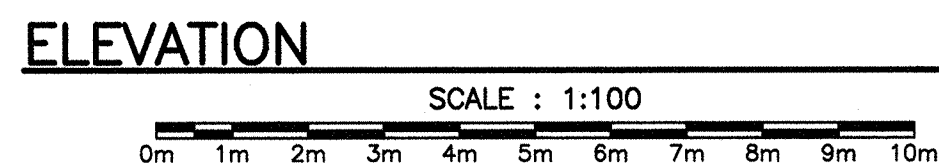


**NOTE:**  
THE PROPOSED LOCATION OF THE ROCK ANCHORS NOTED ON THIS DRAWING ARE BASED ON BEDROCK ELEVATIONS PROVIDED BY OTHERS. THESE LOCATIONS SHOULD BE TREATED AS PRELIMINARY AND MODIFICATIONS MAY BE REQUIRED IN THE FIELD, AS DIRECTED BY PWGSC DESIGNATED PERSONNEL.

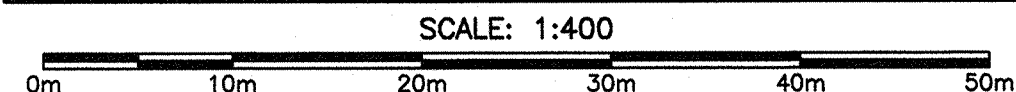


**D 102**

⊗ DENOTES ROCK ANCHOR LOCATION

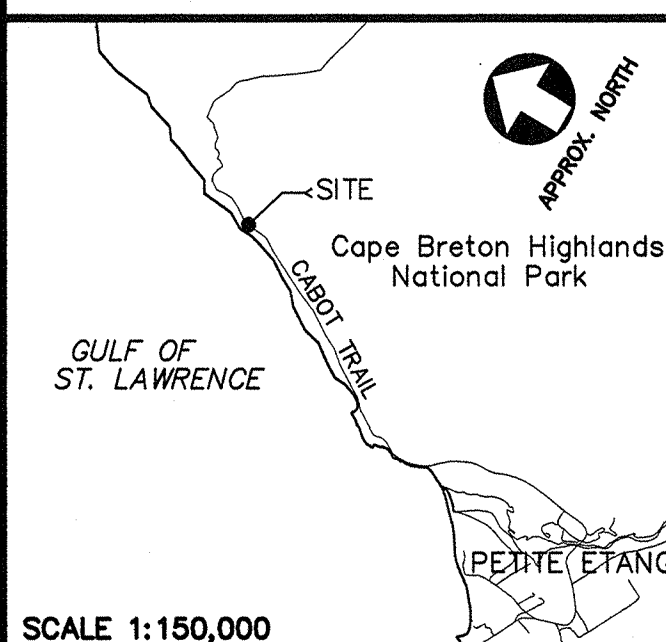
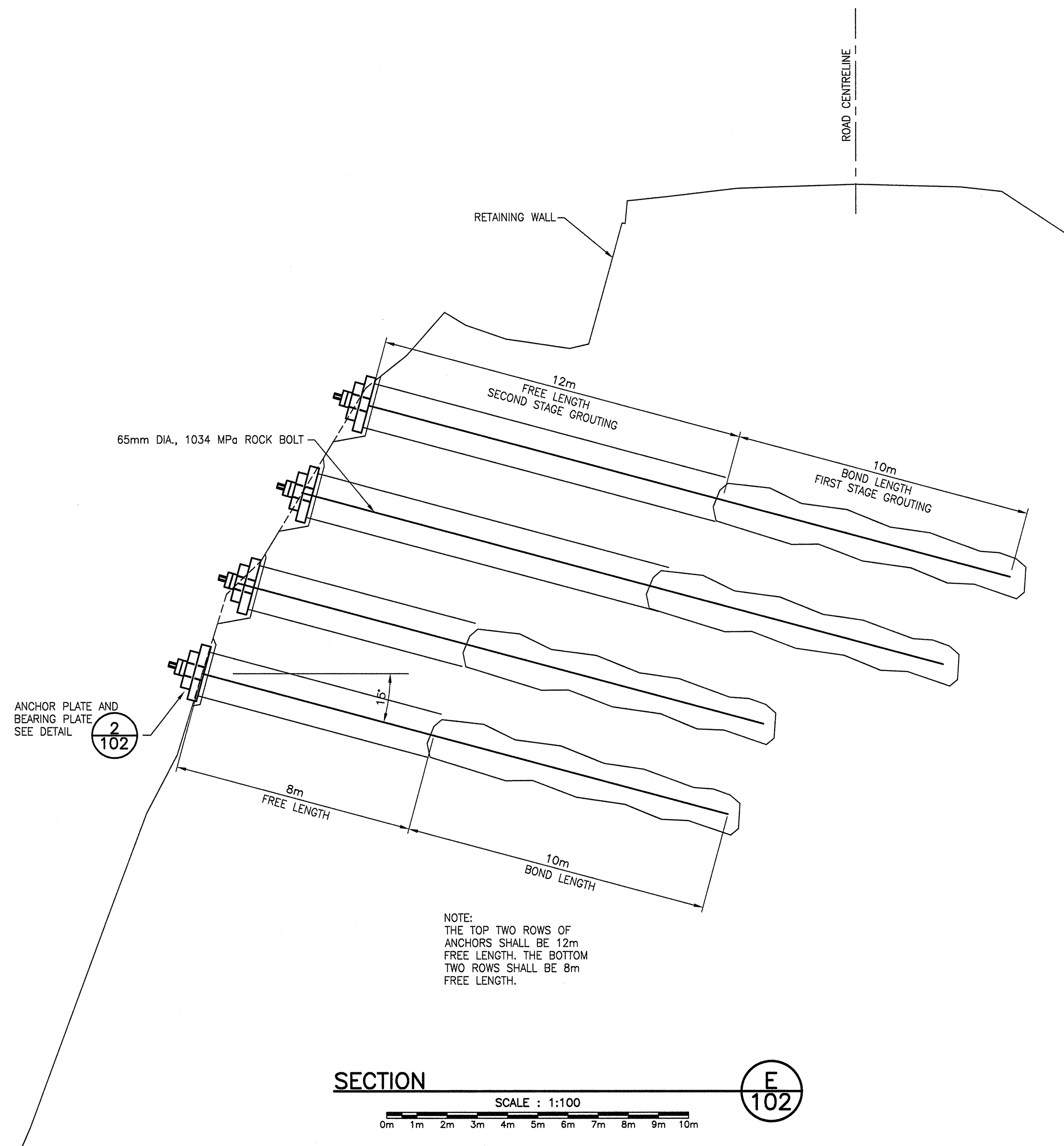
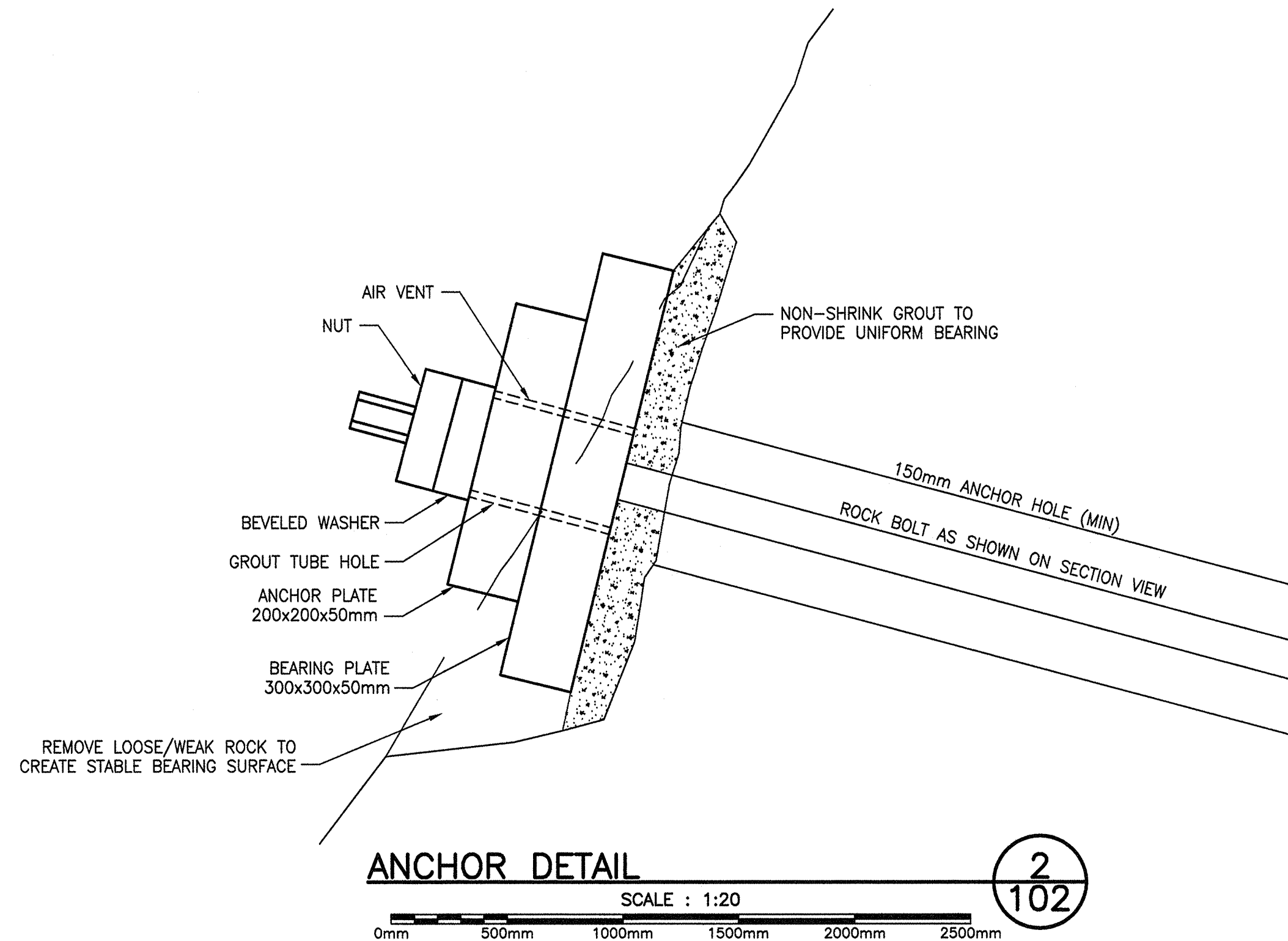


**OVERVIEW OF SITE**



#### ROCK ANCHORS:

1. INSTALLATION OF ANCHORS SHALL BE CARRIED OUT IN ACCORDANCE WITH RECOMMENDATIONS FOR PRESTRESSED ROCK AND SOIL ANCHORS BY THE POST-TENSIONING INSTITUTE (PTI), 2004.
2. ANCHOR HOLE DRILLING, ANCHOR INSTALLATION, GROUTING AND RELATED ACTIVITIES SHALL BE CARRIED OUT UNDER THE SUPERVISION OF AN EXPERIENCED GEOTECHNICAL PROFESSIONAL, PROVIDED BY THE CONTRACTOR AND APPROVED BY PWGSC.
3. ANCHORS SHALL BE 65mm DIAMETER, GRADE 1034 ROCK ANCHOR, WITH ALL ACCESSORIES (CAPS, CENTRALIZERS, COUPLERS, BEARING PLATES, WEDGE WASHERS, NUTS, ETC.) REQUIRED TO COMPLETE THE WORK AS DETAILED AND TO THE MANUFACTURERS SPECIFICATIONS.
4. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 35MPa AT 3 DAYS; 50MPa AT 28 DAYS.
5. ANCHOR HOLE SHALL BE MINIMUM 150mm DIAMETER.
6. TEMPORARY CASING SHALL BE PROVIDED AS REQUIRED TO STABILIZE DRILL HOLE SIDEWALLS.
7. ANCHOR HOLES SHALL BE GROUTED WITHIN 48 HOURS OF THE HOLE BEING DRILLED.
8. ANCHOR HOLE LOCATION AND DEPTH SHALL BE APPROVED BY A DEPARTMENTAL REPRESENTATIVE BEFORE ANCHOR INSTALLATION.
9. COUPLERS SHALL BE INSTALLED IN A MANNER WHICH WILL ENSURE THAT THEY CAN TRANSFER THE REQUIRED ANCHOR LOADS.
10. GROUTING OF THE ANCHOR SHALL BE CARRIED OUT USING 2 STAGES OF GROUTING. THE INITIAL STAGE SHALL CONSIST OF GROUTING THE BOND ZONE FOLLOWED BY TESTING AND STRESSING THE BOLT. SECOND STAGE GROUTING SHALL BE CARRIED OUT AFTER THE BOLT IS TENSIONED. NO PVC SLEEVE IS TO BE USED IN THE FREE LENGTH OF THESE ANCHORS. TESTING OF EACH ANCHOR SHALL BE CARRIED OUT BY AN EXPERIENCED GEOTECHNICAL PROFESSIONAL PROVIDED BY THE CONTRACTOR AND APPROVED BY PWGSC, IN ACCORDANCE WITH THE POST-TENSIONING INSTITUTE (PTI) METHOD FOR PROOF TESTING. THE DESIGN LOAD SHALL BE 2000kN AND THE LOCK-OFF LOAD SHALL BE 2100kN.



Stantec Consulting Ltd.  
102-40 Highfield Park Drive  
Dartmouth, NS Canada  
B3A 0A3  
Tel. 902.468.7777  
Fax. 902.468.0990  
www.stantec.com

**Stantec**

Stantec No.121615619

**NOTE:**  
SEE DWG 102 FOR SURVEY CONTROL REFERENCE POINTS



D	ISSUED FOR TENDER	03/10/2015
C	100% REVIEW	03/09/2015
B	99% REVIEW	02/27/2015
A	66% REVIEW	01/26/2015
revisions		date

project  
**CORNEY BROOK SITE STABILIZATION km 9.1 CAPE BRETON HIGHLANDS NATIONAL PARK, NS**  
project

#### ROCK WEDGE ROCK BOLT LAYOUT AND DETAILS

designed	G. MacNEILL	conçu
date	FEB 2015	
drawn	BSP	dessiné
date	FEB 2015	
approved	G. MacNEILL	approuvé
date	FEB 2015	
Tender	2015-3-11	Soumission
PWGSC Project Manager	Administrateur de projets TPSGC	
project number	R.061630.001	no. du projet
drawing no.	102	no. du dessin