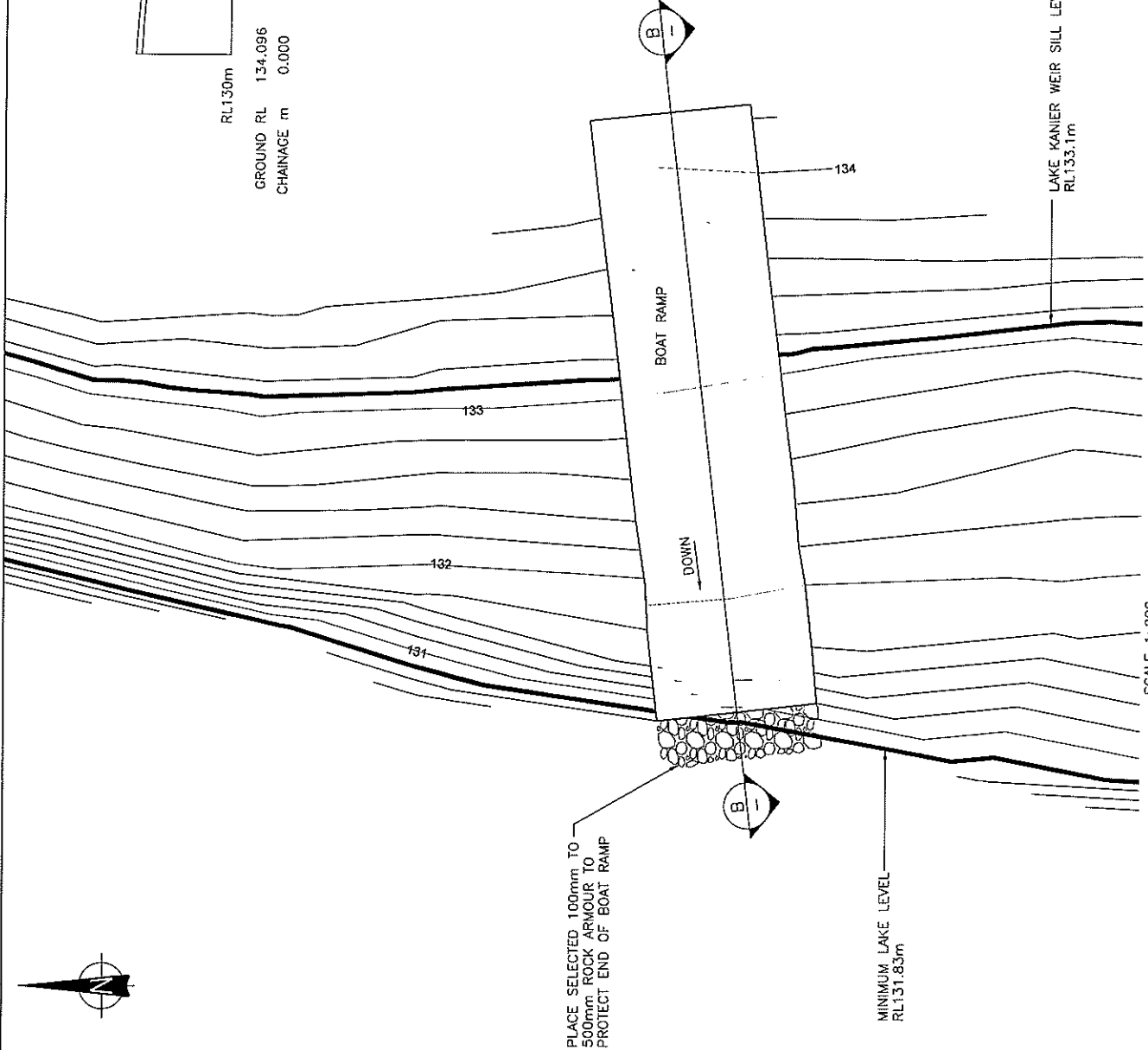


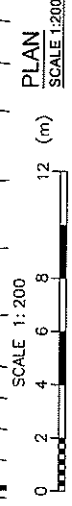
Appendix 3
Sunny Bight and Hans Bay Boat Ramp Drawings
10 KNF/RUG_131
10 KNF/RUG_132



PLACE SELECTED 100mm TO 500mm ROCK ARMOUR TO PROTECT END OF BOAT RAMP

MINIMUM LAKE LEVEL
RL131.83m

LAKE KANIER WEIR SILL LEVEL
RL133.1m



EXISTING BOAT RAMP

LAKE KANIERE WEIR SILL LEVEL
RL133.1m

ADJACENT LAKEBED PROFILE

SCOUR HOLE

MINIMUM LAKE LEVEL
RL131.83m

GROUND RL	134.096	133.692	133.135	132.581	132.016	131.016
CHAINAGE m	0.000	5.000	10.000	15.000	20.000	25.000
						30.000

- ① END TIP SELECTED 100mm-500mm BOULDERS INTO SCOUR HOLE AND OVER END OF BOAT RAMP.
- ② TAMP DOWN WITH BUCKET OF EXCAVATOR.
- ③ EXTEND TOP LEVEL OF ROCK OUT 1m FROM END OF RAMP WITH TOP OF ROCKS 100mm BELOW THE LEVEL OF THE END OF RAMP CONCRETE.

SECTION B
SCALE 1:200

NOT FOR CONSTRUCTION

RILEY
CONSULTANTS

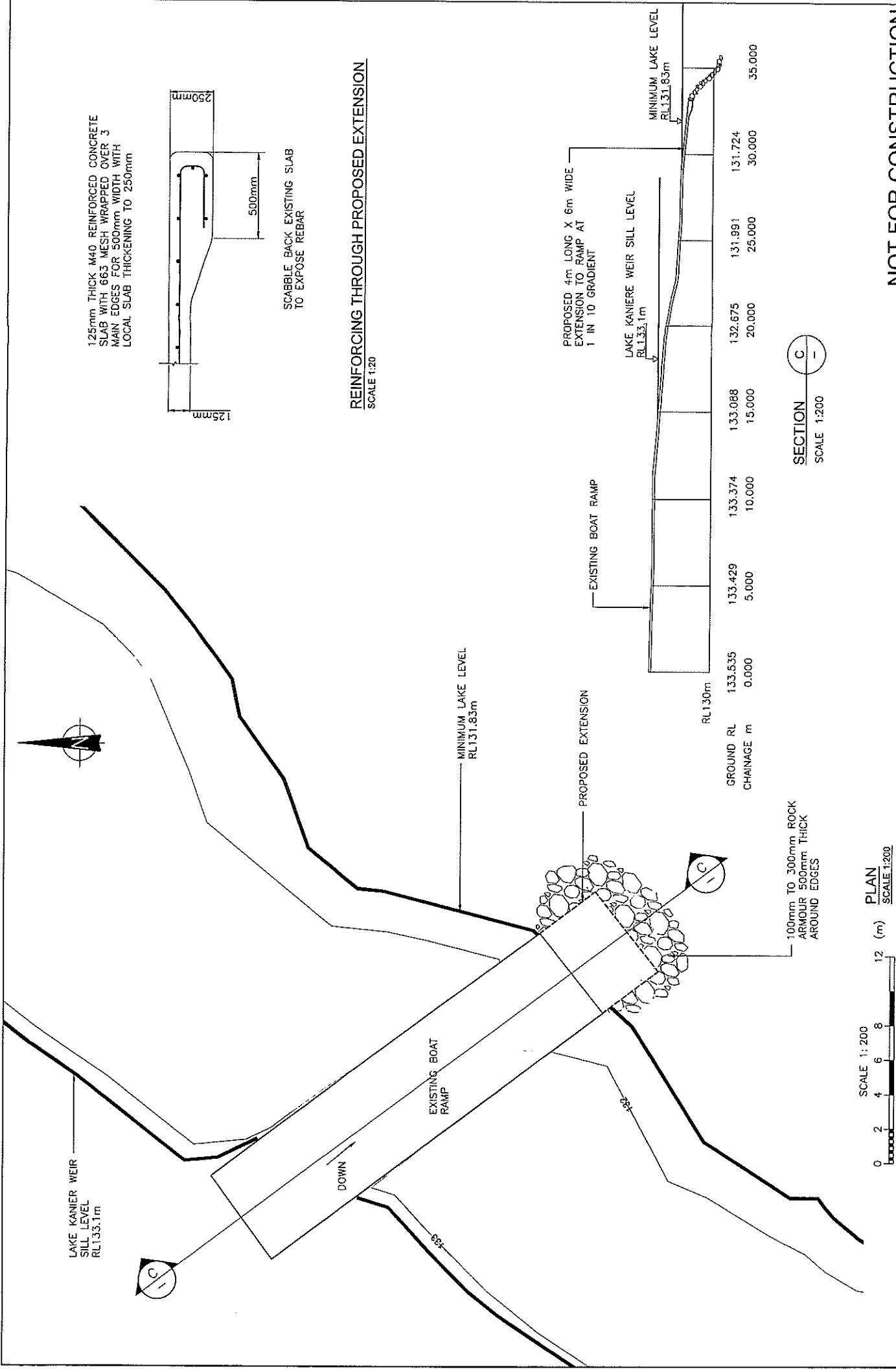
P.O. BOX 4355
CHRISTCHURCH
TEL. 03-3794402
FAX. 03-3794403

DESIGN CHECKED	PPR	DRAWN	CHKD	DATE	30.9.11
BY	DATE	DATE	DATE	DATE	DATE

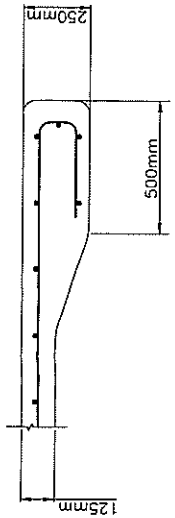
DRAFT

TRUSTPOWER LTD
KANIERE FORKS HYDRO SCHEME - 8 CUMEC ENHANCEMENT
HANS BAY BOAT RAMP ENHANCEMENT

DATE	10/06/11	REV.	0
TITLE	10KNFRUG-131	DRAWING No.	10KNFRUG-131
SCALE	AS SHOWN		



125mm THICK M40 REINFORCED CONCRETE SLAB WITH 663 MESH WRAPPED OVER 3 MAIN EDGES FOR 500mm WIDTH WITH LOCAL SLAB THICKENING TO 250mm



SCABBLE BACK EXISTING SLAB TO EXPOSE REBAR

REINFORCING THROUGH PROPOSED EXTENSION
SCALE 1:20

PROPOSED 4m LONG X 6m WIDE EXTENSION TO RAMP AT 1 IN 10 GRADIENT

LAKE KANIERE WEIR SILL LEVEL RL133.1m

MINIMUM LAKE LEVEL RL131.83m

GROUND CHAINAGE m	RL	133.535	133.429	133.374	133.088	132.675	131.991	131.724	35.000
0.000	5.000	10.000	15.000	20.000	25.000	30.000	35.000		

SECTION C-C
SCALE 1:200



NOT FOR CONSTRUCTION

RILEY CONSULTANTS P.O. BOX 4355 CHRISTCHURCH TEL. 03-3794402 FAX. 03-3794403		TrustPower		TITLE TRUSTPOWER LTD KANIERE FORKS HYDRO SCHEME - 8 CUMEC ENHANCEMENT SUNNY BIGHT BOAT RAMP ENHANCEMENT	
DESIGN CHECKED PER DRAWN HN DATE DRAWN 30.3.11 BY DATE		APPROVED FOR ISSUE DRAFT DATE: / /		DRAWING No. 10KNFRUG-132 REV. 0	