

# Beef cattle feedlots: design and construction

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### **CONTENTS OF SECTIONS**

This manual takes the feedlotter and consultants through the stages of selecting a suitable site, designing the feedlot and its facilities, their construction and the overall management of the project.

In this electronic version, 48 sections are divided into four main subject groups. Each section provides the relevant technical information, and is well illustrated with figures and photographs.

Each section can be selected as required with a click of the computer mouse. High resolution pdfs allow the reader to zoom into any image to investigate detail.

#### Site selection

- 1. <u>Site selection</u>
- 2. <u>Site layout</u>
- 3. <u>Water supply and sources</u>
- 4. <u>Water requirements</u>
- 5. <u>Water quality</u>
- 6. <u>Energy supply and source</u>
- 7. <u>Site investigations</u>
- 8. <u>Earthworks</u>

#### Site design

- 9. Overall pen layout
- 10. Pen and drainage systems
- 11. <u>Sedimentation removal systems</u>
- 12. Holding pond design
- 13. <u>Access and internal roads</u>
- 14. <u>Water reticulation system</u>
- 15. Fences, gates and lanes
- 16. <u>Shade</u>
- 17. Pen and road surfaces
- 18. Pen and road stabilisation
- 19. Feeding systems
- 20. <u>Water trough design and</u> <u>sewer systems</u>

#### **Feedlot facilities**

- 21. Livestock handling
- 22. Receival and dispatch facility
- 23. Processing facility
- 24. Building over processing facility
- 25. <u>Cattle crushes</u>
- 26. Office and amenities
- 27. Truck weighbridges
- 28. Feed preparation and commodity storage
- 29. Grain processing equipment
- 30. Grain storage and handling
- 31. Commodity storage
- 32. <u>Silage</u>
- 33. Hay storage
- 34. Liquid feedstuffs
- 35. Feed mixing and delivery
- 36. <u>Hospital and recovery pens</u>
- 37. <u>Stables</u>
- 38. Fuel and gas storage
- 39. <u>Chemical storage</u>
- 40. Mechanical workshops
- 41. Cattle wash facilities
- 42. Vehicle wash down
- 43. Automatic weather stations
- 44. Covered housing systems

#### Project management

- 45. Feedlot construction delivery
- 46. Design drawings and technical specifications
- 47. Project tendering
- 48. Project management