Planning Officer's Report – LDCA JUNE 2022

APPLICATION 2022/21 – Siting of a Desalination Plant, Water Storage Tanks,

Laying of Water feed & Brine Pipe, Installation of Beach Well

and Construction of a Timber Cabin

PERMISSION SOUGHT Full Permission

REGISTERED 7th April 2022

APPLICANT C.E.J Van Zon

PARCEL JT020024

LOCALITY Nr Donny's Bar, The Moat, Jamestown

ZONE Intermediate

CONSERVATION AREA Heritage Coast

CURRENT USE The Moat

PUBLICITY The application was advertised as follows:

Independent Newspaper on 8th April 2022

A site notice displayed in accordance with Regulations.

EXPIRY 22nd April 2022

REPRESENTATIONS Four Received

DECISION ROUTE Delegated / LDCA / GiC

A. CONSULTATION FEEDBACK

Sewage & Water Division No Objection
 Energy Division No Objection
 Fire & Rescue No Response

Roads Section No Objection - Comments
 Property Division No Objection - Comments
 Environmental Management No Objection - Comments

Public Health
 Agriculture & Natural Resources
 St Helena Police Services
 Aerodrome Safe Guarding
 No Response
 Not Consulted

11. Sustainable Development No Objection - Comments

12. National Trust No Response

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No Response

B. PLANNING OFFICER'S APPRAISAL

LOCALITY & ZONING

The application site is located near Donny's Bar, under the bridge within the Moat, Jamestown. The area is designated within the Intermediate Zone and Heritage Coast Conservation Area.

Diagram 1: Location Plan



Diagram 2: Existing View of the Location



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Diagram 3: Location of the Proposed Development



The Moat itself is listed as a Grade I Monument and has Outstanding Group Value status. The site is located under the bridge within the Moat, where the area is currently not utilised and evidence of its unkept nature is clear to see from the photographs above.

THE PROPOSAL

The request is to construct a staircase down into the Moat from above, where a cabin will then be constructed underneath the bridge on the southern corner between the two blockwork supports for the bridge. The cabin will measure 9m² and constructed

from timber, where it will house the desalintation plant and provide storage space. Water storage tanks will be situated on the northern perimeter near the Moat wall. A beach well has also been proposed, where water can then be extracted from the well instead of the need to the lay a water pipe. Piping for the brine will be directed out into the sea via the Run. Should the well not be successful, the developer would like to install a water feedpipe, which will be laid on the sea floor approximately 800m out of Mundens Point within James Bay. Electricity will be obtained from Connect, where the desalination system will have power consumption of 250 watts. Eventually the developer is looking at investing in PV panels, however this will come as a separate development application. The deslination plant will use a reverse osmosis (RO) system with energy recovery unit. The system does not work with heat, but instead uses high pressure to filter the water. The use of an ernefy recovery unit will reduce the energy needed by 70%. Seawater is pumped through the system and results in 25-30% freshwater and 70-&5% brine water. The reverse osmosis membranes filter 99.9% of bacteria and other contaminations out of the water, as such the resulting water is already safe to drink without after treatment. All these details should comply with the Food and Safety Ordinance, which will be covered by Environmental Health.



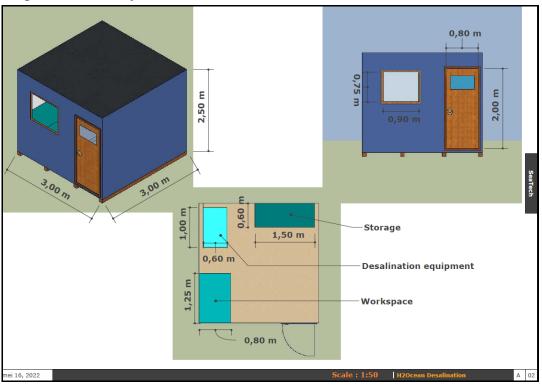
Diagram 4: Site Layout

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Diagram 5: East Elevation

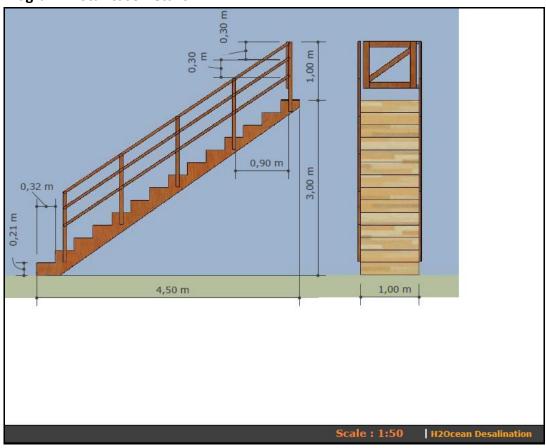


Diagram 6: Shed Layout



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Diagram 7: Staircase Details



PUBLIC & STAKEHOLDER CONSULTATION

Four representations were received from members of the public, where the following comments were submitted.

Representation #1 – 'While the idea of a desalination plant is attractive it should not be located in The Moat, part of historic Jamestown. Ruperts is the designated "industrial" area and if this was the intended location, and as long as it was clear of the Slavery Memorial sites I would have no objections.'

Representation #2 – 'I must confess that when I first saw this application, I wondered if it was real. While a desalination plant might be useful to the island, depending on the purpose of the water produced, to place it in one of Jamestown's historic landmarks is not acceptable. Much of Ruperts has already been destroyed to move the shipping and other industry from Jamestown it seems to be against every policy on planning and development to allow this development in the Moat.'

Representation #3 – 'The moat is highly unsuitable as a location for a desalination plant and water storage tanks. Such an industrial endeavor would be better located in

Ruperts and not in the heart of Jamestown. Such a plan would spoil the attractiveness of the oceanfront area.

Any plans for the moat would be more suited for a small well-designed oceanfront Hotel with underground parking which would fit in well with its surroundings.'

Representation #4

1. Status of Site

- (a) The site indicated in the applicant's A4 document, has the highest level of legal protection against inappropriate development anywhere on the island. It is listed as "The Fortifications", Grade I listed, a Monument, which is of Outstanding Group Value and dating from the 17th century.
- (b) The formal listing is further described as, "The Fortifications, including the East Bastion, (mounting cannon) remains of Curtain, Centre Bastion and West Bastion, the Ditch, Platform and site of Drawbridge." It is also noted that, "Despite many reconstructions these remains are of prime historic and environmental importance. It is of interest that the stone Torus moulding survives along the top of the battered wall in the present P.W.D. Yard. This indicates its likely original presence throughout (as in all fortification work in the 18th C.)"
- (c) The listing of 'Outstanding Group Value' is the only such place on the island, and it is shared with the adjacent Town Gate, Terrace Wall, Terrace and The Castle which together form a defensive complex of immense historic value internationally, and a key asset of prime economic value to St Helena in terms of future tourism as recognised in the LDCP.
- (d) The site is further protected from inappropriate development as part of the Historic Conservation Area.

2. Applicant's aspirations

It is difficult to understand why a business venture would wish to engage in building works in the most sensitive historic part of the island. The advice given by the long list of government officials said to have been consulted by the applicant is not recorded. But why would anyone put themselves into a potentially difficult an expensive planning nightmare when other simpler, and non-planning, solutions must be available?

3. Development Application

- (a) According to Planning Regulations a development application can only be registered if it has a Location Plan (1:5000 scale), Site Plan (1:250 scale) and Building Plans (1:100 scale) as a minimum.
- (b) The application has none of those. In fact no formal plans at all. How can it be legally registered? (The application form claims a location plan was included but it was not.)
- (c) Why has this 'non-application' without plans been advertised for public comment? Why is this application being processed without the required information?

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- (d) Why has an application for such an historically important site been allowed when it contains no details? This is a huge omission.
- (e) How can anyone understand the proposal without the plans and why should anyone be expected to? This application should be halted until the required information is submitted.

4. Site Boundaries

No parcel numbers are given by the applicant and there is no clear understanding of site boundaries.

The vicinity of Donny's is a minefield of flying freeholds and there at least two official versions of parcel maps for that area.

The recent bridge is over the proposed building is central to the application but it is not clearly located on a plan.

The position of the proposed building is also ambiguous.

5. Staircase

The proposed staircase is not shown on any plan.

The details are not shown. The materials are not described.

It is shown on Crown Land. Who will own it?

Will the single flight shown comply with Building Regulation?

Will it look the drawing when built? Has it already been made?

Does it comply with LDCP Built Heritage policies to 'enhance and protect' the conservation area?

Are the public expected to carry water up the stairs? If so are there health and safety implications and what about right of access for disabilities?

How is the project intended to function in reality?

There is already a staircase to where the old distillery was. Why not use that?

6. Building and tanks

Where are the Building Plans required as part of the application?

Is the design suitable for this sensitive site?

How will it 'enhance and protect' the conservation area?

What are the proposed materials?

Are there toilet facilities in the proposed building? If not what is proposed for the workers employed there?

7. Well

Where is the evidence that a well in that position will not undermine or cause subsidence under the existing historic walls?

What is the point of this proposal? Isn't is easier to get spring water from Casons?

8. Removal if business fails

If permission is granted there should be a condition that is the business fails the staircase, building and tanks should be removed.

So who will own them? On whose land are they?

Who will remove them?

Can it be enforced, especially if the applicant sails off into the sun?

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9. Vehicular access and additional traffic

The proposal if successful will see extra traffic movements especially for this business. Will that cause problems for others?

10. Opening hours

What will the opening hours?
Will there need to be restrictions?

11. EIA

All the above, especially the well, would indicate an EIA should be required? Has a scoping or screening report been undertaken?

12. Setting and LDCP policy BH 6

The applicant indicates that because there is an existing mess in the Moat then the proposal would not make it worse. However LDCP policies require that development should enhance the conservation area.

There is no doubt that the staircase and building as proposed would adversely affect the Historic Monument.

LDCP Built Heritage policy BH 6 says that,

"Historic monuments and other identified nationally important archaeological resources shall be preserved in situ, and within an appropriate setting. Developments which have an adverse effect on historic monuments or the integrity of their setting will not be permitted unless there are exceptional circumstances." No exceptional circumstances have been identified by the applicant so the application should be refused on the strength of that policy alone.

Comments were also received from stakeholders as follows:

Chief Environment Officer – 'Overall the motivation for setting up the desalination plant to give another option to the imported bottled water should have a positive environmental impact in reducing the number of plastic bottles imported to the Island and disposed of at the landfill.

The environmental screening checklist was used to identify all of the potential environmental impacts for this development. Although a number of impacts were identified they were not thought to be significant.

In summary:

Siting of desalination plant

No significant environmental impacts were identified for the siting of the desalination plant in the moat. The area is not currently used but there is evidence of litter and discarded waste materials, using this area will therefore help to 'tidy it up' and should act as a deterrent to future littering and dumping of waste.

To access the site a stairway affixed to the heritage wall is proposed. This is a potentially negative impact, there are no details on how this will be done and care

should be taken to prevent damaging the wall.

Installation of beach well

No significant environmental impacts were identified for the installation of the beach

well. Environmentally this would be the preferred option and it is noted that the

applicant will try this first and the laying of the water feed pipe will only be done if the

beach well does not yield the required quality of water.

Laying of water feed pipe

As the water feed pipe passes through the Marine Protected Area (MPA) there is the

potential to have some contact with and impact on marine species but this should be

minimal.

Removal of seawater

The removal of seawater to feed the desalination plant with the volumes proposed

will not have an impact on marine habitats.

<u>Disposal of waste brine into the sea</u>

The waste product of the desalination process will be brine which will be put back into

the sea via the run. With the volumes proposed this should not affect the salinity

levels in the Bay, the brine will be mixed with water in the run before going out to sea

and once in the sea the wave action will further dilute it. There should therefore be

minimal impact on marine species.

However should the demand for the desalinated water increase so that the volume of

water taken and resulting waste brine generated is significantly increased above the

proposed levels, the impact of putting the brine back into the sea should be

reassessed.'

Roads Section – 'Concern about the pipe going out through the Tunnel section as the

sea normally throw Big Rocks up inside there when it is rough. Concern about the

Hygiene of the Run as allot of rubbish does get thrown in there. Concern about

Vermin.'

Sustainable Development - 'SHG's Sustainable Development team has been

supporting this application through the Investment Enabling Group.

Mr Van Zon is an Approved Investor for the island, ratified by the Approved

Investment Committee, specifically to take forward this project.

The project is supported because:

- Its primary aim is to produce bottled water on the island, which is identified as an

import substituting sector in the SEDP

- Another aim is to reduce the use of single use plastics on the Island, which could

reduce pressure on the horse point land fill site in the long run.'

Property Division - The proposal will only be PART of JT020024, which is registered to

the Crown. This proposal will be situated under the bridge only (as any further west

would mean that this proposal will be within private land) and part of the moat will be

used for access into the area.

Permission has been provided to the applicant to access the Moat via a proposed

staircase (this will be included within the parcel to be leased to the applicant), as

shown within document attached, but pending planning permission.

Once the applicant has received planning permission then he will be granted a lease,

following the subdivision of the parcel registered as JT020024.

Conditions:

Applicant to secure the area

Applicant to keep the area clean and free of debris

Applicant to seek advice from a structural engineer in terms of proposal

SHG Civil Engineer – 'After consulting the plans and scale of the plant I think the

construction and operational impact of the proposal is minimal. From a structural point of view regarding the moat wall, I feel the small quantity of ground water to be

extracted pose minimal risk for the foundations.

I recommend that the well be no closer than 1m from the wall and performance tests

of the well is essential to determine its sustainability and cone of depression. A well

that is over pumped that can't sustain a consistent water level may lead to excessive

dewatering of the walls foundation soil and could lead to settlement and structural

issues. I would recommend pump tests to the desired max extraction rate with a

record of the ground water levels should be undertaken once the well is installed to

avoid any further issues.

In summary, I feel the proposal should have no impact on the moat wall's structural

integrity if the correct quality and performance checks are undertaken.'

POLICY CONSIDERATION

The proposed development is assessed against the LDCP Policies set out below:

• Intermediate Zone: Policies

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OFFICER ASSESSMENT

In light of the representations received from the public, the general thoughts are that the Moat is not a suitable location for this type of development. In terms of preapplication consultation, the developer had presented a number of locations for the development. All of these were explored, however due to varying factors such as wharf operational restrictions as well as impact along the seafront, the developer was unable to pursue or discouraged from these options. The location within the Moat was encouraged, where it was considered advantageous for the feed pipe not to interfere with existing infrastructure and of course being in close proximity to the sea. The other consideration was the footprint and visual impact as a result of this proposal. Initially the developer was looking to use a 20ft shipping container to house the desalination plant and to use as a selling point. Various locations along the seafront were looked at, however it was believed this would negatively impact the setting of the area and take away the much needed car parking spaces. The benefits of producing next to the ocean is that it will also help reduce costs and logistical challenges. This particular location within the Moat under the bridge near Donny's is currently not utilised as can be seen in diagram 3, it is envisaged that by enabling development that can be sensitively carried out will help to ensure this neglected area of the Moat is maintained. This is where the proposal had to change resulting in a small timber cabin and omission of using this area as a selling point.

It is recognised that the Moat forms part of other fortifications as a Grade I Listed Monument with Outstanding Group Value. Policy BH6 reads 'Historic monuments and other identified nationally important archaeological resources shall be preserved in situ, and within an appropriate setting. Developments which have an adverse effect on historic monuments or the integrity of their setting will not be permitted unless there are exceptional circumstances and appropriate mitigation measures put in place...'

The proposed development will inevitably have an impact on the Moat and its setting, however what needs to be considered is whether the development creates significant harm to the fortification and its setting. In assessing different aspects of the development, the following can be observed. The staircase will have the most impact on the fortification as it will be affixed to the wall and visible within the landscape, where it can be argued that this would have an adverse impact on the fortification and its setting. The timber cabin and water tanks will be positioned as such that it will not be readily visible and will not adjoin the Moat walls, therefore the effect is considered minimal in terms of harm. The beach well is a later addition to the proposal, where the applicant believes there may be an opportunity to collect water from within the Moat. Advice has been sought from the Civil Engineer, who sees no adverse impact as a

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result of the well, on the integrity of the Moat walls provided it is sited at least 1m away and performance tests are carried out.

The operation of a desalination plant is small in scale with the energy output similar to that of a large fridge freezer; the system in terms of noise levels will not be heard outside of the cabin. The business model is that you would provide the bottle to be refilled or you could purchase the bottle water from merchants. This site will not be a selling point for the applicant, where he will look at delivering bottled water to merchants and customers directly. Public will not have access to the Moat.

The benefits of this development is reducing the need to import bottled water, which will provide a substantial saving to merchants. Secondly drinking water will become more than 3x cheaper in comparison to imported bottled water.

In conclusion, there is a minor conflict with Policy BH6 which seeks to preserve historic monuments by restricting development which has an adverse effect on them. Taking into account the scale and location of the development the conflict with the policy and the harm caused is minor. However, the proposal could give another option to the imported bottled water should have a positive environmental impact in reducing the number of plastic bottles imported to the Island and disposed of at the landfill. It would have economic benefits including increased investment to the island. Taking into account the above the proposal is recommended for approval.

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