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C:\12dSynergy\data\ALBTCAD\5 Maitai Valley Remedial Works_1426\CAD\DWG\1089444.1200-01.dwg 2023-Oct-27 10:07:59 am Plotted By: DJA

NELSON CITY COUNCIL
5 MAITAI ROAD REMEDIAL WORKS
CLIENT REVIEW ISSUE

DRAWING	Rev	Title
GENERAL		
● 1089444.1200-01	1	DRAWING LIST, SITE LOCATION, AND GENERAL NOTES
PLAN		
● 1089444.1200-20	1	PLAN - ANCHORED CONCRETE POLE RETAINING WALL
TYPICAL SECTIONS AND DETAILS		
● 1089444.1200-21	1	ANCHORED CONCRETE POLE RETAINING WALL 1/2
● 1089444.1200-22	1	ANCHORED CONCRETE POLE RETAINING WALL 2/2
● 1089444.1200-23	1	DETAILS SHEET 1/2
● 1089444.1200-24	1	DETAILS SHEET 2/2
● 1089444.1200-25	1	ELEVATION
● DENOTES DRAWINGS THIS ISSUE: 25/10/2023		

Nelson City Council
te kaunihera ō whakatū
INFRASTRUCTURE

APPROVED
GROUP MANAGER INFRASTRUCTURE
DATE

NCC Plan No. ?
Contract No. ?

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. ALL SERVICES SHOWN ON THESE DRAWINGS ARE INDICATIVE ONLY. THE CONTRACTOR IS TO LOCATE AND PROTECT ALL SERVICES PRIOR TO CONSTRUCTION COMMENCING
3. SET OUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR AND APPROVED ON SITE BY THE ENGINEER
4. CONTRACTOR IS TO KEEP LOGS OF THE GROUND CONDITIONS ENCOUNTERED DURING EXCAVATION OF THE PILE HOLES AND DRILLING OF THE ANCHOR HOLES AND PROVIDE THESE TO THE ENGINEER WITHIN 48 HOURS
5. LEVELS TO NZVD2016. COORDINATES TO NELSON CIRCUIT 2000
6. AERIAL PHOTOGRAPHS, PROPERTY BOUNDARIES, AND LIDAR GROUND SURFACE CONTOURS SOURCED FROM WWW.TOPOFTHESOUTHMAPS.CO.NZ IN SEPTEMBER 2023 AND MADE AVAILABLE UNDER A CREATIVE COMMONS ATTRIBUTION 4.0 INTERNATIONAL LICENSE
7. GROUND SURFACE CONTOURS WITHIN LANDSLIDE AREA PROVIDED BY DAVIS OGILVIE SURVEYORS LTD.
8. ANCHOR TESTING. ALL ANCHOR TESTING SHALL BE TO BS EN 1537. THE ENGINEER WILL SPECIFY A LOCATION AND THE CONTRACTOR WILL INSTALL A TEST ANCHOR AND CARRY OUT AN 'INVESTIGATION TEST'. 2 PRODUCTION ANCHORS WILL BE SUBJECTED TO 'SUITABILITY TESTS', REMAINING ANCHORS SHALL BE SUBJECTED TO 'ACCEPTANCE TESTS'

STRUCTURAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.
2. ALL CONCRETE WORK IS TO COMPLY WITH NZS3109.
3. CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 40MPA AT 28 DAYS.
4. REINFORCEMENT IS TO COMPLY WITH AS/NZS4671 GRADE 500E FOR HD BARS.
5. MINIMUM LAP LENGTHS TO BE: HD32 = 1300mm.
6. MINIMUM LAP LENGTHS TO BE: HD20 = 800mm.
7. MINIMUM LAP LENGTHS TO BE: HD16 = 650mm.
8. MINIMUM COVER TO BE 75MM IF CAST AGAINST GROUND, OTHERWISE 50 MM.
9. ANCHORAGE OF SPIRAL TERMINATION AT THE TOP AND BOTTOM OF THE PILE SHALL INCLUDE ONE EXTRA HALF TURN PLUS A 135° HOOK OR WELDED LAP SPLICE TO THE PREVIOUS TURN.
10. ALL REINFORCEMENT TO BE APPROVED BY THE ENGINEER PRIOR TO CONCRETE POURS.
11. SPACERS AT 2M CENTRES TO BE PLACED IN RC PILE REINFORCING CAGE TO MAINTAIN COVER TO REINFORCING.
12. CONTRACTOR TO ALLOW FOR STIFFENING RINGS TO PILE REINFORCING CAGE.
13. ALL CONCRETE SHALL CONTAIN A MINIMUM OF 30% FLY ASH TO AS/NZS3582.1:2016 AS A SUPPLEMENTARY CEMENTITIOUS MATERIAL.



SITE LOCATION MAP
NOT TO SCALE



SITE PLAN
SCALE 1:800

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REV	DESCRIPTION	CAD	CHK	DATE	APPROVED	DATE
1	For Client Review					

DESIGNED	FEOH	Oct.23	DRAWING STATUS
DRAWN	DJA	Oct.23	CLIENT REVIEW ISSUE
DESIGN CHECKED			PROJECT PHASE
DRAWING CHECKED			

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CLIENT **NELSON CITY COUNCIL**
PROJECT **5 MAITAI ROAD REMEDIAL WORKS**
TITLE GENERAL
DRAWING LIST, SITE LOCATION, AND GENERAL NOTES
DRAFT
SCALE (A1) AS SHOWN DWG No. 1089444.1200-01 REV 1

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UNDERSLIP FACE
N.T.S

THERE IS POTENTIAL TO TRIM TOE OF SLOPE TO FORM A TEMPORARY TRAFFIC LANE ON THE WESTERN SIDE OF THE SITE DURING CONSTRUCTION. CUT SLOPE WOULD NEED TO BE RETAINED, POTENTIALLY WITH A MIX OF GABIONS, AND ROCK BOLTS AND SPRAYED CONCRETE. NCC TO DISCUSS

PART SECTION 370
CITY OF NELSON

LOT 26 DP4498

UPSTREAM END SECTION OF L-WALL TO HAVE TAPERED STEM EXTENSION

CENTER OF UPSTREAM PILE 400104.130 mE, 799860.410mN

BACK OF NEW PRECAST L-WALL SLAB

NEW PRECAST L-WALL IN 3m OR 5m LONG SECTIONS (5m SECTIONS SHOWN)

REINFORCED CONCRETE WALER BEAM UNDER PRECAST L-WALL

600mm REINFORCED CONCRETE PILES AT 1.8m CENTRES

ANCHORS AT 3.6m CENTERS.

EXISTING SLUMPED GABIONS TO REMAIN IN PLACE UNLESS OBSTRUCTING PILING

EXPOSED FALLEN OVER RAILWAY IRONS AT BASE OF SLOPE TO BE CUT OFF AND REMOVED TO TIP

CENTER OF DOWNSTREAM PILE 400091.770 mE, 799834.400mN

BH01 BH02 BH03

7.00m 140° 5.60m 1.80m 28.85m 57.00m

MAITAI ROAD

MAITAI RIVER

EDGE OF SEAL

FIBRE

DRAFT

Nelson City Council
te kaunihera ō whakatū
INFRASTRUCTURE

APPROVED

GROUP MANAGER INFRASTRUCTURE

DATE

NCC Plan No. ?
Contract No. ?

0 2.5 5 m
1:100 (A1)
1:200 (A3)

HAZARD REGISTER

HAZARD ID	DESCRIPTION
1	STEEP SLOPE
2	RIVER
3	TRAFFIC
4	UNDERGROUND SERVICES
5	PEDESTRIANS
6	STEEP SLOPE AND ROCK FALL
7	FAILED RETAINING WALL MAY BE UNSTABLE

THIS TABLE IS NOT AN EXHAUSTIVE LIST OF HAZARDS BUT IS INTENDED TO HIGHLIGHT SITE RISKS IDENTIFIED DURING THE DESIGN TO AID THE CONTRACTOR IN THEIR HAZARD AND RISK ASSESSMENT

LEGEND

- LIDAR CONTOUR 10m INTERVAL
- LIDAR CONTOUR 0.5m INTERVAL
- PROPERTY BOUNDARY
- EXISTING UNDERGROUND FIBRE OPTIC CABLE (S)
- BH01 BOREHOLE LOCATION
- SURVEY CONTOUR 10m INTERVAL
- SURVEY CONTOUR 0.5m INTERVAL
- EDGE OF SEAL
- LANDSLIP HEADSCARP
- POTENTIAL TEMPORARY TRAFFIC LANE
- ANCHOR WITH GRADE 150 KSI 46mm Ø BAR
- ANCHOR WITH GRADE 75 KSI 43mm Ø BAR

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CLIENT **NELSON CITY COUNCIL**

PROJECT **5 MAITAI VALLEY REMEDIAL WORKS**

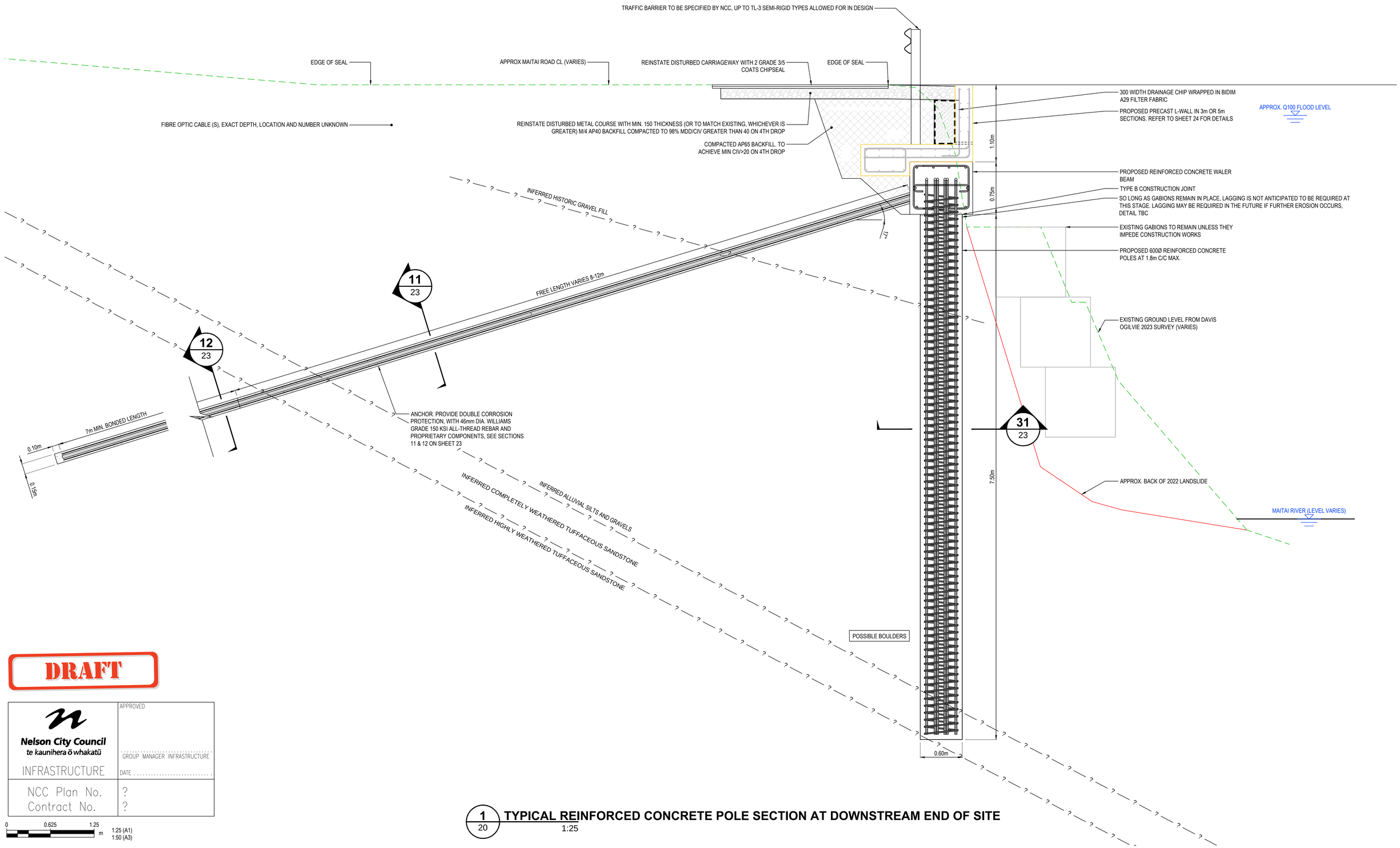
TITLE PLAN
ANCHORED CONCRETE POLE RETAINING WALL

DRAFT

SCALE (A1) 1:100 DWG No. 1089444.1200-20 REV 1

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1/20 TYPICAL REINFORCED CONCRETE POLE SECTION AT DOWNSTREAM END OF SITE
1:25

DRAFT

Nelson City Council te kaunihera ō whakatū INFRASTRUCTURE	APPROVED ..... GROUP MANAGER INFRASTRUCTURE DATE .....
NCC Plan No.	?
Contract No.	?

0 0.625 1.25 m
1:25 (A1)
1:50 (A3)

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REV	DESCRIPTION	CAD	CHK	DATE	APPROVED	DATE
1	For Client Review					

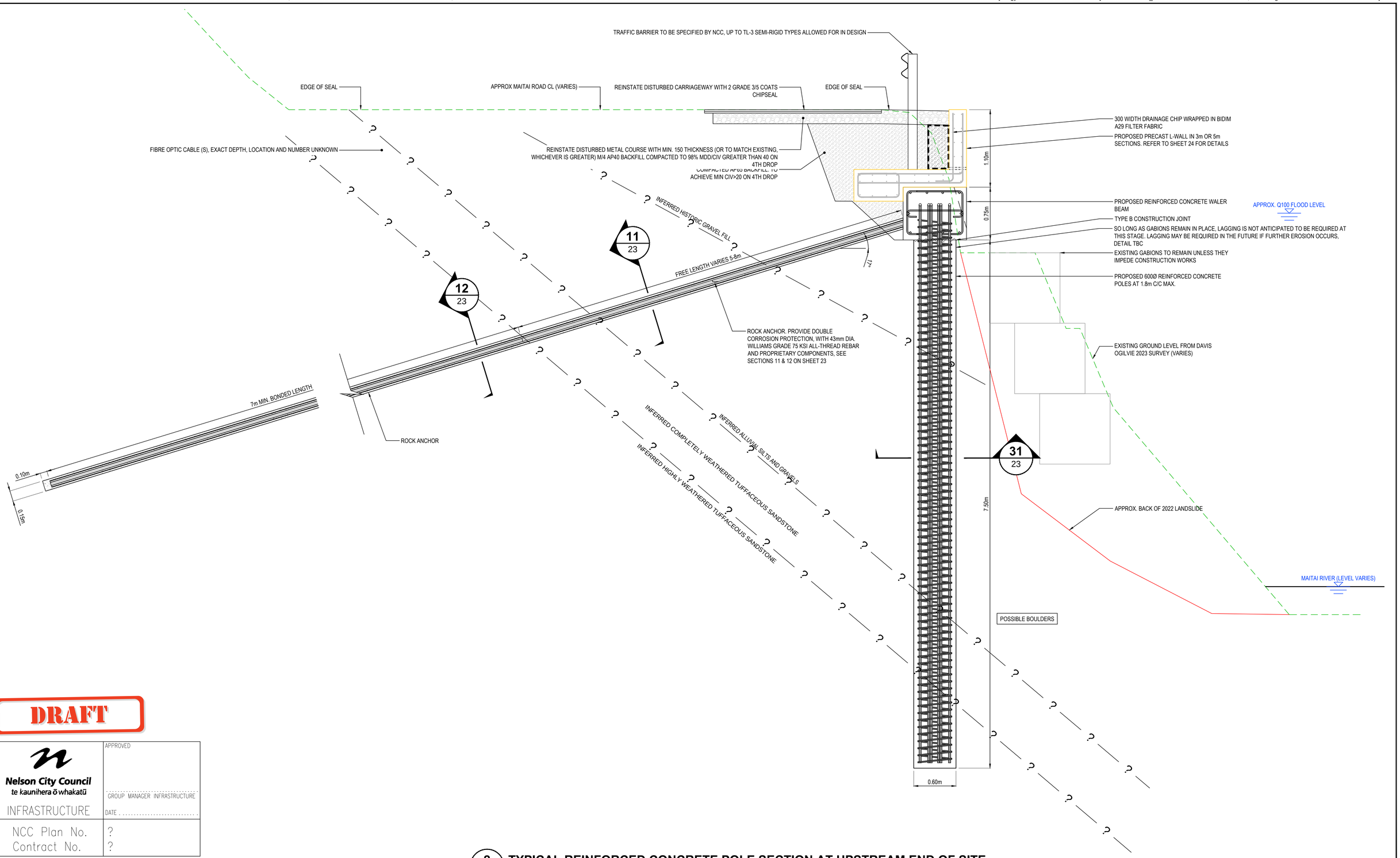
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DRAWN	DJA	Oct.23	CLIENT REVIEW ISSUE
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CLIENT **NELSON CITY COUNCIL**
PROJECT **5 MAITAI VALLEY REMEDIAL WORKS**
TITLE TYPICAL SECTIONS AND DETAILS ANCHORED CONCRETE POLE RETAINING WALL 1/2
DRAFT
SCALE (A1) 1:25 DWG No. 1089444.1200-21 REV 1

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DRAFT

Nelson City Council te kaunihera ō whakatū	APPROVED
INFRASTRUCTURE	GROUP MANAGER INFRASTRUCTURE
	DATE
NCC Plan No.	?
Contract No.	?

0 0.625 1.25 m
1:25 (A1)
1:50 (A3)

2/20 TYPICAL REINFORCED CONCRETE POLE SECTION AT UPSTREAM END OF SITE
1:25

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REV	DESCRIPTION	CAD	CHK	DATE	APPROVED	DATE
1	For Client Review					

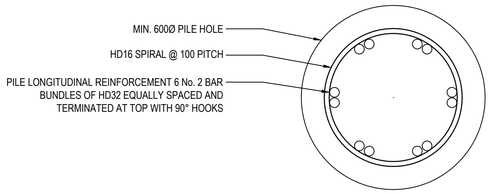
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DRAWING CHECKED			

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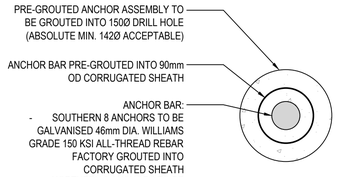
CLIENT **NELSON CITY COUNCIL**
PROJECT **5 MAITAI VALLEY REMEDIAL WORKS**
TITLE TYPICAL SECTIONS AND DETAILS ANCHORED CONCRETE POLE RETAINING WALL 2/2
DRAFT
SCALE (A1) 1:25 DWG No. 1089444.1200-22 REV 1

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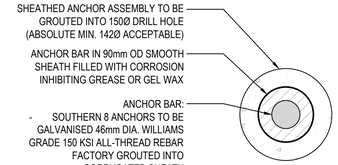
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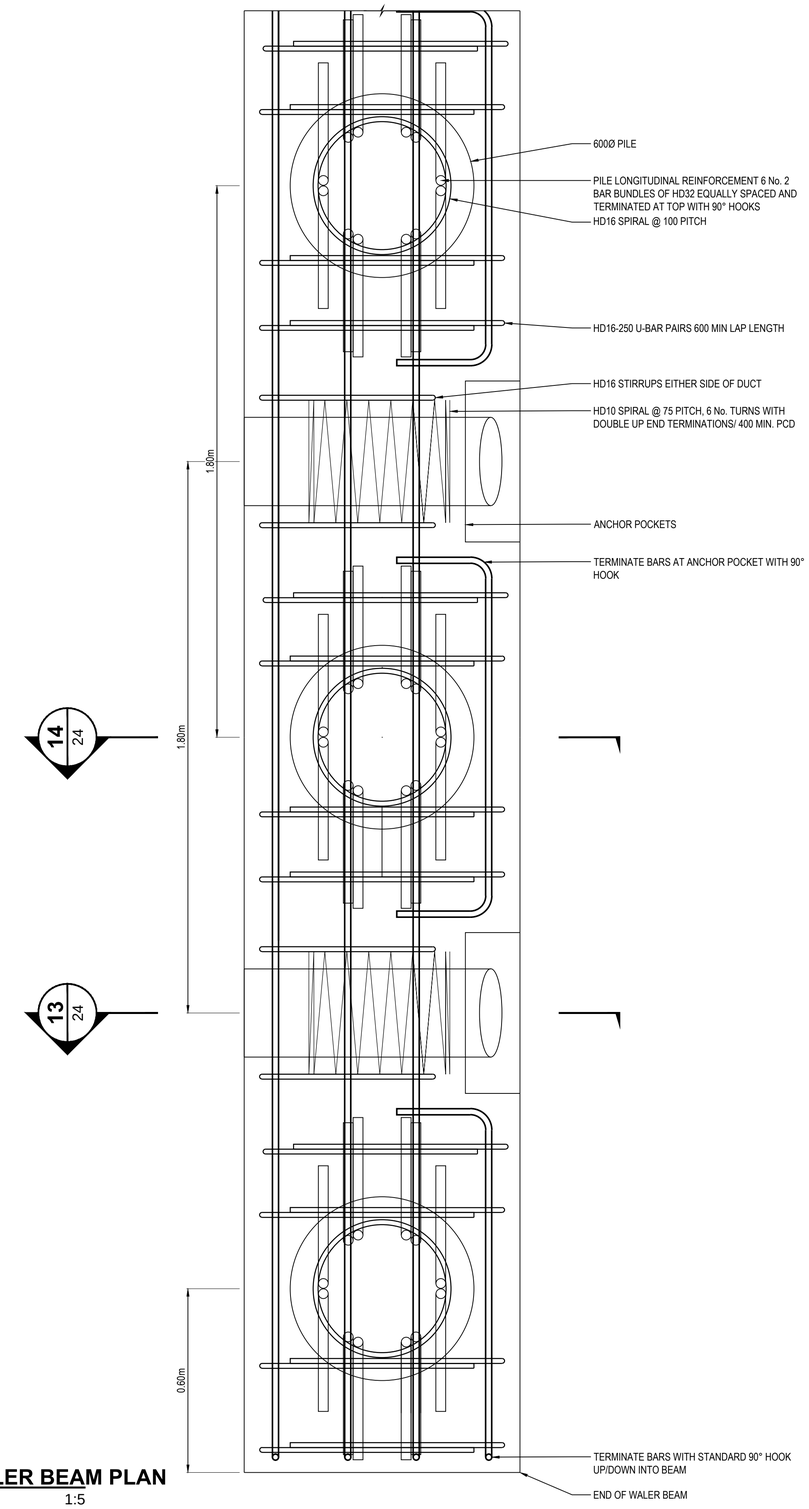
31/21 TYPICAL REINFORCED PILE SECTION
1:10



12/21 ANCHOR BONDED PORTION
1:5



11/21 ANCHOR FREE PORTION
1:5



A/20 WALER BEAM PLAN
1:5

DRAFT

Nelson City Council te kaunihera ō whakatū	APPROVED
INFRASTRUCTURE	GROUP MANAGER INFRASTRUCTURE DATE .....
NCC Plan No.	?
Contract No.	?

0 0.125 0.25 m 1:5 (A1) 1:10 (A3)

0 0.25 0.5 m 1:10 (A1) 1:20 (A3)

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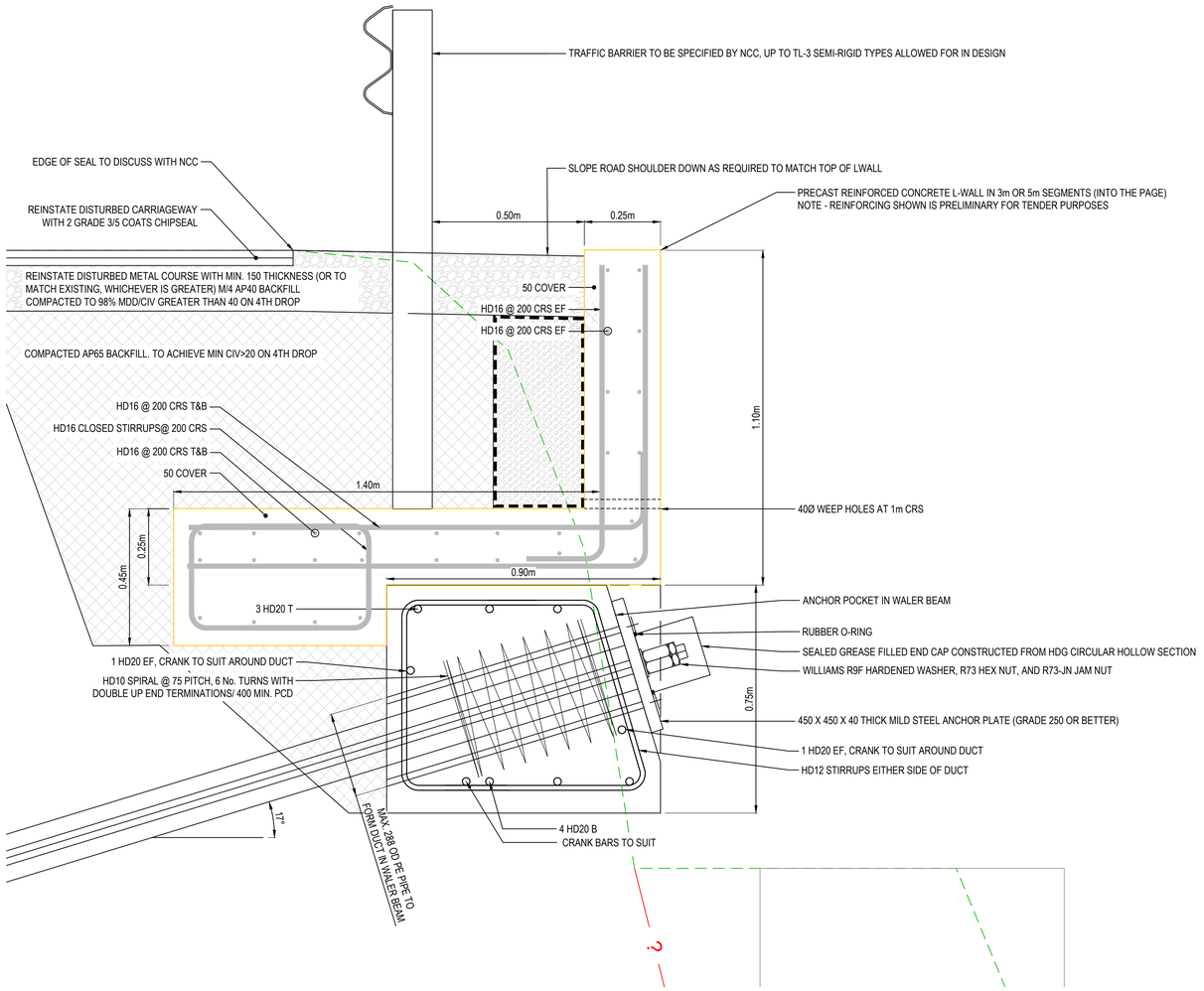
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DRAWING CHECKED			

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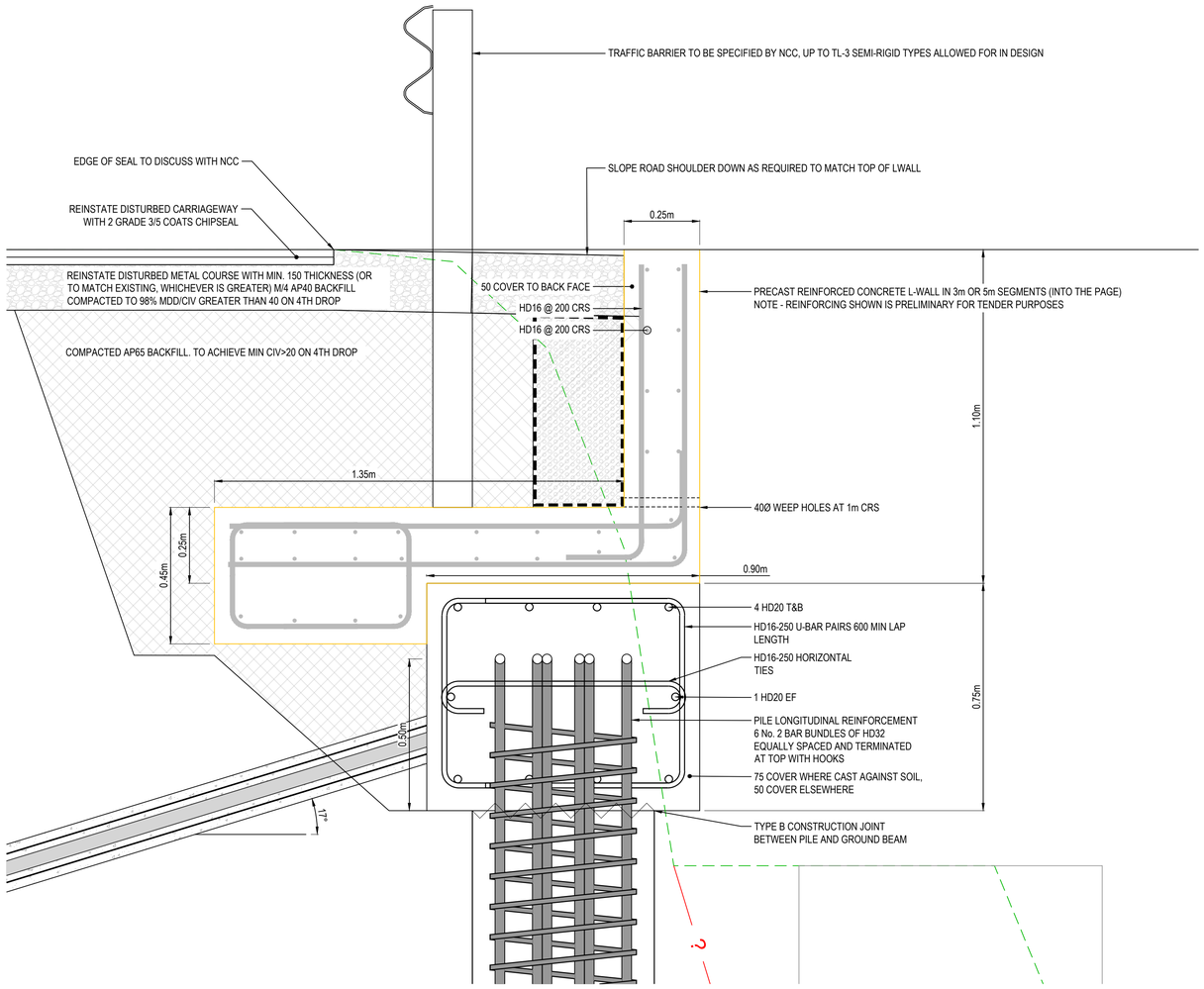
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CLIENT **NELSON CITY COUNCIL**
PROJECT **5 MAITAI VALLEY REMEDIAL WORKS**
TITLE TYPICAL SECTIONS AND DETAILS
DETAILS SHEET 1/2
DRAFT
SCALE (A1) AS SHOWN DWG No. 1089444.1200-23 REV 1

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13/23 TYPICAL WALER BEAM ANCHOR POCKET SECTION
1:10



14/23 TYPICAL WALER BEAM SECTION
1:10

Nelson City Council te kaunihera ō whakatū	APPROVED
INFRASTRUCTURE	GROUP MANAGER INFRASTRUCTURE DATE .....
NCC Plan No. Contract No.	? ?

0 0.125 0.25 m
1:5 (A1)
1:10 (A3)

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PROJECT **5 MAITAI VALLEY REMEDIAL WORKS**

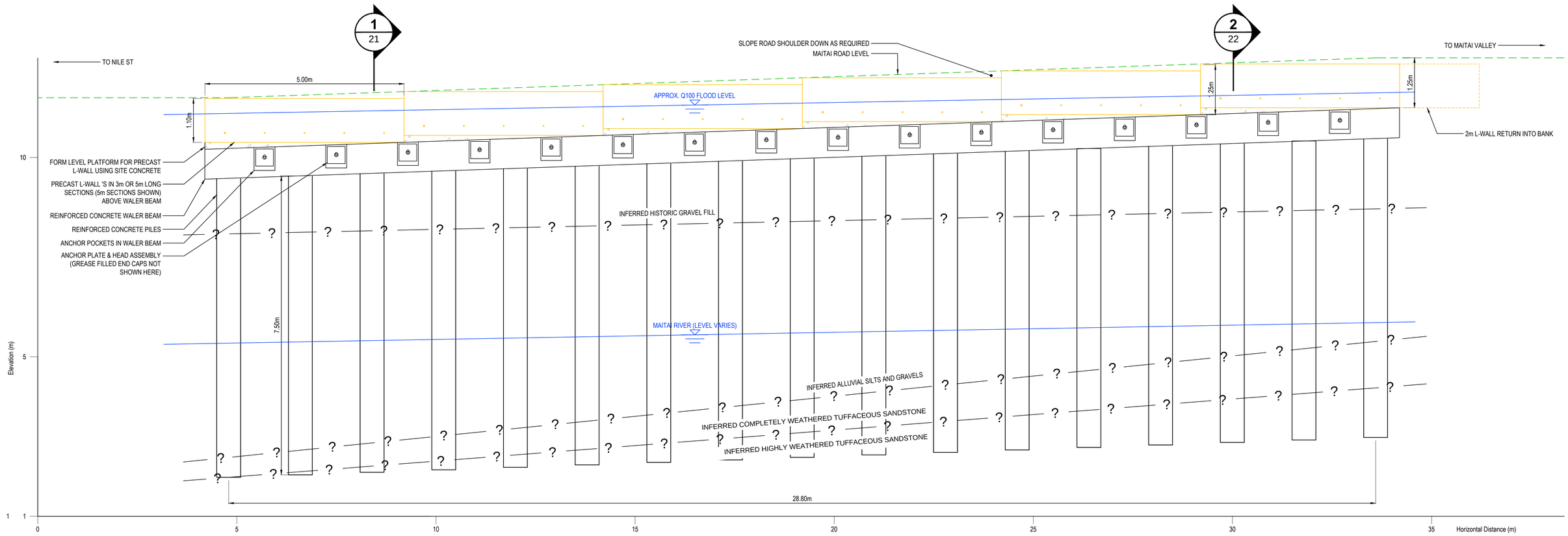
TITLE TYPICAL SECTIONS AND DETAILS
DETAILS SHEET 2/2

DRAFT

SCALE (A1) 1:10 DWG No. 1089444.1200-24 REV 1

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40/20 ELEVATION VIEW
1:50

Nelson City Council te kaunihera ō whakatū INFRASTRUCTURE	APPROVED GROUP MANAGER INFRASTRUCTURE DATE .....
NCC Plan No. Contract No.	? ?

0 1.25 2.5 m
1:50 (A1)
1:100 (A3)

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CLIENT **NELSON CITY COUNCIL**
PROJECT **5 MAITAI VALLEY REMEDIAL WORKS**
TITLE TYPICAL SECTIONS AND DETAILS ELEVATION

DRAFT

SCALE (A1) 1:50 DWG No. 1089444.1200-25 REV 1