

Note / Memo

HaskoningDHV UK Ltd.
Water

To: Robin Siddle, Alice Hall
From: Mark Donoghue
Date: 05 July 2018
Copy:
Our reference: WATPB5270N001F0.1
Classification: Project related

Subject: Runswick Bay Coastal Protection Scheme - Ecological Enhancement

Introduction

This memo provides a summary of the creation of environmental enhancement features within the imported rock armour revetment constructed as part of the Runswick Bay Coastal Protection Scheme and covers;

1. Artificial Rock Pools
- 2. Selective Rock Placement (“Natural” Rock Pools)**
- 3. Increasing Textural Complexity (scoring)**
4. Seed Rocks

5. Initial Observations

At the time of writing this element of the project is ongoing. More detail can be provided on completion e.g. total numbers of pools, as-built photographs etc.

1. Artificial Rock Pools

Equipment:

- Circular saw
- Breaker
- Petrol powered portable generator
- Personal Protective Equipment
- Water (for cooling/dust suppression)

Methodology:

1. Circular saw used to make a series of parallel cuts (typically at 50mm centres).



2. Circular saw used to make a second series of cuts perpendicular to first cuts (typically at 50mm centres).



3. Breaker used to break out loose rock fragments, resulting in “cross” shaped pool.



4. Circular saw used to make a series of “diagonal cuts” through corners.



5. Breaker used to break out loose rock fragments and form dish/bowl shape approximately 300mm diameter with depth of approximately 150mm in centre.







2. Selective Rock Placement (“Natural” Rock Pools)

Where practicable, the position and orientation of rock armour blocks was selected to enable retention of water to mimic rock pools.



3. Increasing Textural Complexity (scoring)

Equipment:

- Circular saw
- Breaker
- Petrol powered portable generator
- Personal Protective Equipment
- Water (for cooling/dust suppression)

Methodology:

1. Circular saw used to make a series of parallel cuts (approximately 10mm deep) in the face of the armour rock.



2. Breaker used to knock out rock between two grooves to create wider groove locally.

INSERT IMAGE

4. Seed Rocks

Existing boulders on the foreshore which were heavily colonised with vegetation / fauna were carefully set aside as required during construction. On completion of rock armour placement, the existing rocks were placed against the toe rocks of the new structure to allow seeding of the new rock armour and to encourage fast colonisation of the new material.





5. Initial Observations

Within two months, vegetation establishment was evident within the artificial rock pools (including incomplete) and in the “natural” rock pools.



