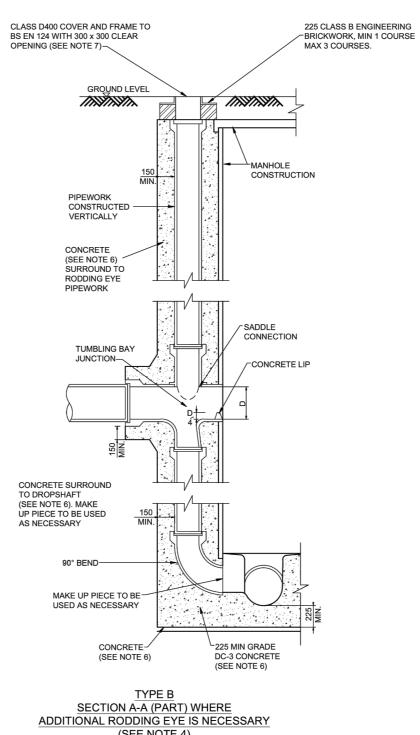
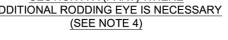
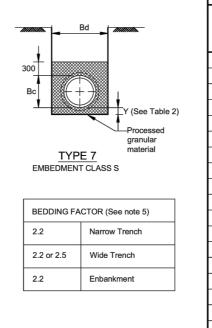


NOMINAL INT DIMENSION Y1





DIMENSION MAX PERMITTER



| PIPE DIA | EVEN TRENCH BOTTOM (MIN) | ROCK OR UNEVEN TRENCH BOTTOM (MIN) | GRANULAR MATERIAL | Z (MIN) | TRENCH WIDTH |
|----------|-----------------------------|---------------------------------------|---|---------|--------------|
| 150 | 100 | 200 | 10mm single sized or 14mm to 5mm graded | 100 | 750 |
| 225 | 100 | 200 | | 100 | 825 |
| 300 | 100 | 200 | | 100 | 925 |
| 375 | 100 | 200 | 14mm single sized or 14mm to 5mm graded | 100 | 1050 |
| 450 | 150 | 200 | | 150 | 1150 |
| 525 | 150 | 250 | | 150 | 1200 |
| 600 | 150 | 250 |]- | 150 | 1350 |
| 675 | 150 | 250 | | 225 | 1450 |
| 750 | 225 | 300 | | 225 | 1500 |
| 825 | 225 | 300 | | 225 | 1600 |
| 900 | 225 | 300 | | 225 | 1900 |
| 975 | 225 | 300 | 20mm single sized or 20mm to 5mm graded | 300 | 2000 |
| 1050 | 225 | 300 | | 300 | 2100 |
| 1125 | 225 | 300 | | 300 | 2200 |
| 1200 | 250 | 350 | | 300 | 2300 |
| 1350 | 375 | 450 | | 375 | 2500 |
| 1500 | 375 | 450 | | 375 | 2700 |
| 1650 | 375 | 450 | ٦J | 450 | 2800 |
| 1800 | 375 | 500 | | 450 | 3100 |
| 1950 | 400 | 500 | 40mm single sized or 40mm to 5mm graded | 525 | 3200 |
| 2100 | 425 | 650 | | 525 | 3400 |
| 2400 | 450 | 675 | | 600 | 3700 |

TABLE 2

Embedment Dimensions for Rigid Pipes

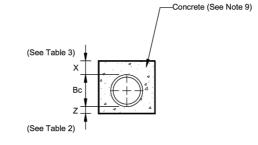
PROCESSED

DIMENSION Y2

| GEI | NERAL NOTES |
|-----|-------------------------------|
| 1. | All dimensions in millimetres |

- The pipe embedments indicate the minimum trench dimensions which should be assumed for initial design purposes; the minimum trench widths shown will usually be sufficient to allow adequate compaction of the embedment naterial All pipework should be designed in accordance with BS EN
- <u>1295-1</u> 3. For narrow trenching techniques the minimum trench width may be reduced, providing that the design indicates that the reduced embedment width is sufficient to support the
- pipework 4. Where selected excavated material may migrate into the native soil or vice versa, geotextile membrane shall be
- provided around the embedment material . Bedding factors are derived from "A guide to design loadings for buried rigid pipes" and IGN 4-11-02 "Revised bedding factor for Vitrified Clay drains and sewers" 6. Embedment dimensions shall be in accordance with Table 2
- PROCESSED GRANULAR MATERIAL: Processed granular material shall comply with WIS 4-08-02.
- The grading of processed granular material shall be as 8. Limestone material shall not be used where the native ground or ground water is acidic, ie pH of 6 or less
- CONCRETE EMBEDMENTS & SURROUND: 9. Gen 3 concrete shall be used in non aggressive ground. Elsewhere the cement type and mix design should be selected to suit the sulphate content and pH of the ground an groundwater
- 10. Concrete surround details shall be adopted where cover to pipework is less than 1.2M and where it is necessary to protect the pipework from traffic loading 11. Pipes to be bedded/surrounded with concrete shall be
- supported on precast concrete setting blocks, the top face of of each block being covered with two layers of compressible packing
- 12. PVC and PE pipes shall be wrapped with a layer of plastic sheeting complying with UU CESWI 6 class 2.95 13. GRP pipes shall be wrapped with compressible filler material
- 100mm wide at the end of the end of the concrete surround 14. Compressible filler shall comply with UU CESWI 6 class 2.19

Concrete Sorround



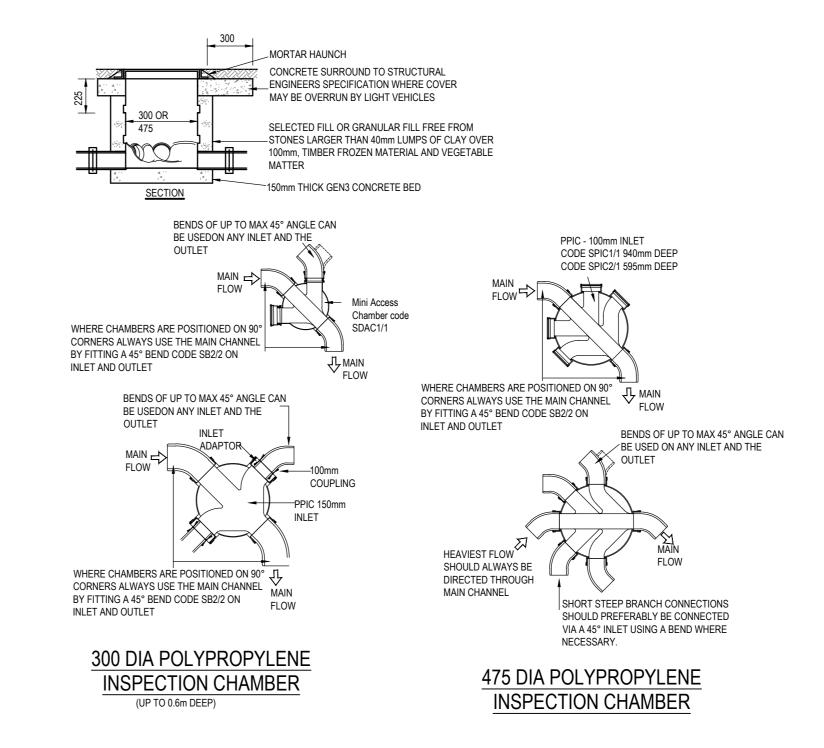
| TABLE 3 Thickness of Compressible Fill (L) | | | | | | |
|--|--------------|--------------------------------|--|--|--|--|
| Nominal Internal Pipe Dia | Dim. X mm | Compressible Filler L mm | | | | |
| <400 | 160 | 18 | | | | |
| 400-700 | 200 | 36 | | | | |
| 725-1200 | 300 | 36 | | | | |
| >1200 | 300 | 54 | | | | |

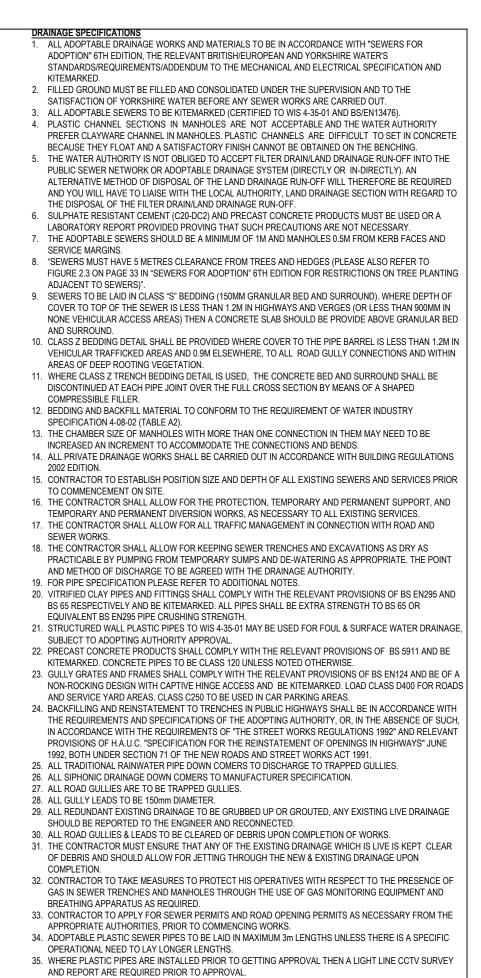
FLEXIBLE JOINT DETAIL FOR CONCRETE BED AND CONCRETE SURROUND SPIGOT AND SOCKET PIPES

✓ 45° JUNCTION ON MAIN → DRAIN RUN

Compressible -

CONCRETE SURROUND (CLASS Z)





SUBJECT TO LOCAL AUTHORITY AND WATER AUTHORITY APPROVAL

