

Table 1. Cut & Fill Earthworks Volumes

Location	Area m <sup>2</sup>	Cut Volume m <sup>3</sup>	Fill Volume m <sup>3</sup>	Net Volume
Proposed Sand Recharge	8,161.70	-78.90	12,894.20	12,815.30

**Cut and Fill Notes**

1. Cut and fill volumes have been calculated based on the Douglas Land's Topographical Survey dated 04.03.2023.
2. Cut and fill volumes have been calculated from the Existing Ground Level to the Proposed Finished Ground level.
3. Extent of earthworks limited within earthworks boundary.
4. Earthworks modelling does not take account of contractor's sequence of works and consideration should be given to handling and stockpiling of material.

Refer to drawings  
63163-27-006 to 008 for  
Cross Sections

Extent of Douglas Land's  
Topographical Survey  
dated 04.03.23

Refer to drawings  
63163-27-006 to 008 for  
Cross Sections

SEPA Lidar Information. Additional  
Topographical Survey Required to  
Confirm Existing Ground Levels

Northern End of  
Existing Gabion Wall

- Notes:**
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  3. Dimensions noted are in metres unless stated otherwise.
  4. Drawing to be read in conjunction with other relevant drawings and documents associated with this project.
  5. Works to be carried out in accordance with the Specification included in the Contract Documents.
  6. Existing and proposed dimensions, levels and locations to be checked & verified by Main Contractor & Sub-Contractors on site prior to the commencement of the works and anomalies reported to the Engineer.
  7. Main Low Water Springs and Mean High Water Springs based on the OS mapping.
  8. See Drawing 63163-27-009 for detailed section through the recharge, fencing and planting details.
- 3<sup>rd</sup> party information used in the preparation of this drawing

	Source	Date
Topographical Survey	Douglas Land Surveys	04.03.23
Lidar Information	SEPA Lidar	12.04.23

- Key:**
- Topo Survey Undertaken March 2023
  - Topo Survey Undertaken March 2023
  - 0.5m Lidar Contours
  - Topo Survey Undertaken March 2023
  - Mean Low Water Springs (MLWS) (see note 7)
  - Mean High Water Springs (MHWS) (see note 7)

- CUT Depth Bands**
- Band 1 -0.00 - -0.50
  - Band 2 -0.50 - -1.00
  - Band 3 -1.00 - -1.55

- FILL Depth Bands**
- Band 1 0.00 - 0.50
  - Band 2 0.50 - 1.00
  - Band 3 1.00 - 1.50
  - Band 4 1.50 - 2.00
  - Band 5 2.00 - 2.50
  - Band 6 2.50 - 3.00
  - Band 7 3.00 - 3.50
  - Band 8 3.50 - 4.20

Revision	Date	Description	Initials
P01	-	For Client Issue	-

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Project Name  
**Outhead Sand Recharge Works  
Delivery Phase**  
Client  
**St Andrews Links Trust**

Title  
**Cut and Fill Earthwork Depth Bands  
and Volumes**

N. Point  
Scale  
Noted  
Scale

Date  
**04.04.23**  
Paper Size  
**A1**  
Quality Assurance  
ISO 9001:2015  
SCS UKAS Certificate CB0254539  
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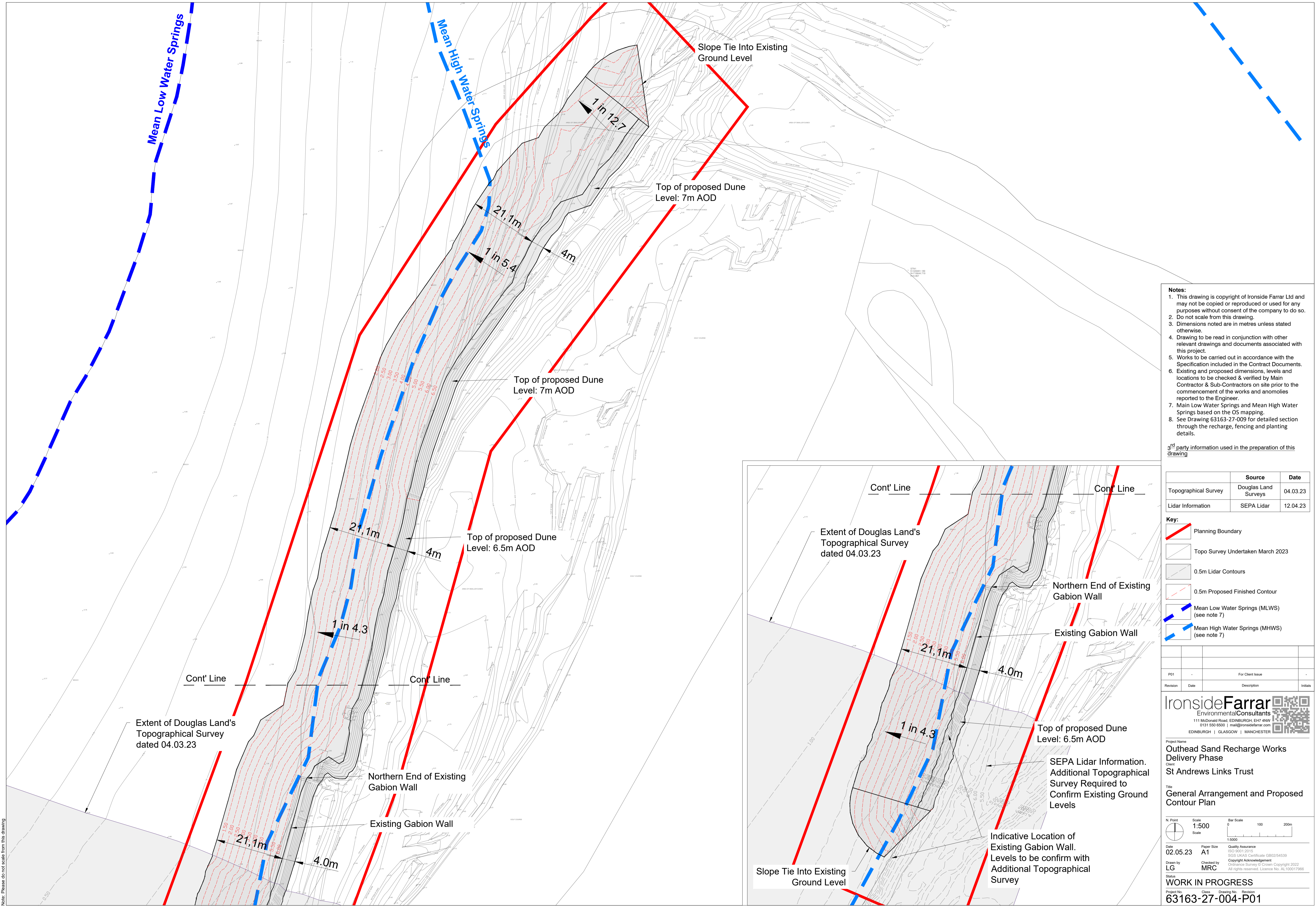
Status  
**WORK IN PROGRESS**  
Project No. Class. Drawing No. Revision  
**63163-27-005-P01**

Note: Please do not scale from this drawing









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  7. Main Low Water Springs and Mean High Water Springs based on the OS mapping.
  8. See Drawing 63163-27-009 for detailed section through the recharge, fencing and planting details.

3<sup>rd</sup> party information used in the preparation of this drawing

	Source	Date
Topographical Survey	Douglas Land Surveys	04.03.23
Lidar Information	SEPA Lidar	12.04.23

- Key:**
- Planning Boundary
  - Topo Survey Undertaken March 2023
  - 0.5m Lidar Contours
  - 0.5m Proposed Finished Contour
  - Mean Low Water Springs (MLWS) (see note 7)
  - Mean High Water Springs (MHS) (see note 7)

Revision			
Revision	Date	Description	Initials

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Project Name  
**Outhead Sand Recharge Works Delivery Phase**  
 Client  
**St Andrews Links Trust**

Title  
**General Arrangement and Proposed Contour Plan**

N. Point Scale: 1:500  
 Bar Scale: 0 100 200m  
 Date: 02.05.23 Paper Size: A1 Quality Assurance: ISO 9001:2015  
 Checked by: MRC  
 Status: LG  
SCS UKAS Certificate: CS60254539  
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**WORK IN PROGRESS**  
 Project No. Class Drawing No. Revision  
**63163-27-004-P01**

Note: Please do not scale from this drawing

	Eastings	Northings
HP01	350037.98	720440.15
HP02	350084.64	720440.15
HP03	350062.12	720355.08
HP04	350111.24	720355.08
HP05	350031.31	720267.82
HP06	350083.36	720267.82
HP07	350062.12	720178.84
HP08	350111.24	720178.84
HP09	350031.31	720092.43
HP10	350083.36	720092.43

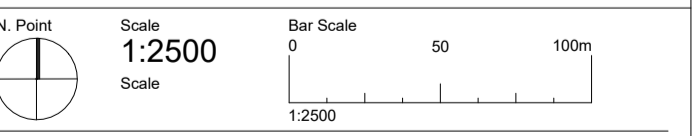


**Proposed Extraction Area:**  
 Sand to be selected from selected location within this wider area . Excavation of sand in shallow cut 0.25m 0.5m deep. No planning permission required for Works in this Area.

Revision	Date	Description	Initials
HP1	-	For Client Issue	-

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Project Name  
**Outhead Sand Recharge Works**  
 Delivery Phase  
 Client  
**St Andrews Links Trust**  
 Title  
**Hand Pit Location Plan**



Date  
**19.05.23**  
 Paper Size  
**A1**  
 Quality Assurance  
 ISO 9001:2015  
 SCS UKAS Certificate CB0254539  
 Checked by  
**CP**  
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Status  
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 Project No. Class Drawing No. Revision  
**63163-21-001-P01**

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