KEY:

Proposed Adoptable Sewers:

Foul sewer

Storm sewer

Highway Gully

Rising Main

Adoptable Lateral (150mm dia)

Adoptable Access Chamber

Proposed Private Drainage:

Foul drain

Storm drain

Rodding eye

Yard gully

Aco drain

Permavoid – Surface Water Collector & Distribution Cell

All private inspection chambers shall be polypropylene non-access chambers in accordance with The Building Regulations, Part H.

Chamber sizes:
Depth to invert <0.6m DN300
Depth to invert >0.6m DN475

Invert levels shown thus: F10.00 S10.00

Finished floor levels shown thus: FFL 10.00

Fall Arrows

Primary Access

Secondary Access

ARROWS INDICATING FLOW OF SURFACE WATER THROUGH PERMEABLE SUB BASE.

EXTENT OF ROADS TO BE OFFERED FOR ADOPTION TO BE CONSTRUCTED AS PART OF INFRASTRUCTURE

AREAS OF PRIVATE INFRASTRUCTURE TO BE CONSTRUCTED

EXISTING WATERCOURSE TO BE RETAINED

EXISTING WATERCOURSE TO BE ABANDONED

NEW WATERCOURSE TO BE CONSTRUCTED

EXTENT OF NEW PUBLIC FOUL SEWER

ROOF WATER TO DISCHARGE TO PERMEABLE PAVING SUB BASE, ALL PARKING COURTS AND ACCESS ROADS TO BE PERMEABLE PAVED TO CONVEY WATER TO WATERCOURSES, ALL FLOWS TO BE ATTENUATED TO GREENFIELD RUN OFF LESS 20% SUB BASE AND CRATE ATTENUATION TO BE DESIGNED TO ACCOMMODATE 1 IN 100 YEAR + 40% CLIMATE CHANGE STORM EVENT

PERMEABLE PAVING TO STORE 1 IN 100 + CC STORM EVENT WITH CONTROL MANHOLE TO RESTRICT FLOWS TO GREENFIELD RUN OFF LESS 20% POINT OFF DISCHARGE IN SIMILAR LOCATION TO EXISTING

WATERCOURSE TO BE CULVERTED UNDER NEW ACCESS ROAD EXACT DETAILS TO BE DETERMINED IN CONJUNCTION WITH WILTSHIRE COUNCIL DRAINAGE OFFICER

FLOW CHANNEL TO BE PROVIDED TO LINK WESTERN ATTENUATION WITH EASTERN OUTFALL, CHANNEL SEE DRAWING NUMBER 4629:P10

AREA OF LAND TO BE RAISED BY CIRCA 500mm , FILL TO BE GRADED OUT AT 1 IN 4 GARDENS TO FALL AT 1 IN 20 TOWARDS BOUNDARY FENCE AND GRADED OUT THEREAFTER

CONTROL STRUCTURE TO RESTRICT FLOWS TO EXISTING OVERLAND FLOWS

CRATE ATTENUATION TANK WITH FLOWS RESTRICTED TO 2 l/s TO STORE 1 IN 100 YEAR + 40% STORM EVENT

APPROXIMATE AREA FOR FLOOD COMPENSATION LEVEL TO BE REDUCED BY 100mm TO PROVIDE ATTENUATION OF 1000m3

PERMEABLE PAVING TO STORE 1 IN 100 + CC STORM EVENT WITH CONTROL MANHOLE TO RESTRICT FLOWS TO GREENFIELD RUN OFF LESS 20%

AREA OF LAND TO BE RAISED BY CIRCA 500mm , FILL TO BE GRADED OUT AT 1 IN 4 GARDENS TO FALL AT 1 IN 20 TOWARDS BOUNDARY FENCE AND GRADED OUT THEREAFTER

CONTROL STRUCTURE TO RESTRICT FLOWS TO EXISTING OVERLAND FLOWS

ROOF WATER TO DISCHARGE TO PERMEABLE PAVING SUB BASE, ALL PARKING COURTS AND ACCESS ROADS TO BE PERMEABLE PAVED TO CONVEY WATER TO WATERCOURSES, ALL FLOWS TO BE ATTENUATED TO GREENFIELD RUN OFF LESS 20% SUB BASE AND CRATE ATTENUATION TO BE DESIGNED TO ACCOMMODATE 1 IN 100 YEAR + 40% CLIMATE CHANGE STORM EVENT

CRATE ATTENUATION TANK WITH FLOWS RESTRICTED TO 2 l/s TO STORE 1 IN 100 YEAR + 40% STORM EVENT

EXISTING ATTENUATION POND TO REMAIN

Northern Development Area

Total site area = 16,800m2
Building footprints under which no till will be placed = 3,880m2

Roads Parking Courts under which no fill will be placed = 3,100m2

Total Hard paved areas = 6,980m2

Total Soft Landscape areas = 9,820m2

Excavated Material

Topsoil assumed at 200mm deep 16800x0.2m =3,360m3

Founds assuming CFA piles 5m long with 600x600 ground beams all excavated in original ground =2,115m3

Excavate additional 250mm to for roads parking etc. =775m3

Allowance for sewers drains patios etc. = 200m3

TOTAL EXCAVATED MATERIAL = 3,090m3

MATERIAL REQUIRED

Based upon 700mm from stripped level formed of 400mm sub soil and 300mm topsoil in soft areas = 9820x0.4m = 3,920m3 of sub soil and 2,940m3 of topsoil

Therefore shortfall of 830m3 of sub soil and 420m3 excess of Topsoil

Southern Development Area

Total site area = 24,860m2
Building footprints under which no till will be placed = 7,448m2

Roads Parking Courts under which no till will be placed = 6,110m2

Total Hard paved areas = 13,558m2

Total Soft Landscape areas = 11,302m2

Excavated Material

Topsoil assumed at 200mm deep 24,86Ux0.2m =9,972m3

Founds assuming CFA piles 5m long with 600x600 ground beams all excavated in original ground =2,440m3

Excavate additional 250mm to for roads parking etc. =1530m3

Allowance for sewers drains patios etc. = 200m3

TOTAL EXCAVATED MATERIAL = 4,170m3

MATERIAL REQUIRED

Based upon 700mm from stripped level formed of 400mm sub soil and 300mm topsoil in soft areas = 11,320x0.4m = 4,520m3 of sub soil and 3,390m3 of Topsoil

Therefore shortfall of 350m3 of sub soil and 1,582m3 excess of Topsoil

SUMMARY OF CUT AND FILL

TOTAL DEFICIT FROM SITE WON MATERIAL FROM NORTHERN AND SOUTHERN PARCELS = 830+350 = 1,180m3
THIS CAN BE WON FROM THE WESTERN ATTENUATION BASIN AND THE NEW CENTRAL CHANNEL

TOPSOIL EXCESS = 2002m3 TO BE TAKEN OFF SITE

ROOF WATER TO DISCHARGE TO PERMEABLE PAVING SUB BASE, ALL PARKING COURTS AND ACCESS ROADS TO BE PERMEABLE PAVED TO CONVEY WATER TO WATERCOURSES, ALL FLOWS TO BE ATTENUATED TO GREENFIELD RUN OFF LESS 20% SUB BASE AND CRATE ATTENUATION TO BE DESIGNED TO ACCOMMODATE 1 IN 100 YEAR + 40% CLIMATE CHANGE STORM EVENT

EXISTING WATERCOURSE TO BE CULVERTED UNDER NEW ACCESS ROAD EXACT DETAILS TO BE DETERMINED IN CONJUNCTION WITH WILTSHIRE COUNCIL DRAINAGE OFFICER

INSERT SHOWING FOUL OUTFALL

Scale = 1 : 500

TENDER ISSUE

REV. No.	DATE	DESCRIPTION	INITIALS
T5	09.09.20	15" water main located and adjusted, minor revisions to culverts	PPB
T4	09.06.20	footpaths to northern area revised	PPB
T3	04.05.20	Additional information added to western attenuation area	PPB
T2	31.03.20	FOUL SEWER NUMBERING UPDATED, ADDITIONAL INFO ADDED TO PARCEL C	PPB
T1	26.03.20	UP REVVED TO TENDER ISSUE	PPB

Client: Durmast Ltd

Project: Land North of Grovelands Way Warminster

Title: Engineering Strategy

Scale: 1:500@A0

Date: May 18

Drawn: PPB

Checked:

Drawing No.: 4629:01

Rev: T5

MJA CONSULTING
CIVIL AND STRUCTURAL ENGINEERS
Monarch House, Barton Lane, Abingdon, Oxon, OX14 3NB
Tel: 01235 555173
Fax: 01235 523226

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