

NEWBURY HOUSING CO-OP OPERATIONS
 Official
 Stamp
 Date: -7 APR 2021
 File



Existing Cal U Trees (T26 & T27) To Be Removed To Allow Vehicular Turning Within Compound
 1.8m Fence & 3m Gated Access To Gas Governor
 NOTE: MAX WATER LEVEL AT S15 DURING 100 YEAR +40% STORM EVENT 45.264m

CELLULAR STORAGE ATTENUATION REQUIRED AT LOW POINT TO PREVENT FLOODING DURING THE 100 YEAR +40% STORM EVENT
 WIDTH 6m, LENGTH 12.5m, DEPTH 1.2m
 BASE LEVEL 43.28m
 SOFFIT LEVEL 44.48m
 OUTFALL FROM ACO CHANNEL TO BE FITTED WITH NON RETURN VALVE

EXISTING FOUL SEWER 150mm @ 1:63
 WHERE THE PROPOSED FOUL SEWER PASSES BETWEEN EXISTING SURFACE WATER MANHOLE AND PROPOSED HYDROBRAKE, ENSURE THERE IS 300mm CLEARANCE SURROUNDING THE PIPE
 NEW FOUL CONNECTION ON TO EXISTING ADOPTED MANHOLE VIA SECTION 106 NOTICE WITH SEVERN TREATMENT WATER
 NEW SURFACE WATER CONNECTION ON TO EXISTING SURFACE WATER SYSTEM. RESTRICTED TO MAX DISCHARGE OF 11.4 l/s VIA HYDROBRAKE CHAMBER
 NON RETURN VALVE FITTED WITHIN INSPECTION CHAMBER

Street Lighting Legend
 6m galvanneal steel lighting column and post-top mounted units
 Schneider Ampora Mini 18 LED WWS626040/470230MA/20W/2.8
 18m LED luminaire finished black (RAL 9005) with Philips Xitanium driver, 7 pin NEMA and Lucy Zedon S55 photo-electric 3 pin NEMA cell with switch output of 50/50 lux. The luminaire shall be pre-programmed to dim to 50% light output from midnight to 05.30am.
 5m hinged galvanneal steel lighting column and post-top mounted units
 Schneider Ampora Mini 3 LED WWS626040/4701/01 18m LED luminaire finished black (RAL 9005) with Philips Xitanium driver, 7 pin NEMA and Lucy Zedon S55 photo-electric 3 pin NEMA cell with switch output of 50/50 lux. The luminaire shall be pre-programmed to dim to 50% light output from midnight to 05.30am. Arrow denotes direction of column fall.
 FOR FULL STREET LIGHTING DESIGN AND CONSTRUCTION INFORMATION REFER TO CAPTA DRAWINGS GC3346-CAP-13-XX-DR-E-1201 & GC3346-CAP-13-XX-DR-E-1202

Legend
 Sewer 225mm
 Sewer 150mm
 Existing Severn Trent Foul Sewer
 Existing Private Surface Water Sewer
 Existing 12000 Private Surface Water Culvert
 Adoptable Foul Sewer & Manhole (S104 - refer to manhole schedule for chamber size)
 Adoptable foul drainage level
 Private Surface Water Sewer & Manhole (Refer to manhole schedule for chamber size)
 Surface water drainage invert level
 Private storm cell attenuation sized to accommodate flows up to and including the 1 in 100 year storm event (100+30% attenuation is in basin above)
 Private foul drain (1000' unless shown otherwise)
 Private foul inspection chamber <3.0m deep with restricted access depths over 1.2m (700mm deep unless noted)
 Private surface water drain (1000' unless shown otherwise)
 Private surface water inspection chamber <3.0m deep with restricted access depths over 1.2m
 Ridding eye (450mm deep unless noted otherwise)
 Drive Gully
 Channel / Aco drain or similar approved
 Road gully & connection
 FF Level
 Car Port slab level (indicates the level at the access to the car port, the slab is to be laid with a minimum 50mm longitudinal fall)
 Proposed spot level
 Existing spot level
 Proposed fall and gradient
 Underbuild
 Tanking
 Tanked retaining wall
 Retaining Wall
 Drainage grip (300mm wide 700mm deep fitted with 550mm wrapped pea shingle and topped with 150mm top soil)
 Overland flow/flood avoidance route
 Roof protection area within development taken from architect's layout
 Buff coloured blistered tactile paving
 Corduroy tactile paving
 Broan Swansons steel ball with reflective strip
 Diagram 1062 750 wide and 1800mm long
 Junction road marking
 Diagram 1003
 Diagram 1000

SEWER ADOPTION NOTES
 1. ALL WORKS FOR ADOPTION UNDER A SECTION 106 AGREEMENT SHALL BE COMPLETED BY THE NATIONAL WATER COURSE BEFORE 'TENDERS FOR ADOPTION' (6TH EDITION, THE REQUIREMENTS OF SEVERN TREATMENT WATER (STW) AS THE STATUTORY SEWERAGE SYSTEM AND THE CIVIL ENGINEERING SPECIFICATION FOR THE WATER INDUSTRY (CESW) 6TH EDITION AND STW ANCHORS TO CESW).
 2. A SECTION 106 APPLICATION TO CONNECT MUST BE MADE TO STW. THE DEVELOPER SHALL OBTAIN STW APPROVAL PRIOR TO CONNECTION. THE WORKS MAY ONLY BE UNDERTAKEN BY A STW HEALTH & SAFETY APPROVED CONTRACTOR. AN ACCREDITED CONTRACTOR BY THE SEVERN PLANNING FEDERATION WILL BE USED TO LAY ANY ADOPTABLE PLASTIC PIPES. A COPY OF THE ACCREDITATION CERTIFICATE TO BE SUPPLIED TO STW BEFORE ANY ORDER IS PLACED OR WORK COMMENCES ON SITE.
SEWER ADOPTION NOTES
 1. THE PLANNING DESIGN AND CONSTRUCTION OF SEWERS SHALL BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 6TH EDITION.
 2. MINIMUM FOUL SEWER SIZE 150mm DIAMETER (IF LESS THAN TEN HOUSES OR EQUIVALENT) CONNECTED, MINIMUM FOUL SEWER SIZE 150mm DIAMETER OR MORE THAN TEN HOUSES (OR EQUIVALENT) CONNECTED.
 3. SURFACE WATER MINIMUM CROSSING = 1/2 PIPE DIAMETER.
 4. THE MINIMUM SIZE OF SEWER WHERE CHAIN BARS, SAFETY CHAINS OR OTHER SAFETY DEVICES ARE REQUIRED IN MANHOLES SHALL BE 150mm DIAMETER.
 5. MINIMUM COVER BETWEEN TOP OF PIPES AND GROUND LEVEL.
 6. GREENSPACES SPACES AND ADOPTATIONAL 9.5m.
 7. HIGHWAYS (INCLUDING FOOTWAYS) 1.5m.
 8. ALL TYPE 1 AND 2 MANHOLES SHOULD HAVE A CONCRETE SUBGRADE. CONCRETE FINISHES SHALL BE SEALED USING 'THERMOPAST' AND LETTERS EYES COLOURED WITH HIGH VISIBILITY MARKER.
 9. COMPLIANCE WITH HEALTH AND SAFETY MATTERS ON ANY PROPOSED MANHOLE IS VOLUNTARY AND A PERMIT TO ENTER A CONFINED SPACE IS REQUIRED WHEN CONNECTING SITE DRAINAGE TO THE EXISTING PUBLIC SEWERAGE SYSTEM. A PERMIT TO ENTER A CONFINED SPACE WILL BE OBTAINED FROM STW PRIOR TO WORKS COMMENCING ON ANY PUBLIC SEWERAGE SYSTEM.
 10. WHERE THE PROPOSED SITE DRAINAGE CONNECTS TO THE PUBLIC SEWERAGE SYSTEM EITHER BY NEW JOINTION, NEW MANHOLE OR AT AN EXISTING MANHOLE OR AT AN EXISTING MANHOLE, IT WILL REQUIRE THE SUPERVISION OF AN APPLICATION FOR SEWER CONNECTIONS FROM STW PRIOR TO WORKS COMMENCING.
 11. 60 COVER AND FRAMES SHALL BE SUCRETE BORN WITH A MINIMUM SQUARE OPENING OF 675x675mm. COVERS SHALL BE DOUBLE TRIANGLE FOR 675mm SQUARE OPENINGS AND BE FINISHED WITH LOOSE BOLTED CONNECTIONS. TYPICAL FRAMES ARE 150mm DEEP BUT IN ALL CASES THE FRAMES SHALL COMPLY WITH STW.
 12. PROPOSED ADOPTABLE SEWERS ARE ONLY PERMITTED TO HAVE OTHER SEWER/GULLY CONNECTIONS AND OTHER SERVICES LAYED AT AN ANGLE OF BETWEEN 45° AND 90° ACROSS THE LINE WITH A VERTICAL CLEARANCE IN EXCESS OF 300mm.
 13. ALL SEWERWORK TO BE WIRE MARKED BY BS1 OR CERTIFIED BY EQUAL INSPECTION AUTHORITY.
 14. RED COLOURED PLASTIC MARKER DATE AT LEAST 150mm WIDE SHALL BE LAID AT A MINIMUM OF 200mm ABOVE THE SURFACE OF THE PIPES. THE DATE SHALL BE PRINTED WITH THE WORDS 'DRAINAGE SEWER' IN BOLD CAPITAL LETTERS THROUGHOUT ITS LENGTH AND AT INTERVALS NOT EXCEEDING 100mm AND SHALL INDICATE THE CORROSION RESISTANT TRACING SYSTEM FOR NON-METALLIC PIPES.
 15. ALL WORKS TO BE NOTIFIED UNDER THE SECTION 106 AGREEMENT SHALL BE INSPECTED BY STW IN ACCORDANCE WITH THEIR REQUIREMENTS (FOUL SEWERS).
 16. REFER TO LONGITUDINAL SECTIONS FOR DETAILS OF PIPE SIZES, INVERT LEVELS, ETC.
 17. FINISHED PIPE MATERIALS ARE:
 • POLYPROPYLENE - POLYPROPYLENE BUILDING PRODUCTS SIZE 150MM, 225MM AND 300MM. ALL ADOPTABLE SEWERS TO BE POLYPROPYLENE.
 • HDPE/HDPE - POLYPROPYLENE BUILDING PRODUCTS SIZE 400MM, 500MM, 600MM, 750MM AND 900MM.
 • WHELUITE - ASSET INTERNATIONAL SIZE 450MM TO 3000MM.
 18. ANY PROPOSED CHANGES TO THE MATERIAL MUST BE AUTHORIZED BY STW.
 19. SEPARATE REINFORCED PORTLAND CEMENT SHALL BE USED FOR ALL CONCRETES AND WORKS HAVING EQUAL OR GREATER STRENGTH OF 30MPa OR GREATER INCLUDING PRECAST CONCRETE PRODUCTS, UNLESS NOTED OTHERWISE.
 20. ALL WATER MANHOLES TO BE DARGED 'TW'. SURFACE WATER MANHOLES TO BE DARGED 'TW'.
HIGHWAY NOTES:
 1. ALL WORKS ARE TO BE CONSTRUCTED IN ACCORDANCE WITH THE HIGHWAYS AGENCY'S SPECIFICATION FOR HIGHWAY WORKS (CIVIL WORKS) 1994 AS AMENDED PUBLISHED BY THE STATUTORY OFFICE.
 2. ALL LEVELS RELATED TO THE SURVEY WHICH IS TO DRAINAGE DATA, DIMENSIONS NOT TO BE SCALED.
 3. STREET LIGHTING, ILLUMINATED TRAFFIC SIGNALS, SIGNS AND ASSOCIATED WORKS SHALL COMPLY WITH SPECIFICATION PROVIDED BY LOCALITIE AND DESIGN BY OTHERS. A COPY OF THE DRAWING SHALL NOT BE ACCUSED THE CLIENT FROM HIS RESPONSIBILITIES UNDER THE HEALTH AND SAFETY: THE CONSTRUCTION DESIGN AND MANAGEMENT REGULATIONS 2015. THE PRINCIPAL DESIGNER IS REQUIRED TO CONTACT PHG CONSULTING PRIOR TO PERMITTING THIS DRAWING TO BE USED IN CONNECTION WITH ANY CONSTRUCTION WORKS.



Code	Description	Quantity	Unit
M	1500mm x 1500mm x 150mm concrete manhole	108	TON
M	750mm x 750mm x 150mm concrete manhole	108	TON
F	0600mm x 0600mm x 150mm concrete manhole	108	TON
F	0450mm x 0450mm x 150mm concrete manhole	108	TON
H	1500mm x 1500mm x 150mm concrete manhole	108	TON
H	750mm x 750mm x 150mm concrete manhole	108	TON
F	0600mm x 0600mm x 150mm concrete manhole	108	TON
F	0450mm x 0450mm x 150mm concrete manhole	108	TON
D	1500mm x 1500mm x 150mm concrete manhole	108	TON
C	0600mm x 0600mm x 150mm concrete manhole	108	TON
A	1500mm x 1500mm x 150mm concrete manhole	108	TON
A	750mm x 750mm x 150mm concrete manhole	108	TON
A	0600mm x 0600mm x 150mm concrete manhole	108	TON
A	0450mm x 0450mm x 150mm concrete manhole	108	TON

Eden Stone POWER CONSULTING ENGINEERS
phg
 Edenstone Homes Ltd
 Whittle Square,
 Brockworth, Gloucester
 Engineering Layout
 Sheet 1
 TOR SJD Approval 1:250 @ A0
 Date: June 19 2021
 Date: June 19 2021
 Scale: 100-1 M