

EMERGENCY SWING DAM IMPROVEMENTS

PARKS CANADA AGENCY

SAULT STE. MARIE CANAL

NATIONAL HISTORIC SITE OF CANADA



LOCATION PLAN
NOT TO SCALE

PHOTOGRAPHS: SCOPE OF WORK

LIST OF DRAWINGS

<u>DWG. No.</u>	<u>DESCRIPTION</u>
11-2011 G1	REMOVALS PLAN & GENERAL NOTES
11-2011 G2	EXISTING WOOD DECK & RAILING SECTIONS
11-2011 G3	WOOD DECK SECTIONS & DETAILS
11-2011 G4	DECK FRAMING PLAN & SECTION (SOUTH END)
11-2011 G5	CRACK SEALING, PIER & STOP BLOCK DETAILS

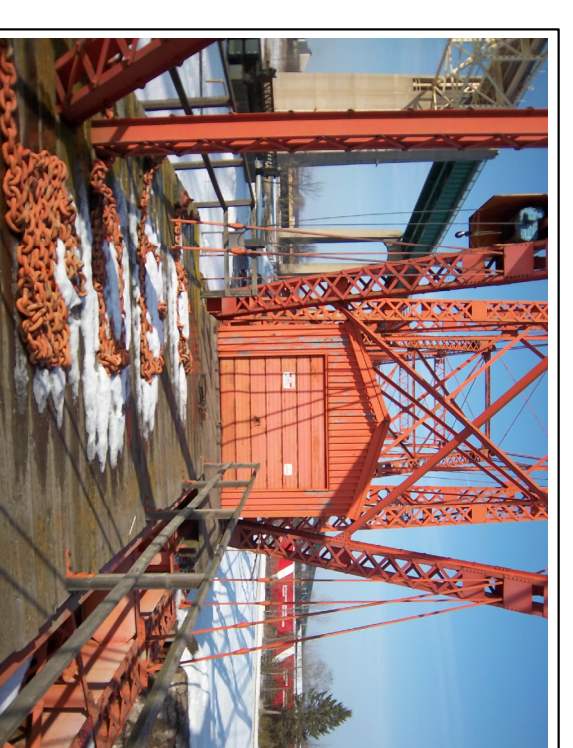
ISSUED FOR TENDER

CONSULTANT

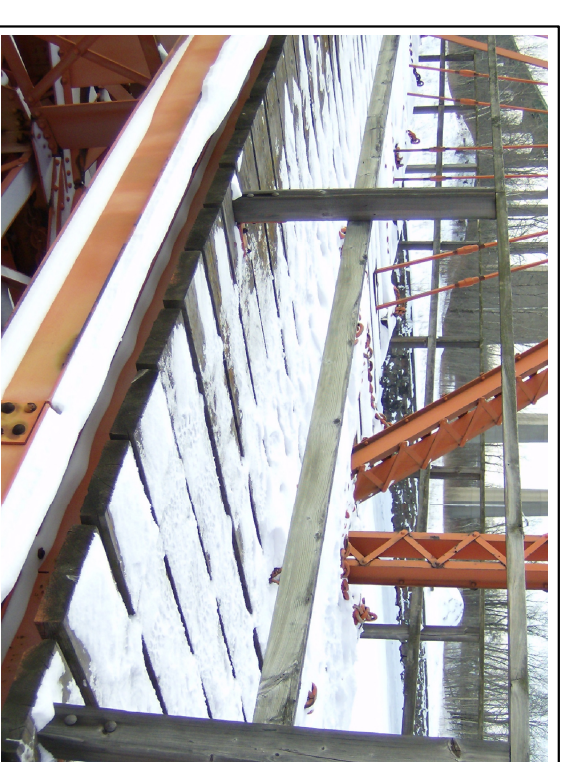
CLIENT



1 REPLACE WALKERS, DECK & WEST RAILING



2 REMOVE, SALVAGE & REINSTALL BUILDING



3 REPLACE DECK & EAST RAILING



4 REPLACE CRUSHED STOP BLOCKS & REPLACE 6 - CAST WICKET CHAIN STOPS



5 EXTEND DECK AT SOUTH END



6 REPLACE TIMBERS & ANGLE SUPPORTS



7 REPLACE EXISTING DECK ARRANGEMENT - SECTION B-B



8 REPLACE EXISTING EQUIPMENT ANCHORS & SANDBLAST AND PAINT ALL PAINTED SURFACES - EQUIPMENT ACCESSIBLE AFTER DECK REPLACEMENT

GENERAL NOTES:

- 1) CONTRACTOR SHALL TAKE EVERY PRECAUTION TO PROTECT EXISTING MAINTENANCE-TIMBER MEMBERS EXCEPTED.
- 2) THE CONTRACTOR IS REQUIRED THAT THIS IS A MAINTENANCE SITE OF CANAL AND SHALL TAKE PRECAUTIONS AND MEASURE TO PRESERVE THE CULTURAL INTEGRITY OF THE SITE.
- 3) RAILING AND DECK TO BE CONSTRUCTED TO O.B.C. LATEST EDITION.
- 4) ALL DIMENSIONS ARE IN MILLIMETERS UNLESS NOTED OTHERWISE.

CONCRETE:

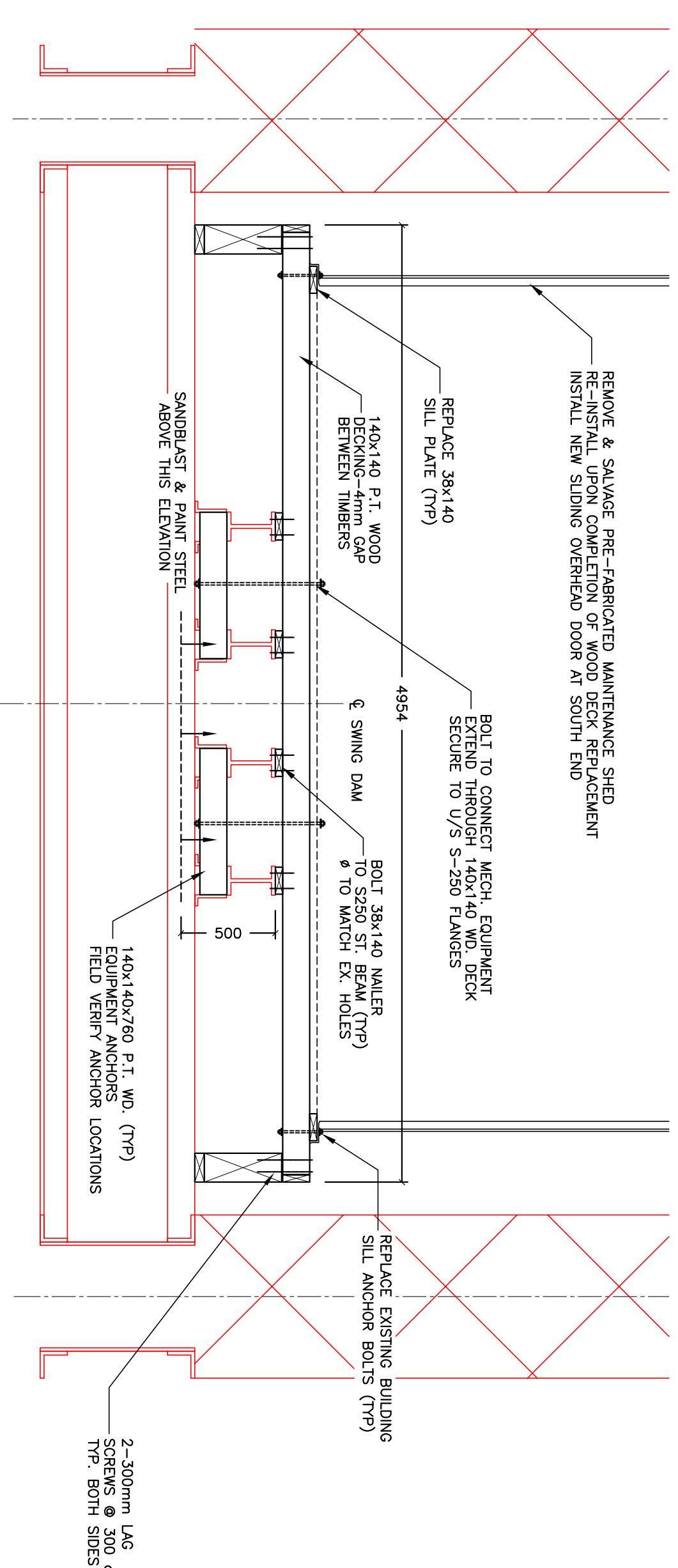
- CONCRETE IS SPECIFIED USING ALTERNATIVE No. (1) OF CSA A23.1 TABLE 2 AS FOLLOWS:
- | | |
|---------------------------|--------|
| EXPOSED CLASS: | F-2 |
| (TABLE 1) | |
| AIR CONTENT CATEGORY: | 1 |
| (TABLE 4) | |
| MAX. W/C RATIO: | 0.45 |
| (TABLE 2) | |
| CURING TYPE: | 1 |
| (TABLE 20) | |
| MIN. COMPRESSIVE STRENGTH | 25 MPa |
| Ø 25 UNCS | |

TIMBER:

- 1) RAILING CONSTRUCTION SHALL BE S.P.F. GRADE NO. 2 OR BETTER.
- 2) ALL TIMBER FOR RAILINGS SHALL BE PRESSURE TREATED TO PROTECT AGAINST DECAY UNLESS NOTED OTHERWISE. SHALL BE CUT TO LENGTH UNLESS NOTED OTHERWISE.
- 3) ALL FIELD CUTS AND HOLES SHALL BE LIBERALLY PAINTED WITH ALKALINE COPPER QUATERNARY.
- 4) WOOD CONSTRUCTION SHALL COMPLY WITH CSA 080.

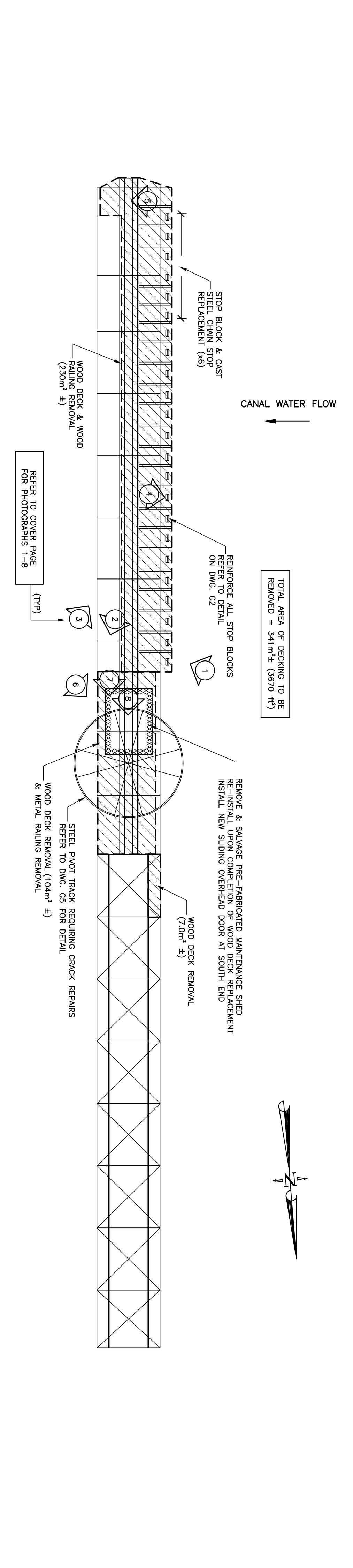
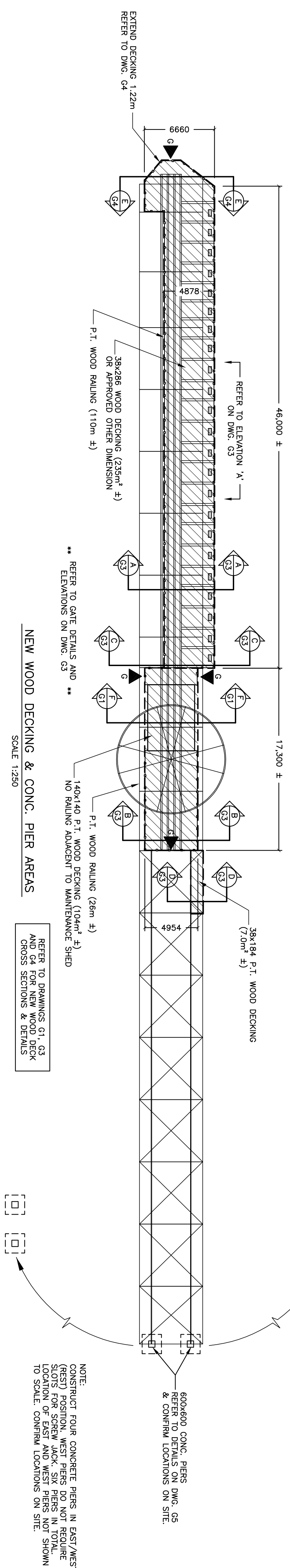
STEEL:

- 1) STEEL SHALL BE INSPECTED BY ENGINEER PRIOR TO INSTALLATION.
- 2) TYPES 'A' AND 'B' STEEL REQUIRE NO PAINTING.
- 3) 350A' AND 350A STEEL MAY BE SUBSTITUTED WITH 350M' AND 350M STEEL RESPECTIVELY.
- 4) SANDBLAST AND PAINT ALL SURFACES OF STEEL IN WHICH ACCESS WILL BE RESTRICTED TO LESS THAN 600mm SPHERICAL CLEAR DISTANCE BY INSTALLATION OR REPLACEMENT WORKS.
- 5) SANDBLAST AND PAINT ALL SURFACES OF STEEL TO A MIN. DEPTH OF 500mm FROM TOP OF EXISTING (DIMS. G3 AND G4), PARKS CANADA DEPARTMENTAL SPECIFICATION FOR PAINTING OF STEEL STRUCTURES IN ACCORDANCE WITH NOTES 4 AND 5.
- 6) COATING TO BE A 3 COAT EPOXY, POLYURETHANE SYSTEM. FIRST COAT 4-6 mils. DRY FILM THICKNESS (EPOXY), SECOND & THIRD COAT 2-3 mils DRY FILM THICKNESS (POLYURETHANE).



CROSS-SECTION F-F

SCALE 1:25



SCOPE OF WORK & REMOVALS PLAN

SCALE 1:250

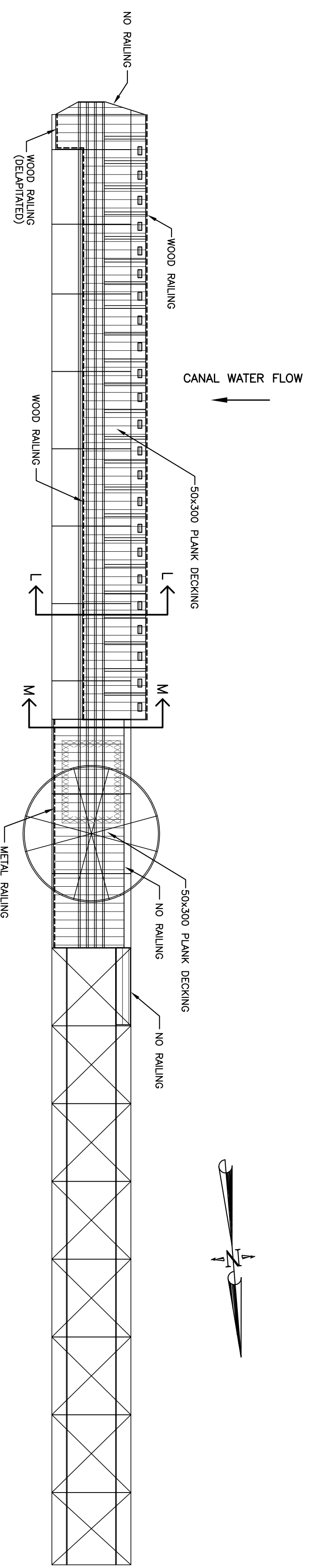
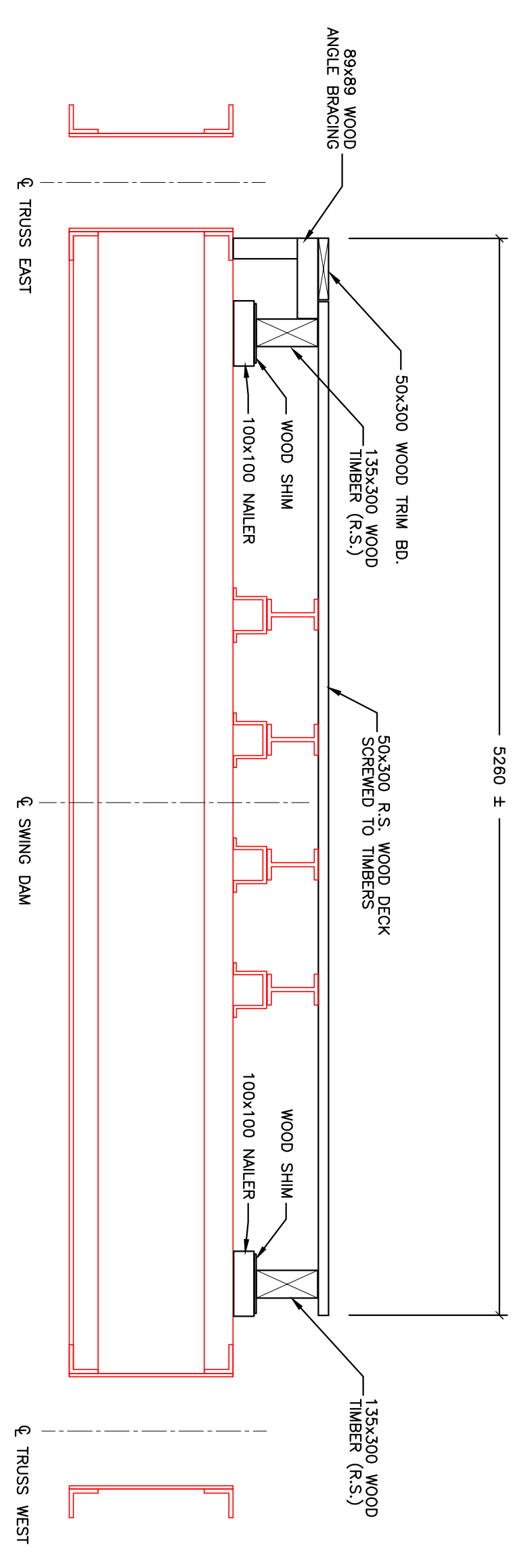
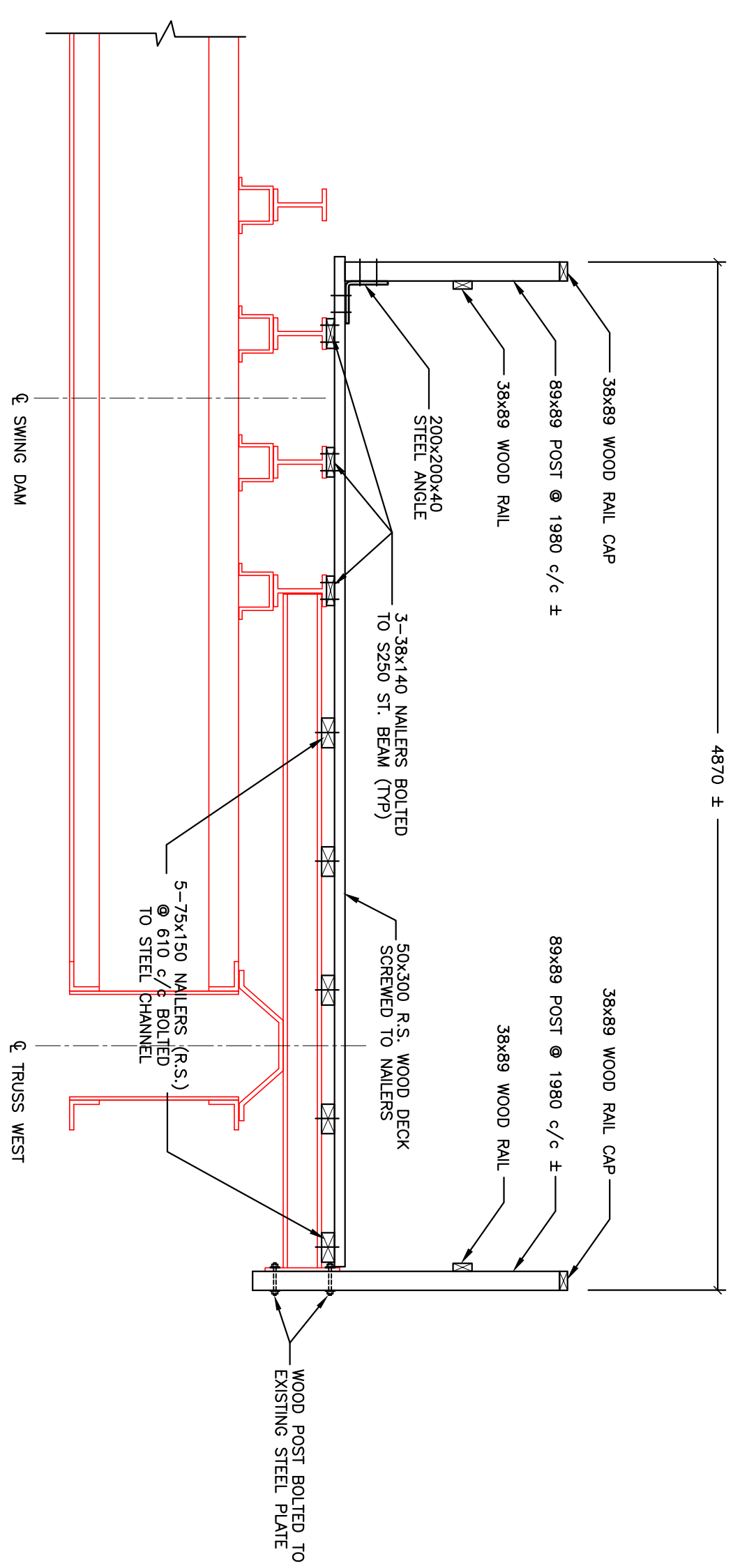
NOTE: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

LEGEND:

	EXISTING STEEL STRUCTURE
	NEW GATE
	NEW RAILINGS

Revision:	No.	Date	By
ISSUED FOR PRELIMINARY COMMENTS	0	27/01/11	CK
ISSUED FOR PRELIMINARY DESIGN	1	04/02/11	CK
ISSUED FOR DESIGN REVIEW	2	16/02/11	CK
ISSUED FOR FINAL REVIEW	3	01/03/11	CK
RE-ISSUED FOR FINAL REVIEW	4	24/03/11	CK
ISSUED FOR TENDER	5	31/03/11	CK

	Parks Canada	Parcs Canada
	TULLOCH	ENGINEERING
DESIGNER	LICENCED PROFESSIONAL ENGINEER A. J. McDONALD 100082267 MAR. 31 2017	
REVIEWER	LICENCED PROFESSIONAL ENGINEER C.L. KIRBY 100111792	
EMERGENCY SWING DAM IMPROVEMENTS		
PARKS CANADA AGENCY		
SAULT STE. MARIE CANAL		
REMOVALS PLAN & GENERAL NOTES		
Scale	AS NOTED	
Dw- No.	KN	Ch. JM
Date	MAR. 1, 2011	
Dwg- No.	11-2011 G1	REV. 3

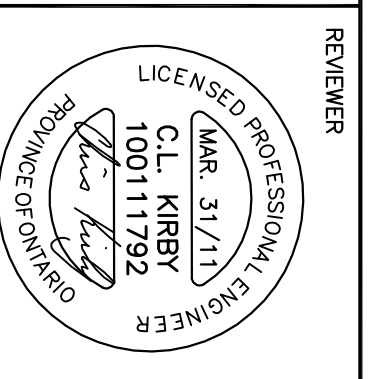
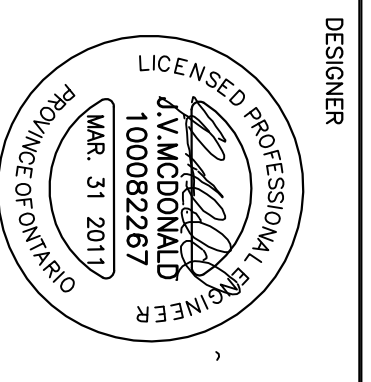


NOTE: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

LEGEND:

— EXISTING STEEL STRUCTURE

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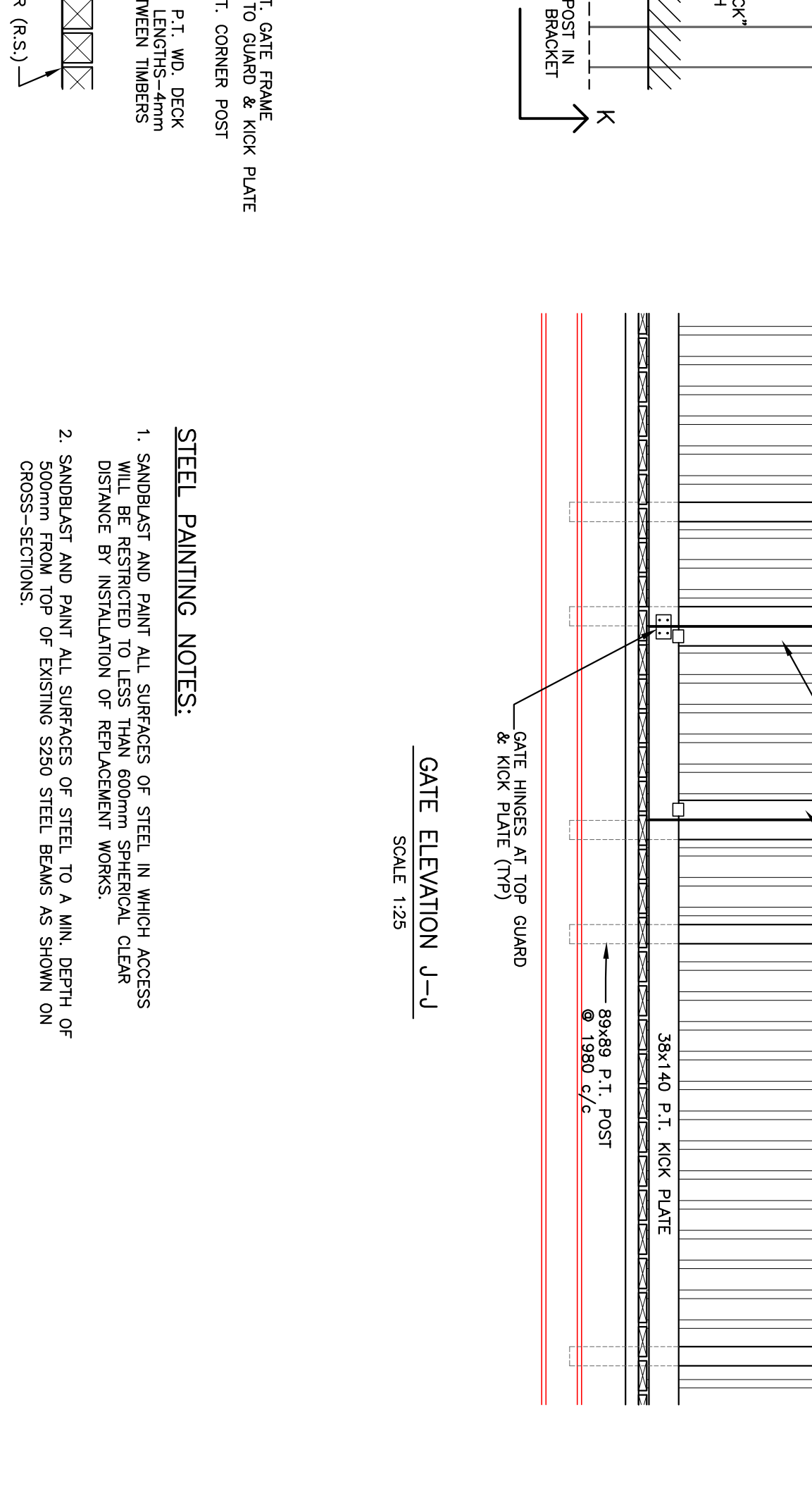
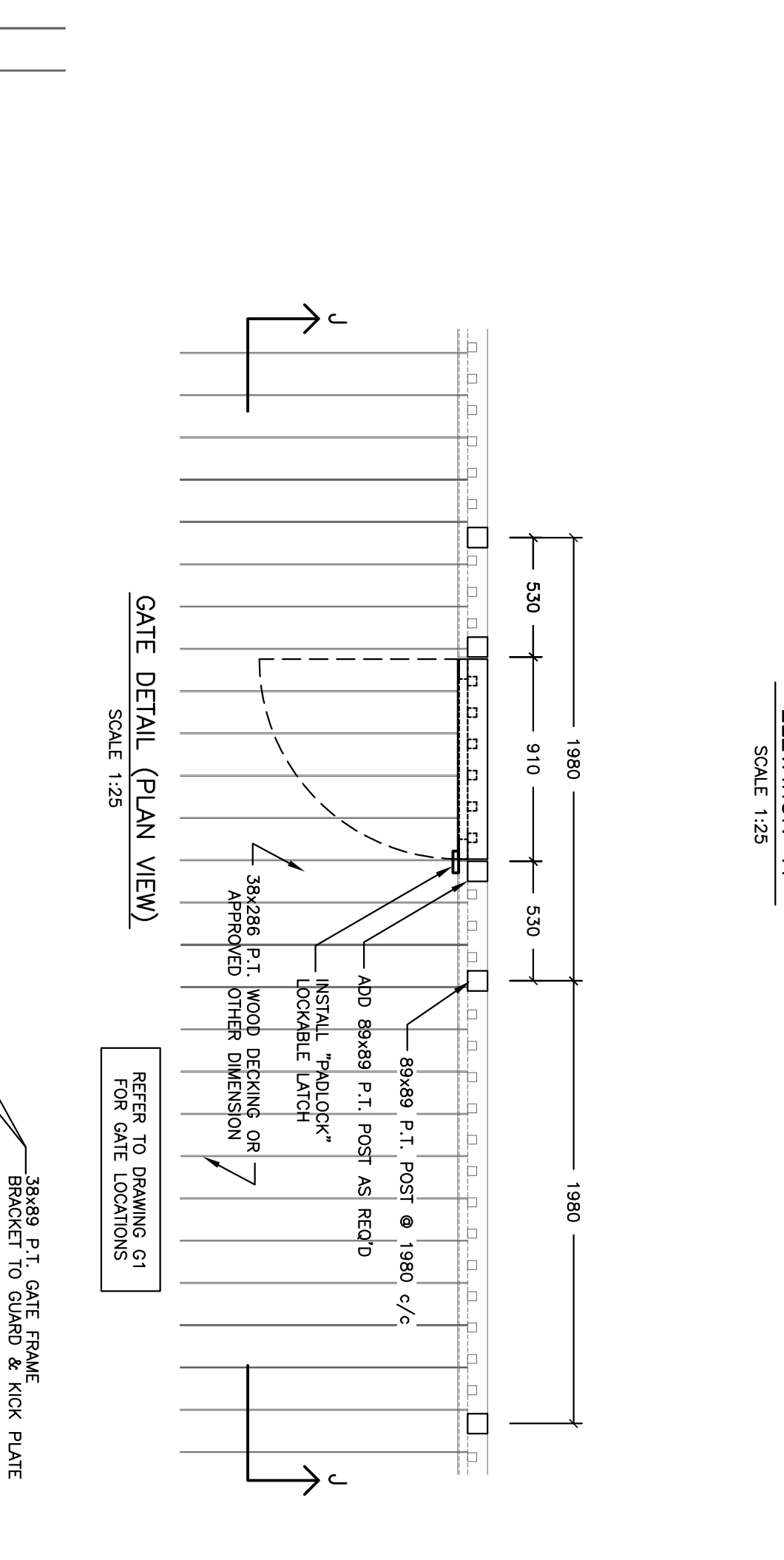
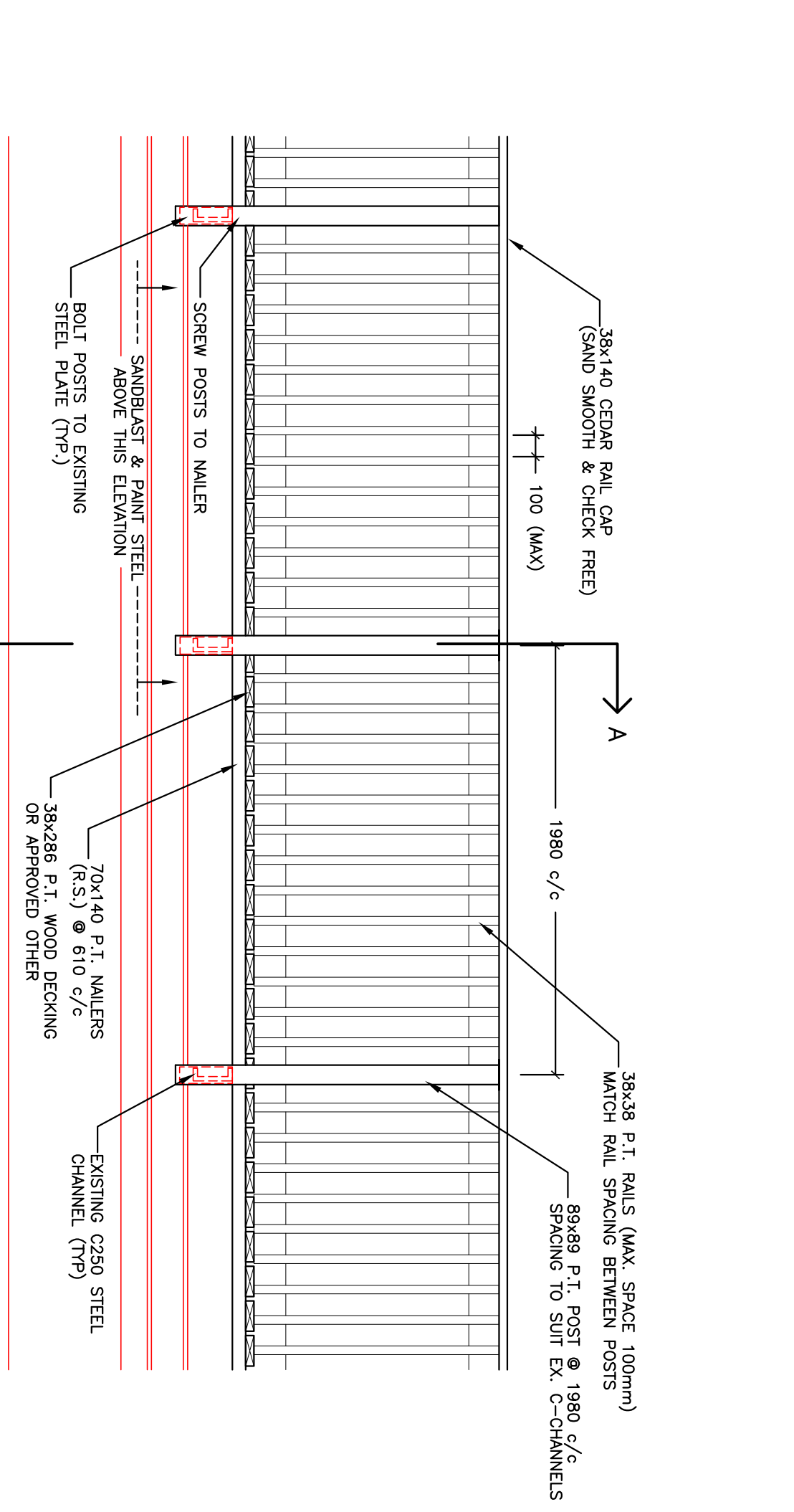
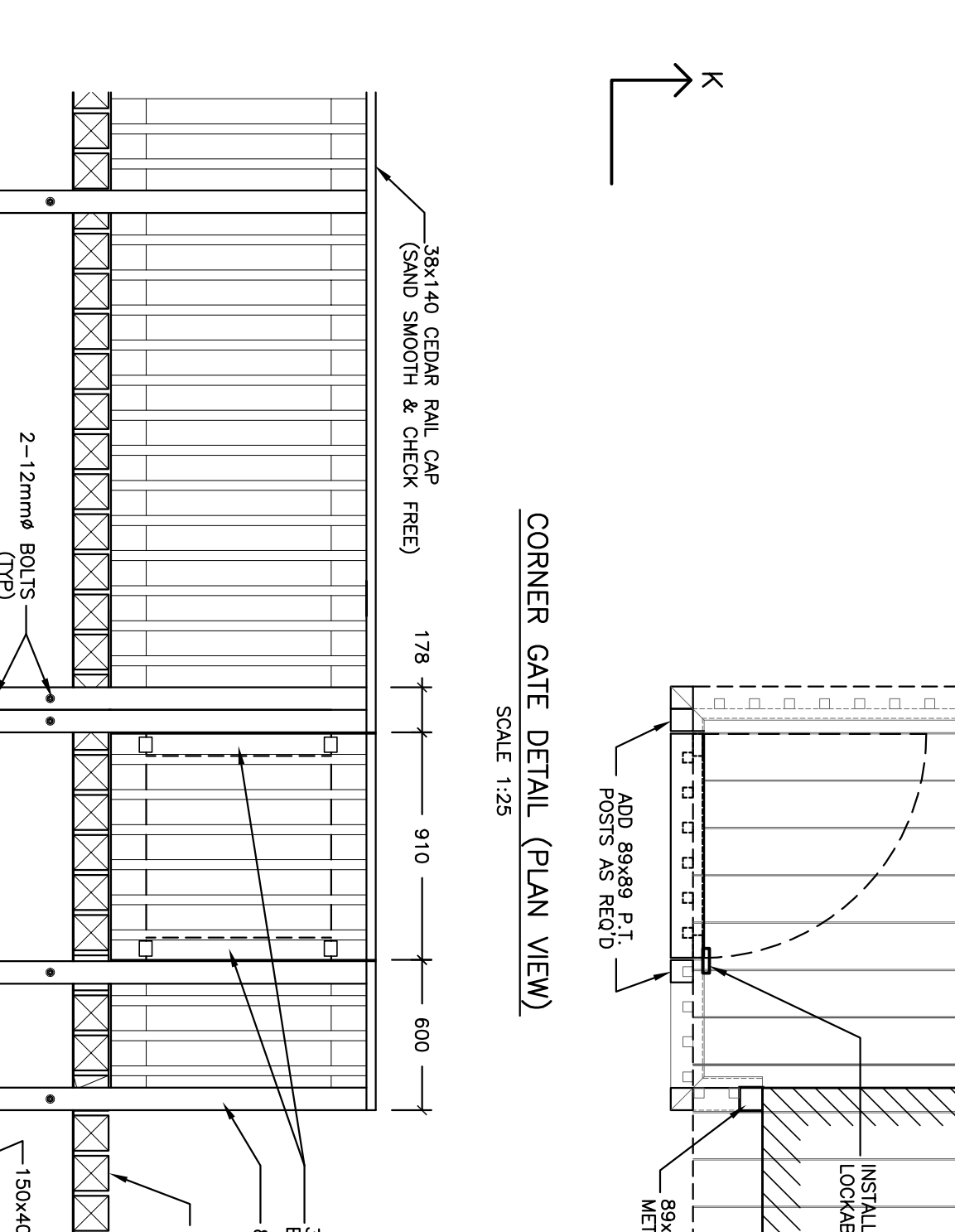
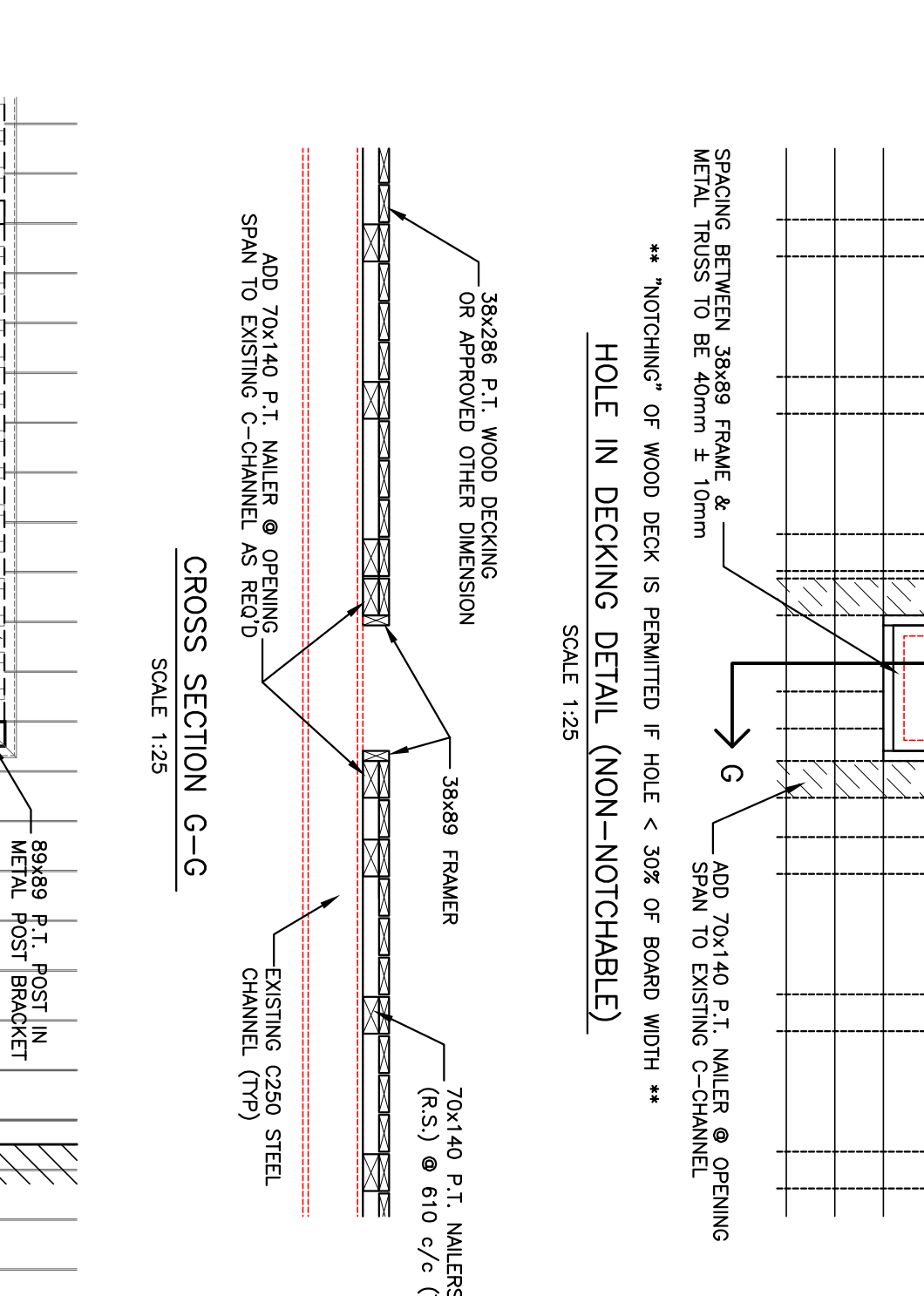
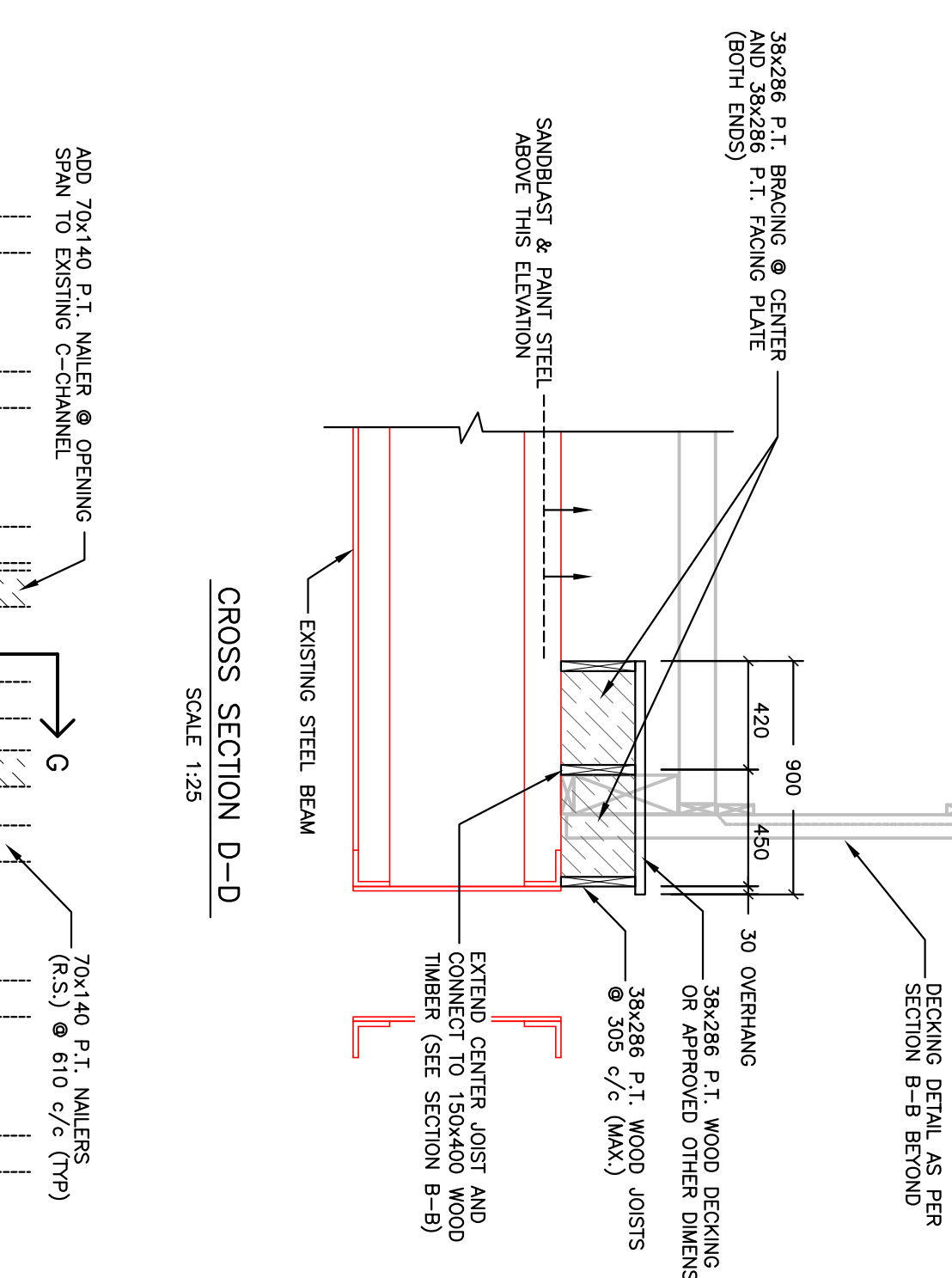
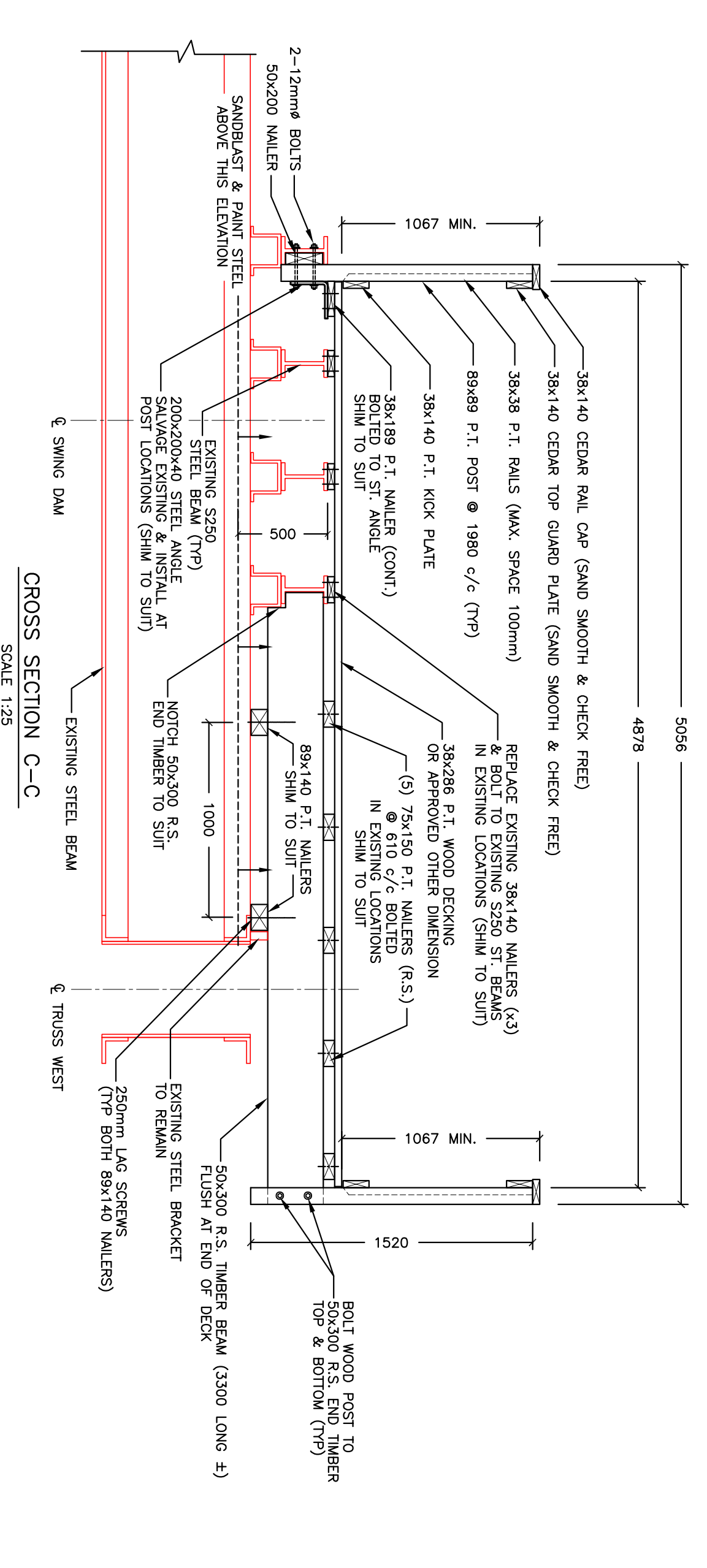
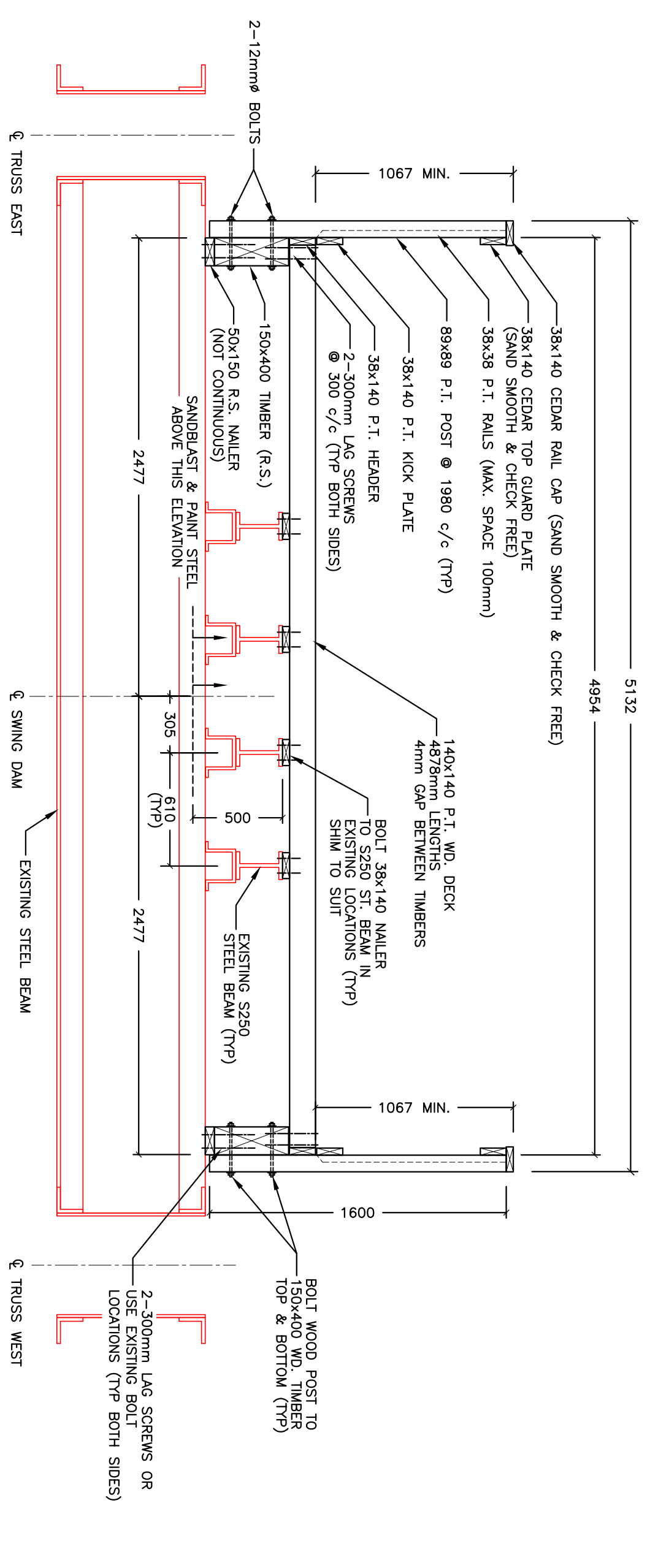
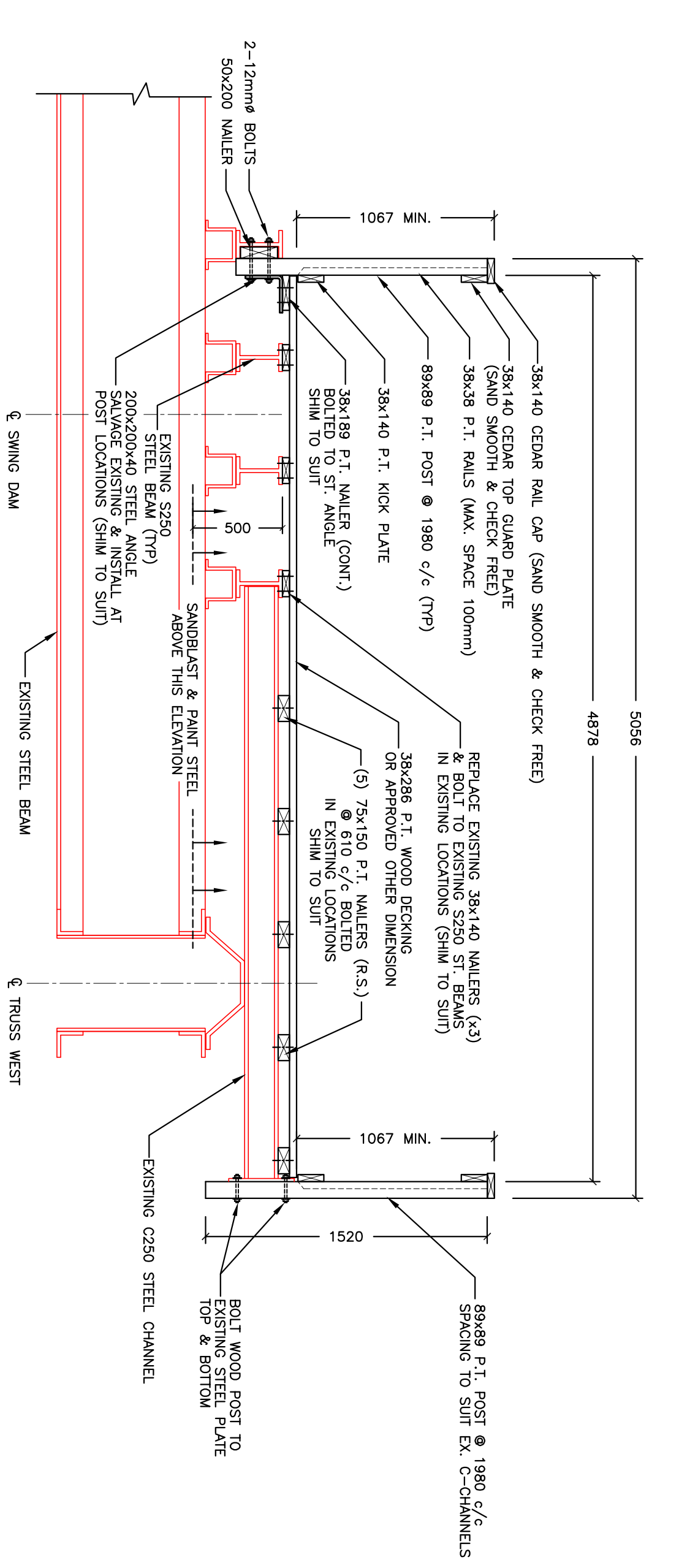


EMERGENCY SWING DAM IMPROVEMENTS
PARKS CANADA AGENCY
SAULT STE. MARIE CANAL

EXISTING WOOD DECK & RAILING SECTIONS

Scale AS NOTED

Dw.-	KN	Ch.	JM
Date	MAR. 1, 2011		
Dwg. No.	11-2011 G2		
REV.	3		



NOTE: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

LEGEND:
— EXISTING STEEL STRUCTURE

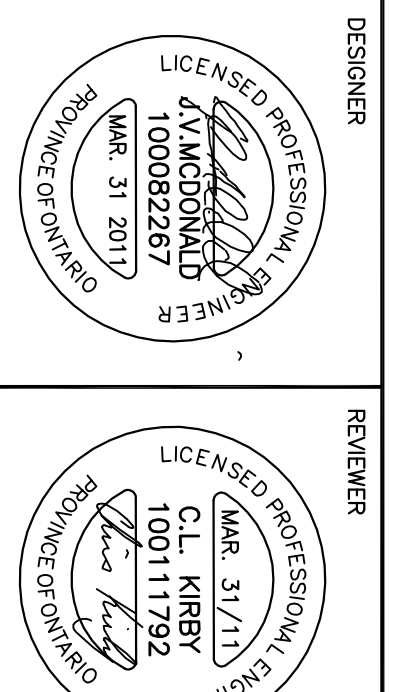
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ISSUED FOR TENDER	5	31/03/11	CK

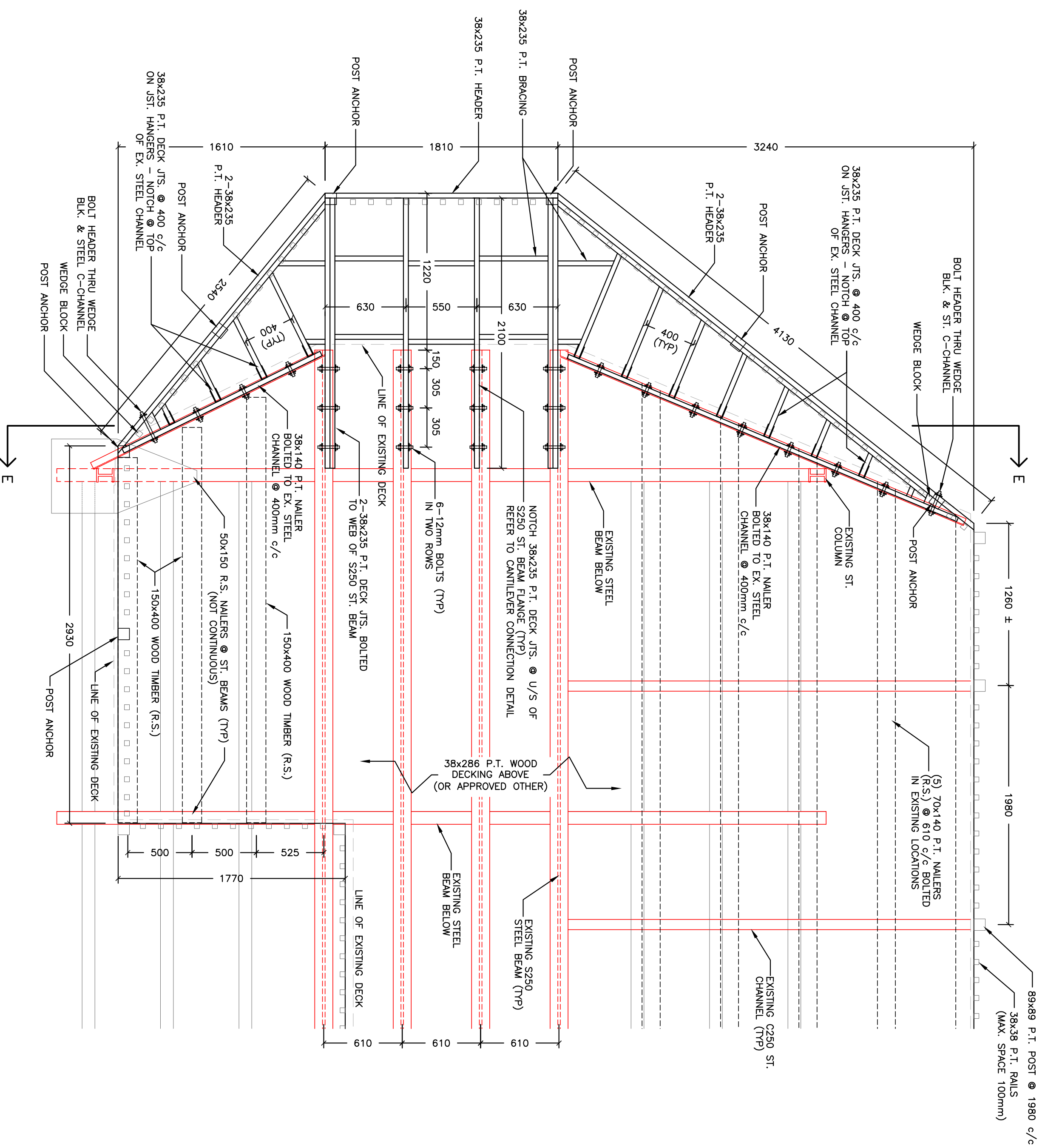
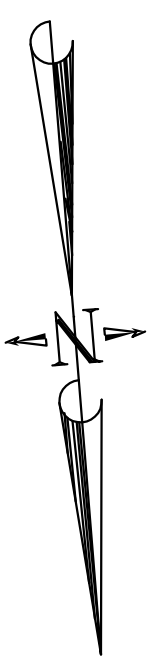
DESIGNER	REVIEWER
LICENCED PROFESSIONAL ENGINEER C.L. KIRBY 100082267 MAR. 31 2017	LICENCED PROFESSIONAL ENGINEER C.L. KIRBY 100111792 MAR. 31/11

EMERGENCY SWING DAM IMPROVEMENTS
PARKS CANADA AGENCY
SAULT STE. MARIE CANAL

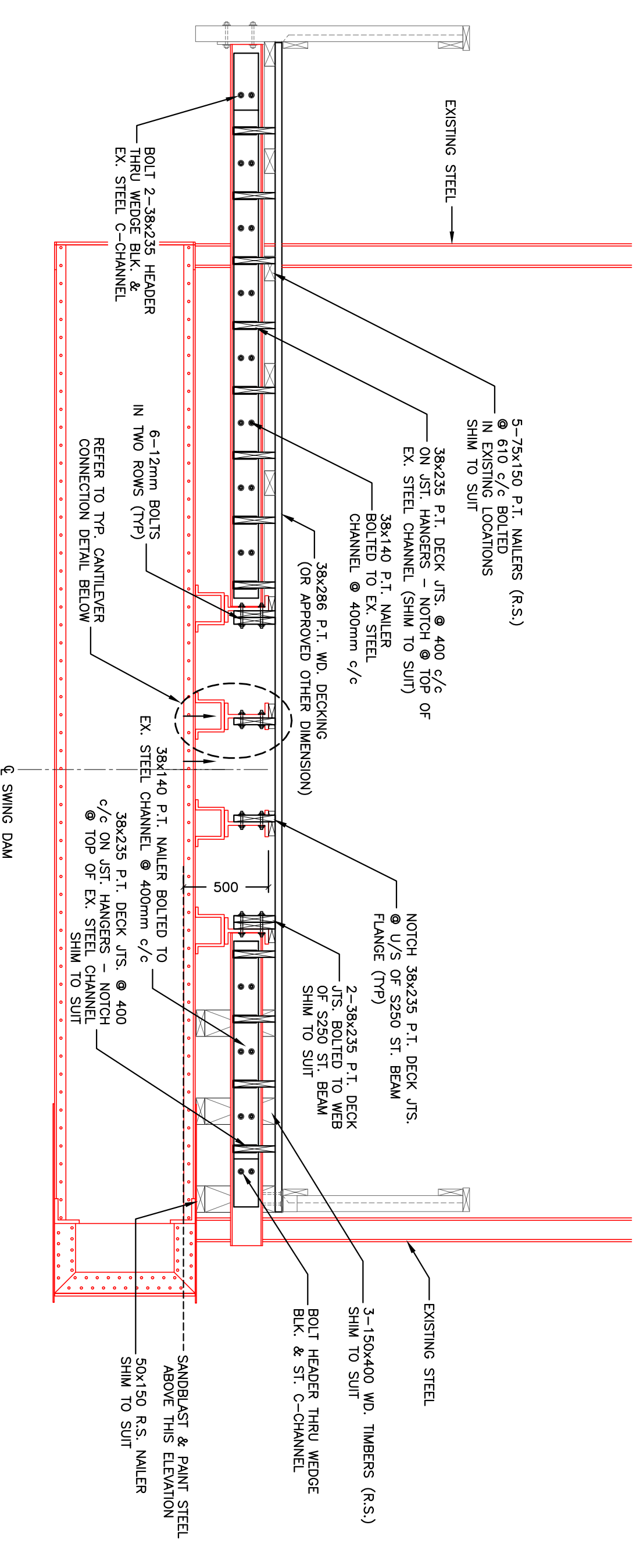
WOOD DECK SECTIONS & DETAILS

Scale	AS NOTED
Dw.- No.	11-2011 G3
Date	MAR. 1, 2011
REV.	3

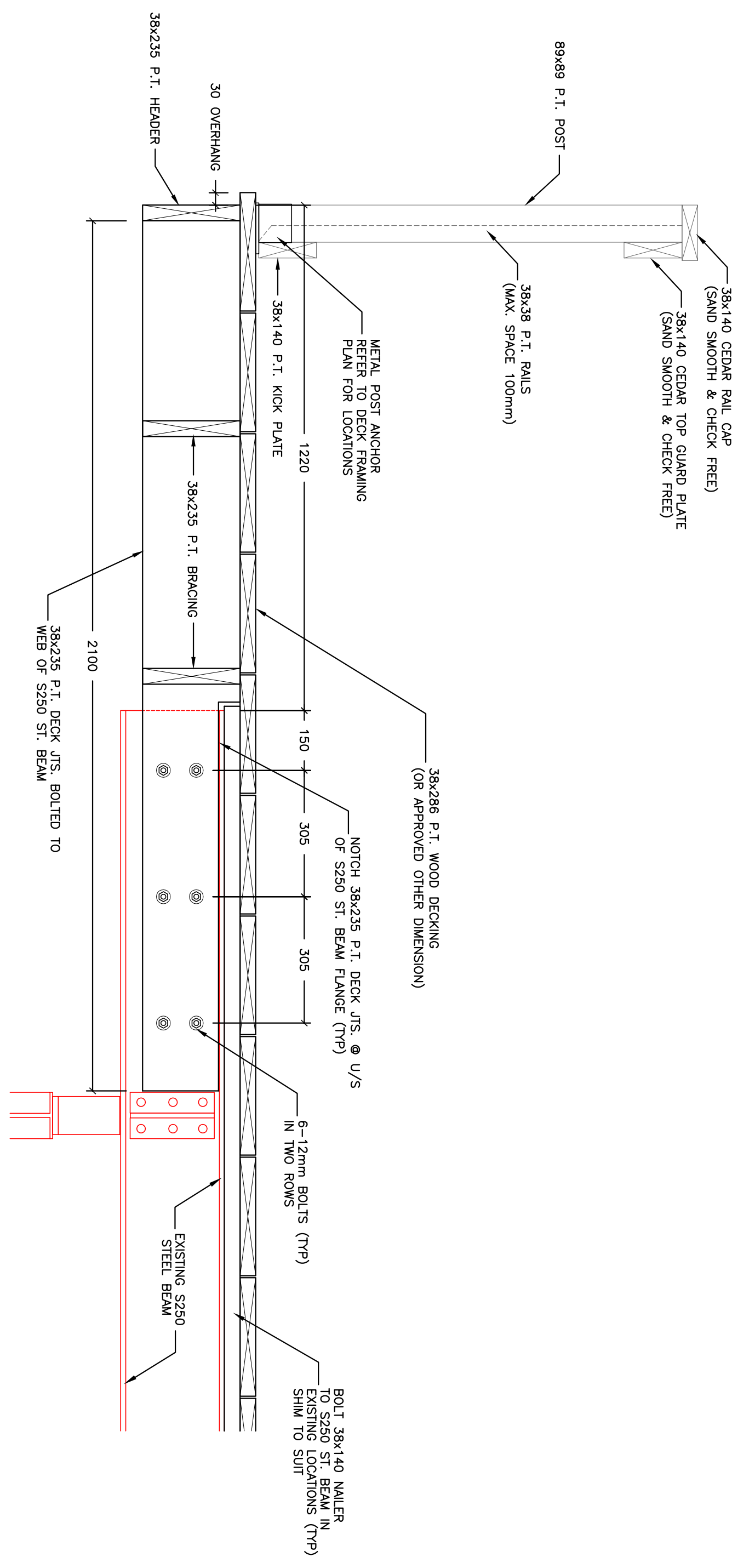




DECK FRAMING PLAN - SOUTH END
SCALE 1:25



CROSS SECTION E-E
SCALE 1:25



TYP. CANTILEVER CONNECTION DETAIL
SCALE 1:10

NOTE: ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED

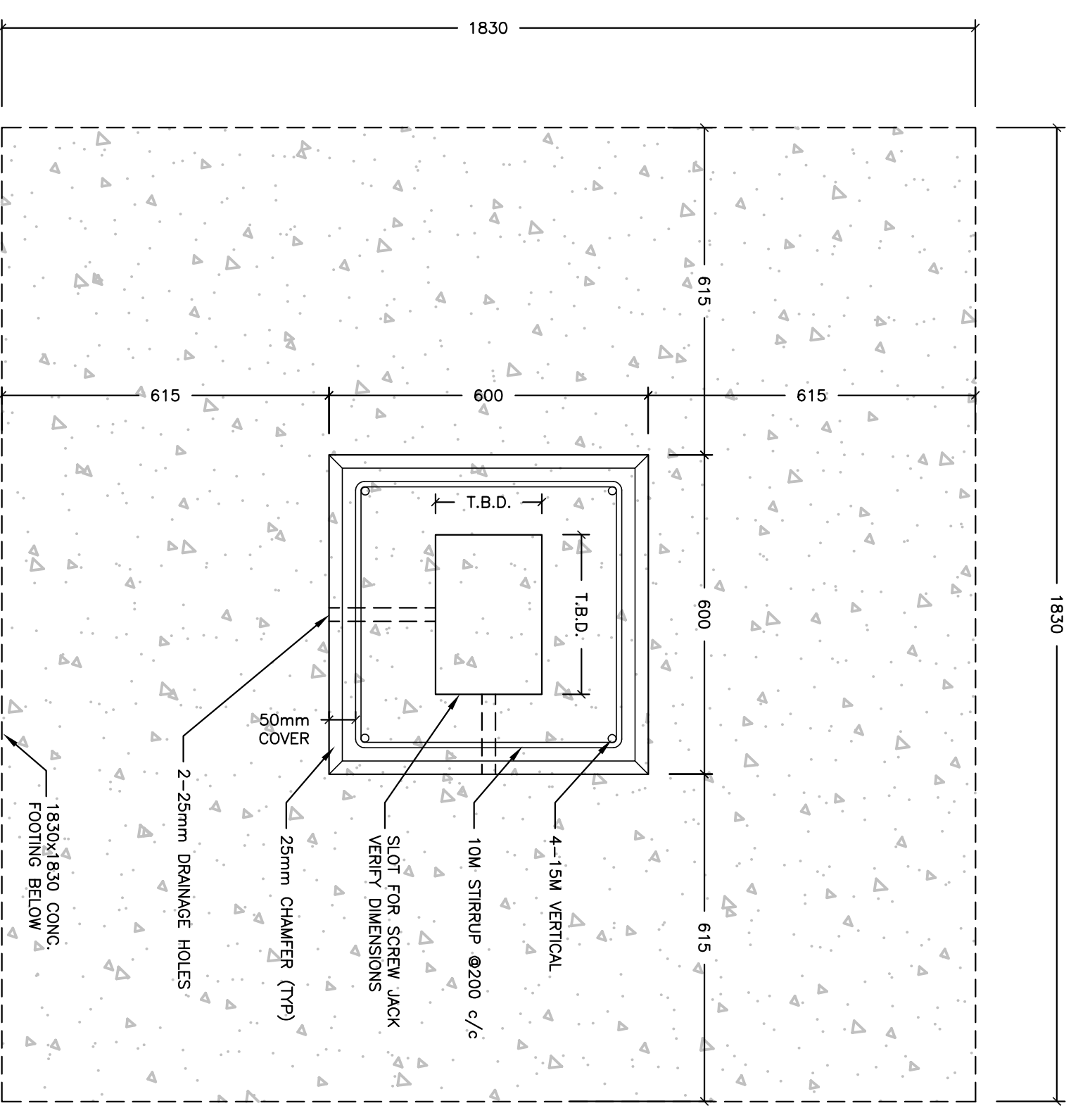
LEGEND:
— EXISTING STEEL STRUCTURE

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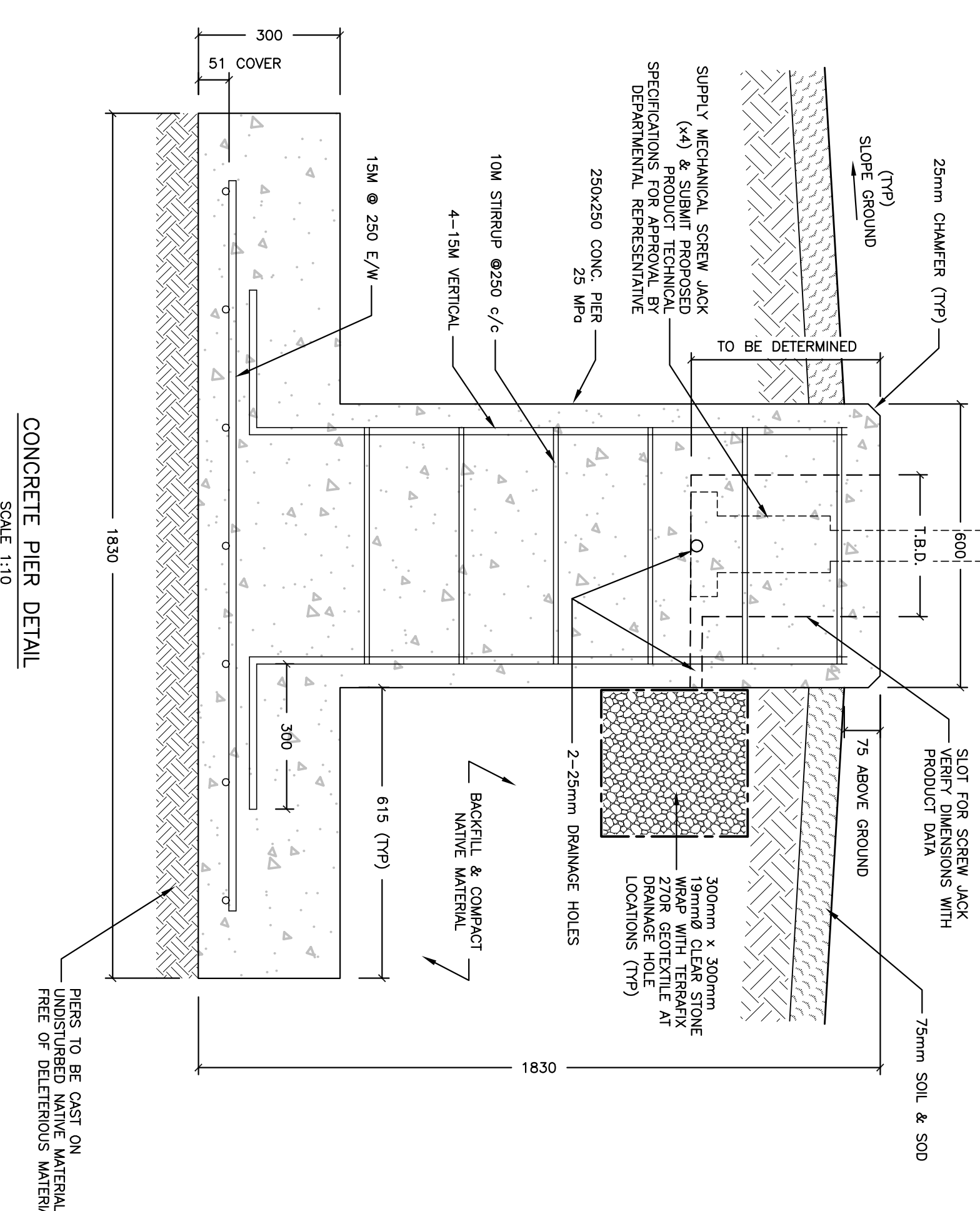


EMERGENCY SWING DAM IMPROVEMENTS
PARKS CANADA AGENCY
SAULT STE. MARIE CANAL
DECK FRAMING PLAN & SECTION - SOUTH END

Scale	AS NOTED
Dwg. No.	11-2011 G4
REV.	3



NOTE:
 -ALL WORK SHALL CONFORM TO THE ONTARIO
 -CONCRETE CODE SHALL BE IN ACCORDANCE
 WITH CAN/CSA A23.1 AND A23.2



NOTE: ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE INDICATED

LEGEND:

EXISTING STEEL STRUCTURE

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ISSUED FOR TENDER	5	31/03/11	CK

CRACK SEALING NOTE:
 FILL AND REPAIR CRACKS 1-8 AS NOTED IN FIGURE 1
 EP-400 OR DARCON 11021 OR DECON PLASTIC SEAL
 PUTTY (A) OR APPROVED EQUIVALENTS. REPAIR OF
 CRACKS SHALL BE IN STRICT CONFORMANCE WITH
 CAN/ACI 308.1R-03 (SECTION 5.10.1)

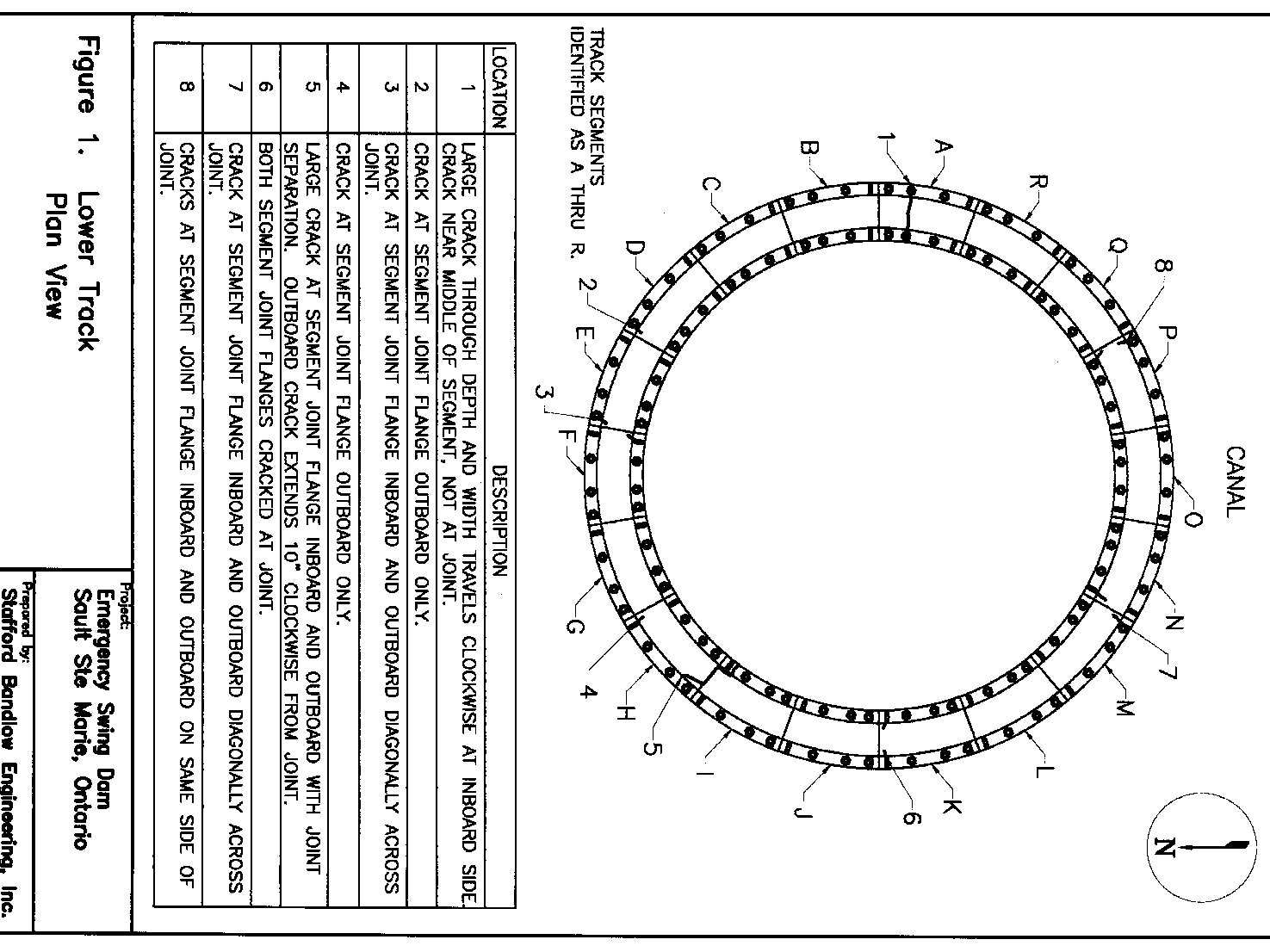


Figure 1. Lower Track Plan View

CRACK REPAIR DETAIL

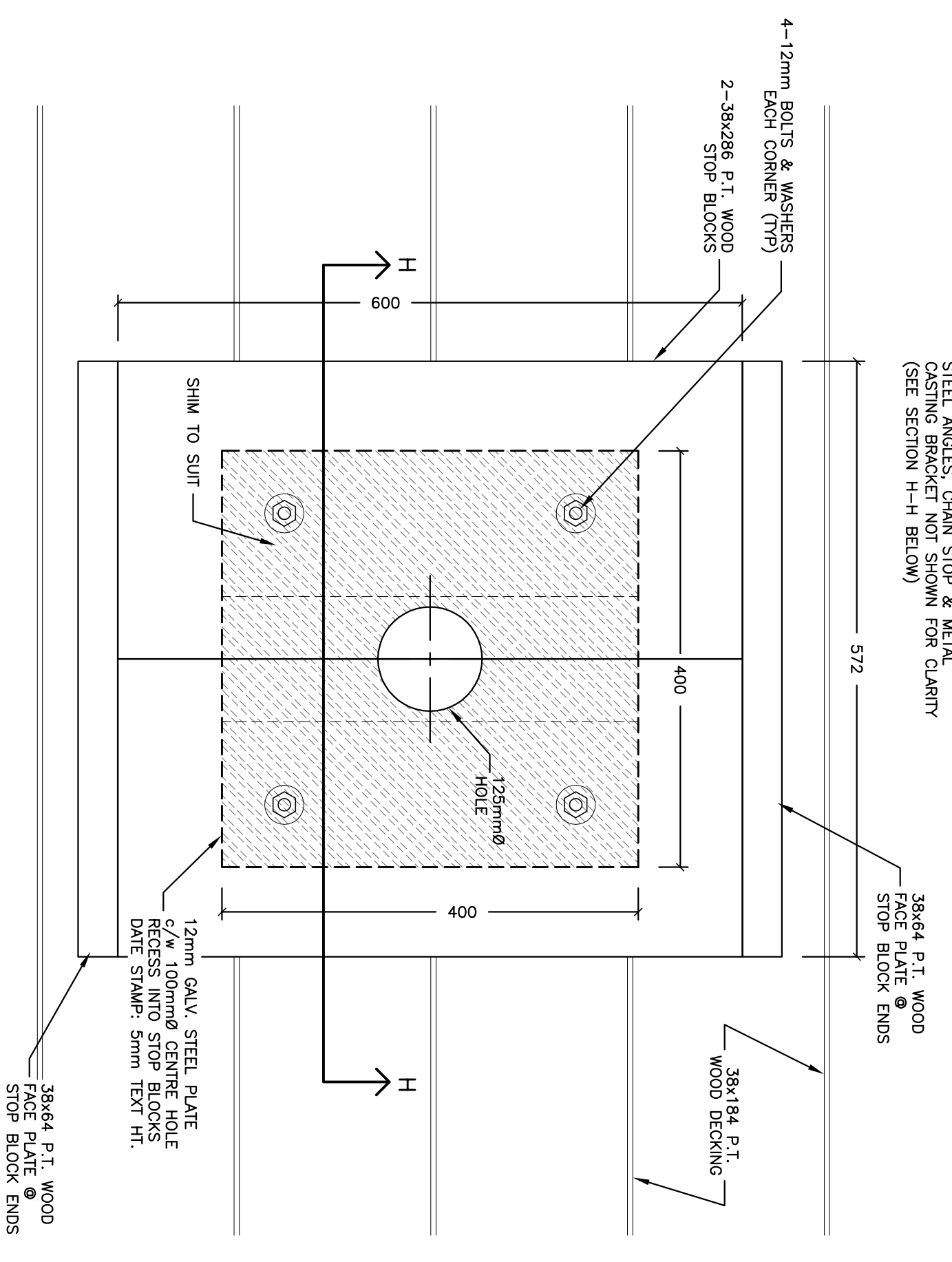
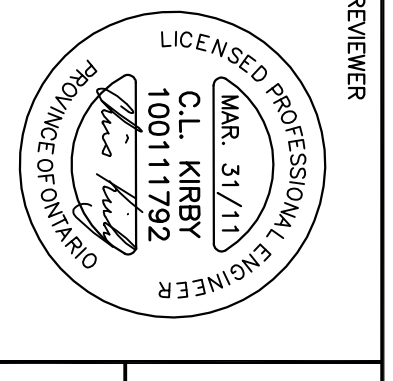
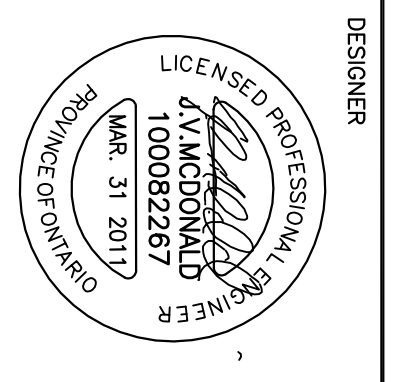
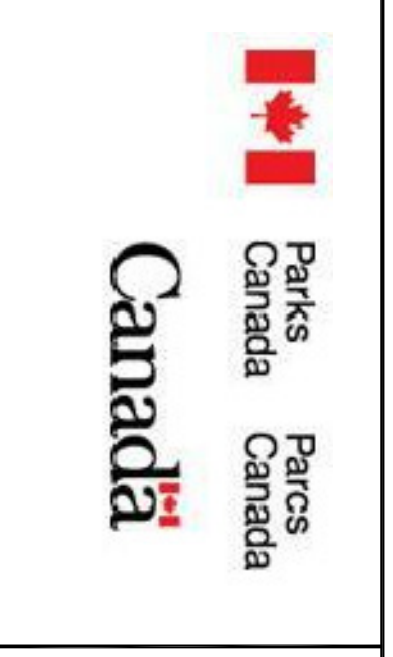
NOT TO SCALE

EXCAVATIONS:
 EXCAVATIONS TO BE EXTENDED TO THE DEPTHS INDICATED.
 ALL EXCAVATIONS SHALL BE SHEETED, PROTECTED, Dewatering and shoring shall be provided in accordance with the design. The concrete footing shall not be placed in or above soil which is frozen.
 FOUNDING SURFACES OF UNDISTURBED NATIVE SOILS SHALL BE PROTECTED AND NOT TO BE DISTURBED. ENGINEERED FILL WHERE RECOMMENDED BY THE SOILS ENGINEER, SHALL BE PLACED ON UNDISTURBED NATIVE SOIL AND SHALL BE MONITORED AND EVALUATED TO THE DESIGN BEARING CAPACITY IS CONSISTENT WITH THE DESIGN BEARING CAPACITY.
 ALL FOUNDING SURFACES SHALL BE APPROVED BY THE ENGINEER AT TIME OF EXCAVATION

CONCRETE:
 CONCRETE IS SPECIFIED USING ALTERNATIVE NO. (1) OF CSA A23.1 TABLE 2 AS FOLLOWS:
 EXPOSURE CLASS: F-2
 AIR CONTENT CATEGORY: 1
 MAX. W/C RATIO: 0.45
 CURING TYPE: 1
 MIN. COMPRESSIVE STRENGTH (TABLE 20): 25 MPa
 MIN. COVER ON ALL REAR (TYP): 50mm
 UNLESS OTHERWISE NOTED

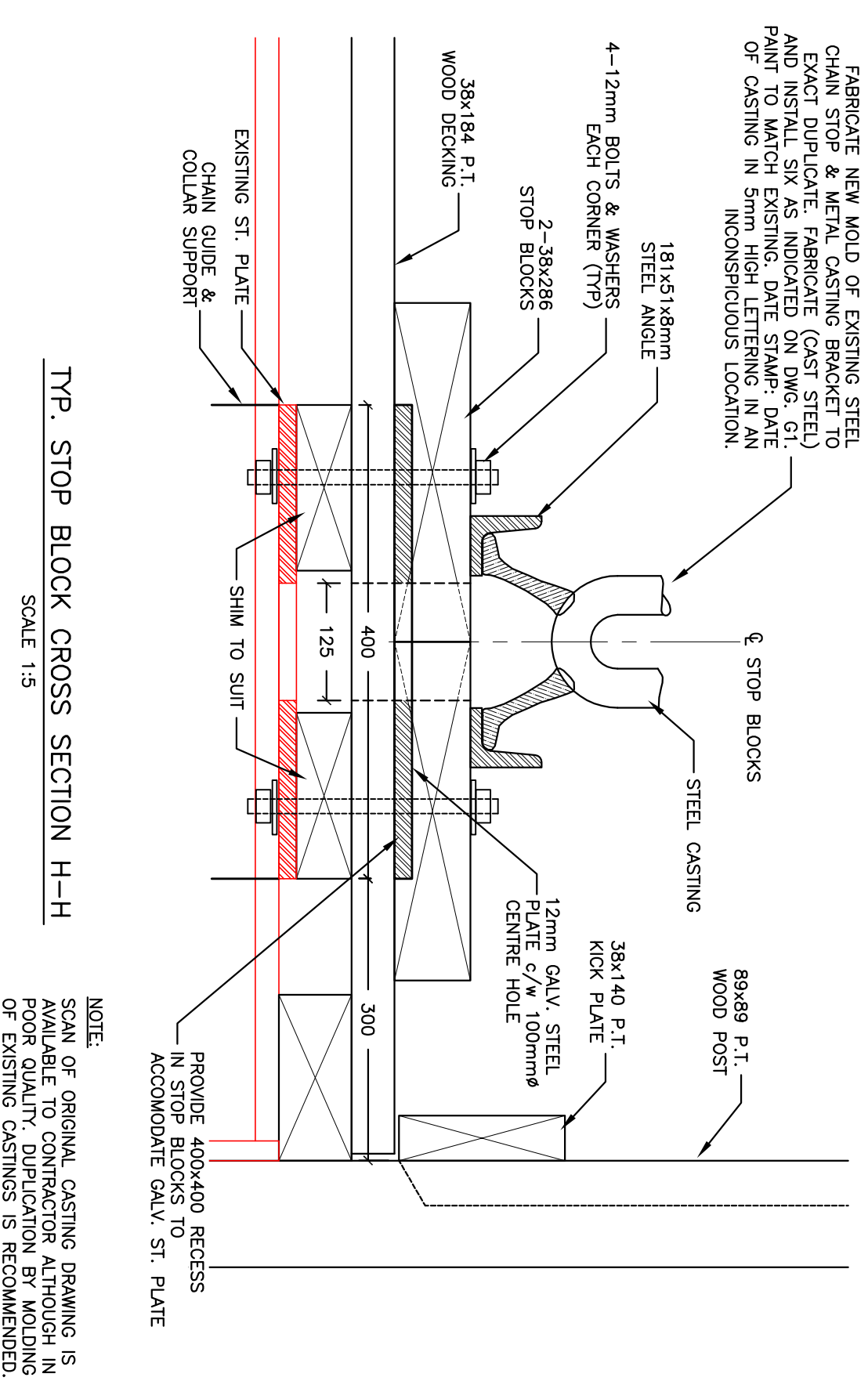
CONCRETE REINFORCEMENT:
 ALL REINFORCING STEEL FOR CONCRETE SHALL BE FURNISHED AND DELIVERED TO THE FIELD IN THE FORM OF STANDARD PRACTICE FOR REINFORCING STEEL.
 ALL REINFORCING SHALL BE ACCURATELY PLACED AND SUPPORTED BY CONTINUOUS CHAIRS. IF REQUIRED, ADDITIONAL BARS OR STIRRUPS SHALL BE PROVIDED TO MAINTAIN THE DESIGN BEARING CAPACITY.
 SPACES FOR REINFORCING STEEL SHALL BE NOT LESS THAN 0.8M.
 DO NOT FIELD BEND REINFORCEMENT EXCEPT AS APPROVED BY ENGINEER. DO NOT STRAIGHTEN OR RE-BEND REINFORCEMENT.
 APPROVAL FROM ENGINEER SHALL BE OBTAINED PRIOR TO CASTING ANY CONCRETE.

STEEL REINFORCEMENT:
 STEEL REINFORCEMENT PLACED PER THE STEEL REINFORCING INSTITUTE OF CANADA STANDARD INSTALLATION PROCEDURES.



TYP. STOP BLOCK REINFORCING DETAIL (ALL)

SCALE 1:5



TYP. STOP BLOCK CROSS SECTION H-H

SCALE 1:5

EMERGENCY SWING DAM IMPROVEMENTS
 PARKS CANADA AGENCY
 SAULT STE. MARIE CANAL

Scale AS NOTED

Dwg. No. 11-2011 G5

REV. 3