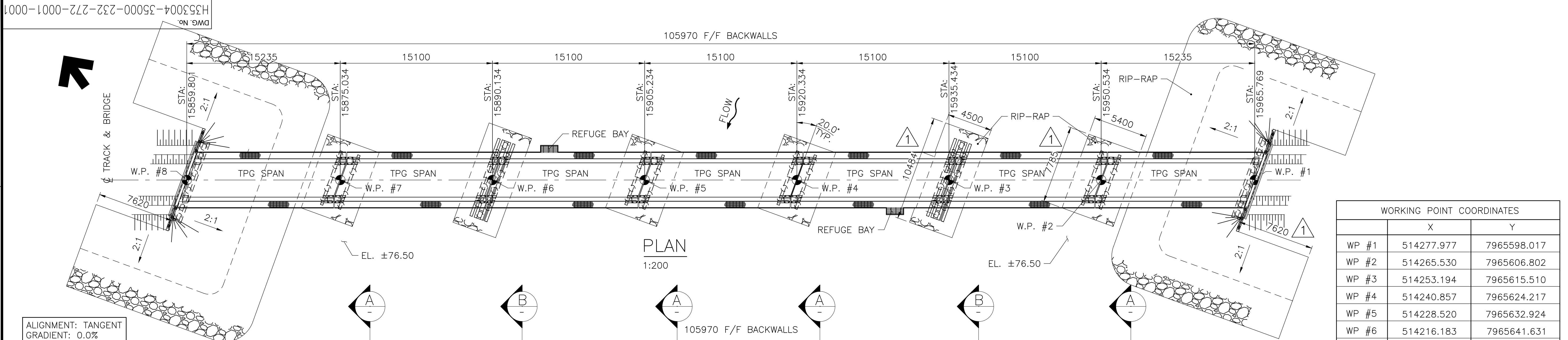
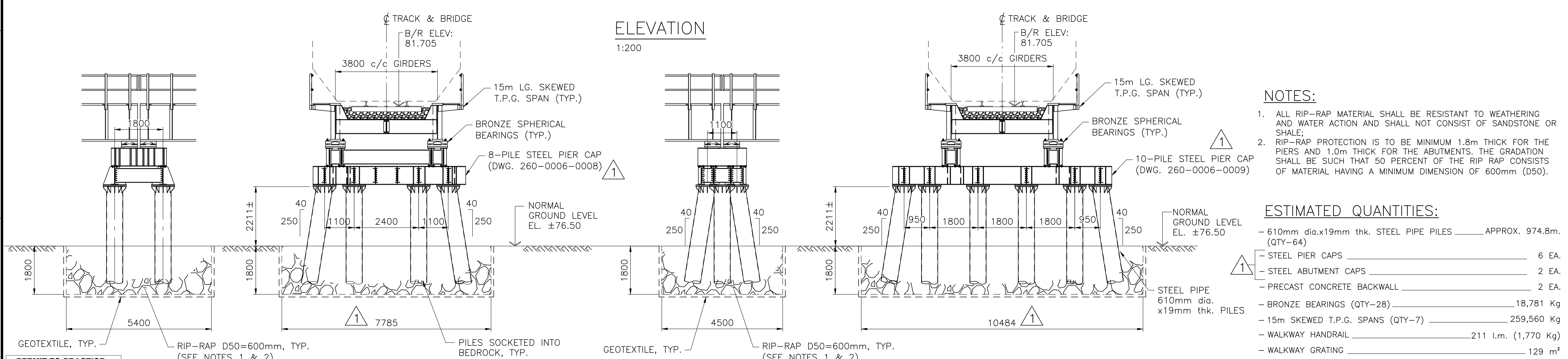
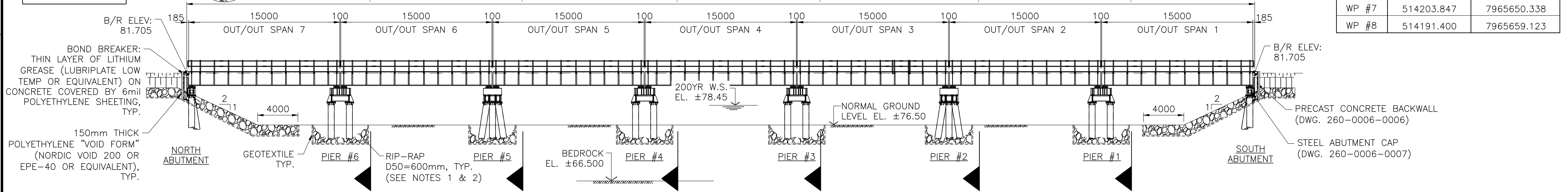




WORKING POINT COORDINATES		
	X	Y
WP #1	514277.977	7965598.017
WP #2	514265.530	7965606.802
WP #3	514253.194	7965615.510
WP #4	514240.857	7965624.217
WP #5	514228.520	7965632.924
WP #6	514216.183	7965641.631
WP #7	514203.847	7965650.338
WP #8	514191.400	7965659.123



- NOTES:**
- ALL RIP-RAP MATERIAL SHALL BE RESISTANT TO WEATHERING AND WATER ACTION AND SHALL NOT CONSIST OF SANDSTONE OR SHALE;
 - RIP-RAP PROTECTION IS TO BE MINIMUM 1.8m THICK FOR THE PIERS AND 1.0m THICK FOR THE ABUTMENTS. THE GRADATION SHALL BE SUCH THAT 50 PERCENT OF THE RIP RAP CONSISTS OF MATERIAL HAVING A MINIMUM DIMENSION OF 600mm (D50).

ESTIMATED QUANTITIES:	
- 610mm dia.x19mm thk. STEEL PIPE PILES	APPROX. 974.8m. (QTY-64)
- STEEL PIER CAPS	6 EA.
- STEEL ABUTMENT CAPS	2 EA.
- PRECAST CONCRETE BACKWALL	2 EA.
- BRONZE BEARINGS (QTY-28)	18,781 Kg
- 15m SKEWED T.P.G. SPANS (QTY-7)	259,560 Kg
- WALKWAY HANDRAIL	211 l.m. (1,770 Kg)
- WALKWAY GRATING	129 m²
- WALKWAY BRACKETS/POSTS (QTY-172)	6,880 Kg
- RIP-RAP D50 (600mm)	1332 m³

PERMIT TO PRACTICE
HATCH LTD.
Signature _____
Date _____
PERMIT NUMBER: P 512
The Association of Professional Engineers,
Geologists and Geophysicists of NWT/NU

END VIEW
1:75

SECTION A
1:75

END VIEW
1:75

SECTION B
1:75

APPROVED FOR CONSTRUCTION

1 PIER AND ABUTMENT CAPS REVISED, RIP-RAP QUANTITY REVISED
0 ISSUED FOR CONSTRUCTION

REG. PROFESSIONAL

HATCH

DRAFTSPERSON	S HANDY	NR	FEB. 23/21
DESIGNER	J PAEZ/D BENSON	NR	FEB. 23/21
CHECKER	A MIDDLETON		FEB. 23/21
DESIGN COORD.	J BALDWIN		FEB. 23/21
RESP. ENG.	A MIDDLETON		FEB. 23/21
LEAD DISC. ENG.	L NGWENYA		
AREA LEAD	F VAN BILJON		FEB. 23/21
ENG. MANAGER	F PITTMAN		FEB. 23/21
ROLE	NAME	SIGNATURE	DATE

DRAWING APPROVAL STATUS: APPROVED FOR CONSTRUCTION

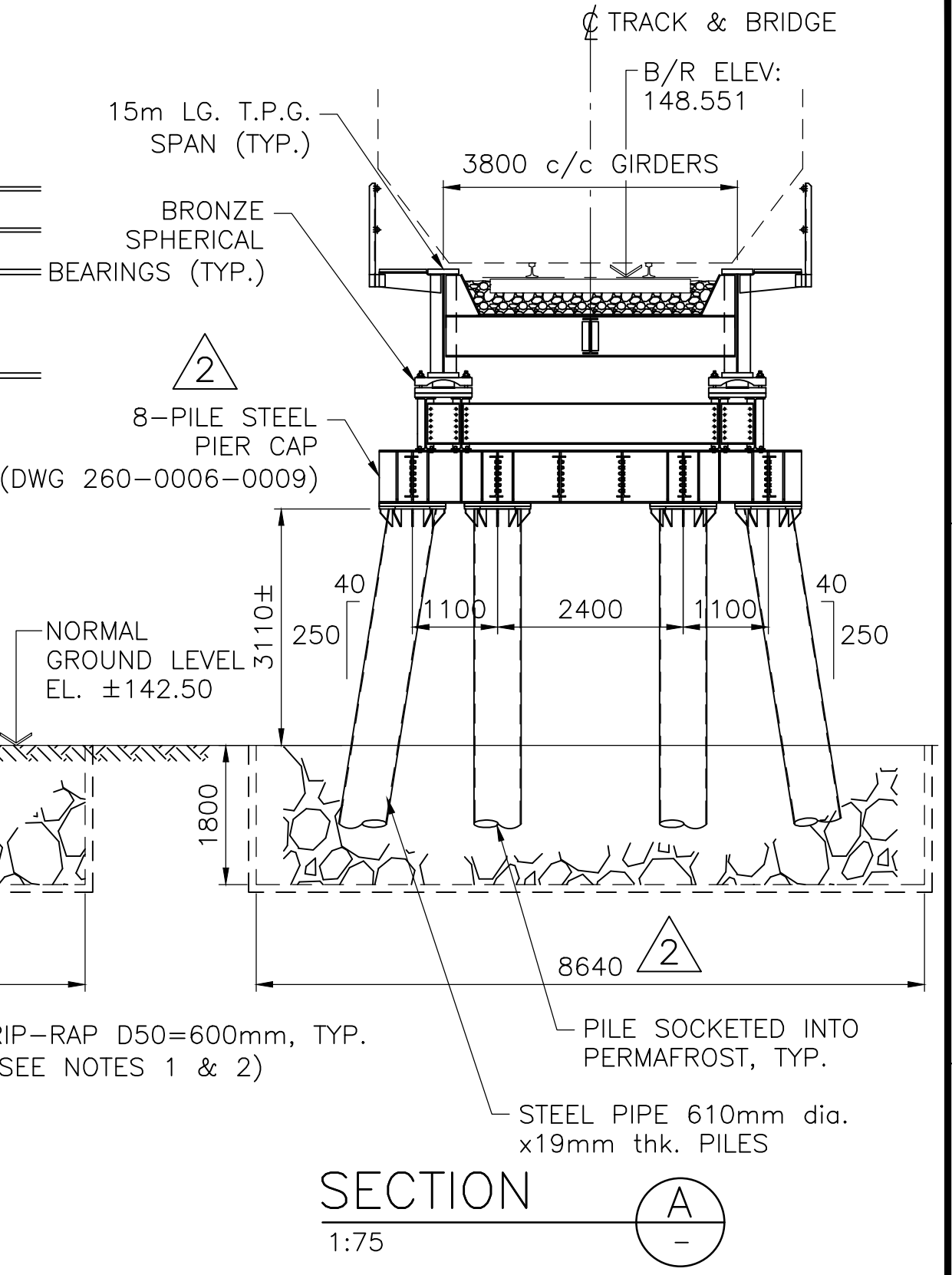
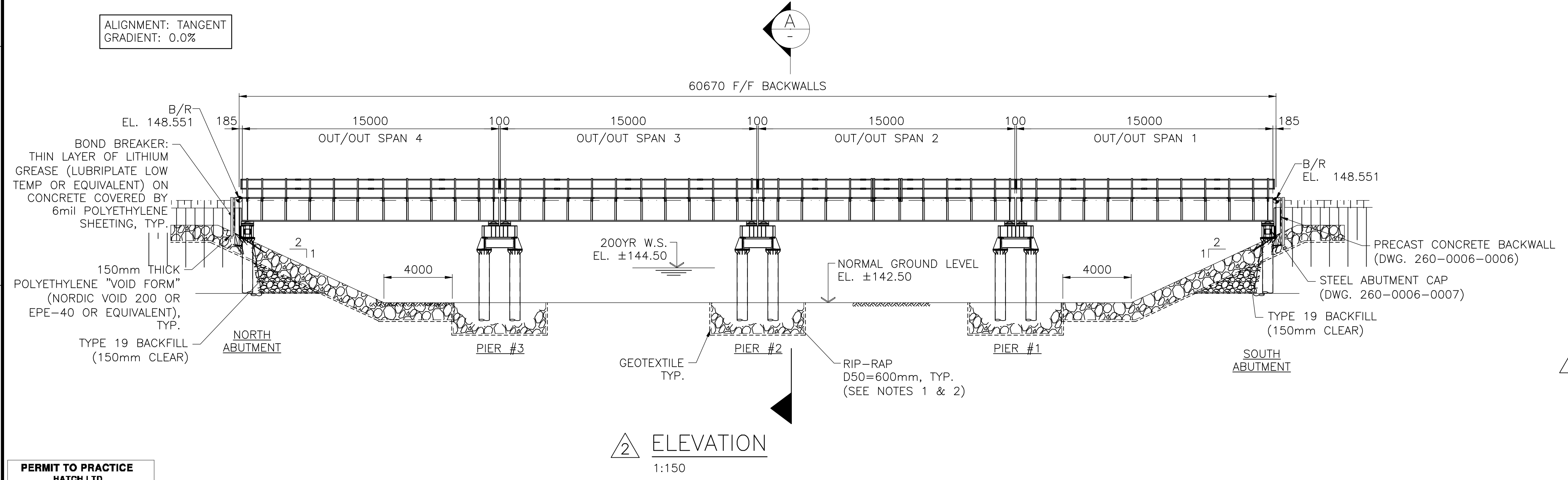
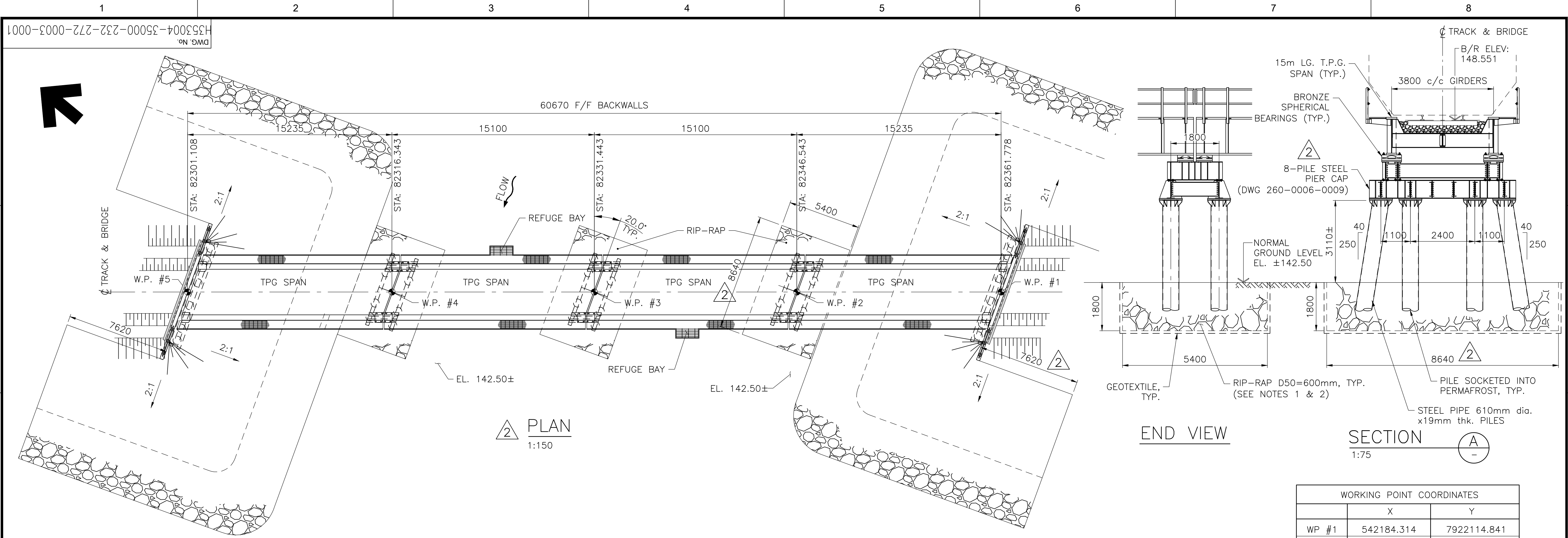
Baffinland

BAFFINLAND IRON ORE MINES LP
MARY RIVER EXPANSION PROJECT

RAILWAY
BRIDGE GENERAL LAYOUT
BR #15.913

SCALE DWG. No. H353004-35000-232-272-0001-0001
OR AS NOTED

REV 1



WORKING POINT COORDINATES		
	X	Y
WP #1	542184.314	7922114.841
WP #2	542174.482	7922126.479
WP #3	542164.737	7922138.014
WP #4	542154.992	7922149.548
WP #5	542145.160	7922161.186

- NOTES:
- ALL RIP-RAP MATERIAL SHALL BE RESISTANT TO WEATHERING AND WATER ACTION AND SHALL NOT CONSIST OF SANDSTONE OR SHALE;
 - RIP-RAP PROTECTION IS TO BE MINIMUM 1.8m THICK FOR PIERS AND 1.0m THICK FOR ABUTMENTS. THE GRADATION SHALL BE SUCH THAT 50 PERCENT OF THE RIP RAP CONSISTS OF MATERIAL HAVING A MINIMUM DIMENSION OF 600mm (D50).

ESTIMATED QUANTITIES:

- 610mm dia.x19mm thk. STEEL PIPE PILES	APPROX. 677.4m (QTY-36)
- STEEL PIER CAPS	3 EA.
- STEEL ABUTMENT CAPS	2 EA.
- PRECAST CONCRETE BACKWALL	2 EA.
- BRONZE BEARINGS (QTY-16)	10,732 Kg
- 15m SKEWED T.P.G. SPANS (QTY-4)	148,320 Kg
- WALKWAY HANDRAIL	121 l.m. (1,014 Kg)
- WALKWAY GRATING	74 m²
- WALKWAY BRACKETS/POSTS (QTY-100)	4,000 Kg
- TYPE 19 BACKFILL (150mm CLEAR)	95 m³
- RIP-RAP D50 (600mm)	1306 m³

PERMIT TO PRACTICE
HATCH LTD.

Signature _____

Date _____

PERMIT NUMBER: P 512
The Association of Professional Engineers,
Geologists and Geophysicists of NWT/NU

APPROVED FOR CONSTRUCTION

REGISTERED PROFESSIONAL ENGINEER
A.C. MIDDLETON
LICENSEE
04-53-201
NTNU

2 PIER AND ABUTMENT CAPS REVISED, NEW BRIDGE LOCATION

1 REVISION TO PIERS (8 PILE, DOUBLE ROW)

0 ISSUED FOR CONSTRUCTION

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DRAFTSPERSON S HANDY NR FEB. 23/21

DESIGNER J PAEZ/D BENSON NR FEB. 23/21

CHECKER A MIDDLETON FEB. 23/21

DESIGN COORD. J BALDWIN FEB. 23/21

RESP. ENG. A MIDDLETON FEB. 23/21

LEAD DISC. ENG. AREA LEAD L NGWENYA FEB. 23/21

ENG. MANAGER F VAN BILJON FEB. 23/21

AREA MANAGER F PITTMAN FEB. 23/21

ROLE NAME SIGNATURE DATE

DRAWING APPROVAL STATUS: APPROVED FOR CONSTRUCTION

BAFFINLAND IRON ORE MINES LP
MARY RIVER EXPANSION PROJECT

RAILWAY
BRIDGE GENERAL LAYOUT
BR #82.340

SCALE DWG. No. H353004-35000-232-272-0003-0001 REV 2

DRAWING No. DRAWING TITLE

REFERENCE DRAWINGS

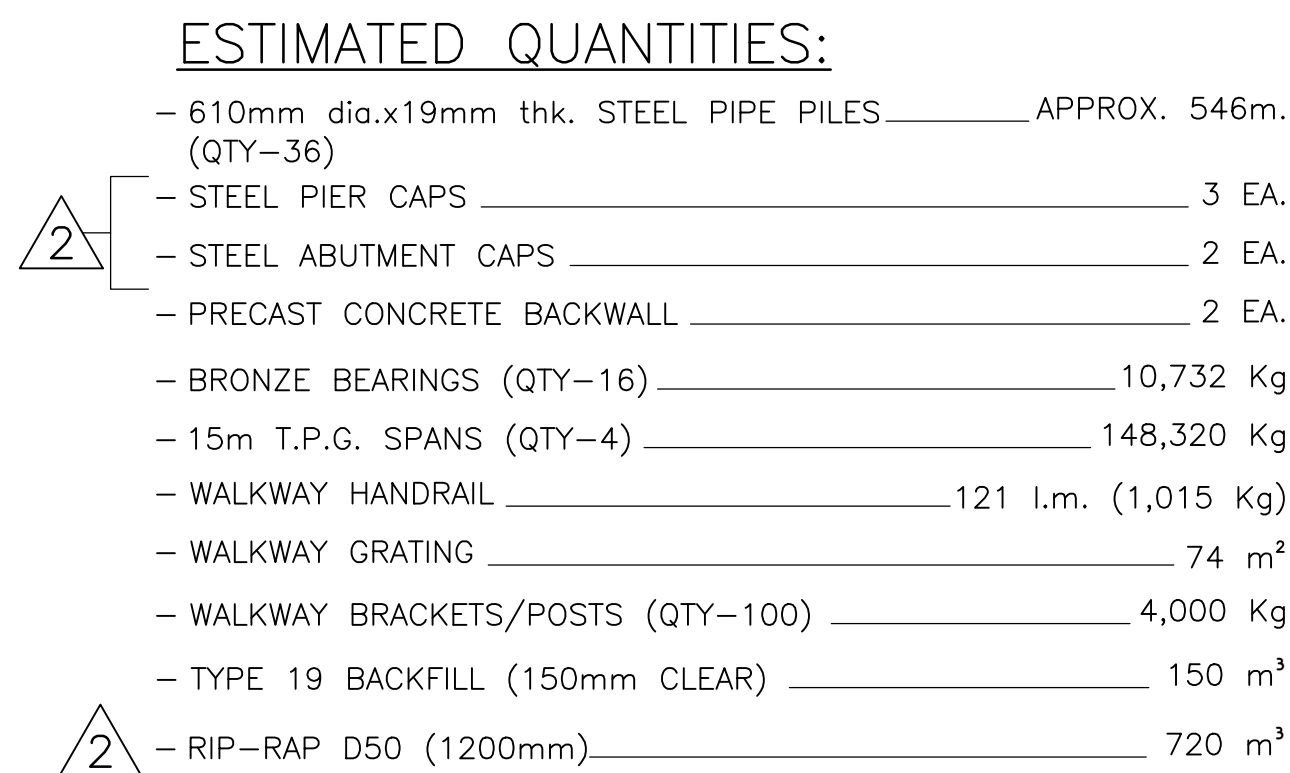
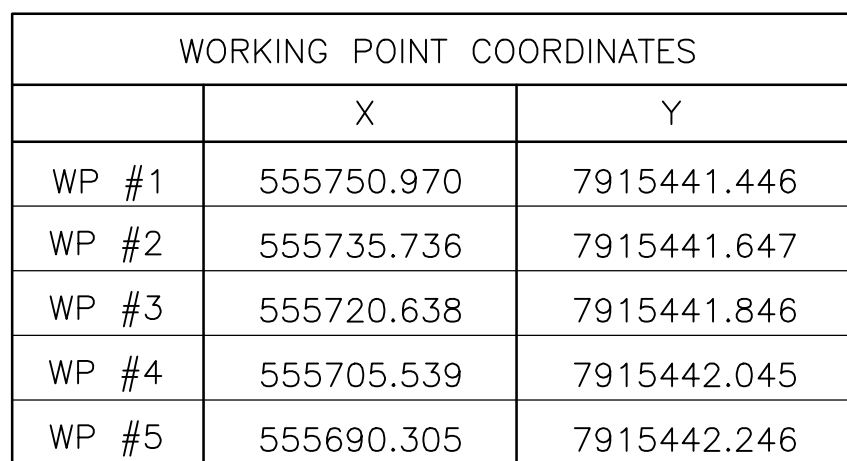
REG. PROFESSIONAL

REVISIONS

BY CHK'D DATE

SHEET SIZE: A1

DWG. No.



1. ALL RIP-RAP MATERIAL SHALL BE RESISTANT TO WEATHERING AND WATER ACTION AND SHALL NOT CONSIST OF SANDSTONE OR SHALE;
2. RIP-RAP PROTECTION IS TO BE MINIMUM 2.4m THICK FOR THE PIERS AND 1.2m THICK FOR THE ABUTMENTS. THE GRADATION SHALL BE SUCH THAT 50 PERCENT OF THE RIP RAP CONSISTS OF MATERIAL HAVING A MINIMUM DIMENSION OF 1200mm (D50).

 ELEVATION
1:150

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RAILWAY
BRIDGE GENERAL LAYOUT
BR #98.534

RE
2

SHEET SIZE: A1

	\$USERNAMES\$	\$TIMES\$
\$DATES\$		
\$FILES\$		