



GRAEME SMITH CONSULTING

Hydroponic Consultancy Services

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Project Management Proposal for '????'

Graeme Smith Consulting is pleased to offer '????' the following services to deliver a commercial hydroponic production facility at ???, ??.

Our expertise in Project Management will assist to deliver your project on time, on budget and to agreed technical specifications.

Project supervision

During the whole building process we will have a project manager or representative on site. They will be in charge of day to day business, and will coordinate the smooth operation of the project. This supervisor will be generally be on site from the beginning till the end of the project.

The services identified below may include either full responsibility (includes planning, design, delivery, funding, commissioning) or basic facilitation (includes planning, liaison, commissioning), and such service levels shall be agreed upon prior to contract signing.

Services offered include but are not limited to the following:

1. Liaise with client on provision and timing of essential services: utilities - electric, water, natural gas, coal, LPG, waste oil, etc.
2. Liaise with client on provision and timing of essential permits – EPA, municipal, DPI, DEH, etc.
3. Management of deposits and staged payments to suppliers of goods & services. Confirm staged accounts for payments tied to job completion to agreed specifications.
4. Negotiation of equipment hires prices and availability.
5. Oversee casual labour hire and works foreman.
6. Oversee civil engineering for site preparation.
7. Creation of necessary technical site drawings
8. Negotiate concrete prices for project (delivered to the site.)
9. Oversee construction of foundations and plinth wall (inc concrete loads delivered.)
10. Locate and oversee preparation of demurrage site for delivery of building components.
11. Oversee pad preparations and construction of tank farm for fresh water, nutrient return, U.V. clean nutrient, etc.
12. Oversee the construction of the plant services area.

13. To conduct weekly site meetings and to generate written reports.
14. To ascertain the temporary power requirements for the construction stage and engage the appropriate equipment to meet those needs.
15. To administer induction training to all staff and workers entering the site. (inc site safety, responsibilities, accreditations, workplace inspections checklists and OH&S awareness.
16. To administer an on site safety protocol covering state OHS regulations and to appoint first aid officers and first aid supplies.
17. Ensure appropriate site signage is catered for.
18. To ensure that at all times safety equipment, (PPE, hats, vests etc) are worn by all staff while on site.
19. To source and maintain on site staff lunch rooms, toilets and site offices.
20. To ensure any control panels supplied to the site are wired to the appropriate Australian Standard. (eg. Dutch panels for the boiler and generator)
21. To consult with client the storm water storage or removal from the site, and the removal or storage of any discharge of spent nutrient that may be required from time to time.
22. To site WorkCover documents from all service providers on site and oversee any public risk insurance claims that may arise.
23. To check all contracts and flow charts to identify any discrepancies or omissions.
24. Negotiate best prices for all hire equipment and manage a flow chart to reduce down time for any on site equipment.
25. Negotiate engineering drawings for reinforced concrete pad for heat storage tank.
26. Laying of the boiler/fertigation shed floor to cure ready for boiler placement and leaving room for the clear access to the glasshouse to restrict damage to the concrete. Floor to be reinforced under the boiler footprint. Drain pit to waste required for boiler draining and Co2 condensate at the North end of boiler. (Check for access under the concrete for pipe work that may be required for stage 1.)
27. Site preparation and laying of the heat storage tank reinforced concrete pad with certified drawings.
28. Oversee construction of glasshouse and boiler/fertigation room with construction supervisor.
29. Glazing storage, waste glass removal (maxi skips) & liaise with glazing supervisor to install glass roof, walls and divider wall.
30. Design and oversee construction of office and partition walls in boiler/fertigation shed.
31. Oversee construction of heat storage tank on cured concrete pad.
32. Supervise placement of the boiler using crane from storage tank hire.
33. Oversee installation of all mechanism after greenhouse is constructed.
34. Oversee the time line and site preparation for the installation of the thermal screens and check material quality and workmanship.
35. Oversee correct placement and installation of air circulation fans.

36. Oversee placement and installation of electrical/sensor cable trays in greenhouse.
37. Review plans and drawings of the trenching, oversee the installation of the Co2 pipes, nutrient pipes, nutrient return pipes, stormwater pipes, condensate pipes and hand watering system pipes back to the control room and the tank farm.
38. Oversee electrical and sensor wire installation in the greenhouse cable tray from the switch board and control panels to the vent and screen motors, fans, sump pump sites and greenhouse control panels.
39. Oversee the installation of the support wires, fog lines, header pipes, tanks, fresh water connection to the filters and pump sets.
40. Plan and supervise the concrete pathway in the glasshouse, the service and cool room area slab and the last panel in the boiler/fertigation room floor.
41. Oversee the nominated electrician to wire in the switch boards, control panels, vent and screen motors, circulation fans, greenhouse 10amp electrical supply plugs, sump pump plugs, safety lights on pathway, exit signs, electric door controls, security door controls, service and staff area lights and G.P.O. as required, boiler/fertigation room lights and G.P.O. as required and all hard wiring to equipment as required.
42. Prepare plans for same if required. (inc total electrical system loads)
43. To plan and integrate the laser levelling of the glasshouse floor ready for the laying of the white weed mat.
44. Oversee the installation of the floor heating pipes on speck hooks, header pipes, monorail pipes, boiler room pipe work, Co2 unit, mixing sets, (manual transport of the pipes into the glasshouse to protect the floor)
45. Oversee the installation of the white weed mat or plastic floor.
46. Oversee the installation of the growing system gutters, the connection of the drainage system, the fertigation feeding system and drippers, (check if centre or North end drain point)
47. Negotiate the installation of the service area fire service. (if required)
48. Oversee the installation of the nutrient mixing units, pre mixing units and the hand watering system.
49. Climate system connection, computer system connection.
50. Commissioning of all aspects of the system.

nb. Pricing includes travel + accommodation to cover a project timeline of ? weeks. *Graeme Smith Consulting* reserves the right to requote if the agreed time line is altered.