1. Basic information
1.1 Desire Number: PL01.06.01.02
1.2 Title: Transit road in Wloclawek
1.3. Sector:
1.4. Location - Commune city of Wloclawek, the Kujawsko-Pomorskie voivodship

2. Objectives
2.1. Wider objective
Increase of the socio-economic cohesion of the Kujawsko – Pomorskie voivodship by development of the road infrastructure.

2.2. Immediate objectives
Improvement of the investment attractiveness of the industrial district; Rise of the number of small and medium-sized companies; Safety improvement of dangerous materials’ transport; Decreasing the traffic on the national road through the city centre; Environmental care; Improvement of the access to the region by compactness of all transit roads and the motorway.

2.3. Accession Partnership and NPAA priority
The project responds to the medium term priority identified in the AP: developing national policy for economic and social cohesion and preparing for the implementation of regional development programmes as well as Community Initiatives. It corresponds also with the NPAA priority "Regional and cohesion policy".

2.4. Contribution to the Preliminary National Development Plan
Transport infrastructure plays a key role in efforts to reduce regional disparities in economic performance. Therefore one of the priorities for the country’s cohesion policy identified in the PNDP is “Integration of the Polish economy through modernisation and enlargement of transport networks”. Since the activities under the priority are concentrated on transport infrastructure located in the TENs, they shall be complemented by the actions carried out in the regions, contributing to the achievement of economic and social cohesion of the country. They have been described under the priority “Strengthening development potential of regions and counteracting marginalisation of certain areas”. One of the proposed measures under this priority is “Development and modernisation of infrastructure serving to strengthen competitiveness of the regions”. It identifies co-financing of regional transport infrastructure as a principal element of building endogenous potential for economic development and regional competitiveness. The project is also in line with the operational programme for the Kujawsko-Pomorskie voivodship. It will be implemented under the priority “Development of the road infrastructure of supra-local significance” and will aim at upgrading the access to areas and locations in the region, enabling the creation of value added within the regional and local economy.

2.5. Cross border impact: n.a.

3. Description
3.1. Background and justification
Wloclawek is the third biggest town in the Kujawsko-Pomorskie region situated by the Vistula River and on the national and international transit traffic lines in the directions north-south (national road n°1) and Germany-Baltic states (road n°62). In the years 1978-1983 a route was built in the section from the water dam to the crossroad with the national road n°1. In accordance with the plans the route was to connect the already existing parts of the national roads n°62. This has not been done yet. The increasing traffic, mostly transit, makes this investment necessary. In 1996, the city commissioned for the preparation a project study "The Concept of Connecting the National Roads N°1, 62 and 67 as an Access Road to the A-1 Motorway". It shows that the 1500-running meter long is a direct connection of the national road n°62 with its new section. Therefore, the investment planned for realization is the completion of the national road n°62 and will allow for a decrease in the transit traffic on the national road n°1 by means of relieving of the 1500-metre long A-B section. It is estimated that building the designed part of the road will cause the decrease of the traffic from 36000 to 23000 cars a day in 2005. The detailed analysis of the traffic peaks was presented in the project feasibility study, which is available at the beneficiary’s office. It should be emphasised that the planned A-1 motorway shall not solve all problems of transit traffic on national roads in the Wloclawek area. Ultimately, a new section of the road will provide a convenient access to the junction on the A-1 motorway in Pikutkowo, which will secure the uniformity of the transit roads of the region, especially in the east-west and east-north directions. Among the reasons
justifying the actions is also the improvement of the transport accessibility to industrial and post-industrial areas located in the eastern part of the city. This improvement will influence the increase in the investment attractiveness, which consequently has to result in the increase of new workplaces. Wloclawek, as a result of the closure of several big factories and employment reduction in all industrial plants, is in difficult social-economic situation. The unemployment rate has increased significantly and today stands at over 21%, with a rising tendency. (e.g. the closing down of the Kujawski Mechanic Plant was a loss of 1800 jobs). The improvement can be obtained only by attracting new investors, who will ensure employment. In accordance with the local investment plan, the East district will be an industrial site and suitable for the location of SMEs (84Ha and 27Ha in the northern area of the designed road). All the parcels are well developed. It can be assumed that the access improvement of those parts of Wloclawek will stimulate development of new, small and medium sized companies. Some manufacture and trade companies have been established in the area of the road no62 already. Their further development depends on the existence of the road. Some of the investors wait for the infrastructure development. The Kujawski Mechanic Plant is to be sold. The fixed assets, like machinery, have been bought already by the smaller plants, which rent some parts of the buildings. This shows that there is a positive development. It is estimated that about 50 small plants and 800 workplaces should be established 2 years after completion of the project. The transit transport of raw materials and dangerous for human beings and environment products (mainly ammonia from „ANWIL” transported in tankers) takes place through the city centre. Realisation of Królowej Jadwigi Avenue creates new possibilities of the elimination of tankers transit on the part of the national road n°1. The transit can take place on the road n°252 to Brzesc Kujawski and from Brzesc to Wloclawek going around the city centre in the Łódz direction. Moreover, the tankers from Plock, transporting petroleum from PKN ORLEN in Plock, can go around crossroad Wronia-Okrzei. On this crossroad, most of the accidents in the town happen. The figures show that over 70 car crashes and accidents take place each year. According to the information obtained in PKN ORLEN in Plock, every 24 hours 50 tankers with the dangerous materials go that way. There is no need to emphasise that the consequences of the ecological disaster in the city centre would be incomparably greater than on the designed road. The effect of the project would also affect the areas outside the town, along the roads n°62 and 67. The access improvement of the areas (mainly agriculture ones) will be conductive to their development. The increase of transit traffic and the local one in the direction east west (Poznan-Warszawa, Plock) is expected. Also in that area, better development conditions will appear, mainly for small and medium sized tourist and transport companies. The project will also have an influence on the tourist traffic to the reservoir near the water dam in Wloclawek. These are the areas to be developed by the adjoining communes. The project of building Królowej Jadwigi Avenue is forerunning to that initiative.

3.2. Linked activities
No linked project activities are currently under way in the region.

3.3. Results
Improvement of road quality; Modernisation of 2 crossroads on the national road n°62; Shortening travel time on the national road n°1 and the increase of ESS factor; Improving access to investment areas; Safeguarding workplaces.

3.4. Outputs:
1500 running metres of a new national road with access to the streets Chopina and Kruszynska (along the new section will be an engineering structure on the junction with the railway track: 2 road lanes, 7m wide, separated with a stripe of greenery, together with a one-side pavement 5m wide); 2 modernized junctions with Kruszynska Street and Chopina Street (national road n°62)

3.5. Inputs:
Total Inputs: 10.8M€.

4. Institutional Framework
The beneficiary of the project will be the municipality of Wloclawek. The Municipal Council will be responsible for the co-ordination and implementation of the investment. The Municipal Road Management in Wloclawek will deal with the organisation of tender for the technical project and the selection (by tender) of the Engineer. After the completion of the project, its outputs, a new road section with the flyover and the modernised intersections, will be handed over to the Municipal Road Management in Wloclawek, which will be responsible for their management and maintenance. The investment will be conducted in compliance with the Decentralised Implementation System regulations – “Practical Guide to Phare, Ispa & Sapard contract procedures”
5. Detailed budget
Financial plan of the project is designed as follows:

<table>
<thead>
<tr>
<th></th>
<th>Phare Support</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Investment</td>
<td>IB</td>
<td>Total Phare</td>
<td>National co-financing</td>
<td>IFI</td>
<td>Total</td>
</tr>
<tr>
<td>Project</td>
<td>2.5</td>
<td>0</td>
<td>2.5</td>
<td>8.3</td>
<td>0</td>
<td>10.8</td>
</tr>
<tr>
<td>Total</td>
<td>2.5</td>
<td>0</td>
<td>2.5</td>
<td>8.3</td>
<td>0</td>
<td>10.8</td>
</tr>
</tbody>
</table>

The co-financing resources will be available.

6. Implementation arrangements

6.1 Implementing Agency
PAO: Vice - Minister in the Ministry of Regional Development and Construction, Wspolna 4 St., 00-926 Warsaw, Phone: + 48 22 661 91 19, Fax: + 48 22 661 91 45.
Implementing Agency: Polish Agency for Regional Development, Zurawia 4a St., 00-503 Warsaw, Phone:+48 22 629 28 88, Fax: + 48 22 627 22 46.

6.1. Twinning: not applicable.

6.2. Not-standard aspects: not applicable.

6.4. Contracts:
Contract 1 (works): 10.04M€
Contract 2 (engineer): 0.76M€

7. Implementation schedule


7.2. Start of project activity: II/2002

7.3. Project completion: IV/2004

8. Equal opportunity
All the procedures used during the realization of the project will be based on Polish law securing equal opportunities for all the institutions and private persons involved. Employing women and men in the realization of the project will be carried out in accordance with the equal opportunity rules of the EU standards and will be carried out by means of official advertisements run in the press during the recruitment of the workers for the project. The rates of the involvement of individual genders in the realization of the project will be measured at the next levels of the realization and will be included in the final report.

9. Environment
On the basis of the assessment of the influence on the natural environment of the planned section of the Królowa Jadwiga Avenue, it can be stated that realizing the planned section of the route between the streets Chopina and Kruszynska in Wloclawek, will not bring itself any harm to the environment in this region. The only dangerous factors are the ones characteristic for the traffic, like SO$_2$, NO$_x$, CO, hydrocarbon C$_n$H$_m$ and noise. But it must be emphasized that the investment does not cause any pollution emission, but its decrease on the overloaded roads in the city center. In the estimation of the harm to the environment, some calculations have been done. They imply that after completion of the route, no pollution overdrafting will take place. From the comparison the acceptable concentration with the estimated ones, we get: the acceptable concentration of SO$_2$ = 500 µg/m$^3$ and the estimated one = 212 µg/m$^3$, the acceptable concentration of NO$_x$ = 500 µg/m$^3$ and the estimated one =390 µg/m$^3$, the maximal local concentration of 3.321 µg/m$^3$, with the acceptable concentration = 20.000 µg/m$^3$, the acceptable concentration of hydrocarbon =3000, but does not exceed 290 µg/m$^3$. The calculated noise estimation shows that the noise protection should be introduced, mainly for the building at the crossroad of the new road part with Kruszynska Street. No other places, where such protection should be introduced, occur. The acceptable level of noise =60 dB, while near the building 65-70 dB may occur. The part of the designed route goes through the area of different natural values. Some valuable floral groups are situated at the south of the route. The investment devoted areas will be treated as a part of the forest with all the species of trees and other elements of the forest. The construction will be performed simultaneously with the terrain shaping on both sides of the route. A well designed route section together with a proper development of the surroundings will not cause any negative environmental effects. On the south side of the route, no cubature buildings are planned, just to save the forest part. At the same time, the strong prohibition concerning the safety of environmental values will be obligatory. Therefore, any designed development close to the route must take into account the water...
intake and forest protection. It must be emphasised, that although the conflict with the water intake in Krzywe Blota, the project is much more convenient than the roads south to the intake (the area of main direction of supply). The estimation of the environmental influence has been made according to the directive 85/337/EEC, concerning the consequence of public and private projects for the environment, simultaneously with the project assessment study. The EIA is available at the beneficiary’s office.

10. Rates of return
The project constitutes a non-productive enterprise, therefore the only profits are the effect of social significance which will contribute to the development of the whole region and not only to the development of the closest investment environment. The rates of return estimated in accordance with the IRR index equals 25.53%. This rate was calculated in the feasibility study and was given as a rote for city investments.

11. Investment criteria
11.1. Catalytic effect:
The Phare support will be conducive to achieving economic and social cohesion goals in Kujawsko – Pomorskie voivodship, which otherwise could be attained only in a more distant future and on a more modest and less efficient scale.

11.2. Co-financing:
The project is co-financed by the Polish partners.

11.3. Additionality:
The Phare project is not displacing other financing sources, especially from the private sector and IFI system; it is the co-financing of identified priorities and does not replace national resources.

11.4. Project readiness and size:
The project will be ready for contracting and disbursement and will meet all conditions for co-financing by the start of project implementation.

11.5. Sustainability:
The project will contribute to the long-term sustainable development of the region, as described in the Operational Programme for Kujawsko-Pomorskie Voivodship. The investment is sustainable and does not require any further expenditures apart from the ongoing technical maintenance on the part of the Municipal Road Management in Wloclawek.

11.6. Compliance with state aids provisions:
All aspects of the project will be developed with respect to the state aids provisions of the Europe Agreement.

11.7. Contribution to National Development Plan
The project is in line with the PNDP and as such will contribute to the increasing of economic and social cohesion of the country and the region.

12. Conditionality and sequencing
The success of the realization of the project will depend on the keeping of the deadlines of the realization of project stages and securing the co-financing for the realization of each of the sub-projects and on the weather conditions either enabling or limiting the physical execution of the project. The following order of actions is proposed in the project: Settling the matter of turning over of the grounds crucial for the investments. Negotiations with the Polish State Railways (PKP) and the Polish Forests; The tender procedure will be carried out by the Municipal Road Management in Wloclawek; The tender for the investment execution. The realization of the project will take place in the period between April 2002 and September 2004. The order of the project realisation will be as follows: modernization of the junctions and starting of the engineering structure construction, starting and realization of the Królowej Jadwigi Avenue road section, connecting of the road section with the engineering structure, connecting of the road section with the streets Chopina and Kruszynska; Finishing of the realisation and conducting the procedure of technical turning over; Taking over of the structure for utilization.
### Annex 1: Logframe Matrix for the project

<table>
<thead>
<tr>
<th>Project number:</th>
<th>Project title:</th>
<th>Transit road in Wloclawek</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of drafting:</td>
<td>End Contracting: 15/12/2003</td>
<td>End Disbursement: 15/12/2004</td>
</tr>
<tr>
<td>Planning period:</td>
<td></td>
<td>Total budget: 10.8M€</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phare: 2.5M€</td>
</tr>
</tbody>
</table>

#### Wider objective
- Increase of the socio-economic cohesion of the voivodship by development of the road infrastructure
  - Indicators of achievement: Increase of regional GDP per capita; Decrease of unemployment rate
  - Sources of information: Main Statistical Office
  - Assumptions and Risks: Continuation of a fast growth in the Polish economy; Implementation of active forms of combating unemployment.

#### Immediate objectives
- Improvement of investment attractiveness; Increase of the number of small and medium sized companies; Improvement of dangerous materials transport safety; Decrease of traffic at national road going through the city centre; Environmental protection; Increase in the region’s communicational accessibility by assuring the accessibility of motorways’ network.
  - Indicators of achievement: 50 new companies in the EAST industrial district set up after 2 years; 800 net jobs created in the EAST district after 2 years; Decrease of car accidents and collisions by 36% after 1 year (from about 70 accidents to about 45 accidents); Decrease of the number of cars at the section of national road number 1 by about 33% (from 33.000 cars a day to 22.000) in 2005; Decrease of harmful gases emission by 36% (0.25 x 13000= 3250g/s) 1 year after completion; Noise level reduction by about 10-12% (from 75 to 65 dB) 1 year after completion
  - Sources of information: Statistical data from the beneficiary; Commune Statistical data; Voivodship Statistical Office; Expert reports; Evaluator Reports; Police data
  - Assumptions and Risks: Stable national politics concerning road transport; Stable economic growth.

#### Results / products
- National road no.62 construction; Modernisation of national road 62's crossings; Shortening the travel time through Wloclawek by road no.1 and increase of the ESS index between A and C points; Improvement of road quality; Improved access to investment areas; Safeguarding workplaces
  - Indicators of achievement: 1.5 km of the national road built; 2 modernised crossroads; Shortening of travel time by 10-15 minutes during rush hours on national road n°1 or growth of the ESS index from A to C by 32 km/h (from 11 km/h to 43 km/h); Increase of road network load capacity to 115 kN/axle; 111 ha of investment areas with improved communications, 150 workplaces safeguarded
  - Sources of information: Expert reports; Data from the beneficent.
  - Assumptions and Risks: Partial financing of the works by the beneficiary; Assuring high quality service; Other factors influencing the timeliness of schedule

#### Activities / Input
- Construction of 1.5 km of the national road and modernisation of 2 crossings; Financial input: 10.8M€, including 2.5M€ Phare and 8.3 mln EUR from national resources (state budget 1.35M€, city budget 6.95M€)

#### Annex 2-4: Cumulative implementation, contracting and disbursement schedule

<table>
<thead>
<tr>
<th>Implementation schedule</th>
<th>Contracting schedule</th>
<th>Disbursement schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>I 01 II 02 III 03 IV 04</td>
<td>I 01 II 02 III 03 IV 04</td>
<td>I 01 II 02 III 03 IV 04</td>
</tr>
<tr>
<td>I II III IV V VI VII VIII IX X XI XII XIII XIV XV</td>
<td>D C I I I I I I I I</td>
<td>0.289 0.578 0.811 0.944 1.3 1.656 1.833 1.967 2.278 2.389 2.5 2.5</td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Legend: D - design of sub-project / C - tendering and contracting / I - contract implementation and payment
ANNEX No 5 – EXECUTIVE SUMMARY OF FEASIBILITY STUDY AND ENVIRONMENTAL IMPACT ASSESSMENT

1. FEASIBILITY STUDY
THE SUMMARY OF THE STUDY MADE BY COMMUNICATIONS ENGINEERING OFFICE Maciej Berendt - IN GDANSK.
The study contains all the data necessary for the estimation of feasibility of the investment. „Building Królowa Jadwiga Avenue in Wloclawek” from the technical and economic point of view. It contains the basic data of the project beneficent, which is the commune of Wloclawek, and presents the town budget forecast for the years 1999–2004 and the economic analysis. This shows the possibilities financing the investment in the portion that falls to be the beneficent share during realisation. Wloclawek as the community and administrative unit, has the income = 215.143.450 PLN and the expenditures 234.155.910 PLN in the 2000 year. The investment budget resources have been increasing from 15 millions PLN in 1997 up to over 30 millions PLN in 2000.
The above data shows that there is an increase of the financial investment and the average amount of money spend on it in the last 3 years = 26 millions PLN. The planned investments for the next several years will remain the average financial investment. The expenditures will contain the dept financing ( for the credit taken to cover the budget deficit).
New and continued strategic investments for the years 2000-2004:
- Construction of Regional Waste Utilisation Centre with a modernisation of the lodgings in Machnacz – expected finish in 2001, the cost in 2001 6.315.077 PLN., total cost of the work 27.841.995 PLN.
- Construction of Królowej Jadwigi Avenue section between Chopin and Kruszynska streets, where a PHARE Social and Economic Cohesion fund reinforcement is planned for 2001 and the national budget together with the City of Wloclawek commune’s financial means (2002-2004), total cost of the work 42.250.000 PLN
- Construction of a railway tunnel (1st part) – expected finish in 2002, cost in 2001 4.200.000 PLN, and 2.800.000 PLN in 2002, total cost of the work 8.000.000 PLN
- Construction of a Sport-Performance show room at Chopin Street – expected finish in 2001, cost in 2001 3.976.070 PLN, total cost of the work 15.608.242 PLN
- Construction of Motorcar Schools’ Association

In the town budget for the year 2000, there is the deficit 42.197.141 PLN planned. Both in the years 2000 and 2001 it will be cover by bank credits and loans.
The deficit analysing for the years 2000-2004 shows the deficit level. Their proportions to the incomes are as follows: 33,45%; 54,66%; 37,94%; 26,66%; 21,20%.
The planned liabilities with interests in that period are as follows: 4,46%; 8,87%; 11,91%; 11,35%; 8,97%.
The above data shows that the total dept at the end of each year does not 60% of the incomes. Also the instalment are in the intervals defined in the 113 article of Public Finance Act (15% of the town incomes).
The financial shape of the community in the year’s 2000-2004 guaranties the investment realisation “Building Królowa Jadwiga Avenue” with the participation of PHARE recourses.
The main object of performing the study was the making of a conceptional design of Wloclawek’s connection with the designed motorway A1 (junction Pikutkowo) by building Królowa Jadwiga Avenue between Chopin Street and Kruszynska Street and by modernisation the crossroad Kruszynska Street, Zbiegniewskiej Street and Jan Pawel II Street. All the index costs and the rates of effectiveness of the investment.
The elaboration’s technical conceptions scale includes:
1. Within the feasibility study:
   - Roadway conception of Królowa Jadwiga Avenue at the section from the crossroad Chopin Street up to the crossroad with Kruszynska Street with a two variant analysis of crossing the railway (over and under the railway) and with the conception of building and modernising both crossroad.
- The bridge conception of two possible variants of the railway crossing engineering object (the flyover and an underground passage below the rails);
- Characterising index costs of the roadwork;
- Characterising index costs of the technical infrastructure;
- Characterising index costs of removing the car crash results with an existing technical infrastructure;

2. **Apart from feasibility study scale** as the elements of the project analysis of the crossroads on Kruszynska Street (in the direction of the motorway A1):
- The road conception of modernisation of the crossroads between Kruszynska Street and Zbiegniewska Street;
- The road conception of modernisation of the crossroads between Kruszynska Street and Jan Pawel II Street;
- The engineering object conception for pedestrians under railways.

**THE PRINCIPLE OF SOLVING**

Through Wloclawek, national road number 1 Gdansk - Cieszyn i no. 62 Strzelno - Plock - Drohiczn, which join each other at the crossroad of Chopina Street and Kazimierz Wielki Street in Wloclawek suburb.

On the 2 km section the transit on the national road no 62 (in Poznan direction) goes through the city centre causing traffic difficulties. The designed investments have the start point on the crossroad Chopina Street and Kazimierz Wielki Street and is the continuation of the project from 70-ties (building the dam and Kazimierz Wielki Street) tending to the building of the south rout of Wloclawek in the direction of the national road no. 62 going around the city centre). According to the geologic researches, it was proven that the ground – water conditions are well enough for the investments.

The feasibility study of the section of Królowa Jadwiga Avenue concerns the following investment point:
- construction of a dual carriageway road with a division 4-5 meters wide, and being 1500m long (with the engineering object) on section from the crossroad Chopin Street and Kazimierz Wielki Street and Kruszyhnska Street;
- construction of the crossroad between Królowa Jadwiga Avenue with Kruszynska street together with the street lights;
- reconstruction of the designed route’s crossing with the Chopin and Kazimierz Wielki streets together with the street lights;
- construction an engineering object at the railroad pass (as one of two alternative objects: a road flyover (road over the railroad) or a road tunnel (a passage under the rails);
- construction of an engineering object at the heating plant piping;
- reconstruction of underground reinforcement at the designed placement.

**THE VENTURE’S COST**

The performed forecast implies, that the engineering object built as a tunnel is the most optimal solution.

The cost of this variant is as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (zl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The section Chopin – Kruszyhnska</td>
<td>9 877 385</td>
</tr>
<tr>
<td>2. Reconstruction of the Chopina Sstreet –Królowa Jadwiga Avenue crossing</td>
<td>1 202 425</td>
</tr>
<tr>
<td>3. Construction of the Kruszyhnska Street–Królowej Jadwigi Avenue crossing</td>
<td>3 017 963</td>
</tr>
<tr>
<td>TOTAL</td>
<td>14 097 773</td>
</tr>
</tbody>
</table>

(for the price level in February 1999 in the investor’s cost estimate)

inflation indices in 1999=10 % * inflation indices in 2000=10% = 1.21% for the price level in December 2000 **TOTAL 1 to 3** 14 097 773 zl. x 1.21 = 17 058 305 zl

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (zl)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Tunnel</td>
<td>12 912 550</td>
</tr>
<tr>
<td>5. Reconstruction of the electrical and lights installations</td>
<td>1 674 000</td>
</tr>
<tr>
<td>6. Reconstruction of the telephone cables</td>
<td>1 000 000</td>
</tr>
</tbody>
</table>
7. Reconstruction of the utilities and dehydration piping  

\[
\text{TOTAL 1 to 7} \quad 35,212 \\
\text{315 zl}
\]

8. Preserves for not mentioned construction costs – 20 %  

\[
\text{7,042} \\
\text{463 zl}
\]

(safety preserves for the water intake also during construction)

\[
\text{ALLTOGETHER 1 to 8} \quad 42,254,778 zl
\]

The rate of return estimated in accordance with the IRR index equals 25.53% - In analysing the rate IRR there were also considered the profits coming from savings on vehicles exploitation costs, saved time of passengers and drivers, traffic accidents and cost of environment caused by emission of gas. The final cost of the whole investment will be calculated after the construction project of the route is ready.

The assessment study indicates that the investment will secure a direct connection between two unconnected sections of the national road number 62 that is Kazimierz Wielki Avenue with Kruszynska street, which is a way leading out to Poznan and to a designed A-1 motorway runoff in Pikutkowo, the road is to direct the traffic out from the town’s centre.

The completion of this investment will also positively affect the traffic conditions, traffic safety, lowering the traffic’s negative influence on Wloclawek down-town environment by elimination of east-west transit traffic, and will influence the activation of the industrial areas that are near or well communicated with the road.

2. ENVIRONMENT IMPACT ASSESSMENT

SUMMARY OF THE EIA MADE BY GEOLOGICAL COMPANY POLGEOL S.A. IN WARSAW – PLANT IN GDANSK.

The designed construction of Królowa Jadwiga Avenue in Wloclawek refers to planned development of the town’s transport plan of the 70s. Expected the estimated design study of the part of the road between ul. Chopina (Chopin Street) and ul. Kruszynska (Kruszynska Street) is an integral part of the whole ring road around Wloclawek.

The considered part of the road will impact the traffic from the inhabited district to the work district excluding the city centre. This ring road will also connect the west and east part of the town. The traffic from Łódz and Torun will be taken over by this ring road, taking it out of the city centre. The main functional- spatial conflict on this area is the collision between two basic elements of the technical infrastructure in Wloclawek, water intake area in „Krzywe Blota” and the designed road with the local, regional and national significance. As the result of the activities, some changes in ground water exploitation like well in the south part of the water intake area in „Krzywe Blota” has been done. Moreover some wells situated closely to the road has been excluded, which let the efficiency of water intake remain at the same level and the correction of the area of the indirect protection. The designed part of the road in accordance with the law is situated in the area of the indirect protection. It enables obtaining the decision of construction the road, provided that all means of protection concerning pureness of the ground water will be used.

The most significant is the prohibition of piping the sewage away. It mainly concerns the rainfall and sloppy roads from the road.

Apart from that the road, without implementing any protection means, can have an impact on the natural environment, it can improve the condition of natural surrounding, while it is well organised.

Well-designed road with the appropriate developed surroundings will not have any negative effect on the environment. But the future develop may intensify the use of the adjoining areas. This does not concern the adjoining areas of the south part of the designed road. Those areas are the property of the national forests and no changes are planed to be done there.

There is a different significance of the foreseen effects. It depends on the exposed element of the environment (ground water, landscape, acoustical climate) and on the level of realisation and functioning of the road.

While using well-defined and well-realised road (with the implementation of all means of protection
of the water intake, landscaping and developing its surrounding) will not cause any harm to the environment, apart from the increase of the emission of pollution and noise. And these are obvious consequences of the develop of the communication plans, which are necessary for the urban localisation.

Concerning all the above notes, while designing and realising the part of Królowa Jadwiga Avenue between the Chopin Street and Kruszynska Street, the following conclusions should be taken into consideration:

- Design ideas of the road must guarantee the total isolation from the bottom, because of the ground water and the „Krzywe Blota” water intake, by solving the problems concerning water intake and purifying rainfalls all along the road;
- The way of designing dehydration of the ground should stop all kinds of pollution, which may occur on the road, also as the consequence of the accidents;
- the possibilities of the dehydration should be a subject of the detailed analysis of designing the road with consideration of the influence of the environmental for the consumers, and reliable functioning;

• In accordance with the decision of the establishing of the „Krzywe Blota” water intake, dehydration is possible only under condition that it will affect the efficiency of the water intake and its usefulness;
• The width of the road should be limited to the minimum, because of the forest;
• The construction of the road should be used for the appropriate development and appearance of the terrain;
• Introducing the additional green areas, should enable the good air exchange conditions in the close surrounding of the road and limit the penetration of the air pollution to the ground water. The species of the plants should remain the same and no other species should be introduced;
• Before building of the road and while its realisation, periodical monitoring of the purification of waters and soil should be performed.
• Because of the not efficient isolation of the ground water layer (especially in the west part), the road will be a potential source of the danger of the „Krzywe Blota” water intake. We should notice that from the north only 7% of the exploited water. The eventual effect of the road may concern only the extreme wells of the north part of the water intake;
• It should be stated that the designed path of the road, apart from the negative effect on the „Krzywe Blota” water intake, is much better solution than the road on the south of the water intake, which is the main part of the supply;

A necessary condition of the road constructing is the introduction of resources limiting an effect on the ground water, both while constructing and exploiting the road. The possible the limitations are included in the text about the estimations.

ANNEX No 6

RESERVOIR OF WLOCLAWEK

The reservoir on the Vistula River near Wloclawek came into being in 1970. It was realised as the part of the designed lower Vistula cascade. The idea of channelling the Vistula River appeared in the 30-ties of this century. The lower Vistula cascade affected mainly the conditions of sailing on the river and enabled the production of electrical energy. The investment was to cover the remaining water needs of the industry and agriculture, and also decrease the danger of future flooding. The reservoirs between the cascade levels were to be used for the recreation. From this plan, only one cascade reservoir near Wloclawek has been built. The dam near Wloclawek is the first and at the same time the biggest element of the designed dam.

Because of the division of the Vistula, the reservoir of the capacity of 408 millions m³. The area the reservoir equals 70 km², and its length - 58 km, and the average width - 1,2 km. Near the dam the river was dammed up to 11 m., and near Pock - 2,5 m. The average depth of the reservoir equals 5,5 m., and the maximum - 15 m. According to the area, this is the biggest reservoir in Poland. And according to the capacity, the second one. Nowadays, the reservoir of
Wloclawek is the unique hydrologic object in Poland. The establishment of such kind of reservoir with so attractive natural-landscape virtue, created the conditions for the development of recreation and tourism. It could appear that the facts that on the both sides of the reservoir are located two big (over 100 thousands citizens), will cause the dynamic develop of the mentioned functions.

### Legend to the FIG.3

<table>
<thead>
<tr>
<th>Destination</th>
<th>Numbers of parcels</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Królowa Jadwiga Avenue Section from Kruszynska Street to Chopin Street (designed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. P 44 KS / Un – Communication appliances area. Transport base adaptation. Possibility of non-onerous services location. Kruszynska Street, Królowa Jadwiga Street - terrains after transport base, nowadays destined for small companies and „HIT” hipermarket</td>
<td>5/12, 3/21, 3/22 KM 79/1 2/21, 2/20, 2/18, 2/15, 2/16, 8/4, 8/5, 8/2, 8/3, 2/14 KM 79/2</td>
<td>9.08 ha</td>
</tr>
<tr>
<td>2. P 45 PP – non-onerous services terrain. Bakery for adaptation. Kruszynska Street, Królowa Jadwiga Street - plant in adaptation and extension</td>
<td>1/35, 1/28 KM 79/2</td>
<td>1.00 ha</td>
</tr>
<tr>
<td>3. p 46 sn – terrain of warehouses. existing objects provided for adaptation. designed building materials wholesalers. Kruszynska Street, Królowa Jadwiga Street - designed building materials wholesalers.</td>
<td>1/54, 1/66, 1/64, 1/63, 1/46, 1/45, 1/22 KM 79/2</td>
<td>3.03 ha</td>
</tr>
<tr>
<td>4. 15 UH/UA/UT i 12 P/U/T/SN – terrain of services, trade, administration, bases, warehouses. Komunalna Street, Cmentarna and Street Królowa Jadwiga Street - realising small and medium sized companies</td>
<td>22/18, 22/17 KM 80 1, 2/2, 2/1, 2/3, 3, 7/6, 7/7, 7/11, 7/12, 7/9, 7/4, 7/14, 7/13, 7/10, 4/2, 4/5, 5/10, 5/9, 4/6, 5/5, 5/8, 5/6, 5/7 KM 108</td>
<td>13.33 ha</td>
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<tr>
<td>5. W 13 US/UK – during the change of the destiny for service, - realising small and medium sized companies</td>
<td>2/5, 13/4, 2/8, 2/7, 2/6, 13/3 KM 110</td>
<td>2.79 ha</td>
</tr>
<tr>
<td>6. W 30 K – during the change of the destiny for service, - adaptation of the existing small and medium sized plants</td>
<td>1/25, 1/23, 1/24, 1/18, 1/17, 1/19, 1/20, 1/15 KM 110</td>
<td>3.18 ha</td>
</tr>
<tr>
<td>7.</td>
<td>F 1 PP 2 – industry, base and warehouses terrain Legska Street, Plocka Street - small and medium sized companies development based on paper-cellulose plant</td>
<td>1/28, 1/26, 1/3, 1/5, 1/10, 1/29, 1/11, 1/18, 1/19, 1/20, 1/21, 1/22, 1/23, 1/8, 1/9, 1/15, 1/14, 1/7, 1/12, 1/13 KM 48 1/1, 1/2, 1/3, 1/4, 2/2, 2/5, 2/4, 2/7, 3/6, 3/8, 3/7 KM 89</td>
</tr>
<tr>
<td>8.</td>
<td>F 32 SN/B/ZPo – Warehouse terrain. - development terrain</td>
<td>67/5, 67/1, 67/3, 68/1, 67/4, 68/2, 68/3, 62/2, 53, 52 KM 112/2</td>
</tr>
<tr>
<td>10.</td>
<td>F 35 P/U/Mn – manufacture-service terrain. - development terrain</td>
<td>46/1, 46/2, 49/1, 56/11, 57/1, 57/3 KM 112/1</td>
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<td>11.</td>
<td>F 41 PP IV - non-onerous services terrain. - adaptation of the small and medium sized companies, model base</td>
<td>55, 25/4, 11/4, 15/2, 17/4, 21/4, 22/4, 26/2, 24/14, 24/13, 27/2, 3/9, 11, 15, 23, 26, 27, 29, 2/80, 2/85, 2/87, 11/1, 2/3, 3/18 KM 102</td>
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<td>12.</td>
<td>F 42 PP V/NO/ZPo - non-onerous services terrain F 43 KS/ZPo – Car Communication appliances area - patrol station</td>
<td>3/7, 26/1, 1/7, 3/6, 4/4 KM 116/2</td>
</tr>
<tr>
<td>13.</td>
<td>F 40 PP IV/B/SN/ZPo/K - non-onerous bases and elements terrain - terrain for companies development</td>
<td>1/30, 1/28, 1/27 KM 99/2 2/4, 2/3, 2/2, 2/1, 1/7, 1/15 KM 119</td>
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<tr>
<td>14.</td>
<td>F 31 PP IV – Industry terrain. Agriculture machines factory adaptation. - adaptation of the URSUS plant after closing down for small and medium sized companies</td>
<td>10/1, 9/2 KM 116/1</td>
</tr>
<tr>
<td>15.</td>
<td>F 29 PP IV/B/S IV / ZPo - Industry terrain. Closing down the House Factory and the background building base. - possibility of realising big warehouse terrain</td>
<td>2/26, 2/28, 4/4, 5/4, 5/9 KM 115</td>
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