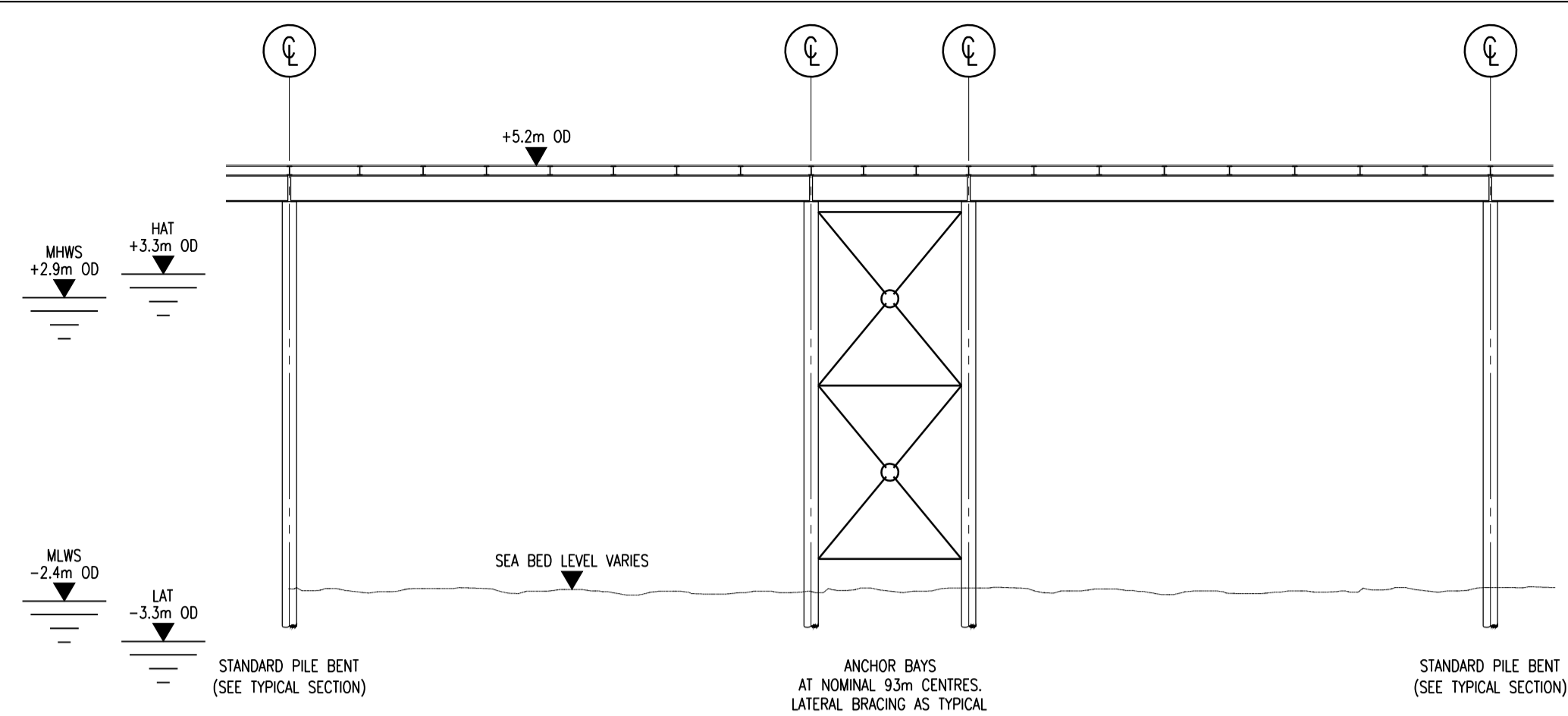


100mm
50mm
0mm

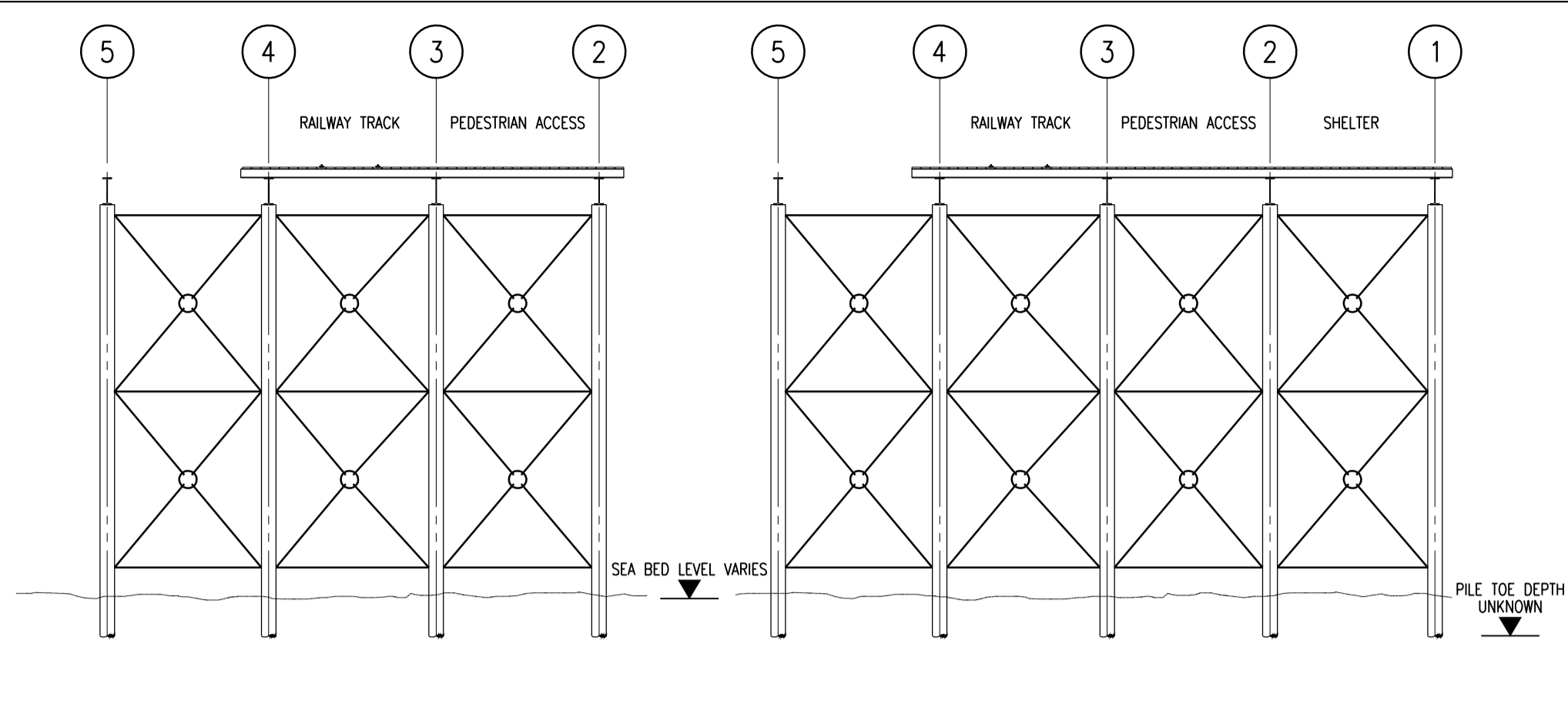
ORIGINAL DRAWING SIZE A1

NOTES.

- 1. GENERAL**
- (i) This drawing is not to be scaled, work to figured dimensions only, confirmed on site.
 - (ii) This drawing is to be read in conjunction with all relevant architectural drawings, detailed specifications where applicable and all associated drawings in this series.
 - (iii) Any discrepancy on this drawing is to be reported immediately to the partnership for clarification.
 - (iv) The contractor is responsible for all temporary works and for the stability of the works in progress.
 - (v) Details subject to change at engineers discretion.

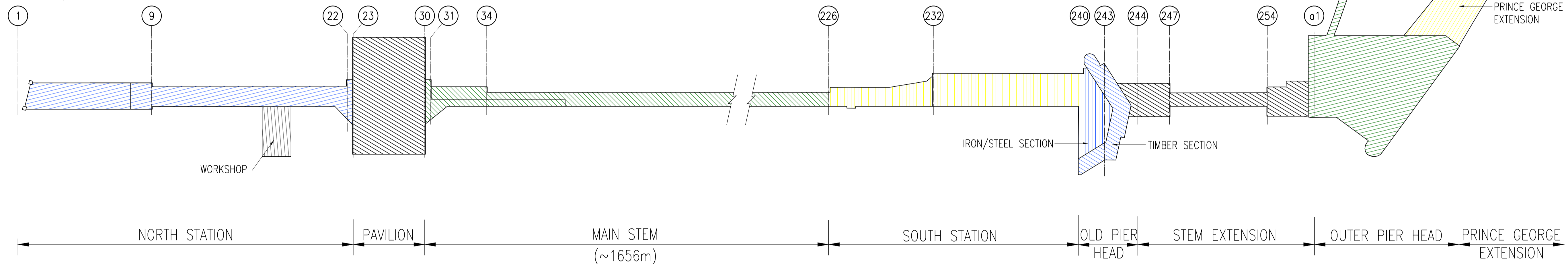
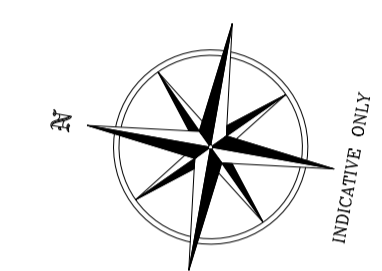


TYPICAL SIDE ELEVATION
(SHOWING BRACING)
(1:100)



TYPICAL SECTION THROUGH MAIN STEM
(SHOWING BRACING)
(1:100)

TYPICAL SECTION THROUGH MAIN STEM AT SHELTER POSITION
(SHOWING BRACING)
(1:100)



PIER KEY PLAN
(1:1000)

Residual Risk Register – Item Potential Hazard – Risk Potential Action

Note – The following residual risks are highlighted to the contractor to manage on site. Potential action is given as guidance only the Principal Contractor is responsible for managing these risks and should conduct his own risk management process.

- 1.0 General working under pier**
- 1.1 General working under pier, cuts to hands from rusted steel. Contractor to include proposals in Health and Safety Plan e.g. Gloves to be worn by all personnel at all times.
 - 1.2 Loose or damaged ladder disconnecting and falling. Contractor to include proposals in Health and Safety Plan e.g. Check ladder fixings before, climbing. Do not climb on loose ladders.
 - 1.3 Health risks associated with ingestion or inhalation of Guano accumulations leading to Pneumonia and Hepatitis etc. Contractor to include proposals in Health and Safety Plan e.g. Personnel should not enter areas with high concentration of Guano, without disposable dust masks, protective goggles, disposable chemical resistant gloves and overalls etc.
 - 1.4 Risk associated with poor communication between operatives. Contractor to include proposals in Health and Safety Plan e.g. All operatives to wear high visibility yellow vests to ensure good visual communication. All operatives to be not less than 15m apart at any one time within eye and ear shot. All operatives to be equipped with two-way radio communication equipment.
 - 1.5 Risk to the Public associated with deck access hatches. The works are located under and adjacent to public access areas. Contractor to include proposals in health and Safety Plan e.g. Deck access hatches to remain down at all times except during access. Temporary service barriers to be installed around hatches in use.
 - 1.6 Existing services – mains electricity, water supply, communications, surface water and foul water drainage services are all located under the pier deck along the full length of the pier
 - 1.7 Fire Hazard – Of particular concern on this site is the risk of fire and the contractor's attention is drawn to the 'joint code of practice on the projection from fire of construction sites and buildings undergoing renovation' 6th edition 2006. The contractor will be expected to comply with all relevant provisions and recommendations included in the code of practice and with and with the client's fire prevention rules and emergency procedures.
 - 1.8 Banging head/unconscious. Contractor to include proposals in Health and Safety Plan e.g. All personnel to wear hard hats at all times.
 - 1.9 Risks associated with adverse weather conditions e.g. wind and tides. Contractor to include proposals in Health and Safety Plan e.g. Works to be planned in advance and to take account of weather conditions e.g. tides and work areas.
- a) No working permitted when wind exceeds force 6 Beaufort scale, no working in wet or icy conditions.
b) No work under the pier deck during the 90 minute period up to and after high tide, subject to weather conditions.
c) Operatives to be accompanied by at least 2 No. competent persons both with mobile telephones/radios on their person.

2.0 Moving to Work areas/work areas

- 2.1 Falling, working at height over water. Contractor to include proposals in Health and Safety Plan e.g. Climbing on trusses should be not be undertaken at any time without a suitable fall arrest system and appropriate training for operatives.
- 2.2 Using suspended walkway. Contractor to include proposals in Health and Safety Plan e.g. Contractor to note that large areas of the suspended walkway are not maintained and not used by pier staff contractor to liaise with Pier Management and consider generally unsafe.
- 2.3 Health risks associated with ingestion or inhalation of human excrement from leaking foul water. Contractor to include proposals in Health and Safety Plan e.g. Do not enter areas where foul water is spraying into areas of the walkway or where foul water pipes or pumping stations are leaking. Report incident to Pier Management.
- 2.4 Risks associated with electrocution. Contractor to include proposals in Health and Safety Plan e.g. Walkway should not be used in areas where fresh or foul water is spraying near suspected electric cables or appliances, or in areas where sea spray is present. Areas of concern should be reported to the Pier management for remedial work.
- 2.5 Falling, working at height over water. Contractor to include proposals in Health and Safety Plan e.g. Operatives to take precautions and ensure they have a three point contact at all times.
- 2.6 Ensuring a safe work area. Contractor to include proposals in Health and Safety Plan e.g. consider the use of scaffolding out work areas with appropriate edge protection or work restraint system as appropriate.
- 2.7 Fatigue caused by travelling to and from work area. Contractor to include proposals in Health and Safety Plan e.g. some areas of work are a distance away from existing hatches/access. Contractor to consider minimising travel by cutting new hatches local to work areas etc.
- 2.8 Working adjacent to and below live railway track.

LEVELS	
DESCRIPTION	LEVEL (OS DATUM)
APPROX DECK LEVEL	5.2m*
HAT	3.3m
MHS	2.9m
MHWN	1.8m
MLWN	-1.5m
MLWS	-2.4m
LAT	-3.1m
* LEVEL VARIES AT REBUILT PIER HEAD	

NOTE:-
SEE DRAWINGS 12211-15-P03 TO 12211-15-P06 FOR SCHEDULES AND LOCATIONS OF MEMBERS TO BE REPAIRED

HOP
HEMSLEY ORRELL PARTNERSHIP
CONSULTING CIVIL & STRUCTURAL ENGINEERS

ISSUED FOR INFORMATION

ISSUED FOR INFORMATION		28.07.2016	LR.S	-		
Revision	Date	By	Rev. No.			
Client SOUTHEND-BY-SEA BOROUGH COUNCIL						
Project SOUTHEND PIER EMERGENCY REPAIRS						
Title KEY PLAN AND TYPICAL SECTIONS						
<p>HOP HEMSLEY ORRELL PARTNERSHIP CONSULTING CIVIL & STRUCTURAL ENGINEERS HOP House, 41 Church Road, Hove BN3 2BE Tel : +44 (0)1273 223900 Fax : +44 (0)1273 326767 E-Mail : engineers@hop.uk.com www.hop.uk.com</p>						
Scales	Date	Drawn	Engineer	Checked	Approved	HOP Contact
AS SHOWN	27/07/16	LR.S	N.P.C	N.P.C	-	N.CHASTON
Project No.	Task No.	Dwg. No.	Rev. No.			
12211	23	LBC06	-			

P:\PROJECTS\12211_Southend Pier\Task_23_Pier_Cap_Repairs\Drawings\12211-23-LBC06_Dwg_Supplement

© Copyright