Central Coast Council Development Engineering Design Drawing Notes

Gravity Sewer Construction Notes

- Construction of gravity sewer lines shall be in accordance with the Sydney Water Edition of the "Sewerage Code of Australia" WSA02-2002 (Version 4) with Central Coast Council Supplements. These notes specify Central Coast Council's particular requirements in these documents in relation to the construction of gravity sewer mains and associated maintenance structures. Central Coast Council Supplements can be found on Council's Water and Sewer Development website.
- 2. Connection of new sewer reticulation mains to existing Council reticulation mains shall be carried out by the contractor unless specified otherwise by Council. Contractor is to submit a methodology to Council's Water and Sewer Development Engineer at least 10 business days prior to scheduled cut in.
- 3. The Developer's contractor shall be responsible for the care and maintenance of all existing utilities and services, to the satisfaction of the relevant Authority or owner. This may include arranging or performing relocation, temporary diversion or support of the service. All cost incurred by the Developer's contractor in verifying the location of utilities and services, providing for their care and maintenance shall be borne by the contractor.
- 4. Pipe for gravity sewer mains shall generally be flexible pipes with rubber ring joints. Pipe must be a minimum class SN8. Pipes in mine subsidence areas shall not be greater than 3m in length, shall incorporate flexible joints and have a smooth external surface. Pipes to be used in mine subsidence areas shall be certified by the pipe supplier to be suitable for the predicted ground strains as advised by the Mine Subsidence Board.
- 5. Pipe embedment shall be as specified on the drawings and in accordance with WSA standard drawings SEW-1200 series and Central Coast Council's Supplement to the WSA Code document. Pipe embedment material shall be single sized aggregate and comply with WSA-02, Clause 20.3 Embedment Materials. Should ground conditions encountered not be suitable for the specified embedment then the embedment type shall be changed to suit the site conditions. Trench fill under areas of existing road pavement shall be 15:1 stabilised sand in accordance with section 4.9 of Central Coast Council's "Civil Construction Specification"
- 6. Carry out field compaction testing in accordance with WSA-02, Clause 22.3 Compaction Testing. Submit copy of test documentation to council as part of acceptance testing.
- 7. Requirements for trench stops and bulkheads shall be as specified on the design drawings and in accordance with standard drawings SEW-1206 and SEW-1207-V. For pipes up to DN300 with excavations greater than 1.5m in height, trench stop and bulkhead can cease at height of first benching.
- 8. All property connections shall be in accordance with the "Buried Interface Method" as described on standard drawing SEW-1151 and Central Coast Council's supplement to the WSA Code document.
- 9. Maintenance Holes (MH) shall be constructed in accordance with SEW-1300 series standard drawings and Central Coast Council Supplement to the WSA Code document. The use of internal drops as shown on standard drawing SEW-1306-V will only be allowed if specified on the design drawings or specific approval has been obtained from Central Coast Council. In regards to standard drawing SEW-1308-V, covers must be metal, bolted down and watertight. Rocker pipes (shorts) of 600mm length will be required on all pipe lines at manholes for all pipe types.
- 10. Select component maintenance hole lengths to minimise the number of joints. First riser component from base to be between 300mm and 600mm in height. Maximum four (4) riser shafts to be used for maintenance holes up to six (6) metres height (excluding taper). Pre-cast maintenance hole joints to be sealed with approved protective wrap or other approved product to further assist against infiltration and tree root intrusion.
- 11. In areas subject to surcharge, water charged ground and flooding and / or where MHs are specified, only cast in situ or polypropelene maintenance holes shall be used.
- 12. Maintenance Chambers (MC) where shown on the design drawings shall be constructed in accordance with WSA standard drawings SEW-1314-V, SEW-1315, SEW-1316-V and SEW-1317 and

Central Coast Council Supplement to the WSA Code document . MS's or TMS's shall not be used. No high level sewer is to enter an end of line Maintenance Chamber.

- 13. Acceptance testing of sewer mains shall be arranged by the Contractor. Acceptance testing shall be in accordance with WSA-02 Part 3 Section 22 and include:
 - a. Compaction testing of trench fill
 - b. Pressure testing or vacuum testing of pipelines
 - c. Vacuum testing of maintenance holes
 - d. CCTV inspection
 - e. Deflection (ovality) for mains >300mm diameter.
 - f. Property sewer connection diagram (line sheet)
- 14. Surface restoration and pavement restoration shall be in accordance with the requirements of WSA-02, Section 25 Restoration.
- 15. Clarification of construction requirements should be obtained from Council's Water and Sewer Development Engineer where requirements are not clear on the approved design drawings, these notes and/or the Sydney Water Version of WSA-02 (Version 3) and/or Central Coast Council Supplement to the WSA Code document.
- 16. Work as Executed (WAE) drawings shall be prepared using the Council approved design drawings and in accordance with Central Coast Council's Work as Executed guidelines (located on Council's Water and Sewer Development website). Submitted plans must be in AutoCAD digital format and PDF (no red pen markups). In addition to providing WAE level information, location and junction information shall be provided. WAE plans to be submitted to
- waterandsewerworks@centralcoast.nsw.gov.au maximum one month post construction for review.
 17. Evidence of the Contractor's experience and references from other Water Agency type organisations is required to be provided to Central Coast Council prior to a Contractor being accepted as suitable to construct the required sewerage works. All Contractors shall carry appropriate levels of Public Liability Insurance.
- 18. In the event a shutdown of a sewer rising main is required, consult Council's Water and Sewer Development Engineer. Special conditions will apply including maximum shutdown time and duration. Constructor will be required to provide a methodology prior to commencing works. Sewer rising main valves are clockwise closing.

EROSION AND SEDIMENT CONTROL NOTES

- 1. Disturbed areas to be kept to a minimum.
- 2. Control clean water from above the site, through the site or around the site.
- 3. Keep clean water separate from dirty water.
- 4. Conserve all topsoil, stockpile and protect for re-use on site.
- 5. Protect all disturbed areas from erosion.
- 6. Minimise sedimentation.
- 7. Maintain all erosion and sediment control measures until complete rehabilitation is achieved.
- 8. Erosion/Sediment Control measures to conform with Erosion and Sediment Control Plan for Subdivision works.
- 9. WARNING

Unless notified to the contrary in writing, the applicant shall be held responsible for any breaches of the Protection of Environment Operations Act 1997. Pease note: Failure to implement or maintain appropriate erosion/sediment control measures is a breach of the Act. Such a breach is liable for a on-the-spot fine and/or penalty.