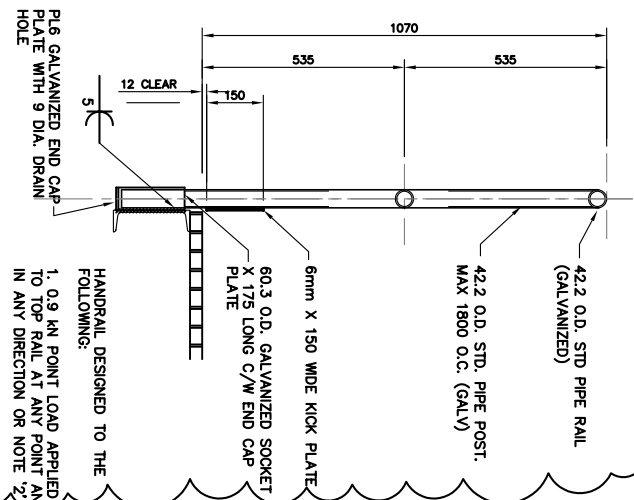
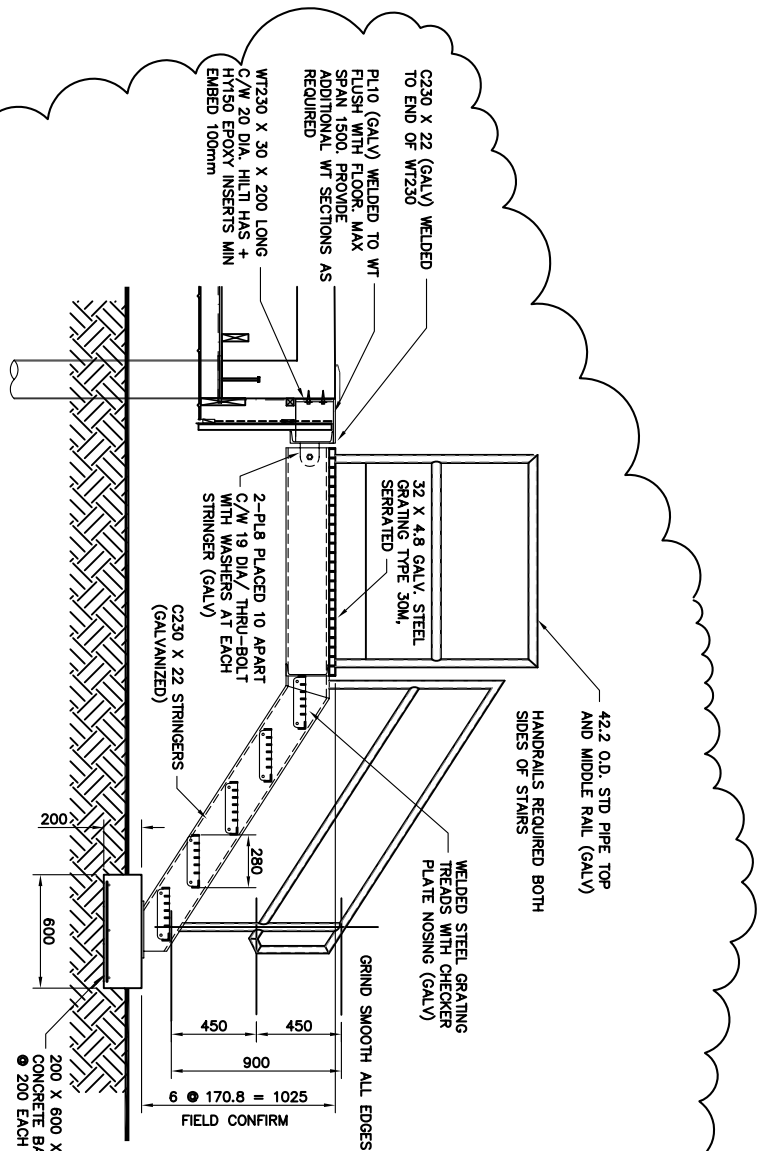
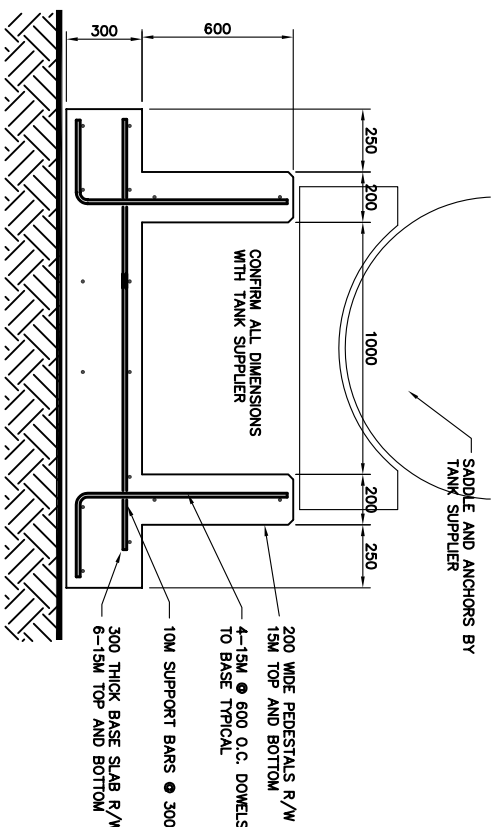
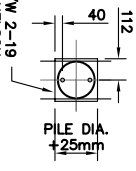


- | FILE NOTES: | | | | | | | | | |
|-------------------------------------|--|-------------------------------------|------------------------------------|---------|---|-----------|----|------|----|
| 1. | THE MEAN ANNUAL GROUND TEMPERATURE WAS ASSUMED TO BE -3.5° | | | | | | | | |
| 2. | THE SALINITY OF THE SOIL WAS ASSUMED TO BE LOW MODERATE. | | | | | | | | |
| 3. | ADDFREEZE PILES MAY BE DESIGNED USING THE FOLLOWING VALUES: | | | | | | | | |
| | <table border="1"> <thead> <tr> <th>DEPTH OF PILE BELOW FINAL GRADE (m)</th> <th>ALLOWABLE ADFFREEZE STRENGTH (kPa)</th> </tr> </thead> <tbody> <tr> <td>0-3.0 *</td> <td>0</td> </tr> <tr> <td>3.0 - 6.0</td> <td>30</td> </tr> <tr> <td>>6.0</td> <td>40</td> </tr> </tbody> </table> | DEPTH OF PILE BELOW FINAL GRADE (m) | ALLOWABLE ADFFREEZE STRENGTH (kPa) | 0-3.0 * | 0 | 3.0 - 6.0 | 30 | >6.0 | 40 |
| DEPTH OF PILE BELOW FINAL GRADE (m) | ALLOWABLE ADFFREEZE STRENGTH (kPa) | | | | | | | | |
| 0-3.0 * | 0 | | | | | | | | |
| 3.0 - 6.0 | 30 | | | | | | | | |
| >6.0 | 40 | | | | | | | | |
| | * USE 6.0 FOR PI PILES | | | | | | | | |
| 4. | PILES WITHIN THE DESIGN 3.0m ACTIVE ZONE SHOULD BE WRAPPED WITH 2 SEPARATE LAYERS OF POLYETHYLENE SHEETS TO MINIMIZE UP/LIFT FORCES | | | | | | | | |
| 5. | ROUND HOLLOW STRUCTURAL SECTIONS ARE RECOMMENDED. STEEL PILES BELOW ACTIVE ZONE MUST BE PROPERLY CLEANED, FREE OF PAINT, LACQUER, OIL, GREASE, DIRT AND EXCESSIVE RUST. | | | | | | | | |
| 6. | PILE TO BE INSTALLED OPEN ENDED IN PRE-DRILLED OVERSIZED HOLES. | | | | | | | | |
| 7. | SOLE SHOULD BE PARTIALLY BACKFILLED WITH SALINE FREE SAND AND FRESH WATER SLURRY PRIOR TO INSTALLING PILES. | | | | | | | | |
| 8. | THE PILES SHOULD BE PLACED IN THE HOLE AND VIBRATED DOWN TO THE BOTTOM OF THE HOLE whilst ADDING MORE SAND AND FRESH WATER AROUND THE PILE DIAMETER. | | | | | | | | |
| 9. | DRILL CUTTINGS ARE NOT BE USED AS BACKFILL OR IN SLURRY MIX. | | | | | | | | |
| 10. | PILES WILL REQUIRE A HOLE WHICH IS 50mm LARGER IN DIAMETER THAN THE OUTSIDE DIAMETER OF THE PILE | | | | | | | | |
| 11. | PROVIDE CASINGS AS REQUIRED AS THE ACTIVE LAYER IS CURRENTLY UN FROZEN AND CAVE-INS MAY OCCUR | | | | | | | | |
| 12. | FREEZE BACK AROUND THE PILES MAY TAKE 2-3 MONTHS BEFORE FULL PILE CAPACITY CAN DEVELOP. INSTALL REMEDIATIONS ON PILES AT VARIOUS DEPTHS ALONG THE PILE SURFACE TO MONITOR THE FREEZE BACK | | | | | | | | |
| 13. | FINISH GRADE AROUND THE BUILDINGS SHOULD BE SLOPED AWAY AT A SLOPE OF AT LEAST 3 PERCENT OVER A DISTANCE OF 2.0m. | | | | | | | | |
| 14. | PILE INSTALLATION TO BE SUPERVISED BY PILING REGISTERED IN NINJA/UT | | | | | | | | |

PILE SCHEDULE				
TYPE	PILE DIA.	HOLE DIA.	SHAFT LENGTH	REMARKS
P1	141	191	17 000	SEE PILE NOTES
P2	141	191	12 500	SEE PILE NOTES
P3	141	191	12 500	SEE PILE NOTES
P4	141	191	9 000	SEE PILE NOTES



1 ADFREEZE PILE



SECTION
1:10
(3)
(S3)

SECTION
1:10

REVISIONS	
No.	Date
2	2007 05/20
1	2005 09/20
0	2005 09/15