



**OSLO, NORWAY - EUROPAN 9 SITE**

## **European 9 in Norway – Four cities expand the European Laboratory**

European Norway enters the 9th session of the European competitions with 4 cities and sites. European Norway participated for the first time in European 7 with three sites, and has managed to get all the winners into the implementation phase on different levels. The winning project in Stavanger is already a built reality. The total of 11 cities now involved lifts European, as an urban laboratory in Norway, from a local to a national level.

The board of European Norway consists of representatives from The Norwegian State Housing Bank (Husbanken), the Centre for Design, Architecture and Built Environment (Norsk Form), the National Association of Norwegian Architects (Norske Arkitekters Landsforbund) and the three schools of Architecture (Trondheim, Bergen and Oslo). The Norwegian State Housing Bank has made European to one of their main tools in investigating the Norwegian contemporary city, is heavily funding the competitions and is also following up the implementation process in each city. This is of great importance for the implementation of the winning projects.

Our fellow competition organizers and the developer organisations have prepared the ground for the competition program since last summer. This was pushed one big step further in Berlin, where European Germany hosted The European 9, Forum of Sites. The Norwegian cities were heavily represented. After having observed and discussed the local urban issues in a European perspective, everybody returned with a keen interest for what kind of ideas the competitors might discover and develop. In many ways the understanding of the challenges of the sites has “been on the move” up to the now finished competition programs, and will continue to do so into the phase of realization. All the cities involved have therefore committed themselves to engage the winning teams in study commissions, to ensure the process of lifting the competition ideas into the project phase, and to implement them.

### **EUROPAN 9 is an open invitation to young European architects to build meaningful urban life.**

To engage in the forming of contemporary urban society does not signify to move away from architecture. Although when architecture is presented rather as a hypothesis rather than a definitive solution, architecture is still increasingly important as a physical tool for shaping social spaces of everyday lives.

What is changing is the range and complexity of what we try to define as the needs of existing and future inhabitants in order for them to manifest a meaningful society and urban life. We look for projects to open up discussions on the strategic role of architecture as catalyzing agents for the development of urban environments. In a considerable number of EUROPAN competition briefs (and certainly in many of the Norwegian ones) candidates are presented with a gallery of various players, ideas and visions. The competition is an invitation to enter this world and, and enter it from the outside by investigating coherent urban strategies.

This leads to what is a very important role for European Norway; the discovery of engaged professionals with the right competence and commitment for the task. The editor of the Norwegian Magazine “Byggekunst”, Ingerid Helsing Almaas, stated this in her editorial, presenting European 8:

“The inviting cities learn from each other. Not at least: they get courage and insights to enter into cooperation with young and able architects with other references, new to the cities. The result of this process is not only visible in the implemented projects. Even when projects is not realized or changes direction the competition winners has important influence on other planning processes in the cities.”

All seven Norwegian sites from European7 and European 8 are in progress for implementation.

**The overall theme of European 9, “Sustainable city and new public spaces”** opens a wide range of challenges to the cities and the competitors.

Odda on the western coast of Norway is a former industrial center now under change, even in decline and in search for a new identity and profile in the midst of a dramatic Norwegian landscape. The study area and site is located to a peninsula out in the beautiful fjord landscape. The town states in the program: “European participation is admirably suited to the phase in which we now find ourselves”.

Trondheim in the middle of the country is a Norwegian center of knowledge and science. The competition site and program profiles this through the strengthening of the city center as a university city; the site and study area is seen as part of such a strategy. Creative, constructive, critical is key words in this university strategy which also can be seen as slogans for the European competition. The developer asks for new innovative student housing, to be built within three years.

Two sites in the Oslo region are in the European 9 field of research:

The Grorud valley is the hinterland of the capital, a vast area with large housing projects and an industrial sub-urbanity from the middle of the last century. In planning terminology it has been in the shadows, but a strong searchlight has lately been set on the valley both from the local and the national government. European participation can be seen as part of a task-force carving out the new valley concept. The inviting parties sees the European competition at the Grorud center as a possible pilot that may introduce elements that can be transferred to other areas and contexts in the larger valley.

The town of Lillestrøm in the Skedsmo Municipality is located halfway between the Oslo city center and the new international airport at Gardermoen. Lillestrøm is the focus point in a municipality with large areas of suburban housing and a variety of expanding industrial and commercial conglomerations. The town is well known for three features: The football club that competes in the top of Norwegian football (the “canary birds”), the largest showroom in all Norway, “Norges Varemesse” and the “Kjeller Research Center”. The town is an important node in the Oslo region. The town is not known for its urban intensity, parks and public spaces and enters into European 9 to change this.

European Norway welcomes participants from abroad and at home to take part in this national investigation of the Norwegian contemporary city. The European Competition is searching for young talent from all over Europe. European Norway and the partner cities will be deeply committed to all strong ideas and explorations that is put forward, and to see that they are implemented.

A sincere welcome

Knut Eirik Dahl  
President European Norway

Eskil Bråten,  
Director of Agency for Real Estate and Urban Renewal, City of Oslo.

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**City:** Oslo, Grorud, Norge  
**Population :** 500.000 inhabitants in Oslo,  
25.000 Grorud district  
**Study site:** 15 ha  
**Site of project:** 5,5 ha

## 1. TOPIC

Grorud senter is a typical suburban challenge, lack of urban intensity and housing diversity. Today Grorud senter is a transportation node serving enclaves of housing, shopping center, gas station and recreational / sport areas. The node itself is a transitional space separating, rather than stitching together the enclaves and open spaces. How can new development and programs repair the area in a positive way? The challenge now is to investigate an interesting transformation of the area existing public spaces and suburban logic.

### Multimodality

The competition will focus on facilitating an improved relationship between public transport, pedestrian traffic and the centre. The site area also includes the connection to the motorway system as a further challenge in the centres relationship to existing local and regional infrastructure.

### Spatial management of cars

The existing parking facilities at the centre, occupies a large area and is not used to its capacity. It will therefore be challenge to integrate the parking area into the structure of the centre. The new development will need further parking facilities, preferably under ground, and one must strive to reduce the impact of cars in the public domain at the same time as the centre and the public transport node maintains an accessible and sufficient car parking system.

### Functional mix

The programming of the new development will set the new trend for the area. Mixed use, potentially with high density is one of the main challenges for the site. The cultural aspect of the programming can bring new ideas and point out important issues for the future of the centre.

### New public spaces

The public space / boulevard linked to public transport terminal should be given new ideas and be developed as central parts of the programming in general. The relation between the indoor shopping centre Grorud Torg and the public spaces/boulevard must be improved.





## 2. CONURBATION

### Regional aspect

Oslo is the capital of the Kingdom of Norway. The city has a blue-green image, as it is surrounded by the blue Oslo fjord and green hills and forests. The geographical area of Oslo is 450 km<sup>2</sup>, and only 1/3 of the area is developed. The city centre is surrounded by woods, lakes and 40 islands in the fjord.

Oslo is the oldest of the Scandinavian capitals, and its history goes back to 1000 years ago, when the first settlements were built at the inlet of the Oslo fjord.

After the Great Fire that destroyed the city in 1624, the Danish King Christian IV, decided to rebuild the city in brick and stone, and named it Christiania. Three hundred years later, in 1925, the citizens decided to rename their city Oslo.

Oslo is a pleasant city with over 500 000 inhabitants. The city is characterized by a mix of old and new architecture, parks, hills, museums, monuments, lakes, forests and the fjord.

### Climate :

Average mean temperatures in:

November-March: -3 C

April-May: 8 C

Jun-Jul-Aug: 16 C

Sep-Oct: 8 C

Hours of sunshine per month in Jun-Jul-Aug-Sep: 240 hrs

**Employment** : 360 000 people have Oslo as their place of work.

The City of Oslo employs approximately 43 000 people.

Business and Industry :

Shipping industry

Information technology, telecommunications and multimedia

Offshore and engineering activities

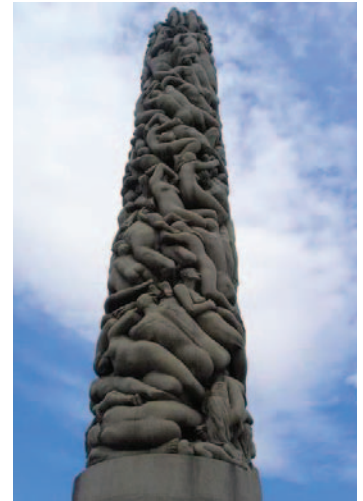
Biotechnology and pharmaceuticals

**Oslo's architecture** is currently undergoing many interesting transitions, and it is quite a long time since architecture and urban planning have been the object of such great public debate! The new Opera in Bjørvika is in the planning stages, Fjordbyen is taking shape, and discussions about the Vestbanetomt building site and planned high-rises are taking their course. New architectural firms and architects such as Sverre Fehn (Colosseum) and Snøhetta, the latter is also renowned for the new library in Alexandria, are leaving their marks on the city.

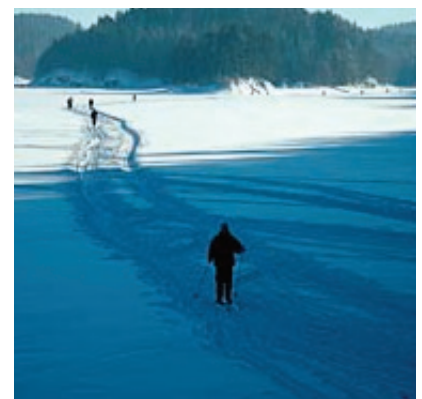
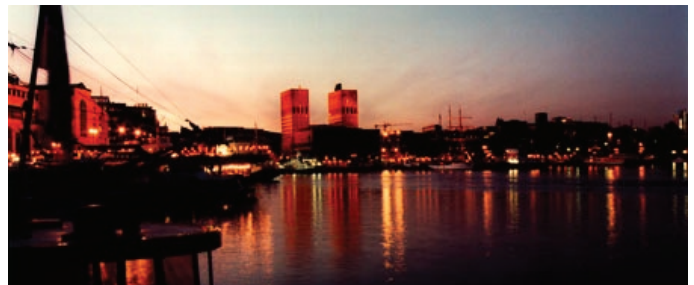
**Akershus Castle and Fortress**, fortifications that have existed for more than seven hundred years, are the most prominent of these buildings. Akershus Castle also plays an integral role in the history of Oslo and Norway and at the same time offers a magnificent view of Oslo Fjord from the outer fortifications.

**Karl Johan Street** is the main street in Oslo and serves as the parade street. The Castle and Oslo Central Station are at opposite ends of the street. From the Castle down to the station, is located institutions such as the University, the National Theatre and the Norwegian Parliament. Great architects such as H.D.F. Linstow and Christian Henrik Grosch have left their marks on the Castle and the old University buildings in the centre of Oslo.

**Aker Brygge** is a fine example of how restrictions on architectural styles have been relaxed in recent years. Aker was previously a shipyard but was restored during the 1980s and rebuilt into a waterfront centre for housing, shopping and restaurants. In summer, Aker Brygge and the Karl Johan Street district are the most popular outdoor areas in Oslo.



Pictures from Oslo



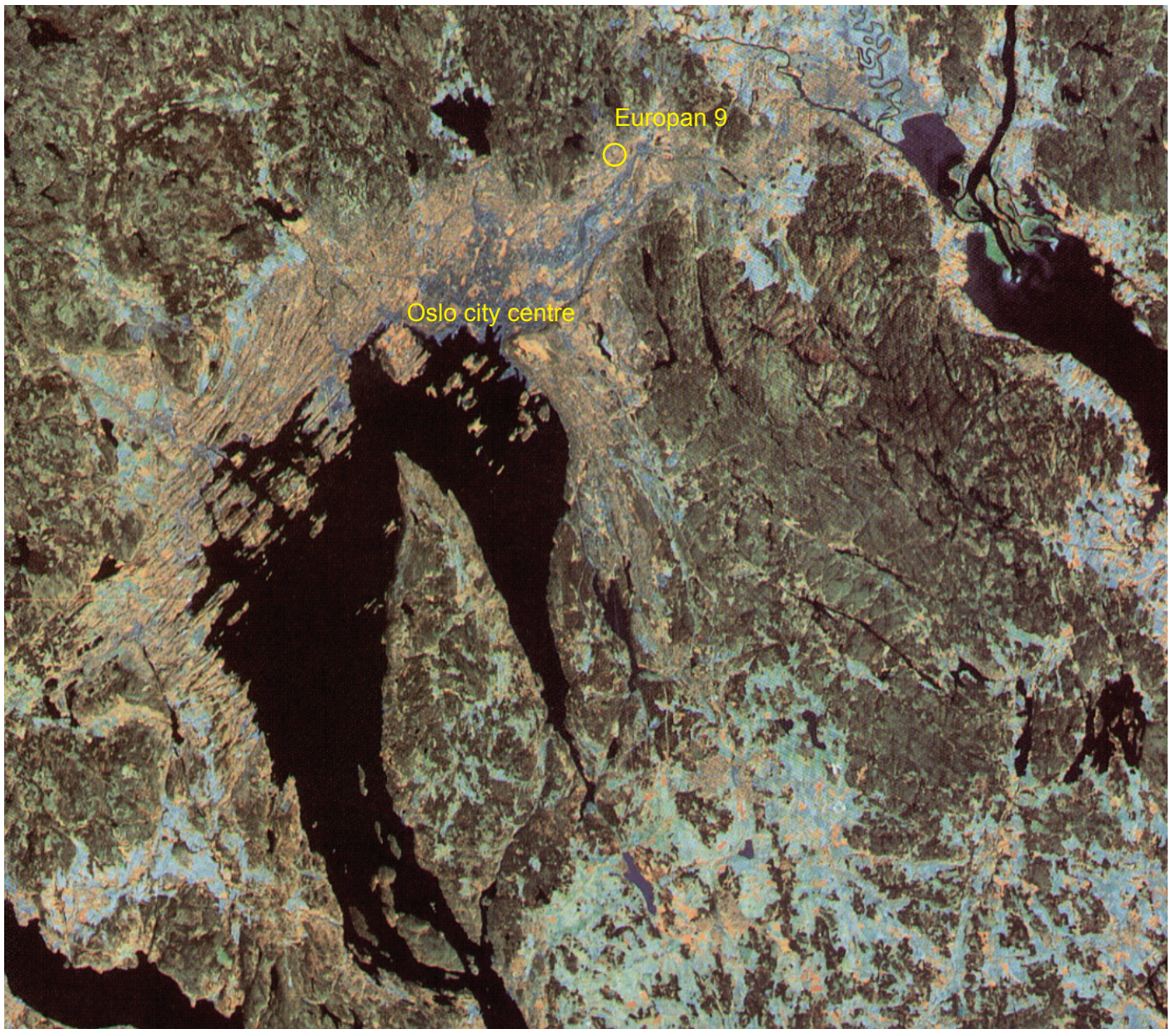


**General description**

The Grorud Valley (Goruddalen) is an extension of the Oslo city from the 60-s with about 130.000 of the capitals inhabitants. The valley is a fully occupied urban site. The residential areas are located in both sides of the valley facing up towards to the nature. The lower part of the valley is part of the main highway system and huge industrial areas. Oslo is expanding through increasing density and large city/state-subsidized urban renewal program is about to be launched for the Grorud Valley.

Grorud Senter is located in the northeastern part of the Grorud Valley, Norways largest and most important transportation and logistics corridor, connecting traffic east, west, north and south, rail, port, auto and plane. The logistic port of Oslo is currently being relocated further south, in the inner harbour basin and the new waterfront is the city’s most important inner city development, with the new opera of Oslo as a focal point.

New expansion areas are required as migration from other parts of Norway is expected to double the capitals population. The Grorud Valley is roughly 4 times the size of the transformation areas liberated at the waterfront. Both the industrial areas in the lower part of the valley and parts of the residential areas in both sites are supposed to be transformed and increasing density. The industrial transformation areas in the lower part of the valley



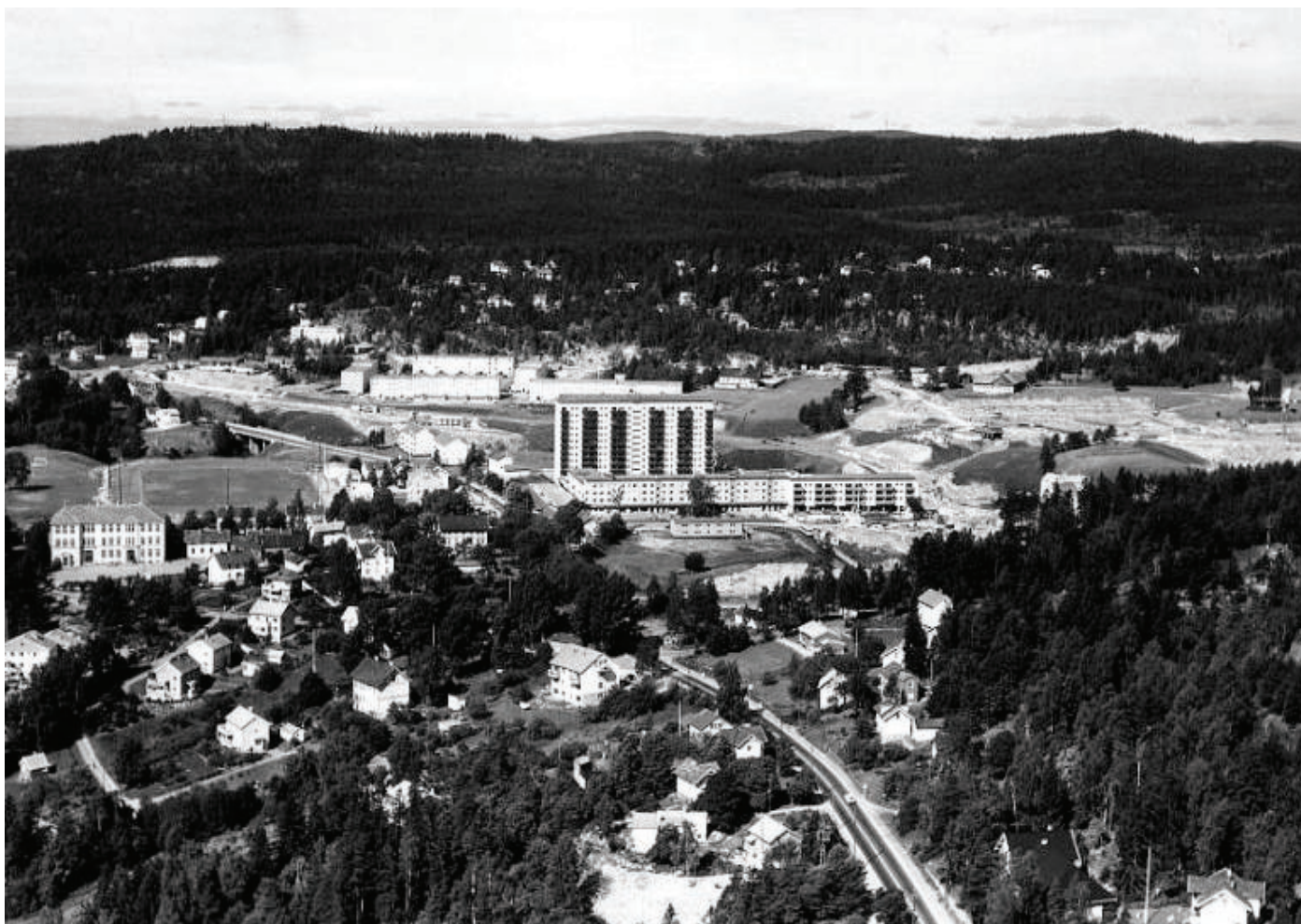
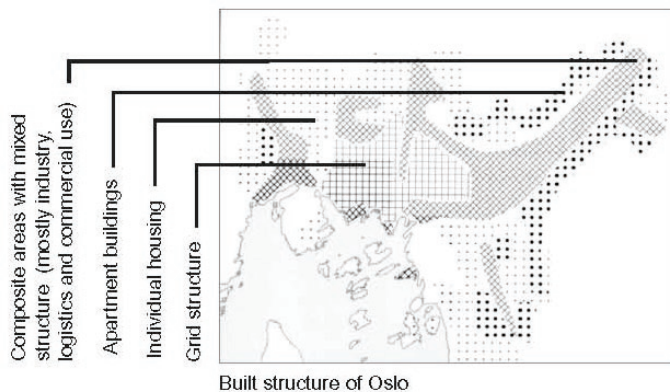
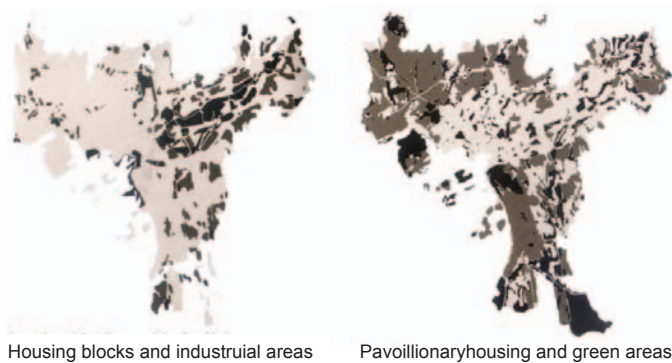


have been located according to a combination of accessibility and low costs on large plots of land. With the growth of the city, modernisation of industry and logistics and a more poly-central urban structure indicated by the Oslo Strategic masterplan 2000, the whole valley are in transformation. Grorud senter is located in the existing residential areas at the northern site of the valley. There is a potential of increasing density and urban development according to the strategy of polycentral structure.

**Historical transformation of Grorud.**

Grorud was a farmland until the end of the 19th century. Groruds location made it a thorough fare for the transportation of goods into the city both by highway and trains. Throughout time Grorud has been formed by the expansion of Oslo, even before it became part of the capital.

The implementation of a Quarry (for Grorud Granite) and building of the metro (Grorud-line) in the 60's, together with the building of housing and a shopping centre, forms what we today know as Grorud Senter. The closed down quarry has given an historical identity to the place. Grorud is a typical example of post-war development. In recent years Grorud has become more multicultural with an increased population of immigrants moving into the area. Integration and the multi-cultural identity presents a challenge in relationship to the program and in giving form to public spaces.



The Grorud Centre was built in 1963.

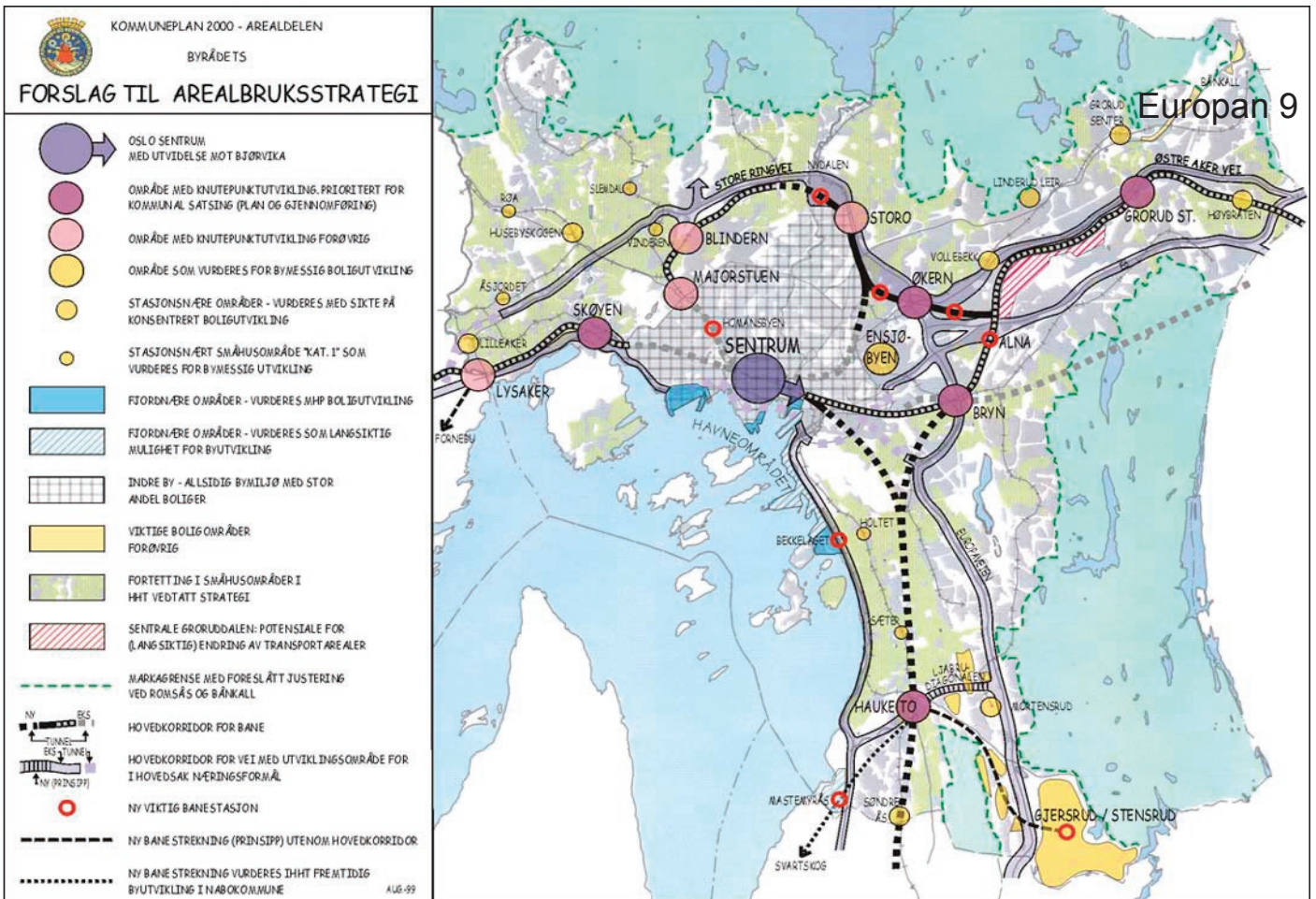


**Future transformation in a regional perspective.**

Grorud is pointed out as a high priority area for dense housing development in relation to a public transportation node (yellow colour circle on masterplan 2000). A large city/state-subsidized urban renewal program has plotted Grorud senter out as one by five areas in the Grorud Valley. The Grorud centre of today is composed by monofunctional areas separated by infrastructure and undefined public spaces. Municipal plans now aim at urbanising the area by increasing density, mixed use, defining the urban spaces and connecting the public transport.

Large areas at Grorud senter is public property. City of Oslo Agency for Real Estate and Urban Renewal (EBY) is the department in charge of the management of municipal plots, such as the site at Grorud centre, while City of Oslo Planning Authority (PBE) is responsible for the master plan for Grorud senter. By entering Grorud senter as competition site for European 9 the municipality wishes both to have ideas on the level of the program of mixed uses, public spaces and public transportation, and on the level of strategic use of urban elements for generating new internal logics on city level. Thus the candidates project may open up various processes of development within the master plan.

EBY wishes to develop a detailed urban development plan for the site, in consultation with PBE. The municipality is also interested in exploring more strategic plans for the public spaces within the study area. On a more general level the challenges in the study area are comparable to the challenges of other areas of the strategic master plan for the Groruddalen, and may be transferred to these contexts.



Proposal to land use strategy masterplan 2000. Grorud is planned a junction area, prioritized for municipal important area.



### 3. THE STUDY AREA

#### Place of study area in town

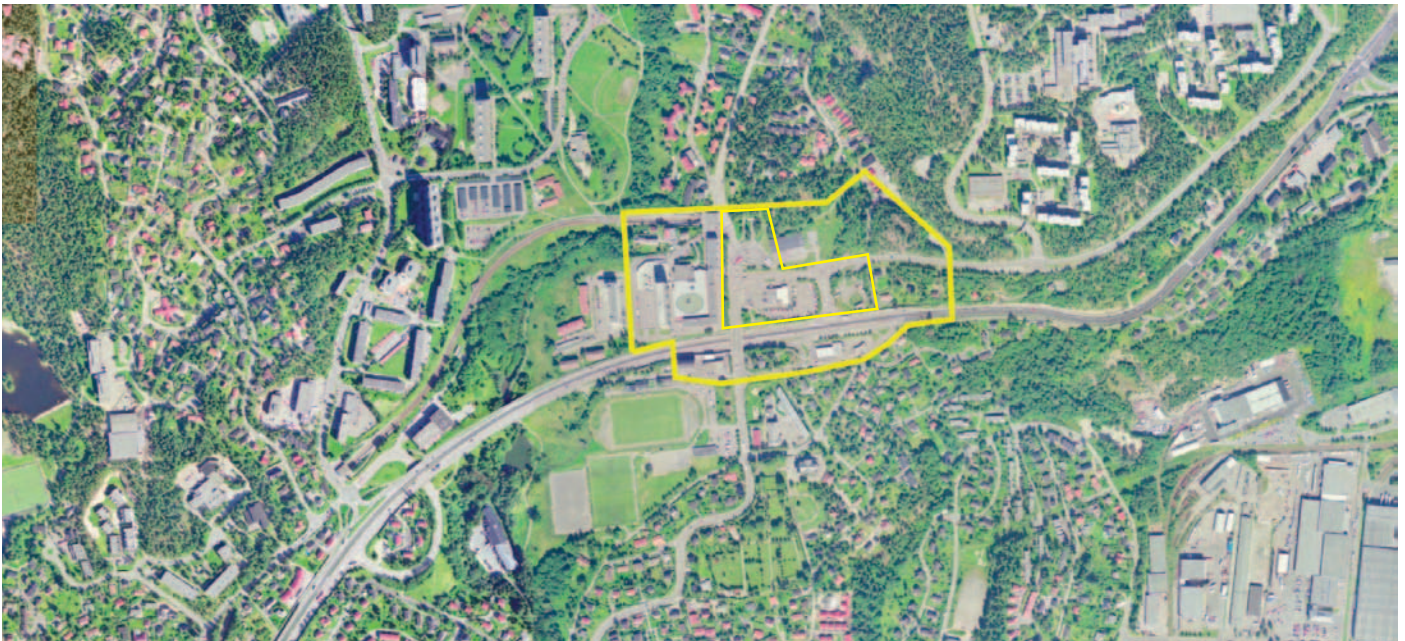
Grorud senter is located in the north eastern part of the valley with good connectivity to the centre of Oslo city by bus, subway and motorway. Social residential building scheme are arranged around a market square, Grorud Torg, now an indoor shopping centre. The study area, Grorud senter in extension, represents a needed opportunity to create public spaces and increase the social impact by intensity, multi-functionality and multimodality. The study area represent complexity both in structure and functions including a marketplace, a shopping centre, a high-rise residential building, subway- and bus station, 2 gas stations, development areas, local streets and connection areas to the motorway. There is a mix of city and private owners. City is owner of several plots, including the site, but it is important to make partnerships with private owners.

The main challenge is the fact that Grorud senter is deteriorating and losing its market share, at the same time as there are larger vacant lots nearby. The development of housing and commercial

activities in relationship to the metro station area is supposed contribute to reduce the general transport needs at the same time as it will increase the need for public transport. Restructuring local roads to environmentally prioritized city streets will help improve public space.

#### Centrality and location

The study area can be reached by 200-300 000 people within 45 minutes by public transport. This is comparative with a car journey of about 20 minutes if one take into consideration the cost of travel. As many as 350-400 000 people can reach the area by car within 20 minutes. The area has a central position, connected to one of the main traffic arteries into Oslo, but lacks any of the functions or services that would make it a natural stop for travellers apart from those who live locally. Besides its function as a junction-point for traffic systems, and Alnavassdraget's function as part of a continuous green belt, the area does not possess any particular qualities that would tie the area together with neighbouring local or regional areas. In effect the area can be characterised to have much more of a local-, than regional value.



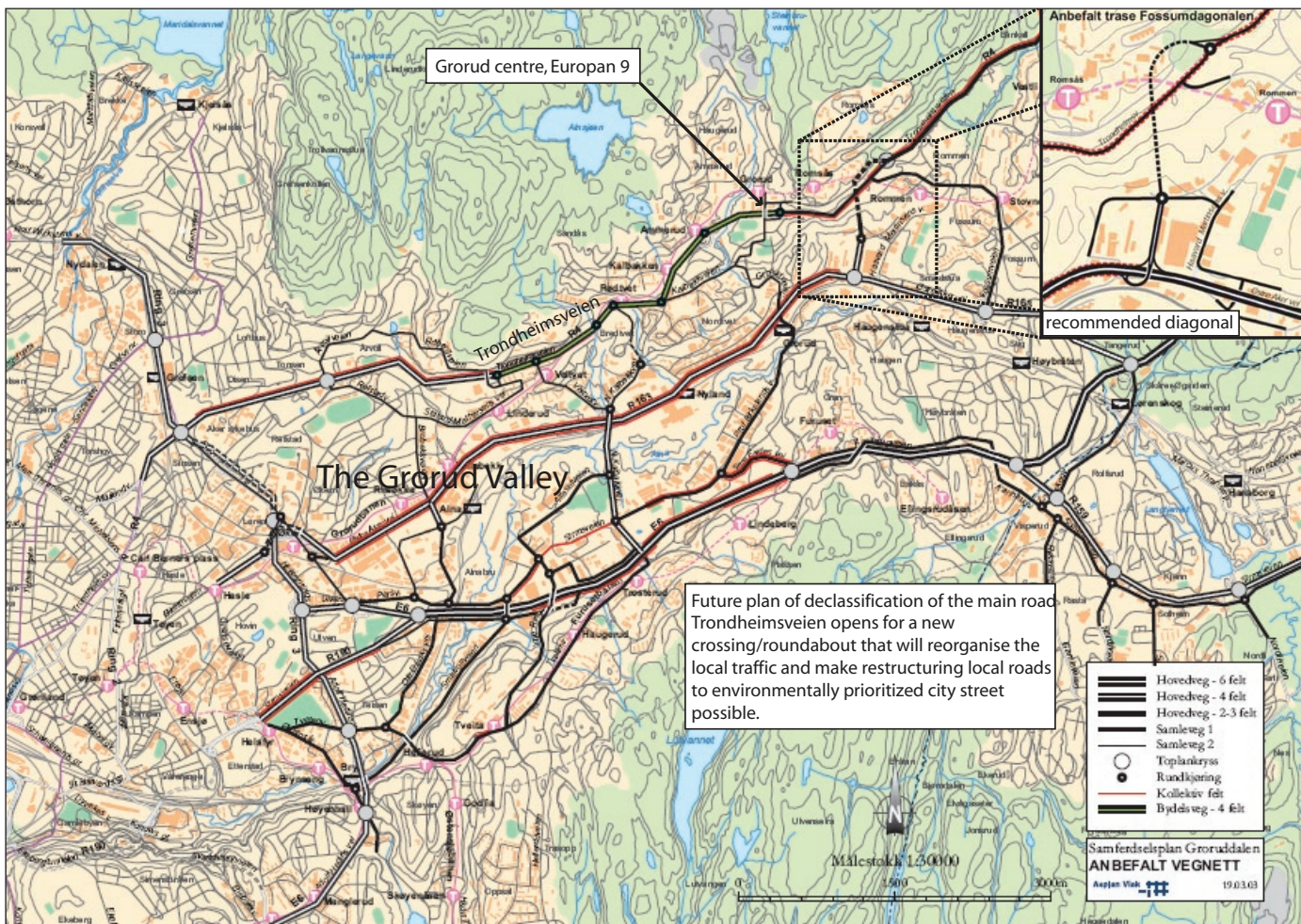
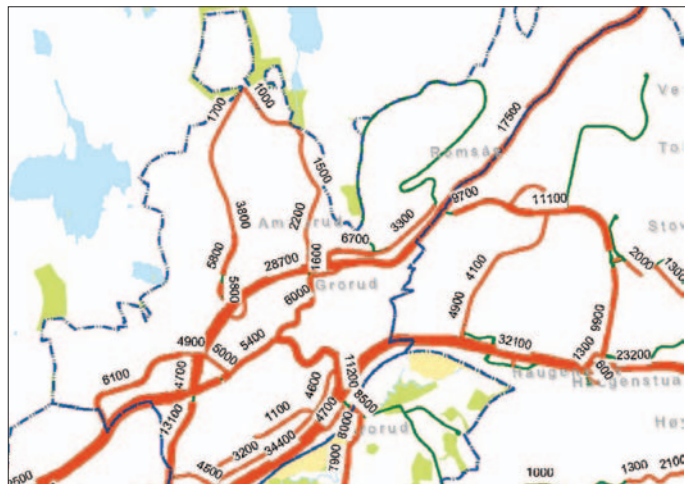


The property marked of today indicates that there is a demand for development of housing at Grorud. At the same time there is a significant share of commercial activity that is lost from Grorud to Alnabru and the neighbouring principality. The conducted analysis concludes with a recommendation to facilitate a larger commercial area centrally in Grorud. The areas characteristics and given perimeters suggests that there should be a further development of the place as a local centre and a node for public transport.

**The main road system**

The main road connecting the area to the city centre is Rv4 – Trondheimsveien. Approx. 30 000 cars are passing in Trondheimsveien. The traffic development that last 10 – 15 years show an almost constant volume of traffic along Trondheimsveien. Todays traffic pattern in the centre of Grorud is dominated by the traffic in Trondheimsveien. In the local traffic network the traffic is the greatest on the side roads to Trondheimsveien. This is partly due to these roads being part of the level crossing over Trondheimsveien.

Future plans of declassification of the main road Trondheimsveien opens for a new crossing/roundabout that will reorganise the local traffic and make restructuring local roads to environmentally prioritized city streets possible.





## Public Transport

Finding a solution for a public transport terminal is an essential key to the development of the area, and will influence the usage of space. Road patterns will to great extent determine future developments. The re-organisation of the bus terminal is the single most important factor for improving the accessibility to and between the various public transport services in the area.

The existing terminal has a split function with an open bus terminal and a subway terminal which is badly integrated with the local centre. Neither the bus terminal nor the subway terminal is of a good standard. The bus terminal has a temporary feel to it and comes across as a windy and unpleasant space, and will be particularly unpleasant in the winter. The connection between the subway terminal, the bus terminal and the local centre is not communicated very well.

Grorud Station is the nearest railway station. The station lies to the south of Østre Aker vei and approximately 1,5 km away from the centre of the study area.

### Accessibility to buss

The possibilities for travel by bus are very good. The bus terminal is located just by the metro (T-bane) station, in the crossing between Bergensveien and Romsåsveien, with access points from Bergensveien. Buses arrive at the terminal from both Bergensveien (In both directions) and from Romsåsveien/ Dr. Kloumannsvei. For changing between buss and subway, the passengers can walk via a pedestrian tunnel or cross Bergensveien.

### Busrouts to/from the area:

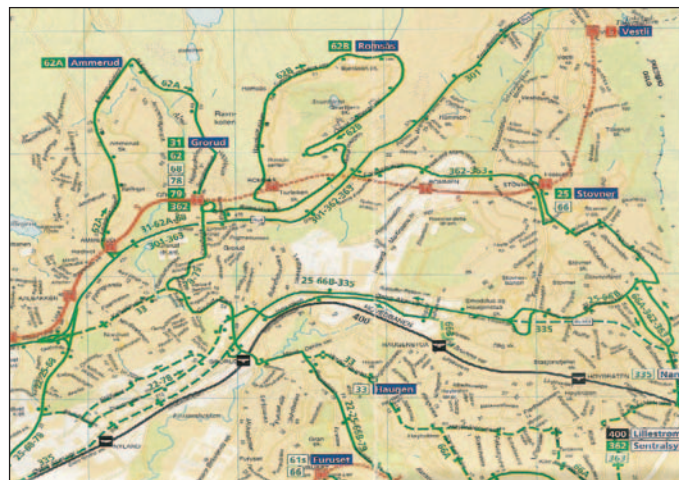
Bus Departure pr. hour/direction	Rush	Day	Night
Bus (OS) 31 Grorud – Snarøya	4	4	2
Bus (OS) 68 Grorud T – Helsefyr T	4	2	2
Bus (OS) 78 Grorud T – Prinsdal	2		
Bus (OS) 79 Grorud T – Holmlia	4	4	2
Bus (OS) 62A Grorud T – Ammerud	4	2	
Bus (OS) 62B Grorud T – Romsås	4	2	2
Bus (SL) 301 Oslo M - Nittedal	2	2	1
Bus (SL) 362 Grorud T - Lillestrøm		1	0,5
Bus (SL) 363 Blindern - Lillestrøm	2		

The travel times from the buss terminal to downtown Oslo is approximately 30 minutes. The travel time is expected to be reduced when Trondheimsveien is given a continuous bus lane according to the recommendation in the Traffic plan for Groruddalen.

### Accessibility to subway (T-bane)

Large sections of the area in study lies within a 500m radius from the Grorud subway station. The station has about 2300 passengers per day. The subway line is the No 5 and runs every 15 minutes during rush hour. It takes about 20 minutes from Grorud to downtown Oslo. The station is organised over three levels. The tracks and platforms at the bottom level. The prolongation onwards to Romsås continues via tunnel. On level 2 is the main hall. From the main station hall there are ramps to the outside in all directions which gives a good connection to the local centre, residential areas and green space. A pedestrian tunnel connects the existing buss terminal to the subway. From the main Hall there are stairs up to level 3 (Street level) where the Taxi ranks are located.

Despite the good accessibility of the public transport network, the car as a means of transportation still holds an advantage outside the morning and late afternoon rush. The road network and connections are of a good quality. The subway station is in need of an comprehensive upgrade.



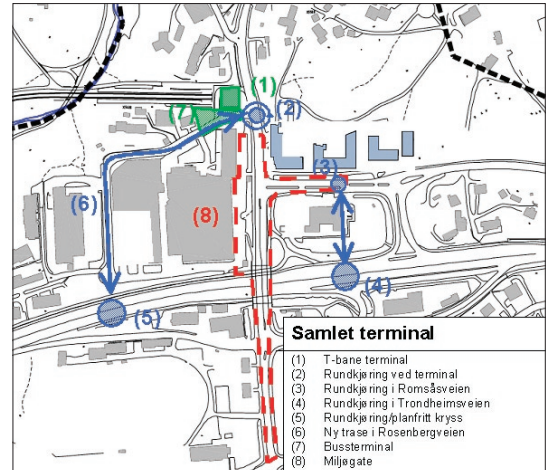


## Alternatives for new terminal

The master plan describe 4 different alternatives for new terminal:

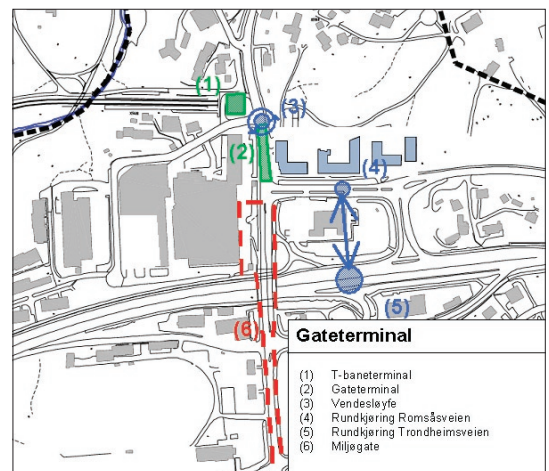
### Alternative 1 – One main terminal

One main terminal. Bus terminal at street level and Subway terminal below street level. In connection with the buss terminal it will be necessary to provide a turning space adequate for turning busses around, as well as parking. The terminal will occupy a large area and might be of a scale which is out of place with the structure of the area, and in particular towards the housing developments to the north.



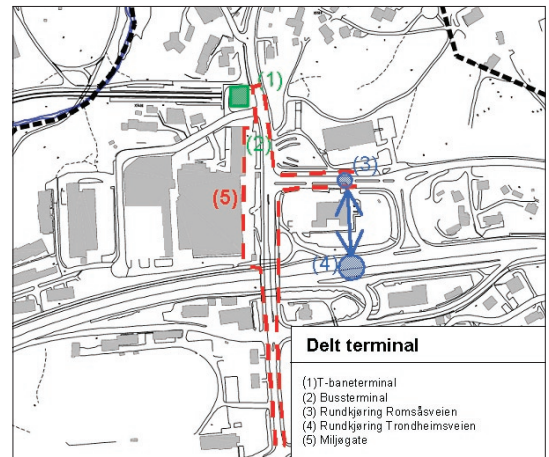
### Alternative 2 - Street terminal

The second alternative provides a more traditional street terminal to both sides of Bergensveien, from the terminal to the Romsås Exit. This alternative is the most typical situation seen in dense urban settings. This alternative will give the most strain to the local environment but might make the school route less safe.



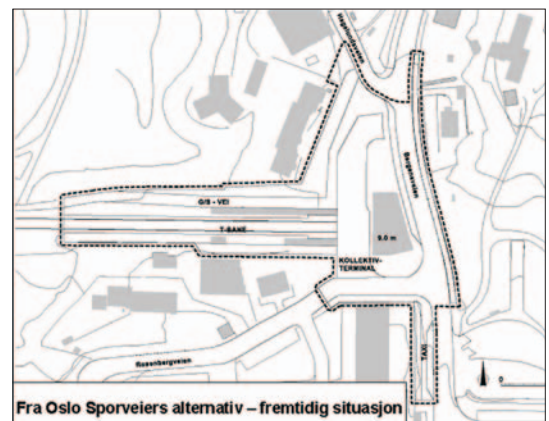
### Alternative 3 - Split terminal

This alternative stems from the existing situation of a split terminal. The buss terminal and the subway terminal are connected by lowering the buss terminal below streetlevel. The space in front of the T-bane terminal and the existing passage to the buss terminal is expanded to a large space with commercial activities. With regards to traffic, this alternative is the least straining on the local environment. It also provides for a large street with good qualities, which again will tie the area together and provide a clearer traffic situation.



### Alternative 4 - Alternative by Oslo Metro

There is an existing planning proposal by the Oslo Metro system which provides a fourth alternative- The proposal is for one main terminal area in the shape of a "raindrop" which follows along Bergensveien. The alternative will mean that areas to the north of the existing subway will need to be purchased/demolished.



**Conclusion with regards to Master Plan**

The following principals must guide the further development of traffic and communications in the area:

**Objective 1:** Split terminal where the existing T-bane and a new bussterminal at the existing buss stop in Romsåsveien, are connected underground.

- Parking connected to the new bus terminal is placed below street level

**Objective 2:** A new roundabout is built in Trondheimsveien in the intersection with Kloumanns vei.

- Provide a new road between Trondheimsveien and Romsåsveien by moving Dr. Kloumannsvei closer to Bergensveien
- A new roundabout will be provided in the intersection of Dr. Kloumannsvei and Romsåsveien

**Objective 3:** Bergensveien/Grorudveien between the T-bane and Grorud School is turned into an environmental street.

- The pupils at Grorud School should be provided with a 100% safe school route by the recommendation that a bridge in Bergensveien over Trondheimsveien/subway and a bridge in Grorudsveien over Trondheimsveien/Grorud School, is to be seen in connection with the environment street project.
- Some street parking should be provided in the environment street, but several of the existing parking spaces in front of the local centre will be removed.
- New parking is recommended to be places in the area between the centre and Trondheimsveien
- A new connection is established between the core area and Alna via Rosenbergsveien. This connection should have a complete accessibility and work together with the new public space. The existing connection between the sport facilities and Alna should be improved

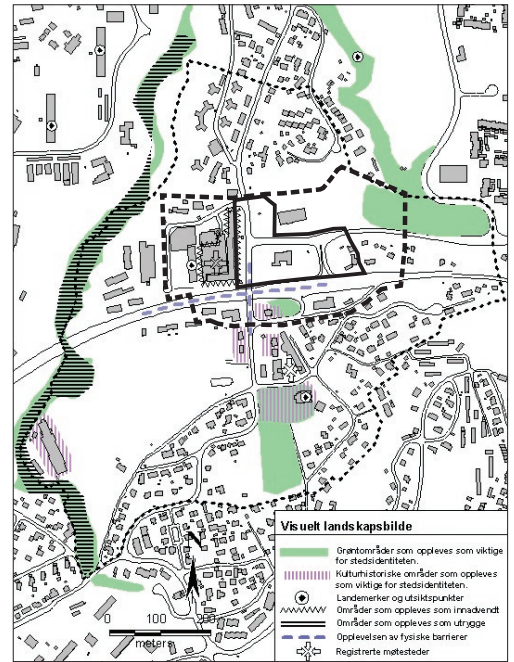
**Blue-green structure and recreational areas**

The only larger continuous blue-green structure in the area; the area along the river Alna, will not be affected by the proposed development. The existing open areas and sport facilities will also not be affected and will continue to be used as before. Several of these areas, and in particular the areas along the Alna and along the sports facilities, has however, a potential for improvement. Improvements to the sports facilities are recommended to be seen in connection with the other open spaces, or meeting points, in the area to the south of Trondheimsveien. There are current plans for a new Ice-dance rink. The areas along the Alna has a need for upgrading and improvement to the access points. this encompasses among other things, the establishment of a better connection between the sports facilities and the river Alna. Furthermore, both public and private outdoor space should be considered as part of the blue-green structure of the area.

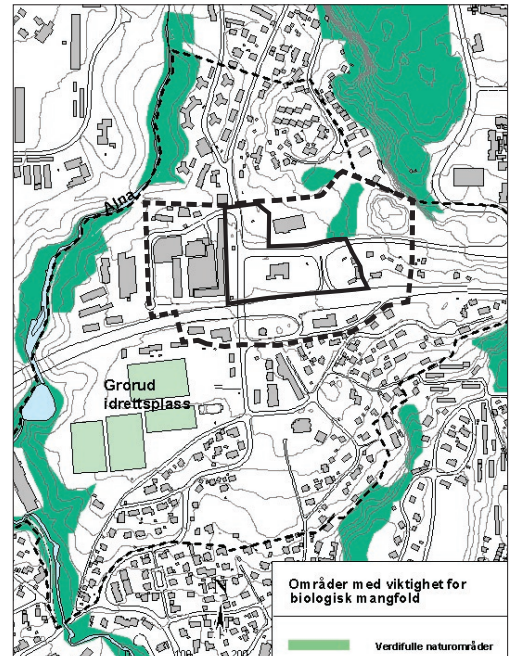
**Topography**

Oslo's natural landscape is defined by the amphitheatre to the west and north, the valley (Groruddalen) to the northeast and the fjord and the elevated level to the southeast. The vegetated hillsides are dominant visual elements in the cities horizon.

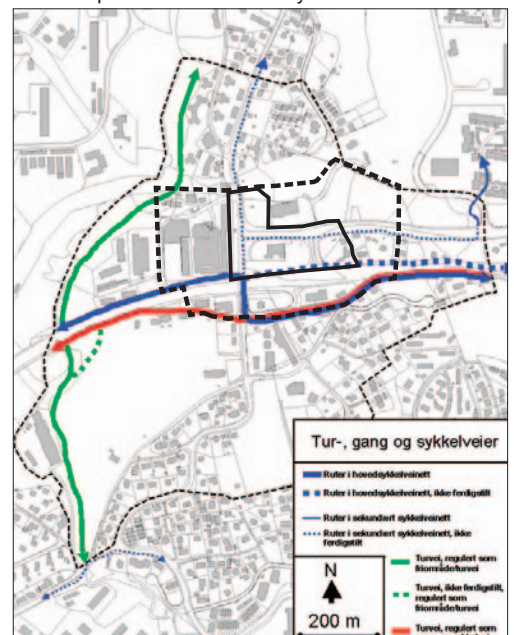
The Grorud center lies on the upper northern side of a large area of morene masses generated by the large glaciers that were present around 7.000 years b.c. Then the sea level was 250 m higher and the whole lower centre plateau was under water, explaining the larger areas of clay in the lower part of the region. At Grorud centre though, there has been a large amount of granite north of the morene masses.



Visual landscape identity.



Areas important for biodiversity.



Pedestrian and bicycle routes.



The rivers have changed role throughout the history, from primary production to industry and production to park and recreation. The river Alna is one of the city's rivers that has been heavily polluted by industry and by today partly cleaned and become a central part of the green structure. The pond in the river is currently being cleaned and planned for recreation and bathing.

**Climate**

Within the relevant area there are no particular climatic conditions to make note of. There is a cold air flow along the Alna river. In addition, the three main road connections into the Grorud Valley are categorised as areas with a high level of air pollution, however, the area in focus is situated at a higher altitude and therefore has a lower degree of air pollution than at the bottom of the Grorud Valley.

**Pollution and noise**

Essential questions with regards to development of the Grorud Centre are whether the level of air quality and noise pollution will set preconditions for placement of buildings in relationship to Rv4 (Trondheimsveien) with regards to roads, building heights and building forms and initiatives for pollution reduction.

*Air corridor*

In order to maintain a good flow/change of little polluted air from the Marka area, new buildings should not be positioned across predominant wind directions. Such a positioning will reduce the flow of air and prevent the conditions of improving in the areas to the south of Rv4.

*Development based on the existing situation*

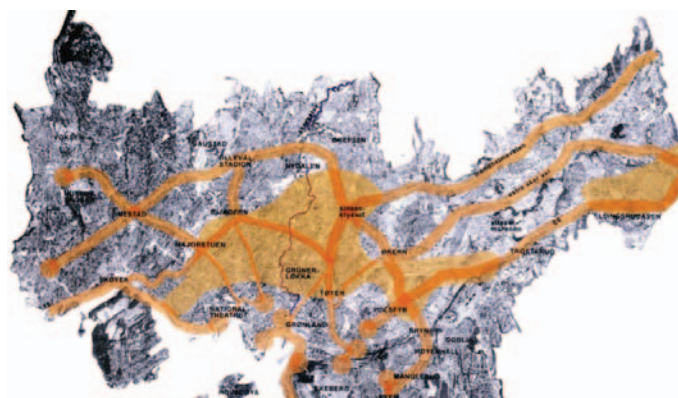
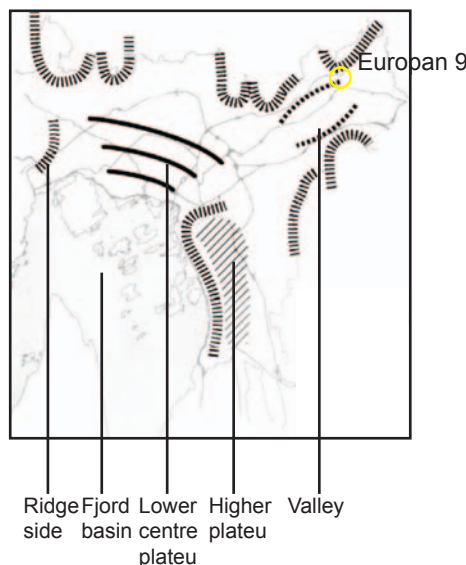
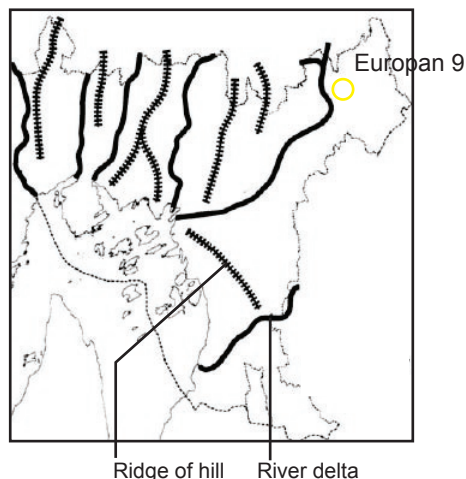
Today's traffic level of 30,000 cars, does not exceed the national goals for PM10 and NO2 and the air quality does not place any limitations or conditions on housing developments along Trondheimsveien. At the centre of Grorud the conditions are better to the north of Rv.4, as the predominant wind direction is from the north to northeast in the winter. It is recommended that one maintains a distance of minimum 20 meters to the shoulder edge of the road as the concentration of pollution will be greater the closer one gets to the road. The health risk will therefore also be greater closer to the roads.

With today's level of traffic, the potential development areas along the Trondheimsvei are in the level "red" noise zone, and is not suited for residential use or noise sensitive functions. In other words, one should not propose to construct residential buildings in this zone, and one should be careful with other building types as well. However, by using certain building types as "noise-walls" the conditions for building behind the walls will be much improved.

*Development for future improved situations.*

With a reduced level of traffic volume to about 10,000 cars, and reduced speed to about 60 km/hour the air quality will not present a problem any more. Change of air/airflow will however need to be maintained.

With a reduction of the amount of traffic, the areas situated 20 meter from Trondheimsveien and Romsåsveien are situated in a "yellow" noise zone. Romsåsveien will receive about the same level of traffic, but at speeds of no more than 50 km/h. By the use of good adaptations and noise reduction initiatives it should be possible to construct residential projects or other more noise sensitive building forms in this area.



Air pollution map for Oslo



Air corridors at Grorud



## Potential for development

A more urban place development should preferably happen by accommodating an increased development of housing in the area, and also preferably in connection with other functions (Commercial, restaurants, culture, offices), and the establishment of public functions at street level and directed towards public spaces. The centre of Grorud as connection point for various means of transport, should be articulated. With these starting points, the development of the areas potential lies along the main street axis, and in particular in the areas closer to the Grorud centre and the existing bus stop and sub way.

It is desirable that new development follow the scale of the existing developments, and the demand for certain types of buildings indicates that one should provide for a developments for buildings of no more than 4-5 storeys with parking in the basement.

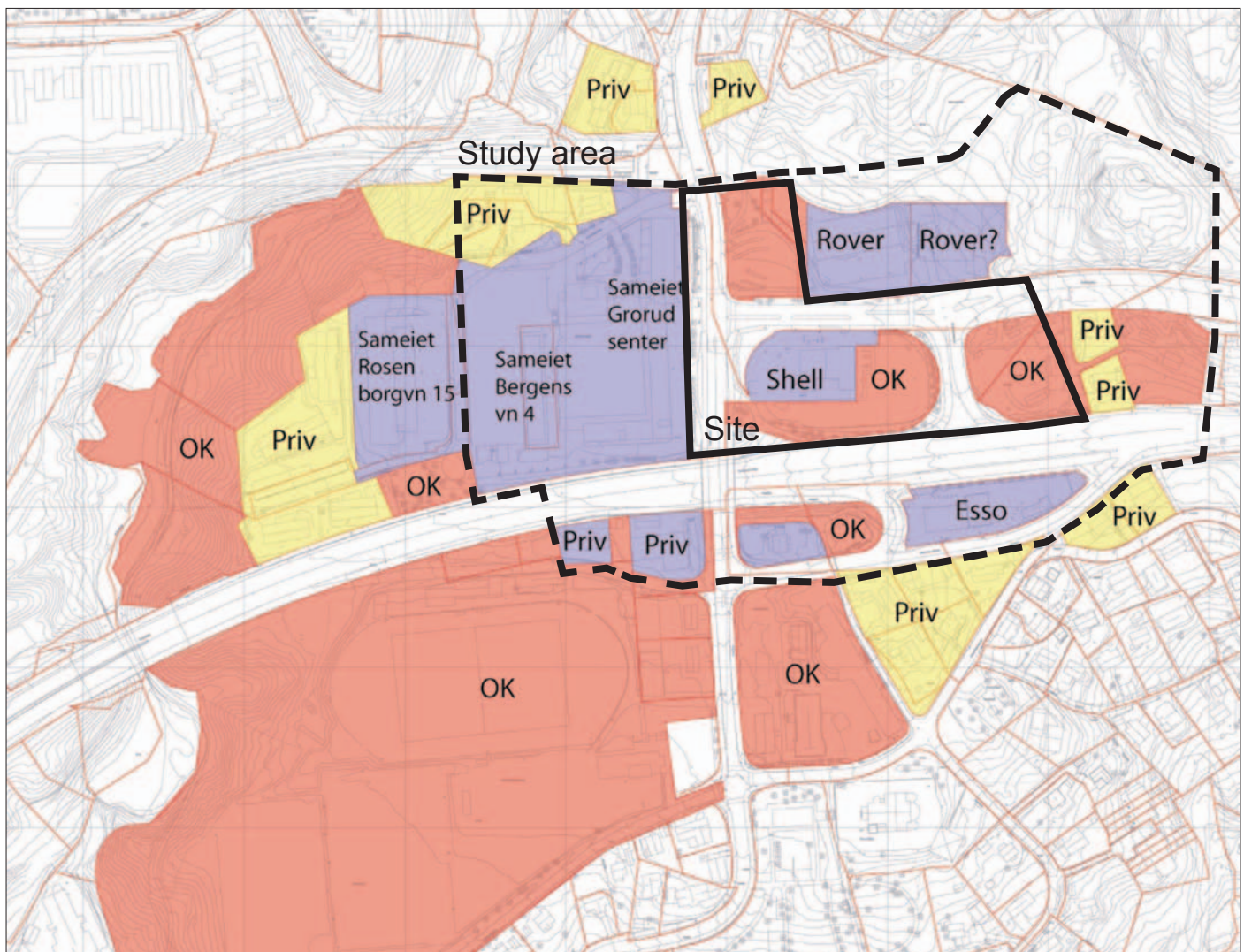
## Meeting points

### *Public market and meeting points*

The centre of Grorud, and in particular by the T-bane/ shopping centre, is a gathering point for a large amount of people at Grorud, Ammerud and Romsås. The area has a collection of many everyday activities and is characterised as a space of business and people on the move. Despite the high activity, the area lacks outdoor public spaces and meeting points. The areas that to some degree has this function today, are the areas in connection with the shopping center, the areas around the Shell

Petrol station as well as the areas connected to the buss and T-bane. These areas has a poor existing form, and mainly consists of worn down buildings and asphalt surfaces.

In the area to the north of Trondheimsveien, the establishments of public spaces and meeting points will be necessary in order to achieve the sense of an urban development. By the construction of a level crossing at Trondheimsveien, the grorudveien/Bergensveien will no longer be part of a separated level crossing and entry ramp to Trondheimsveien. This allows for the possibility of developing the street with qualities of open spaces and meeting points that will give it an identity. Such a project should encompass Bergensveien and Grorudsveien along with neighbouring areas, in the stretch from the T-bane to Grorud School. The street has a great existing width, holding three lanes on the bridge over Trondheimsveien. It does not hold an urban profile. This should allow for extensions of the pavements and the possibility of a seperate bicycle lane. The area between Bergensveien and Grorud shopping centre also has a great widt, and the centre has a "city-Wall" that provides a potential for the development of an market space. The road level in Bergensveien and the bridge above Trondheimsveien are at a higher elevation that the areas in front of the centre. By cutting into the road, a better connection between the two levels can be achieved. The project should be considered extended into parts of Romsåsveien. "the old Grorud" south of Trondheimsveien should be activated as part of the centre by for example upgrading the sports facilities.



Map of property. Red areas are owned by the City of Oslo, blue areas are private buisness and centre propety and yellow areas are private resedential areas.



*Private outside areas*

Even the existing residential areas in the more central parts of Grorud have a lack of public spaces connected to them. The people living in the high-rise towers have no outside space at all. It is recommended that the situations around the towers is improved greatly, however much the planning of outside space connected to residential projects must be viewed in connection to each individual project. There should further be considered ways of how one can increase the varieties of inhabitants in the towers.

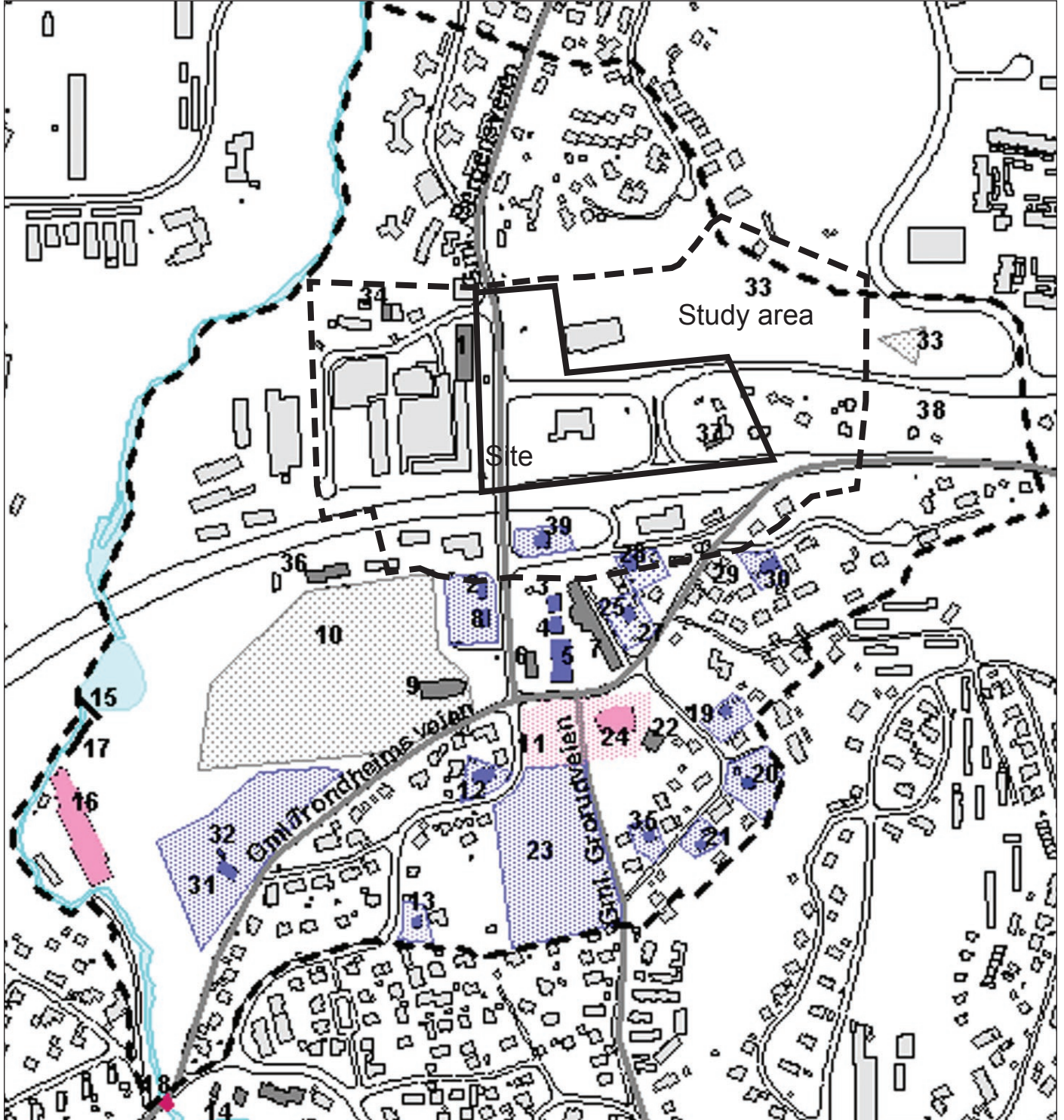
**Cultural Heritage**

The area is quite rich in cultural Heritage worth preserving. A few buildings have also been listed by preservation authorities. There are several historical buildings, infrastructure and areas of no preservation status, that are connect to commercial and community functions.

The figure shows that most of the cultural heritage sites are to the south of Trondheimsveien, outside the E9 site, together with community functions such as schools, churches and sports



Building no. 37



No.	G.nr./b.	Address	Description	Year	Status
1	94/0	Bergensveien 8	Grorud local centre		Commerce and community activities (F)
2	94/230	Grorudveien 3	Publicly owned building	1924-25	Listed (B)
3	94/12	Grorudveien 4	Teachers residence (school))	1900	B
4	94/12	Grorudveien 4	Teachers residence (school))	1900	B
5	94/12	Grorudveien 4	Grorud school (primary)	1900	B
6	94/12	Grorudveien 4	Grorud school (primary)		F
7	94/12	Grorudveien 4	Grorud school (primary)		F
8	94/229	Grorudveien 5	Publicly owned building	1924-25	B
9	94/16	Grorudveien 7	Grorud Sportsclub	1972	F
10	94/16	Grorudveien 7	Grorudbanen (Local train)	1923-24	F
11	94/193	Grorudveien 11	Grorud øvre, side building (farm workers). Previous grocer and baker (residential house today)	Late 1800-century	F
12	94/196	Grorudveien 13	Grorud øvre, main building. Old tavern around 1890.	Før 1875	B
13	94/213	Grorudveien 14	Residential House	Early 1900-tall	B
14	94/0	Grorudveien 35	The first telephone central in the valley (Rasmusbakken kindergarten to day)	1930-tall	F
15	93/8	Kalbakkveien 46	Groruddammen, Dam constructed for the Shoddyfactory	1890-tall	F
16	94/206	Kalbakkveien 46	Shoddyfactory	Ca. 1875	Reg. Preserved, pbl § 25.6
17		Kalbakkveien 46	Watermain from Groruddammen to Shoddyfactory	1899	F
18	92/2	Kalbakkbrua	Very old stonebridge (One of the countrys oldest)	1791	Listed kml § 15
19	94/65	Kirkesvingen 4	Residential House	Early 1900-century	B
20	94/67	Kirkesvingen 10	Residential House	Early 1900-tall	B
21	94/69	Kirkesvingen 14a	Residential House	Early 1900-century	B
22	94/61	Pastor Blaaus vei 3	Grorud religious centre		F
23	94/46	Pastor Blaaus vei 3	Grorud Cemetary	1903	B
24	94/61	Pastor Blaaus vei 3	Grorud Church	1900-02	Reg. preserved, pbl § 25.6
25	94/52	Pastor Blaaus vei 6	Kirkebakken House. Originally block of flats	1889	B
27	94/52	Pastor Blaaus vei 6	Kirkebakken, outhouse (for pigs).Residential around 1900		B
28	94/41	Pastor Blaaus vei 10	Villa	Late 1800-century	B
29	94/57	Pastor Blaaus vei 11	Karlsborg, house connected to the lumber industry	1896	F
30	94/40	Pastor Blaaus vei 13	Lillaborg Våningshus stonemason house, House for Johan Falkbergets	Early 1900	B
31	94/16	Rasmusbakken 1	Grorud nedre, main farmbuilding raised 1945 etter fire. Priests residence from 1924.	1945	B
32	94/16	Rasmusbakken 1	Grorud nedre, Garasge	1947	F
33	94/27	Romsåsveien 0	quarry and remains of production building		F
34	94/60	Rosenbergveien 5	Fleskekassa, evt. Lund, workershouse. Used as school prior to construction of new school	Late 1800	F
35	94/78	Teppaveien 11a	Residential House	1913	B
36	94/16	Trondheimsveien 449	Grorudgullet Kindergarten		F
37	94/174	Trondheimsveien 468	Grorudhaugen, bolig. Origin. Blacksmith. Moved 1896 from another place in Grorud		F
38	94/103	Trondheimsveien 478	Remains of road structure from stone industry	Late 1800	F
39	94/659	Trondheimsveien 459	Villa Glitre/Doktorvillaen/Michelsenhuset (Office for Akers Avis today)	1911	B



facilities. The business centre is positioned to the north of Trondheimsveien, and works as a barrier between two parts of Grorud. At the same time, the historical roads "Grorudsveien" and "Bergensveien", are important elements that serve the function of connecting the two parts of Grorud.

Within the study area there is only the building no. 39 which is a listed building (1911 Villa, used as an office for a local newspaper.) Building No. 37 is an old Blacksmith's house moved from another area of Grorud in 1896. The building is within the site but is not listed.

### **Projects outside the study area**

The City of Oslo Agency for Cultural Affairs and Sports Facilities is currently planning the re-use of a former granite quarry located a few kilometres north of the study area. The plans for re-use include sports, culture and leisure facilities for summer and winter use such as an international skiing arena for the winter Olympic Games 2018, outdoor concerts, climbing, golf and so forth. It is supposed that such an arena will benefit the new Grorud centre in terms of visitors and local activities.



#### 4. THE SITE

The site is located close to the area around Grorud local shopping and community centre with the busterminal on the adjacent site and subway line and station area just north of the shopping centre. A gloomy pedestrian concrete tunnel is connecting the bus station to the subway station. The site of the busstation is separated from the main site by Romsåsveien connecting the residential area of Romsås to Grorud centre.

A sports and fitness training centre is located just west of the busstation. Adjacent to the fitness training centre is recently built a new 4 – storey block of flats.

The site itself consists of a flat tarmac surfaced area located between the main thorough fare and the local road system. There is no valuable vegetation on the sitedue to its present use.

The site area is presently owned by two major owners; The City of Oslo and Shell Norway.

Present use of the site is petrol station and short term commuter parking. The commuter parking area is owned by the City of Oslo, whilst the petrol station is owned by Shell Norway.

The petrol station is according to Shell Norway, a successfully run enterprise with a strategic location playing an important part of the Shell petrol market. It is important for the owner that the station in the future also obtain a visible location in the new scheme for the site. Hence, this must be considered a key factor in implementation.

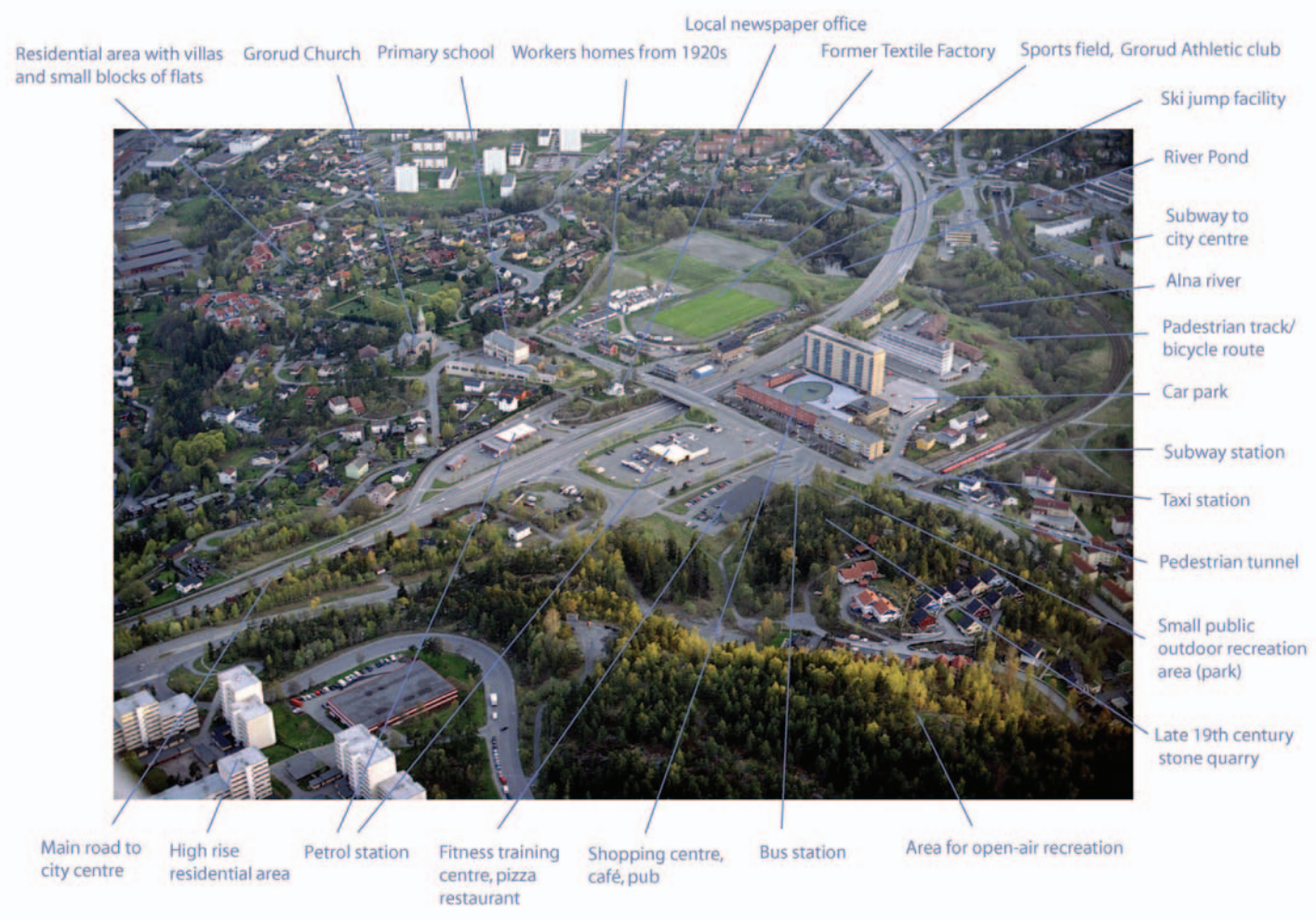
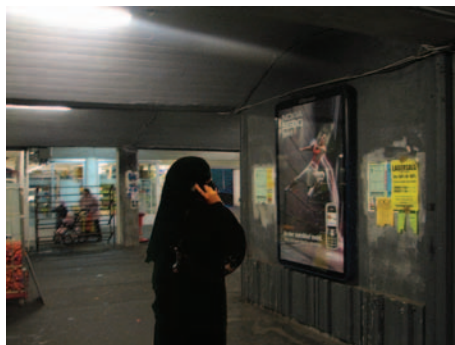
The impact of pollution and noise from the main road is large. This is expected to be reduced considerably by the planned declassification of the main road. At the present it is considered not advisable to locate dwellings close to the main road.

The north east fringe of the site boundaries a steep forested hill climbs upwards towards the high rise residential community of Romsås.

The eastern part of the site consists of a few small privately owned single and two-storey wooden family dwellings. This part of the site area connects to a larger area towards west between the Romsås road and the main road with a potential for further exploitation. This is, however, not presently part of the site project.







## 5. PROGRAM

### Programmatic intentions for the study area

The new urban development for the area should promote a diverse, multifunctional structure that, by articulation of strategic connections to the collective transport systems bus/subway, can promote a positive growth for both local businesses, culture and social life in general. Grorud senter is in need of a new urban development trend, characterized by clearer urban networks, diversity of public and private spaces and new cultural programs. The work on the public spaces is linked to the European topic with density and multimodality. Multi-functionality and social programs should be invented in relationship to public space.

The main points are:

- more dense development of housing combined with business and culture with the aim of reducing transportation and urban sprawl by creating a new urban polycentrality
- defining public spaces
- establishing Grorud centre as a public transportation node connecting the central part of the city with the urban polycentrality and residential areas
- the local traffic must be better integrated and clarified by the urban structure.

### Program for the site

The site has potential for an increased density with a mixed use purpose. The competition is a call for strategic urban structures and mixed programming, which opens up a discussion on possible futures. Proposals have to be illustrated as a refreshing and credible vision that shows the areas potential, and engages existing and new inhabitants, as well as investors that are ready to start development.

The proposals should show an idea for built volume and open spaces that give the site and the central area new identity both architectural, spatial and social. There are no defined limits for density for the new buildings. The master plan indicates an average height of 4 to 5 stories.

#### *New terminal:*

New terminal is supposed to be based on existing solutions but the connection between subway, buss, parking and public spaces is to be improved. For this reason relocation of the present bus station is part of the program. The station may be located along the boulevard, at the present site with new organisation and mixed program, south of the subway or a combination of these. The new bus station is supposed to improve both the connection to the subway, to the centre and to the new public spaces. The pedestrian tunnel is not attractive in use. How can the pedestrian tunnel be included in other underground functions in order to make these areas more attractive and how can this be linked to the other functions on the site?

#### *Public spaces:*

How can new public spaces activate more social life by means of new meeting points? How can new public spaces define new functions and integrate different structures in a better and more defined way than to day? The boulevard is supposed to be restructured to environmentally prioritized city street to improve public space. Both the boulevard and a new public square is supposed to be integrated in the new structure.

#### *Local transport:*

Det skal tas utgangspunkt i løsning med rundkjøring i Trondheimsveien som avlastning for lokaltrafikken langs senteret i boulevarden og over broa.

#### *Mixed program:*

- Cinema and cultural centre are supposed to be central parts of the new program
- Commercial / Offices / shops / cafes etc
- Public and private services
- The existing petrol station must be integrated with new developments and be part of the urban context. It might be located west or east of the present location.
- Residential development in connection with the centre. New apartments can take advantage of being within a future township with good accessibility to public transport. Pollution/ noise pollution from the motorway must be taken into consideration in these developments. Outdoor spaces is supposed to be 15- 20% of net housing area.
- In order to support the public transport system it is recommended that the site area should include park & ride facilities for easy connection to the new terminal.
- Parking:
  - Housing: 0,7 parking places per dwelling
  - Shops: 9-15 parking places per 1.000 m<sup>2</sup>
  - Offices: 2-7 parking places per 1.000 m<sup>2</sup>
  - Cinema/culture: 0 parking places

## 6. COMMISSION FOR THE WINNER

The property owner EBY (City of Oslo, Agency for Real Estate and Urban Renewal) in collaboration with Shell Norway, intends to involve the winning proposal, which shows good ideas for development of a future urban centre for Grorud, in the working out of a public zoning plan. After zoning the municipality intends to sell the municipal site area to developers who in further collaboration with Shell Norway, are able to implement the plan.

The site may not be ready for implementation before the necessary infrastructure has been dealt with such as declassification of the main thorough fare and establishment of new roundabouts.





Looking north-west towards the site.



Ortophoto from the site.



## 7. LIST OF ILLUSTRATIONS AND DOCUMENTS

OSLO-NO-PROGRAM.pdf	competition program with illustrations
OSLO-NO-TEXT.word	text without illustrations and figures
OSLO- NO-C-P1.jpg	
OSLO- NO-C-P1_2.jpg	
OSLO- NO-C-M1.dxf	
OSLO- NO-C-M1.pdf	
OSLO- NO-SA-P1.jpg	
OSLO- NO-SA-P1_2.jpg	
OSLO- NO-SA-P2.jpg	
OSLO- NO-SA-P2_2.jpg	
OSLO- NO-SA-P2_3.jpg	
OSLO- NO-SA-P2_4.jpg	
OSLO- NO-SA-P3.jpg	
OSLO- NO-SA-P4.jpg	
OSLO- NO-SA-P5.jpg	
OSLO- NO-SA-P6.jpg	
OSLO- NO-SA-P7.jpg	
OSLO- NO-SA-M1.pdf	
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