

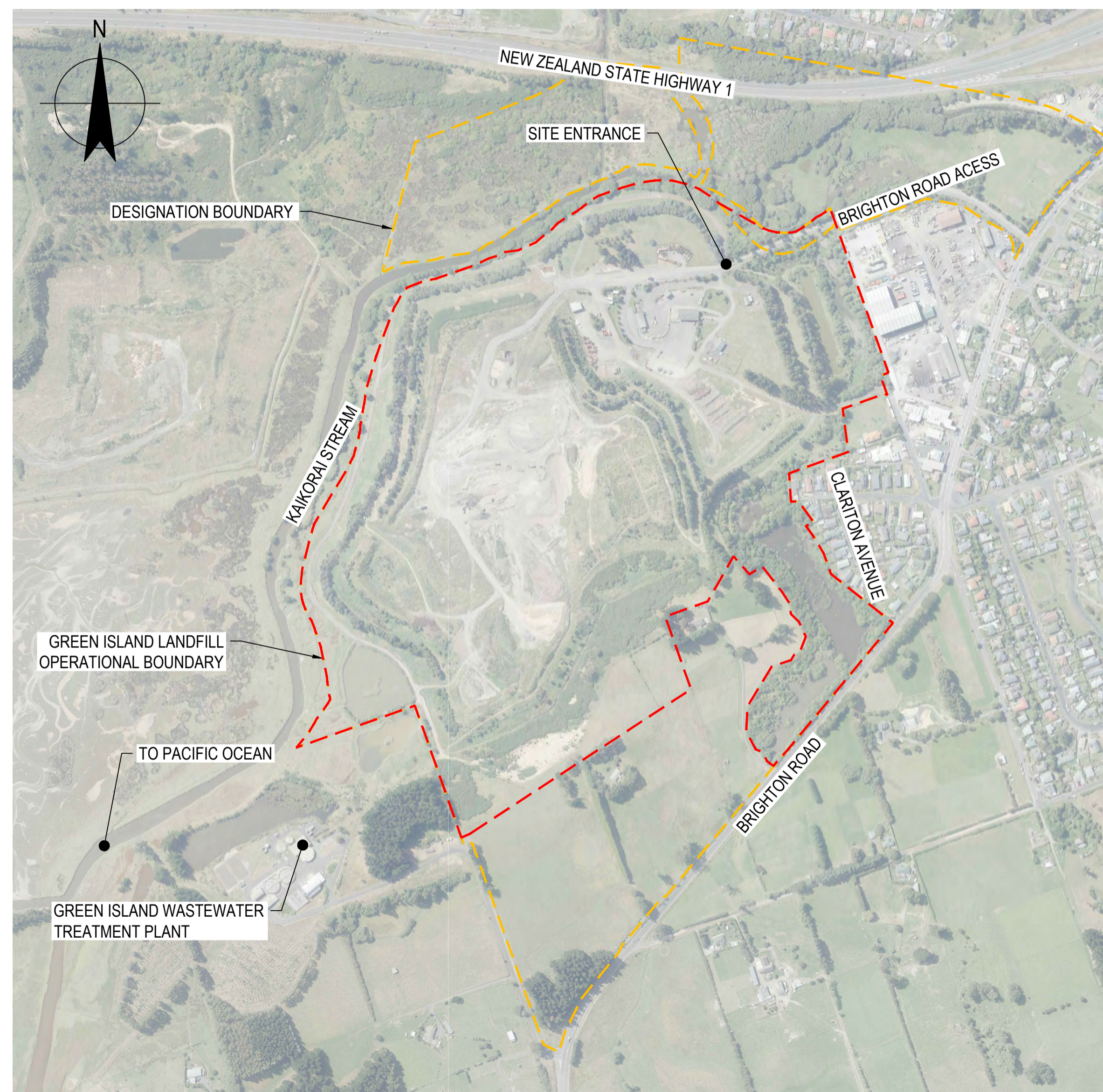
Appendices

Appendix A - Drawings

DUNEDIN CITY COUNCIL

GREEN ISLAND LANDFILL CLOSURE

12547621



LOCALITY PLAN

DRAWING LIST

DRG No.	DRAWING TITLE
12547621-G001	COVER SHEET, LOCALITY PLAN AND DRAWING LIST
12547621-G101	EXISTING LAYOUT - LANDFILL AND SUPPORT AREA INFRASTRUCTURE
12547621-G102	GENERAL ARRANGEMENT
12547621-C201	EXISTING LANDFILL CONTOURS
12547621-C202	PROPOSED FINAL CONTOURS
12547621-C203	LANDFILL STAGING
12547621-C204	EXISTING AND PROPOSED LEACHATE COLLECTION SYSTEM - GENERAL ARRANGEMENT
12547621-C205	LAYOUT OF EXISTING AND PROPOSED LEACHATE COLLECTION SYSTEM ONLY
12547621-C206	LANDFILL CROSS SECTIONS SHEET 1
12547621-C207	LANDFILL CROSS SECTIONS SHEET 2
12547621-C301	PROPOSED LEACHATE COLLECTION TRENCH PLAN
12547621-C302	PROPOSED LEACHATE COLLECTION TRENCH CROSS SECTIONS SHEET 1
12547621-C303	PROPOSED LEACHATE COLLECTION TRENCH CROSS SECTIONS SHEET 2
12547621-C304	TYPICAL DETAILS
12547621-C401	EXISTING SURFACE WATER COLLECTION SYSTEM
12547621-C402	FINAL SURFACE WATER COLLECTION SYSTEM
12547621-C501	LANDFILL GAS MANAGEMENT SYSTEM
12547621-C601	ENVIRONMENTAL MONITORING PLAN

FOR CONSENT NOT FOR CONSTRUCTION

Rev	Description	Checked	Approved	Date
A	PRELIMINARY ISSUE	PM*	PD*	16.12.22
Author	R. LOPEZ	Drafting Check		
Designer		Design Check		



Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE

Drawing Title	COVER SHEET, LOCALITY PLAN AND DRAWING LIST
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Project No.	12547621
Status	PRELIMINARY
Status Code	S2

Drawing No.	12547621-G001
Rev	A



LEGEND

	EXISTING CONTOURS
	PROPERTY BOUNDARY
	FENCE
	SEWER LINE
	STORMWATER DITCH
	EXISTING GAS MAIN
	EXISTING GAS WELL CONNECTOR
	EXISTING PERIMETER LEACHATE COLLECTION TRENCH (NOTE 1)
	LANDFILL OPERATION BOUNDARY
	DESIGNATION BOUNDARY
	EXISTING HORIZONTAL LEACHATE DRAIN (IN WASTE)
	EXISTING GAS WELL
	AV AIR VALVE
	MH MANHOLE
	PS PUMP STATION
	ST STAFF
	EXISTING SLUDGE PLACEMENT AREA
	FORMER STOCKPILE AREA
	EXISTING ASBESTOS AREA
	FINAL CAP COMPLETED
	BORROW AREA

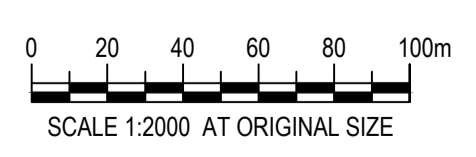
- NOTES:**
- EXISTING LEACHATE COLLECTION TRENCH ALIGNMENT AND ASSOCIATED STRUCTURES (INCLUDING MANHOLES AND PUMP STATIONS) APPROXIMATELY BASED ON MWH (2004) DRAWING, GREEN ISLAND - LANDFILL LEACHATE COLLECTION & ENVIRONMENTAL MONITORING SYSTEM (REF. 006116-19-01 - G11-C, DATED 12.10.2004). ACTUAL INFORMATION TO BE CONFIRMED PRIOR TO THE DETAILED DESIGN.

EXISTING LAYOUT - LANDFILL AND SUPPORT AREA INFRASTRUCTURE
SCALE 1:2000

FOR CONSENT NOT FOR CONSTRUCTION

Rev	Description	Checked	Approved	Date
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Author: R. LOPEZ Drafting Check: []
Designer: [] Design Check: []



Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE
Status	PRELIMINARY

Drawing Title	EXISTING LAYOUT - LANDFILL AND SUPPORT AREA INFRASTRUCTURE	Size	A1
Status Code	S2	Drawing No.	12547621-G101
Rev	A		

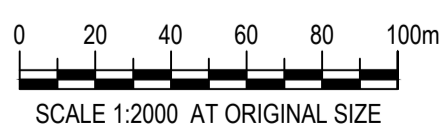


- LEGEND**
- 500 EXISTING CONTOURS
 - PROPERTY BOUNDARY
 - FENCE
 - EXISTING PERIMETER LEACHATE COLLECTION TRENCH
 - EXISTING HORIZONTAL LEACHATE DRAIN (IN WASTE)
 - LANDFILL OPERATION BOUNDARY
 - DESIGNATION BOUNDARY
 - PROPOSED MSW PLACEMENT EXTENT FROM 2022
 - SURFACE FLOW
 - PIPE FLOW
 - PROPOSED LEACHATE COLLECTION TRENCH
 - EXTENT OF PROPOSED HORIZONTAL LEACHATE DRAINS
 - SEWER LINE
 - EXISTING GAS MAIN
 - EXISTING GAS WELL CONNECTOR
 - EXISTING GAS WELL
 - PS PUMP STATION
 - MH MANHOLE
 - EXISTING SLUDGE PLACEMENT AREA
 - FORMER STOCKPILE AREA
 - EXISTING ASBESTOS SOIL AREA
 - FINAL CAP COMPLETED
 - BORROW AREA

SERVICE PLAN
SCALE 1:2000

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Author	R.LOPEZ	Drafting Check		
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Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE
Status	PRELIMINARY

Drawing Title	GENERAL ARRANGEMENT
Status Code	S2
Drawing No.	12547621-G102

Size	A1
Rev	A



LEGEND

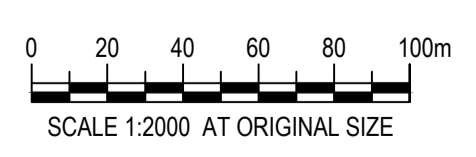
	EXISTING CONTOURS
	PROPERTY BOUNDARY
	FENCE
	SEWER LINE
	STORMWATER DITCH
	LANDFILL OPERATION BOUNDARY
	DESIGNATION BOUNDARY
	FINAL CAP COMPLETED
	BORROW AREA

- NOTES:**
- EXISTING CONTOURS ON THIS DRAWING IS DRONE SURVEY OF 3 AUGUST 2022.
 - AERIAL PHOTO OF MAIN LANDFILL AREA ON THIS DRAWING IS DRONE SURVEY OF 3 AUGUST 2022; AND SURROUNDING AREAS IS OF 8 JULY 2021.
 - COORDINATE SYSTEM: NZGD2000 NORTH TAIERI CIRCUIT.
HEIGHT DATUM: NZVD2016

EXISTING LANDFILL CONTOURS
SCALE 1:2000

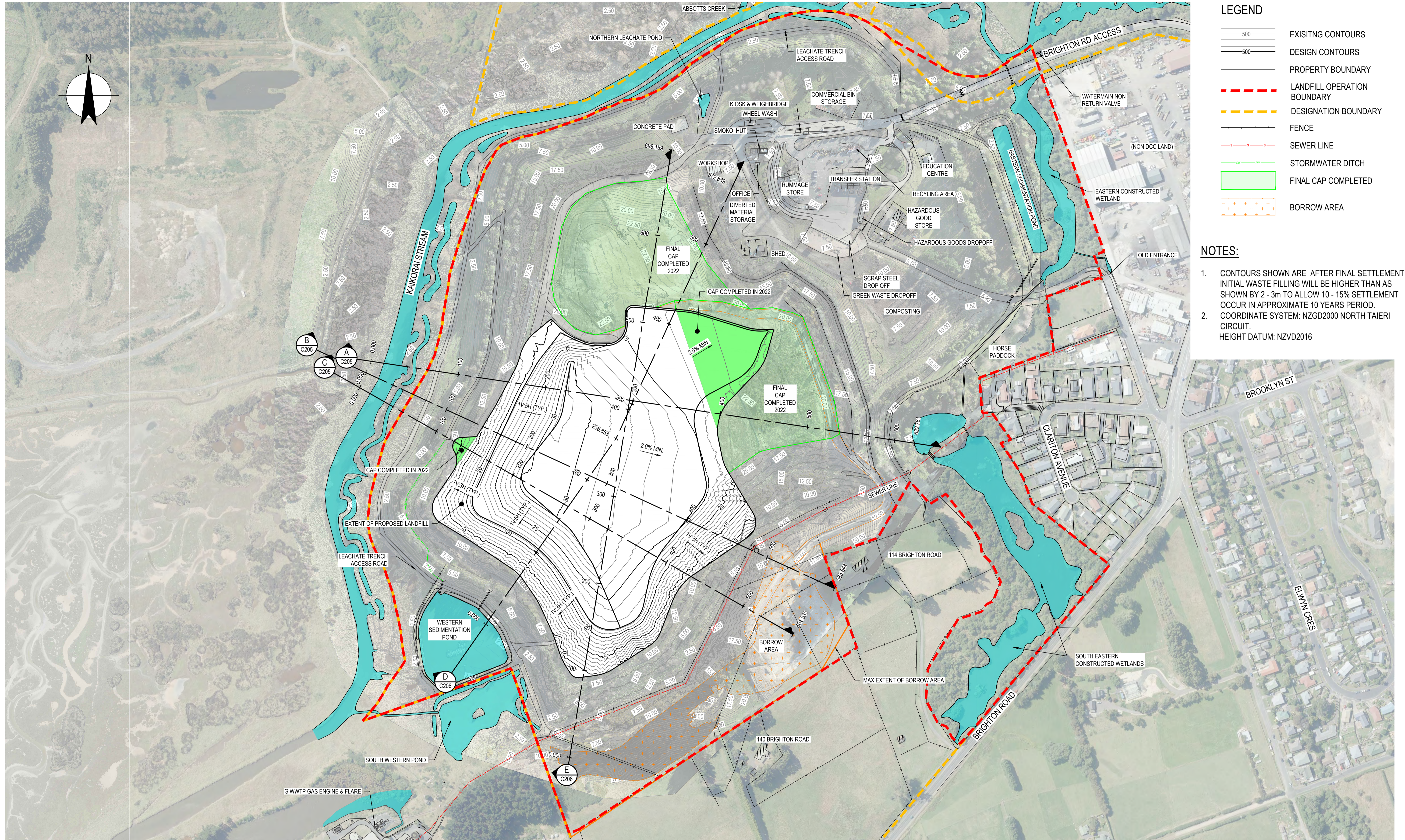
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Designer		Design Check		



Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE
Status	PRELIMINARY

Drawing Title	EXISTING LANDFILL CONTOURS	Size	A1
Status Code	S2	Drawing No.	12547621-C201
Rev	A		



LEGEND

	EXISTING CONTOURS
	DESIGN CONTOURS
	PROPERTY BOUNDARY
	LANDFILL OPERATION BOUNDARY
	DESIGNATION BOUNDARY
	FENCE
	SEWER LINE
	STORMWATER DITCH
	FINAL CAP COMPLETED
	BORROW AREA

- NOTES:**
- CONTOURS SHOWN ARE AFTER FINAL SETTLEMENT. INITIAL WASTE FILLING WILL BE HIGHER THAN AS SHOWN BY 2 - 3m TO ALLOW 10 - 15% SETTLEMENT OCCUR IN APPROXIMATE 10 YEARS PERIOD.
 - COORDINATE SYSTEM: NZGD2000 NORTH TAIERI CIRCUIT. HEIGHT DATUM: NZVD2016

PROPOSED FINAL CONTOURS
SCALE 1:2000

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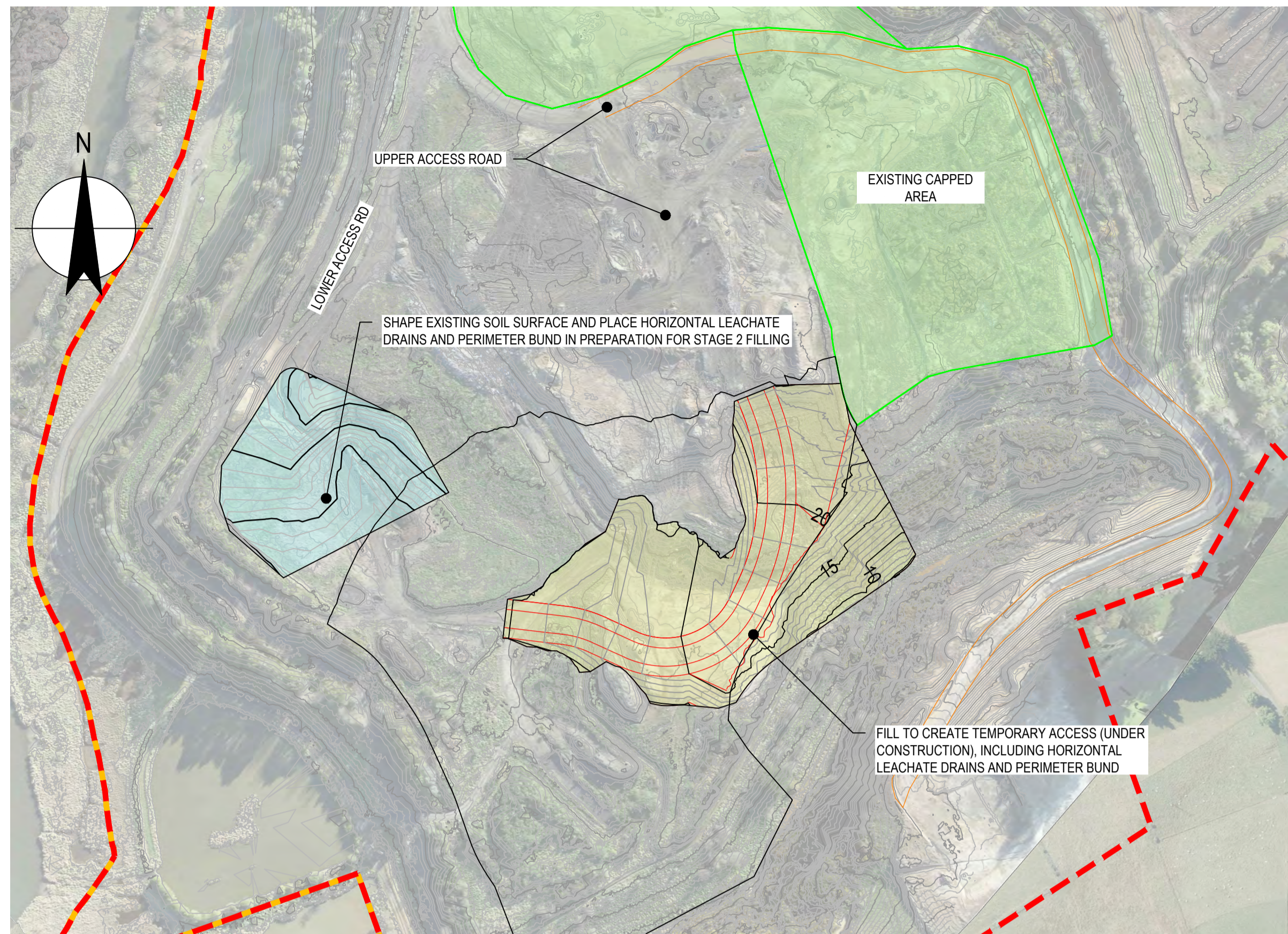
Rev	Description	Checked	Approved	Date
A	PRELIMINARY ISSUE	PM*	PD*	16.12.22

Author: R. LOPEZ Drafting Check: []
Designer: [] Design Check: []

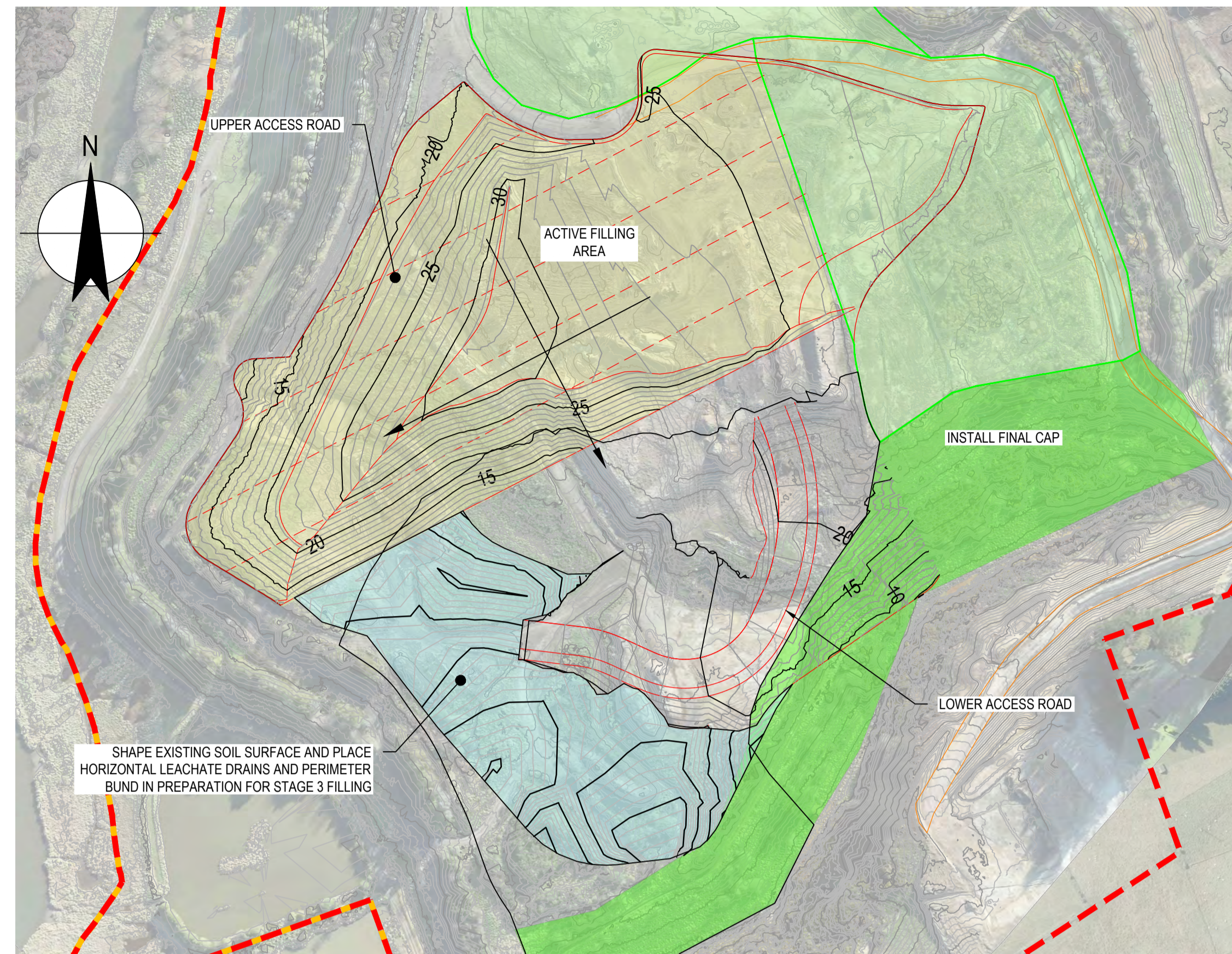


Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE
Status	PRELIMINARY

Drawing Title	PROPOSED FINAL CONTOURS	Size	A1
Status Code	S2	Drawing No.	12547621-C202
Rev	A		



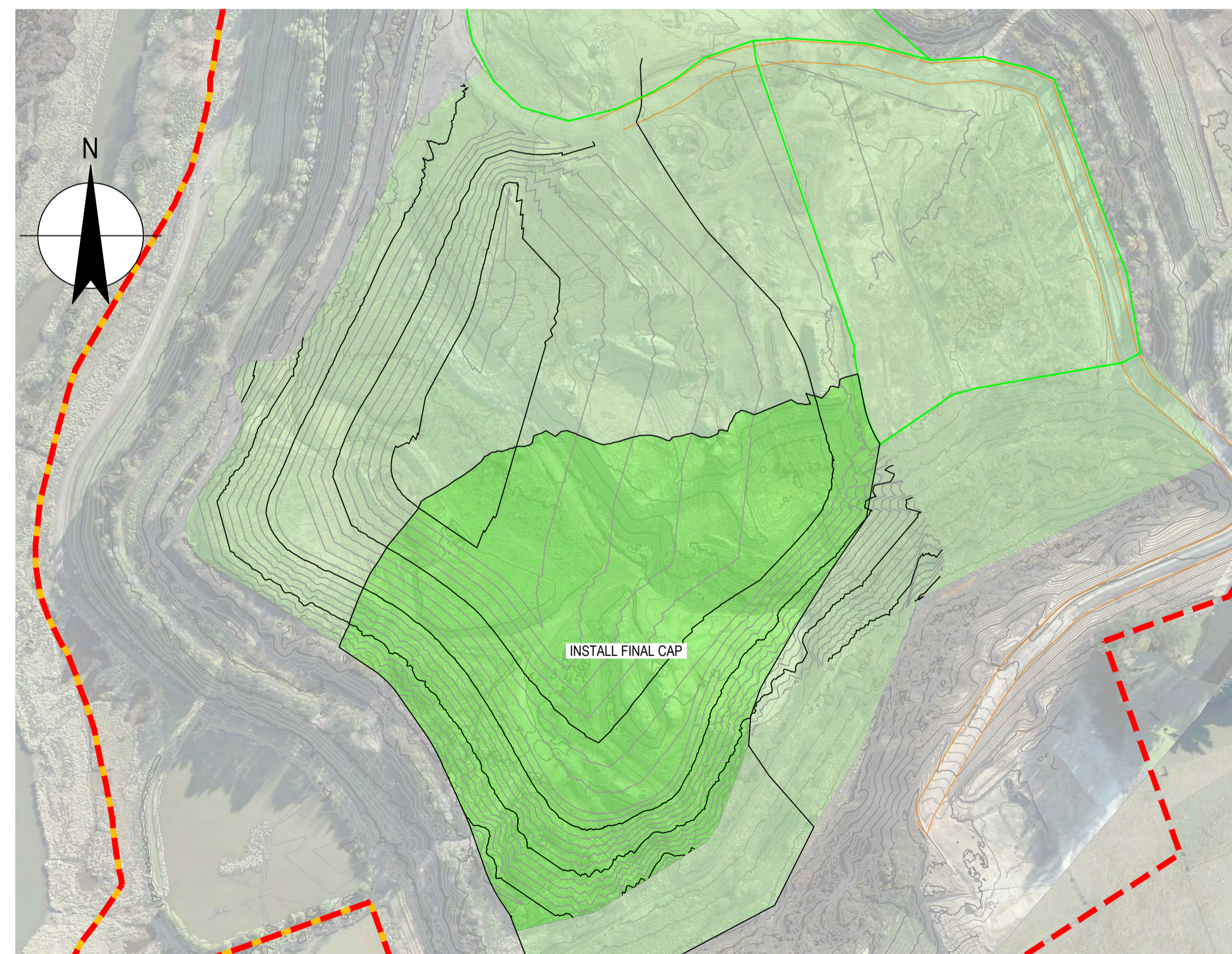
STAGE 1 WORKS
SCALE 1:2000



STAGE 2 WORKS
SCALE 1:2000



STAGE 3 WORKS
SCALE 1:2000



CLOSURE
SCALE 1:2000

LEGEND

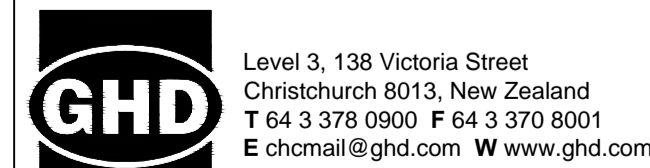
- EXISTING CONTOURS
- PROPOSED CONTOURS
- FILL PROGRESSION DIRECTION
- LANDFILL OPERATION BOUNDARY
- DESIGNATION BOUNDARY
- ACCESS ROAD
- EXISTING CAPPED AREA
- INSTALL FINAL CAP AREA
- ACTIVE FILLING AREA
- STAGE 2 HORIZONTAL LEACHATE DRAINS AREA

NOTES:

1. EXISTING CONTOURS AND AERIAL IMAGE ON THIS DRAWING ARE DRONE SURVEY OF 3 AUGUST 2022.

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A PRELIMINARY ISSUE	PM*	PD*	16.12.22
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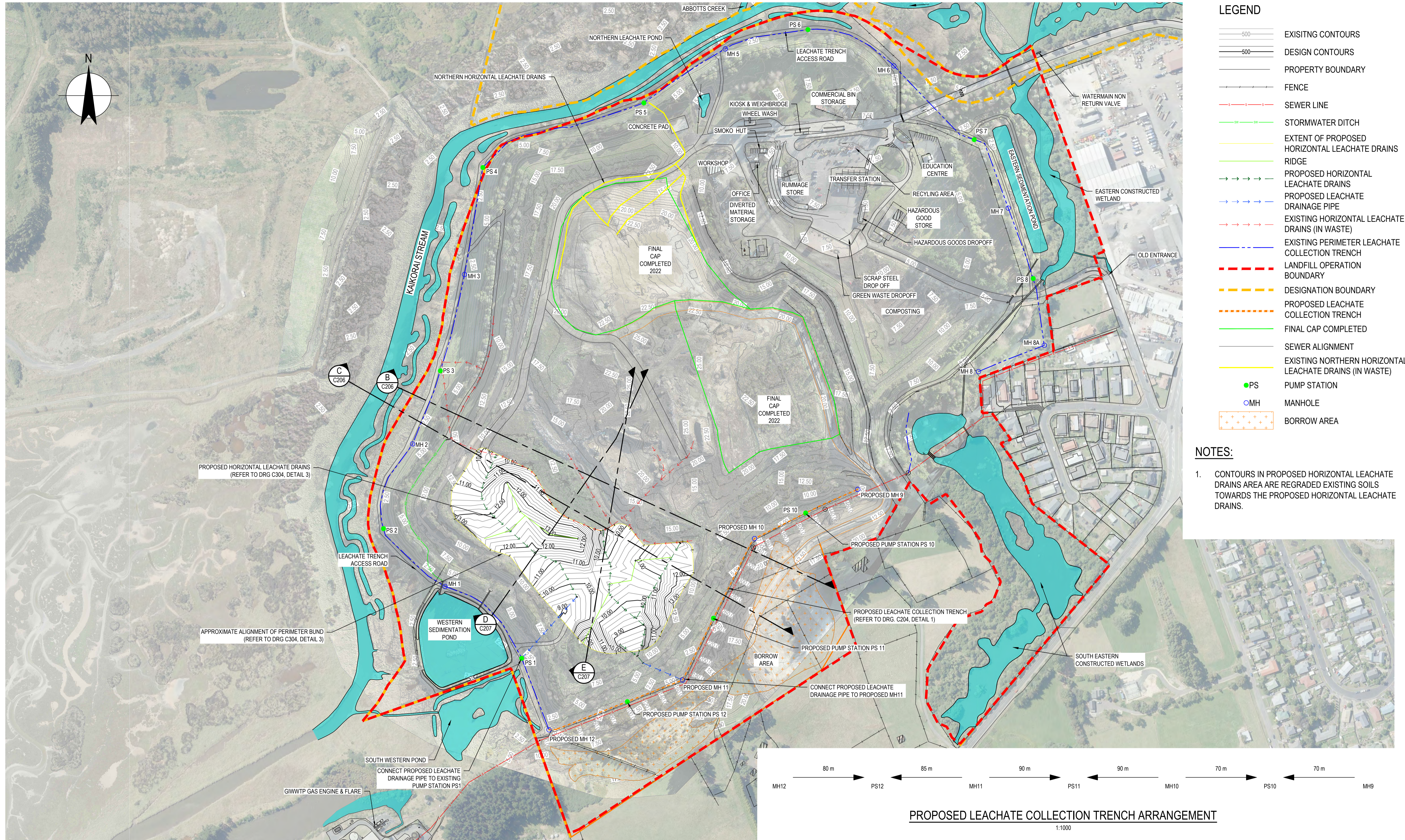
Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE
Status	PRELIMINARY

Drawing Title: LANDFILL STAGING

Status Code: S2

Drawing No.: 12547621-C203

Size: A1
Rev: A



- ### LEGEND
- EXISTING CONTOURS
 - DESIGN CONTOURS
 - PROPERTY BOUNDARY
 - FENCE
 - SEWER LINE
 - STORMWATER DITCH
 - EXTENT OF PROPOSED HORIZONTAL LEACHATE DRAINS
 - RIDGE
 - PROPOSED HORIZONTAL LEACHATE DRAINS
 - PROPOSED LEACHATE DRAINAGE PIPE
 - EXISTING HORIZONTAL LEACHATE DRAINS (IN WASTE)
 - EXISTING PERIMETER LEACHATE COLLECTION TRENCH
 - LANDFILL OPERATION BOUNDARY
 - DESIGNATION BOUNDARY
 - PROPOSED LEACHATE COLLECTION TRENCH
 - FINAL CAP COMPLETED
 - SEWER ALIGNMENT
 - EXISTING NORTHERN HORIZONTAL LEACHATE DRAINS (IN WASTE)
 - PS PUMP STATION
 - MH MANHOLE
 - BORROW AREA

- ### NOTES:
1. CONTOURS IN PROPOSED HORIZONTAL LEACHATE DRAINS AREA ARE REGRADED EXISTING SOILS TOWARDS THE PROPOSED HORIZONTAL LEACHATE DRAINS.

EXISTING AND PROPOSED LEACHATE COLLECTION SYSTEM - GENERAL ARRANGEMENT
SCALE 1:1000

FOR CONSENT NOT FOR CONSTRUCTION

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Author: R. LOPEZ Drafting Check: []
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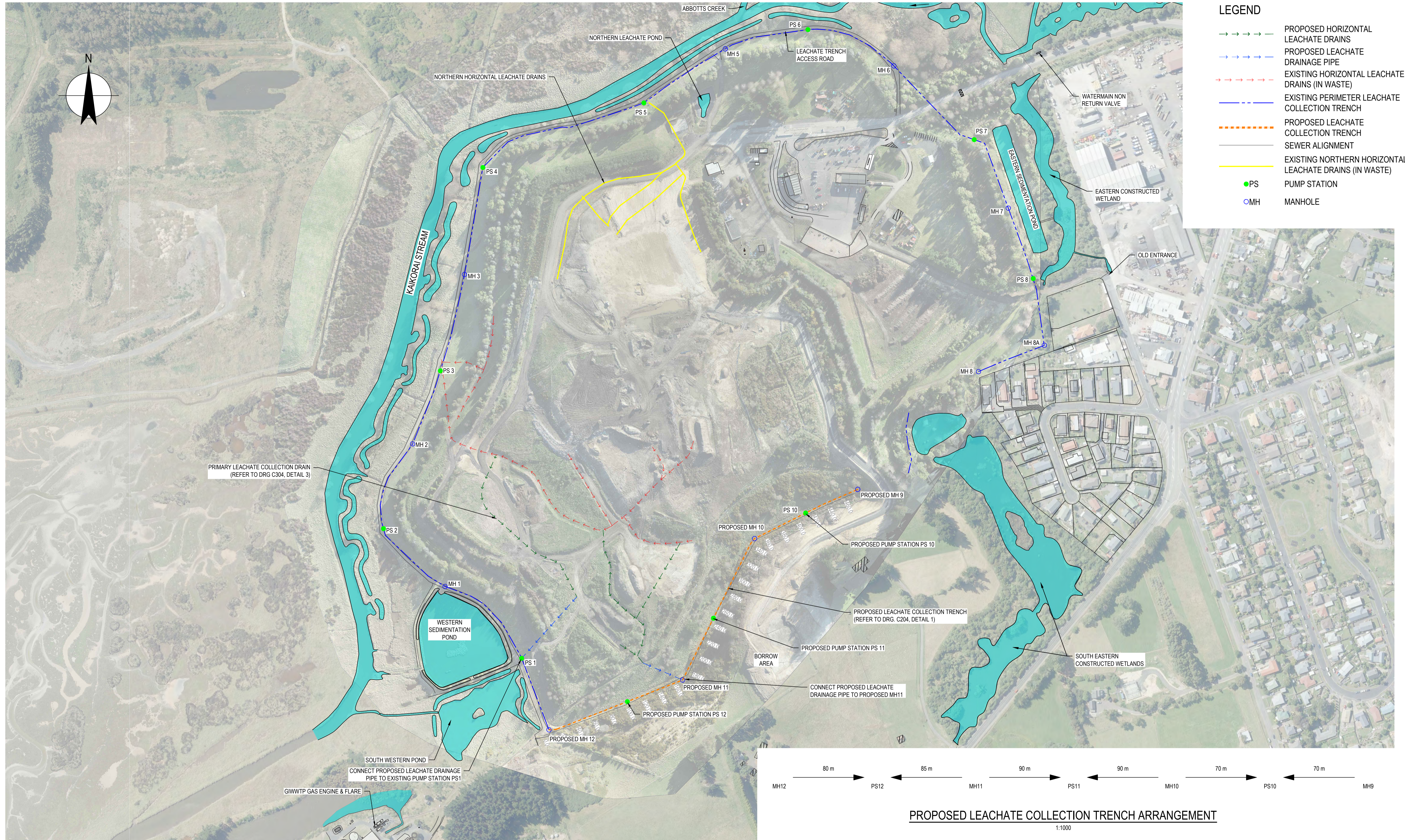


Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE
Status	PRELIMINARY

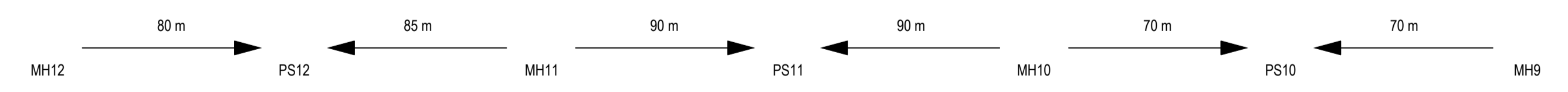
Drawing Title: EXISTING AND PROPOSED LEACHATE COLLECTION SYSTEM GENERAL ARRANGEMENT

Drawing No: 12547621-C204 Status Code: S2

Size: A1 Rev: A



- LEGEND**
- → → → PROPOSED HORIZONTAL LEACHATE DRAINS
 - → → → PROPOSED LEACHATE DRAINAGE PIPE
 - → → → EXISTING HORIZONTAL LEACHATE DRAINS (IN WASTE)
 - EXISTING PERIMETER LEACHATE COLLECTION TRENCH
 - PROPOSED LEACHATE COLLECTION TRENCH
 - SEWER ALIGNMENT
 - EXISTING NORTHERN HORIZONTAL LEACHATE DRAINS (IN WASTE)
 - PS PUMP STATION
 - MH MANHOLE



PROPOSED LEACHATE COLLECTION TRENCH ARRANGEMENT
1:1000

LAYOUT OF EXISTING AND PROPOSED LEACHATE COLLECTION SYSTEM ONLY
SCALE 1:1000

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Designer		Design Check		



Client	DUNEDIN CITY COUNCIL
Project	GREEN ISLAND LANDFILL CLOSURE
Status	PRELIMINARY

Drawing Title	LAYOUT OF EXISTING AND PROPOSED LEACHATE COLLECTION SYSTEM ONLY
Drawing No.	12547621-C205

Size	A1
Rev	A