METRIC

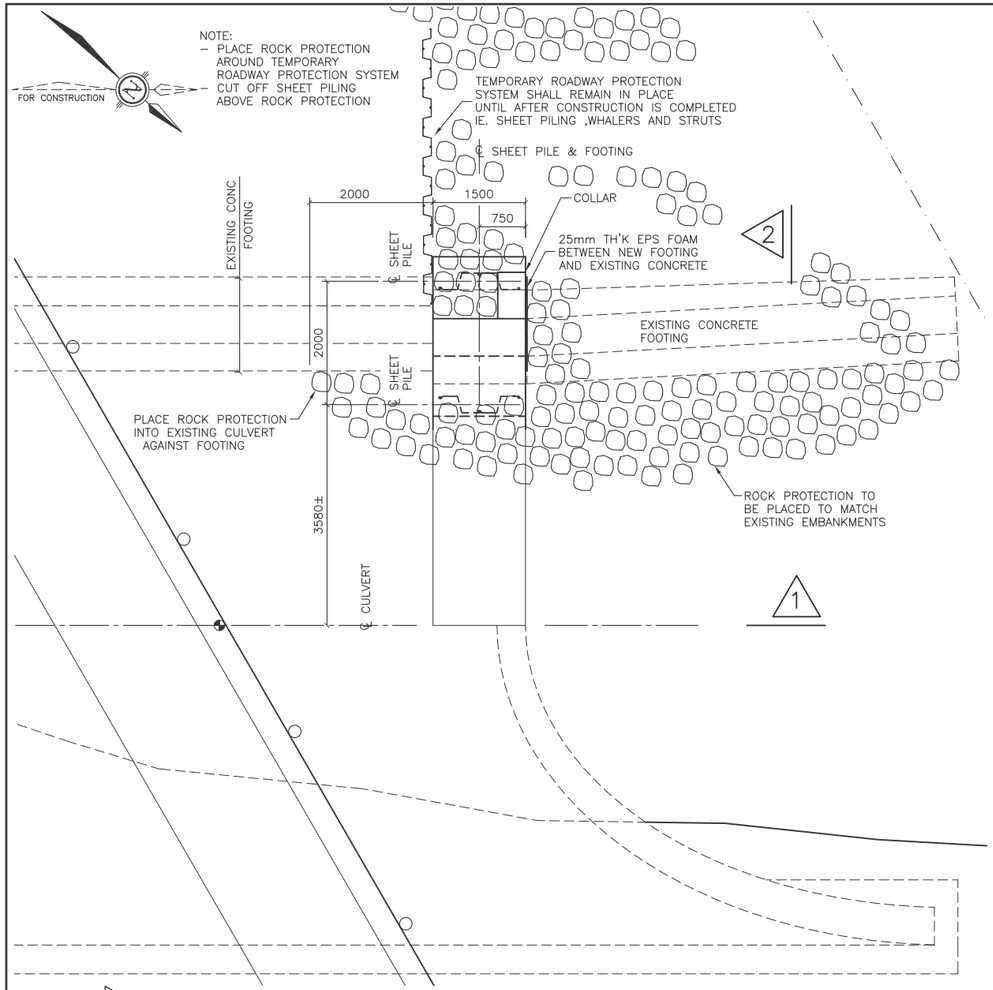
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

DIST HWY 17
CONT No X
WP No 6300-01-01

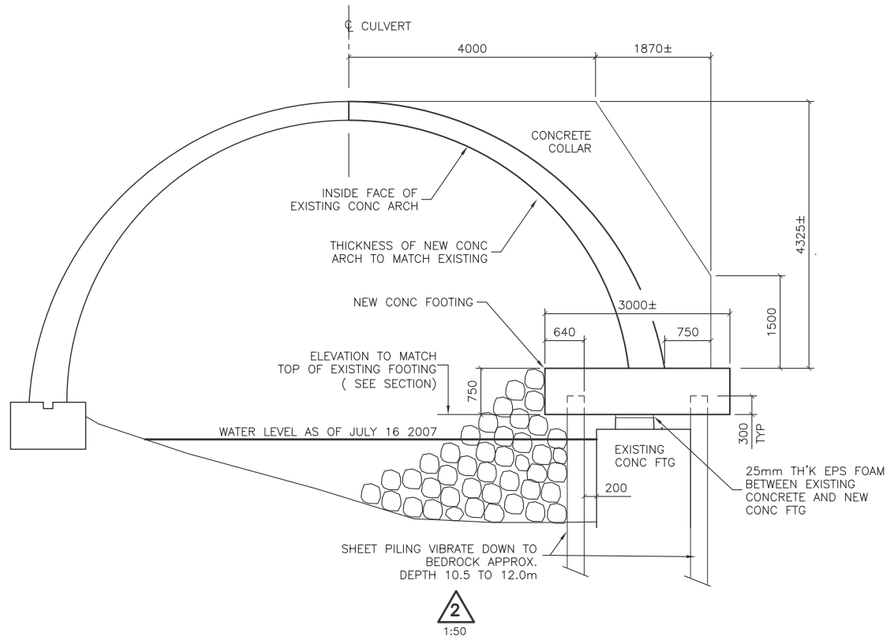
SHEET

MINK CREEK CULVERT
GENERAL ARRANGEMENT

cookengineering
Thunder Bay, Ontario



PLAN
1:50



NOTES

CLASS OF CONCRETE

ALL CONCRETE	30 MPa

CLEAR COVER TO REINFORCING STEEL

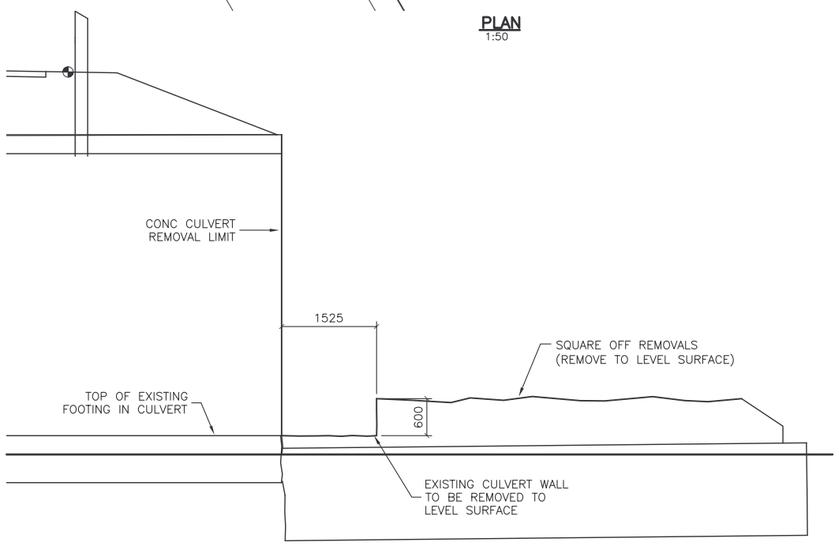
– BOTTOM OF FOOTING:	100 ± 25
– REMAINDER:	70 ± 20

REINFORCING STEEL

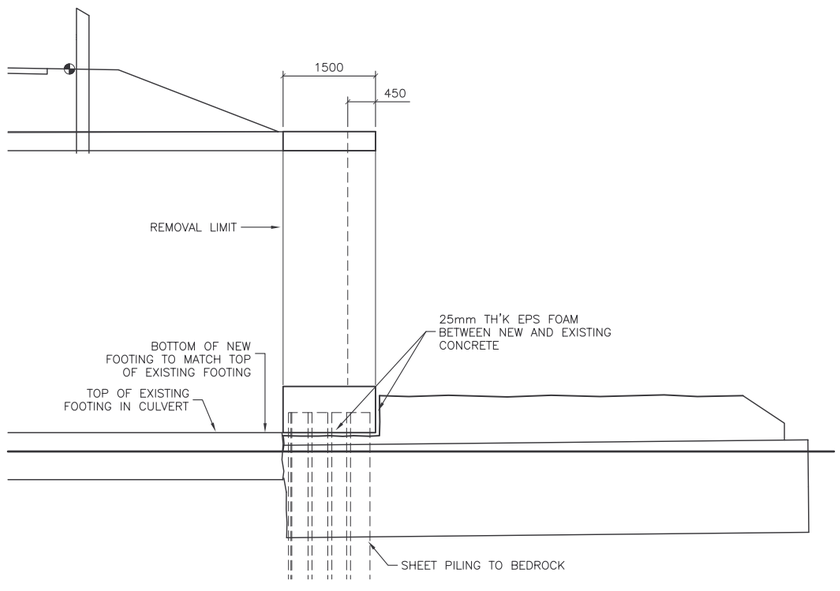
1. REINFORCING STEEL SHALL BE GRADE 400 UNLESS OTHERWISE SPECIFIED.
2. UNLESS SHOWN OTHERWISE, LAP LENGTHS NOT INDICATED ON THE CONTRACT DRAWINGS SHALL BE CLASS 'B' .
3. BAR HOOKS, WHERE REQUIRED, SHALL BE MINIMUM LENGTH AND STIRRUPS SHALL HAVE MINIMUM HOOKS UNLESS INDICATED OTHERWISE.

SHEET PILING

1. ALL WELDING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF CSA STD W59-M AND SHALL BE CARRIED OUT BY A WELDER QUALIFIED UNDER CSA STANDARD W47
2. ALL SHEET PILING SHALL BE EZ95 SECTION AVAILABLE FROM CANADIAN METAL ROLLING MILLS. SECTION MODULUS 1310 cm3/m
3. SHEET PILING TO BE IN ACCORDANCE WITH ASTM A328



1 REMOVALS SECTION
1:50



1 REHABILITATED SECTION
1:50

DRAWING NOT TO BE SCALED
100 mm ON ORIGINAL DRAWING

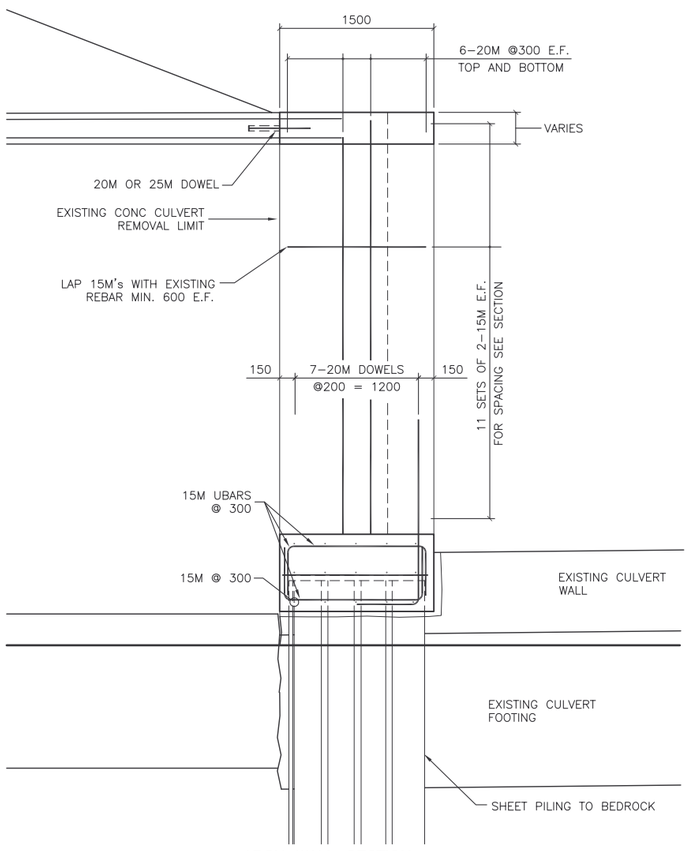
REVISIONS			DESCRIPTION

DESIGN PAS	CHK LJB	CODE CHBDC 06	LOAD CL-625-ONT	DATE	JULY/2007
DRAWN LNP/BWR	CHK LJB/BWR	SITE 48C-23	STRUCT	SCHEME	DWG 1

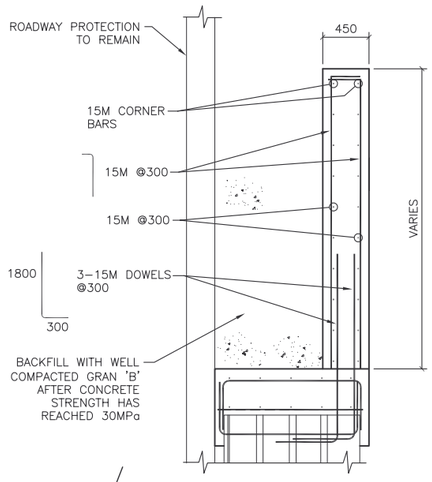
METRIC

DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

DIST HWY 17 CONT No X WP No 6300-01-01	
MINK CREEK CULVERT CONCRETE REPAIRS DETAILS	SHEET
cookengineering Thunder Bay, Ontario	



ARCH WALL SECTION
1:30

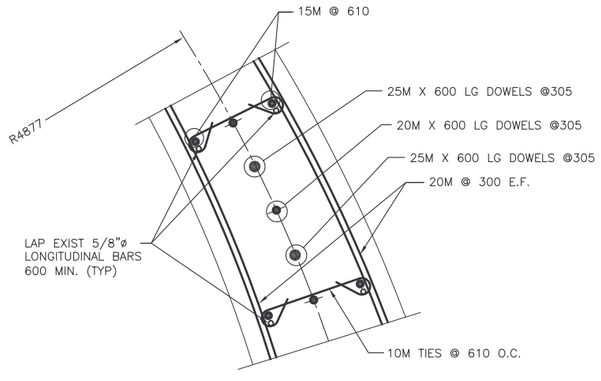


COLLAR SECTION
1:30

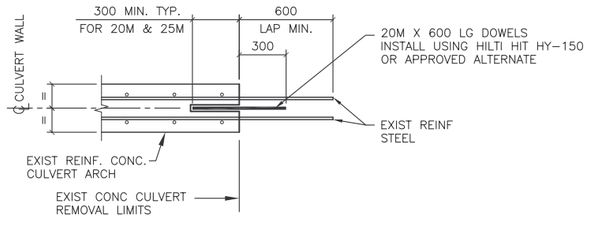
ELEVATION
1:30

NOTES

1. REUSE OR MOFIFY REINFORCING STEEL PROVIDED IN PREVOIUS CONTRACT IF POSSIBLE.



1 **DETAIL**
1:10



TYPICAL DOWEL DETAIL ALONG TOP OF ARCH
1:20

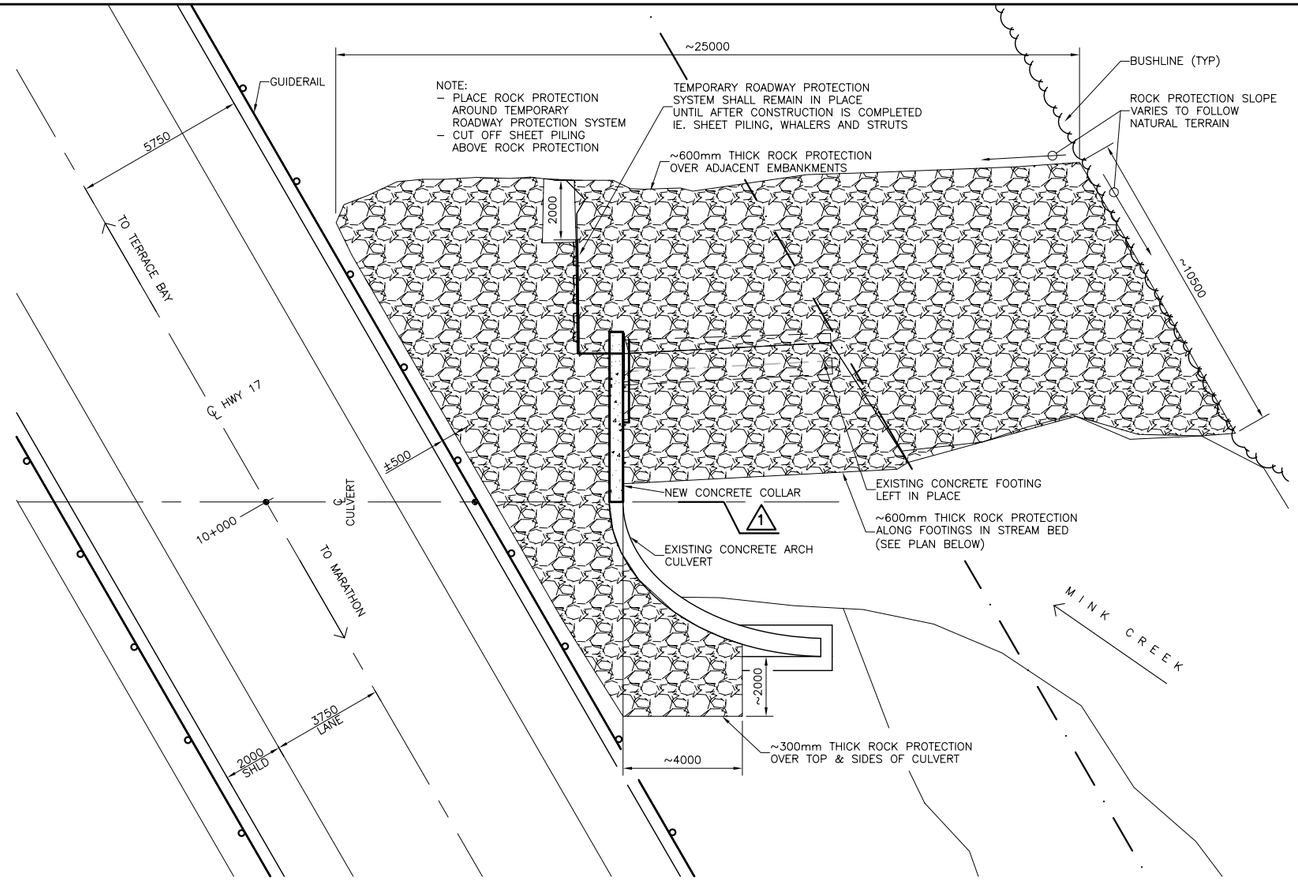
DRAWING NOT TO BE SCALED
100 mm ON ORIGINAL DRAWING

REVISIONS			DESCRIPTION

DESIGN PAS	CHK LJB	CODE CHBDC 06	LOAD CL–625–ONT	DATE	JULY/2007		
DRAWN LNP/BWR	CHK LJB/BWR	SITE 48C–23	STRUCT	SCHEME		DWG 2	

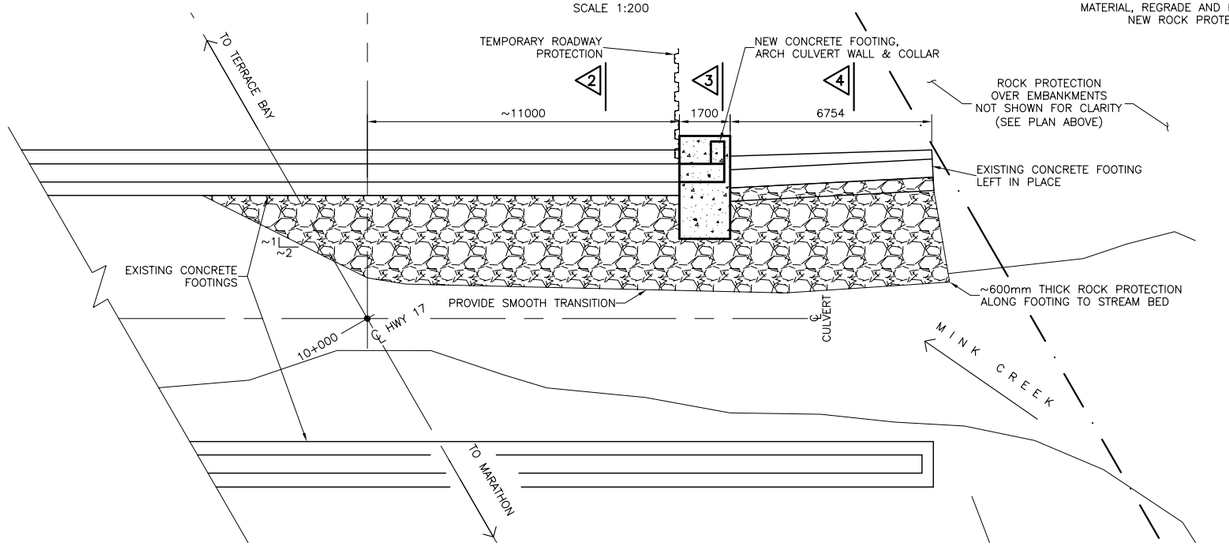
METRIC
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

DIST 61 HWY. 17	
CONT No	
WP No 6300-01-01	
MINK CREEK CULVERT ROCK PROTECTION DETAILS	SHEET



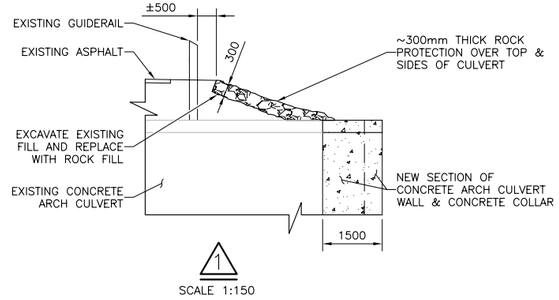
PLAN – ROCK PROTECTION OVER TOP AND ALONG SIDES OF CULVERT

SCALE 1:200

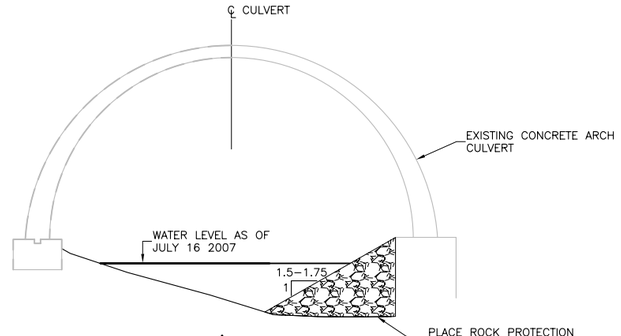


PLAN – ROCK PROTECTION INSIDE CULVERT ALONG FOOTING TO STREAM BED

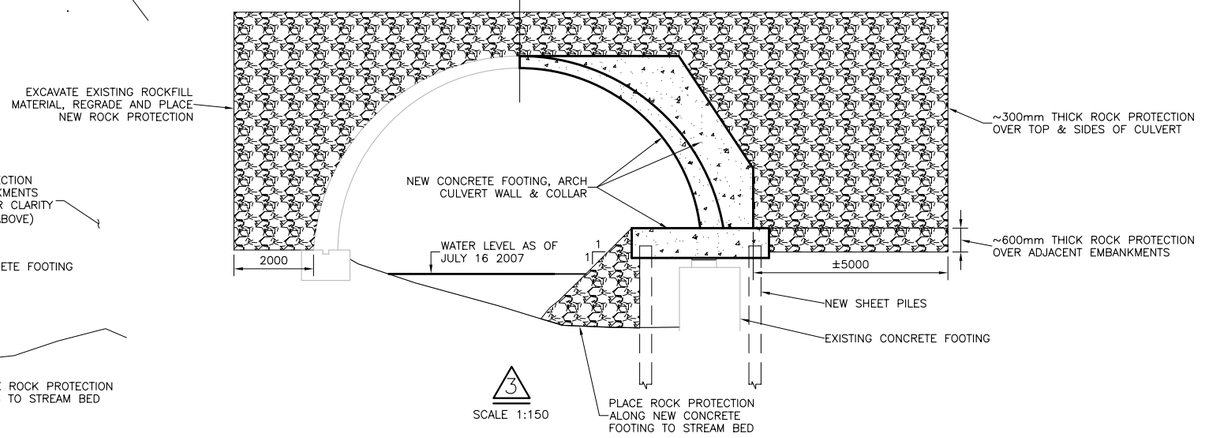
SCALE 1:200



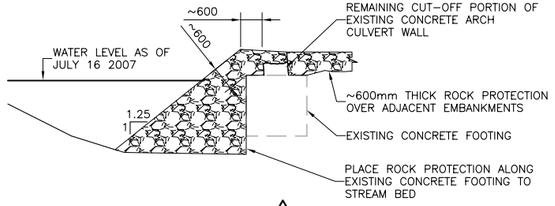
1
SCALE 1:150



2
SCALE 1:150



3
SCALE 1:150



4
SCALE 1:150

REVISIONS						
			DESCRIPTION			
DESIGN X	CHK X	CODE	LOAD	DATE 08/07		
DRAWN X	CHK X	SITE 48E-23	STRUCT	SCHEME	DWG X	

METRIC
DIMENSIONS ARE IN METRES
AND/OR MILLIMETRES
UNLESS OTHERWISE SHOWN

DIST 61 HWY. 17
CONT No
WP No 6300-01-01

MINK CREEK CULVERT
FOOTING PROTECTION
DETAILS

SHEET

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SIGNAGE AS PER OTM BOOK 7.

SCOPE OF WORK

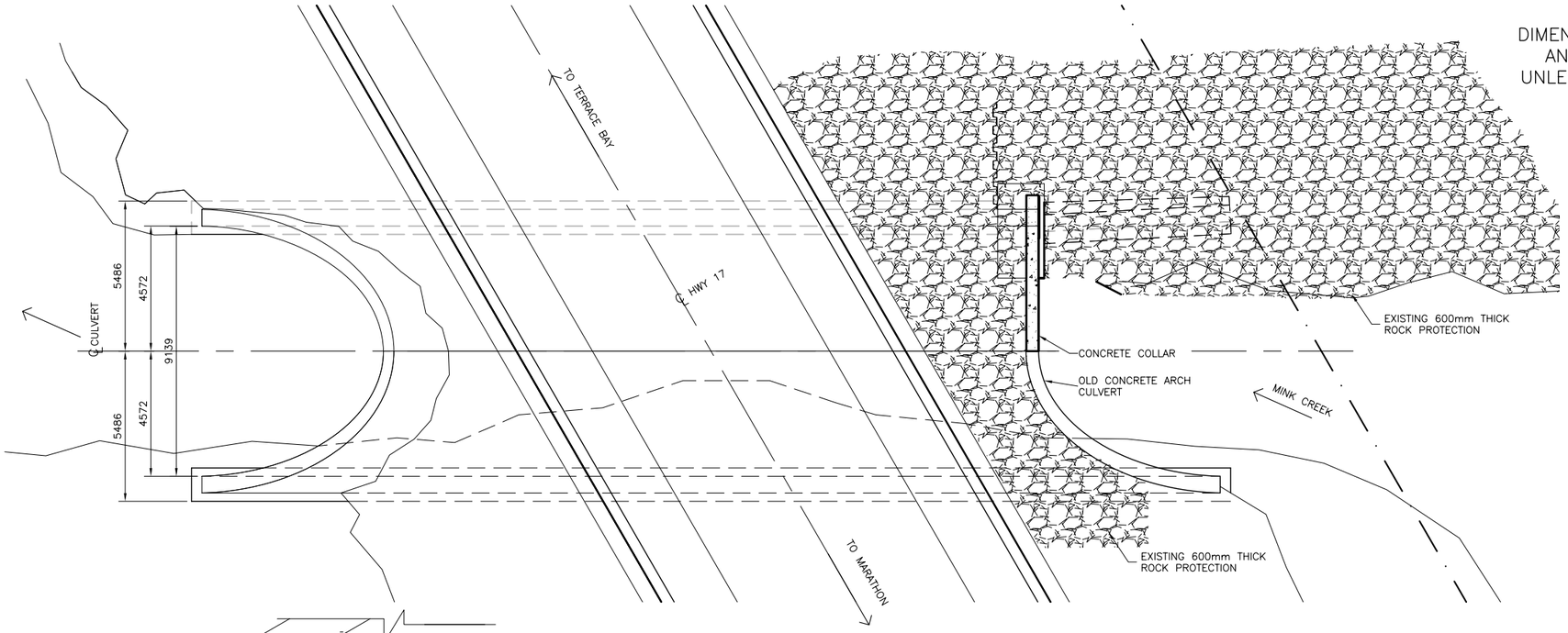
1. INSTALL TEMPORARY TURBIDITY/SILT CURTAIN DURING PLACEMENT OF BAGS.
2. PLACE CONCRETE MIX BAGS TIGHT ALONG THE FACE OF THE FOOTING. SEE DRAWINGS FOR EXACT LOCATIONS. ALL BAGS TO BE HAND PLACED. CONTRACTOR TO MAKE SURE OF A TIGHT FIT BETWEEN EACH BAG WHEN PLACING EACH BAG. CONTRACTOR TO STAGGER JOINTS OF BAGS BETWEEN TOP AND BOTTOM LAYERS.
3. ALL ROCK PROTECTION TO REMAIN 'AS IS'.

SEQUENCE OF WORK

1. INSTALL TEMPORARY TURBIDITY/SILT CURTAIN DURING PLACEMENT OF BAGS.
2. WIPE DUST OFF EXTERIOR OF CONCRETE MIX BAGS PRIOR TO PLACING INTO POLYWOVEN MATERIAL BAGS.
3. PLACE CONCRETE MIX BAGS ALONG WEST FOOTING ONLY.
4. CONTRACTOR TO HAVE A DRY/WET SHOP VACUUM PRESENT TO CLEAN OFF ANY SURFACE DEBRIS INSIDE THE TURBIDITY CURTAIN AREA.

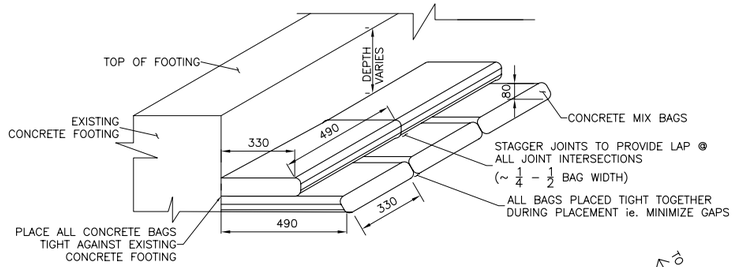
MATERIALS

1. DRY CONCRETE MIX BAGS SHALL BE PLACED IN A POLYWOVEN MATERIAL BAG.
2. CONCRETE IN MIX BAGS SHALL CONTAIN AN ANTI-WASH ADDITIVE.
3. CONCRETE IN MIX BAGS SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 20MPA WITH A MAX AGGREGATE SIZE OF 10mm..
4. CONCRETE MIX BAGS SHALL BE KWIK MIX (PRODUCT NAME).

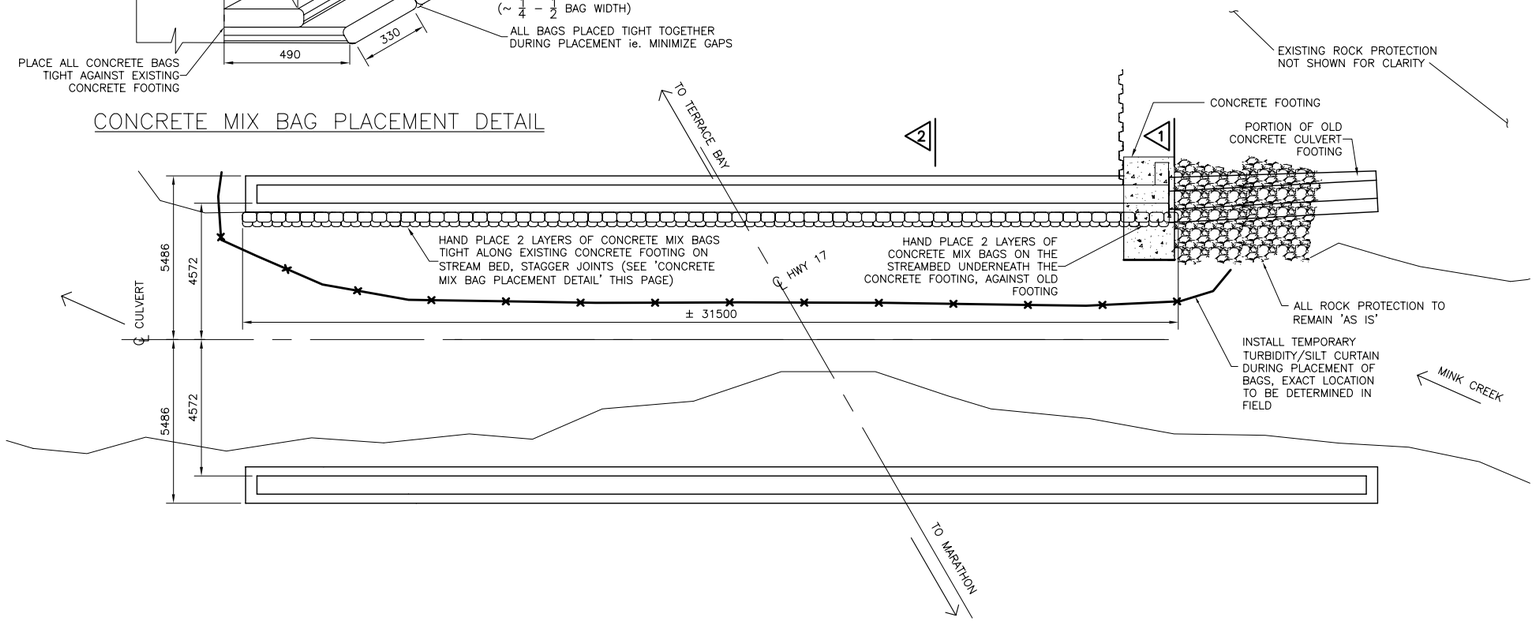


PLAN – EXISTING CONDITIONS

SCALE 1:200

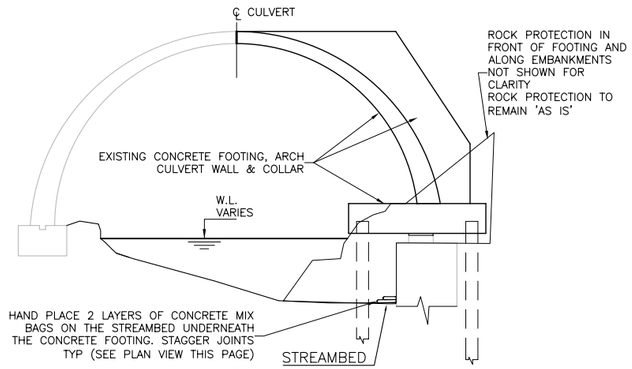


CONCRETE MIX BAG PLACEMENT DETAIL



PLAN – LOCATION OF CONCRETE MIX BAG PLACEMENT
(TOP OF CULVERT, ROCK PROTECTION AND ROADWAY NOT SHOWN FOR CLARITY)

SCALE 1:200



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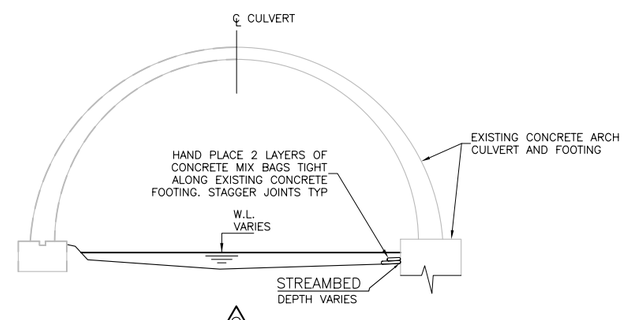
SCALE 1:150



2
SCALE 1:150

REVISIONS			DESCRIPTION			
DESIGN X	CHK X	CODE	LOAD	DATE 08/07		
DRAWN X	CHK X	SITE 48E-23	STRUCT	SCHEME	DWG X	