



SABEEL 2020

TECHNICAL REQUIREMENTS

Technical requirements

All submitted proposals must incorporate the below considerations and requirements, presenting a drinking water fountain design that is:

- Insulated to provide chilled water
- Durable and robust
- Resistant to the elements and rust
- Able to withstand a high volume of usage
- Inclusive of a hood guard and anti-squirt features to eliminate splashing
- Facilitative of bottle-filling
- Preventative of the accumulation and stagnation of wastewater by utilizing effective drainage features
- Accessible for maintenance via a lockable cabinet
- Accessible to all, meeting all the [Dubai Universal Design Code](#) and [Americans with Disabilities Act](#) guidelines
- Fit for purpose, employing durable materials and adhering to all the statutory and regulatory codes in terms of safety, water quality, hygiene, filtration and drainage
- In keeping with Expo 2020 Dubai's strong focus on sustainability. Proposals should address the question of how they can contribute to sustainability through their materiality and efficiency. Designers are free to propose the use of recycled materials, alternative energy sources and/or water from air units
- Demountable/transportable to allow for the drinking fountains to be relocated post-Expo 2020 in the Legacy phase
- In line with the following water and electrical limitations and does not exceed them:
 - Water – 32mm LDPE Connection
 - Electrical – 3kW Single Phase Supply

Designers should note that the drinking water fountains will be fixed to pre-installed concrete slabs. Preliminary details of these foundations are provided in Figures 1a and 1b for reference (drinking fountain units shown in these images are notional). Also note there is a provision for plumbing, power supply and drainage at all the marked locations.

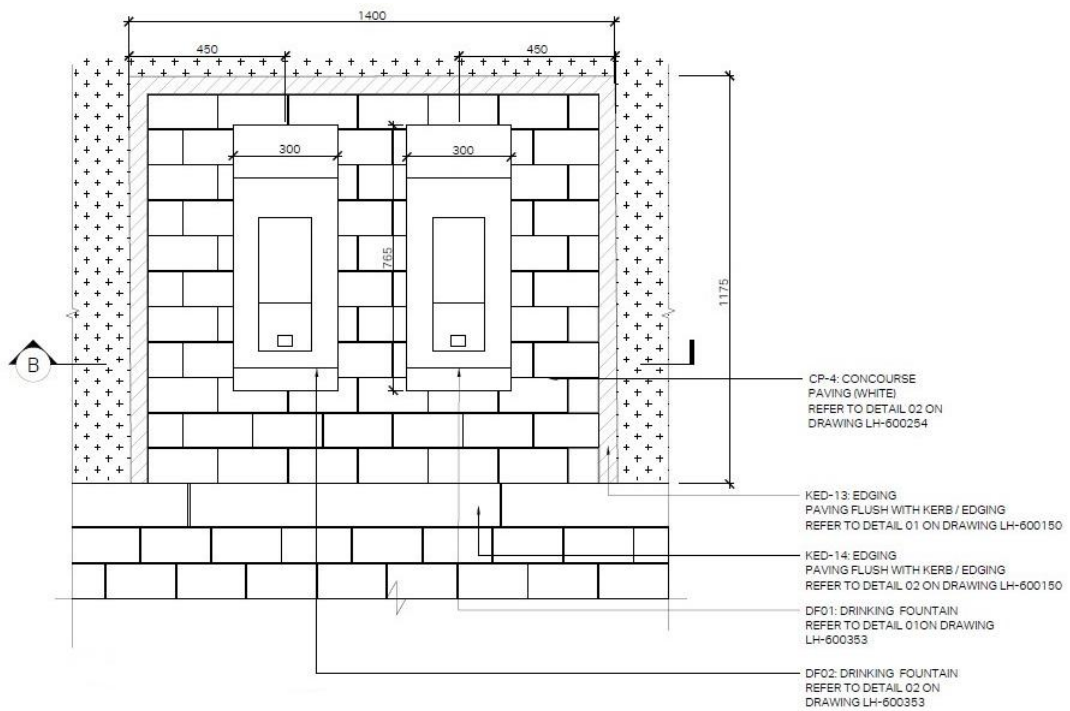


Figure 1a: Typical Fixing Location (Plan)

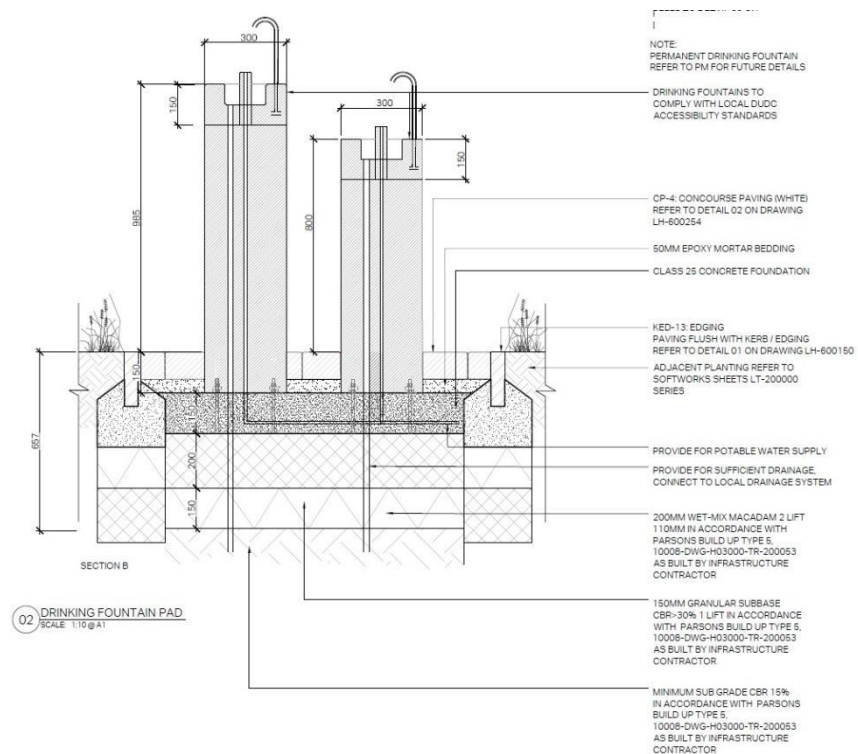


Figure 1b: Typical Fixing Location (Section)



Filtration requirements

In order to meet the Expo 2020 health and wellness goals, the filtration system must achieve the following requirements:

- **Sediment** - All water being delivered to the drinking fountains must prove turbidity of less than 1.0 NTU
- **Microorganisms** - All water being delivered to the drinking fountains must ensure total coliforms (including E. coli) are not detected in the sample