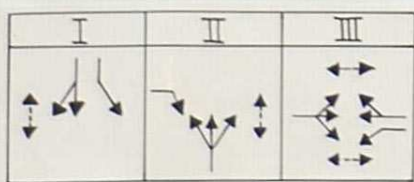


PHASING  
OF SIGNALISATION



Intersection 1 is reconstructed as a signalized intersection

Parallel service-parking lane along the road 2 makes the parking manoeuvres safer. Parking cars don't disturb the through traffic. Two existing parking areas have been opened together, they have been reorganized.

Separated cyclist roads make cycling traffic safer. Cyclists don't cause congestion for the vehicles of the main flow.

Cyclist lanes along the road 2 allow cyclist to ride in a natural way.

New parking places for local cyclists in front of the offices and for tourists behind of the church as a rest-area

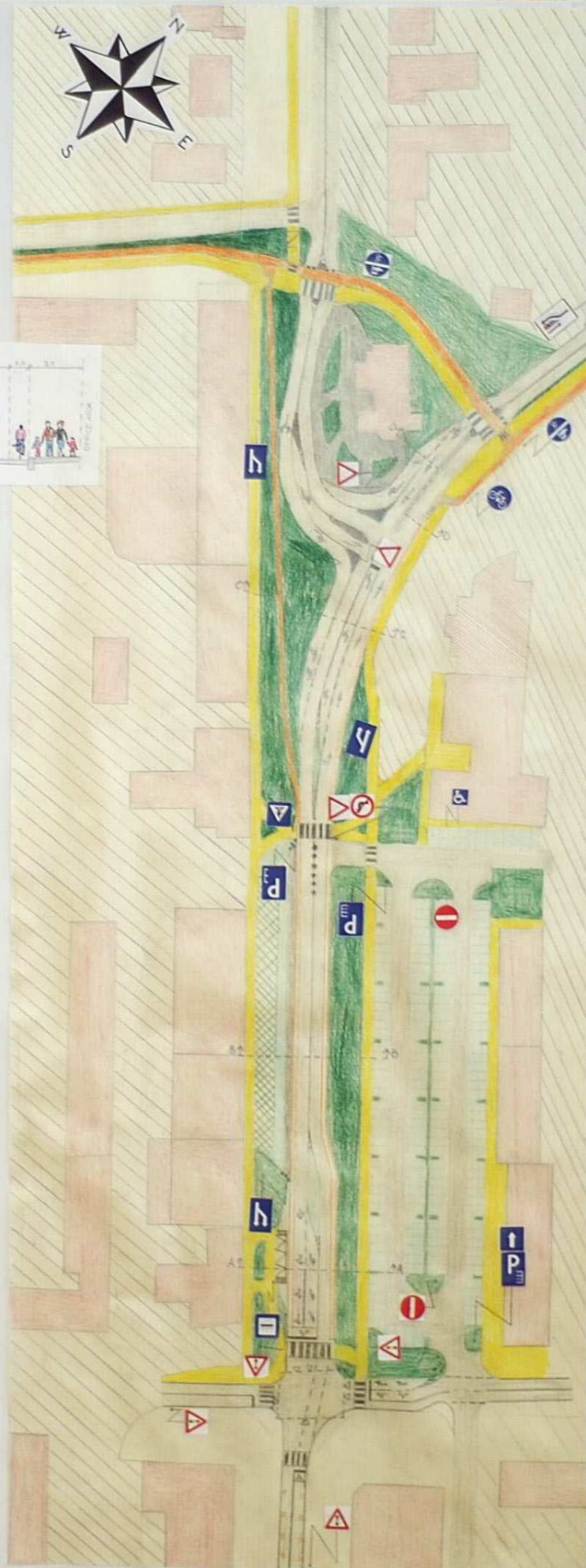
New cyclist road and pedestrian way behind the church follows the needs of the users.

Dangerous left-turning movements have been eliminated by construction of concrete separation elements.

Reorganization of traffic lanes in the junction of Záhorská street and Brozovská street helps to solve the priority and sight problems.

LEGEND

- Road carriageway
- Cyclist road
- Cyclist lane
- Cyclist lane (opened)
- Cyclist path
- Road markings
- Parking places
- Pedestrian surfaces
- Green area
- Existing buildings
- Existing living and parking area





# Variant "Low Budget"

## GENERAL IDEAS:

- Junction is kept signalised
- General geometric characteristics are left as they are
- Bicycle facilities are implemented
- Pedestrians' crossing is a little improved
- Some hardly used vehicle lanes are removed
- Conflict-prone merging points are erased
- Space for pedestrians in front of shops beside parking area
- Turning left from Hviezdoslavova is easier and safer
- Bicycle bars are installed instead of "rim killers"



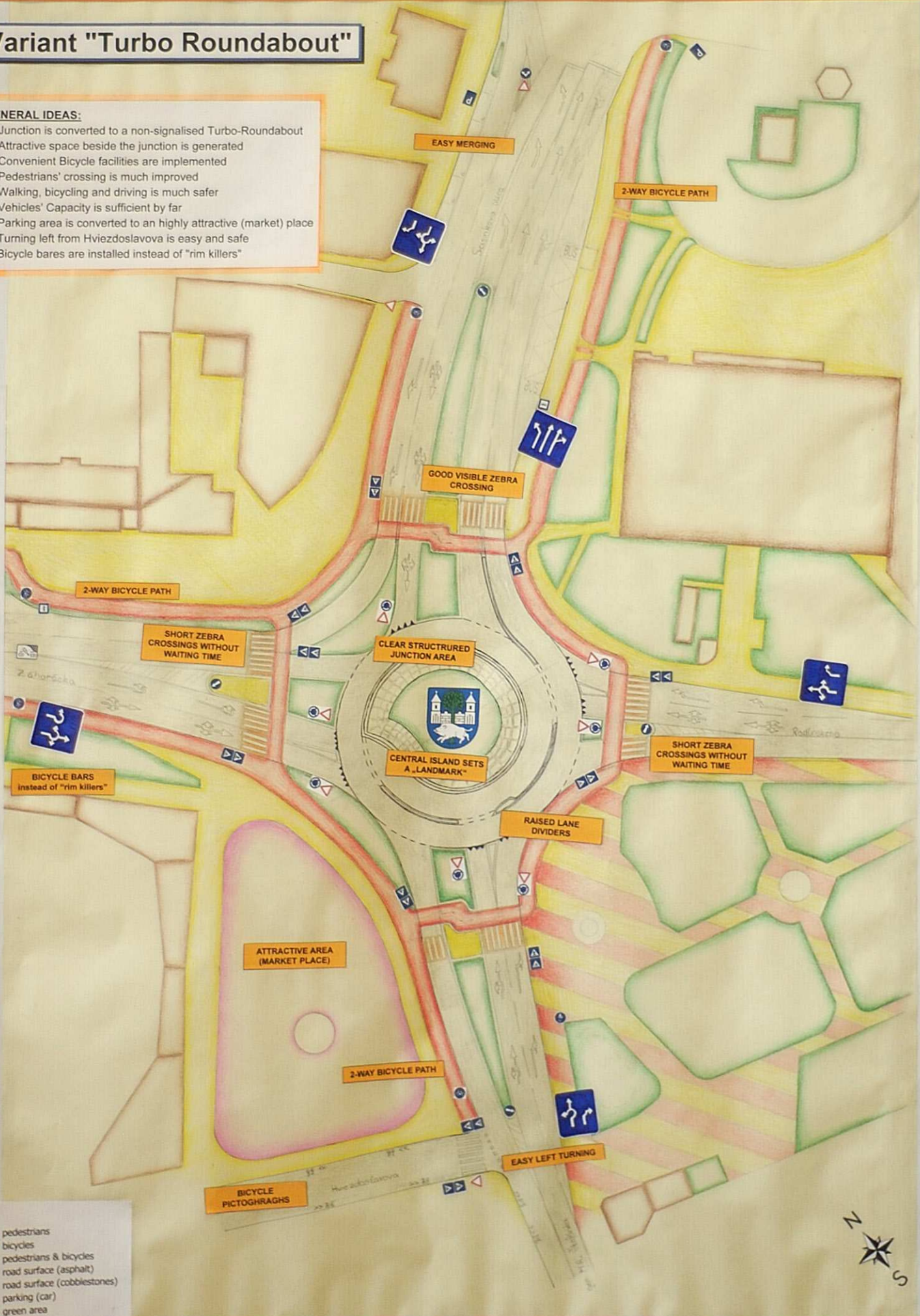
- Legend**
- pedestrians
  - bicycles
  - pedestrians & bicycles
  - road surface
  - parking (car)
  - green area



# Variant "Turbo Roundabout"

## GENERAL IDEAS:

- Junction is converted to a non-signalised Turbo-Roundabout
- Attractive space beside the junction is generated
- Convenient Bicycle facilities are implemented
- Pedestrians' crossing is much improved
- Walking, bicycling and driving is much safer
- Vehicles' Capacity is sufficient by far
- Parking area is converted to an highly attractive (market) place
- Turning left from Hviezdoslavova is easy and safe
- Bicycle bars are installed instead of "rim killers"



**Legend**

- pedestrians
- bicycles
- pedestrians & bicycles
- road surface (asphalt)
- road surface (cobblestones)
- parking (car)
- green area



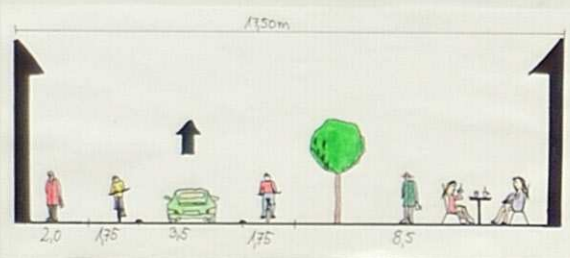
## HIGH COST SOLUTION

### MEASURES FOR PEDESTRIANS

- Wider sidewalks - better safety and comfort
- Relaxed and more peaceful atmosphere for pedestrians
- More green places and trees
- Space for cafés with the possibility to sit outside
- Direct connection between railway station and new bus station for pedestrians, realized by underpass
- One street level for better accessibility

### MEASURES FOR CYCLISTS

- Marked bike lanes by bumpers at the edges of the vehicle lanes
- Lighted bumpers every 0,6 m to increase safety
- Special horizontal warning signalization on intersections with lower level streets
- New bicycle parking facilities
- Possibility to underpass the railway with elevators



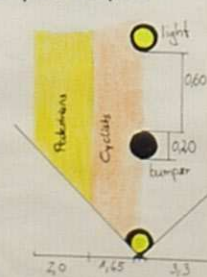
### MEASURES FOR DRIVERS

- One direction
- Narrower roadways and chicanes as traffic calming measures
- No heavy vehicles allowed in Radlinského street
- No parking possibility or parking along the street
- Reorganization of parking at the beginning and at the end of the street
- More parking space for disabled users

### MEASURES FOR INFRASTRUCTURE

- More parking space for disabled users
- New street infrastructure (benches, mini-gardens, street lights, sidewalk)
- New surface in pedestrians area

Detail plan: bumpers

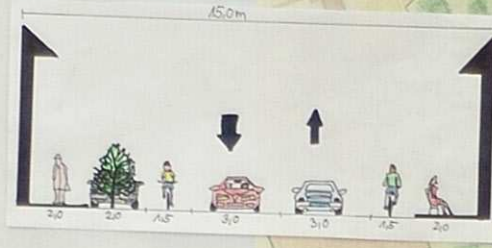




## LOW COST SOLUTION

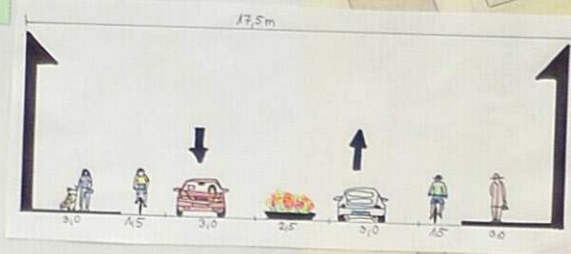
### MEASURES FOR PEDESTRIANS

- Wider sidewalks - better safety and comfort
- Elevated "zebras"
- "Gates" to the calmed section of the street with middle islands
- Relaxed and more peaceful atmosphere for pedestrians
- Free space for future café terraces, social activities, etc.
- Proposal for pedestrian underpass below the railway at the end of Radlinského street



### MEASURES FOR DRIVERS

- Narrower roadways, elevated pedestrian crossings and speed - bumpers as traffic calming measures
- No heavy vehicles allowed in Radlinského street
- Reorganized parking places
- More parking space for disabled users



### MEASURES FOR CYCLISTS

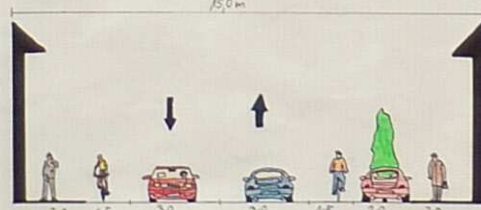
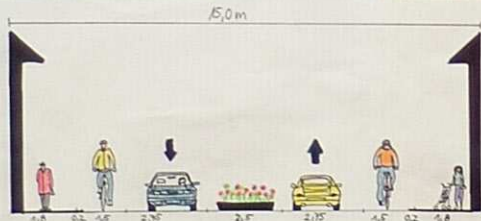
- Special marked bike lanes at the edges of the vehicle lanes
- Special horizontal warning signalization on the intersections with lower grade streets
- New bike parking lots
- New cycling connection towards the railway station

### MEASURES FOR INFRASTRUCTURE

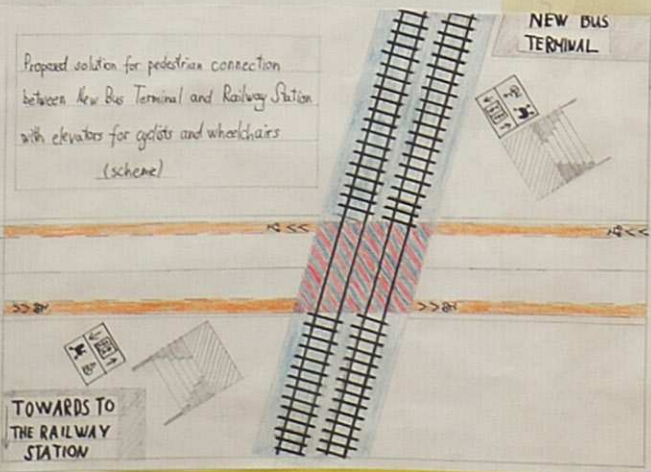
- Possibility of traffic - light implementation on Radlinského and L. Zúbka streets in the future
- New street furniture (benches, mini - gardens, street lights, sidewalk)

### MEASURES FOR PUBLIC TRANSPORT

- Bus lines rerouted to L. Zúbka and Partizánska Streets (new inner road)
- Dismantling of bus stop at the beginning of Radlinského Street
- New bus stops on Kláštorne square, close to old bus stops
- Possibility of retaining mini - bus lines if necessary



Proposed solution for pedestrian connection between New Bus Terminal and Railway Station with elevators for cyclists and wheelchairs (scheme)



TOWARDS THE RAILWAY STATION

#### Legend

- sidewalk/pedestrians
- cycle way
- parking
- buildings
- trees
- green
- railway
- bike parking
- commercial and relaxing zone





**REASONS FOR ZONE 30 IN VEĽKOMORAVSKÁ STREET**

- Veľkomoravská street with zone 30 – “a better place for living”
- safety for all street users
- located in residential area
- lower noise
- more space for inhabitants, pedestrians and cyclists
- fluent traffic flow
- more parking lots



**MAIN IDEAS OF THE FINAL SITUATION**

- Narrowing the street down to 6,00m/6,50m/5,50m on the whole length
- Intersection with street “Jána Hollého”: demolition of corner house → improvement of visibility, speed cushion for lowering speed raising driver’s attention
- Raised intersection in the area of Street “Jánošíkova” for marking the beginning of the zone 30 km/h
- New design of intersection “Veľkomoravská” street and I/2 with left-turning-lane, channelisation and extra cyclist-crossing; solid islands for safer pedestrian crossing
- Dropped sidewalk crossing with different surface
- Narrowing street by trees
- Chicane with trees and parking lots for narrowing the street down to 5,50 m between “Slovenská” and “M. Nešpora” street
- Raised intersection with street “Bernolákova”: pedestrian crossing for improvement of safety and accessibility of old and disabled people, tactile lines for blind people; pedestrian crossing at Street “Bernolákova”
- Improved visibility situation at the entrances/exits of the driveways of the block of flats
- Small double chicane
- Roundabout at the node of “Veľkomoravská” street with “Cesta Mládeže”

**FINAL SOLUTION**

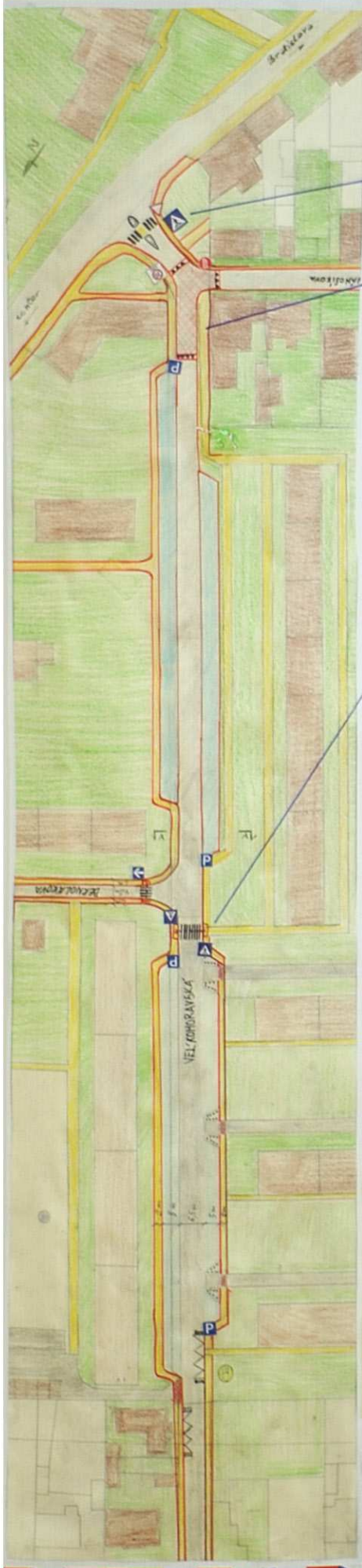
+	-
safety for all street users	investment costs
new design of all street-elements	time loss of 30 seconds for car-drivers
work in a synergy → induce street calming	
fair sharing of road space	maintenance service in winter?
improved accessibility for old and disabled people	
increased life quality and appearance of street	
easier crossings for pedestrians	
better organisation of public transport and parking lots	

**LEGEND**

- car lanes
- buildings
- green
- parking lots
- infrastructure for pedestrians
- infrastructure for cyclists
- dropped kerb
- new street line
- road signs
- traffic bottoms
- plastic columns
- bus stop

Scale: 1:500

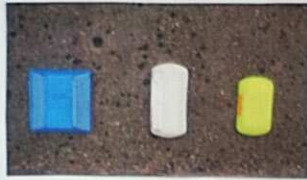




MAIN IDEAS OF THE QUICK FIX

- Intersection with street "Jána Hollého": demolition of corner house, bottom markings for optical psychologic brake
- Intersection Veľkomoravská street and I/2: islands made from traffic bottoms for safer pedestrian crossing
- Raised intersection in the area of street "Jánošíkova" for marking the beginning of the zone 30 km/h

- Chicane made of bottom markings and parking lots for narrowing the street down to 5,50 m between "Slovenská" and "M. Nešpora" street



- Dropped curb at the pedestrian crossing street "Bernolákova" for accessibility for disabled people and tactile lines for blind people



- Small double chicane made from plastic collums



- Roundabout at the node of "Veľkomoravská" street with "Cesta Mládeže"

QUICK FIX SOLUTION

+	-
quick improvement of the situation	no narrowing of street leads to speeding and lack of safety
low investment costs and not so complex for projecting	unsafe situation for pedestrians at crossings
easy maintenance	no improvements for cyclists
visibility on intersection with street "Jána Hollého"	no improvements for public transport
	short term solution → not sustainable

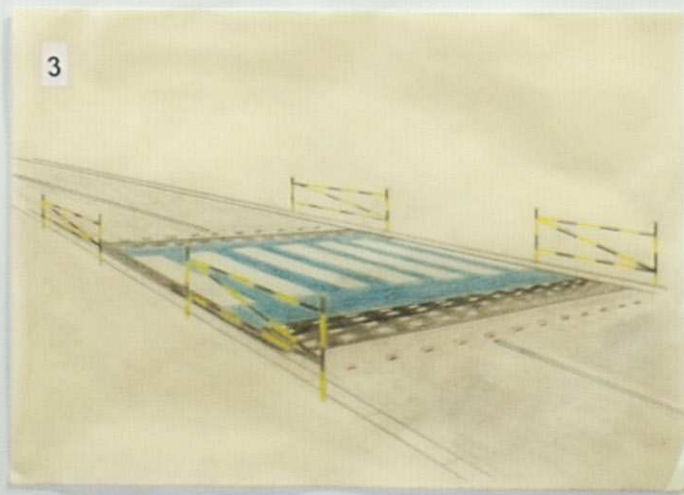
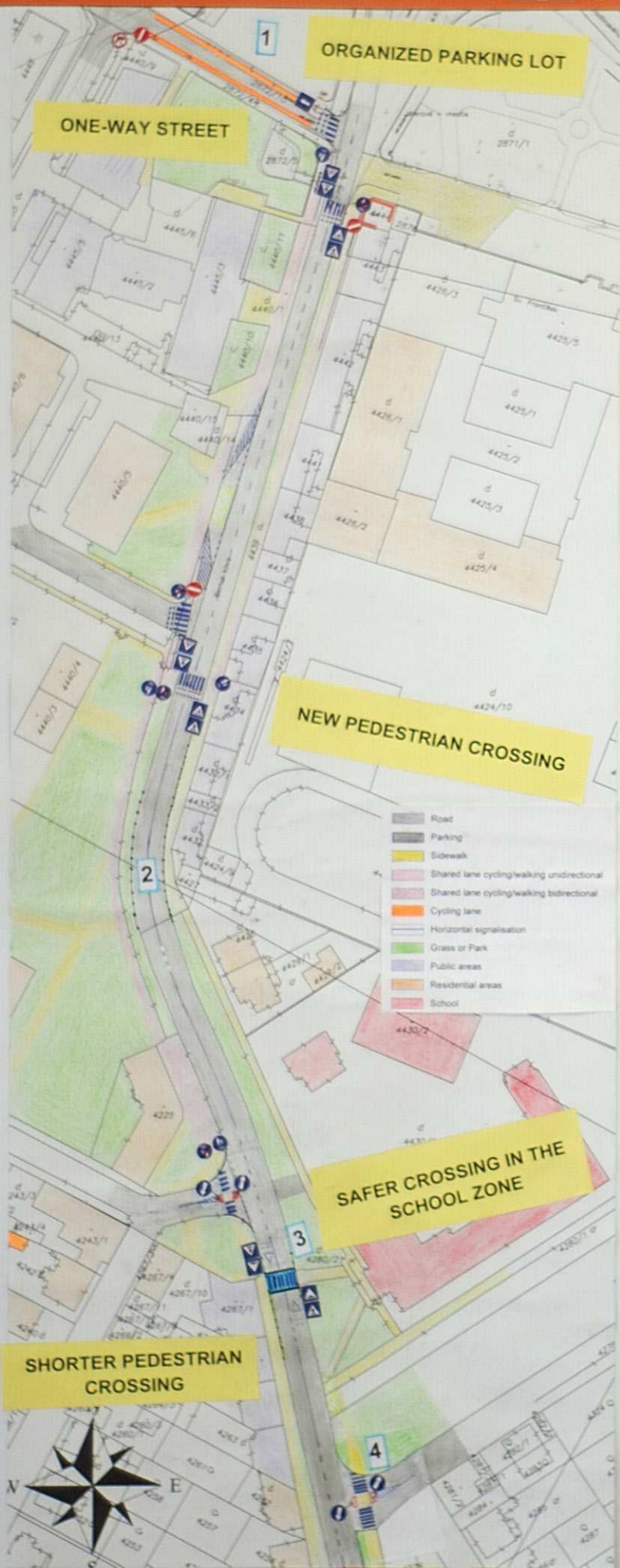
LEGEND

Scale: 1:500

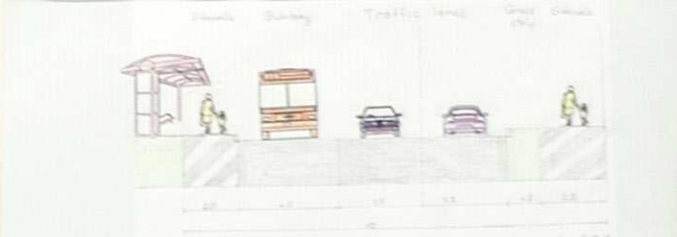
- car lanes
- buildings
- green
- parking lots
- infrastructure for pedestrians
- infrastructure for cyclists
- dropped kerb

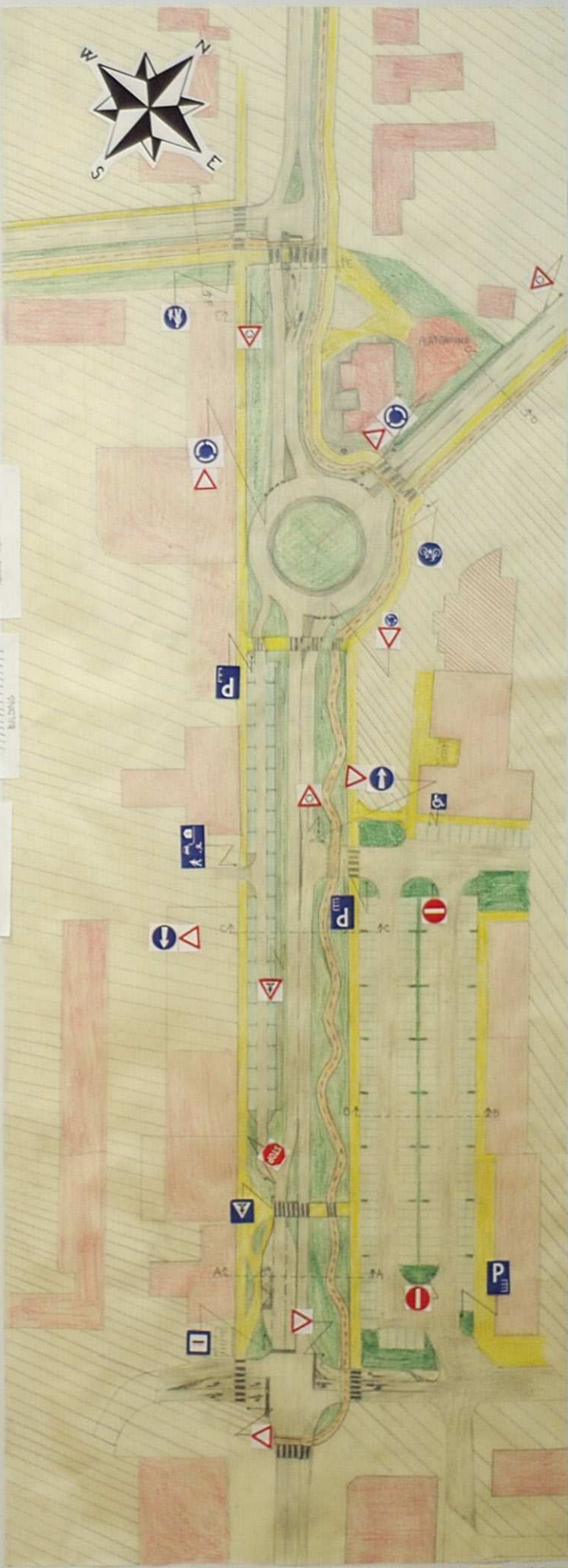
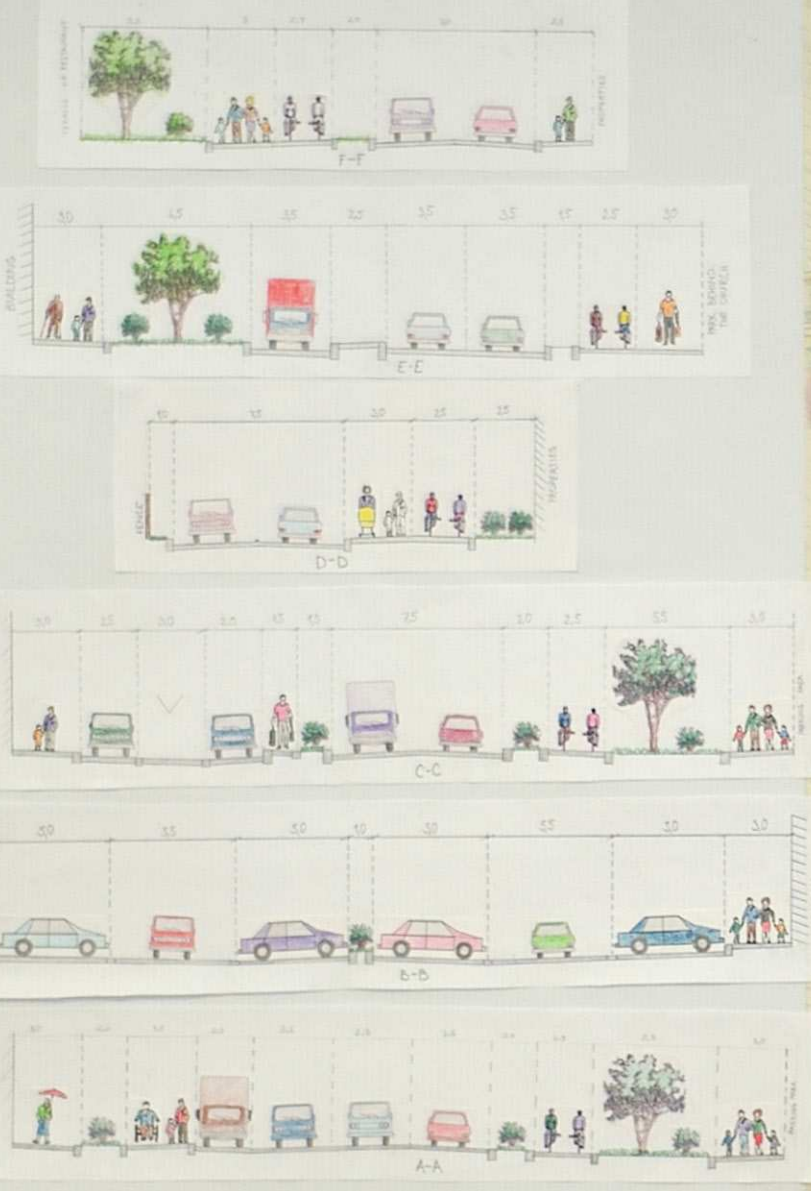
- new street line
- road signs
- traffic bottoms
- plastic collums
- bus stop











New left-turn lanes in the junction 1 make the traffic more organized. The left turning will be easier with the construction of the bypass road.

Parallel service-parking road along Road Nr.2 makes the parking manoeuvre safer. Parking cars don't disturb the through traffic. Two existing parking areas have been opened together, they have been reorganized.

Separated cyclist roads make cyclist traffic safer. Cyclists don't cause congestion for the vehicles of the main flow. New cyclist crossings allow cyclists to cross the road safer. New parking places for local cyclists in front of the offices and for tourists behind of the church as a rest-area.

Dangerous left-turning movements at the exit of the parking area have been eliminated by concrete separation elements. The closeness of the roundabout provides new turning opportunity.

New roundabout in the junction of Záhorská street and Hlenská street. Queue length became shorter, waiting times reduced. Problem of left turning movements is eliminated.

LEGEND

- Road carriageway
- Cyclist road
- Cyclist lane
- Cyclist lane (opened)
- Cyclist path
- Road markings
- Parking places
- Pedestrian surfaces
- Green area
- Existing buildings
- Existing living and parking area

