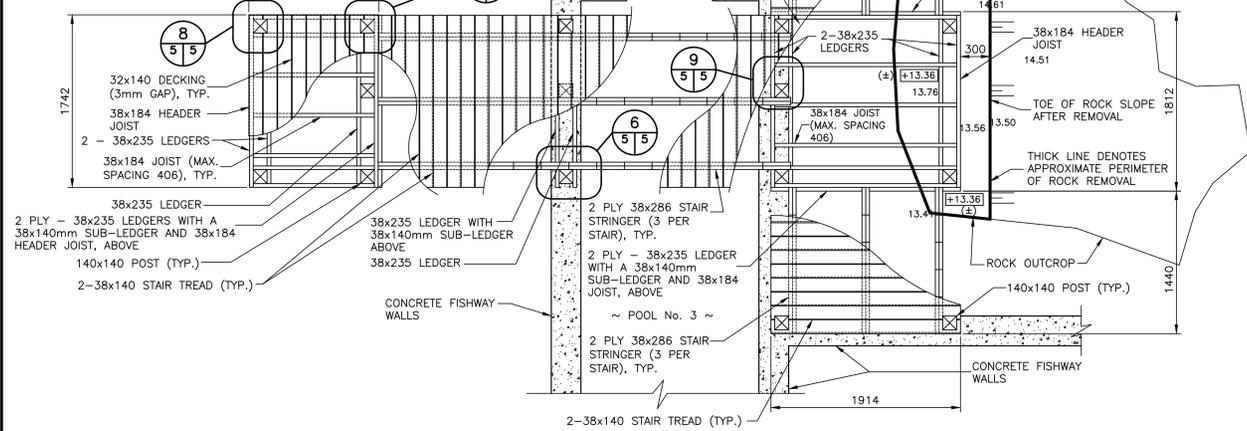
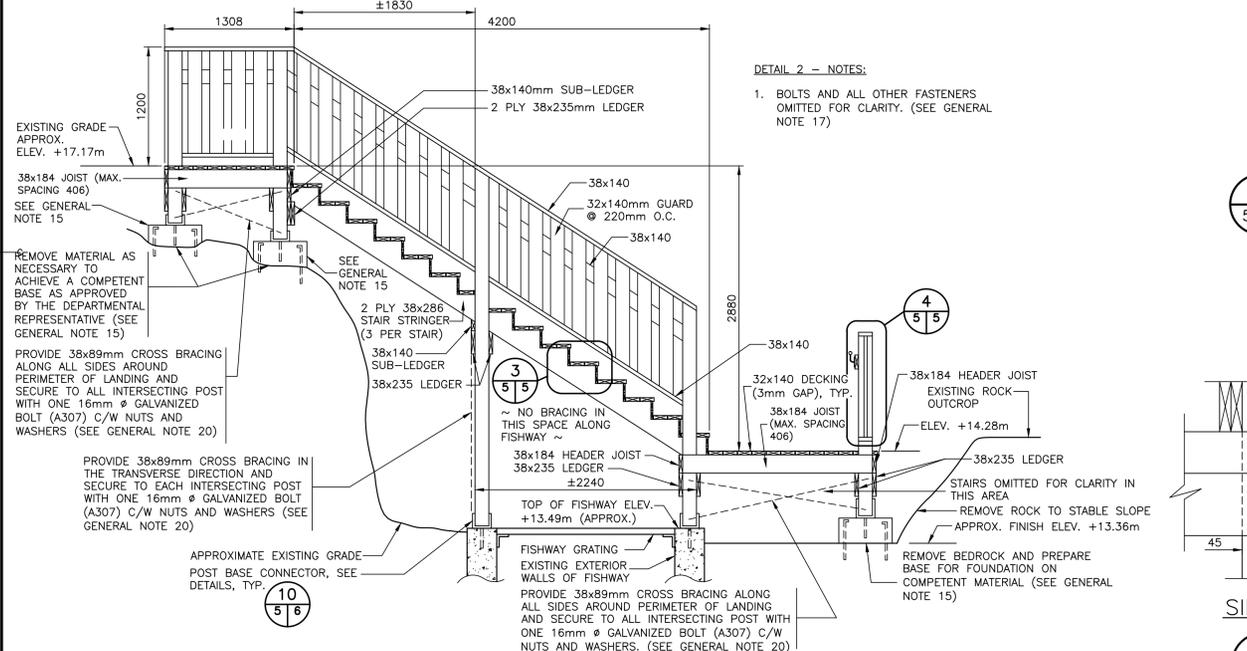


DETAIL 1 - NOTES:

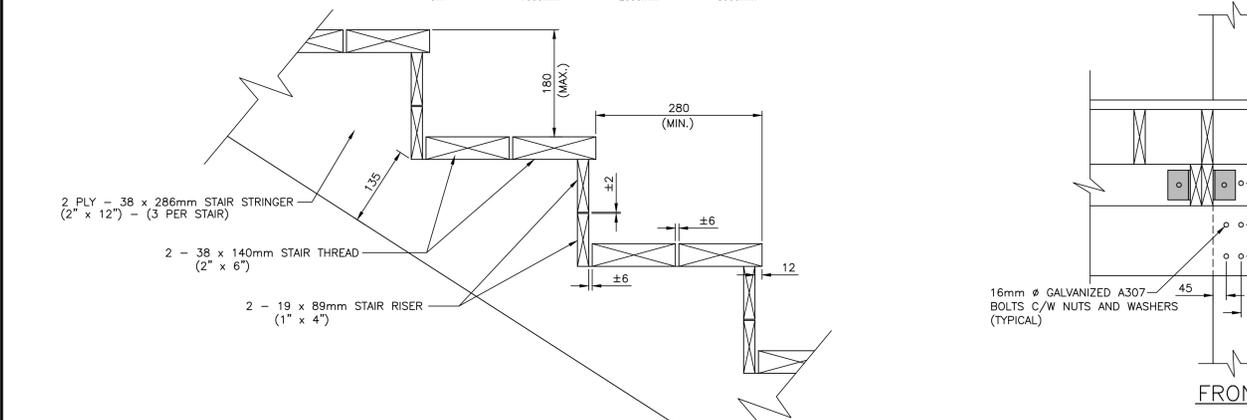
1. RAILING, GUARDS, POST FOUNDATIONS, CROSS BRACING, POOL GRATING, BOLTS/FASTENERS AND TRAP ENCLOSURE OMITTED FROM PLAN FOR CLARITY, REFER TO OTHER DETAILS AND NOTES.
2. PROVIDE ADDITIONAL CONCRETE FOOTING (300 L x 300 W x 300mm H) WITH TWO STRINGER CLIPS (L76x76x6.4) FASTENED TO STRINGER WITH 1-16mm Ø GALVANIZED BOLT AND 2-16mm Ø GALVANIZED ANCHORS INTO CONCRETE FOOTING.
3. ROCK IN AREA OF NEW STAIRCASE AND LANDING SHALL BE REMOVED AS NECESSARY TO ACCOMMODATE THE NEW CONSTRUCTION. REMOVE TO A DEPTH THAT ENABLES SUFFICIENT SPACE TO INSTALL FRAMING, POST BASE CONNECTOR PLATES AND BRACING. CONFIRM IN THE FIELD WITH DEPARTMENTAL REPRESENTATIVE.



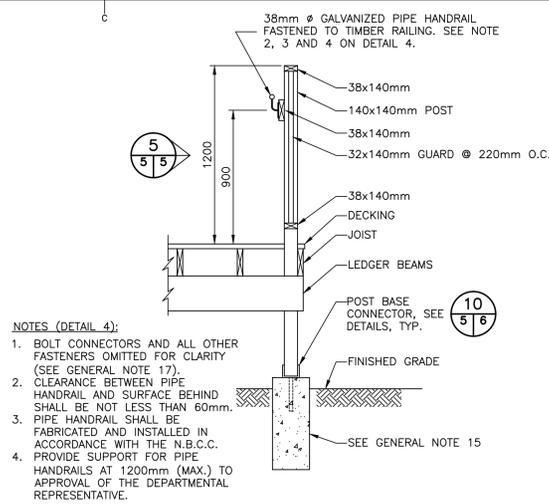
1 STAIR AND LANDING FRAMING PLAN
SCALE: 1:30



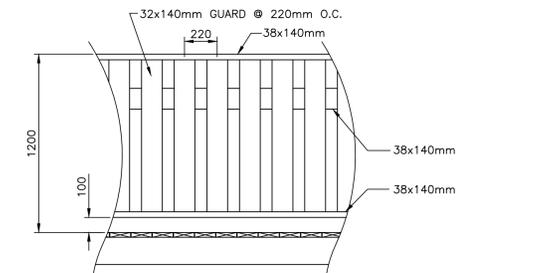
2 STAIR AND LANDING - ELEVATION
SCALE: 1:30



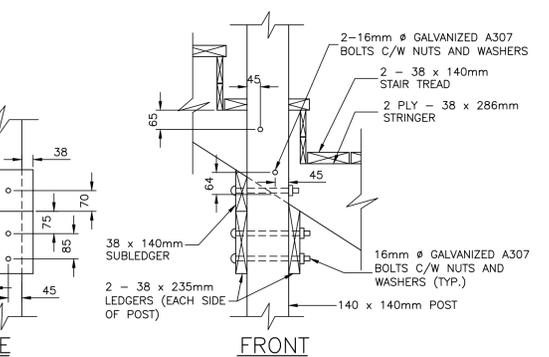
3 STAIR TREAD DETAILS (TYPICAL)
SCALE: 1:5



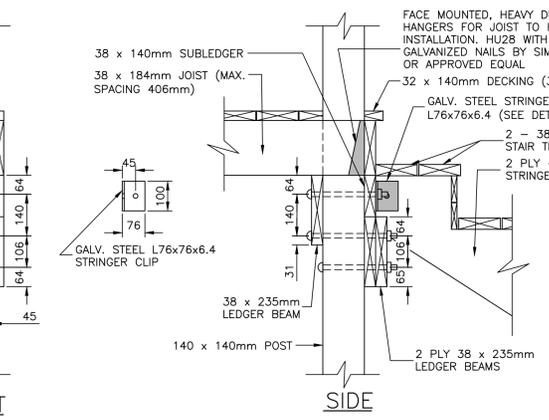
4 NEW TIMBER RAILING - SECTION (TYPICAL)
SCALE: 1:20



5 NEW TIMBER RAILING - ELEVATION (TYPICAL)
SCALE: 1:20



6 CONNECTION DETAIL No. 1 - (TYPICAL)
SCALE: 1:10

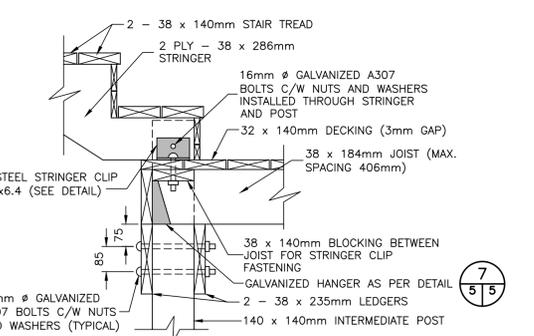


7 CONNECTION DETAIL No. 2 - (TYPICAL)
SCALE: 1:10

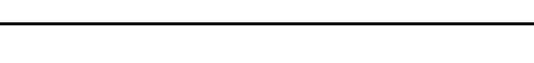
GENERAL NOTES:

1. MAKE ADEQUATE PROVISIONS FOR CONSTRUCTION STRESSES, WEATHER PROTECTION AND FOR SUFFICIENT TEMPORARY BRACING AND SHORING TO KEEP THE STRUCTURE PLUMB AND LEVEL DURING ALL PHASES OF WORK.
2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SAFEGUARD ALL EXISTING STRUCTURES AFFECTED BY THIS CONSTRUCTION.
3. DO NOT SCALE FROM DRAWINGS.
4. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE BEFORE PROCEEDING WITH ANY PORTION OF THIS WORK. DO NOT SCALE FROM DRAWINGS.
5. SOME COMPONENTS ON THE DETAILS PROVIDED HAVE BEEN OMITTED FOR CLARITY. REFER TO ALL OTHER DETAILS FOR COMPLETE WORK.
6. EXCAVATE EXISTING MATERIAL TO A STABLE SLOPE. DO NOT UNDERMINE ANY EXISTING STRUCTURES OR FOUNDATIONS.
7. THE CONTRACTOR SHALL PROVIDE FALSEWORK AND FORMWORK IN ACCORDANCE WITH CSA S269.1-1975 (R2003) AND CAN/CSA S269.3-M92 (R2003) "CONCRETE FORMWORK" RESPECTIVELY.
8. UNDERSIDE OF ALL NEW FOOTINGS NOT FOUNDED ON SOUND BEDROCK SHALL TO BE PLACED ON ENGINEERED FILL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 150 kPa.
9. FOOTINGS NOT FOUNDED ON SOUND BEDROCK SHALL BE AT LEAST 1220mm BELOW FINISHED GRADE, UNLESS NOTED OTHERWISE.
10. DO NOT PLACE FOOTINGS ON FROZEN GROUND.
11. USE FILL TYPES AS SPECIFIED BELOW. COMPACTION DENSITIES ARE PERCENTAGES OF MAXIMUM DENSITIES OBTAINED FROM ASTM D698 CORRECTED DRY DENSITY:
 - (1) USE TYPE 2 FILL TO UNDERSIDE OF BASE COURSE AND COMPACT TO 98%.
 - (2) PROVIDE 150mm COMPACTED THICKNESS OF TYPE 1 FILL TO UNDERSIDE OF FOUNDATION AND COMPACT TO 100%.
12. CORRECT UNAUTHORIZED OVER-EXCAVATION AS FOLLOWS:
 - (1) FILL UNDER BEARING SURFACES AND FOOTINGS WITH CONCRETE SPECIFIED FOR FOOTINGS.
 - (2) FILL UNDER OTHER AREAS WITH TYPE 2 FILL COMPACTED TO NOT LESS THAN 95% OF CORRECTED MAXIMUM DRY DENSITY.
13. HAND TRIM, MAKE FIRM AND REMOVE LOOSE MATERIAL AND DEBRIS FROM EXCAVATIONS. WHERE MATERIAL AT BOTTOM OF EXCAVATION IS DISTURBED, COMPACT FOUNDATION SOIL TO DENSITY AT LEAST EQUAL TO UNDISTURBED SOIL. CLEAN OUT ROCK SEAMS AND FILL WITH CONCRETE MORTAR OR GROUT TO APPROVAL OF DEPARTMENTAL REPRESENTATIVE.
14. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
15. THE CONTRACTOR IN COORDINATION WITH THE DEPARTMENTAL REPRESENTATIVE SHALL BE RESPONSIBLE TO DETERMINE IN THE FIELD WHICH POST FOUNDATION DETAILS APPLIES TO EACH CASE BASED ON THE GROUND CONDITIONS IN THAT AREA. POST BASE FOUNDATION DETAILS ARE INCLUDED ON SHEET C6. IN SOME CASES ADDITIONAL ROCK OR COMMON MATERIAL MAY HAVE TO BE REMOVED TO INSTALL THE MINIMUM FOUNDATION DIMENSION INDICATED AND POST BASE CONNECTION ALONG WITH ABOVE FRAMING MEMBERS. CONCRETE FOUNDATIONS SHALL BE INSTALLED ON COMPETENT EXISTING MATERIALS AS APPROVED BY THE DEPARTMENTAL REPRESENTATIVE. REMOVE AND THOROUGHLY CLEAN ALL LOOSE OR BROKEN ROCK PRIOR TO PLACEMENT OF CONCRETE FOUNDATIONS ON SOUND BEDROCK MATERIAL.
16. ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA (NBCC), LATEST EDITION AND CSA 086.1, LATEST EDITION.
17. ALL MAJOR STRUCTURAL CONNECTIONS SUCH AS LEDGER/POST, LEDGER/STRINGERS, POST /STRINGER, POST/BASE, JOIST/HEADER AND CROSS-BRACING/POSTS SHALL BE BOLTED AS PER THE DETAILS PROVIDED. THE MINIMUM VALUES OF END DISTANCES, EDGE DISTANCES AND SPACING FOR FASTENERS SHALL BE CONSISTENT WITH THE REQUIREMENTS OF CSA-086.1. NOT ALL OF THE BOLTED CONNECTIONS ARE INDIVIDUALLY DETAILED ON THE DRAWINGS. HOWEVER, THE NECESSARY BOLTING INFORMATION PROVIDED FOR THE CONNECTIONS SHOWN DOES INCLUDE ALL THE NECESSARY TYPICAL INFORMATION REQUIRED TO COMPLETE THE OTHER CONNECTIONS. REVIEW ALL STRUCTURAL CONNECTIONS WITH DEPARTMENTAL REPRESENTATIVE PRIOR TO START OF WORK AND TO THE FABRICATION OF ANY FASTENING PLATES. ALL OTHER CONNECTIONS SHALL BE COMPLETED IN ACCORDANCE WITH INDUSTRY STANDARDS FOR CARPENTRY WORKMANSHIP, THE NBCC, CSA 086.1 AND TO APPROVAL OF THE DEPARTMENTAL REPRESENTATIVE.
18. BUILT-UP 2 PLY WOODEN MEMBERS AND STRINGERS SHALL BE FASTENED TOGETHER IN ACCORDANCE WITH THE REQUIREMENTS OF THE NBCC.
19. ALL TIMBER SHALL BE PRESSURE TREATED IN ACCORDANCE WITH SECTION 06 10 00 - ROUGH CARPENTRY.
20. CROSS-BRACING SHALL BE PROVIDED AS INDICATED ON THE DRAWINGS. THIS INCLUDES BRACING IN BOTH THE TRANSVERSE AND LONGITUDINAL DIRECTION AROUND PERIMETER OF ALL LANDINGS AND IN THE TRANSVERSE DIRECTION AT THE INTERMEDIATE POST LOCATIONS ALONG THE FISHWAY EXTERIOR.
21. PROVIDE AND MAINTAIN ACCESS TO FISHWAY THROUGHOUT THE ENTIRE CONSTRUCTION PHASE. PROVIDE TEMPORARY ACCESS TO APPROVAL OF THE DEPARTMENTAL REPRESENTATIVE DURING STAIRCASE REPLACEMENT.
22. STAIRCASE AND LANDINGS ARE DESIGNED FOR AN UNFACTORED LIVE LOAD OF 4.8 Kpa, IN ACCORDANCE WITH THE NBCC.

8 CONNECTION DETAIL No. 3 - (TYPICAL)
SCALE: 1:10



9 CONNECTION DETAIL No. 4 - (TYPICAL)
SCALE: 1:10



Public Works and Government Services Canada / Travaux Publics et Services gouvernementaux Canada

PROVINCE OF NEWFOUNDLAND AND LABRADOR PERMIT HOLDER
 This Permit Allows
 Meridian Engineering Inc.
 To practice Professional Engineering in Newfoundland and Labrador.
 Permit No. as issued by PEG NO453 which is valid for the year 2015.

REGISTERED PROFESSIONAL ENGINEER
 LEE M. BENNETT
 15/10/22
 NEWFOUNDLAND & LABRADOR

C	ISSUED FOR TENDER	15/10/22
B	ISSUED FOR 99% REVIEW	15/10/22
A	ISSUED FOR 66% REVIEW	15/08/22

revisions: _____ date: _____

project: _____

BISHOP'S FALLS FISHWAY UPGRADES

drawing: _____ design: _____

NEW TIMBER STAIRCASE DETAILS

designed L. BENNETT conq
 date AUG, 2015
 drawn R. SNOW dessin
 date AUG, 2015
 approved Gary MacGillivray Oct 23, 2015
 date
 Tender Submission

PWSSC Project Manager / Administrateur de projets TPSSC
 project number no. du projet
R.075582.004
 drawing no. no. du dessin
C05

E-DRM/GDD-E: 527646 DFO No. 02E0301C0151