

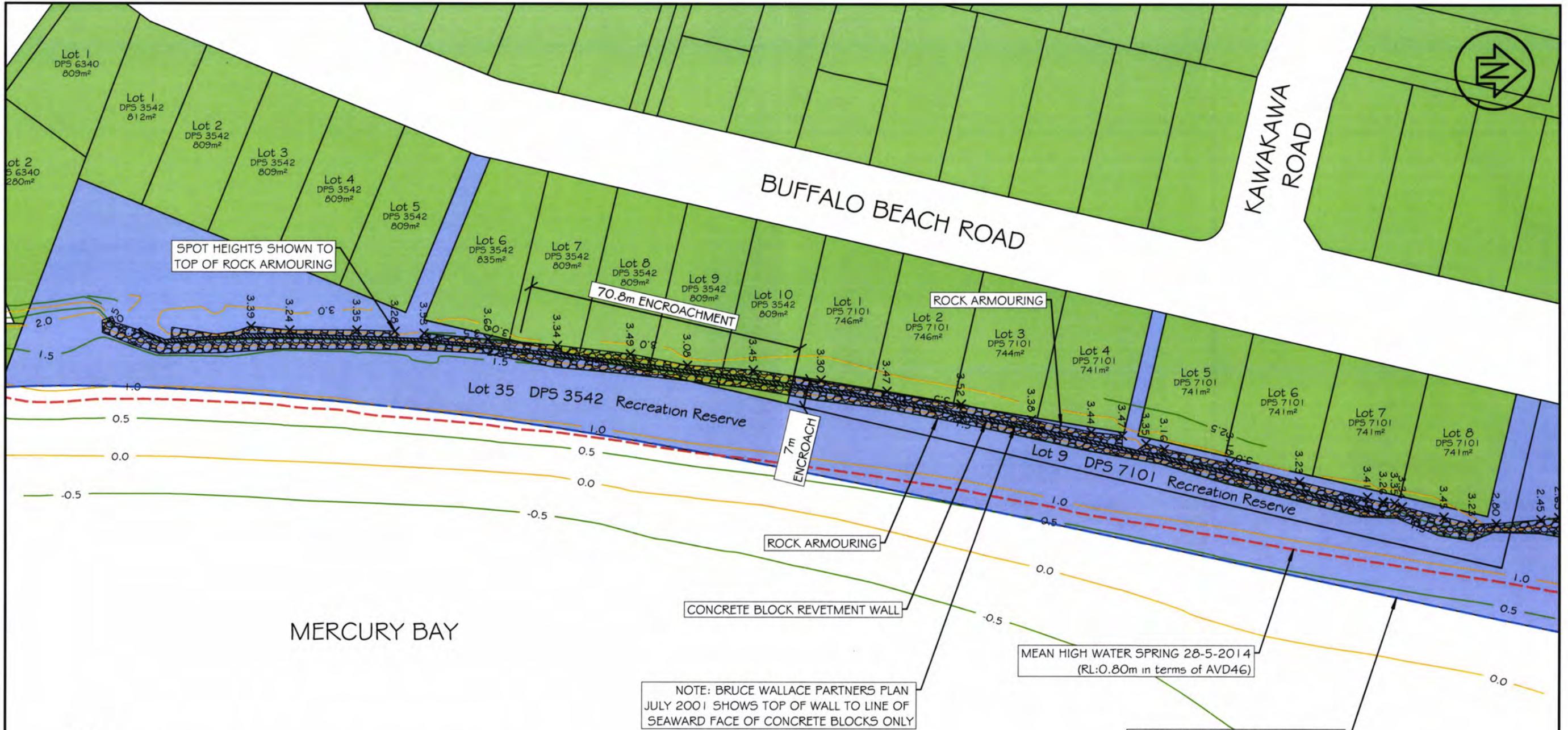
ATTACHMENT A

TOPOGRAPHICAL PLAN OF THE EXISTING COASTAL DEFENCE STRUCTURE



PLANNERS PLUS LIMITED

Land Development, Resource Consent and Planning Specialists.



SPOT HEIGHTS SHOWN TO TOP OF ROCK ARMOURING

70.8m ENCROACHMENT

ROCK ARMOURING

7m ENCROACHMENT

ROCK ARMOURING

CONCRETE BLOCK REVETMENT WALL

NOTE: BRUCE WALLACE PARTNERS PLAN JULY 2001 SHOWS TOP OF WALL TO LINE OF SEAWARD FACE OF CONCRETE BLOCKS ONLY

MEAN HIGH WATER SPRING 28-5-2014 (RL:0.80m in terms of AVD46)

MEAN HIGH WATER MARK 4-8-1954 (ADOPTED DPS 3542)

Notes:

- 1) Levels are in terms of Auckland Vertical Datum 1946
- 2) Origin of levels OBLK 150 51500 RL: 1.99m
- 3) Source: TCDC Benchmark Booklet 2008
- 4) Contour interval: 0.5m
- 5) Mean High Water Springs = RL: 0.80m (sourced from Whitianga Waterways level datum chart ref: 3808)

Date: 24 June 2014		Scale: 1:1000 @ A3	
No.	Date	Revision Details	By Ver. App.

TOPOGRAPHICAL SURVEY OF EXISTING REVETMENT STRUCTURE BUFFALO BEACH ROAD, WHITIANGA

Drawn	Date
CRS	
Designed	Date
Verified	Date
Approved	Date

RMS SURVEYORS
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Project No. **F7116**
Drawing No. Rev. **T 1**

DATE PLOTTED: 24/06/2014 11:58 AM



14 July 2014

Our Ref: 7116-01

Planners Plus Limited
PO Box 218
WHITIANGA

Attention: David Lamason

**RE: BUFFALO BEACH HOMEOWNERS - REVETMENT STRUCTURE
105-139 BUFFALO BEACH ROAD, WHITIANGA**

We have completed the survey of the revetment structure and Mean High Water Springs (MHWS) at Buffalo Beach Road.

Please find attached a plan showing the location of the revetment structure relative to legal boundaries along with the current location of MHWS at the time of survey.

We make the following comments in respect of the survey:

1. The revetment structure is generally within the recreation reserve apart from a 70.8m section that encroaches within Lots 7-10 DPS 3542. Reserves are shaded blue and private property is shaded green on our plan.
2. We note that the encroachment into private property as shown on our plan is greater than that shown on the Bruce Wallace Partners plan prepared in July 2001. Our measurements suggest that Bruce Wallace Partners measured the top of the wall along the seaward (east) face of the concrete blocks and that they have shown this line as the extent of the structure. We suggest that the structure also includes the blocks themselves along with the rock armouring directly above the blocks. We have therefore shown the landward extent of the structure to the top of the existing rock armouring or top of bank where the rock armouring is covered in soil & kikuya grass.
3. The current position of MHWS at the time of our survey is shown as a red dashed line on our plan. This line is between 9m – 18m seaward (east) of the bottom of the rock revetment structure.
4. The Bruce Wallace Partners plan shows MHWS generally along the bottom of the rock revetment structure in July 2001. The current position of MHWS at the time of our survey was seaward (east) of this position. We presume that this is due to accretion of sand in front of the wall since July 2001.

5. We note that at the southern end of the revetment structure the current position of MHWS at the time of survey was marginally seaward (east), by up to 4m, of the position of Mean High Water Mark as measured on plan DPS 3542 in August 1954.
6. Conversely, we note that at the northern end of the revetment structure the current position of MHWS at the time of survey was landward (west), by up to 10m, of the position of Mean High Water Mark as measured on plan DPS 3542 in August 1954.
7. Our survey has been carried out in terms of Auckland Vertical Datum 1946. MHWS is equal to RL:0.80m in terms of this datum. We note that the Bruce Wallace Partners survey was carried out in terms of Whitianga Datum 1994. The relationship between these datums is known therefore comparison between the two is possible.
8. Spot heights are shown along the top of the revetment structure. These range between RL:3.1m and RL3.7m AVD46 The level at the bottom of the structure along the beach is generally at RL:1.5m AVD46.

We trust that this meets your requirements. Please find attached our account for fees in respect of this work.

Please contact us if we can be of any further assistance.

Yours faithfully

STEWART GROUP LIMITED

per:



CALLUM STEWART
DIRECTOR

crs:kp

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