



- LEGEND**
- REFER TO ARCHITECTS DRAWINGS FOR SITE BOUNDARY LINE
 - OUTLINE OF WAYLEAVE FOR EXISTING 4000 WATERMAIN
 - PROPOSED SURFACE WATER SEWER
 - PROPOSED INFILTRATION TRENCH
 - PROPOSED PERMEABLE PAVED DRIVEWAYS AND CAR PARK
 - ROAD SIDE FILTER STRIPS WITH SUBBASE STORAGE AND INFILTRATION TO GROUND WHERE POSSIBLE
 - ROAD SIDE TREE FITS WITH SUB-SURFACE STORAGE AND INFILTRATION TO GROUND WHERE POSSIBLE
 - BIO RETENTION AREA WITH SURFACE WATER STORAGE AND INFILTRATION TO GROUND WHERE POSSIBLE

- NOTES:**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS.
 2. ALL LEVELS ARE IN METRES O.D. MALIN HEAD.
 3. THE POSITION AND LEVELS OF EXISTING SERVICES INsofar AS THEY ARE KNOWN AND AS SHOWN ON THE DRAWINGS MAY NOT BE ACCURATE AND MERELY INDICATE THEIR PRESENCE IN THE WORKING AREA. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING SERVICES ON SITE.
 4. THE SURVEY INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM A TOPOGRAPHICAL SURVEY UNDERTAKEN BY MURPHY GEOSPATIAL IN MAY 2021. DRAWING REFERENCE MCL41890_1_TTM_Rev2.
 5. FOR DETAILS OF LONGITUDINAL SECTIONS REFER TO DRG. No. 21003-TJOC-ZZ-ZZ-DR-C-0068, 21003-TJOC-ZZ-ZZ-DR-C-0069 & 21003-TJOC-ZZ-ZZ-DR-C-0070.
 6. FOR DETAILS OF MANHOLES REFER TO DRG. No. 21003-TJOC-ZZ-ZZ-DR-C-0076 & 21003-TJOC-ZZ-ZZ-DR-C-0077.
 7. FOR DETAILS OF BEDDING REFER TO DRG. No. 21003-TJOC-ZZ-ZZ-DR-C-0074.
 8. FOR DETAILS OF BUILDING DRAINAGE CONNECTIONS REFER TO ARCHITECTS AND M+E DRAWINGS
 9. ALL PIPEWORK IS 150mmØ UNLESS OTHERWISE NOTED.
 10. WHERE EXCAVATIONS FOR DRAINAGE ENCROACH ON THE BEARING FOR FOUNDATIONS (I.E. PIPE IS BELOW FOUNDATION OR BELOW 45° LINE EXTENDING OUT AND DOWN FROM THE BOTTOM OF THE FOUNDATION), SUCH EXCAVATIONS SHALL BE BACKFILLED IN LEAN MIX CONCRETE TO FORMATION LEVEL OF FOUNDATIONS. NEW FOUNDATIONS WILL BE INSTALLED AT A DEPTH TO SUIT THE PROPOSED NEW DRAINAGE.
 11. PIPE BEDDING AND BACKFILL SHALL BE AS PER DRAWING 21003-TJOC-ZZ-ZZ-DR-C-0074 WITH CLASS E BEDDING FOR FLEXIBLE PIPE (UPVC AND THERMOPLASTIC STRUCTURED WALL PIPE) AND CLASS B BEDDING FOR RIGID PIPE (CONCRETE). BACKFILLING OF TRENCHES ABOVE PIPE BED AND SURROUND SHALL BE CLASS B4 MATERIAL WHERE TRENCHES ARE BENEATH ROADS, UNLESS SITUATION IS AS PER NOTE 10 ABOVE. WHERE PIPES ARE LAID UNDER SLABS AND CONCRETE SURFACES, THE TRENCHES SHALL BE BACKFILLED WITH HARCORE COMPLYING WITH THE REQUIREMENTS OF SR21 AND IS EN 13242.
 12. SURFACE WATER SEWERS WITH A DIAMETER OF 150mm AND 225mm SHALL BE UPVC. ALL SURFACE WATER SEWERS WITH A DIAMETER OF 300mm AND GREATER SHALL BE CONCRETE PIPES UNLESS NOTED OTHERWISE. REFER TO LONG SECTIONS FOR SPECIFIED PIPE MATERIAL.
 13. WHERE AN UNDERGROUND PIPE IS BUILT INTO A STRUCTURE THERE SHALL BE TWO FLEXIBLE JOINTS ADJACENT TO THE STRUCTURE. THE FIRST SHALL BE NOT MORE THAN ONE PIPE DIAMETER FROM THE OUTSIDE FACE OF THE STRUCTURE. THE LENGTH OF THE NEXT PIPE (ROCKER PIPE) SHALL NOT EXCEED 75mm FOR PIPES UP TO 450p.
 14. SETTING OUT OF ALL SVPS AND RWPS TO ARCHITECTS DETAILS.
 15. DRAINAGE TO LANDSCAPED AND NON CARRIAGEWAY PAVED AREAS BY LANDSCAPE ARCHITECTS.
 16. ALL MANHOLES TO BE SET OUT ON SITE AND CO-ORDINATED WITH PROPOSED AND EXISTING SERVICES PRIOR TO CONSTRUCTION.
 17. COVER LEVEL TO BE CO-ORDINATED WITH PROPOSED LANDSCAPING LEVELS.
 18. ALL MANHOLE COVERS IN TRAFFICED AREAS TO BE A MINIMUM OF CLASS D400 SOLID TOP COVERS. RECESSED COVERS TO BE PROVIDED IN PAVED LANDSCAPED AREAS.

PROPOSED ATTENUATION STORAGE:
 STORMTECH STORAGE SYSTEM PROVIDING
 136 0m³ STORAGE IN 48 No. SC740 CHAMBERS
 (PLAN AREA @ BASE = 166.6m²)
 STORMTECH SYSTEM LEVELS:
 02.030m BASE OF EXCAVATION
 02.300m TOP OF STONE BASE
 (02.947 T.M. 100 YR EVENT)
 03.000m TOP OF STORMTECH UNITS
 03.240m TOP OF STONE
 03.800m GROUND LEVEL COVER.
 REFER TO DRG. 21003-TJOC-ZZ-ZZ-DR-C-0071
 FOR FURTHER DETAILS.

NOTE: WHERE FOUL SEWERS OR SURFACE WATER PIPES CROSS OVER THE EXISTING WATERMAIN, THEY SHALL CROSS AT RIGHT ANGLES TO THE EXISTING WATERMAIN AND SHALL BE LOCATED MIDWAY BETWEEN THE WATERMAIN JOINTS. THERE SHALL BE A MINIMUM OF 500mm VERTICAL SEPARATION DISTANCE BETWEEN THE TOP OF EXISTING WATERMAIN AND UNDERSIDE OF FOUL SURFACE WATER PIPE AT THE CROSSING POINT.

BIORETENTION AREA WITH SURFACE WATER STORAGE
 VOLUME OF 10.8m³. ROAD GULLIES IN PROXIMITY OF BIORETENTION AREA TO DISCHARGE INTO BIORETENTION AREA WHERE SURFACE WATER IS FILTERED AND STORED IN SUB-SURFACE BIORETENTION MATERIAL.

C02	AP	ISSUED AS ADDITIONAL INFORMATION	21.04.2022
C01	AP	ISSUED FOR PLANNING	18.11.2021
REV	STAT	DESCRIPTION	DATE
DRAWING STATUS		ISSUED FOR PLANNING	

CHECKED BY:	REVIEWED BY:	APPROVED BY:
RON	JM	JM

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PROJECT:	PROPOSED RESIDENTIAL DEVELOPMENT AT GORDON PARK
CLIENT:	GREENWALK DEVELOPMENT LTD.
DRAWING TITLE:	PROPOSED SURFACE WATER LAYOUT SHEET 1
SCALE:	1:250 (A1)
PROJECT - ORGANIZATION - VOLUME - LOCATION TYPE - TITLE - NUMBER	21003-TJOC-ZZ-ZZ-DR-C-0065
REV:	C02

2 - SQUARE IN-SITU CHAMBER FITTED WITH FLOW CONTROL DEVICE LIMITING FLOW TO 14 L/S AT 1.65m HEAD (HYDRO-INTERNATIONAL HYDROBRAKE MD-SHE-6100-5400-1650-5400)

PROPOSED ATTENUATION STORAGE:
 STORMTECH STORAGE SYSTEM PROVIDING
 77 0m³ STORAGE IN 99 No. MC-3500 CHAMBERS
 (PLAN AREA @ BASE = 538.3m²)
 STORMTECH SYSTEM LEVELS:
 1.482m BASE OF EXCAVATION
 1.782m TOP OF STONE BASE
 (2.965 T.M. 100 YR EVENT)
 2.927m TOP OF STORMTECH UNITS
 3.227m TOP OF STONE
 4.100m GROUND LEVEL COVER.
 REFER TO DRG. 21003-TJOC-ZZ-ZZ-DR-C-0072
 FOR FURTHER DETAILS.