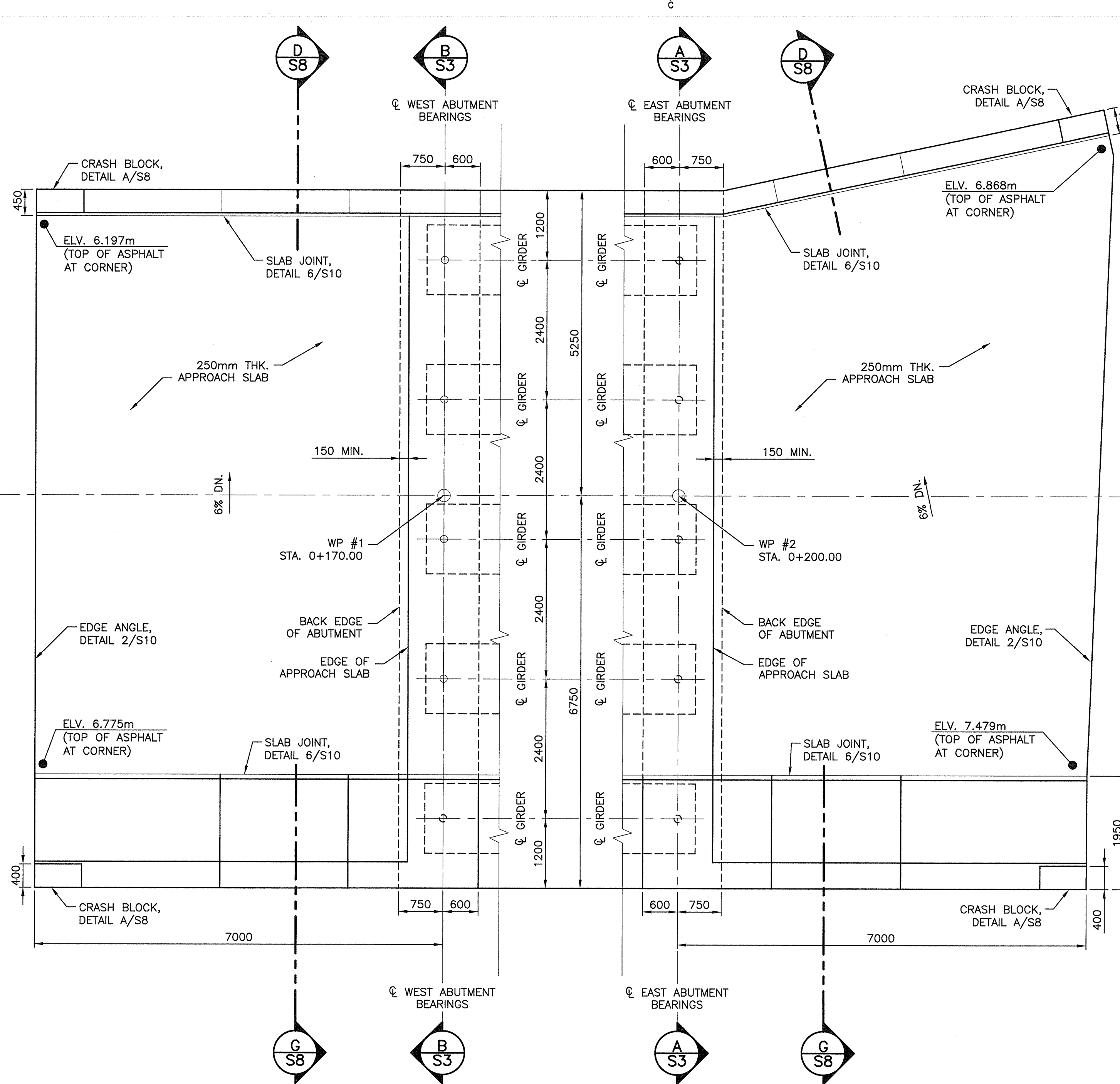
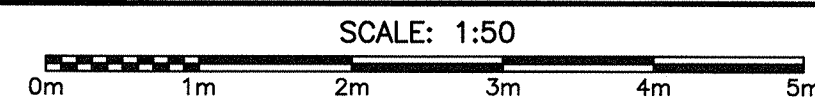
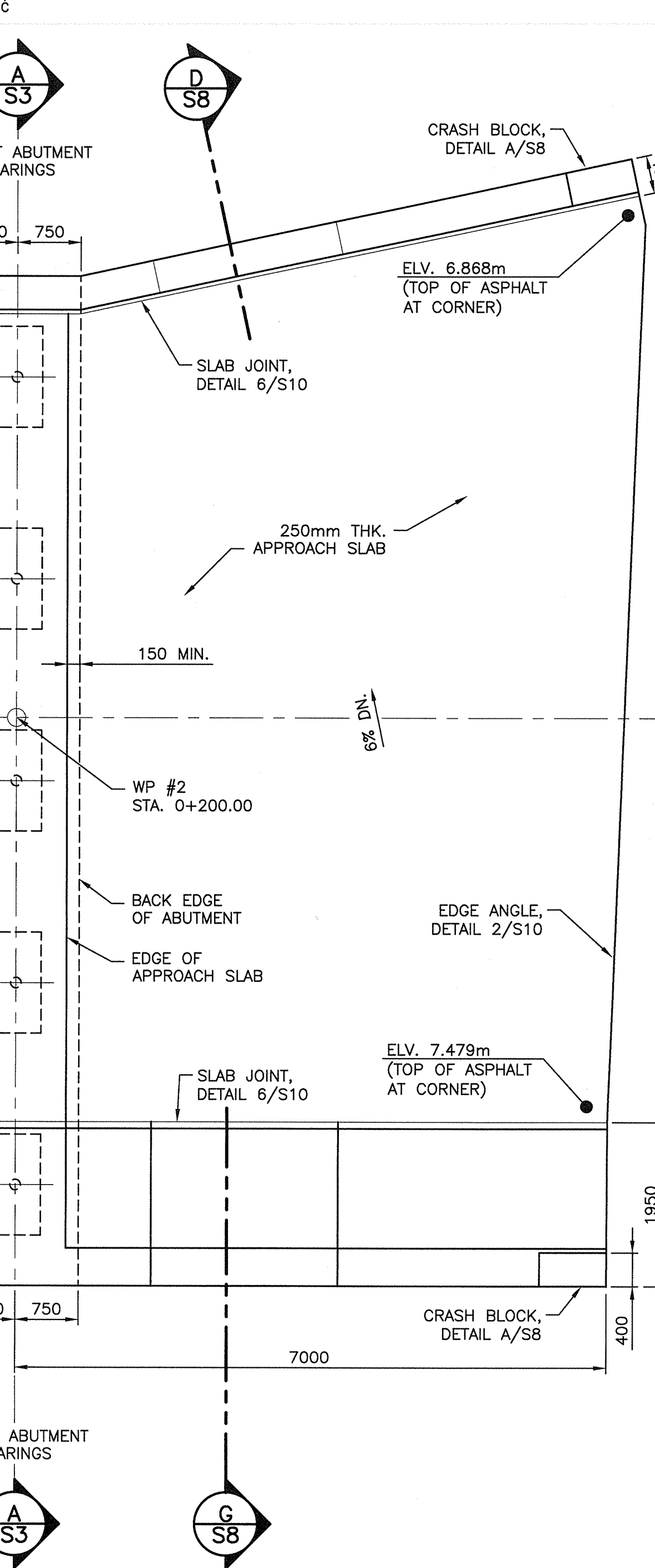
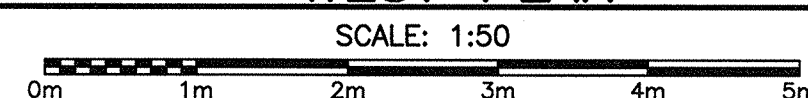


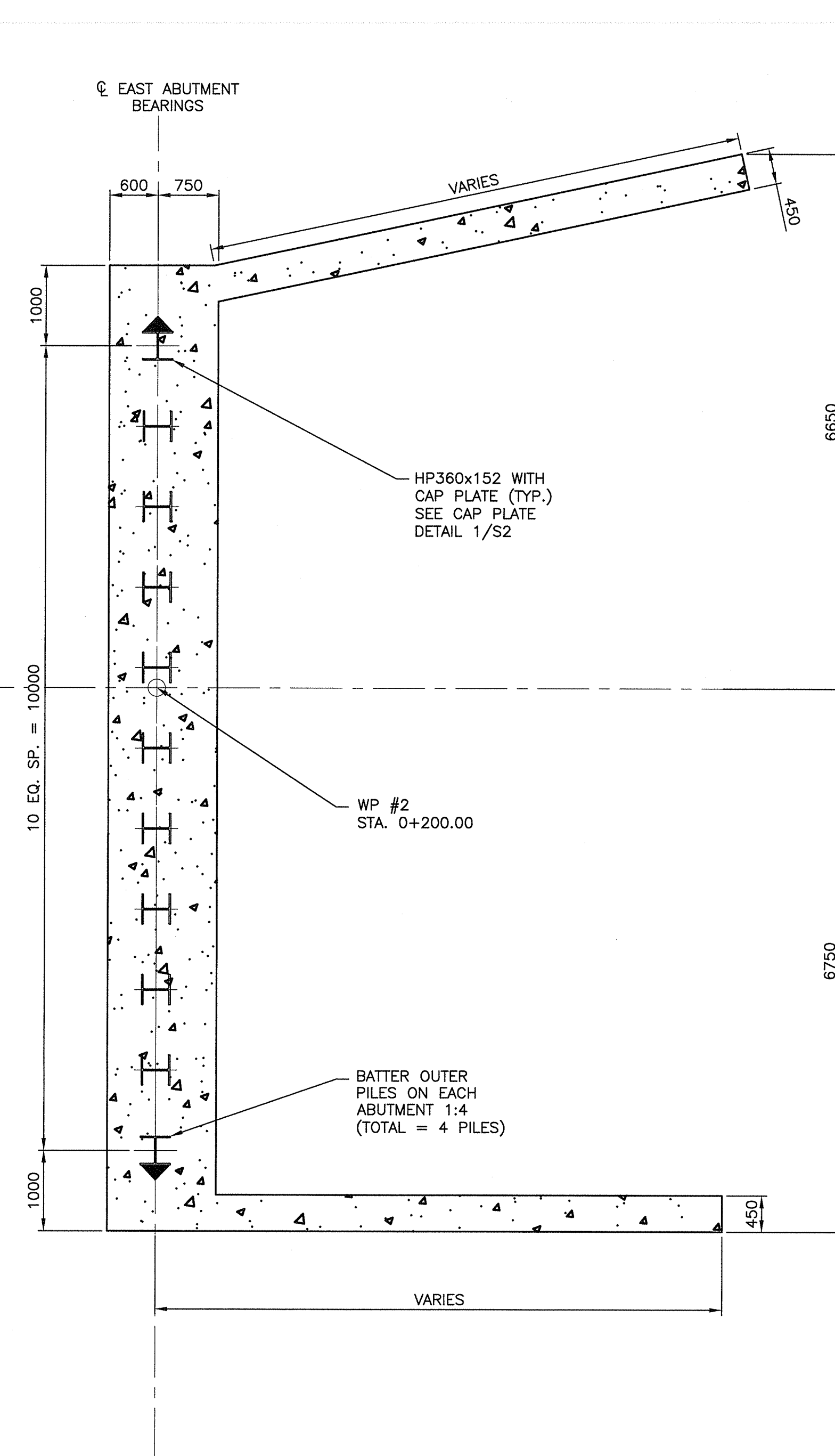
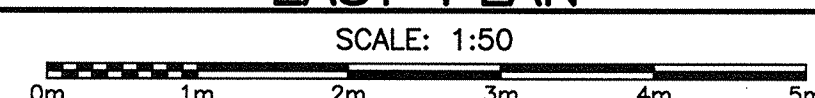
WEST ABUTMENT - PILE CAP PLAN



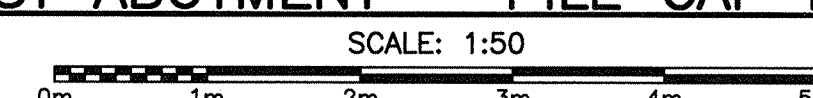
WEST PLAN



EAST PLAN



EAST ABUTMENT - PILE CAP PLAN



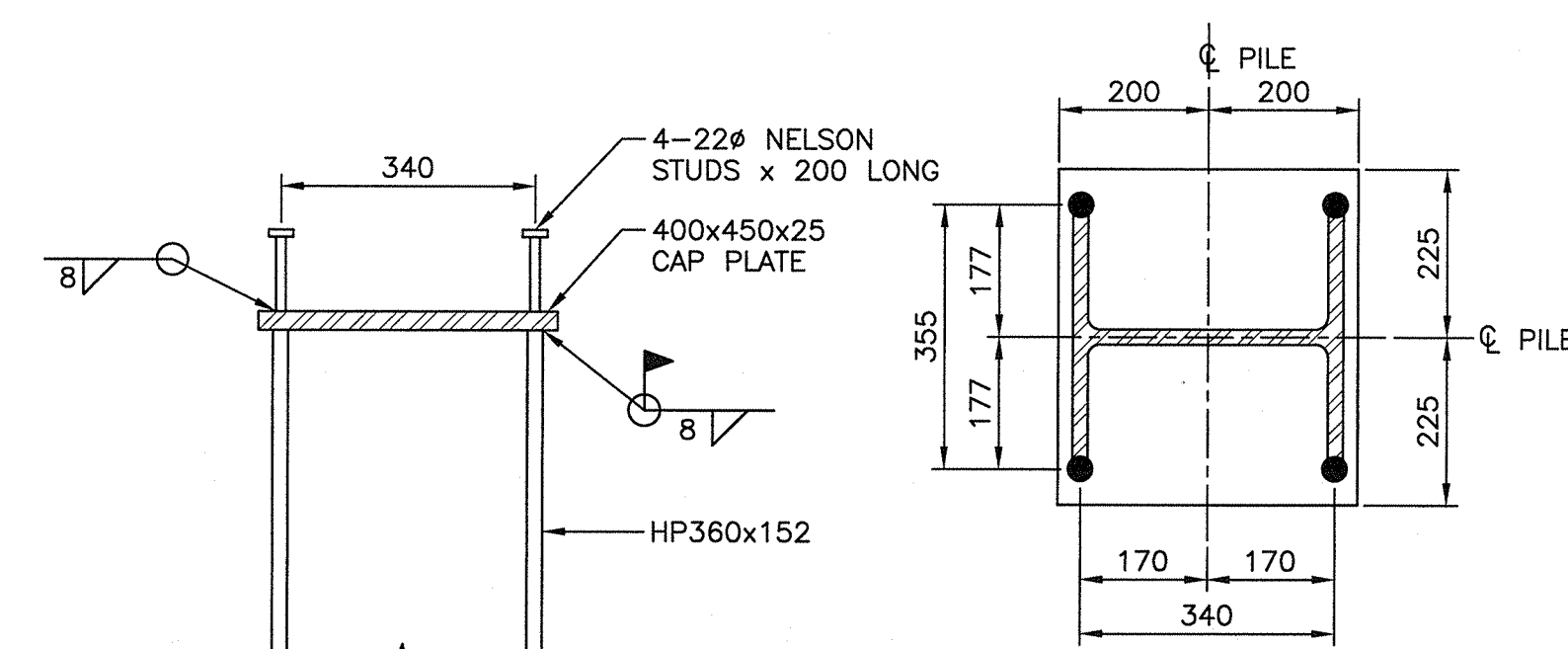
TYPICAL CONCRETE NOTES:

- CHAMFER EXPOSED CONCRETE CORNERS 25mm. THIS INCLUDES BUT IS NOT LIMITED TO ABUTMENTS, DECK AND CURBS.
- CONCRETE, CONCRETE MATERIALS, FORMS, PRACTICES, FINISHES, AND TOLERANCES: TO CAN/CSA S6-14, CAN/CSA A23.1/2-09, A23.3-04 AND S269.3-M92 (R2015) AND S269.1-75 (R2003). USE HIGH PERFORMANCE CONCRETE AS SPECIFIED.
- CONCRETE MIX FOR ABUTMENTS, WINGWALLS, DECK, APPROACH SLABS, AND BARRIERS:
 - HIGH PERFORMANCE CONCRETE (HPC)
 - COMPRESSIVE STRENGTH AT 28 DAYS: MIN. 45MPa
 - MAX AGGREGATE SIZE: 20mm
 - AIR CONTENT: 6% +/- 1%
 - MAX WATER/CEMENT RATIO: 0.35
 - MIN CEMENT CONTENT, SLUMP, AIR SPACING, PLASTICIZER, CHLORIDE ION PENETRABILITY AND TEMPERATURE REQUIREMENTS: AS SPECIFIED.
- USE RETARDER IN MIX FOR CONCRETE DECK POUR. REFER TO NOTE ON S6.
- CONCRETE MIX FOR PRECAST, PRE-STRESSED GIRDERS: REFER TO DRAWING S4.
- CONCRETE COVER TO STEEL AND GFRP REINFORCING AS NOTED ON DRAWINGS.
- REFER TO DRAWING S11 FOR REINFORCING STEEL AND GFRP REINFORCING REQUIREMENTS.
- ALLOW DEPARTMENTAL REPRESENTATIVE TO INSPECT ALL REINFORCEMENT PRIOR TO CLOSING PILES, FORMWORK, OR PLACING CONCRETE.

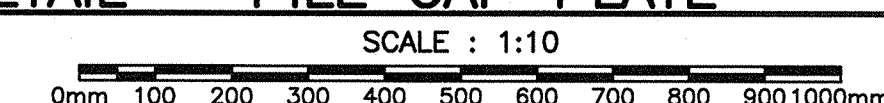
PILE NOTES:

- MATERIALS:
 - H-PILES: 350W, TO CAN/CSA G40.20/21-13.
 - CAP PLATE: 350W.
 - PILE POINT (SHOE) PLATES: 300W.
 - WELDING MATERIAL: TO CSA W48.1-14.
 - WELD TO CAN/CSA W59-13.
- PILE SPLICE AND SHOE:
 - REINFORCE EACH PILE POINT WITH STANDARD SHOE. MATCH SHOE SIZE TO PILE SIZE AND WELD TO PILE TIP AS PER MANUFACTURER RECOMMENDATIONS. SUBMIT SHOE SHOP DRAWING.
 - DO NOT SPLICE PILES UNLESS AUTHORIZED BY DEPARTMENTAL REPRESENTATIVE.
- PILE BATTER 1:4.
- INSTALLATION TOLERANCES:
 - TOP OF PILES WITHIN 150mm OF PLAN LOCATION
 - OUT-OF-PLUMB OR OUT-OF-BATTER SHALL BE LESS THAN LESSER OF 10mm/m PER PILE LENGTH, OR 100mm TOTAL.
- HAMMER ENERGY:
 - USE HAMMER ENERGY OF 300J/cm² OF PILE AREA.
 - INSTALL PILES BY DRIVING OVER ENTIRE LENGTH. DO NOT INSTALL BY DRILLING OR VIBRATORY METHODS.
- REFUSAL CRITERIA:
 - LESS THAN 25mm OF PENETRATION FOR LAST 15 BLOWS FOR A MINIMUM OF TWO CONSECUTIVE SETS.
 - RE-STRIKE ALL PILES TO REFUSAL CRITERIA, 24 HOURS AFTER INITIAL SET.
 - IF RELAXATION OCCURS, RE-STRIKE ALL PILES TO REFUSAL CRITERIA. REPEAT RE-STRIKE CYCLE UNTIL REFUSAL IS MAINTAINED DURING RE-STRIKE.
- TESTING:
 - ALLOW DEPARTMENTAL REPRESENTATIVE TO CONDUCT DYNAMIC PILE TESTING AS SPECIFIED.
 - ALLOW A MINIMUM OF 2 PILE PER ABUTMENT TO BE TESTED DURING INITIAL DRIVE, AND 2 PILE PER ABUTMENT TO BE TESTED DURING RE-STRIKE.

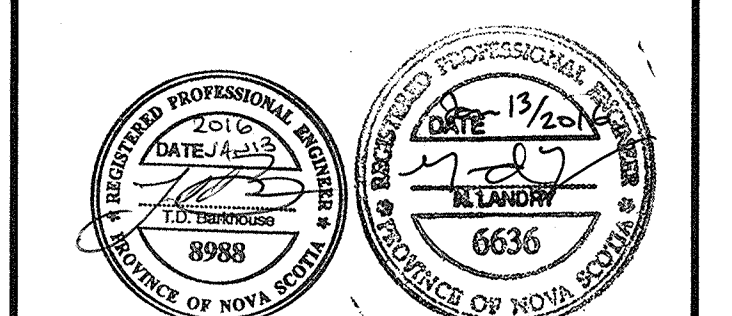
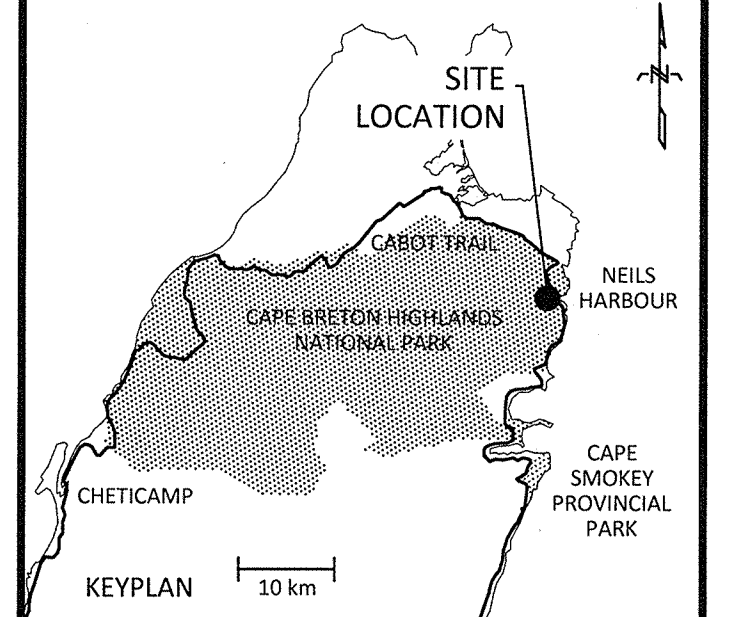
H-PILE SCHEDULE		
LOCATION	NO. OF PILES	CUT OFF ELEV.
EAST ABUTMENT	11	1.840
WEST ABUTMENT	11	1.840
FACTORED H-PILE RESISTANCE 1400kN		



DETAIL - PILE CAP PLATE



1
S2



C01	ISSUED FOR TENDER	JAN 13 2016
revisions		date

project
**NEILS BROOK
BRIDGE REPLACEMENT
CAPE BRETON HIGHLANDS
NATIONAL PARK,
NS**

drawing
ABUTMENT PLANS

designed TDB	conçu
date	
drawn TMB	dessiné
date	
approved NDL	approuvé
date	
Tender	Submission
PWOSC Project Manager	Administrateur de projets TPSC
project number	no. du projet
R.074443.001	
drawing no.	no. du dessin
S02	

