

## Durrat al Bahrain

This island paradise located in the blue waters of the southern Bahraini seas is sure to become known as one of the worlds premier island cities for permanent residents and tourists alike. The 15 interconnected islands in an elaborate necklace shape covering 21 km<sup>2</sup> are named after “the most perfect pearl” in the Arabian Gulf. This area was once known for its vibrant pearl diving trade. With 2000 beachfront villas, 3600 executive apartments and offices, luxury hotels, parks schools, retails malls, restaurants and beach cafes plus a 400 berth marina and an 18 hole championship golf course all has been catered for in this US \$ 6 billion development.

Jointly owned by the government of Bahrain and the Kuwait Finance House and designed by Atkins Global, the development is made up of six curved atolls, 5 petal shaped islands, the center Hotel Island, as well as the Crescent Island where the offices, retail malls, restaurants and theaters are all situated. Finally, 60 000 residents will live here, with the addition of up-to 4500 daily visitors.



Initial dredge and fill operations started in 2004 with the islands starting to take shape in 2005 and 2006. Construction of the villas and connecting causeways was nearing completion in 2008 and at this stage Nass Contracting



Concrete levelling pad on geofabric on compacted gravel



First course placed to line and level. Geofabric backing in place.

proceeded with the necessary Terraforce walls and stairways on the beaches of the atolls and on the Pearl Island. Approximately 160 000 Terraforce L16 blocks and 20 000 4x4 Step blocks were ordered from Consent LLC in Dubai, Terraforce's UAE licensee.

To enhance the landscaping alongside the main roads, leading to the islands, vertical Terraforce L16 block walls were built with Gabion cross walls as a feature.



Line 4 installed with backfill as specified and compacted, Round-face option.

Lines installed longitudinally with gaps at specified centres for access stairs.



Stairway with round-face and split-face combination.



Beachfront protection on Pearl island.



Line 6 in the foreground and line 7 in the background being levelled out.



Series of stairways installed with Terraforce 4x4 step blocks and L16 wing walls.



Vertical Terraforce toe walls with gabion protective cross barriers. Plants established