



**Developing institutional capacity for attraction of FDI
in Ternopil region**

**Workshop: Practical aspects of investment promotion
and support at the local level**

Role of Industrial Real Estate

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THE MINISTRY OF REGIONAL DEVELOPMENT,
CONSTRUCTION, HOUSING
AND COMMUNAL SERVICES



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Structure of the presentation:

- Case study: Hyundai Motor Company investment in Nošovice
- Typology of industrial zones
- Three stage of industrial zone development
- Homeworks to be completed
- Discussion

What will feed more hungry mouth?



Cabbage fields or Industrial zone?



Hyundai Motor Manufacturing Czech

- €1,12 billion investment of Hyundai Motor Company (HMC)
- Global sales of 8 million cars in 2014 (Hyundai & KIA)
- Construction started 03/2007, production launched 11/2008
- Production capacity of 300 thousand cars a year; gearboxes
- 3400 jobs created directly and around 4000 indirectly
- Total area of the factory: **200 hectares**
- Hyundai i30, Hyundai ix20, Hyundai ix35 and Hyundai Tucson
- Number of cars produced in 2014: **307 450**
- Total sales in 2014: **€3,86 billion** (CZK 106,3 billion)
- Sales per hectare: **€19,3 million** (CZK 531,58 million)
- Share of exports: **95,5%**

What if cabbage was grown on the 200 hectares of land?

- Agricultural cooperative farm with 67 members / employees
- Farming on 1170 hectares (900 ha arable land, 270 ha pastures)
- Average yield of cabbage per hectare: **35 tons**
- Total area of cabbage fields: **200 hectares**
- Total harvest of cabbage in 2014: **7000 tons**
- Fresh cabbage – 2/3 and shredded cabbage – 1/3
- Total sales of cabbage in 2014: **€3,558 million** (CZK 98 million)
- Sales per hectare: **€17,8 thousand** (CZK 489,93 thousand)
- Jobs related to the cabbage fields: **11,5**
- Share of exports: **0%**

And the winner is ...



| | | | |
|--------------------------|-----------------------|----------------------|-----------------|
| Sales per hectare | €17,8 thousand | €19,3 million | 1 : 1084 |
| Jobs per hectare | 0,06 | 16,06 | 1 : 276 |

It wasn't for free indeed ...



Typology of industrial zones

Local:

- 10+ ha
- infrastructure

Regional:

- 50+ hectares
- infrastructure
- population of 40.000+
- 30 minutes to highway

Strategic:

- 200+ hectares
- infrastructure in place
- population of 200.000+
- adjacent to highway
- possibility of railroad siding and another transportation modes

Can a municipality prepare industrial zone?

Stage 1: Master planning

LEGEND

Residential

- Single-Family
- Two Family
- Medium Density Residential
- High Density Residential
- Mixed Residential / Commercial

Commercial

- Local Commercial
- Community Commercial
- Central Business District
- General Commercial

Industrial

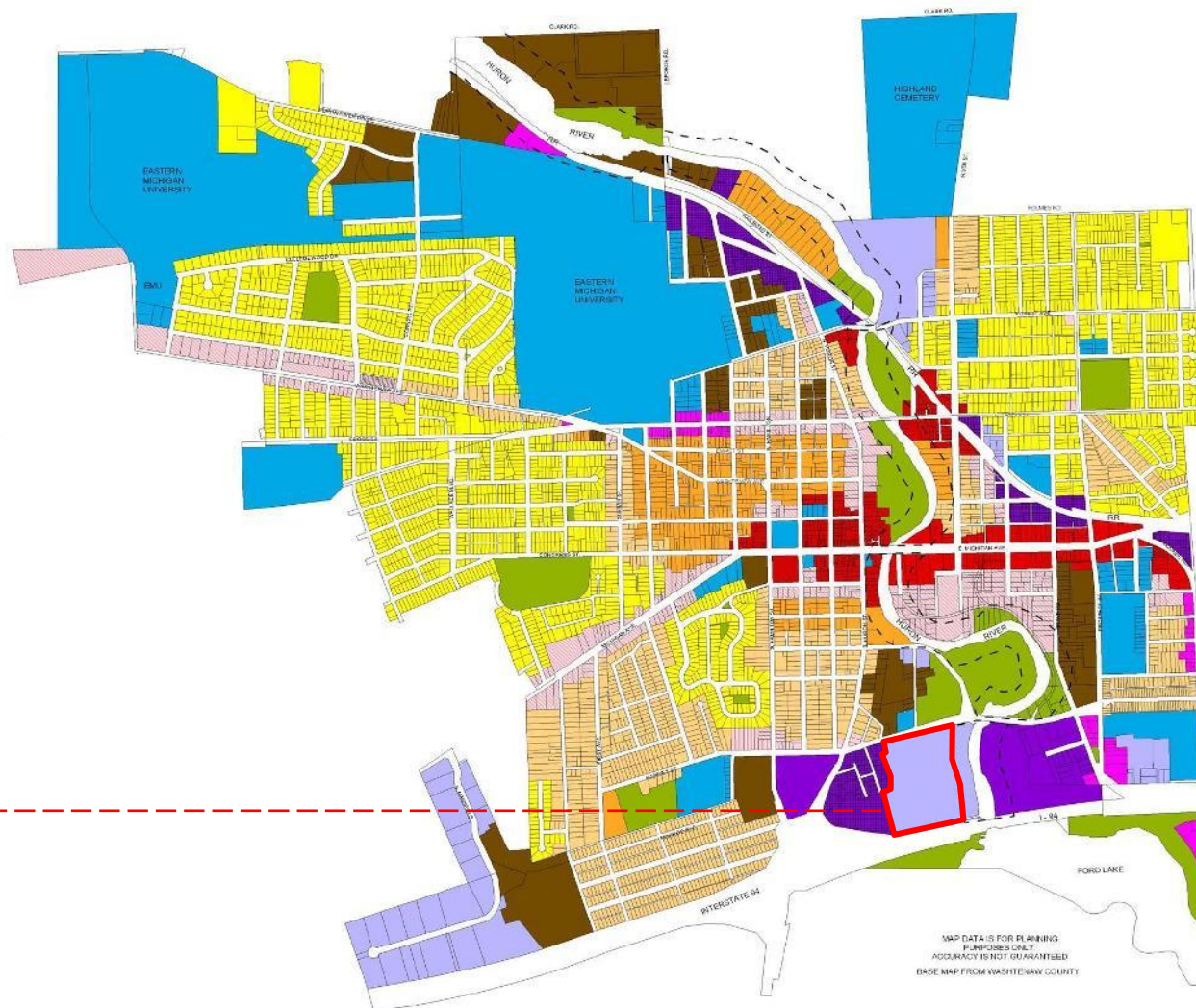
- Mixed Industrial / Commercial
- Light Industrial / High Technology
- Heavy Industrial

Public Uses

- Parks
- Public / Institutional

Other

- River Preservation District

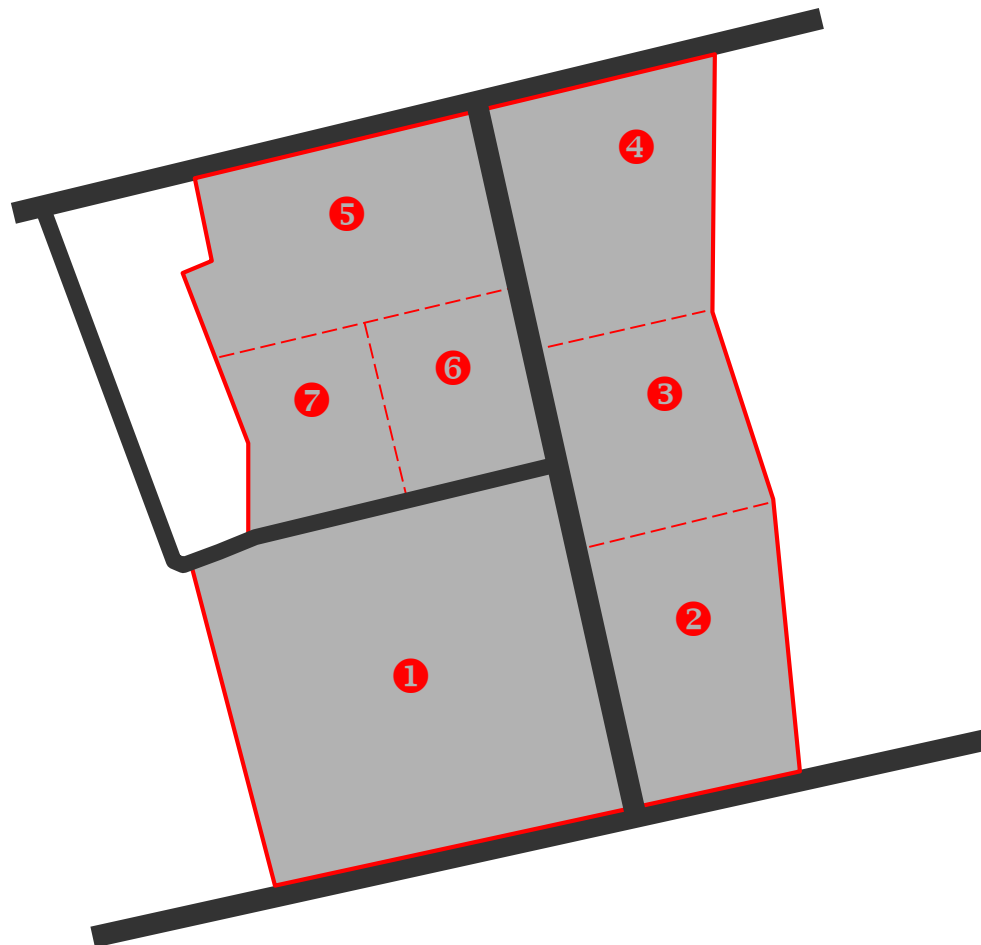


**New
Industrial
Park**

MAP DATA IS FOR PLANNING
PURPOSES ONLY
ACCURACY NOT GUARANTEED
BASE MAP FROM WASHTENAW COUNTY

Can a municipality prepare industrial zone?

Stage 2: Conceptualizing



New Industrial Park



Can a municipality prepare industrial zone?

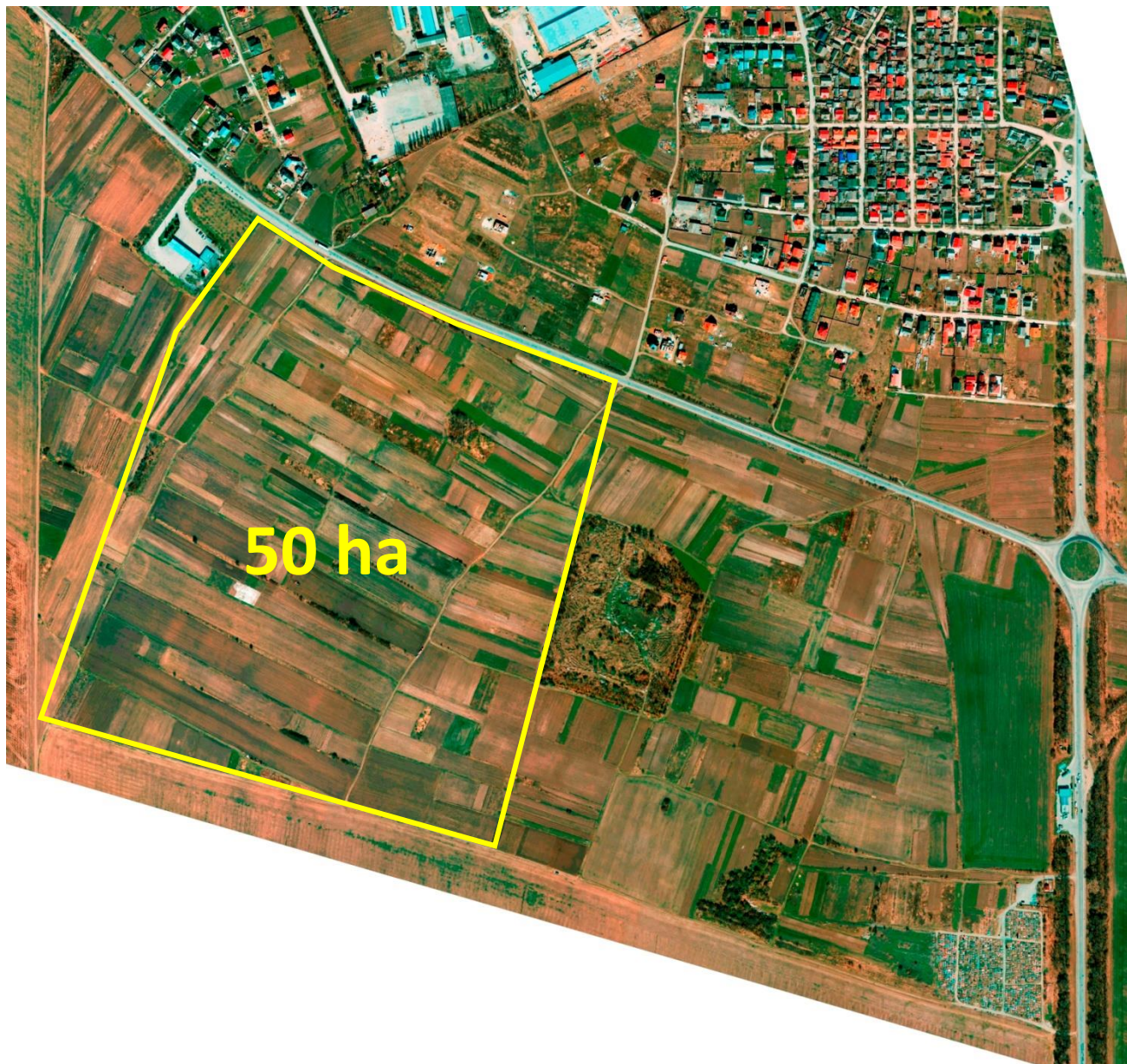
Stage 3: Developing





Practical example

What makes Chortkiv – West unique?



- Total size
 - Regular shape
 - Relatively flat
 - Adjacent to two roads
 - Close to population center
 - Industrial land designation
 - Municipal ownership
- and
- The site can accommodate spatial needs of large industrial projects

What makes Chortkiv – West unique?

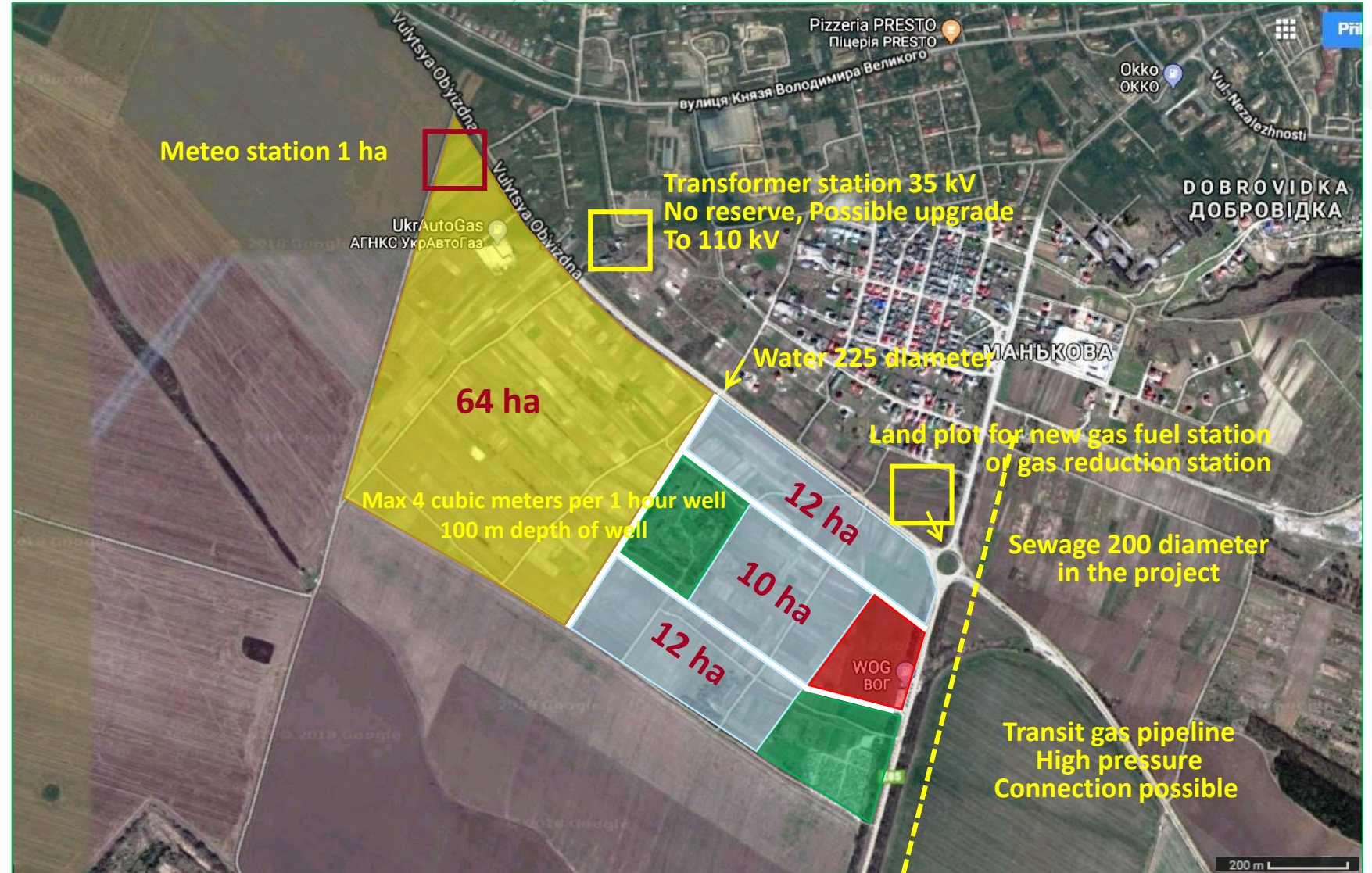


| Industrial site Novo Mesto / SLO | |
|----------------------------------|--|
| Company: | Revoz d.d. Novo Mesto |
| Owner: | Fully owned by Renault Group |
| Business activity: | Vehicle manufacturing and marketing |
| Products: | Renault Twingo, Renault Clio, Smart For Four |
| # of units in 2016: | 133.693 / 99,2% share of exports |
| Sales in 2016: | EUR 1,080 million |
| # of employees in 2016: | 2400 |
| Investment 2013-2016: | EUR 308,7 million |
| Total size of the site: | 67,6 hectares |
| Total size of halls: | 20 hectares |

| Industrial zone Podbořany / CZ | | |
|--------------------------------|--------|---------------------------|
| COMPANY | JOB | INVESTMENT (EUR, million) |
| p.Bartoš (BIDIPO) | 2,00 | 6,00 |
| NS KUNSTSTOFFTECHNIK CZ s.r.o. | 65,00 | 6,00 |
| ROVER CZECH s.r.o. | 10,00 | 6,80 |
| FTE AUTOMOTIVE CZECHIA s.r.o. | 630,00 | 20,00 |
| CONTA s.r.o. | 112,00 | 60,00 |

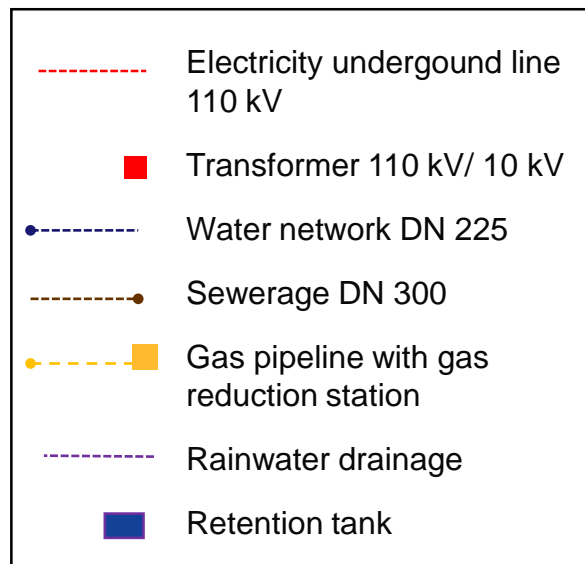
POSSIBLE ZONING

- Strategic investor
- Processing industry and logistics
- Cemetery incl. protection zone and green zone
- Commercial zone



PHASE A

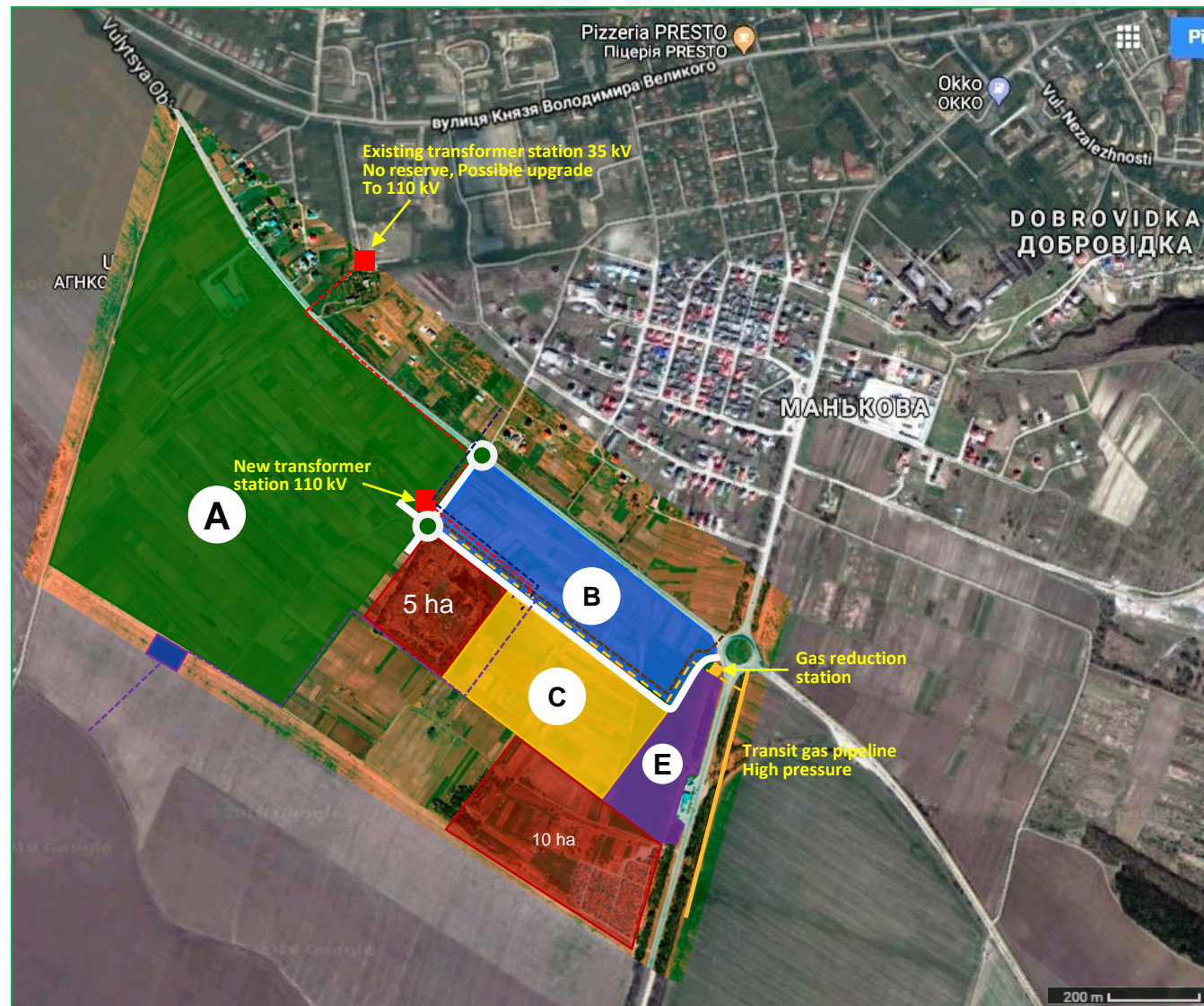
| Plot | Usage | Area (ha) | Built up area (m2) | Average new jobs / 1.000 m2 of built up area | Total jobs |
|--------------|------------------------|-----------|--------------------|--|---------------|
| A | Industry (car factory) | 60 | 300 000 | 35 | 10500 |
| B | Logistics | 12 | 72 000 | 25 | 1800 |
| C | Industry | 13 | 65 000 | 35 | 2275 |
| D | 0 | 0 | 0 | 0 | 0 |
| E | Retail | 4 | 20 000 | 35 | 700 |
| TOTAL | | 89 | 457 000 | 33 | 15 275 |



PHASE A – CONSTRUCTION COSTS

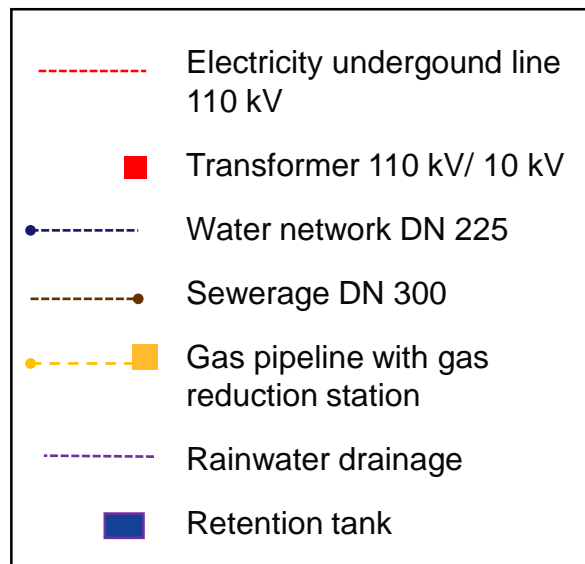
| Chortkiv - estimated costs | Unit | PHASE A | | |
|---|------|---------|----------|------------------|
| | | amount | EUR/unit | Total (eur) |
| New roads (width 7,5 m) | m2 | 7 425 | 80 | 594 000 |
| Pavements (width 1,5 m) | m2 | 1 485 | 53 | 78 764 |
| Roundabouts | unit | 2 | 36 000 | 72 000 |
| Water pipe Dn 225 (150) | m | 690 | 95 | 65 550 |
| Sewage network Dn 500 (225) | m | 870 | 155 | 134 850 |
| Atmospheric sewage network A, Dn 300 - 800 mm | m | 980 | 126 | 123 480 |
| Drainage and retention basin | pcs | 1 | 120 000 | 120 000 |
| Underground power line 35 kV | m | 730 | 65 | 47 450 |
| Underground power line 10 kV | m | 250 | 45 | 11 250 |
| Transformer station 35/10/0,4 kV | unit | 1 | 80 000 | 80 000 |
| Transformer station 10/0,4 kV | unit | 1 | 35 000 | 35 000 |
| Gas pipeline DN 100 | m | 900 | 85 | 76 500 |
| Telecommunications and lighting | m | 990 | 300 | 297 000 |
| TOTAL | | | | 1 735 844 |

| | |
|---|---|
| --- | Electricity underground line 110 kV |
| ■ | Transformer 110 kV/ 10 kV |
| --- | Water network DN 225 |
| --- | Sewerage DN 300 |
| --- | Gas pipeline with gas reduction station |
| --- | Rainwater drainage |
| ■ | Retention tank |



PHASE A+B

| Plot | Usage | Area (ha) | Built up area (m2) | Average new jobs / 1.000 m2 of built up area | Total jobs |
|-------|------------------------|-----------|--------------------|--|------------|
| A | Industry (car factory) | 60 | 300 000 | 35 | 10500 |
| B | Logistics | 12 | 72 000 | 25 | 1800 |
| C | Industry | 13 | 65 000 | 35 | 2275 |
| D | Industry | 10 | 50 000 | 35 | 1750 |
| E | Retail | 4 | 20 000 | 35 | 700 |
| TOTAL | | 99 | 507 000 | 34 | 17 025 |



PHASE A+B CONSTRUCTION COSTS

| Chortkiv - estimated costs | Unit | PHASE A + B | | |
|---|------|-------------|----------|------------------|
| | | amount | EUR/unit | Total (eur) |
| New roads (width 7,5 m) | m2 | 9 375 | 160 | 750 000 |
| Pavements (width 1,5 m) | m2 | 1 875 | 106 | 99 450 |
| Roundabouts | unit | 2 | 72 000 | 72 000 |
| Water pipe Dn 225 (150) | m | 960 | 180 | 88 500 |
| Sewage network Dn 500 (225) | m | 1 140 | 290 | 171 300 |
| Atmospheric sewage network A, Dn 300 - 800 mm | m | 980 | 252 | 123 480 |
| Drainage and retention basin | pcs | 2 | 120 000 | 120 000 |
| Underground power line 35 kV | m | 1 000 | 130 | 65 000 |
| Underground power line 10 kV | m | 520 | 90 | 23 400 |
| Transformer station 35/10/0,4 kV | unit | 2 | 160 000 | 160 000 |
| Transformer station 10/0,4 kV | unit | 2 | 70 000 | 70 000 |
| Gas pipeline DN 100 | m | 1 170 | 170 | 99 450 |
| Telecommunications and lighting | m | 1 250 | 600 | 375 000 |
| TOTAL | | | | 2 217 580 |





Tips and tricks

How to prepare an industrial zone

Step 1 – Conceptualization:

1. Do we need an IZ? Why?
 - New jobs in manufacturing
 - Positive result of demand scan
2. If yes – how big?
 - 40 – 50 jobs per 1 hectare for manufacturing
 - 10 jobs per 1 hectare for logistics
 - Catchment area / local, regional, national importance
3. Where will we locate it?
 - Physical master plan (agricultural vs. industrial land)
 - Ownership

Physical master plan

- Is the site zoned for industry?
- If not – how long does it take to change the zoning?
- What are the additional costs related to the change?

If it is a brownfield site

- Is there any pollution on the site?
- Has an ecological audit been completed?
- If no, do you know the “history” of the site?

Homeworks to be completed

- Extract from the Cadastre
- Is municipality the only owner?
 - If yes – can it sell the land?
 - Who makes the decision?
 - How long does the process last?
 - What is the price?
- If not – how many owners are there?
 - Do they agree to sell for given price?
 - Will they sell first to the municipality?

How to prepare an industrial zone

Step 2 – Design:

1. How many plots, how big?
 - 1 large investor and suppliers
 - Space for SME
2. Road connection of individual sites
 - Space for trucks
 - Parking
3. Technical infrastructure capacity

Zoning / Conceptual design

- Is the site designed for investors who need 1,5 ha – 2 ha – 3 ha – 5 ha – and more?
- Where will the roads and technical infrastructure lead?
- Is there enough space for parking?
- What is the percentage of permissible built-up area (usually max 50%)?
- Additional requirements on the buildings?

Technical infrastructure

- Map of all utilities + „connection points“
- Does the site have necessary capacity?
 - 80 – 150 kW of electricity per 1 ha
 - 60 – 100 m³/hour/1 ha of gas or
 - 300 – 500 kW per 1 ha for heating
 - 0,8 – 1,2 l/sec/ 1 ha of water
 - 10 – 15 l/sec of water in case of fire
 - 1 – 1,3 l/sec / 1 ha of sewage water

How to prepare an industrial zone

Step 3 – Elaboration:

1. How much will it cost?
 - Land
 - Infrastructure
2. Will it generate income?
 - Sale / rent of land
 - Property tax
 - Personal Income tax
3. Where to find money (feasibility study)?
 - Own resources
 - Bank
 - State and other donors

How to prepare an industrial zone

Step 4 – Finalization:

1. Purchase of land
2. Technical Infrastructure
 - In advance or together with an investor?
3. Marketing
 - National IPA
 - Web site
 - International Fairs



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U - LEAD

W I T H E U R O P E

Дякую за увагу!