

**General:**

- All Milton Keynes City Council standard details should be read in conjunction with National Highways 'Manual of Contract Documents for Highway Works' (including Specification for Highway Works and Highway Construction Details), and any project specific contract documentation. In the event of any conflict, this drawing will take precedence over any MCHW details/specification unless otherwise agreed with Milton Keynes City Council.
- Any construction not covered by these standard details should be discussed with and approved by an MKCC engineer.
- Any variation from these standard details should be discussed with an MKCC engineer prior to installation.
- All vertical curves should be in accordance with DMRB CD 109 and *A Highway Guide for Milton Keynes: A Guide for Developers* (2018).
- The design and positioning of traffic signs is to align with National Guidance - Traffic Signs Regulations & General Directions 2016 and the Traffic Signs Manual. Post & foundation design is expected to be undertaken using KeyPost and KeySign software, but checked by a structural engineer. CD 354 should be consulted where the size of the traffic sign warrants classification as a minor structure.
- Island construction to be the same as footway construction.
- For missing information refer to MCHW for details and specifications.
- Tack coat to be applied prior to laying any upper bituminous layers.

**Inspections/Access Chambers:**

- Inspection chambers shall be in accordance with MCHW: CD 536 and details given on drawing MKCC-500-001.

**Manhole Chambers:**

- All pipes shall be laid soffit to soffit unless stated otherwise on the manhole schedule.
- Preformed swept channels shall be used at junctions and no branch shall enter at less than 90 degrees from the outgoing sewer.
- Manhole chamber to be sized and constructed in accordance with DMRB specification for highway works.
- The following chamber type should be used:
  - Type 7 1200Ø catch pit for incoming pipes up to and including 450Ø - MCHW: CD 536
  - Type 2 for incoming pipes greater than 450Ø and depth to pipe soffit between 1-1.5m - MCHW: CD 536
  - Type 3 for incoming pipes greater than 450Ø and depth to pipe soffit between 1.5-3m - MCHW: CD 536
- Type 4 for incoming pipes greater than 450Ø and depth to pipe soffit between 3-6m - MCHW: CD 536

**Non Return Valves:**

- Non return valves to be fitted in locations shown on the drainage layout drawings.
- To be inline check valve 'WAPRO WASTOP' or approved equivalent, to suit drainage pipe diameter.

**Compressible Filler for Pipelines:**

- Compressible filler board to be used to interrupt concrete protection to pipelines at each pipe join. Shall consist of bitument impregnated insulating board to BS1142.

**Proprietary Products:**

- Reference shall be made to the manufacturer's instructions. Consideration will be given to alternative products of equal quality but the contractor may not use a substitute material without prior written approval of the supervising officer/engineer.
- To be installed to manufacturers guidelines unless otherwise stated on the contract drawings.

**Testing and Cleaning:**

- All new drainage is to be jetted, cleaned and pressure tested prior to completion.

**Connections to Existing Drainage:**

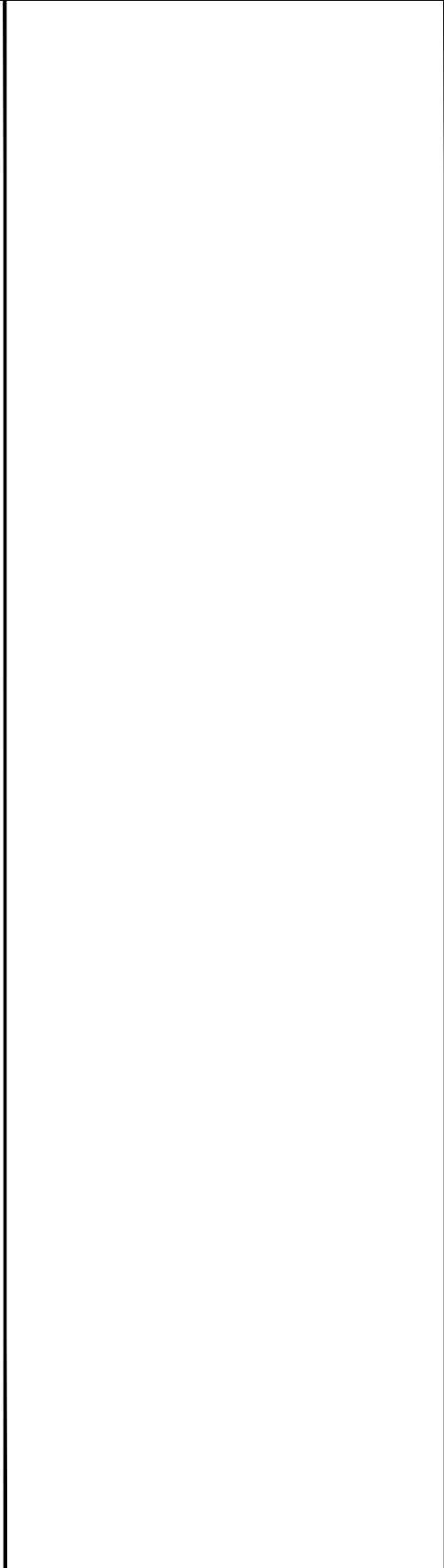
- Branch connections to existing drainage pipes are to be made with preformed WYE junctions and slip collar/repair coupling. Refer to typical detail drawing MKCC-500-001.


**Filter Drains:**

- Filter drain are to installed at the toe of earthwork slopes (cut & fill) within the adoptable highway, as shown on the drainage layout drawings.
- Filter drains to be 225Ø Type H in accordance with MCHW: CD 533, with perforation facing downwards.
- Filter drain back fill to be 20-40mm type B filter material to MCHW: CC 500 clause 1.70 to clause 1.86.
- 600Ø PVC-U inspection chambers in accordance with MCHW: CD 536, are to be used at the start and end of runs, with intermediate chambers at maximum spacing of 90m.
- Inspection chambers to have 600 x 600mm ductile iron cover and frame in accordance with notes 12, where depth from cover to sump level is greater than 1m. Access opening to be reduced to 300 x 300mm.
- The low point of the filter drain is to discharge into the highway drainage system or nearest watercourse with appropriate connection detail or headwall structure.
- Proximity of tree and shrub planting near filter drains and narrow filter drains is to be in accordance with the landscape architects design. Necessary protection measure e.g. root barrier, to prevent root invasion is defined on the landscape drawings. Refer to filter drain typical detail for interface between filter drain and root barrier.

**Edge of Pavement Drainage - Narrow Filter Drain (Road Type 1 Only):**

- The low side of all road pavements are to be drained using a narrow filter drain or filter drain. This applies to roads in cutting, natural ground or embankment.
- Narrow filter drains are to be 100Ø Type 9 in accordance with MCHW: CD 524.
- The top of pipe level (height) shall be a minimum of 300mm below the bottom of sub-base or 50mm below the bottom of sub-formation, whichever is lower.
- 600Ø PVC-U inspection chambers in accordance with MCHW: CD 536, are to be used at the outfall of NFD runs.
- Inspection chambers to have 600 x 600mm ductile iron cover and frame in accordance with notes 12. Where depth from cover to sump level is greater than 1m. Access opening to be reduced to 300 x 300mm.
- The low point of the narrow filter drain is to discharge into the highway drainage system or nearest watercourse, with appropriate connection detail or headwall structure.
- If the sub-grade is classified as 'free draining' then the narrow filter drainage may be omitted. This applies to imported class 1 material proposals to omit NDF's should be submitted to the overseeing organisation for consideration.



 <p>Highways and Transportation Civic Offices 1 Saxon Gate East Central Milton Keynes MK9 3EJ</p>	<b>DRAWING TITLE:</b>												
	Standard Details Guidance Note												
	<b>SCALE:</b>	<b>REV:</b>		<b>DRAWN:</b>	<b>CHECKED:</b>	<b>APPROVED:</b>	<b>REV:</b>	<b>AMENDMENTS:</b>	<b>DRN:</b>	<b>CHCK'D:</b>	<b>APPR'D:</b>	<b>DATE:</b>	
	NTS	P01		PG	JM	LS						00/00/0000	
		<b>INITIALS:</b>				<b>DRAWING NO:</b>							
		<b>DATE:</b>	07/01/2026	17/03/2026	17/03/2026	MKCC-100-001							

