## EAST OF OUSE POLVER & NAR INTERNAL DRAINAGE BOARD

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Sent by email

Dear Sirs.

## Planning Application FUL/2024/0001

Norfolk County Council, Land to East of West Winch Village

Development of 3.5km of new single lane access road known as the West Winch Housing Access Road (WWHAR), with a new roundabout junction between the WWHAR and the A47 trunk road providing access to the planned Hardwick Green development. Additional works include: a new roundabout junction between the WWHAR and the A10 at the southern end of the WWHAR; Roundabout Junctions on the WWHAR to provide access to the residential allocation area; Treatment of local roads which will be severed by the WWHAR, including a new road over bridge with shared footway, cycleway on Rectory Lane to cross over the proposed WWHAR and the permanent stopping up of Chequers Lane for vehicular traffic; Modification and re-orientation of the Hardwick Interchange; Dualling of the A47 to the north of the existing highway alignment between the WWHAR and the A10/A47 Hardwick Interchange junction; Temporary working areas for road construction including haul routes and two sets of National Grid gas main diversion works including construction compounds and temporary access and working areas; demolition of Hill Cottages on A47 Constitution Hill; construction of drainage basins, swales and associated maintenance access tracks

This application is for the construction of the highway associated with the Hardwick Green Development located to the east of the A10 at West Winch. The new road being referred to as the West Winch Housing Access Road (WWHAR). The information submitted includes a drainage strategy and supporting drawings.

With regard to the strategy, the road, which is approximately 3.5km in length, is divided into 7 catchment areas. Each area being drained to an attenuation basin, which in-turn discharges to an existing watercourse, or in the case of the catchment which includes the junction with the A47 at the northern end of the proposed road, to an existing manhole which takes run off from the existing highway. Catchments 1 to 4, catchment 1 being located at the southern end of the proposed road, at its tie in with the A10, are located within the Highland Catchment of the East of Ouse Polver and Nar Internal Drainage Board District. Catchments 5,6 and 7 are, I believe located within the Watershed Catchment associated with the Kings Lynn Internal Drainage Board, and which bounds with the East

of Ouse highland catchment to the south of the A47, west of the Hardwick Roundabout. The attenuation basins for these catchments are certainly located within the Watershed Catchment as they are located on the northern side of the A47. Also the watercourses into which the attenuation basin discharge are considered to in-turn discharge to the Pier Point Drain, a Kings Lynn Internal Drainage Board maintained drain. The watercourses from the other attenuation basins are considered to in turn discharge to the Puny Drain, an East of Ouse Internal Drainage Board maintained drain.

With regard to the discharge rate that has been calculated, and on which the attenuation basins have been sized, the criteria used is stated as being that required by the LLFA (Norfolk County Council) and is the greater of Qbar calculated for greenfield flow, or 2l/s/ha. In all instances 2l/s/ha provides the greater discharge rate. The rate of 2l/s/ha resulting in a flow of approximately 80% greater than if the discharge had been calculated using the Board's accepted discharge rate of 1.1l/s/ha. If the Qbar rate, calculated for greenfield run off had been used, the discharge would be between 24% and 6% less than the discharge calculated using the accepted Board's discharge rate. (This is considering catchments 1 - 4, those discharging to the East of Ouse system). Given this it is suggested that the attenuation basins should be designed such that the discharge which enters into the Board's system meets with the requirements of the Board in terms of permitted green field run off.

With regard to other features relating to drainage aspects affected by the proposals, i.e. culverts and impact on overland flow, these are suggested as being appropriately considered, in that any flow route intercepted by the construction of the road is catered for by provision of a drain to collect the flow located along the line of the road at the toe of any embankment, and culverts are provided capable of catering for flow in the watercourse on which they are situated under 1 in 100 year +40% conditions. Also, within the East of Ouse catchment the culverts are 600mm diameter, which is suggested as the minimum size required to cater for risk of blockage by debris in the environment in which they are located.

There are also proposals to infill some sections of existing watercourses, ordinary watercourses, and to install new watercourses where the infilled part effectively "cuts off" the continuity of the watercourse. From a review of the information provided the proposals would seem reasonable in this regard.

The proposals attached to the planning application are for the construction of the road only, it is therefore suggested that there will need to be co-ordination of these proposals with those for drainage from the housing development, as it is possible the route through the Board's district to the Board's maintained drain, will be intended to carry flow from both the housing development and highway. This is suggested as reinforcing the need to limit discharge to the Board's greenfield rate of 1.11/s/ha for both sources i.e. highway and housing, and which is nearer to representing Qbar for greenfield conditions.

Besides planning Byelaw consent will be required from the Board for the proposals.

Yours faithfully,



General Manager