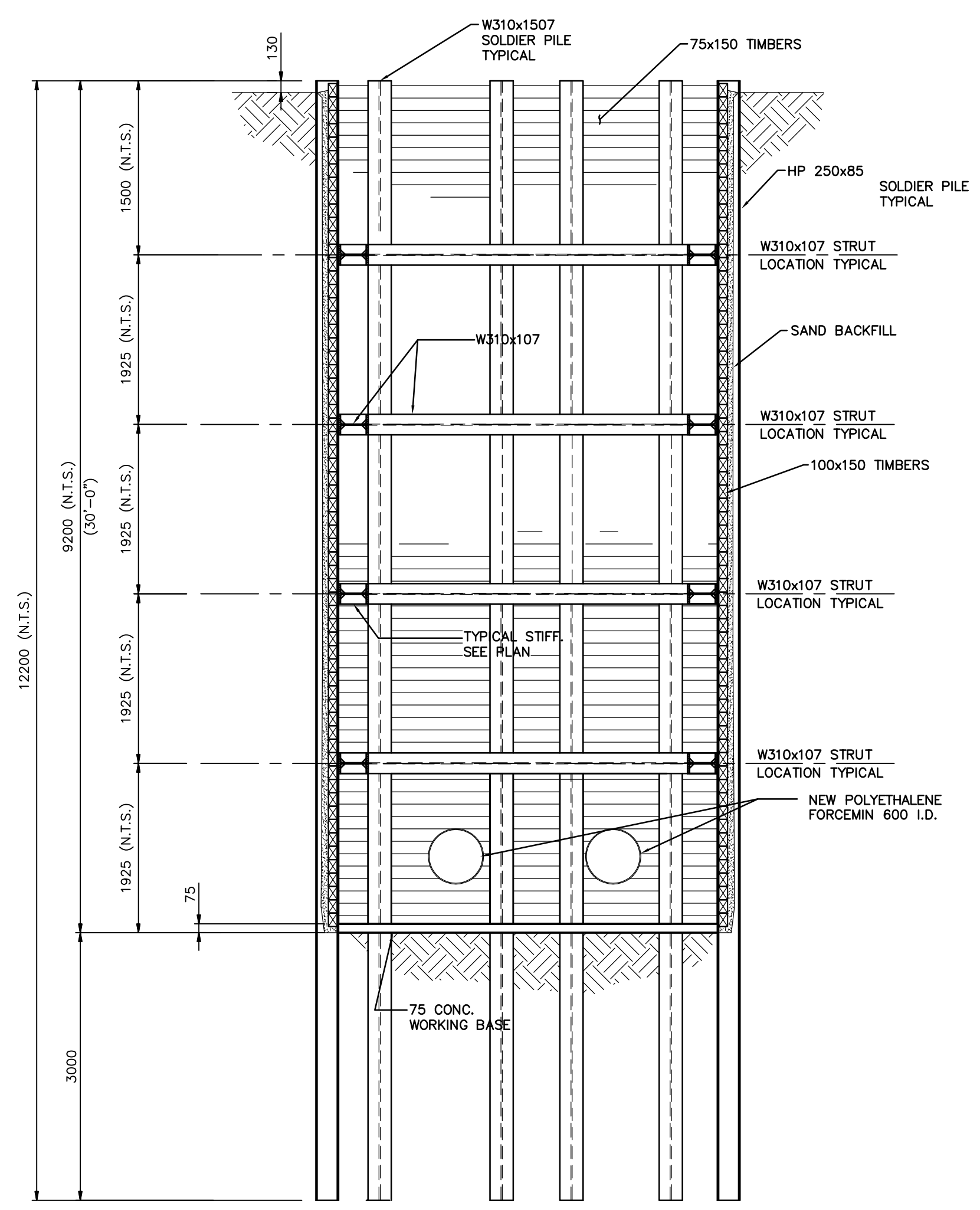
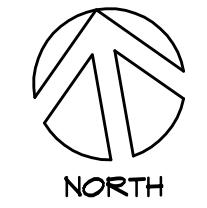
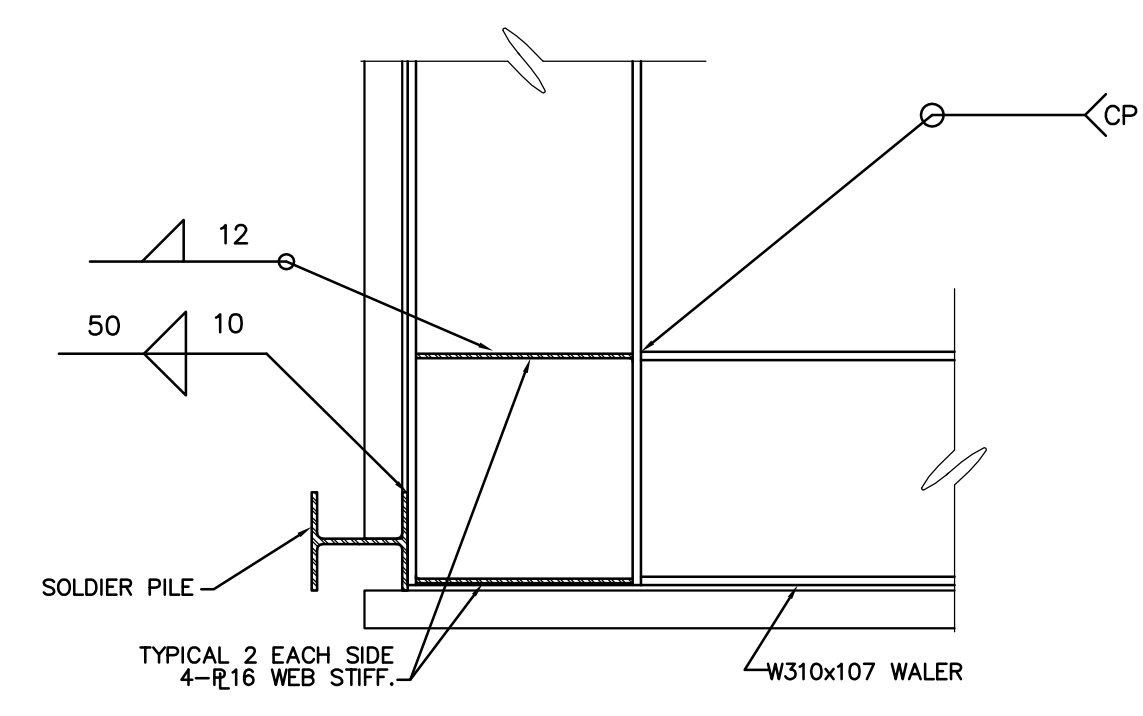


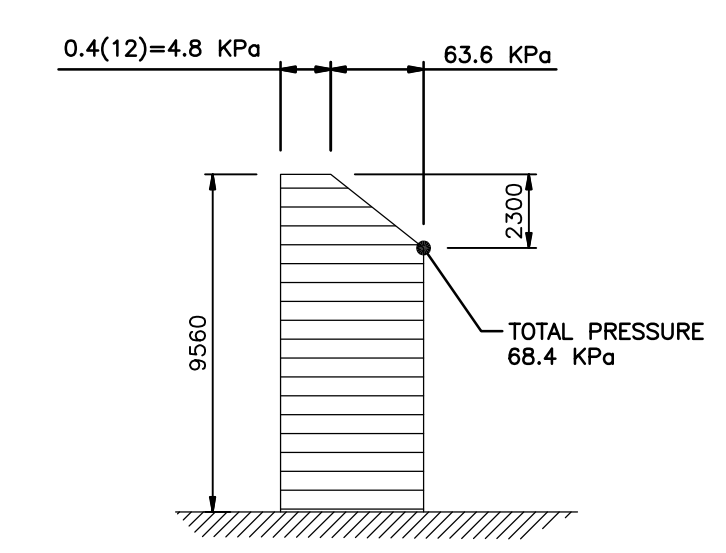
**SHORING PLAN**  
1 : 50



**SECTION 2 SH-1**  
1 : 50



**CORNER DETAIL 1 SH-1**  
1 : 20



**ASSUMED SOIL PRESSURE DIAGRAM**

BASE HEAVE FAILURE (BASAL INSTABILITY) HAS BEEN CHECKED

SOILS LOG	
0	GRAVEL (FILL) - Crushed limestone
1	CLAY (FILL) - Brown, frozen to moist, stiff, high plasticity, trace fine grained sand.
2	CLAY (LACUSTRINE) (CH) - Brown, moist stiff, high plasticity, silty
3	- Silt layer from 3.35 to 3.66 m.
4	- Increased silt content, trace 2-3mm silt nodules, trace oxidation below 3.35 m.
5	
6	
7	- Increased moisture content, soft, high plasticity between 7.32 to 7.62 m.
8	
9	- Increased moisture content, decreased silt nodules between 8.84 to 9.14 m.
10	- Grey, saturated at 9.14 m.
11	- Firm at 10.67 m.
12	
13	
14	
15	- Trace 1-2mm silt nodules, trace fine grained angular gravel between 14.94 and 15.24 m.
16	- Soft at 16.5 m.
17	SILT (TILL) (ML) - Brown, soft, low plasticity, with fine to coarse grained angular gravel.
18	- Limestone cobble at 18.25 m.
19	- Tan, damp very dense, low plasticity, trace gravel (to 25mm), trace cobbles (-) at 18.48 m.
20	- Poor recovery, good circulation
21	- Limestone cobble at 19.51 m.
22	- Granitic cobble at 20.57 m.
23	- Limestone cobble at 20.65 m.
24	- Granitic cobble at 21.34 m.
25	- Limestone cobble at 21.54 m.
26	- Limestone boulder at 22.40 m.
27	- Coarse grained, numerous granitic (10%) and limestone pebbles to 0.08mm, minimal recovery, fine grained sand visible in drill fluid.
28	LIMESTONE (BEDROCK) - Solid buff limestone core, very strong.
END OF HOLE AT 27.56 m	

- NOTES**
- Structural steel to conform to CSA G40.21-350W
  - Walers to conform to CSA G40.21-350
  - All welding to be performed by CSA certified welders using CSA certified materials and procedures.
  - Logging to be 75mm rough saw poplar.
  - Excavation to proceed in max. 2 metre lifts.
  - All work to conform to the requirements of workplace safety and health.

No.	REVISION	DATE	BY

**WOLFROM ENGINEERING LTD**  
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SEAL

**APEGM**  
Certificate of Authorization  
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No. 1166 Expiry April 30, 2004

**PROVINCE OF MANITOBA**  
**P. J. McSHANE**  
REGISTERED PROFESSIONAL ENGINEER  
FEB. 27/04

JOB TITLE  
**MONTCALM PUMP STATION  
TEMPORARY SHORING  
WINNIPEG MANITOBA**

DRAWING TITLE  
**SHORING PLAN  
& DETAILS**

DRAWN BY	SCALE	DRAWING NO.
JLP	AS NOTED	<b>SH-1</b>
FILE NO.	DATE	REVISION NO.
W04-051	FEB. 12/04	0