N

ex. SW dyke system to river

ex. SW dyke system

ex. outfall

ex. outfall

SW28

SW27

ex. foul treatment plant

gravel car park

gravel car park

yard

yard

yard

ramp

Pump Well

SW01

SW02

SW03

SW04

SW08

SW09

SW10

SW12

SW15

SW18

SW19

SW20

SW21

SW22

SW23

SW24

SW25

SW26

RW01

RW02

RW03

RW04

RWP

DF01

DF02

DF03

DF04

DF05

DF06

DF07

DF08

DF10

DF11

DF12

DF13

DF17

DF18

TF01A IL = 9.407

TF01B IL = 9.600 CL = 10.000

TF01C IL = 9.640 CL = 10.000

TF01 IL 9.35

TF02 IL 9.47

TF03

TF07 IL = 9.400

TF09

TF10

TF07A IL = 9.612 CL = 10.35

TF07B IL = 9.630 CL = 10.20

Pump Chamber O/E Existing Run To MH TF01B

Extg FFL =10.185

IL=8.52

Overflow

ex SWMH57 CL 10.35 IL 8.715

package pump flow control to SW19

new 100 FW system

new FWMH CL =150 IL site check

ex. FWMH CL IL site check

new amenity block

Cucina House

site entrance/exit

ex. disabled ramp

zone of deliberate flooding of sunken loading dock yard approx 29 x 16m for storm events up to 1 in 100 plus 40% CC

temporary toilet block removed on completion of new amenity block

ex. foul system modified to service the new amenity block
nominal net increase of foul discharge due to decommissioning of existing internal amenities and removal of temporary toilet block

Drainage Strategy

Permeable grassed area lost to impermeable new building roof = 277sq.m

Existing total site impermeable area = 32,917sq.m

Percentage increase = 0.084% i.e. minimal

Increased peak storm discharge to existing SW system = 3.9 L/s
Existing SW system in the vicinity of the new amenity building cannot be proven adequate to take the additional storm flow.

New flow to be routed via the existing sunken loading dock. Flow to be controlled by a new submersible pump and storage provided by deliberate flooding of the recessed dock area. Storage volume required for 1 in 100 yr event plus 40% allowance for climate change, for 100% of 277sq.m roof area = 25cu.m. Equates to 50mm deep flood in the 29x16m sunken loading dock yard.

Yard area emptied by controlled pump flow into the existing SW system and ultimately discharged to the dyke water course. Controlled discharge also prevents overwhelming of the existing SW pipe system.

Localised short-term flooding of the yard during rain storms is accepted by the Client. The yard and associated walls are constructed from flood resilient materials and flooding will not restrict vehicle loading and unloading operations.

REV	DESCRIPTION	DATE	BY
P1	First issue.	14.04.22	JR

DRAWING STATUS - PLANNING

CLIENT

BAKKAVOR

PROJECT

BAKKAVOR BOSTON
NEW AMENITY BLOCK

TITLE

DRAINAGE STRATEGY

A1	SCALE	DATE	DRAWN	CHECKED
	1:500	12/04/22	JR	GC

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PROJECT No.	DRAWING No.	REV
P2021-035	100	P1