

Enhancing Retail Shopping Through Transformational Stormwater Management Solutions

Souq Extra (Phase 2), located in Dubai Silicon Oasis, will be flooded with customers, not water, thanks to Polypipe's Polystorm



CASE STUDY

Project

Souq Extra Silicon Oasis (Phase 2)

Client

Souq Extra

Application

Infiltration Tanks

Products Used

Polystorm (PSM1 and PSM 3)

Souq Extra is a proudly Emirati organisation that successfully develops, manages and acquires retail and mixed-used real estate assets in the UAE.

Here in the region, consumer markets are becoming increasingly localised. Consequently, individuals are looking for ways to reduce commuting times, especially to locations that provide essential community services such as supermarkets, pharmacies, family restaurants, etc. Souq Extra recognised the increased need for greater penetration of neighbourhood facilities in order to improve

quality of life. Through contemporary retail complexes, they seek to provide modern meeting places where residents can shop, relax and engage.

Working closely with lead consultant, ASG, and main contractor, Al Tayer Stocks, Polypipe Middle East developed efficient water management solutions for the new Souq Extra (Phase 2) retail complex located in Dubai Silicon Oasis.

Dubai Silicon Oasis (DSO) is a sprawling residential and commercial hub equipped with state-of-the-art offices, attractive

residential communities and appealing retail spaces. Located in a part of the city that is still evolving, proximity to essential community services is especially integral.

After observing the need for these services in the area, Souq



Souq Extra Silicon Oasis (Phase 2)



Extra first opened a complex in Phase 1 of Dubai Silicon Oasis. The retail centre quickly transformed into a valued destination for local residents.

For Phase 2 of DSO, the development of a new retail complex was planned. It was vital that this second retail complex possess the ability to reliably withstand rainwater to prevent flooding.

Fortunately, Polypipe Middle East specialise in providing sustainable water management solutions that efficiently capture, store, manage and re-use water across built environments. The extensive range of engineered solutions offered, permits clients to find the perfect solution for any project specifications. Having previously created solutions for retail centres such as Dubai Hills Mall and City Centre Ajman, Polypipe Middle East is experienced in crafting fit for purpose solutions for projects that encounter heavy footfall and require high loading capacity. Based on site conditions and a thorough technical analysis, geocellular

infiltration solution – Polystorm, was selected as the product of choice for this project. The high strength and modular nature of the Polystorm product makes it ideal for creating large attenuation, detention and infiltration structures under trafficked and loaded areas such as car parks, housing developments and commercial complexes.

Two infiltration tanks were installed at the new Souq Extra site that can help prevent localised flooding. Polypipe's unrivalled expertise in infiltration/soakaway modular water management systems comes from years of experience in the Middle East, backed by extensive local testing and research.

With a 95% void ratio, the product essentially creates a void underground that is specifically designed to optimise stormwater collection and consequently, create a safer, cleaner community for residents and visitors.

As SuDS compliant product, Polystorm is installed in a way that supports excess rainwater runoff. It is important to ensure that every project is well-prepared for varying amount of rainfall; effective flood risk management is an extremely important aspect of planning any new project.

Ultimately, Polypipe Middle East created a sustainable solution to overcome the weak ground conditions on site in order to prevent flooding, like that which had occurred previously in the area. Percolation testing was conducted on site to consolidate the delivered solution and ensure that rainwater would infiltrate fast enough into the ground.

Through expert technical advice, sustainable solutions, efficient installation and professional service, Polypipe Middle East were able to successfully enhance water management and in turn contribute to the creation of a healthy, thriving community.

