



- Notes
- All Invert levels based on record drawings provided by others, Contractor to confirm existing levels prior to construction.
  - It has been assumed that the difference in levels between record drawings and recent topographical and building surveys is exactly 10m.
  - Stub Stack locations are as provided by KKA architecture 09/06/2017.
  - All works, workmanship and materials on private drainage to be in accordance with the civil engineering specification for water industry 7th edition published by the water research council.
  - All pipework to be thermoplastic structured wall pipe, to comply with BS EN 13476-1 and WIS 4-35-01, and BS EN 13476-3 or BS EN 13476-3. pipes to be BSI kitemarked or equivalent third party certification.
  - The entire completed drainage network is to be thoroughly cleaned out by high pressure jetting and subjected to CCTV survey, with video recordings and reports to be made available to the employer's agent prior to substantial completion and end of maintenance certificates being used.
  - All pipework not directly connected to a manhole must be provided with rodding access.
  - Connections from stub stacks to be 110Ø laid at 1 in 80 minimum.
  - Concrete surround to pipelines shall be provided to all internal drainage.
  - Covers are to be set flush with proposed finished surface level.
  - At rainwater and soil vent pipe outlets, a rest bend and bends to allow the pipework to exit the foundation area are to be provided.
  - Where required, sleeve pipes 225/300 diameter are to be provided where pipes cross the floor slab downstand. A short length of pipeline is to be provided within the sleeve and flexible joints are to be sited close to the sleeve pipe for flexibility.
  - All gullies to be roddable and trapped.
  - All External MH covers to have 600x600 clear opening and conform to FACTA Class C (C250) requirements.
  - Internal MH's shall be as above with Class B covers.
  - All MH's to have double seal airtight and watertight lockable recessed covers to accept floor screed or finishes. Recessed MH covers and frames to be bedded on Class 1 mortar and a maximum of two courses of Engineering brickwork.

- Key to symbols
- Existing Combined Drainage and Manholes
  - Proposed Foul Drainage and Manholes
  - Connection between Stacks at High Level
  - 110 Ø Soil Stub Stack
  - 110 Ø Waste Stub Stack
  - Trapped Floor Gully

Reference drawings

P1	19/06/2017	JF	Outfall point amended	GB	AH
P1	15/06/2017	JF	First Issue	GB	AH
Rev	Date	Drawn	Description	Ch'k'd	App'd

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Title

## Liverpool Football Club The Kop Proposed Drainage Layout

Designed	J Finnigan	JF	Eng check	G Bolton	GB
Drawn	J Finnigan	JF	Coordination	A Hilton	AH
Dwg check	G Bolton	GB	Approved	A Hilton	AH
Scale at A1	1:100		Status	PRE	P2
Drawing Number	382099-MMD-00-XX-SK-C-0001				