# FASOS GREEN IMPACT PROPOSAL: PROJECT FASOS GREEN SPACE

### Summary

The area behind the Turnzaal and GG76 is currently a barren concrete space and car park. Our proposal is to gradually convert this area into a sustainable green space that will provide a pleasant space for students and staff to collaborate on work, relax and walk peacefully. It will act as a carbon sink and urban green space. The plan is also to link the space to the neighbouring Beyart park area, thus contributing to the greening of the inner city and the creation of public green spaces within the highly petrified city centre.

#### Introduction

After WWII, the inner city of Maastricht lost many of the inner city green areas attached to former convents. As a result, the inner city has a dense concentration of stone and concrete, and a low level of green space (known as petrification). In the present era of global warming, this is detrimental both to urban nature, because few species can live in such highly petrified environments, and to human inhabitants. Petrified environments reach higher temperatures in summer, requiring more energy use for air conditioning. Additionally, such environments only contribute to the bad air quality in the inner city. This has a negative impact on health and well-being of students and staff. Lack of public green space also means those who work or live in the city have few opportunities to relax and destress in contact with natural environments.

The university is the single most important private owner of space in the inner city. In an era of climate change, the university has a duty as a stakeholder in the city of Maastricht, and as a space and service provider for its community, both staff and students, to use its space in an environmentally conscientious way that benefits its own community and other inhabitants of the city as much as possible without detriment to its mission of education.

In addition to this, a recent project report from the University Maastricht Sustainability Institute<sup>1</sup> indicated that University's Facility Services department is of the opinion that the sustainability potential of the university's buildings and terrains is not sufficiently utilised with regard to greening. Especially when the ambitions of Sustainable UM2030 program for the next ten years, are taken into account. Our proposal therefore would like to set the wheels in motion, for a university terrain in the inner city that offers great potential to contribute to the Nature Inclusive Campus ambitions.

### The current space

The space behind FASoS, Grote Gracht 76-92, is currently a mixture of paved space, unpaved car park and paved car park. The paved space, currently used twice a year for events, has a negative environmental impact, preventing the absorption of rainfall and fully petrifying the space. The car park is made up of two parts: a formal paved parking area, and an informal space where cars park on grass round the edge. The area has several mature trees which could provide a pleasant study space. However, this space is not used, partly because sitting beside a car park is unpleasant, but also because no seating is available and the area is not maintained, being overgrown much of the year with coarse grass, which is cut at intervals, eliminating any positive environmental impact. Viewed from Google maps, the space appears as a bald patch in the city, barren and largely unused. The stone paving and lack of vegetation contributes to higher temperatures in the surrounding buildings in summer and produces an unattractive environment that is not used except those few individuals who park their cars there.

<sup>&</sup>lt;sup>1</sup> 'Towards a campus greening vision and strategy for Maastricht', University Maastricht Sustainability Institute (May 2020)

## The proposal

We propose to gradually convert some two-thirds of the existing space into an extensive study garden in two stages (see below). The repurposed space will serve four purposes:

- It will increase green space and act as a carbon sink and a haven for urban nature in the inner city. Faced with the negative consequences of climate change, every city, and every stakeholder in the city, including the university, needs to take immediate and resolute action to minimize the negative impact on inhabitants and users, as well as on nature. The university has an opportunity to play an important part.
- 2) For 6-8 months of the year, the green space created, including seating areas surrounded by greenery, will provide attractive and peaceful locations where university members can sit and read, discuss work, socialize, relax, or walk. Under social distancing, it will provide more opportunities for students to use outdoor space to study without being close together. It is important for staff and students to have access to adequate informal study and socializing space at present very little such space is available in the FASoS buildings: Banditos garden, which is overcrowded in good weather; and the smoking area near the Turnzaal. Research has shown (source) that green spaces are a valuable resource in reducing the stress that is a common problem for both students and staff, yet no such green spaces are accessible close to FASoS, the nearest being the Hoge Fronten.
- 3) It provides the faculty and the UM an opportunity, as an academic institution, to act as a solid partner with the city of Maastricht in community building and cooperation by co-establishing urban nature.
- 4) It provides staff and students with a sense of community and ownership of the space they use ("our garden"), which is likely to increase the respect with which the space is treated and reduce maintenance costs from wilful damage or neglect.

The aim is to construct a green space that is relatively self-sustaining and does not require extensive maintenance (minimal lawns to be mown or annual flower beds to be replanted). The space should not be a lawn with trees, which provides limited habitat for wildlife, but rather a structured garden of multiple layers: larger trees that will provide long term shade and substantial carbon sinks, smaller trees, shrubs and perennials, ground coverage, and climbing plants. There should be a high level of biodiversity, focusing on European endemic species. Ground cover will be sufficient to create a pleasant garden within just a few years. Within ten years, trees will grow sufficiently to provide shade, habitat for birds, and reduce local temperatures. By 2050, the garden should make a significant

contribution to green space for the city of Maastricht. The ideal vision is to create gateways to link the green space with the much larger Beyart park, which is planned as a public space under development by Secufund Real Estate, so university members can access this park. Planning of the garden should be a joint effort between city environment advisors, enthusiastic gardeners from amongst FASoS staff, and student volunteers. This will provide a key sense of student and staff ownership of the space.



The long-term goal of the University should be to prioritise the health benefits of many FASoS staff and students over a small number of car drivers. We recognise that this cannot be achieved in the short term, thus the project should proceed in two stages.

## Stage 1 Creating a garden behind GG76 (immediate)

Convert the paved space behind the GG76 into a garden area. The small grass area between the paved space and the triangular zone of grass with one mature tree adjacent to the wall of the Montessori school, both currently unused, would be included in this first stage of the project.



Some of the paving would be kept to create a vehicle route through to the Turnzaal and a turning circle for deliveries, which would also serve to allow easy emergency evacuation of the building in case of fire. Immediately behind the GG76 building there would be a buffer zone of 5-7 metres, starting with low plants closest to the building to allow light moving to larger trees furthest from the building that would damp sound from garden users and avoid disturbing classes. Beyond this, picnic tables(like those currently in Banditos garden) spaced at intervals in paved islands, connected by paved paths would allow students and staff to use the garden for study and socialising for a considerable part of the year. These paths would be built by recycling the concrete slabs originally covering the space.



To minimise costs of waste removal, more of the concrete slabs could be used to construct raised walled gardens. Others could be stored to create paths, islands for seating and similar raised gardens in stage two (below).

The marquee for social events would be located on the paved car parking space between lamp-posts at the near end of the car park. Caterers would be able to access it via the car park entrance. During these two weeks, parking would be reduced by about 50% only.

The newly create garden space offers considerable value-added for

events using the marquee, in that these can now spill over into a pleasant garden space instead of a concrete pavement.

### Stage 2: Reclaiming the unpaved car parking space (in five to ten years)

The informal, unpaved car parking area will be converted into garden space with some further tables. Conversion costs should be very low as the surface is unpaved and will need very little treatment other than digging over. Paving from stage one could be recycled into more raised gardens. This will reduce the capacity of the car park, but nearly 50 spaces will remain. Observation shows that currently in summer many users prefer the informal car park because the trees offer shade, leaving the paved car park largely empty. The stage of the project might thus include more large trees that in the long term would provide some shade at the edge of the remaining car park. The surrounding space for events using the marquee on the paved car park will become increasingly attractive.



### Financing

Funding is needed to cover three major steps, plus an additional one that should be taken into consideration as well:

- 1) Preparation of the space and bringing in fertile soil. This step should initially be covered by university financing.
- 2) Acquisition of plants: In order to make the project one that is owned by the UM community, we propose to involve additional financial funding here by means of <u>Universiteitsfonds</u> <u>Limburg/SWOL</u> crowdfunding and/or the SWOL annual fund campaign. The time is there to dedicate such crowdfunding activities and annual campaigns to sustainable projects as well.
- 3) Maintenance: This will be the biggest long-term concern. While some professional maintenance may be necessary, we propose to establish a garden team composed of volunteers from FASoS staff and students. A plan to allow one Solver hour for every two hours worked (up to one hour per month) could be an appealing incentive for staff. Subsequently, an appeal can be made to the current maintenance budget. <u>Dolmans Monsdal</u> outdoor gardening does maintenance at FASoS a few times a year. They can still come to do maintenance, but it will be pruning instead of mowing. The FASoS garden team can then focus on the parts of the garden that require more intensive maintenance.
- 4) Opening up and connecting the FASoS gardens to the neighbouring Beyart park area, the Marres House for Contemporary Culture and potentially other surrounding gardens: the whole will be greater than the sum of the individual parts. This step contributes to the greening of the inner city and the creation of public green spaces within the highly petrified city centre. Or in other words, it will contribute to urban nature and biodiversity in a vulnerable city district. By doing so, this last step becomes eligible for external funding. An excellent partner for external funding is <u>Elisabeth Strouven Fonds</u>, who can reward urban nature projects -which meet their core values- with a substantial reward. The organisation previously financed the <u>Natuurgluren</u> project at the UM Tapijn location.

Phase	Budget needed	Financed by
1 Preparation	€ 16.000,-	Maastricht University
2 Acquisition	€ 10.000,-	Universiteitsfonds
		Limburg/SWOL
3 Maintenance		Current UM maintenance contract
4 Opening up and connecting	€ 20.000,-	Elisabeth Strouven Fonds
Costs for Maastricht University	€ 16.000,-	

The following amounts and funding organisations are proposed:

The UM would only need to finance the first preparational and third maintenance phase (the latter is already included in the current maintenance contract). Phase 2, Acquisition, would be covered by external SWOL funding. Opening up and connecting with surrounding green areas during Phase 4 is a choice still to make in the future, though offers opportunities for funding by the Elisabeth Strouven Fonds.

## Moving forward

An ambitious project such as this one needs a project team to safeguard and monitor its execution. Thus, the project needs a semi-permanent team to be sustainable and enhance long-term benefits. We would like to propose that our current FASoS Green Impact team will be integrated in such a team. The team should furthermore consist of a representative from FASoS Student Representatives, delegates from Facility Services, the FASoS facility manager, the FASoS managing director and a renown gardening expert who is working at FASoS.

To quantify the support within the faculty community, a survey will be conducted among students and staff during the start of the next academic year. Furthermore, interviews with internal and external stakeholders are planned as well. The interview outcomes should offer a good impression, regarding how the project will be perceived UM-wide. If the university eventually would choose to connect the FASoS gardens to the surrounding area, knowing the opinion of external stakeholders is of great value as well.



FASoS Soylent Green – The FASoS Green Impact team

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