

# Response to enquiry for a toilet on Epsom Downs



## **Epsom and Ewell Borough Council**



16<sup>th</sup> July 2021











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**Enclosures: Access Control Options, Two Drawings** 

## Introduction

Thank you for the opportunity to consider new toilets at Tattenham Corner, and please find enclosed our suggestions below.

Healthmatic has for over 30 years had an absolute focus on the design and management of public toilets. The different approaches over this period have been steadily improved as building techniques change and different materials become available.

We have been to the site, and considered the local environs, as well as the likely usage of the facility – although this is very difficult to estimate as a one off consideration.



A 2020 delivery to Plymouth City Council



## 1. Capital Cost of the Unit

There are a number of variables to calculating the capital and per annum cost for a toilet.

- 1. The primary driver is the capital cost of the unit.
- 2. Who is responsible for the groundworks costs.
- 3. The length of contract over which capital can be repaid.
- 4. Whether cleaning and/or maintenance included in the "per annum" cost.
- 5. Whether Utility usage is included.
- 6. Whether Usage Income from usage in included.
- 7. Is it possible for any sublets in the space to provide offsetting income.

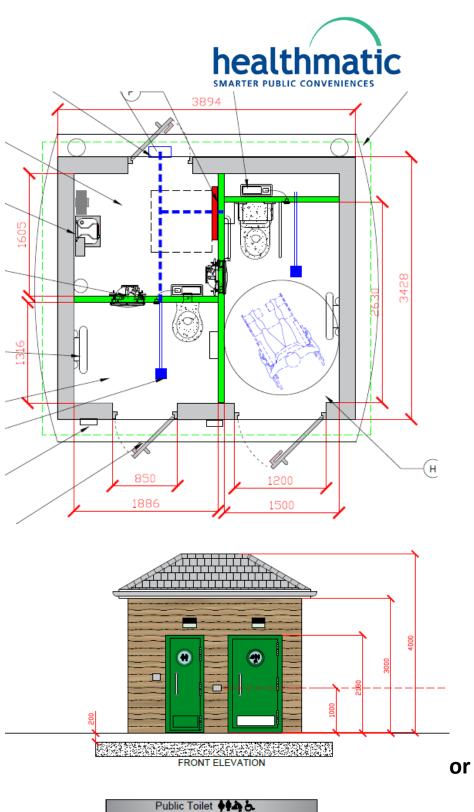
A single cubicle toilet, installed to a prepared base, will cost approximately £43,000. If this was paid over 15 years, the cost would be £4300 per annum. A Twin Cubicle will cost approximately £59,000, and a three cubicle toilet, £72,500.

Note-Timed open/close is included as standard. The cost of an access control system would be in addition to this. If Contactless is required, it is approximately £2000 per door.

The toilets on the Downs will be very busy, especially on the big events and Summer weekends. But as we have seen, it will be busy/active everyday. We don't have the statistics on how busy, but we have some idea as we manage similar sites in a number of high tourism/park areas. (For example, Royal Parks, Wildlife sites).

Each regular cubicle in a direct access style toilet can handle up to 110 people per day. Peak requirement on the Downs, with a charge for use, is likely to be around 300 users. Given that this is the peak, there is no point in sizing the unit to anything above this, and in fact there is some sense to under sizing and accepting a small queue on the big days. This will depend on budget. There is then the need for babychanging, outside showers and preferably an easy to access Accessible toilet.

Based on these assumptions, and ignoring the capital cost for now, we would suggest a toilet with one unisex cubicle and one accessible cubicle. This would cover the requirement for 95% of the year. We have included two images, one with the roof in a similar style to the current building, and the other a flat roof, not trying to replicate, but compliment. The footprint for this might look like:





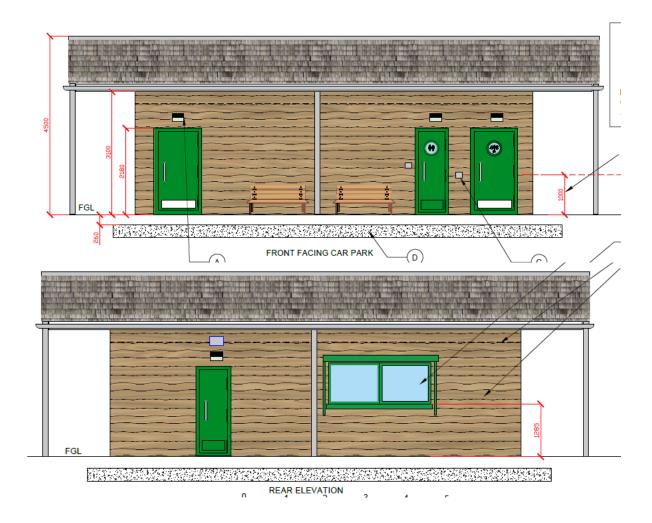


A toilet with this footprint and high specification will be costing more like £59,000 – plus the costs of the access control, £2000 per door – a total of £63,000. The groundworks would be in addition, and would be something approaching £18,000, assuming the utilities are all in close proximity. But we understand that this is something the Council would undertake.

This is drawing "Twin Toilet Beside Cafe - Epsom Downs.pdf"

Alternatively, and honestly the better option, is to be slightly more ambitious and replace the current building which being frank, is genuinely poor.

If this was case, we would suggest incorporating the toilets and the café into one structure. The outcome would be more akin to:



This option would require demolition, and slightly larger scale groundworks. The building itself would be in the region of £85,000, but we haven't done a detailed analysis of this, and it would be very dependent on what's included in the Kitchen area.



## 2. Groundworks

Approximately half our installations, we complete the project from start to finish, act as principle contractor and deliver a turn key project. The other half will have a mix of activities completed by different parties. One of the main areas is groundworks. Often, the Council may have its own groundworks teams which it prefers to use, or there may be a preferred contractor who works in the area.

In general, there is unlikely to be a great variation in costs, but the responsibilities do then vary. We prefer to act as principle contractor if possible as it removes any of the blames game is something does go wrong – if we're in charge, there is only one place for the Council to look.



The building will arrive as a single piece, probably with the slightly more extravagant roof arriving separately.



## 3. Length of Contract

Most installations we complete are paid with capital, and some are paid over a period of time. In the cases of toilets being paid over a longer period, it will almost certainly be the case that we are managing the toilet as well, with all the costs wrapped into one fee.

As with waste trucks, and other lease or rental arrangements, the longer the contract, the lower the annual cost of the capital element of the repayment.

The time from order to delivery will be in the region of 12-14 weeks.

## 4. Cleaning and Maintenance

We clean and maintain a high proportion of our own installations. Sometimes this is a strategic move by the customer, and sometimes it's a default option as they don't have an incumbent. In either case, it can either be included with capital costs in an annual fee or not.

## 5. Utility Usage

The annual costs of utilities in the current Epsom Downs toilet are expected to be high – we don't know the details, but our experiences on these facilities has always been on the expensive end. Going forward, with a brand new efficient toilet, with low water use, no leaks, LED lights and natural light where possible, we would expect the utility costs to be less than £3000 on the basis of 40,000 users. In fact it should be closer to £2500, but we need to understand more about usage to confirm this.

#### 6. <u>Usage Income</u>

In the layout of the toilet above, we would be able to handle comfortably 40,000 users. We don't know if that's the right number until we have discussed this on site with you, but the budling is easily capable of this.

Depending on charge, this can bring some substantial offsetting income. We would strongly suggest that it is all contactless, making use and management much simpler.

At 40p, the income will help pay the running costs. We would be wary of setting the budget however based on 40,000 users, but be more conservative at 20,000. At 40p, the gross income would be approximately £6000 allowing for tailgating by some.

In some contracts we keep risk and the income and use it to offset our charge to the Council. In others the Council receives it direct, taking the risks and rewards themselves. The advantage of the former is that we can fix a price for you in year 1 which will cover all costs net of income, with the annual cost only varying by inflation.





A door with contactless and coin options

## 7. Sublets

An efficient way to help you reduce the annual cost is by introducing rent paying customers in to sections of the new building. The tenant not only provides rent, but also provides valuable oversite to the area. In about 30% of our toilets now, we include a sublet style opportunity. Sometimes its just an office, but can be for cafes, storage or a Timpsons style service.

In the Epsom site, there is already a tenant, but the actual value of the tenancy is dimished by the quality of the building.

Our belief is that by improving the site, the landlord will be able to procure a higher return from the building/location. In fact, I would believe that the site would support a more ambitious plan than our proposal, but that would be well beyond this remit.









## **Sustainability and the Environment**

The environment and sustainability are core to the design of the toilet. They go hand in hand with efficiency and lower operational costs and therefore are vitally important to the initial design.

The measures we would take include:

- 1) The toilet is powered down when not "engaged" and only turns on lights, ventilation and hot water systems when the user enters the toilet. They switch off automatically when the user exits.
- 2) We use Wallgate Thrii washbasins in all our toilets. They use exceptionally low power and water:
  - Less than 0.3 litres of water is dispensed per cycle
  - Less than 0.02 KWh is used per operation
  - Instant water heater consumes power only when in use
- 3) We have installed a number of toilets recently with sedum roofs. Most recently across Kent into Swale and the Isle of Sheppey. These reduce the carbon in the atmosphere, and look great but they do require some maintenance.



- 4) The DVS flush system can be adjusted between 1 & 6 seconds to deliver the optimum flush but typically uses 6 litres / flush
- 5) Solar panels on the roof will help offset the electricity usage, and work well in seaside locations. They can be targeted by vandals however.



- 6) Lighting 2 X 6w LED lights PIR triggered per cubicle when occupied.
- 7) Water heater in service room for cleaner 3kw only operational when required.
- 8) Sun Pipes to bring natural light direct into the building ( quite expensive but good)
- 9) Exterior light switched by dawn to dusk sensor 6w. If only triggered by PIR, then this can be individually solar powered.



Measures which we have found to be unsuccessful in public toilets include:

- Its probably unenvironmental to say, but we have found that grey water causes more problems than it solves in beach locations. The main reason is that the peak usage is when the sun comes out and it doesn't rain so there is no grey water. We have used them to great effect in the Brecon Beacons, but they will have very limited impact in Rother.
- Low water flush toilets like Propelair. They work very well in office and commercial premises type environments, but when users try and put their trousers down the toilet, or shoes or other non typical things, they become very expensive to fix.



We have listed below the specification which we believe will meet the requirements:

## **Healthmatic Touchless Toilet Specification (with Waney Board)**

#### **Doors:**

Healthmatic Specialist Public Toilet Door with options for free entry, coin, contactless and access pad entry

- Galvanised and powder coated in RAL Colours
- Integrated closer
- Strike Lock 12/24V DC door monitoring improved for user safety & security
- Twin Deadlocks to close down cubicle
- Auto lock (am) and unlock (pm), fully adjustable to suit requirements

Option: Stainless steel 'porthole'

#### **Interior Walls:**

Either - 'Johnson' ZUBA1F 600x300 wall tiles (Client colour choice)

Or: Trespa high performance laminate

## Wash hand basin / hand dryer / soap dispenser:

Solid Surface Wallgate Thrii® Handwash 'no touch' soap dispenser / hand wash & dry / flush mounted with services concealed in the service corridor / Hot Water temperature controlled by thermostat. No hot water therefore stored on site. (Client colour choice)

#### Mirror:

Stainless steel mirror

#### **Toilet Pan:**

Wallgate Solid Surface toilet pan. Plumbed to the main water supply, automatic 'no touch' DVS flushing system. (Client colour choice)

#### Lighting:

Twin energy saving 28W 2D opal polycarbonate low energy bulkhead style lights

Auto illuminate/switch off using internal PIR and ambient light setting— Emergency back-up

#### **Ventilation:**

Extract ventilation, triggered by PIR on entry, and time lapse switch off

#### Floor:

Either – Heavy Duty Altro Non-Slip Vinyl in all areas for user safety, hygiene, ease of cleaning, and long life wear resistance.

Or 'Johnson' 10mm anti-slip, 'Dorset Grey' floor tiles

All cubicles fitted with square or lateral drain



## **Babychange:**

Option for Babychange. Fold down table by babypoint.

## **Waste, Sanitary and Sharps Bins:**

## Options for:

- Stainless steel Sharps bin, fitted through wall into service area.
- Solid surface single bin (By Wallgate)
- Stainless Steel twin Bin, fitted through wall into service area. (Marked for Sanitary, Sharps, General waste as required)
- Solid surface OR Stainless Steel Integrated Three in One bin and dispenser Sharps, toilet paper and general waste bin

#### Accessible cubicle:

Low-level & mid height alarm pull cord to activate audible warning signal plus activates external flashing red light – with internal cubicle reset

Two Coat Hooks

High visibility contrasting colour coated steel support-rails

Door fitted internally with full width pull handle

## **Additional Options:**

Colostomy shelf

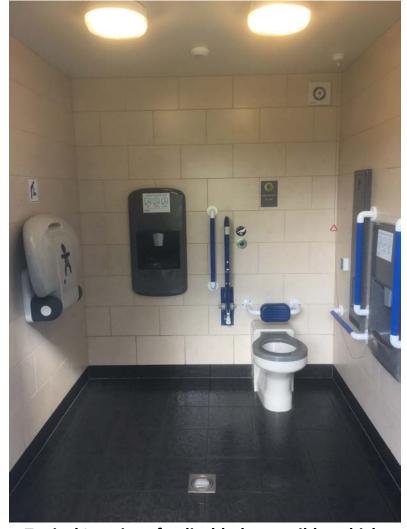
Babychange

Pull cord replaced with twin EAO push button bezzles

#### **Service Area:**

An area within the existing building to be prepared for 'service' access to electrical / mechanical and consumable equipment to replenish same. To incorporate a stainless steel sink unit.





Typical Interior of a disabled accessible cubicle