

 RESTRICTED SITE / WORKING AT HEIGHT
 INTERFACE WITH PUBLIC
 NEAR TO WATERWAYS / TIDAL WORKING / INUNDATION
 GROUND INSTABILITY / EXCAVATIONS
 TRACK SUPPORT ZONE
 SERVICES
 UNSTABLE STRUCTURES
 TRIP HAZARD
 ECOLOGY / ENVIRONMENT
 UNFORESEEN GROUND CONDITIONS

ASSET 3
61.1382 - 61.1406

DOWN

UP

CH962
61.1382

CH984
61.1406

61.1430

61.1320

61.1210

61.1540

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 DRA001.

- | | |
|--------------------------|----------------------------------|
| CONSTRUCTION | 9. INUNDATION |
| 1. RESTRICTED SITE | 10. SERVICES |
| 2. WORKING AT HEIGHT | 11. UNSTABLE STRUCTURES |
| 3. INTERFACE WITH PUBLIC | 12. TRIP HAZARD |
| 4. NEAR TO WATERWAYS | 13. ECOLOGY |
| 5. TIDAL WORKING | 14. ENVIRONMENT |
| 6. GROUND INSTABILITY | 15. UNFORESEEN GROUND CONDITIONS |
| 7. EXCAVATIONS | |
| 8. TRACK SUPPORT ZONE | |

MAINTENANCE AND INSPECTION

- TRIP HAZARD
- GROUND INSTABILITY

OPERATION









- TRIP HAZARD

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.



LEGEND:

-  EXISTING NETTING TO BE MAINTAINED
-  PROPOSED ENCAPSULATION OF EXISTING NETTING WITH HIGH TENSILE ROCKFALL NETTING
-  PROPOSED HIGH TENSILE ROCKFALL NETTING
-  PROPOSED PASSIVE ROCKFALL NETTING
-  PROPOSED STONE FILL REGRADE
-  ALLOW FOR PASSIVE ROCKFALL NETTING
-  PROPOSED DEVEGETATION AND LIGHT SCALE
-  PROPOSED LIGHTWEIGHT CATCHFENCE

NOTES

- MILEAGES STATED ARE APPROXIMATE AND SHOULD NOT BE USED FOR SETTING OUT.
- DRAWING TO BE REPRODUCED IN COLOUR.
- DESIGNER TO SET OUT WORKS PRIOR TO CONSTRUCTION.
- CHAINAGE 0 AT 61.0330.
- DOWEL POSITIONS SHOWN INDICATIVELY ONLY. EXACT DOWEL POSITIONS ARE TO BE SET OUT ON SITE BY THE DESIGNER DURING CONSTRUCTION FOLLOWING DEVEGETATION AND SCALING.

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Rev	Date	Description	Drawn	Chkd	Appd
B	17/09/24	APPROVED FOR CONSTRUCTION	AC	DC	CMcA
A	27/08/24	REVISED FOR FORM B	CMcC	DC	CMcA

APPROVED FOR CONSTRUCTION

FAIRHURST
4th Floor, 300 Bath Street
GLASGOW G2 4JR
Tel: 0141 204 8800



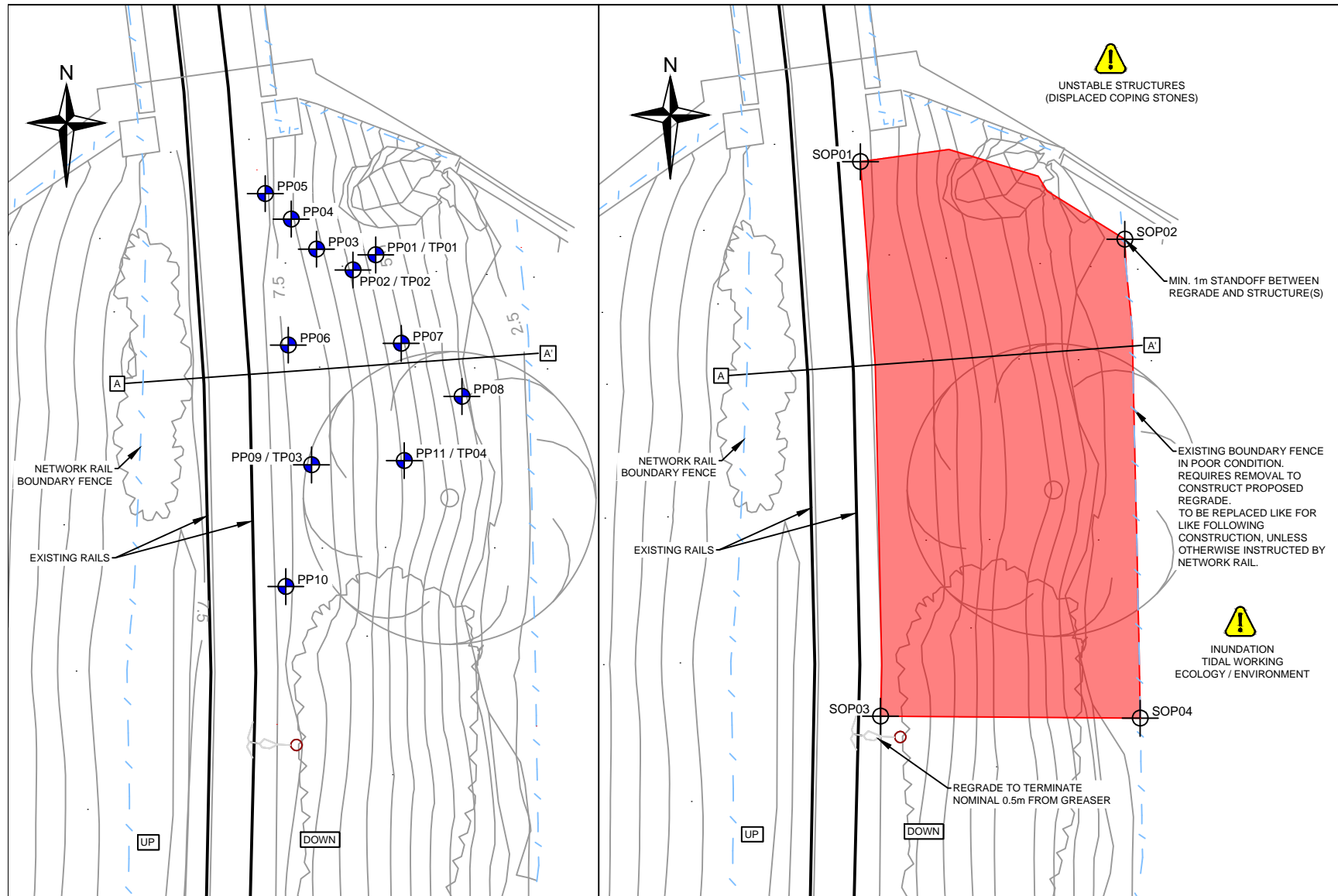
Project Title
**ERBUSAIG BAY
KYL 61.0330 - 62.0770
UP AND DOWN**

Drawing Title
**PROPOSED WORKS
SHEET 2 OF 3**

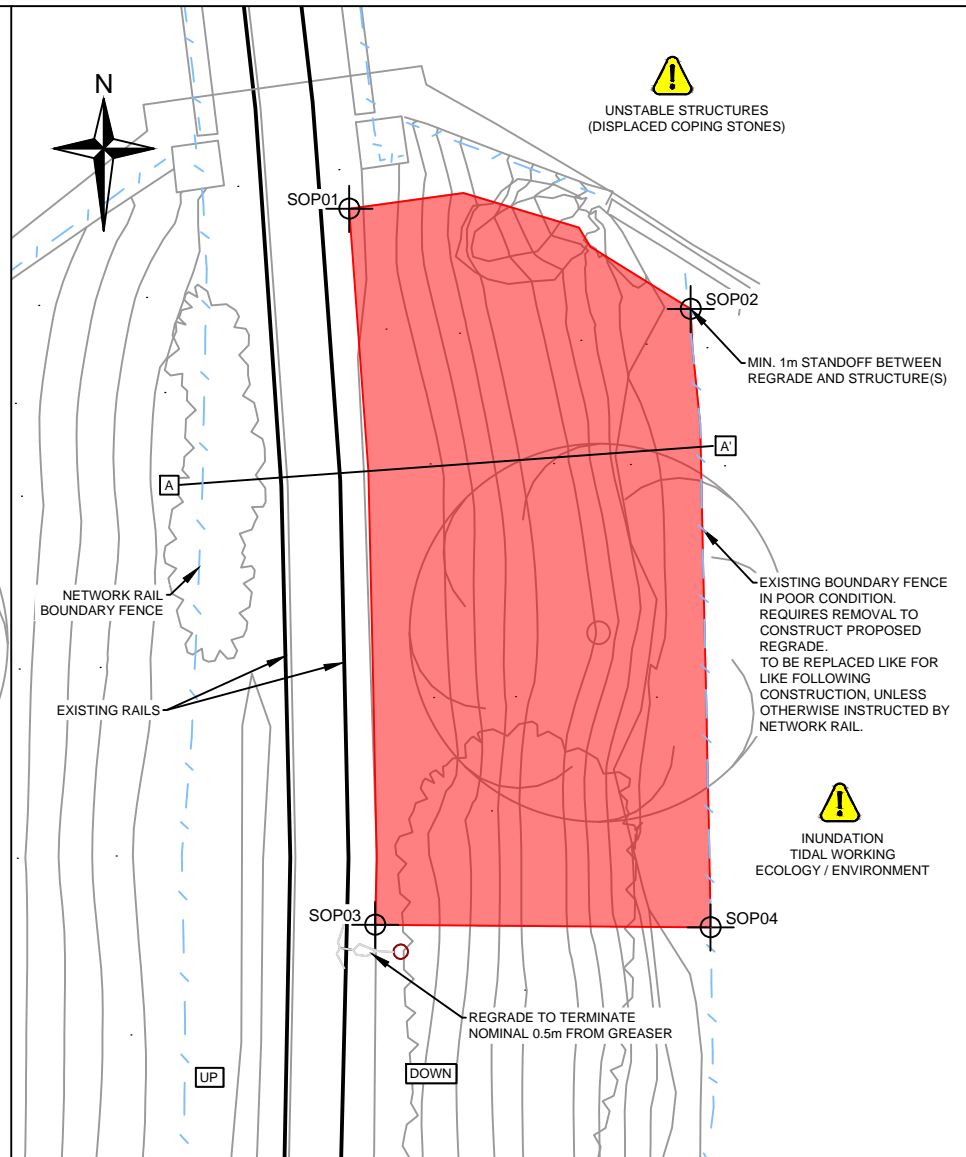
Drawn	Date	Designed	Date
CMcC	21/06/24	DC	21/06/24
Checked	Date	Approved	Date
CRI	21/06/24	CMcA	21/06/24

A3 Scale 1:1000 Fairhurst Ref 158139-KYL-61.0330-62.0770-9004

Drawing Number 158139/KYL/61.0330-62.0770/9004 Revision B



AS BUILT GROUND INVESTIGATION POSITIONS
SCALE 1:200
GROUND INVESTIGATION RESULTS ARE APPENDED TO THE FORM A



PROPOSED EMBANKMENT REGRADE EXTENTS
SCALE 1:200

SETTING OUT POINTS FOR EMBANKMENT REGRADE			
SOP#	TYPE	EASTING	NORTHING
01	CORNERS OF WORK EXTENTS	176135.188	829671.940
02		176144.219	829669.289
03		176135.874	829653.002
04		176144.745	829652.936

EMBANKMENT REGRADE SPECIFICATION

SETTING OUT

- 1m STANDOFF TO STRUCTURE UB303-153 IS TO BE OBSERVED AT ALL TIMES. STANDOFF IS TO BE APPROVED BY THE STRUCTURES TEAM PRIOR TO MOBILISATION TO SITE.
- 0.5m STANDOFF TO GREASER AT HIGH MILEAGE END OF PROPOSED REGRADE REQUIRED.
- DE-VEGETATION OF THE EMBANKMENT IS REQUIRED PRIOR TO COMMENCEMENT OF WORKS. WHERE REQUIRED, TREE ROOTS MAY REQUIRE REMOVAL.
- TOE OF PROPOSED SLOPE TO BE POSITIONED AT THE NR BOUNDARY FENCE.
- CREST OF REGRADE SHALL BE FORMED AS 1m WIDTH, MEASURED FROM EDGE OF SLEEPER. CREST OF SLOPE SHALL BE GRADED TO TIE IN WITH EXISTING CREST LINE AT THE HIGH MILEAGE END OF THE REGRADE.

MATERIALS

- ZONE 1 STONE FILL SPECIFICATION: SHW CLASS 6G 125mm TO 225mm GRADING, IN ACCORDANCE WITH SHW SERIES 600.
- ZONE 2 AND ZONE 3 STONE FILL SPECIFICATION: HARD, DENSE, DURABLE, UN-WEATHERED NATURAL ROCK, COMPATIBLE WITH THE LOCAL GEOLOGY AND FREE FROM LAMINATIONS, WEAK CLEAVAGE PLANES OR CHEMICAL DECOMPOSITION. IT SHALL BE ABLE TO WITHSTAND LONG EXPOSURE TO WEATHERING, IN PARTICULAR WETTING/DRYING, FREEZING/THAWING AND ABRASION WITHOUT BEING LIABLE TO DECOMPOSITION OR DISINTEGRATION. ONLY CLEAN STONE SHALL BE USED IN THE WORKS AND IT SHALL BE CAPABLE OF BEING HANDLED AND PLACED WITHOUT UNDE FRACTURE OR DAMAGE.
- THE ROCK ARMOUR LAYER SHALL BE CAREFULLY SELECTED AND PLACED IN SUCH A MANNER THAT VOIDS ARE KEPT TO A MINIMUM. THE FINAL SURFACE LAYER OF STONES SHALL BE PLACED TO PRODUCE A COMPACT FINISH TO THE LINES AND LEVELS SHOWN ON THE DRAWINGS.
- GEOTEXTILE SEPARATOR SHALL CONSIST OF A NONWOVEN, NEEDLE PUNCHED, GEOSYNTHETICS EKOTEX 22, OR SIMILAR APPROVED.

CONSTRUCTION

- SHEAR KEY SHALL BE MIN 0.5m DEPTH. SIDES OF SHEAR KEY SHALL BE NO GREATER THAN 60°. SHEAR KEY REQUIRED ALONG FULL LENGTH OF WORKS.
- BENCHES SHALL BE MAX 0.5m HORIZONTAL, MAX 0.5m VERTICAL. BENCH DIMENSIONS INCLUDING BATTER SHALL BE ADJUSTED TO SUIT SITE CONDITIONS. NOTE HIGH LIKELIHOOD FOR COLLAPSE OF TEMPORARY BATTERS, BASED ON EXCAVATION OBSERVATIONS DURING GROUND INVESTIGATION.
- GEOTEXTILE SEPARATOR SHALL BE PLACED AT BASE OF EXCAVATION PRIOR TO PLACEMENT OF STONE.
- IT IS STRONGLY RECOMMENDED THAT EXCAVATION AND PLACEMENT OF MATERIAL IS UNDERTAKEN IN DISCRETE BAYS, MAX 5m WIDE, TO REDUCE THE LIKELIHOOD OF INSTABILITY DURING CONSTRUCTION.
- NOMINAL COMPACTION OF STONE SHALL BE UNDERTAKEN WITH BACK OF EXCAVATOR BUCKET.

BOUNDARY FENCE

- BOUNDARY FENCE AT TOE OF SLOPE SHALL BE TEMPORARILY REMOVED AND REINSTATED. REINSTATED FENCE SHALL COMPRISE TIMBER AND POST FENCE AS PER NR/OTK/SD/BM/103 UNLESS OTHERWISE STATED BY NETWORK RAIL.

STONE FILL SPECIFICATION		
ZONE	GRADING (mm)	SPECIFICATION
ZONE 1	125 - 225	SHW SERIES 600 - CLASS 6G
ZONE 2	300 - 500	RESISTANCE TO WEAR OF M_{de10} (MICRO-DEVAL COEFFICIENT ≤ 10) IN ACCORDANCE WITH BS EN 13383-1:2002 WATER ABSORPTION OF $W_{a,1}$ (AVERAGE ABSORPTION ≤ 0.5) IN ACCORDANCE WITH BS EN 13383-1:2002
ZONE 3	500 - 700	RESISTANCE TO WEAR OF M_{de10} (MICRO-DEVAL COEFFICIENT ≤ 10) IN ACCORDANCE WITH BS EN 13383-1:2002 WATER ABSORPTION OF $W_{a,1}$ (AVERAGE ABSORPTION ≤ 0.5) IN ACCORDANCE WITH BS EN 13383-1:2002

DO NOT SCALE FROM THIS DRAWING

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

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- | | | |
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| 2. WORKING AT HEIGHT | 13. ECOLOGY | 14. ENVIRONMENT |
| 3. INTERFACE WITH PUBLIC | 15. UNFORESEEN GROUND CONDITIONS | |
| 4. NEAR TO WATERWAYS | | |
| 5. TIDAL WORKING | | |
| 6. GROUND INSTABILITY | | |
| 7. EXCAVATIONS | | |
| 8. TRACK SUPPORT ZONE | | |

- MAINTENANCE AND INSPECTION**
- TRIP HAZARD
 - GROUND INSTABILITY

- OPERATION**
- TRIP HAZARD

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.



LEGEND

- EXISTING SLOPE PROFILE
- PROPOSED SLOPE PROFILE
- SURVEYED POSITION OF NETWORK RAIL BOUNDARY FENCE
- MEAN HIGH WATER SPRING LEVEL
- PROPOSED EXTENT OF REGRADE
- CLASS 6G 125 - 225mm STONE
- NOMINAL 300-500mm STONE
- NOMINAL 500-700mm STONE
- AS BUILT EXPLORATORY HOLE LOCATIONS, APRIL 2024
- SETTING OUT POINTS FOR EMBANKMENT REGRADE

Rev	Date	Description	Drawn	Chkd	Appd
B	17/09/24	APPROVED FOR CONSTRUCTION	AC	DC	CMcA
A	27/08/24	REVISED FOR FORM B	CMcC	DC	CMcA

APPROVED FOR CONSTRUCTION

FAIRHURST
4th Floor, 300 Bath Street
GLASGOW G2 4JR
Tel: 0141 204 8800



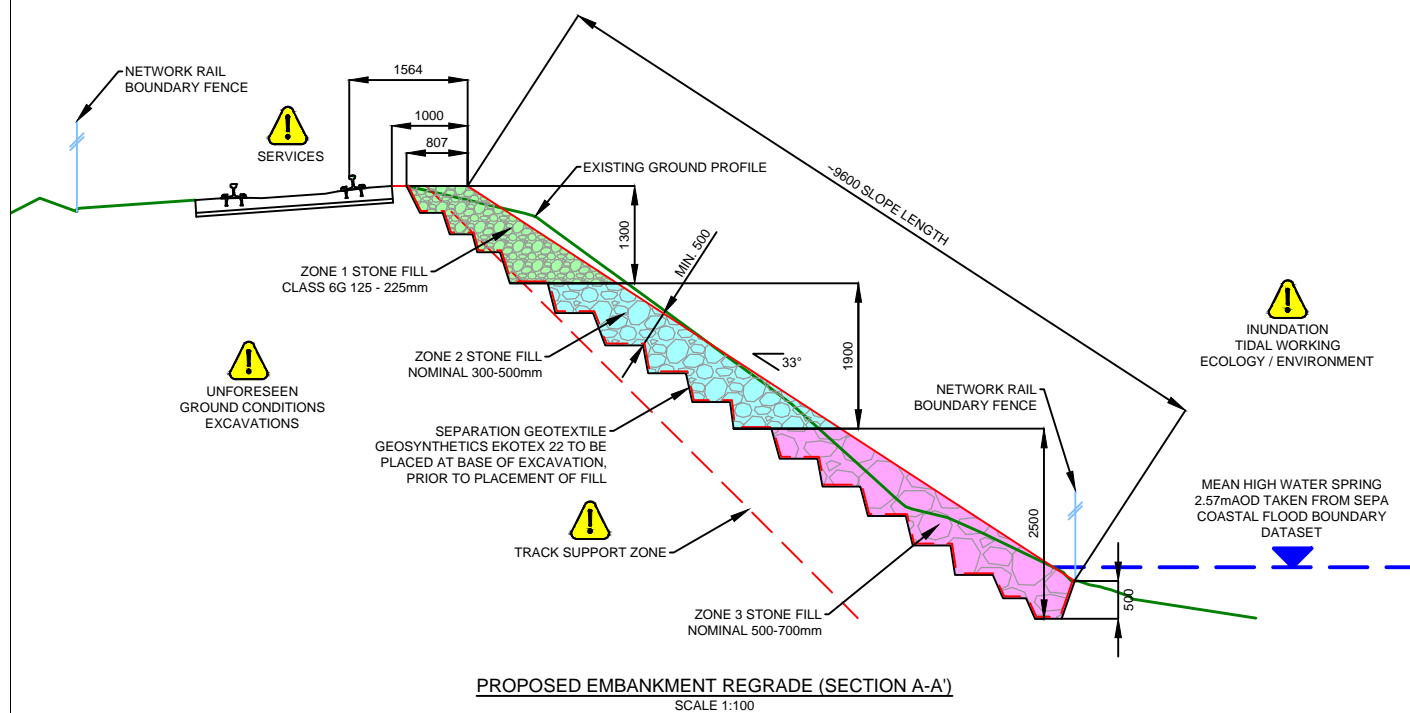
Project Title
**ERBUSAIG BAY
KYL 61.0330 - 62.0770
UP AND DOWN**

Drawing Title
**PROPOSED EMBANKMENT
REGRADE SPECIFICATION**

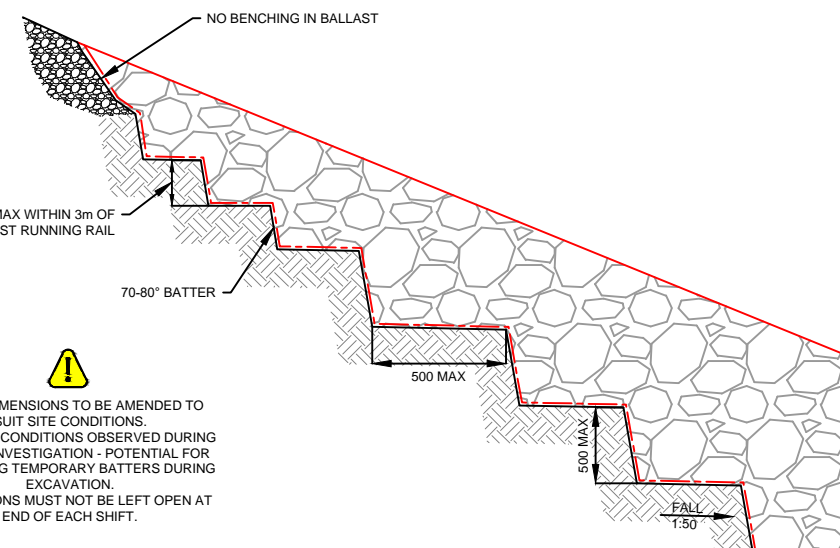
Drawn	Date	Designed	Date
CMcC	03/05/24	DC	03/05/24
Checked	Date	Approved	Date
CRI	03/05/24	CMcA	21/06/24

Scale	Fairhurst Ref
A3 AS SHOWN	158139-KYL-61.0330-62.0770-9018

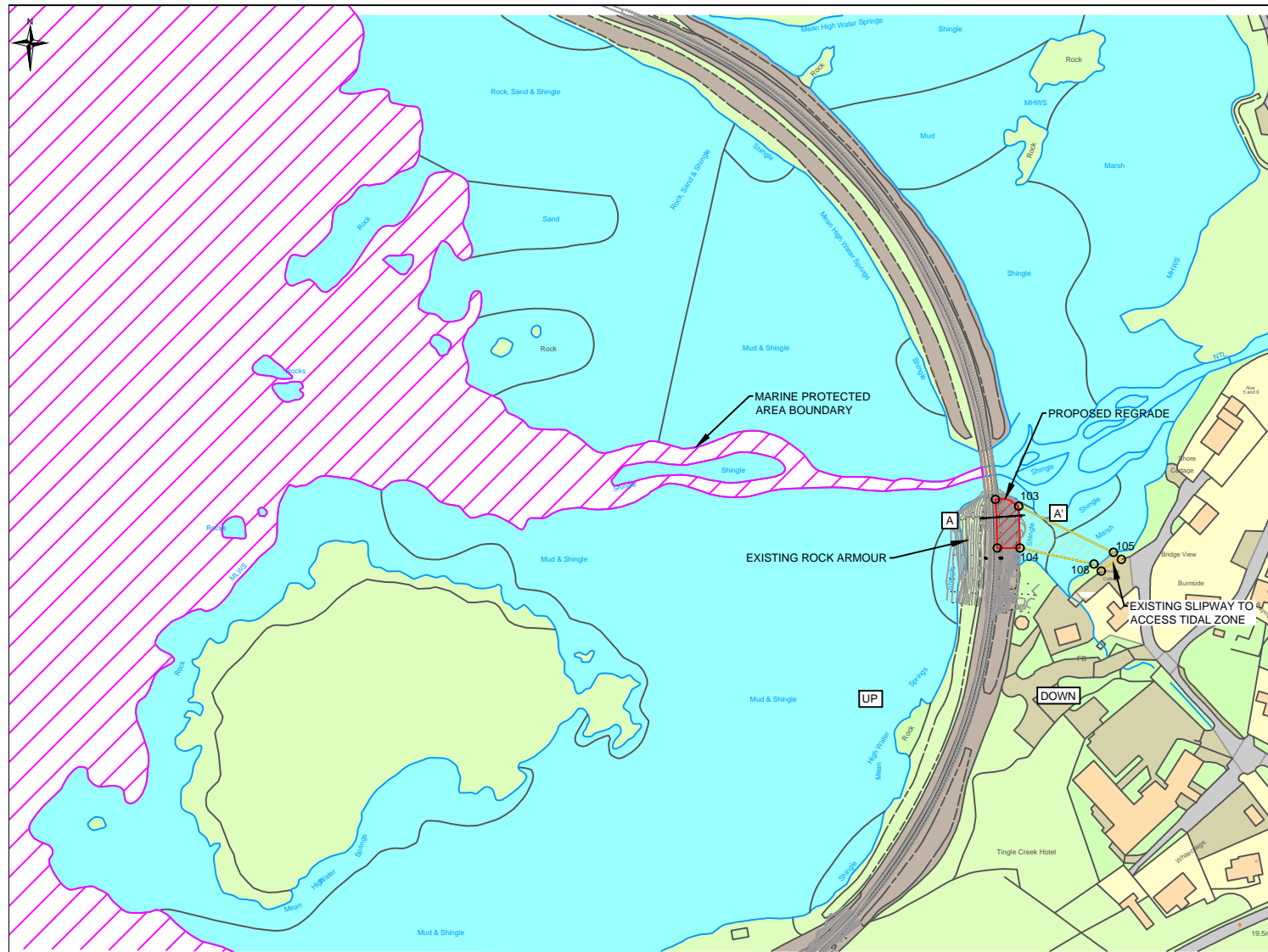
Drawing Number	Revision
158139/KYL/61.0330-62.0770/9018	B



PROPOSED EMBANKMENT REGRADE (SECTION A-A)
SCALE 1:100

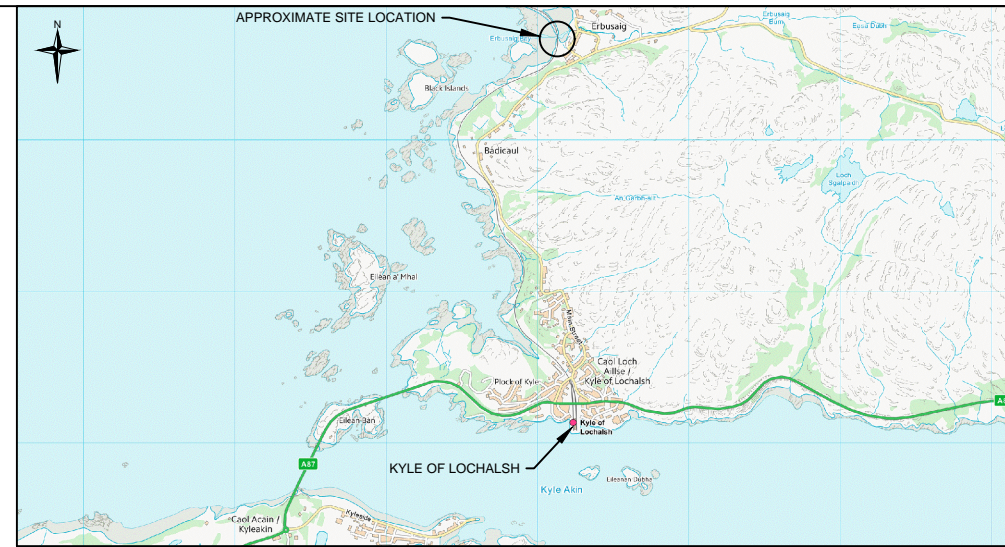


TYPICAL BENCHING DETAILS
SCALE 1:50



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PROPOSED EMBANKMENT REGRADE EXTENTS
SCALE 1:2500



SITE LOCATION OVERVIEW
SCALE 1:50000



AERIAL IMAGES FROM NETWORK RAIL ROUTEVIEW SERVICE

LABEL	TYPE	Degrees and Decimal Minutes (DMM)	
		Lat	Long
103	CORNERS OF PERMANENT WORKS BELOW MHWS	57° 18.152	-5° 43.069
104		57° 18.143	-5° 43.067
105	CORNERS OF EXISTING SLIPWAY	57° 18.144	-5° 43.031
108	- ASSUMED BELOW MHWS	57° 18.141	-5° 43.038

Table updated by QTS 24/10/2024 with new information supplied by Fairhurst in email on 16/09/2024!

STONE FILL SPECIFICATION		
ZONE	GRADING (mm)	SPECIFICATION
ZONE 1	125 - 225	SHW SERIES 600 - CLASS 6G
ZONE 2	300 - 500	RESISTANCE TO WEAR OF M_{De10} (MICRO-DEVAL COEFFICIENT ≤ 10) IN ACCORDANCE WITH BS EN 13383-1:2002
ZONE 3	500 - 700	WATER ABSORPTION OF $WA_{0.5}$ (AVERAGE ABSORPTION ≤ 0.5) IN ACCORDANCE WITH BS EN 13383-1:2002

EMBANKMENT REGRADE SPECIFICATION

SETTING OUT

1. 1m STANDOFF TO STRUCTURE UB303-153 IS TO BE OBSERVED AT ALL TIMES. STANDOFF IS TO BE APPROVED BY THE STRUCTURES RAM PRIOR TO MOBILISATION TO SITE.
2. 0.5m STANDOFF TO GREASER AT HIGH MILEAGE END OF PROPOSED REGRADE REQUIRED.
3. DE-VEGETATION OF THE EMBANKMENT IS REQUIRED PRIOR TO COMMENCEMENT OF WORKS. WHERE REQUIRED, TREE ROOTS MAY REQUIRE REMOVAL.
4. TOE OF PROPOSED SLOPE TO BE POSITIONED AT THE NR BOUNDARY FENCE.
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MATERIALS

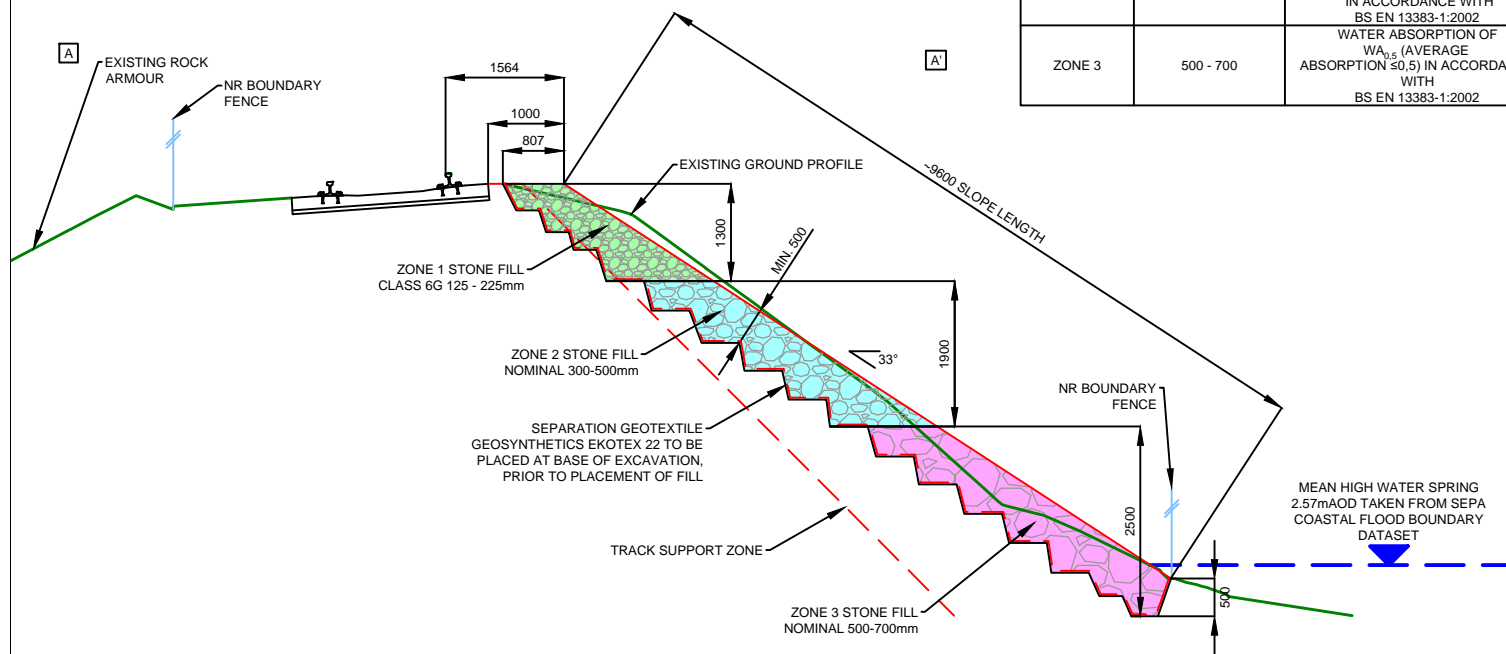
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BOUNDARY FENCE

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PROPOSED EMBANKMENT REGRADE (SECTION A-A)
SCALE 1:100

DO NOT SCALE FROM THIS DRAWING

SAFETY HEALTH AND ENVIRONMENTAL INFORMATION

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MAINTENANCE AND INSPECTION

- TRIP HAZARD
- GROUND INSTABILITY

OPERATION

- TRIP HAZARD

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

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LEGEND

- EXISTING SLOPE PROFILE
- PROPOSED SLOPE PROFILE
- SURVEYED POSITION OF NETWORK RAIL BOUNDARY FENCE
- MEAN HIGH WATER SPRING LEVEL
- LINE OF CROSS SECTION A-A'
- PROPOSED EXTENT OF REGRADE
- PROPOSED AREA OF ACCESS TO PERMIT CONSTRUCTION OF PERMANENT WORKS
- CLASS 6G 125 - 225mm STONE
- NOMINAL 300-500mm STONE
- NOMINAL 500-700mm STONE
- NATURESCOT MARINE PROTECTED AREA (MPA) FROM SPATIALDATA.GOV.SCOT

Rev	Date	Description	Drawn	Chkd	Appd

FOR INFORMATION

FAIRHURST
4th Floor, 300 Bath Street
GLASGOW G2 4JR
Tel: 0141 204 8800

QTS **Network Rail**

Project Title
**ERBUSAIG BAY
KYL 61.0330 - 62.0770
UP AND DOWN**

Drawing Title
**PROPOSED EMBANKMENT
REGRADE SPECIFICATION**

Drawn AC	Date 05/09/24	Designed DC	Date 05/09/24
Checked CRI	Date 05/09/24	Approved CMcA	Date 05/09/24
A3	Scale AS SHOWN	Fairhurst Ref 158139-KYL-61.0330-62.0770-9101	Revision -