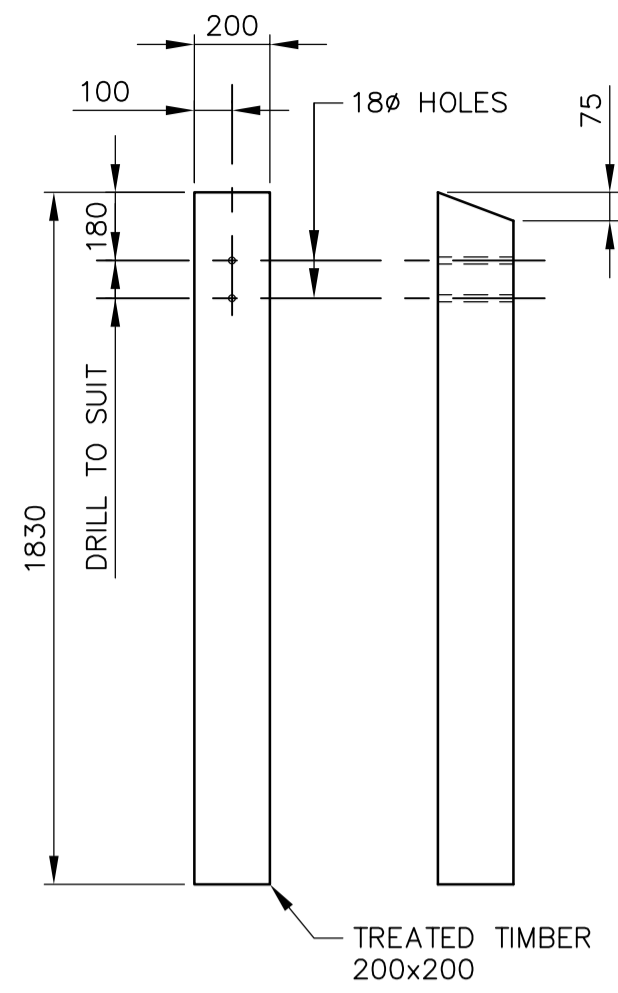
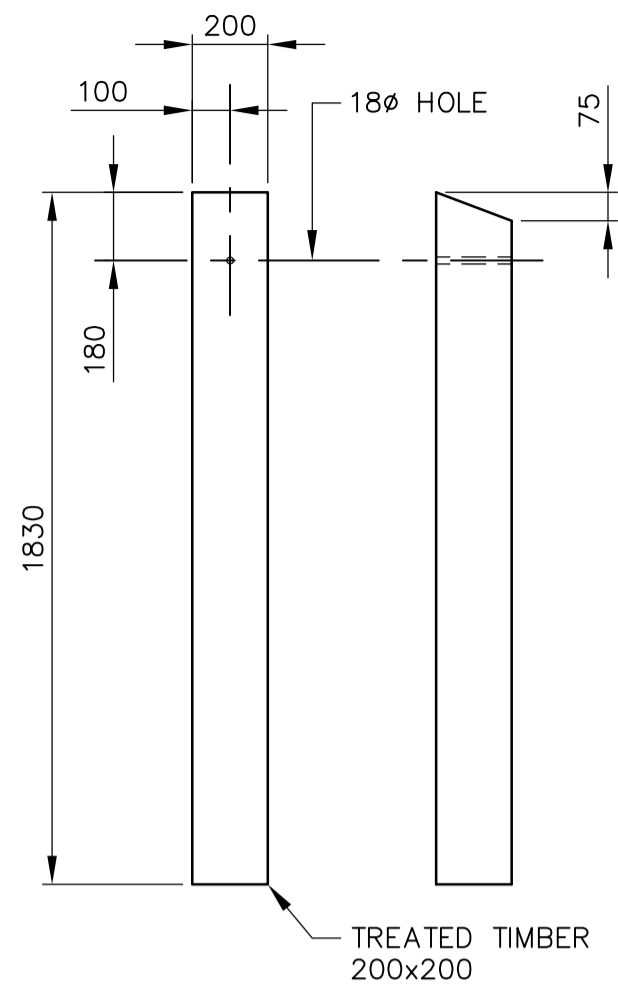


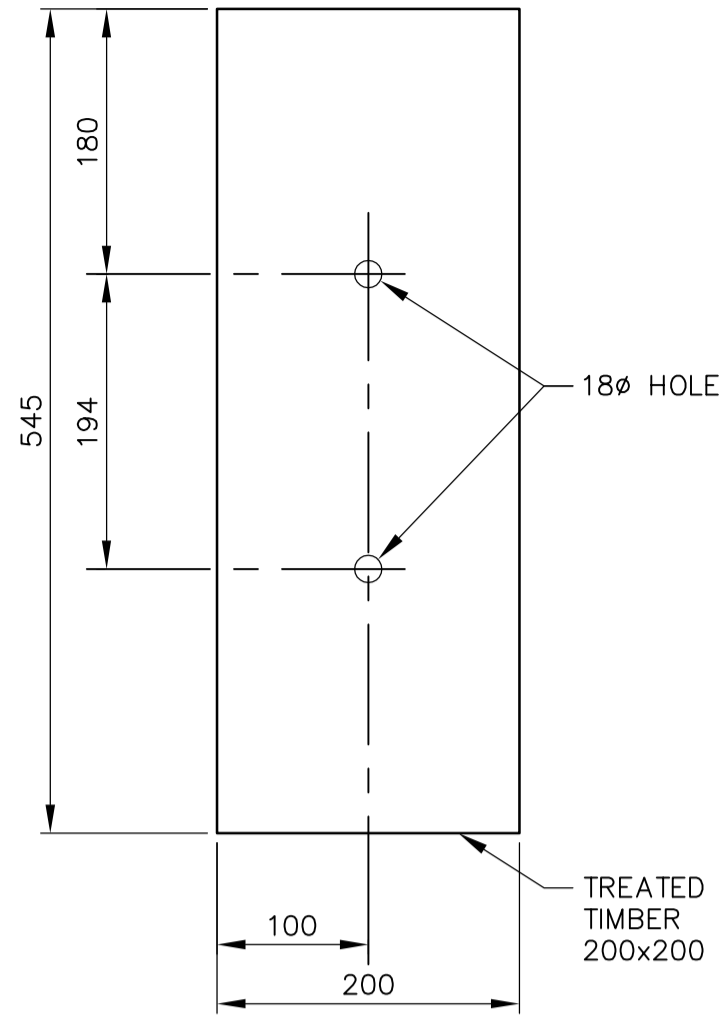
POST MK. TPDE07



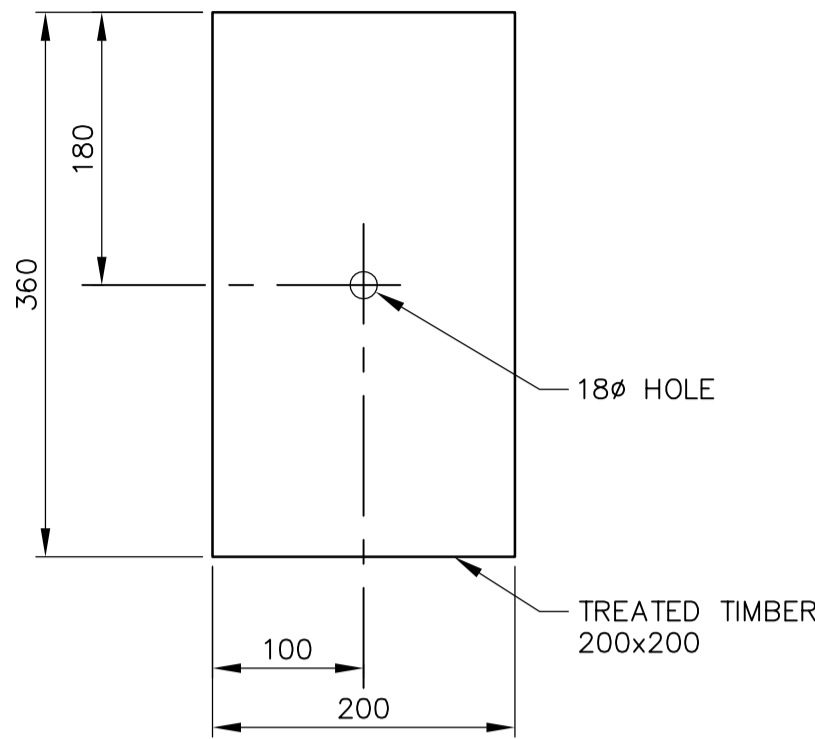
POST MK. TPDE05



POST MK. TPDE02



BLOCK MK. TPDB02



BLOCK MK. TPDB01

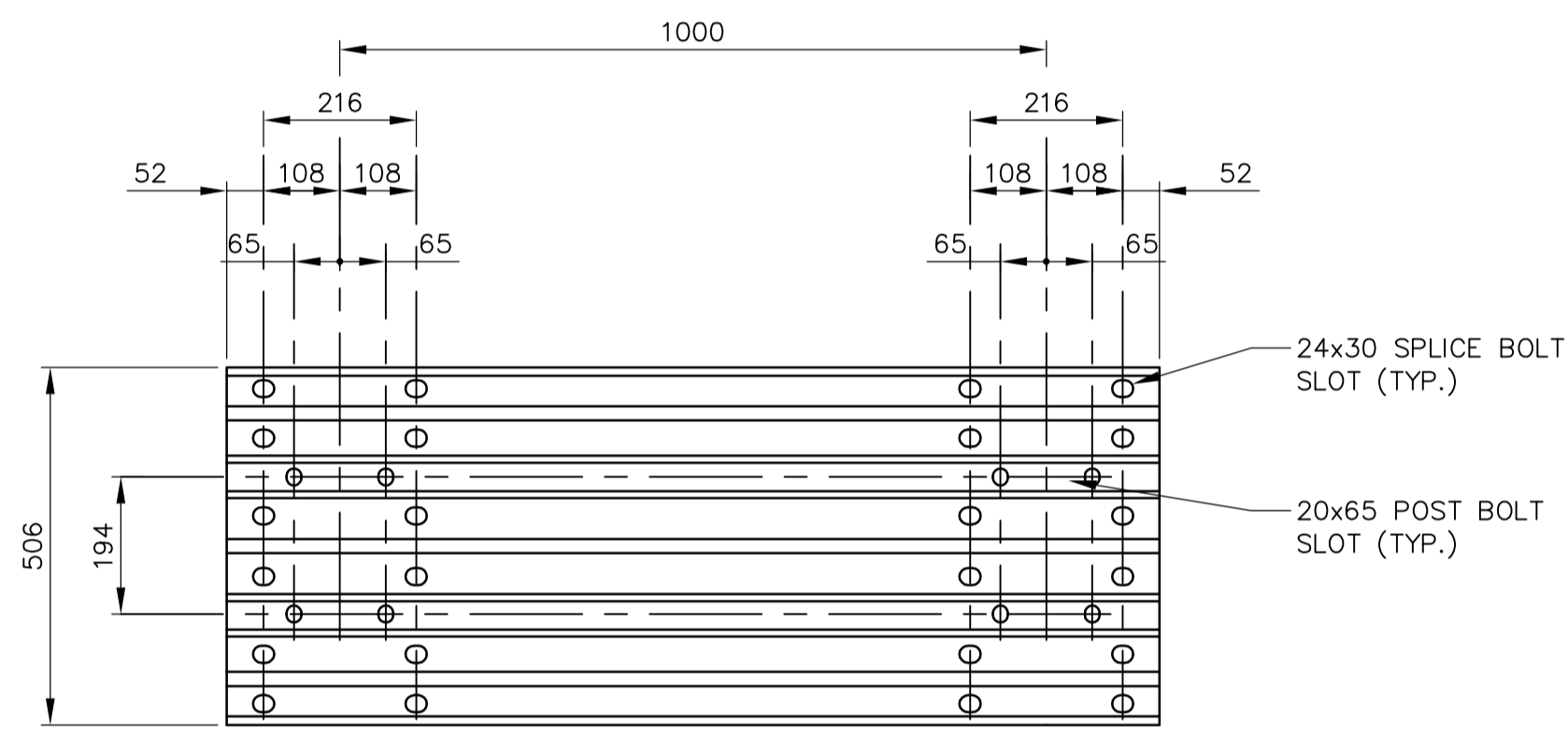
NOTE:
4 BLOCK MK. TPDB02,
HOLES TO SUIT TRANSITION
SECTION

BILL OF TIMBER
FOR APPROACH GUARDRAIL

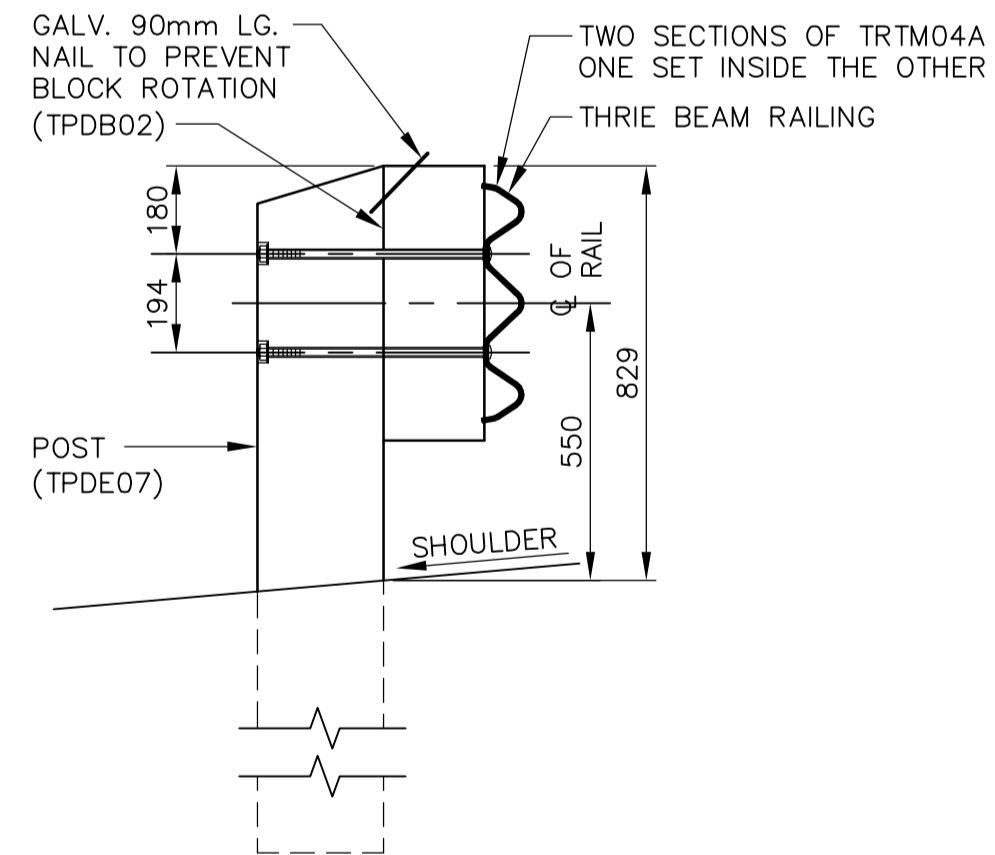
QTY.	PART No.	DESCRIPTION	REMARKS
12	TPDE02	TIMBER GUARDRAIL POST	STANDARD GUARDRAIL POST
4	TPDE05	TIMBER GUARDRAIL POST	
8	TPDE07	THRIE BEAM GUARDRAIL POST	
12	TPDB01	W BEAM TIMBER BLOCKOUT	
12	TPDB02	THRIE BEAM TIMBER BLOCKOUT	

BILL OF GUARDRAIL AND HARDWARE
FOR APPROACH & BRIDGE GUARDRAIL

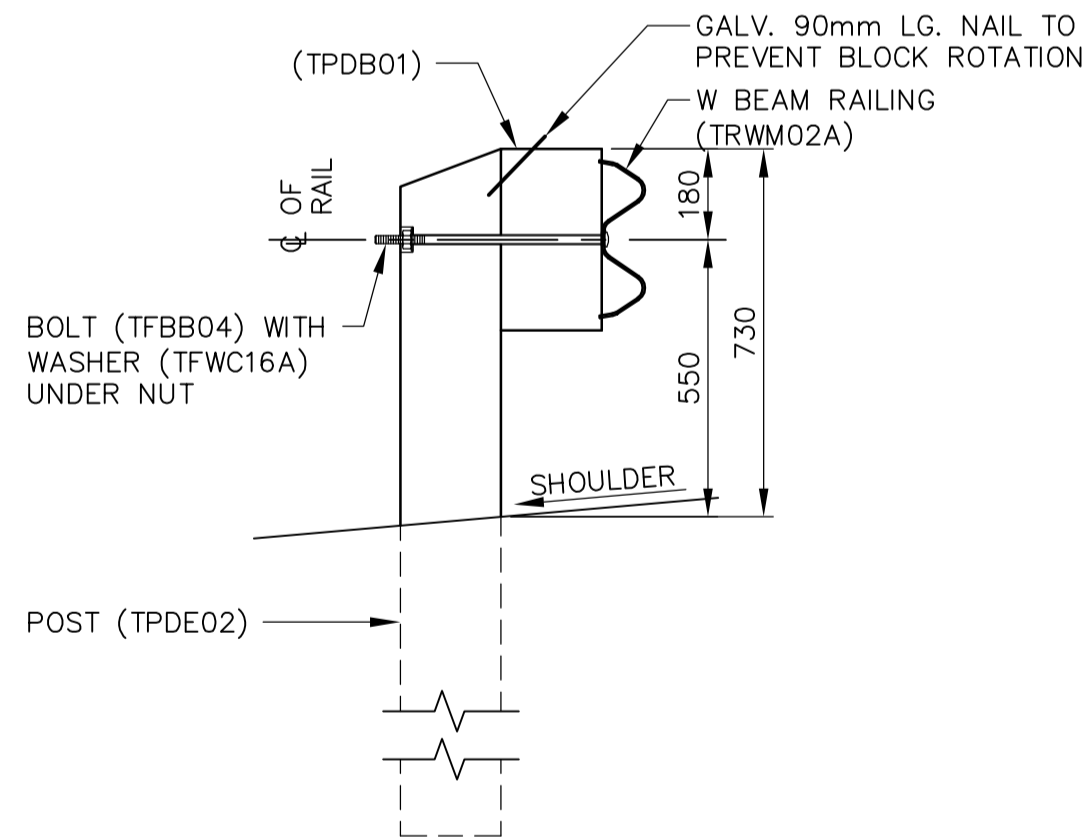
QTY.	PART No.	DESCRIPTION	REMARKS
72	TFBB03	GUARDRAIL BOLT (255 LG)	
20	TFBB04	GUARDRAIL BOLT (640 LG)	
16	TFBB05	GUARDRAIL BOLT (640 LG)	
200	TFBB01	GUARDRAIL SPLICE BOLT/NUT (ACCOMPANYING NUT)	AS REQUIRED
4	A	THRIE BEAM GUARDRAIL	
4	TRWT01a	TRANSITION BEAM GUARDRAIL	
4	TRTM04a	THRIE BEAM GUARDRAIL	4-SPACE THRIE BEAM GUARDRAIL
4	TRTM04a	(NESTED) THRIE BEAM GUARDRAIL	
4	TRWE01a	W BEAM END CONNECTOR	
4	TRWM02a	W BEAM	



THRIE BEAM GUARDRAIL MK. A
SCALE 1:10



STANDARD THRIE BEAM
SCALE NTS



STANDARD W-BEAM
SCALE NTS

 APEGM Certificate of Authorization Earth Tech Canada Inc. No. 730	B.M. ELEV.	 Frederickson Cooper ARCHITECTS	 A Terra International Ltd. Company	ENGINEER'S SEAL	 THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT ENGINEERING DIVISION	
	DESIGNED BY AP/JC			CHECKED BY JC		ORIGINAL SIGNED BY J.N. CRANG
	DRAWN BY KC			APPROVED BY DT		07/11/09
	SCALE: AS NOTED			RELEASED FOR CONSTRUCTION BY: R. SOROKOWSKI		CONSULTANT DRAWING NO. WN-S0487
00 ISSUED FOR TENDER 07/11/09 PAAP	NO. REVISIONS	DATE BY	DATE 07/02/14	DATE 07/11/09	WATER TREATMENT PLANT CONSTRUCTION OF ROADS AND LANDSCAPING CITY FILE NUMBER SHEET OF STRUCTURAL MIDDLE BRIDGE APPROACH GUARDRAIL DETAILS CITY DRAWING NUMBER I-0601N-A-S0487-001-00D	