# **OXFORDSHIRE COUNTY COUNCIL**

# **TECHNICAL DESIGN INFORMATION SHEET**

# STANDARD DETAILS

- All kerbing, edging, channel blocks and gullies are to be laid on and backed up with ST2. ST4 with dowel bars at 450mm centres is to be used where there is commercial use or a bus service. Kerbing concrete to be laid within 45mins of delivery to site.
- All kerbing and channel blocks to be laid on a minimum of 350mm wide haunch. Edging to be laid on a minimum of 250mm wide haunch.
- Minimum 150mm thick layer of Type 1 is to be laid 150mm beyond and below the bedding and haunch.
- o All kerb faces (except detailed below) are to have a 125mm upstand.
  - All kerbs at vehicle crossovers are to have a maximum 25mm upstand.
  - All kerbs at pedestrian crossings to have a 0-6mm upstand.
  - All channel blocks are to be laid flush.
  - All kerbs (other than pedestrian access and vehicular access) on shared surfaces are to have a 50mm upstand.
- Roadside Footway or footways subjected to vehicular traffic construction to be a minimum of 20mm surface course, 60mm binder course, 150mm compacted lean mix and 75mm Type 1.
- Isolated footway construction to be a minimum of 20mm surface course,
  60mm binder course and 150mm GSB Type 1.
- Carriageway Capping and subbase to be in line with OCC Foundation CBR Table. Ground stabilisation is required for CBRs of 2.5% or lower.
- Surface PSV at junctions, roundabouts and pedestrian crossings to conform with HD 28/15 and IAN 156. Please note, OCC no longer accepts Anti-skid surface dressing.
- o Tactile paving See DETR 'Guidance on the use of Tactile Paving Surfaces'
- Ramps are to be constructed out of Macadam. When blockwork is proposed on the table top a flush 10x5"/ 225x125mm CS1 channel at the top of the ramp is required.
- Controlled or uncontrolled pedestrian refuses island crossings are to conform with LTN 2/95.
- Yellow road markings are to be colour No.353 Deep Cream yellow.

## **DRAINAGE DETAILS**

- o Side hinged gullies only (with hinge facing oncoming traffic).
- Frames and gulley grating to be D400 standard.
- OCC adopted surface water manholes in the highway should be of the catchpit type with a 300mm sump.
- o Gulley connectors to have a maximum 12m pipe length.
- Gulley surround to be ST2 concrete.
- Gulley spacing to be as per DMRB.



- Pipes must have concrete cover if within 1200mm of surface level in carriageway or within 900mm of surface level in footway or verge.
- Services and foul sewers need to be adopted by a statutory authority/utility company for OCC to entertain adoption of the street.
- Surface water sewers either need to be adopted by a statutory authority/utility company or by OCC if the road is going to considered for highway adoption.
- OCC can only entertain adoption of a surface water sewer and drainage features that take solely highway surface water (i.e. swale, soakaway, permeable paving or piped system), this is OCCs preference. If the system takes combined highway and private water, OCC cannot adopt the surface water sewer and drainage feature but has a vested interest in the system and its maintenance. Drainage easements maybe required.

#### **HIGHWAY DESIGN**

- MfS, MfS2 and DMRB along with Oxfordshire Residential/cycling/walking Design Guides are to be used.
- Maximum carriageway longitudinal gradient is 1:20 (where there isn't a roadside footway/ shared surface RAT could consider gradient up to 1:15 avoiding junctions).
- Minimum carriageway longitudinal gradient is based on the road surface type.
  1 in 80 Blockwork, 1 in 100 Asphalt and 1 in 120 where a concrete channel is provided.
- Maximum footway crossfall gradient to be 1:40.
- o Minimum width of a two-way carriageway is 4.8m residential.
- Service corridors are to be 2m in width and to be impermeable when inside the highway corridor. Where service cross permeable carriageway, corridor needs to be impermeable and distinguishable from the surface. Service corridors are also acceptable in grass verges.
- Bus routes minimum width is 6.75m.
- o Shared surfaces width is to be a minimum of 6m.
- In the absence of a footway directly adjacent to carriageway/ shared surface, an 800mm maintenance margin is required.
- Tracking is required to evidence a refuse vehicle can enter, turn and exit entirely in the carriageway/ surface area when proposed for adoption.
   Tracking will need to work with parked cars that are 2.0x5.0m.
- Where Street Lighting cannot be situated in footways, a 1.5m margin is required.
- o Footways to be 2m in width.
- Parking bays adjacent to the carriageway will require a 1m adopted hardstanding behind them with a dropped kerb at both ends.
- Parallel visitor parking bays directly adjacent to adopted carriageway can be offered for adoption. Echelon, perpendicular or allocated parking bays cannot and must be positioned outside of the adoptable highway.
- Adoptable areas are confirmed at the technical audit stage and should not be inferred from planning drawings.
- Brass/stainless steel studs (DDA and DETR compliant) on hard surfacing and marker blocks on verges are required to delineate highway extent.
- Vision splays for junctions adjoining existing roads to be determined from speed survey results and are required for adoption.



### STREET LIGHTING

- Street lighting cables to be within proposed highway.
- Private networks are to be avoided where possible. Where they cannot be avoided and are acceptable to OCC, additional commuted sums will be secured.
- o There should be no trees within 10m longitudinally of a streetlighting column.
- It is understood that trees are needed to create certain spaces, where there is likely to be conflict between trees and lighting, OCC recommend early engagement with Street Lighting Team to ascertain what is adoptable. Street lighting will take priority over trees for highway safety, but spacing acceptability could be dependent on species of tree.

#### **CONSULTATIONS**

- Controlled crossings, including zebra crossings, require a consultation and incur a cost.
- Speed calming and bus stops also require consultations. And incur a cost.
- TROs incur a cost, must be implemented within 2 years and OCC must be made aware 28 days prior to implementation.

# **ROUNDABOUTS/ GHOSTED ISLAND JUNCTIONS**

- To be designed in accordance with the DMRB.
- Departure from standards to be detailed and fully justified on OCCs departure form.
- All roundabout designs to include details of:
  - Inscribed Circle Diameter Entry Path Curvature on each arm.
  - Entry Angle (s)
  - Entry Width
  - Approach Half Width
  - Entry Kerb Radius
  - Exit Kerb Radius
  - Effective Flare Length
  - Visibility (s)
- All ghosted islands junction designs to include details of:
  - Design speed limit
  - SSD
  - Turning length (a)
  - Deceleration length (b)
  - Through Lane width (c)
  - Turning lane width (d)
  - Direct taper length (e)
  - Central island taper length (paragraph 7.30)

