

# ENVIRONMENTAL AUDIT REPORT, 1-3 HIGH STREET YARRAVILLE - PHOTOS



1. Site collection prior to remediation (15/5/01)



2. Excavation of test pits to identify edge of quarry (10/4/02)



3. Excavation of test pit to identify edge of quarry (10/4/02)



4. Test pit showing edge of quarry (10/4/02)



5. Excavation of test pit showing basalt at edge of quarry (10/4/02)



6. Stockpile used for cap construction (6/5/02)

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7. Stockpiled vegetation and soil removed during surface scrape (15/4/02)



8. Clean area formed for concrete panel fabrication (15/4/02)



9. Preparing subgrade (forming to starting levels) (6/5/02)



10. Testing of test pad used to confirm performance of clay (7/5/02)



11. Excavation to determine edge of quarry beneath High Street (7 May 2002)



12. Exposing quarry edge beneath High St (15/5/02)

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13. Determining quarry edge beneath High St (15/5/02)



14. Piling for construction of retaining wall along High St (18/6/02)



15. Retaining wall along High St and capped area beneath High St (16/7/02)



16. Retaining wall and cap construction along southern boundary (31/7/02)



17. Trench excavated to allow clay to be installed around services (31/7/02)



18. Construction of gas ventilation along service trench (31/7/02)

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19. Installation of clay cap (including gas vent layer and geosynthetic fabric) (31/7/02)



20. Compaction of clay cap (31/7/02)



21. Minor surface cracking in finished clay cap (cracks surficial only) (31/7/02)



22. Use of strip drain to construct gas vent layer in trenches (9/8/02)



23. Typical profile beneath cap (9/8/02)



24. Finished surface on western boundary (no clay cap) (9/8/02)

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25. Clay capping on western segment of site (9/8/02)



26. Compaction of clay using smooth drum (pad foot roller used to key in layer) (13/8/02)



27. Typical fill profile (20/8/02)



28. Clay cap installed within trench (service trenches later excavated in clay) (20/8/02)



29. Retaining wall, cap and finished surface on southern boundary) (20/8/02)

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30. Horizontal gas collectors in gas vent layer beneath super market (20/8/02)



31. Strip drain material used to construct gas vent layer in trenches (20/8/02)



32. Compacted clay within trenches (20/8/02)



33. Compaction of clay lift using vibrating drum roller (20/8/02)



34. Scarifying surface of compacted clay layer prior to placement of next lift of clay (20/8/02)



35. Wetting of scarified surface of clay prior to placement of next lift of clay (20/8/02)

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36. Placing next lift of clay for compaction (20/8/02)



37. Compaction density testing of compacted clay (20/8/02)



38. Collection of sample of compacted clay for testing (20/8/02)



39. Scraping edge of clay layer to check for lamination (20/8/02)



40. Checking for lamination in compact clay profile (no evidence found) (20/8/02)

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41. Excavation of service trench along southern boundary (25/9/02)



42. Typical cracking around timber pile following driving of pile (12/2/03)



43. Typical pile showing gap and cracking near surface (25/9/02)



44. Excavation for construction of pile cap (note cracking and gap around pile reduced after excavation – ie cracking appears surficial) (25/9/02)



45. Bituminous paint to protect piles (25/9/02)



46. Placement of expanding grout around piles to seal gap (25/9/02)

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47. Steel reinforcement for pile cap above pile sealed with expanding grout (25/9/02)



48. Finished pile cap (25/9/02)



49. Piles beneath supermarket (25/9/02)

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50. Excavation of service trenches (for placement of clay) in eastern portion of the site (28/10/02)



51. Sewer trench being excavated in compacted clay beneath supermarket (14/11/02)



52. Services installed in trenches beneath supermarket where cap was locally thickened (28/10/02)



53. Finished clay cap and pile caps beneath supermarket (28/10/02)



54. Trench to locate quarry edge east of Grid 11 (yellow line marks quarry edge) (28/10/02)



55. Stockpiled clay from "Carlton" source (14/11/02)

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56. Pile adjacent to service trench (note limited depth of any cracking or gap around pile) (14/11/02)



57. Stockpiled contaminated soil from trench excavations (14/11/02)



58. Test pits used to sample soil along eastern boundary of site (near location of burial of contaminated soil on-site) (14/11/02)



59. Placing clay in major service trench along southern boundary (14/11/02)



60. Construction of gas vent layer in trench in east section of site (14/11/02)



61. Pouring slab for shopping centre (14/11/02)

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62. Carlton construction site (14/11/02)



63. Clay from Carlton construction site arriving on-site (14/11/02)



64. Compacted clay at Carlton construction site (14/11/02)



65. Construction of gas vent layer and clay cap on east section of the site (14/11/02)



66. Pouring concrete slab in supermarket area (18/12/02)



67. Construction of supermarket (12/2/03)

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68. Piling rig and timber piles (12/2/03)



69. Major service trench excavated into thickened clay (12/2/03)



70. Placement of Tensar (4/4/03)



71. Drilling for groundwater monitoring bore within quarry (5/4/03)



72. Groundwater monitoring bores on southern boundary (11/6/03)



73. Gas vent assembly (17/6/03)

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74. Bottom of gas vent assembly (17/6/03)



75. Installed gas vent (not sealed) (17/6/03)



76. Gas vents installed within garden area (4/4/03)



77. Gas vent pipework at rear of specialty shops (connected to lateral vents beneath building) (11/6/03)



78. Finished gas vent (4/9/03)



79. Gas vent stacks (4/9/03)

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80. Gas vents stacks (4/9/03)



81. Finished gas vent in carpark (21/10/03)



82. Provision for sampling from gas vents from beneath building (21/10/03)



83. Rotary vents connected to gas ventilation layer (21/10/03)



84. Survey point to measure settlement (21/10/03)



85. Subsurface chamber to monitor any gas above clay layer (21/10/03)

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86. Finished groundwater monitoring bore (21/10/03)



87. General site view (21/10/03)



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