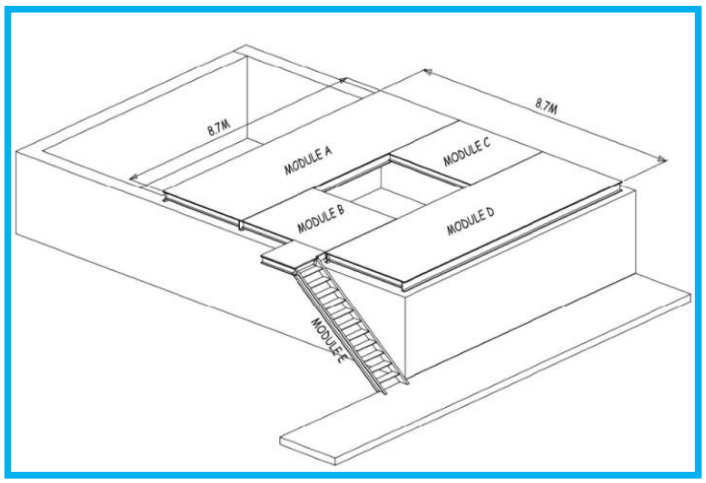
Pre Assembled Units/Sub Modules

Peers delivered over 200 pre assembled units (PAU's) to a confined site at Liverpool Waste Water Treatment Works - Sandon Dock. As there was limited build up area adjacent to the work face, all the steel was built up at Peers works and transported to site ready to be lifted into place. The PAU's ranged from simple walkways & platforms to stair towers and lift shafts. Below are two examples of the types of PAU's used. Where a module was too large to deliver to site as one, it was broken down into sub-modules which were easily connected at low level prior to lifting into the final location.



2 N° 8.0m x 8.0m platforms were split into 4 N° units that were built up offsite, delivered to site and connected together prior to the lift into the final position (Above and Right).

Decanter Module

8 N° high level Decanter floors were split into 14 N° units per floor and built up offsite. The units were stacked 5 high with timber spacers. The units were stacked in the erection sequence order to save time onsite (Left).

Key Points

- Where possible loads were kept below 2.9m wide and 4.95m high to keep avoid road restrictions and expensive escorted loads.
- Each set of the decanter floor units were delivered to site using 3 trailers with 5 units per wagon.
- Site time was kept to a minimum due to only needing to be on site to install the modules. 14 No units only took two days (average of one module per hour).
- PAU's require a bit more steel but this can easily be offset by the saving in time on site and the reduced working at height.
- Large modules can be achieved by creating sub-modules which are quickly assembled on site and lifted as one complete unit.
- As most of the modules were lightly loaded the design case was typically lifting. On the sub-modules this meant the splice joints had to be designed to provide stiffness and stability

For further information contact Paul Airey at Peers. Tel – 01204 558500.