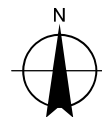
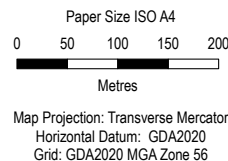




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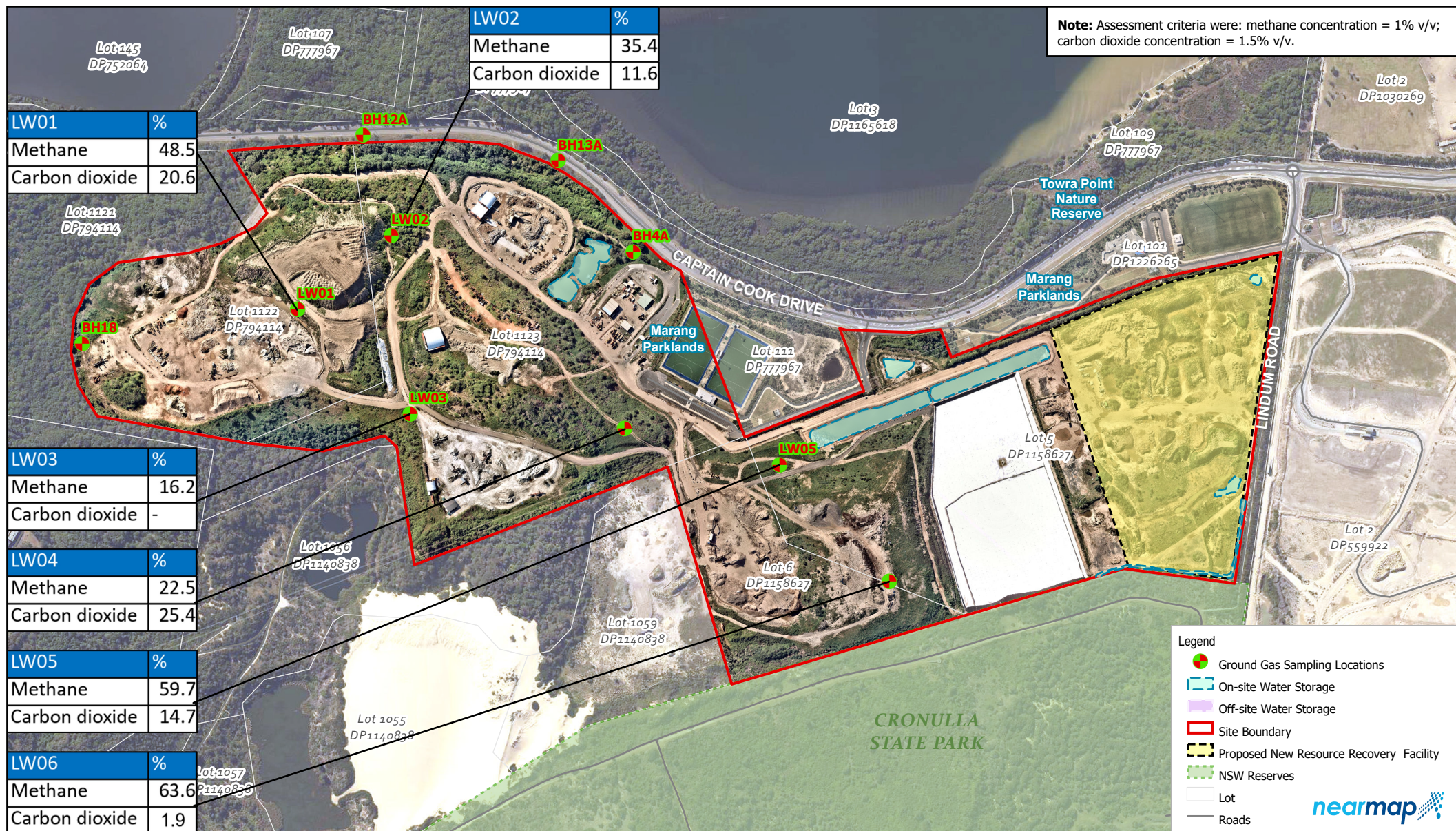


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Groundwater exceedance plan

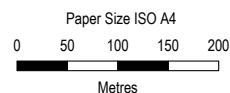
Project No. 12529041
Revision No. -
Date 25/09/2020

Figure 12

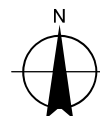


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Map Projection: Transverse Mercator
Horizontal Datum: GDA2020
Grid: GDA2020 MGA Zone 56



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Project No. **12529041**
Revision No. **0**
Date **12/11/2020**

Ground gas exceedances

Figure 13

SOUTH

NORTH

SOURCE

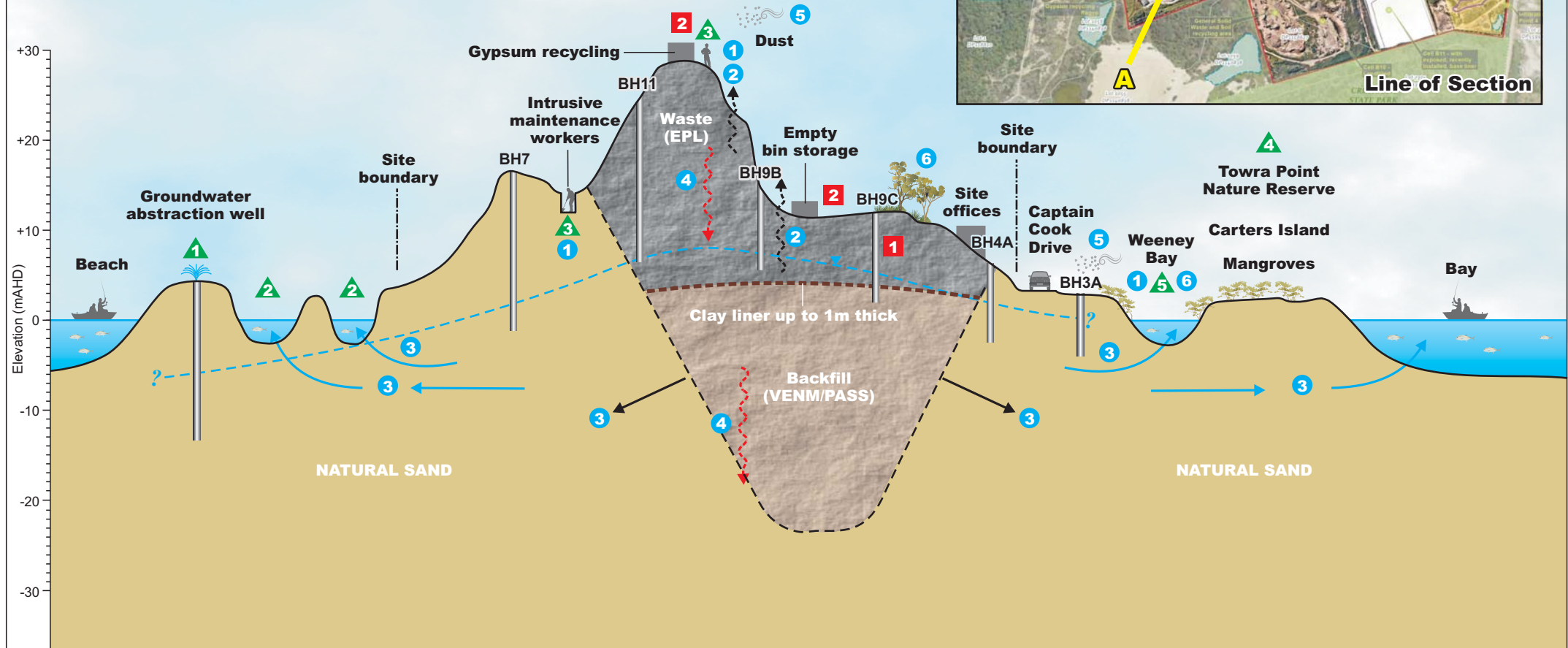
- 1** Landfilling
- 2** Localised contamination from site operations (leaks/spills)

PATHWAY

- 1** Direct contact
- 2** Ground gas migration
- 3** Groundwater and leachate lateral migration
- 4** Leaching to groundwater
- 5** Dust inhalation
- 6** Uptake by flora and fauna

RECEPTOR

- 1** Off-site groundwater abstraction (irrigation/recreation)
- 2** Off-site ponds (fresh water)
- 3** Site workers/users
- 4** Towra Point Nature Reserve
- 5** Aquaculture (oyster leases)



Conceptual diagram only -
scale is approximate

LEGEND

- Leachate pathway
- Ground gas migration
- Groundwater and leachate migration pathway
- Groundwater head



Breen Resources Pty Ltd
Breen Resource Facility - EIS

Conceptual site model
Cross section A'-A - current site layout
(Lot 1123 DP794114)

Job Number	12-529041
Revision	0
Date	29 Sep 2020

Figure 14

SOUTH

NORTH

SOURCE

PATHWAY

RECEPTOR

1 Landfilling

1 Direct contact

1 Off-site groundwater abstraction (irrigation/recreation)

2 Ground gas migration

2 Off-site ponds (fresh water)

3 Groundwater and leachate lateral migration

3 Site workers

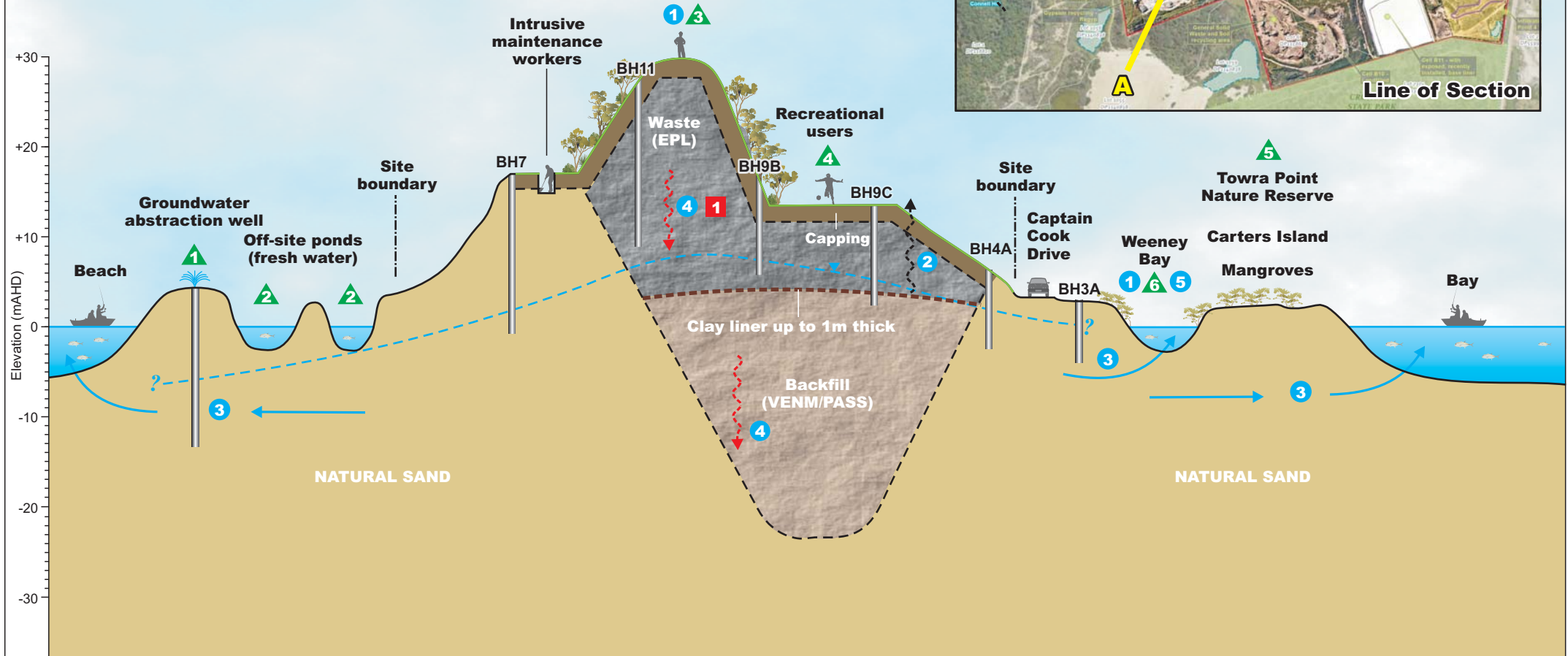
4 Leaching to groundwater

4 Recreational users

5 Uptake by flora and fauna

5 Towra Point Nature Reserve

6 Aquaculture oyster leases



Conceptual diagram only -
scale is approximate

LEGEND

- Leachate pathway
- Ground gas migration
- Groundwater and leachate migration pathway
- Groundwater head

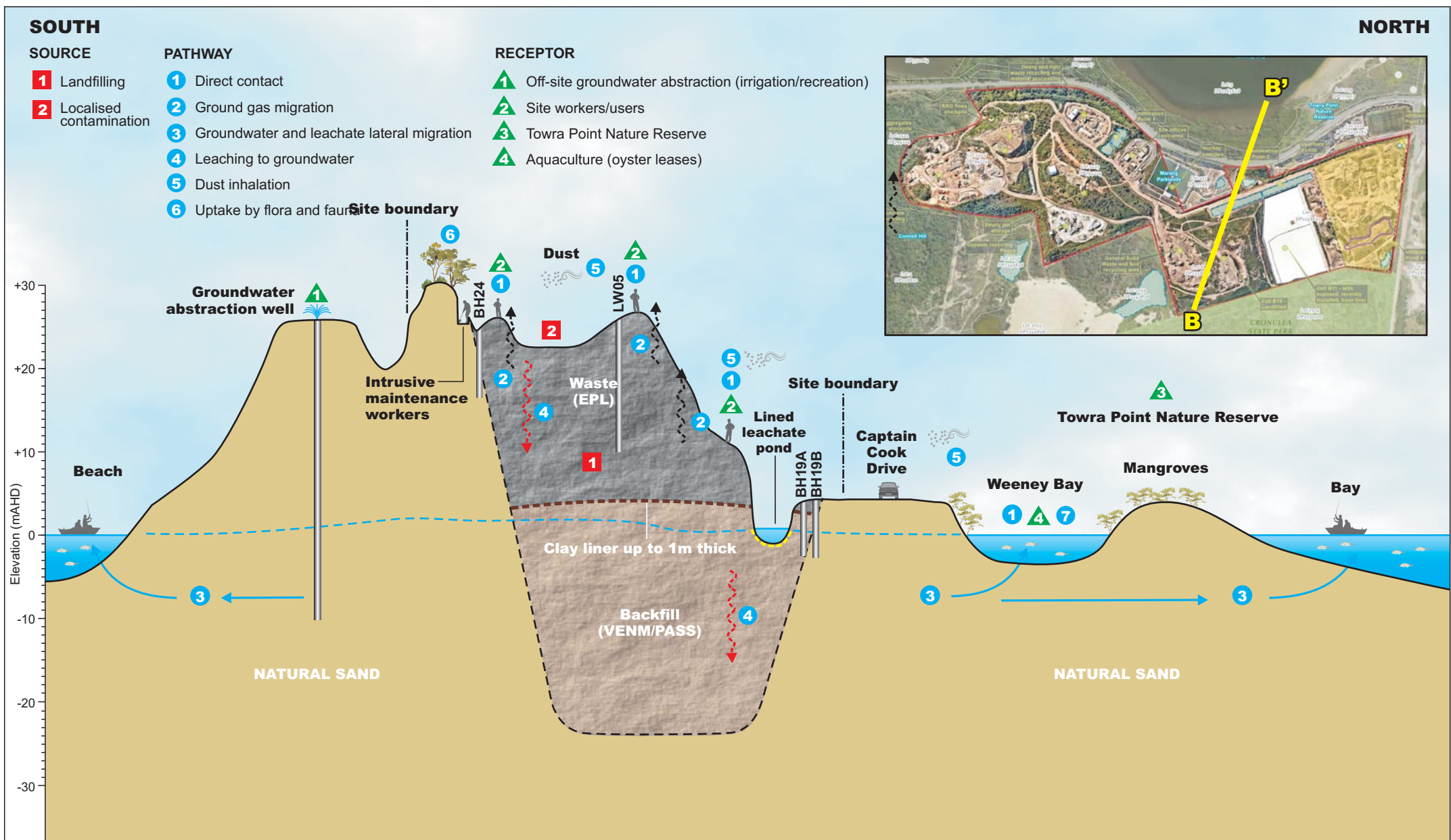


Breen Resources Pty Ltd
Breen Resource Facility - EIS

Conceptual site model
Cross section A'-A - future site layout
(Lot 1123 DP794114)

Job Number	12-529041
Revision	0
Date	29 Sep 2020

Figure 15



Conceptual diagram only -
scale is approximate

LEGEND

- Leachate pathway
- Ground gas migration
- Groundwater and leachate migration pathway
- Surface run-off
- Groundwater head



Breen Resources Pty Ltd
Breen Resource Facility - EIS

Conceptual site model
Cross section B'-B - current site layout
(Lot 6 DP1158627)

Job Number	12-529041
Revision	0
Date	29 Sep 2020

Figure 16

WEST

EAST



SOURCE

1 Landfilling

PATHWAY

1 Direct contact

2 Ground gas migration

3 Groundwater and leachate lateral migration

4 Leaching to groundwater

5 Dust inhalation

6 Uptake by flora and fauna

RECEPTOR

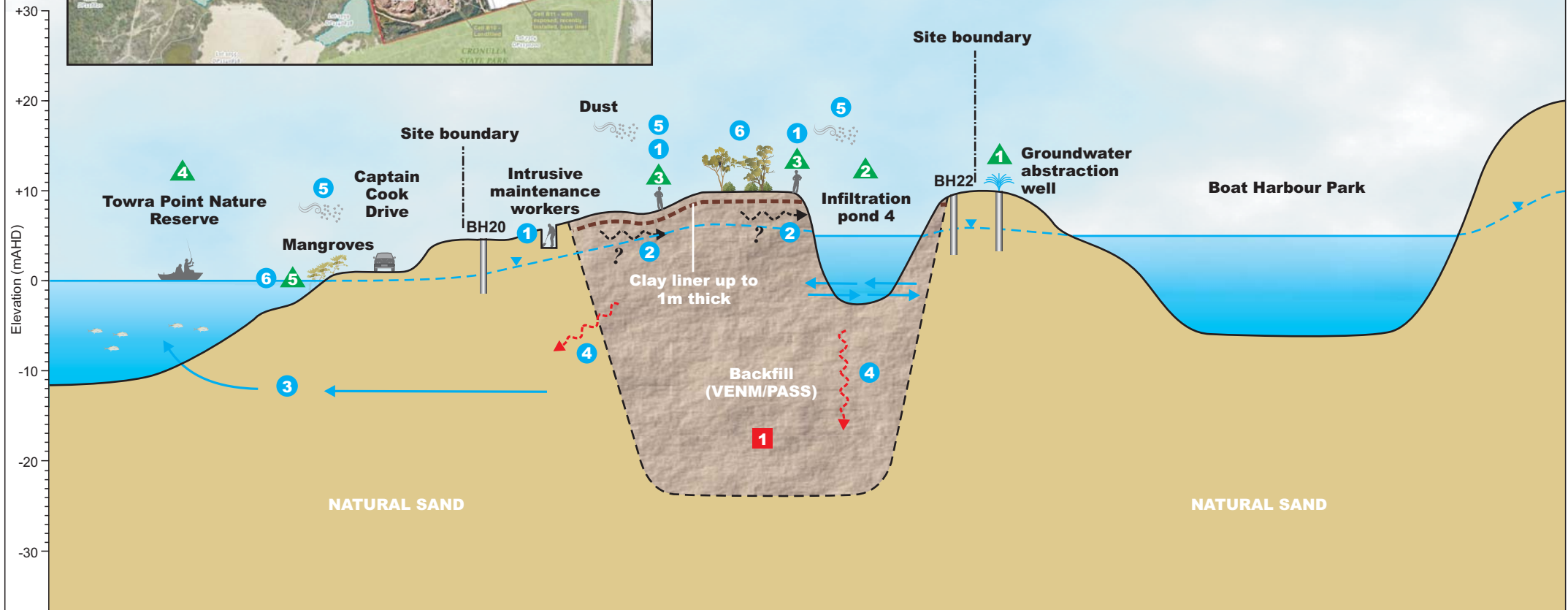
1 Off-site groundwater abstraction (irrigation/recreation)

2 On-site ponds

3 Site workers/users

4 Towra Point Nature Reserve

5 Aquaculture (oyster leases)



Conceptual diagram only -
scale is approximate

LEGEND

- Leachate pathway
- Ground gas migration
- Groundwater and leachate migration pathway
- Surface run-off
- Groundwater head



Breen Resources Pty Ltd
Breen Resource Facility - EIS

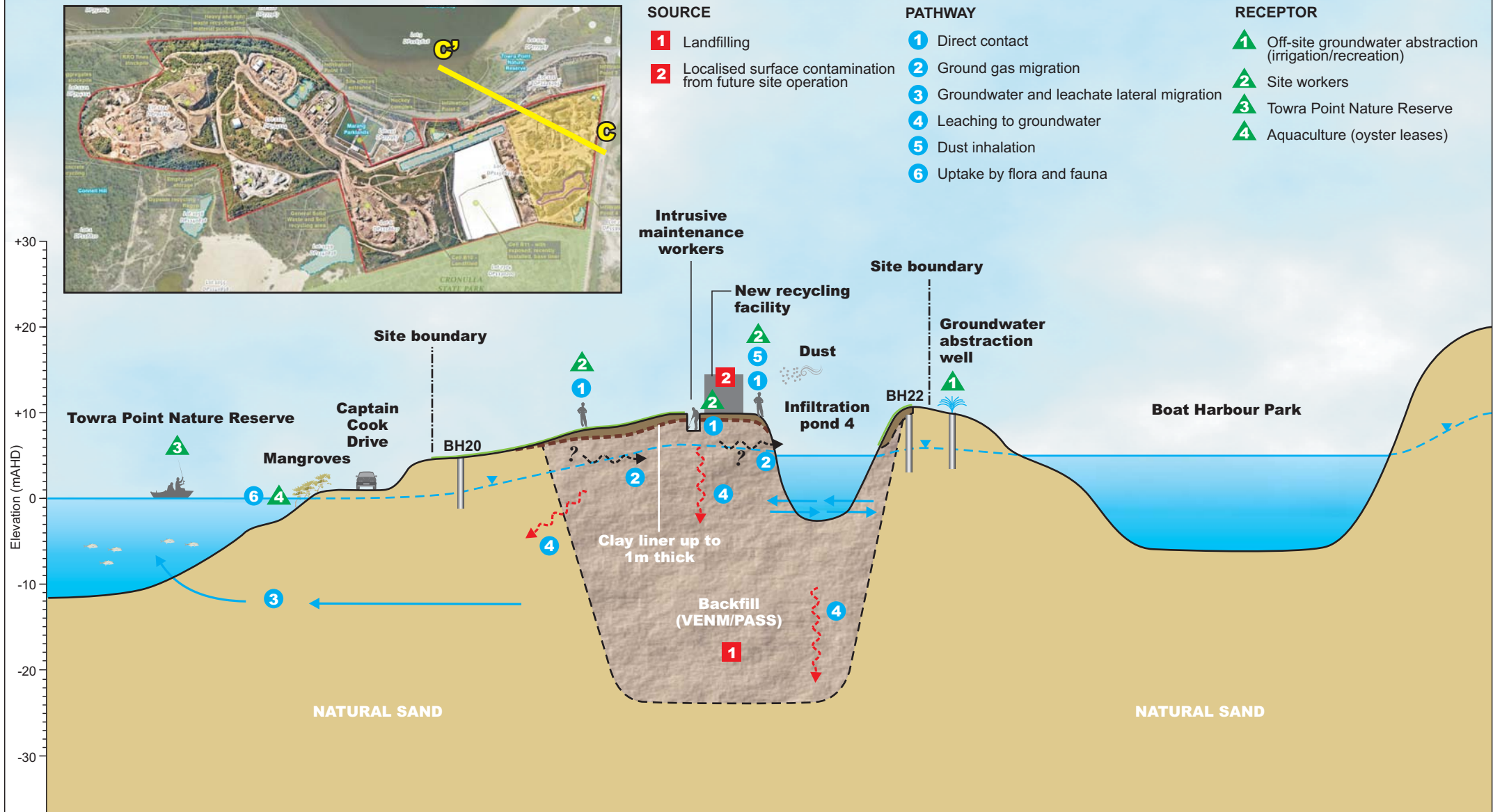
Conceptual site model
Cross section C'-C - current site layout
(Lot 5 DP1158627)

Job Number	12-529041
Revision	0
Date	29 Sep 2020

Figure 18

WEST

EAST



Conceptual diagram only -
scale is approximate

LEGEND

- Leachate pathway
- Ground gas migration
- Groundwater and leachate migration pathway
- Surface run-off
- Groundwater head



Breen Resources Pty Ltd
Breen Resource Facility - EIS

Conceptual site model
Cross section C'-C - future site layout
(Lot 5 DP1158627)

Job Number	12-529041
Revision	0
Date	29 Sep 2020

Figure 19