Seamlessly connected

English Summary of the integral design ‘de Groene Loper’ of Avenue2

Entering the heart of Maastricht, you discover that what the city wants most is a solution to a persistent problem that splits the city in two: the A2 national motorway. Maastricht longs for change, connection, cleaner air, and a reduction of noise pollution. Avenue2 is working to realise that dream, and we will ensure that it becomes a reality. We are at the start of a dream that is set to come true. Our plan emerged from the wishes of Maastricht and its residents, and out of respect for the city. Our goal is to make use of the city’s own abundant strength - the impact of the plan that we have designed will be enormously positive. Maastricht will once again be made whole. We will restore both the east-west and north-south connections, connect the city to the Country Estate zone (Landgoederenzone) in the north, and bring the neighbourhoods in Maastricht East closer together. Our plan is made to fit Maastricht and its residents – like a glove.

With the tunnelling of the A2 near Maastricht, we are turning things upside down. Cars, lorries and motorcycles will disappear under the ground, and a point of discussion for years will finally become a reality. Above the tunnel, we are setting up a green park avenue, and grey will once again become green. We are extending this avenue towards both the north and south. We call this green route, which twists like a green ribbon through the city, the Green Carpet (de Groene Loper). The avenue is our gift to Maastricht - it is a route planted with no fewer than four thousand trees that connects the city with its surroundings. With the Green Carpet, we are offering Maastricht opportunities for change, improvement and connection.

Creating opportunities
The Green Carpet
The Green Carpet forms the heart of our plan, which arises from our conviction that the space atop the tunnel deserves not only an urban approach, in the form of a boulevard, but even more importantly a scenic approach, in the form of a green, intimate avenue. The Green Carpet will change the current A2 zone into a connecting space for the city. And not only that, but the Green Carpet will also extend beyond the space atop the tunnel, twisting from north to south through the city like a green ribbon running from the Ceramic District to deep into the Country Estate zone. The route will link the many areas of the city. We will give the route its green character by planting thousands of linden trees next to each other in rows four to eight trees wide. This will give the avenue allure and a suitable atmosphere that exudes peace, space and vitality.

Down to the last detail
Stacked tunnel
We consciously chose a uniquely shaped tunnel; not one with all lanes running parallel to each other, but one with two tunnel tubes each of two lanes, on top of each other in stacked form. As a result, the tunnel will not be wider than the current A2, but can still handle larger traffic volumes. Above ground, this offers enormous possibilities, from increased space, safety and quality of life, for people, flora and fauna. This can all be found in our design of the outside space. Our aboveground design is geared mainly towards pedestrians and cyclists. There will be no trace of a visible ‘scar’, creating the feeling that something intangible has happened, something that leaves only a pleasant feeling behind.
The tunnel route runs from the Geusselt interchange to the Europaplein interchange and covers approximately two kilometres. The tunnel’s four separate tubes create an optimum flow of traffic. We separate local traffic from through traffic to help reduce traffic lane changes in the tunnel. In the event of an obstruction or maintenance, traffic can easily flow into another tube, which means we will not need to lay any emergency routes above ground through Maastricht East, we can keep the roadway narrow, and we can design the space for slower traffic.

**The heart of the Green Carpet**

**Park avenue**

One of the Contracting Authority’s clearest wishes was for the development of a boulevard above the tunnel. We translated the boulevard into a park avenue. The main difference is that, with an avenue, the emphasis is on living rather than using the space for traffic purposes. Our park avenue is green, long, intimate and designed mainly for pedestrians and cyclists. We have designed the avenue with fifty per cent less asphalt than the amount currently at the same location. Because the width of the park avenue is modest and we are organising it as a green space, it will become even less of a main traffic artery. We imagined the avenue not as a barrier, but as a connective element that fits seamlessly into the existing surroundings. We can include the park avenue in our design, because we have chosen the option of a stacked tunnel, giving us a great deal of freedom for the design above ground.

**The face of Maastricht**

**Two unique city entrances**

We have given the mouths of the tunnel a unique form where the tunnel descends at the northern end near the Geusselt junction, and at the southern end near the Europaplein interchange. The tunnel mouths will one day be recognisable as two sloping areas in the landscape. We call these two new entrances to the city the name ‘Tweeherigheid’, which loosely translates to ‘Dual Sovereignty’. This references the period in Maastricht history in which two sovereigns shared control of the city: the Duchy of Brabant and the Prince-Bishopric of Liège. The tunnel mouths will above all be given an attractive, green character. At the Europaplein, the green, sloping space lies just outside the city. We mark the mouth of the tunnel there with a row of urban villas between the park avenue and the John F. Kennedy singel, where a residential building will one day also be one of the area’s defining characteristics. At the Geusselt junction, a sloping area will be created that will form the transition between city and landscape. The real estate in the area will guide the Green Carpet’s route here.

**Unity in diversity**

**Real Estate**

As we see it, any extreme, vastly different new real estate plans would not fit into the intimate character of the city of Maastricht, which is why we chose to design houses and offices along the park avenue that form a natural transition to the existing buildings. In addition to quality, this real estate will not only add a completely new aspect to the existing neighbourhoods, but obviously will also blend seamlessly into the existing environment. With the new construction, we are completing what is already there. The park avenue will one day look as if it had grown organically over the years, rather than the area exuding an atmosphere of a newly built neighbourhood. As for atmosphere, the avenue will one day be reminiscent of well known, varied avenues in cities such as Brussels and Antwerp, but also of the existing boulevards in Maastricht. Above all, the avenue will have an allure that suits the Green Carpet. The avenue will one day be lined by houses that are staggered in heights and widths – narrow, wide, low, tall – diversity will be the most prominent element. The area will feature stacked buildings alongside private homes, land-based houses and apartments, and fine
buildings with ample space on the ground floor for studios, stores or home offices. Houses will have front gardens or will directly border the pavement and a variety of roof styles, for which we have opted for brick architecture.

**On the map**

**Country estate zone**
The Green Carpet offers a wonderful opportunity to revitalise the now somewhat fragmented Country Estate zone. When speaking of the Country Estate zone in Maastricht, we do not immediately think of the type of zone such as the Vecht region in the province of Utrecht. The Maastricht zone is more like a number of individual country estates of significant ecological and recreational value. Our plan is an initiative to once again bring the zone together as a single entity. We will extend the Green Carpet over the A2 by means of a cycle bridge to Mariënwaard. It might also be possible for it to keep ‘rolling along’ to the Juliana Canal and Castle Meessenhoven. The Green Carpet reconnects existing country estates such as Geusselt Castle, Villa Kanjel and Vaeshartelt with each other and with the city. Along the A2, the Country Estate zone will gradually change into a more finely meshed network of water zones and fauna passages.

**Approach to the city entrance**

**Cycle bridge**
Near Nazareth, the Green Carpet crosses the A2 in the form of a pedestrian and cycle bridge. We have given this ‘gate’ to Maastricht a unique form, because it marks the intersection of the Green Carpet with the A2 and serves as the approach to the entrance to the city. The bridge welcomes motorists who travel the A2 from the north into the city – the route over the bridge travels in an S-shaped path. It ‘rises’ from the landscape on the side of Geusselt Park, crosses the motorway and then once again follows the open, watery landscape on the west side near Nazareth.

**Like a caterpillar**

**Tunnel train**
We will construct the tunnel with the help of a logistic ‘tunnel train’. This construction machine travels like a caterpillar through the various areas in a single journey. In this way, we will build the tunnel just as quickly as a traditional tunnel, but we only pass by residents once. We do not need to drive piles, which means the construction can be carried out with considerably less vibration and noise pollution. In addition, this construction method ensures better accessibility and safety during the construction. The tunnel will be completed in 2016. Transport of marl and dirt and delivery of construction materials will only occur along the old motorway, so that the region will experience an absolute minimum of inconvenience. On the west side of the tunnel under construction, traffic from the A2 will travel along a temporary, narrowed detour. Once the tunnel is complete, most of the work will take place under the ground and outside of the city area. By building in this way, residents of the area will only be inconvenienced once, and the inconvenience will be limited to a single area.

**Second wind**

**Air and noise**
Our plan improves the air quality and noise situation in the planning area in a natural and futureproof way, thanks to our design solutions. The air quality and the noise situation will improve considerably and noticeably near the tunnel mouths due to our choice of a stacked tunnel. Our plan also completely satisfies the legal requirements for air quality. For the homes in the planning area, the air quality will even exceed the legal requirements. The noise situation...
along the roads in the city will improve considerably, because they will have lower traffic intensity – with ten to thirty percent less traffic than current levels, thanks to the improved traffic management through the new tunnel.

**With respect**

**Cultural heritage**
The planning area encompasses several cultural heritage areas. We have carefully incorporated this heritage, which is so valuable to the city of Maastricht, into our plan. A unique new development arising from our solution is the preservation of the council flat at Koningsplein. Our plan also does justice to the many other valuable cultural-historical objects in the area.

**2026: Maastricht as one**
The entire plan will be completed in 2026. Just think of it: Maastricht as one, seamlessly connected by the Green Carpet.