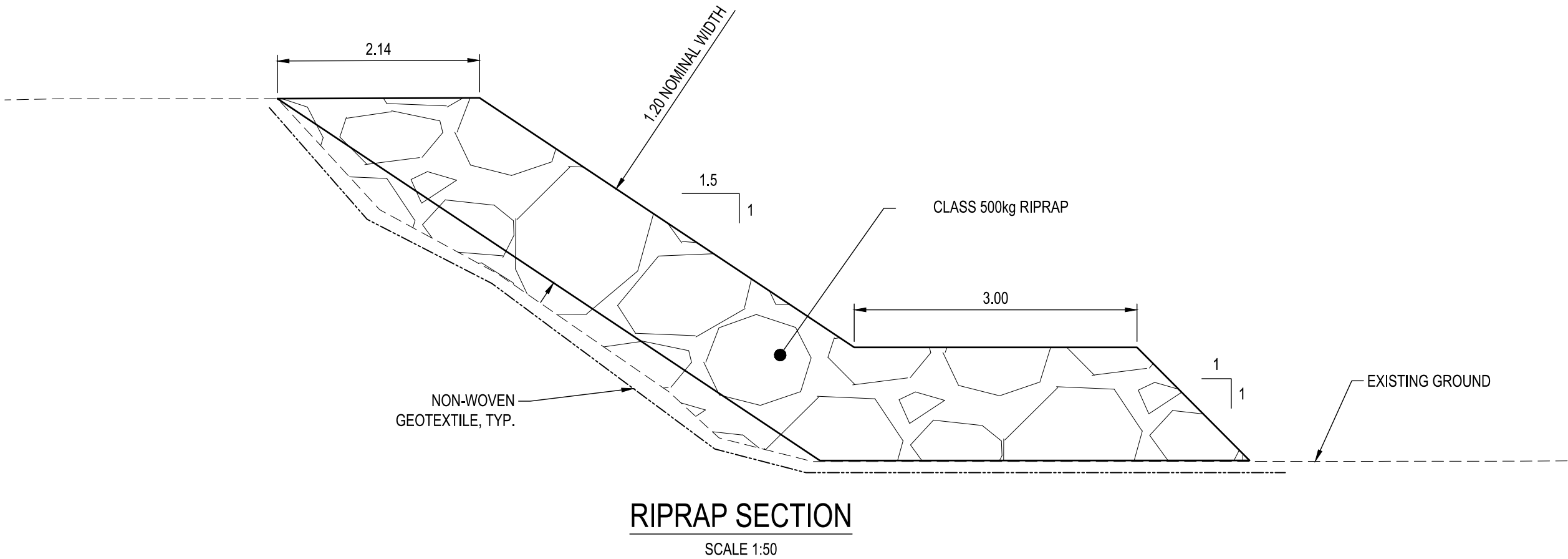


1. SITE SURVEY PERFORMED MAY 30, 2022 BY McELHANNY LTD.
2. LIDAR FLOWN IN 2018.
3. SITE COORDINATES/ELEVATIONS DERIVED FROM GPS TIES TO INTEGRATED MONUMENT 95H1887.
N: 6041615.281m
E: 523496.280m
ELEV. 102.176m
4. THIS DRAWING IS METRIC DISPLAYED IN UTM NAD 83 ZONE 9 COORDINATES.
5. ELEVATIONS ARE IN METRES, BASED ON GEOIDETIC DATUM CVD28. ESTABLISHED BY GNSS TIES TO INTEGRATED MONUMENT 95H1887 USING GEOID MODEL HT 2.0.
6. CONTOUR INTERVAL: MAJOR 5.0m MINOR 1.0m.
7. ALL DIMENSIONS ARE IN METERS, UNLESS OTHERWISE NOTED.
8. LEGAL BOUNDARIES ARE APPROXIMATE FROM ParcelMap BC DATA.
9. LOCATIONS OF UNDER GROUND UTILITIES SHOWN ON PLAN ARE APPROXIMATE ONLY. INFORMATION MAY NOT BE COMPLETE OR ACCURATE. CONTRACTOR SHALL EXPOSE LOCATIONS OF ALL EXISTING UTILITIES AND ADVISE THE ENGINEER OF POTENTIAL CONFLICTS.

1. SEDIMENT MUST BE PREVENTED FROM ENTERING ANY WATERCOURSE, AS IT IS A VIOLATION UNDER THE FISHERIES ACT.
2. ALL WORK SHALL BE DONE IN A MANNER THAT WILL NOT RESULT IN DEPOSITION OF DEBRIS, SOIL OR OTHER MATERIAL DELETERIOUS TO FISH, IN ANY WATERCOURSE.
3. ALL WORKS TO BE CONDUCTED FROM LAND, AND NO EQUIPMENT WILL BE PERMITTED IN ANY WATERCOURSE AT ANY TIME.
4. VERMONT RIP RAP TO BE USED IS CLEAN, IS OF SUITABLE QUALITY, AND IS PLACED SO AS NOT TO DISTURB NATURAL VEGETATION WITHIN THE RIPARIAN ZONE.
5. DISTURBANCE OF THE STREAMBANKS SHALL BE MINIMIZED. BANK STABILITY AND EROSION PREVENTION IS CRITICAL. LIMIT WORKS TO THE SURVEYED WORK AREA. THERE IS TO BE NO DISTURBANCE BEYOND THE ROAD RIGHT OF WAY.

1. CLASS 500kg RIPRAP PLACED TO A NOMINAL DEPTH OF 1200mm.
 ROCK SHALL BE HARD, DURABLE ANGULAR QUARRY ROCK
 GRADED AS FOLLOWS:
 CLASS 500kg - 85% OF ROCK - AVERAGE SIZE OF ROCK = 1030mm
 - 50% OF ROCK - AVERAGE SIZE OF ROCK = 715mm
 - 15% OF ROCK - AVERAGE SIZE OF ROCK = 330mm
2. FOR VERTICAL COMPRESSION TESTS, THE AVERAGE
 AVERAGE DIMENSION OF ANGULAR ROCK OF CLASS 500kg IS
 715mm.
3. ALL RIPRAP FILL TO BE NON ACID GENERATING ROCK.
4. ALL RIPRAP TO BE PLACED, NOT END DUMPED.

1.	SPECIFICATIONS		
	GRAB TENSILE STRENGTH	912 N	ASTM-D4632
	ELONGATION	50 %	ASTM-D4632
	CBR PUNCTURE	2336 N	ASTM-D6241
	TRAPEZOIDAL TEAR	356 N	ASTM-D4533
2.	GEOTEXTILE FABRIC SHOULD HAVE A MINIMUM OF 800mm SIDE OVERLAPS. END OVERLAPS FOR BOTH LAYERS OF GEOGRID AND THE FILTER FABRIC SHOULD BE A MINIMUM OF 1.0m.		

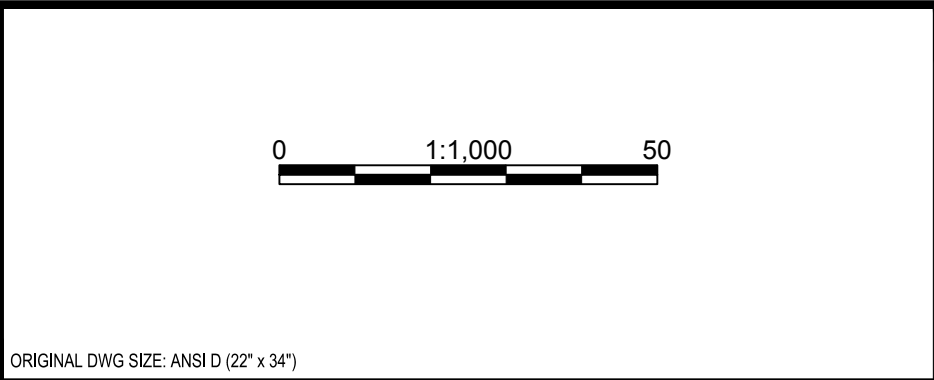



PA	2022-08-22	ISSUED FOR 75% REVIEW	JMD	JMD	CJH
Rev	Date	Description	Drawn	Design	App'd

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NOT FOR CONSTRUCTION

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**KITSUMKALUM RIVER FLOOD MITIGATION
KITSUMKALUM RIPRAP DESIGN
PLAN, NOTES AND DETAILS**

Drawing No.	
C-301	
Project Number	Rev.
2321-02079-00	PA