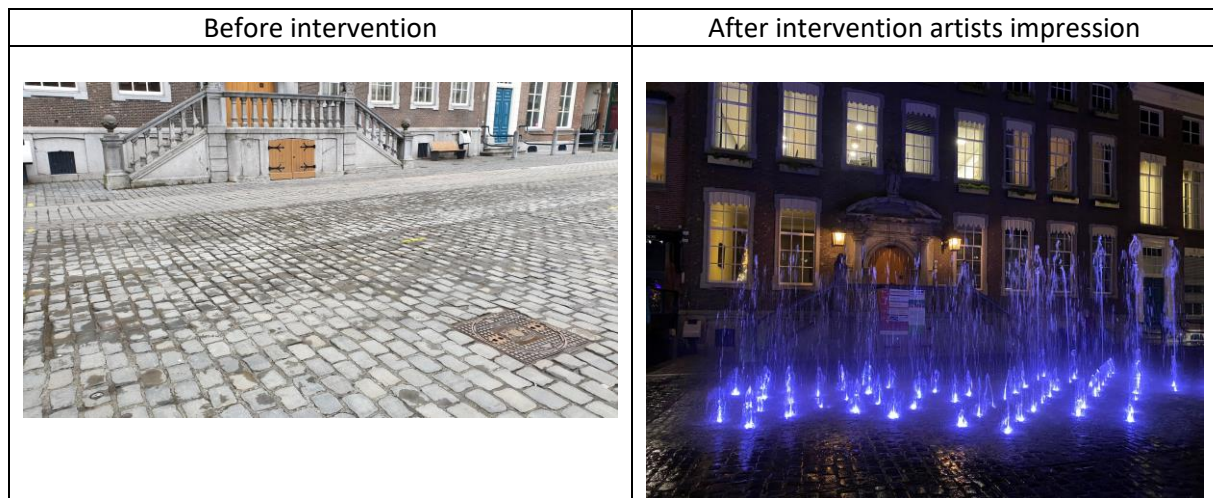




Using a water feature to cool a city square Breda –Waterspeelplein

In the heart of the city center, the Grote markt, a water playground has been realized in the form of the logo of Breda, three crosses. The square is in a prominent place in front of the old town hall. In the crosses there are a total of 63 pumps with lighting with their own control so that a playful and varied program is possible. The lights also adds quality in the evening.



Location

Breda is a medium sized city in the south of the Netherlands with about 180,000 inhabitants. It is predicted to experience increasingly hot summers and water scarcity in future, due to climate change and this will negatively impact the liveability and quality of life in the city.

Site Description

The 'Grote markt is the heart of the city center surrounded by many restaurants and pubs with terraces, the historic church, the 'Grote Kerk', and the Town Hall. It has a high historical, recreational, and economic value for the city. Shopping, visiting restaurants, evenings out, and also weddings, markets and large events take place in or around the Grote markt.

The decision-making journey

Like every city, Breda has to deal with a lower number of visitors to the center during hot weather and heat waves. The realization of an attractive water playground makes the city center more attractive, especially for families with young children. In conversation with entrepreneurs and local residents a range of possibilities were discussed, and it was agreed that a high-quality installation was required to reflect the importance of the Grote Markt to the city.

Implementation – problems encountered

Finding a suitable location on the Grote Markt was simple as the only place for the water playground was directly in front of the historic Town Hall because this was the only place without restaurant terraces or historically important underground archaeology. The proximity of these necessitated good co-ordination and communication between all the parties involved. Colleagues from the Heritage

department were involved in the final selection of the site and particularly in the placement of two large manholes for controlling and purifying the water, and installation of an anemometer to ensure that not too much water is blown away. The contractor, [Fonteintechiek Gruppen](#), experienced installers of water playgrounds, were involved from the early stages of the design ensuring all effective co-ordination and efficient installation. Additional investment has been made in lighting so that the water playground can also add to the quality of the experience of evening visitors.

Indicative costs: please note that costs have been rounded and, while accurate at the time of implementation, can only be used as an indication of cost.

Capital Cost	€	£ =1.15 €
The cost for realizing the water playground was €550,000	550,000	479,313
The overall cost of this project was 0.7 million Total	555,000	479,313

Maintenance Costs per year	€	£ =1.15 €
Maintenance contract first years	15,000	13,071

Reflection: what went well/what could have gone better?

The water playground was completed at the end of 2021 and has therefore not yet been in use. During the realization, most of the comments were positive. On social media, in addition to the many positive reactions, there were also critical questions about issues such as energy consumption and health.

MEASURE OF SUCCESS	EVIDENCE
reduction of PET value (baseline vs result values, comparison with reference point)	Estimated 1.6°C
size of the area (m ²) with improved heat resilience (the total area that benefits from the measures approximate this by using the same approach used for the initial estimation in the application form)	100 m ²
number of daily users benefitting from the intervention (if relevant/available: are there specific times of day or the year when there is heavy use?)	Around 10,000 each day
co-benefits achieved (e.g. biodiversity, pollution reduction, economic benefits, influence on property value, long-term savings, aesthetic improvement, psychological impact etc.)	Less traffic, biodiversity, aesthetic improvement

Technical and financial specifications

The water playground consists of three crosses, made of steel. In each cross there are 21 pumps that are controlled separately so that a playful effect can be created in water height. On each pump is a color lamp that is connected in a few groups.

The water is circulated and purified through various steps. If the water is too contaminated, it is discharged into the sewer and replenished with drinking water.

For more details see the supplier's website <https://www.fonteintechiekgruppen.nl/>

References

Signposting for further information