CRADDYS

PENNINE WAY PLAY AREA, CHANDLER'S FORD

NATIONAL BUILDING SPECIFICATION

LAND DRAINAGE SPECIFICATION

CLIENT
CHANDLER'S FORD PARISH COUNCIL

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DATE: AUGUST 2024
CRADDYS DOCUMENT REFERENCE: 13562W0003

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Revision	Date	Notes	Author	Checked	Approved
A	28.08.24	FIRST ISSUE	CAP	RJH	AR

Generally

100 Existing drains and watercourses

1. Pre-commencement checking: Before starting work, check invert levels and positions of existing drainage against drawings. Report any discrepancies
2. Drains to be retained: Protect. Maintain normal operation. Show location on drawings

106 In situ concrete (general)

1. Standard: To BS 8500-1 and BS 8500-2 .
    1.1. Concrete: GEN 3

Drains

220 Filter drains with pipe and geotextile trench lining

1. Trench size
    1.1. Depth: Minimum 600mm
    1.2. Width: Minimum 450mm
2. Geotextile trench lining
    2.1. Manufacturer: Terram
        2.1.1. Product reference: T1000
3. Pipe bedding: Granular material to BS EN 13242, size 6/10
4. Pipes: Plastics to BS 4962, Kitemark-certified, perforated
    4.1. Manufacturer: Contractor's choice
        4.1.1. Product reference: Contractor's choice
    4.2. Sizes: 150mm diameter
5. Pipe surround and backfill
    5.1. Material: As pipe bedding
    5.2. Level: To surface

220 Land drains with pipe and geotextile trench lining

1. Trench size
    1.1. Depth: Minimum 600mm
    1.2. Width: Minimum 450mm
2. Geotextile trench lining
    2.1. Manufacturer: Terram
        2.1.1. Product reference: T1000
3. Pipe bedding: Single size stone 40mm
4. Pipes: Plastics to BS 4962, Kitemark-certified, perforated
    4.1. Manufacturer: Contractor's choice
        4.1.1. Product reference: Contractor's choice
    4.2. Sizes: 150mm diameter
5. Pipe surround and backfill
    5.1. Material: As pipe bedding
    5.2. Level: To surface To within 250 mm of finished ground level. Cover with geotextile membrane

350 Laying pipes

1. Weather conditions: Lay pipes in good weather using methods suitable for the site conditions
    1.1. Plastics pipes: Do not lay or backfill at temperatures lower than 5°C
    1.2. Trafficking: Do not compact, smear, cause top ponding, rutting or damage to the soil structure
2. General: Scoop out locally at couplings and sockets. Lay pipes digging slightly into bed and resting uniformly on their barrels. Lay to line and gradient without backfalls
3. Junctions between branches and mains: Purpose made components
4. Upper ends of drain runs: Plug to prevent ingress of soil or animals
5. Backfilling: Do not damage, distort or displace pipes

Excavating/ beddings/ surrounds/ backfill

500 Topsoiling

1. Filter drains: Filter drains with granular fill up to finished ground level should not be covered by topsoil.
2. Segregation: Carefully remove topsoil when forming trenches and prevent mixing with subsoil

515 Existing live land drains

1. Drains exposed by excavation: Bung ends and leave in situ

520 Formation for beds or pipes

1. Timing: Excavate to formation immediately before laying beds or pipes
2. Hard spots: Remove rock projections, boulders, etc. Replace with consolidated bedding material
3. Soft spots: Tamp in bedding material

570 Installing geotextile trench lining

1. Preparation: Trim trench. Remove sharp stones and other projections
2. Placing
   - 2.1. Dressing geotextile: Uniformly to trench profile without stretching, perforation or rupture. Protect geotextile trench lining from damage during subsequent construction
   - 2.2. Top level: 200 mm below ground level
   - 2.3. Top of aggregate: Wrap free lengths of geotextile over top surface and overlap by 300 mm. Tuck top layer down trench side by 100 mm

Ancillary constructions and work

605 Precast concrete catch-pits

1. Drawing reference: 13562-0050
2. Bases
   - 2.1. Material: In situ concrete (general)
   - 2.2. Thickness: 225 mm
3. Catch-pits
   - 3.1. Standard: To BS 5911-3 and BS EN 1917 and Kitemark-certified
   - 3.2. Manufacturer: Contractor's choice
     - 3.2.1. Product reference: Contractor's choice
   - 3.3. Cement type and content: To above standards
   - 3.4. Chamber sections: Circular, sizes as scheduled
   - 3.5. Cover slabs: Precast concrete to BS 5911-3 and BS EN 1917
     - 3.5.1. Thickness: 150 mm
   - 3.6. Openings: To suit access covers
4. Joints: Mortar, plastomeric or elastomeric seal conforming to BS EN 1917 and BS 5911-3
5. Steps: To BS EN 13101
   - 5.1. Type: Galvanized ferrous in catch-pits exceeding 900 mm deep
6. Surround
   - 6.1. Material: In situ concrete (general)
   - 6.2. Thickness: 150 mm
7. Access covers and seating: Cast iron

640 Cast iron access covers and seating

1. Covers: Grey cast iron or ductile cast iron.
   - 1.1. Standard: To BS EN 124-1 and BS EN 124-2 .
   - 1.2. Manufacturer: Contractor's choice
     - 1.2.1. Product reference: Contractor's choice
   - 1.3. Load class (minimum): B125
   - 1.4. Sizes: 675 x 675
2. Seating: Either engineering brickwork for manholes or precast concrete cover frame units to BS 5911-3.
3. Bedding and haunching of frame
   - 3.1. Solidly in 1:3 cement:sand mortar over whole area.

800 Cleaning

1. General: Thoroughly flush out the whole of the installation with clean water to remove silt and debris immediately before handover
2. Preparation: Lift covers to any access points which form part of the system. Remove mortar droppings, debris and loose wrappings
3. Timing: Before cleaning, final testing, CCTV inspection (if specified), and immediately before handover
4. Cleaning: Thoroughly flush any pipes with water to remove silt and check for blockages. Where

appropriate, rod pipes between access points if there is any indication that they may be obstructed
5. Washings and detritus: Dispose of safely. Do not discharge into sewers or watercourses
6. Covers: Securely replace after cleaning and testing