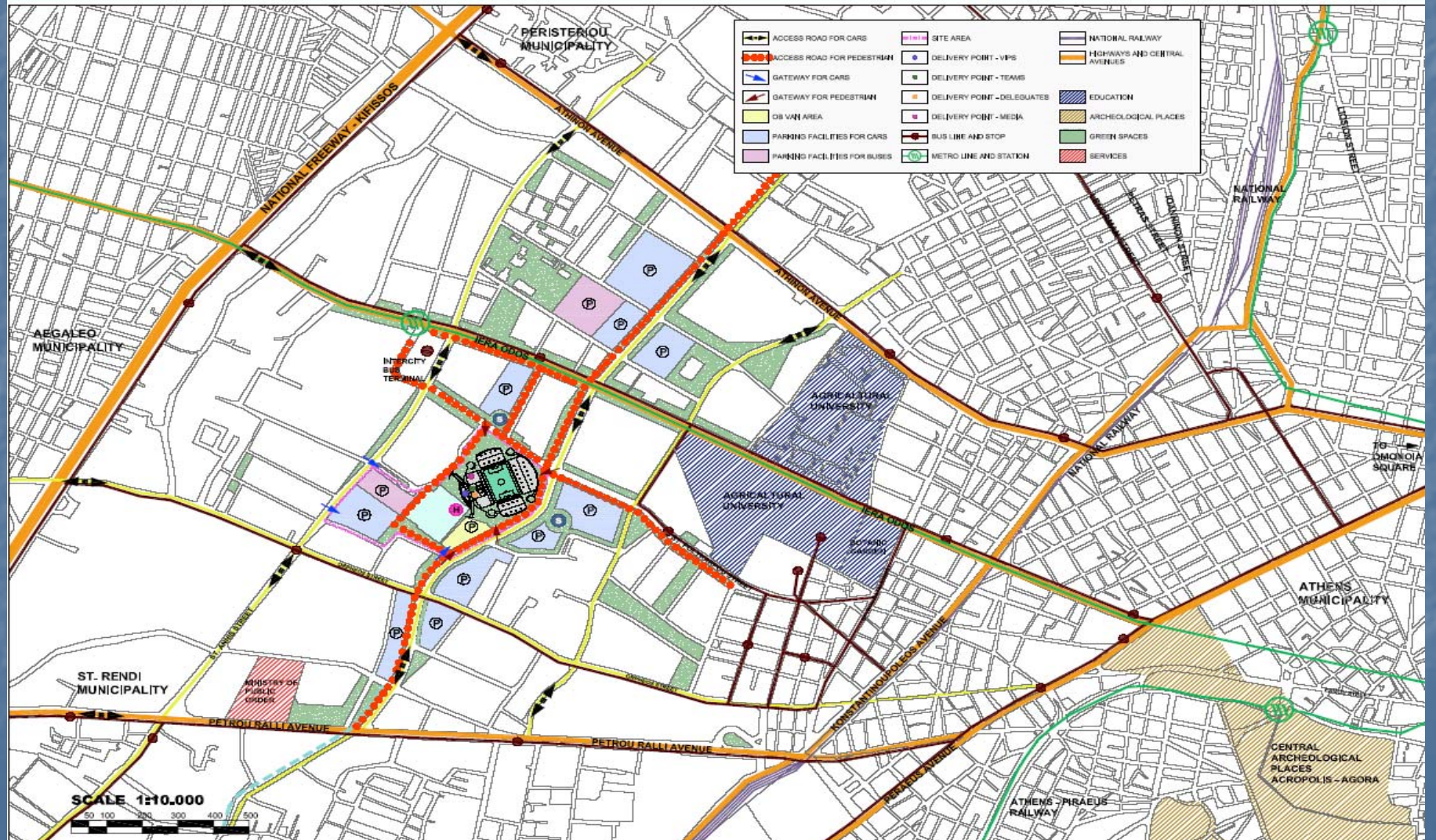
will give the spark for the expected upgrade of all downgraded region of Eleonas combined with, the replacement of devastated also arbitrary infrastructures with architectural works of high quality that they will constitute as “hotspot” for the region and the city.



The intervention in the region of Botanikos is accompanied by the parallel concretisation of basic work of infrastructure (road, transport, plumbing works and other).

MUNICIPAL STADIUM OF ATHENS - FC PANATHINAIKOS

IMMEDIATE SURROUNDINGS





Double Reformation Votanikos – Alexandras Avenue

In the newly formed blocks an area is defined for the development of:

- **40.000 spectators capacity football field**
- **Basketball & volleyball hall**
- **Multifunctional municipal building**
- **Parking spaces > 5.000**
- **140 acres of open spaces and green**

The general environmental objectives of the Program of Double Reformation can be summarised in the followings:

- Upgrade of regions of reformation.
- Improvement of quality of life of residents of the capital.
- Discovery of the most optimal environmental solution in the problem of arrangement of the athletic installations of Panathinaikos.
- Observation of the directions of Regulating Plan of Athens and the promotion of its application.

The general environmental objectives are related, with crowd of individual parameters that concerns in sectors of environment that are important for an urban, densely structured region. They are reported as:

- Creation of communal spaces.
- Increase of green – open spaces.
- Collection rain water and their partial re-use.
- Collection and sewages treatment.
- Most optimal management of littering (recycling in the source).
- Enhance of use of means of mass transport.
- Improve of road network
- Creation of infrastructures that could cover the need of access, circulation and parking.
- Reduction of levels of noise, particularly in built-up regions.

- Improvement of socio-economic environment of ground.
- Reduction- removal of disturbing uses from the urban net.
- Reduction of atmospheric pollution.
- Improvement of benefit of services of Administration in the citizen.
- Improvement of energy balance and reduction of emissions of gases of greenhouse through the adoption of principals of bioclimatic planning in building infrastructures, particularly in those of big scale.
- Configuration of conditions of maintenance in a good level of the communal spaces of big scale that will make them attractive and safe for the citizens.

ESTIMATION AND EVALUATION OF REPERCUSSIONS

Determination of environmental objectives.

The appreciated potential repercussions of the Program of Double Reformation of regions Votánicos – Alexandras Av. were recorded and evaluated for the following environmental units:

Biotic factors (Biodiversity, ecosystems, fauna, flora and urban green,)

Abiotic factors (Climatic factors, soil, waters, atmosphere, acoustic environment)

Anthropogenic environment (Materially financial elements and socio-economic environment, population and demography, human health, built-up environment and technical infrastructures, cultural heritage).

ESTIMATION AND EVALUATION OF REPERCUSSIONS

Important repercussions :

1. Landscape - Aesthetic Environment
2. Land Uses - Urban Environment – Residents
3. Social - Economic Environment
4. Urban Green

1. Landscape - Aesthetic Environment

- a. Creation of spaces of green in an important extent that will contribute in the confrontation of lack of green in the wider region.
- b. Improvement of elements of the natural environment via the cleansing of situation in the stream of Prophet Daniel.
- c. Improvement of geometric characteristics of road arteries of the region of study and better circulatory operation of the network so much for the direct but also for the wider region.
- d. Upgrade of quality of life of residents via the facilitation of access in the exercising and in cultural and athletic type events.

- d. The increase of the green public character and the integration of multiple activities of recreation will allow the appointment and exploitation of these spaces but also the upgraded daily operation of urban space.
- e. Appointment of region and the increase of visitors with substantially direct and indirect developmental profits.
- f. Rearrangement of this traditional region of industrial concentration, with the creation of pole of multiple operations that supplies economically the growth of productive activities of region that are found in inactivity and draw public and private capitals with result the concretisation of enacted urban planning and the resolution of dragging on problems of region (circulatory, lack of spaces of green, stream of Prophet Daniel and remaining work of infrastructure).

2. Land Uses - Urban Environment - Residents

From the comparison of sizes in the two cases result the following conclusions:

a. In the region of reformation in the Alexandras street , the free spaces are tripled (from 6.256, 62m² in 20.375, 4m²), the cover and layout are decreased drastically (from 144.598, 78m² in 400m² and from 75.079, 44m² in 400m² respectively).

b. In the region of reformation in Votnicos, is observed reduction of land that remains in private individuals, with simultaneous change of uses from industrial-transport in administration, sports, trade and recreation.

c. In the region of Votnicos is observed also an increase of open spaces at 120 acres.

3. Social - Economic Environment

The repercussions in the socio-economic characteristics of region are differentiated depending on these functional levels and are distinguished as direct and indirect:

- a. Increase of employment (more than 1.000 new employees)
- b. Upgrade of the wider region
- c. Improvement of circulatory operation
- d. New incomes for the government (taxes, VAT, etc)

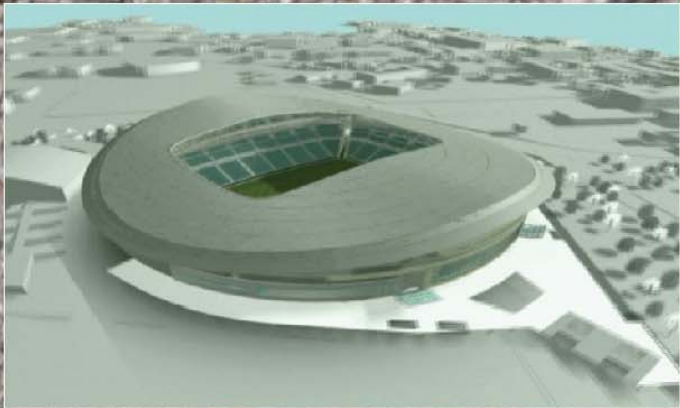
4. Urban Green

The changes that are expected by the concretisation of Double Reformation as for the urban green are particularly positive

- a. Construction **19** acres of green instead of 75.000 m² of concrete in Alexandras Av.
- b. Construction of 120 acres of open spaces in Votanikos area
- c. Acceleration of the development of the entire area of Eleonas.
- d. Is totally created ground with the character of urban green with area **140** acres that are translated in increase at **5%** of urban green of Athens.
- e. With the Double Reformation, Athens gains at least new 84 acres of urban green in 2 -3 years time by the private sector (new buildings etc)

Double Reformation Votanikos – Alexandras Avenue





ΛΕΩΦ. ΚΗΦΙΣΟΥ

ΛΕΩΦ. ΑΘΗΝΩΝ

ΤΕΡΑ ΟΔΟΣ

ΑΓΙΑΣ ΑΝΝΗΣ

ΑΓ. ΠΟΥΛΚΑΡΓΙΟΥ

ΣΤ. ΠΛΑΤΣΗ

στ45α

ΓΗΠΕΔΟ

ΚΑΣΙΣΤΟ
ΓΗΠΕΔΟ

ΔΗΜΟΤΙΚΟ ΚΤΗΡΙΟ

στ45-46-60

ΟΡΦΕΩΣ

ΠΕΤΡΟΥ ΡΑΜΗ

ΛΕΩΦ. ΚΑΜΠΟΠΟΛΕΩΣ

Green Interventions in the planning of the new Athletic Stadium:

1. Reduction of consumption of natural resources and saving of energy.
 - ✓ With the application of bioclimatic planning is achieved exploitation of natural lighting and airing of spaces with result the reduction of consumption of energy.
 - ✓ With the use of energy efficient connections in the installations.
 - ✓ Are still examined the use of Renewable Sources of Energy for the heating, refrigeration and cover of needs of electric energy of installations.
 - ✓ With the choice of modern system of lighting with light balls of low consumption.

- ✓ With the choice of suitable ecological structural materials that covers absolutely the European Community specifications for the environment and the health in all their circle of life.
- ✓ With the concentration, collection and storage of rain water are given the possibility of cover of needs of water for use in the lavatories.
- ✓ With the collection and recycling of impure water, wash open and internal spaces and the use in secondary needs.
- ✓ With metres and practices for saving and rational use the consumption of water can fall in the 1/3 from followed up to today practical.

2. Modern practices of management of waste.

- ✓ With the reduction in the use of consumption of papers, plastic and glasses.
- ✓ With the maximisation of recycling so that can be decreased the wastes that are produced by the operation of new installations and is maximized the environmental profit.

3. Facilitation of access in the New Athletic facilities for pedestrians and bicycles.
 - ❖ It has been taken concern in the planning for the comfortable and sure circulation of the pedestrian sports fans from the point's disembarkment and embarkation of means of mass transport that arrives and withdraws from the Court.
 - ❖ Have been determined special places of free quartering for bicycles, facilitating all sports fans using as means of transport.

Double Reformation Votanikos – Alexandras Avenue



Double Reformation Votanikos – Alexandras Avenue

Stage of Investment

Investments includes:

- Incorporation of DOUBLE REGENERATION SA
- Land acquisition
- Stadium study and construction in Votanikos
- Municipal multifunctional buildin study and construction in Votanikos
- Public works and infrastructure in Votanikos
- Park, museum & club house, and underground public parking in Alexandras Av.

Double Reformation

Votanikos – Alexandras Avenue

Investment in financial terms:

- Stock capital of DOUBLE REGENERATION SA (3,8 m. €)
- Masterplan study (0,4 m. €)
- Votanikos Stadium study & construction (82 m. €) **(Panathinaikos)**
- Votanikos multifunctional building study & construction (55 m. €) **(Municipality & BOT)**
- Alexandras Av. museum, club house, recreation and dining area, park, underground parking study & construction (8 m. €) **(Municipality & Government)**
- Public works & infrastructure in the greater area (90 m. €) **(Municipality & Government)**
- Land expropriations (40 m. €) **(Municipality & Government)**

Double Reformation Votanikos – Alexandras Avenue

- **The above sum up to 280 m. €.,** without the land acquisition from Municipality of Athens, with land purchase of 75.000 m² from National Bank of Greece (20,3 m. €), donation from land owners of 56.000 m² (26,5 m. €) implementing the law N.3481/2006, and land purchase and expropriations from other owners
- **The total investment budget including the land value sums up to more than 325 m. €**

<i>Enviroment</i>	<i>Upgrade of reformation Area</i>	<i>Improvement of quality population living standards</i>	<i>Optimum enviromental option to the Issue of the arrangement of the new P.A.O F.C Stadium</i>
Population-Demography	✓	✓	
Health	✓	✓	✓
Biodiversity-ecosystems- flora-fauna-Urban Green	✓	✓	
Ground	✓		
Waters	✓	✓	
Atmosphere	✓	✓	✓
Climatic factors	✓	✓	✓
Acoustic enviroment	✓	✓	✓
Built up Enviroment- technical Infrastructures	✓		✓
Cultural Heritage			✓
Landscape	✓	✓	✓



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