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TECHNICAL NOTE

OXENDEN PARK HERNE BAY

DRAINAGE STRATEGY

210201 **03.09.21**

The following technical note has been prepared to support the application to discharge Conditions 19 & 22 of the planning permission CA/17/02907/FUL

[i]The overall drainage strategy has been considered and the noise bund to the south of the site realigned to not inhibit overland flood flows. The culverted section of the ditch, which has been piped with a small diameter pipe is to be removed and this section naturalised.

[ii]Where elements of the ditch system are to be culverted this is to be undertaken with an oversized precast concrete culvert section. This will allow free flow of water and in normal conditions aid the movement of creatures along the ditch line

[iii]The levels around the development have been raised as per the previous designs but not to the same extent to reduce the importation of soil but still to allow the surface water to drainage by gravity.

[iv]The western ditch which has been filled to the north beyond the extents of this development has been surveyed and this together with the other ditches in this area collect and discharge to the west below Thornden Wood Road.

[v]Footpaths both formal but generally informal have been detailed so that the basin areas provide areas of amenity.

[vi]Whilst the current ditches will be cleared and where necessary profiled to use this maintain their drainage function, planting is also proposed in proximity whilst not hindering access. The proposed footpaths are situated away from the ditch to protect the habitat in this area.

[vii]The design follows the initial discharge criteria set within the PBA report issued in support of the outline application and with the Canterbury Council requirement of 4 l/s / ha.

[xiii]The main carrier drains are to be offered for adoption by ICOSA water and the network has been designed and detailed accordingly.

The modelling has been considered on the basis [as usual] on M5-60 value of 26.25mm.

The retention pond sizes are larger than those detailed in the Odessy drainage evaluation
Stepped gradients have been detailed for each of the pond areas on the basis that these will in the large be generally dry.

Basin1 - invert of pond 10.40 extreme water level 11.50m AOD

Basin 2 - invert level 10.40 , extreme water level 11.50m AOD

Basin 4 - invert of pond 8.40m AOD with large, stepped area at 8.8m AOD. Side slopes at 1 in 3 with a feature basin to the east where a stone finished semi-pond will be constructed to provide a habitat. Peak extreme water level 9.70m AOD

Basin 5 Invert level 9.50m AOD extreme level 10m AOD

Basin 7 and 7a- invert of pond 10.20m AOD, extreme water level 11.20. Central lowered amenity area also provided [not considered in the drainage calculations] between the two pond areas.

Basin 8 invert level 8.80m AOD extreme water level 9.85m AOD

All basins have a freeboard of 0.3m.

The following has been supplied for review;

Drainage Strategy Plan drawing 3051
S104 drawing 1 3010A [this shows the pipe network reference, size etc]
S104 drawing 3011A
Detailed catchment area plans 3021
& 3020
Exceedance route plans drawing 3052
Windes modelling for the Q30 and Q100 [calculation sets]
Pond construction details drawing3045
Culvert design details drawing3050B
Drainage long sections drawings 3022-3025
Acoustic Bund details for information drawing 1001B

External levels drawing 7001-7006