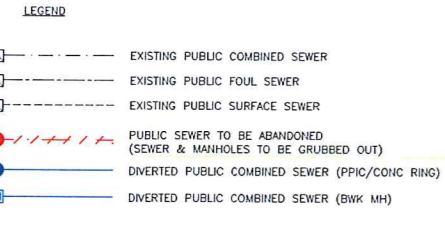


CDM - Risk

- Live Services through-out
- Awareness when excavating for drainage
- Working within public highway

MB DUCTILE IRON COVER SPECIFICATION  
 - DUCTILE IRON TO BSEN 124  
 CLIMBED BRICKHOUSE OR SIMILAR BS REF. MA-60 LIST No. 5055A-C DREADNAUGHT OR SIMILAR.  
 BEDDING CLASSIFICATIONS - SEE DETAILS  
 PUBLIC DRAINAGE BACKFILL CLASSIFICATIONS  
 TYPE A - BACKFILL FROM THE TOP OF THE SPECIFIED PIPE SURROUND OR PROTECTIVE CUSHION UP TO FORMATION LEVEL WITH GRANULAR SUB BASE TYPE 1 TO DTP. SPECIFICATION FOR HIGHWAY WORKS, CLAUSE 803 LAID & COMPACTED IN 150mm LAYERS.  
 TYPE B - BACKFILL FROM TOP OF SPECIFIED SURROUND/PROTECTIVE CUSHION WITH MATERIAL EXCAVATED FROM TRENCH, COMPACTED IN LAYERS NOT EXCEEDING 300mm THICK.  
 ALL CONCRETE TO BE CLASS 2 SULPHATE RESISTANT.  
 ALL WORKS TO BE IN ACCORDANCE WITH SEWERS FOR ADOPTION 6th EDITION.  
 BEDDING TO PUBLIC DRAINAGE PIPES:  
 WITHIN LANDSCAPED AREAS:-  
 FOR DRAINAGE WITH LESS THAN 750mm COVER TO THE CROWN OF THE PIPE, BEDDING & SURROUND TO BE CLASS Z.  
 FOR DRAINAGE WITH MORE THAN 750mm COVER, BEDDING TO BE CLASS B.  
 WITHIN ROADWAYS, FOOTWAYS & HARDSTANDING AREAS:-  
 FOR DRAINAGE WITH LESS THAN 1200mm COVER TO THE CROWN OF THE PIPE, BEDDING & SURROUND TO BE CLASS Z.  
 FOR DRAINAGE WITH MORE THAN 1200mm COVER, BEDDING TO BE CLASS S.

- NOTES:
1. NOT ALL EXISTING MANHOLES RECORDED ON TOPO SURVEY. SOME ARE BURIED AND MAYBE MISSED OFF SURVEY. DUE TO BLOCKAGES AND DEMOLITION RUBBLE CCTV SURVEY NOT CONCLUSIVE ENOUGH TO ESTABLISH EXACT DRAINAGE ROUTES.
  2. SLIT TRENCHES TO BE CARRIED OUT BY CONTRACTOR TO ESTABLISH EXACT DIVERSION CONNECTION.
  3. WHILST INSTALLING DIVERTING SEWERS & MANHOLES CONTRACTOR TO ALLOW FOR STUB CONNECTIONS INTO MANHOLES FOR ALL NEW PLOT DRAINAGE CONNECTIONS.
  4. ALL ABANDONED SEWERS AND MANHOLES TO BE GRUBBED OUT AND BACKFILL TO THE SPECIFICATION OF HIGHWAYS WORKS.
  5. ALL EXISTING CONNECTIONS TO EXISTING PUBLIC AND PRIVATE SEWERS TO REMAIN TO BE ADEQUATELY CAPPED OFF TO PREVENT DEBRIS ENTERING LIVE SEWERS.
  6. ALL MANHOLES TO REMAIN. COVER LEVEL TO BE ADJUSTED TO SUIT NEW FINISHED LEVELS. ALLOW FOR NEW MANHOLE COVER, MINIMUM C250 LOADING.
  7. DIVERTED PUBLIC SEWERS WITHIN DRIVEWAYS WITH LESS THAN 1.2m COVER TO SOFFIT TO BE CLASS Z CONCRETE PROTECTED.



**Adoptable Drainage**

1. All adoptable drainage works to be in accordance with the water authorities publication "Sewers For Adoption 7th Edition" as well as the approved drawings.
2. Precast concrete manhole rings to comply with the relevant provisions of BS5911: Part 200.
3. All brickwork to be Class B engineering complying with the relevant provisions of BS 3921. Concrete bricks maybe used if their specification is the same as Class B engineering bricks. Please seek approval from relevant water authority before using.
4. Manhole covers and frames shall comply with the relevant provisions of BS EN 124 and be of a non-racking, non-ventilating design.
5. Ladders that are required in Type 1 manholes are to comply with "Sewers For Adoption 7th Edition".
6. Concrete must be either C20 sulphate resistant portland cement with high strength concrete topping to the benching or C35 ordinary portland cement.
7. 150mm Concrete surround is required around pipes where the depth from finished surface to soffit of pipe is less than 1200mm. This may be reduced to 900mm within open space.
8. The location of existing drainage that is within close proximity to the proposed site works, which is not to be diverted, should be confirmed by the contractor and reported to the developer to ensure it corresponds to that shown on the engineering layout and that no proposed works are affected. The position, line and diameter of all existing drainage apparatus should be confirmed on site prior to the commencement of the works. Any discrepancies must be reported to the engineer immediately. The connection of foul and surface water drainage to the existing public sewer system shall be subject to the approval of the local sewerage undertaker. The contractor is expected to apply for relevant permits prior to commencing the work.
9. Roads and sewers contractor must inform water authority prior to works commencing
10. All construction is to be undertaken in accordance with the current adopting authorities current standard details and under the supervision of the clerk of works. It is the responsibility of the contractor to familiarize themselves with these standards and organize inspections.

**Existing Services**

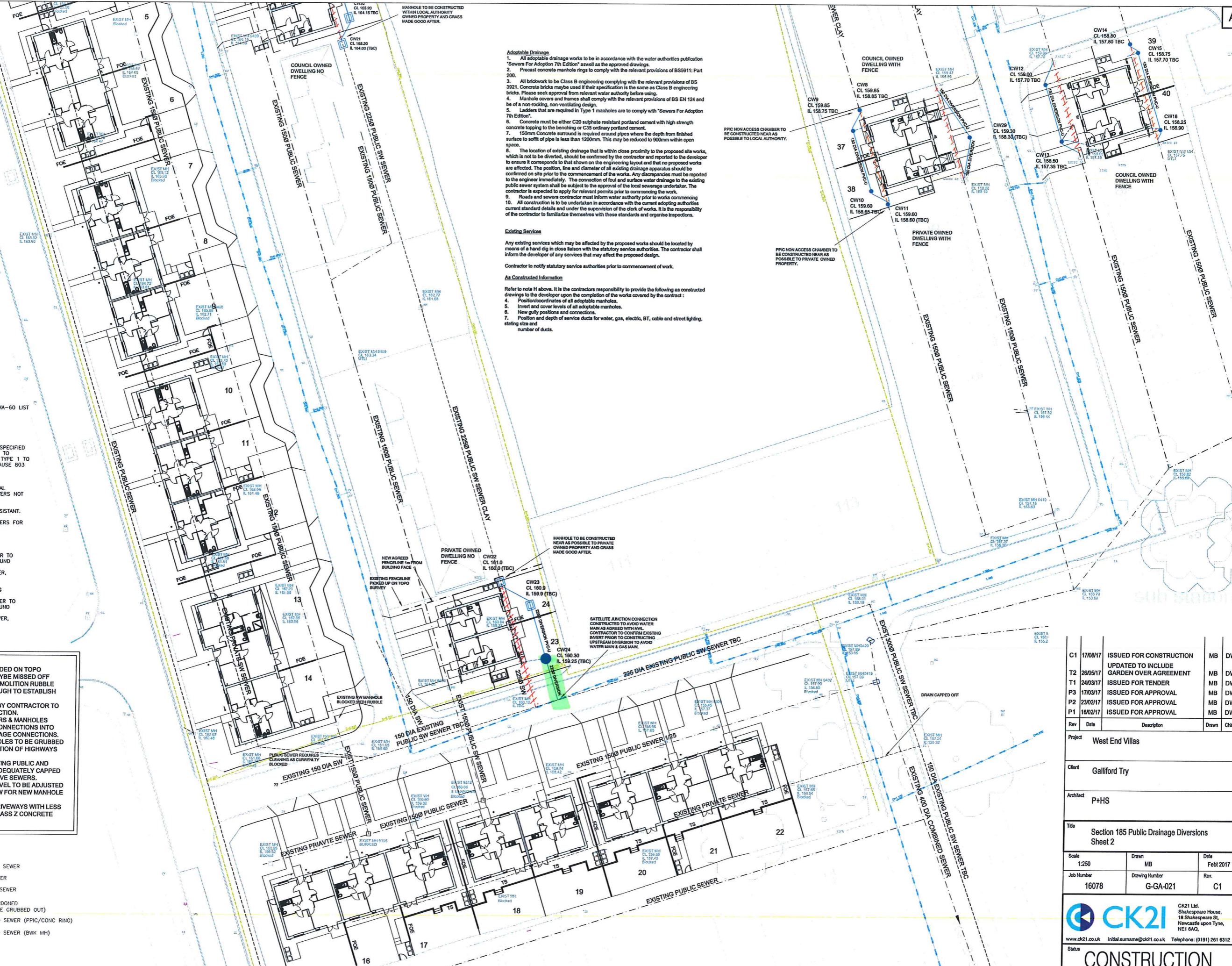
Any existing services which may be affected by the proposed works should be located by means of a hand dig in close liaison with the statutory service authorities. The contractor shall inform the developer of any services that may affect the proposed design.

Contractor to notify statutory service authorities prior to commencement of work.

**As Constructed Information**

Refer to note H above. It is the contractors responsibility to provide the following as constructed drawings to the developer upon the completion of the works covered by the contract:

1. Position/coordinates of all adoptable manholes.
2. Invert and cover levels of all adoptable manholes.
3. New gully positions and connections.
4. Position and depth of service ducts for water, gas, electric, BT, cable and street lighting, stating size and number of ducts.



Rev	Date	Description	Drawn	Child
C1	17/08/17	ISSUED FOR CONSTRUCTION	MB	DW
T2	28/05/17	UPDATED TO INCLUDE GARDEN OVER AGREEMENT	MB	DW
T1	24/03/17	ISSUED FOR TENDER	MB	DW
P3	17/03/17	ISSUED FOR APPROVAL	MB	DW
P2	23/02/17	ISSUED FOR APPROVAL	MB	DW
P1	16/02/17	ISSUED FOR APPROVAL	MB	DW

Project	West End Villas		
Client	Galliford Try		
Architect	P+HS		
Title	Section 185 Public Drainage Diversions Sheet 2		
Scale	1:250	Drawn	MB
Job Number	16078	Drawing Number	G-GA-021
Date	Feb 2017	Rev.	C1

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Status: **CONSTRUCTION**

— DIVERSION CONNECTION / PUBLIC FOOTWAY/HIGHWAY