

● INDICATES ADDITIONAL PILE REPAIRS REQUIRED (< 10mm WALL THICKNESS)

✕ INDICATES PILES VISIBLY INSPECTED, DEEMED TO BE IN GOOD CONDITION, NO THICKNESS MEASUREMENTS TAKEN

○ INDICATES PILES PREVIOUSLY REPAIRED TO 8.6T/m² OR WITH >10mm WALL THICKNESS

PLAN
Scale: 1-250

Preliminary Repair Design Summary			
Pile Type	Repair (W x H)	Quantity	Weight (T)
Bearing Piles	0.5 x 1.0	35	1.10
	0.75 x 1.5	10	0.71
	0.612 x 2.0	15	1.15
	Total	60	2.96
Fender Piles	No Repairs Required		
Raker Piles	No Repairs Required		

Do not scale from this drawing.

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

IN ADDITION TO THE HAZARD/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING RISKS AND INFORMATION.

RISKS LISTED HERE ARE NOT EXHAUSTIVE. REFER TO DESIGN ASSESSMENT FORM NO. DID/

CONSTRUCTION

FALLS FROM HEIGHT

- EXPOSED QUAY EDGE
- DIVING-ENTRAPMENT/DROWNING
- FAST TIDAL CURRENTS

WEILS DISEASE

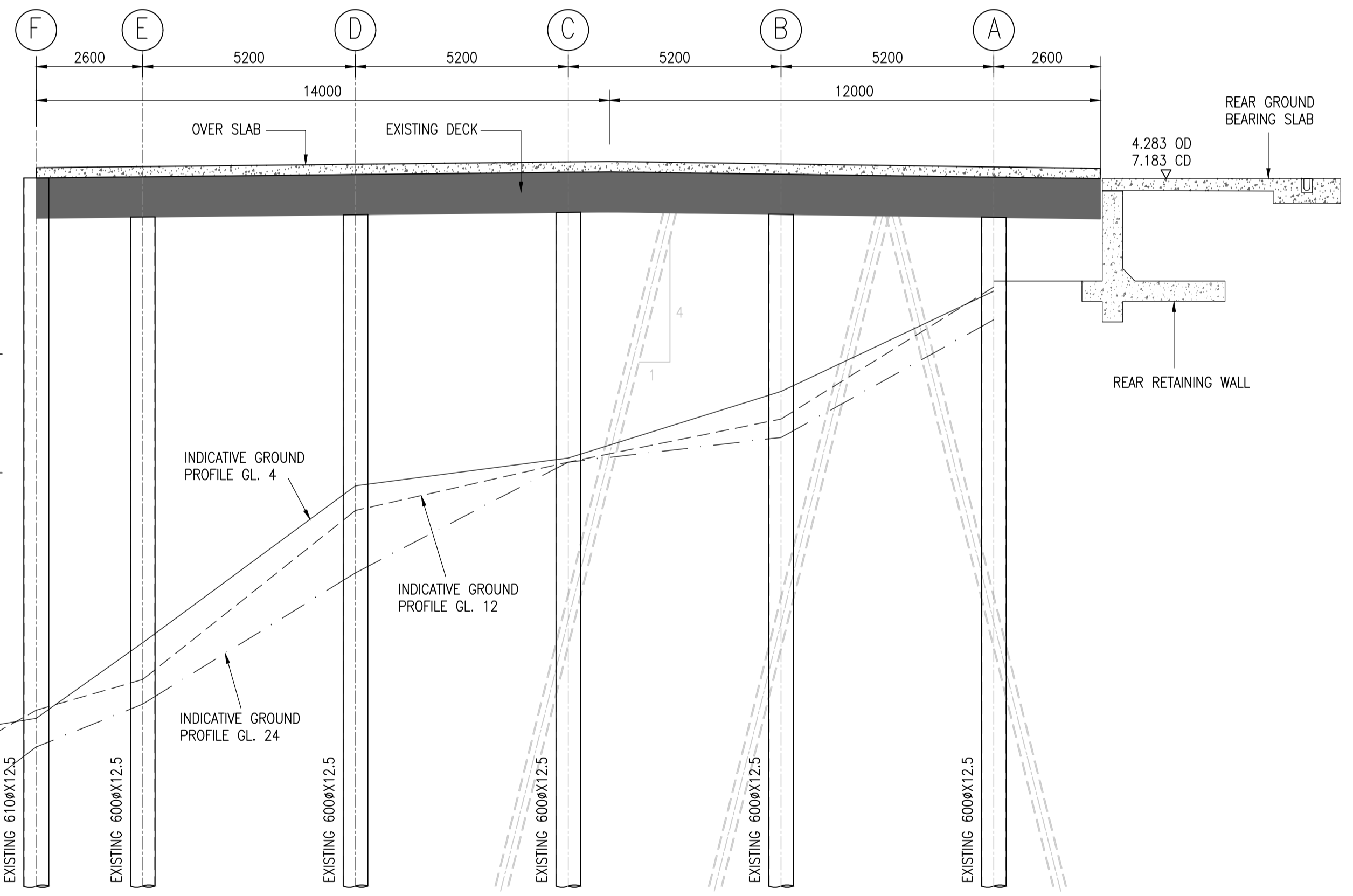
- DISEASE FROM RATS
- HOT WORKS

DEMOLITION

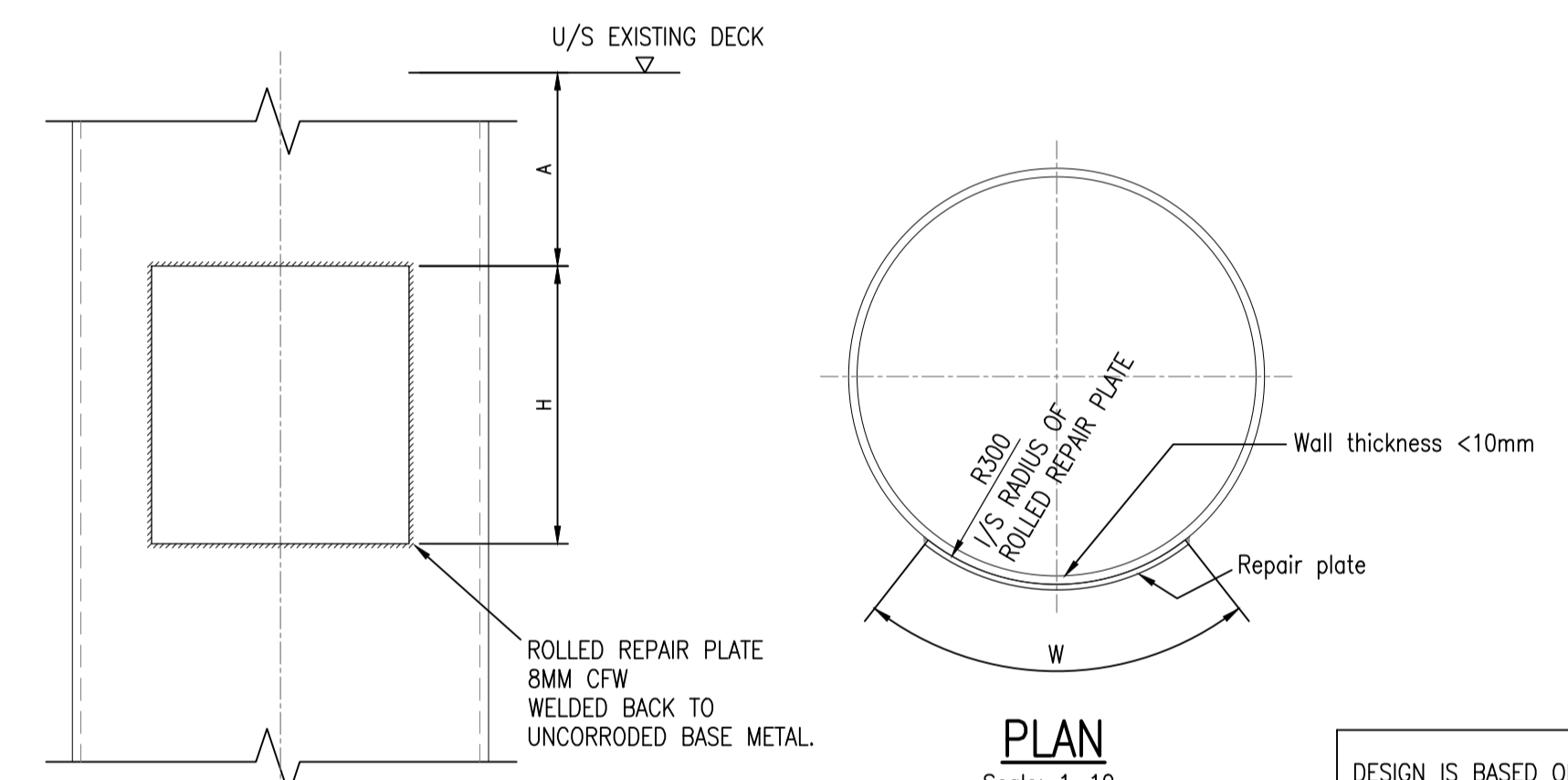
NONE

FOR INFORMATION RELATING TO USE, CLEANING AND MAINTENANCE SEE THE HEALTH AND SAFETY FILE

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT CONTRACTOR WORKING, WHERE APPROPRIATE, TO AN APPROVED METHOD STATEMENT.



TYPICAL SECTION THROUGH QUAY
Scale: 1-100



INDICATIVE REPAIR DETAIL
Scale: 1-10
See table for repair plate size & locations

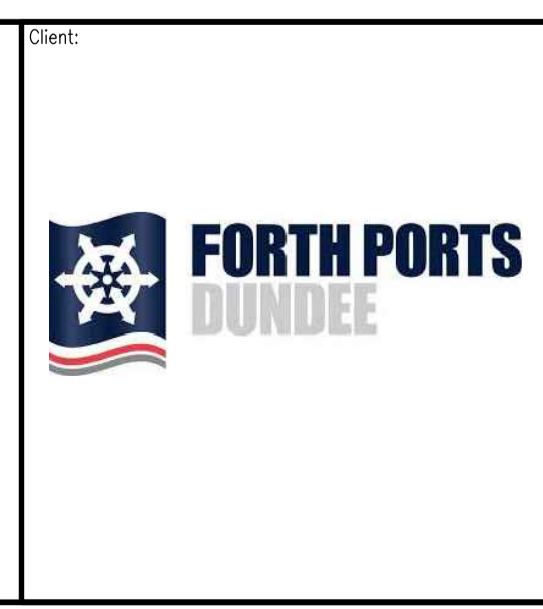
DESIGN IS BASED ON THE WALL THICKNESS SURVEY DATA TAKEN FROM HARBOUR MARINE PILE THICKNESS SURVEY 2013 & 08/2015. ALL REPAIR AREAS ARE STANDARDISED TO 3 TYPES OF REPAIR PLATE.

ALL WORKS TO CONTRACTORS DESIGN

DRAWING FOR ILLUSTRATION PURPOSES ONLY AND NOT FOR CONSTRUCTION

Rev.	Date	Description	Drawn	Checked	Approved
E	24/01/20	REVISED TO SUIT CLIENTS COMMENTS	SB	MD	MC
D	20/01/20	MINOR REVISIONS	SB	MD	MC
C	13/01/20	REVISED TO SUIT CLIENTS COMMENTS	SB	MD	MC
B	08/01/20	REVISED TO SUIT CLIENTS COMMENTS	SB	MD	MC
A	23/12/19	MINOR REVISIONS	SB	MD	MC

- NOTES**
- This design is based on 2016 & 2019 survey data. Contractor shall refer to new 2019 survey & SI for steel thickness results & for basis of design.
 - Piles to be blast cleaned back to sound substrate prior to steel plate installation.
 - All bearing pile repair plates to be 8mm thick and bent to suit pile diameter.
 - All repair plates to be grade S355.
 - Welding**
-Repair plate to be fixed using a 6mm fillet weld all around.
-Grade of fillet weld to be S355.
-Where two or more plates are welded together and to the pile, filling between the plates may be necessary. Electrodes of S355 grade to be used for filling.
All welds to be grinded upon completion to achieve a smooth finish.
 - Deck levels taken from archive drawing 6147-80G.
 - All pile repairs subject to detailed design following a full visual inspection and thickness gauge survey (minimum 50% pile coverage). To be agreed with the client.
 - Contractor to allow for up to 500mm of bed excavation local to piles, to facilitate repair plate installation.
 - Contractor to refer to site information but not limited to including dive surveys, UTG reading & archive drawings.
 - Maintenance of ladders, bollards & revetment not included in this scope of works
 - Refer to 130143/5002 for deck works..



Client: **PORT OF DUNDEE EAST REDEVELOPMENT**

Project Title: **MARINE WORKS PCW PILE REPAIRS 10.0T/M² CARRYING CAPACITY EXEMPLAR SOLUTION**

Scale at A1: AS SHOWN

Status: Preliminary

Drawn: SB, Checked: MD, Approved: MC

Date: 12/12/19

Revision: 12/12/19

FAIRHURST

1 Arngrove Court, Barrack Road, Newcastle-upon-Tyne, NE4 6QB
Tel: 0191 221 9505 Fax: 0844 381 4412

Scale at A1: AS SHOWN

Status: Preliminary

Drawn: SB, Checked: MD, Approved: MC

Date: 12/12/19

Revision: 12/12/19

Drawing No.: 130143/5001

Revision: E