

澳大利亚，昆士兰州，Stamp住宅 / Charles Wright Architects



建筑师： Charles Wright Architects

地点： 澳大利亚昆士兰州

建筑师负责人： Charles Wright

项目团队： Charles Wright, Richard Blight, Justine Wright, Darcy Shapcott

项目年份： 2013

摄影： Patrick Bingham Hall



结构工程: G&A Consultants Pty Ltd
土木工程: McPherson MacLean Wargon Chapman
液压系统: Gilboy Hydraulic Solutions



机电工程: MGF Consultants
工料测量师: Turner & Townsend
景观设计师: Andrew Prowse
承包商: PD Builders



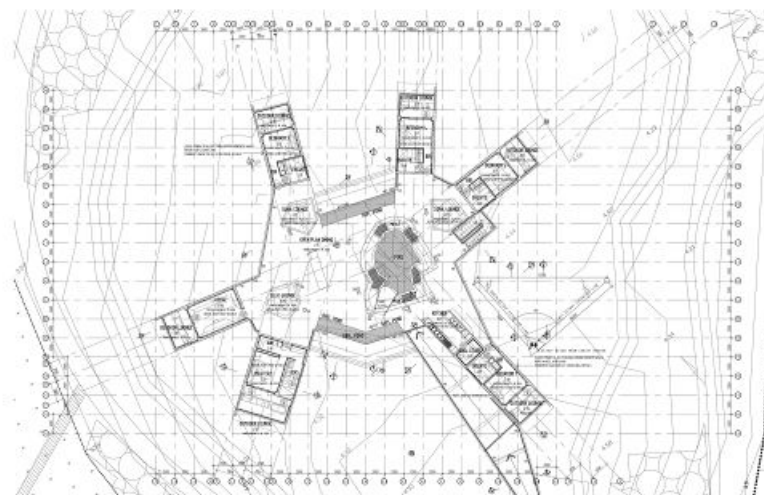
本案项目的客户找到CWA事务所，希望他们能为FNQ海滨热带雨林边缘的一块脱离城市网格的环境敏感型基地提供一个碳中性（运行时）解决方案。客户的目的不仅是要一座精心设计的建筑，还希望建筑能使基地大部分区域成为自然设施，重新在周边引入原生湿地环境。该建筑的倒影投射在其所处的工程水生态系统中，这个生态系统是与国家公园、环保机构、州政府及当地政府长期交流与合作的结果。



设计将现浇混凝土和预制混凝土创新结合在一起。混凝土经过设计和保温处理，被结合到太阳能板屋顶中，全年为建筑提供恒定的凉爽舒适的环境温度。设计还利用巨大的悬挑结构减轻了潜在的洪水、巨浪和飓风对建筑的影响。该项目设计非常坚固，能经受住强烈飓风的冲击。

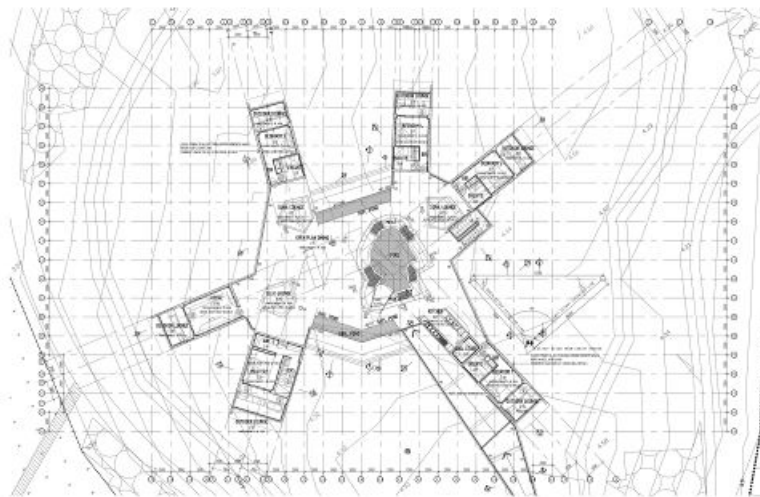
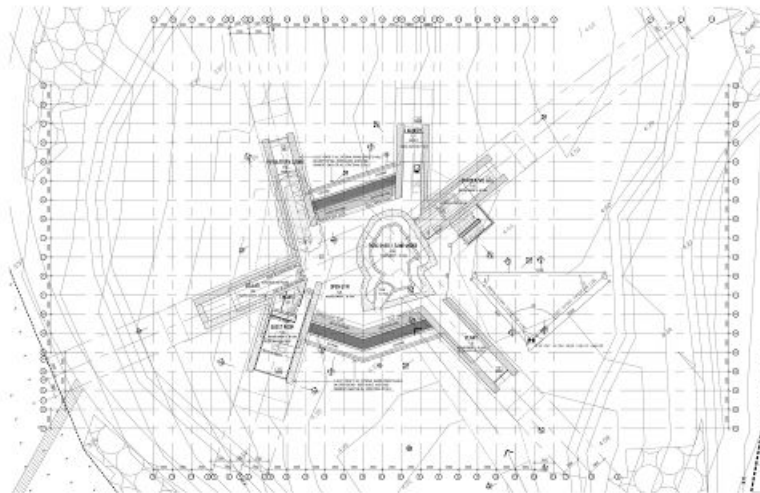


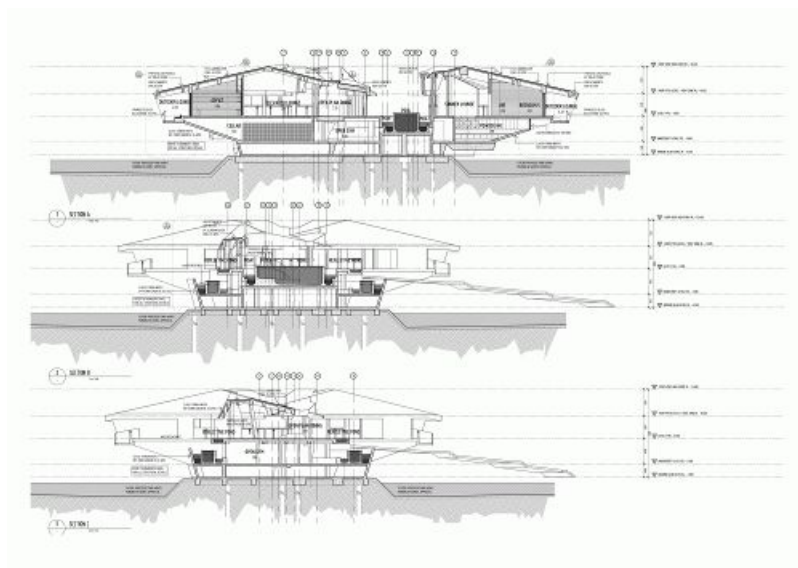
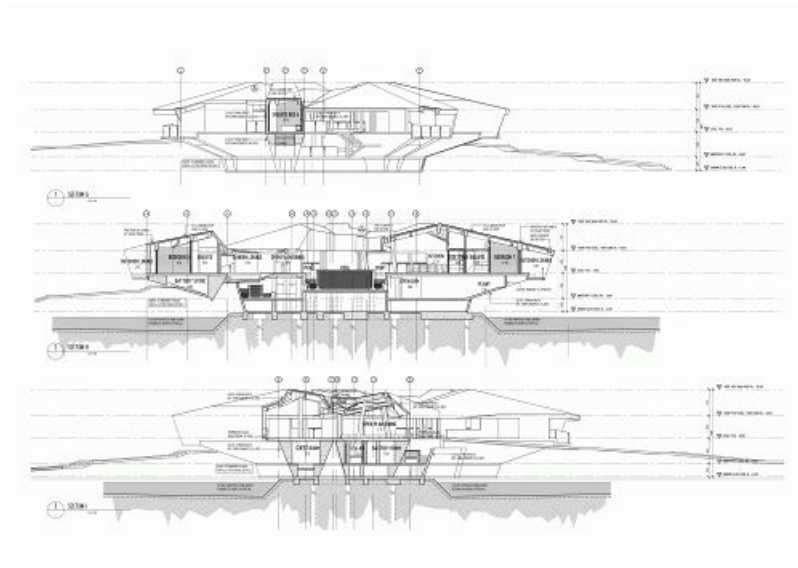
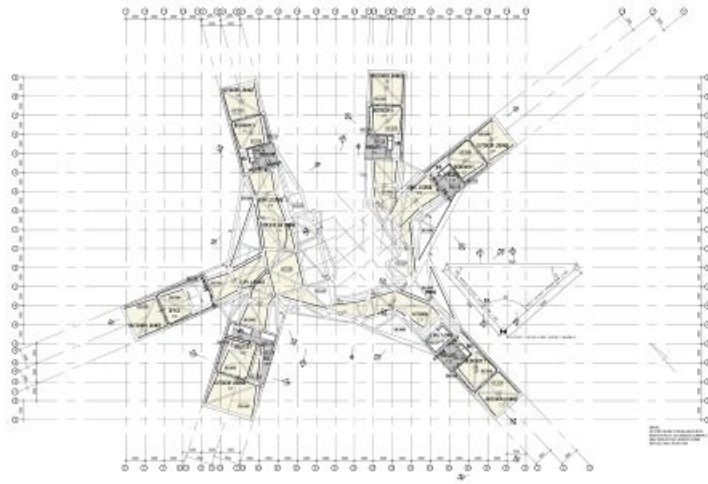
生态可持续发展措施包括：共25万升的水收集装置，回收与网状结构，可再生的太阳能发电设备（太阳能备用电池不依赖于化石燃料备用发电装置），现场先进的三级污水处理厂，中水回收与灌溉，遮阳与保温蓄热工程，通过楼宇自动化系统（CBUS）控制“绿色”制冷节能设施。

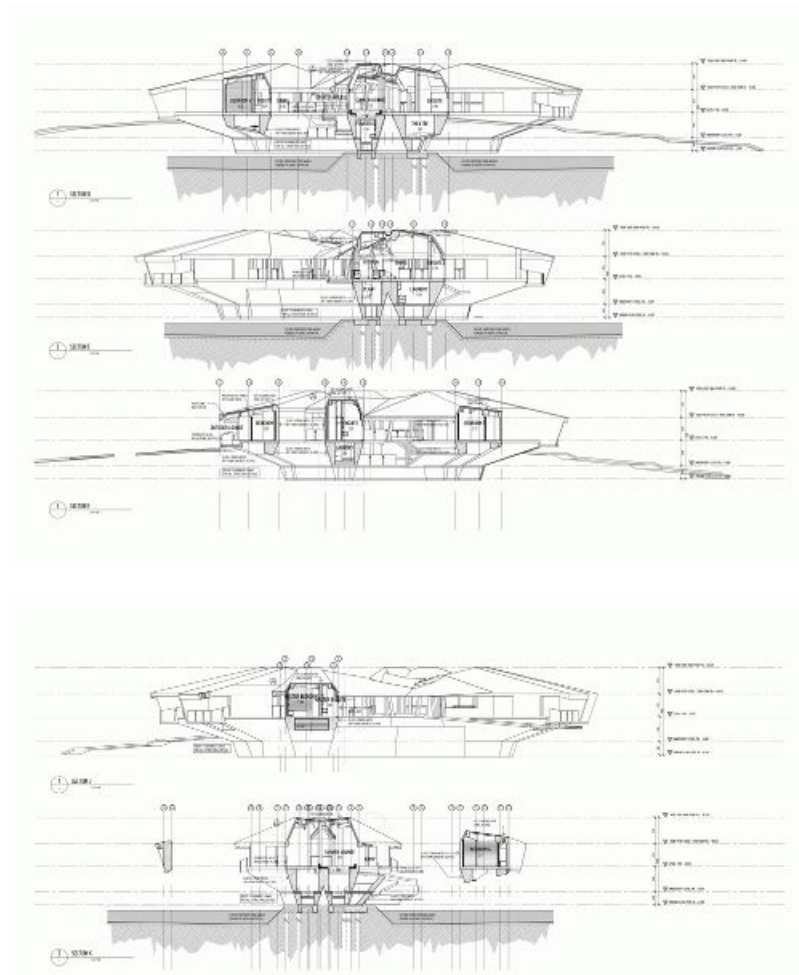












原文:

Architects: <http://www.wrightarchitects.com.au/> Charles Wright Architects

Location: Queensland, Australia

Architect In Charge: Charles Wright

Project Team: Charles Wright, Richard Blight, Justine Wright, Darcy Shapcott

Year: 2013

Photographs: <http://www.patrickbingham-hall.com/> Patrick Bingham Hall

Structural Engineering: G&A Consultants Pty Ltd

Civil Engineering: McPherson MacLean Wargon Chapman

Hydraulics: Gilboy Hydraulic Solutions

Electrical & Mechanical Engineering: MGF Consultants

Quantity Surveyor: Turner & Townsend

Landscape Architect: Andrew Prowse

Contractor: PD Builders

CWA were approached by the project client to deliver a carbon neutral (in operation) solution for an environmentally sensitive site off-grid on the edge of the FNQ beachfront rainforest. The aim was not to simply produce an engineered outcome but produce a building which made the most of the sites natural amenity

and re-introduced the surrounding native wetland environment. The building is literally reflected by way of its siting over an engineered water ecosystem which was the result of lengthy liaison & collaboration with National Parks, Environmental Agencies, State and Local Government.

The design is formed in an innovative combination of in-situ and precast concrete. The concrete has been engineered & insulated incorporating a total solar panelled roof to provide for a constant cooler & more comfortable ambient temperature year-round. The design utilises massive cantilevers to mitigate impact from potential flooding & king tide inundation associated with cyclonic activity. The project has been designed to be solid and to withstand intense cyclones.

ESD initiatives include: total 250,000 ltr water harvesting, recycling & reticulation, renewable solar energy generation with solar backup non-reliant on fossil fuel backup generation, On-site Advanced Tertiary Sewerage treatment plant, grey water recycling & irrigation, Shaded & Insulated Thermal mass engineering, 'green' cooling & energy conservation controlled via building automation system (CBUS).