

The following addendum supersedes information contained in the drawings and specifications issued of the project to the extent referenced. This Addendum forms part of the Tender Documents and is subject to all conditions set out in the contract documents

This addendum contains:

- Electrical addendum (4 pages)
- Electrical drawings E-05, E-06 (2 pages)
- Electrical drawing sheets 1000, 1001, 1002, 1003 from Project Number R.018739.001 (4 pages)
- Pole base details from MMCD Standard Detail Drawings (1 page)

1 Temporary Kirk Key Interlock at CB-5

- a REFER to Addendum E01 item 11 and Drawings E05 and E06, Revision 4, these show an apartment style interlock on breaker CB-5. This is to be installed as temporary to ensure that feeders shall not be paralleled prior to final testing and commissioning. Paralleling of feeders requires an agreement between EGD and BCH on the final operating procedures. EGD shall inform contractor when agreement is formed.
 - i Final CB-5 shall have no Kirk Key interlocks on it to allow paralleling of feeds and the ability to isolate one of either BC Hydro feeds. Drawing E05 revision 5 shall be the final configuration.

2 Disconnection of Existing Service

- a The existing service shall be fully disconnected before the energization of the new BC Hydro feeders. This has been outlined with an additional note on drawing E05 as follows:
 - i "EXISTING BCH 12F71 SERVICE FROM DND TO BE SWITCHED OFF AND COMPLETELY DISCONNECTED PRIOR TO ENERGIZATION TO THE NEW BCH FEEDERS."
- b REFER to Specification section 26 05 01 1.6.12 for further information, it is also repeated here:
 - i REMOVAL OF EXISTING DND-EGD SUPPLY: Isolate, de-energize and remove existing HV cabling from existing DND/EGD pullbox to the existing DND incoming main breaker in the SES switchgear lineup.
 - ii Communicate with the DND team, the PSPC/EGD team, and the BCH team assigned to this project for coordination and information. Make all necessary arrangements for a safe switch-over from existing DND-EGD supply to new BCH-EGD supply.
 - iii De-energize DND feeder. Safely isolate at DND overhead location and SES DND incoming main breaker.
 - iv Energize the new BCH feeders at POD switchgear and SES main incoming breakers.
 - v After BCH Feeders have been in service, trouble free, for a minimum of 3 months, remove DND feeder from PB34 to S.E.S. and cap and make safe feeder elbows in PB34.

3 Drawing E06 - Kirk Key Interlock Detail Removed from Drawing E06

- a For clarity, the Kirk Key interlock system detail shown on drawing E06 is removed. The detail shown on drawing E05 shall remain, with the modification made as per Item 1 on this Addendum #2.

4 Drawing E05 – Power CTs Removed from Drawing

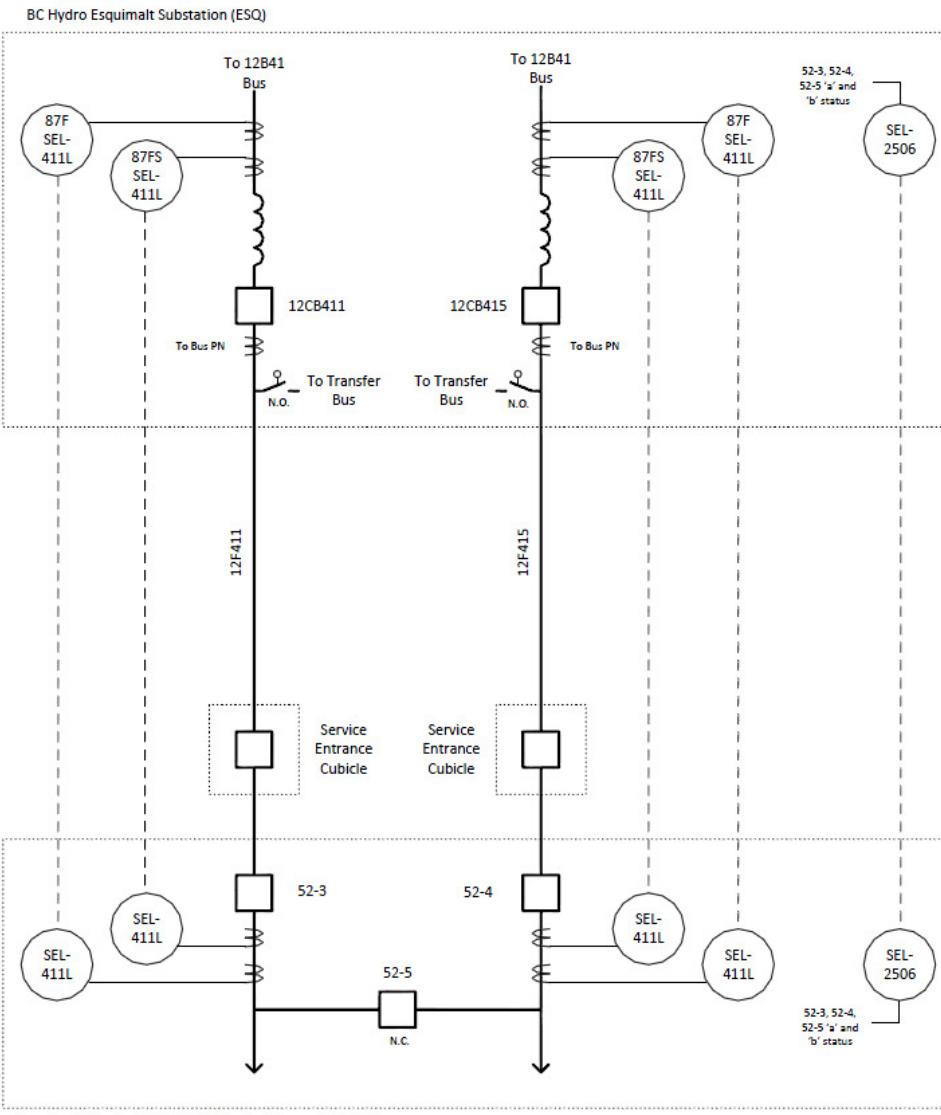
- a For clarity and as per BC Hydro's request, the incoming CTs and PTs shown on drawing E05 are removed. Their details shown on drawing E06 shall remain, with modifications as per Item 5 on this Addendum #2. CTs and PTs removed from the drawing include:
 - i 25/12CT-3A-P
 - ii 25/12CT-3B-P
 - iii 25/12PT-3 and its associated fuses
 - iv 25/12CT-4A-P
 - v 25/12CT-4B-P
 - vi 25/12PT-4 and its associated fuses
 - vii 25/12PT-B1
 - viii 25/12PT-B2
 - ix 25/12CT-3-M
 - x 25/12CT-4-M

5 Drawing E06 – Power CT for Parallel Conductor

- a Existing power CTs 25/12CT-3B-P and 25/12CT-4B-P, which are on the second parallel conductor from BC Hydro, were not shown on drawing E06. These existing CTs were added into the drawing. Their revised connection to the protection relay shall be as shown.

6 Matching BCH Relay's and Firmware Update:

- a Existing SEL411L protection relays shall be updated to match the firmware of the BCH 411L protection relays to match part number # 0411L0X6X5XXDDXH5E424XX. Existing SEL 411L part number in SES is 0411L0X6X5C8CCX35E424XX. Provide updated communications cards, firmware update and re-certification as required.
- b New SES SEL-2506 shall match new BCH 2506 at the Esquimalt substation and have the same part number: 250604414X.
- c Add keynote 9 on drawing E06.
- d Overall protection diagram shown below from BCH protection and Control:



7 CLARIFICATION: Continuous Fibre Run

Q: Please confirm the BCH provided fiber is continuous from the point of service through to the SES with no splices or terminations in the D Mark building. Fibre will not pass through the D-mark building.

A: The fibre run from the BC Hydro point of service shall be continuous to the termination point in the Service Entrance Substation. Details of this fibre pull through existing pull boxes and conduit are part of Addendum 1 item 10.

8 CLARIFICATION: BC Hydro Termination

Q: Please confirm BCH will be providing the parts and terminating the fiber they are providing.

A: BC Hydro will provide the fibre near PullBox 33 (PB 33) at the entrance to the EGD. Contractor will pull the BC Hydro fibre and run from PB 33 to the Service Entrance Substation, as per addendum 1 item 10.

Contractor shall provide all termination equipment and parts as required for termination of BCH fibre.

Contractor shall install a 100mm RPVC duct stub-out from PB 33 approximately 1m from the manhole. BCH to intercept conduit for their fibre run.

BCH protection and control indicates the following:

- (1) Provide WECC Class 2 synchronous circuits between ESQ and EGD or the "ESQ-EDG 12F411 PY DIGITAL TELEPORT" and "ESQ-EGD 12F411 SY DIGITAL TELEPORT". Physical interface shall be over 1300nm single mode fibre using **ST** connectors.
- (2) Provide WECC Class 2 synchronous circuits between ESQ and EGD or the "ESQ-EDG 12F415 PY DIGITAL TELEPORT" and "ESQ-EGD 12F415 SY DIGITAL TELEPORT". Physical interface shall be over 1300nm single mode fibre using **ST** connectors.
- (3) Provide a circuit between ESQ and EGD for "EGD STATUS". Physical interface shall be over 1300nm single mode fibre using **ST** connectors.

9 CLARIFICATION: Site drawing to be provided

Q: Please issue a site plan showing the location of the SES building in reference to the BCH switch.

A: A basic site plan shall be provided and attached to this addendum. Refer to attached drawings "Service Entrance Substation (SES) & Pump House Substation (PHS)" drawing 1000, 1001, 1002 and 1003.

10 CLARIFICATION: Foot Traffic

Q: Foot traffic will be required to be re-routed to the opposite side of the road for the work. Please confirm if the temporary security gate is available for use by the contractors.

A: No, foot traffic cannot be relocated to opposite side of road for the duration of the project. The construction work is to keep the existing walkway in service at all times and not redirect foot traffic to the opposite side of the road. The temporary security gate is not available to the contractor. Temporary closures on weekends after hours may be permitted with provided notice to EGD. **Refer to Addendum E01 item 3. Refer to specifications sections 01 11 00 1.5.1, 1.5.2, 1.5.3 and 1.9.7.**

11 CLARIFICATION: Light Standards to be used as Fenceposts

Q: Drawing E03 Keynote 23 & 26 indicate light standards to be used as corner posts for fence. Specification 26 50 00 Section 3.1-4 indicates lighting supported by fenceposts. If Light Standards are required at the corners please provide a specification and base detail.

A: Lighting fixtures and cameras shall be supported by light standards. The light standards shall be used as corner fenceposts. The pole's height and fixture mounting height is shown on drawing E03. Poles shall be hollow square poles with an powder coat black aluminum finish, with ability to allow for lighting and camera mounting as required, manufactured by Valmont West Coast Engineering or Nova Pole, or approved equivalent. Pole base shall be to MMCD Standard Detail Drawing Type B Sonotube concrete base or approved equivalent, as attached.

12 CLARIFICATION: Access Control Gate Hardware

Q: Please confirm the gate hardware is to be an electric strike with passage set at the man gate and mag locks (x3) with flared guides on the sliding gate. Mounting plates by fencing contractor.
A: Confirmed. Fencing is included in project specifications.

13 CLARIFICATION: Fibre Panel on E06 Clarification

Q: Fiber panel shown E06 has an incorrect keynote. Please confirm a new rackmount panel is to be supplied and installed.
A: Fiber patch panel shown is existing and will be modified as per keynote as needed per project requirements.

14 CLARIFICATION: 120VAC Metering Supply

Q: Notes 19 & 20 only state that there is a conduit running from the cabinet to LV junction box, but we need confirmation on dedicated circuit from a 15A breaker source and wire details.
A: Contractor to install a dedicated 15A, 1 pole circuit from the panel on the outside of the Demarcation Building through provided conduit to supply the meters with 120VAC. Provide 2c #12 RW90 XLPE cable with 1c #12 bond through provided conduit shown on drawing E02 and E03.

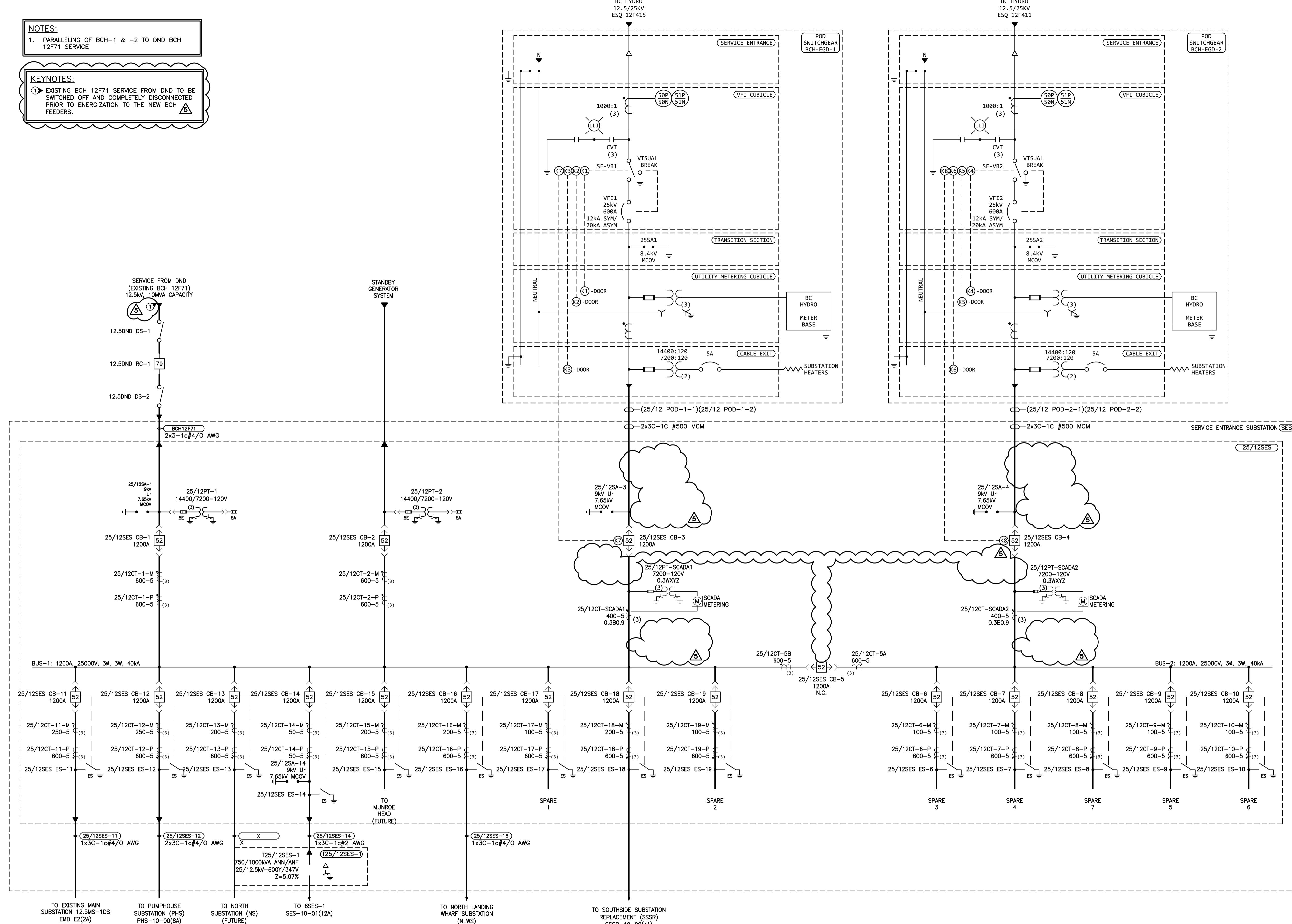
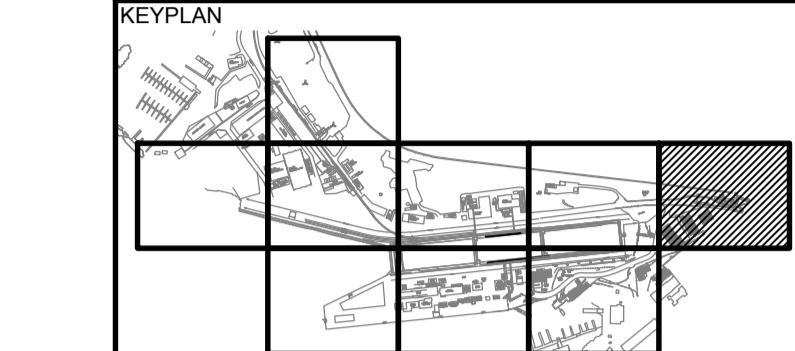
STRUCTURAL ADDENDUM

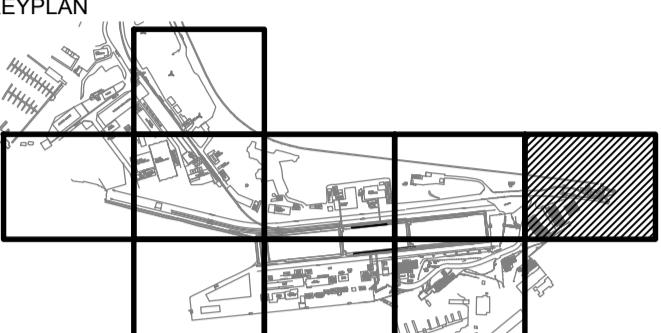
There has been no specification or drawing modifications within Addendum #2

ELECTRICAL ADDENDUM E-02

*Reference above addendum issued by WSP Electrical Consulting – 4 pages
Also refer to the following drawings, which have been altered and reissued as part of addendum E-02. Changes on these drawings are denoted by a clouded area and revision triangle:
E05 OVERALL MV SINGLE LINE DIAGRAM_R5 (1 page)
E06 PROTECTION SINGLE LINE DIAGRAM_R5 (1 page)
Electrical drawing sheets 1000, 1001, 1002, 1003 from Project Number R.018739.001 (4 pages)
Pole base details from MMCD Standard Detail Drawings (1 page)*

END OF ADDENDUM





Revision / Revision	Description / Description	Date / Date
5	ISSUED FOR ADDENDUM 2	19/02/01
4	ISSUED FOR ADDENDUM 1	19/01/28
3	ISSUED FOR TENDER	18/12/11
2	ISSUED FOR 75% REVIEW	18/11/21
1	ISSUED FOR 50% REVIEW	18/10/10
0	ISSUED FOR BCH PRE-REVIEW	18/05/09

Client / client

PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

825 ADMIRALS ROAD
VICTORIA, BCProject title/Titre du projet
**ESQUIMALT GRAVING DOCK (EGD)
REPLACE MAIN DISTRIBUTION LINE (RMLD)**

B.C. HYDRO (BCH) POINT OF DELIVERY (POD) SWITCHGEAR

Consultant Signature Box Only

Designed by/Concept par

G. PETERSON / T. DAVIDSON

Drawn by/Dessiné par

P. PARANPAN

PWSC Project Manager/Administrateur de Projets TPSGC

STEVE WINDL

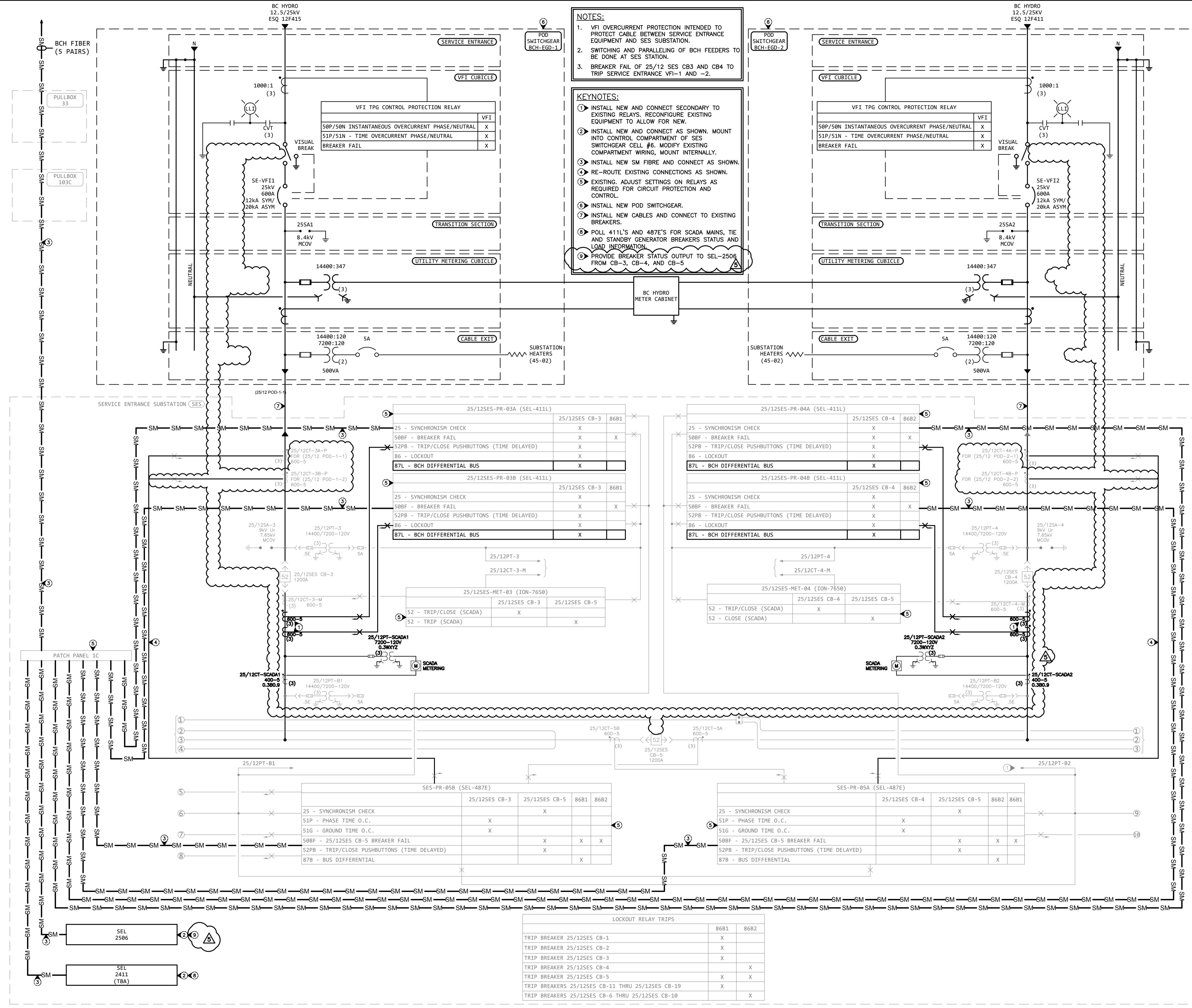
PWSC, Regional Manager, Architectural and Engineering Services/
Gestionnaire régionale, Services d'architecture et de génie, TPSGC

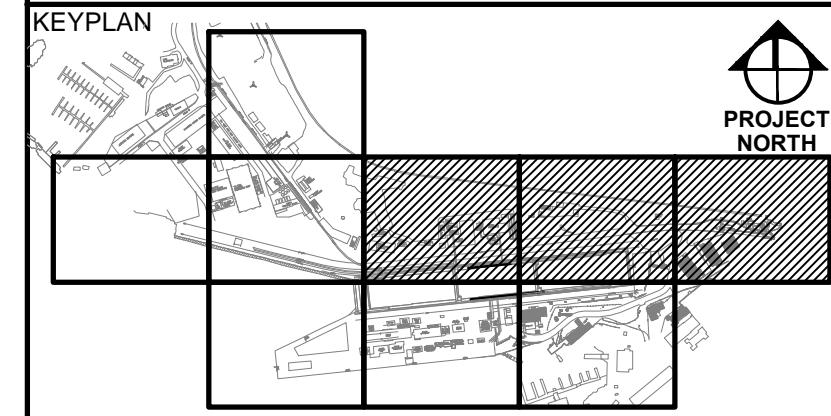
PREETIPAL PAUL

Drawing title/Titre du dessin

PROTECTION SINGLE LINE DIAGRAM

Project No./No. du projet	Sheet/Feuille	Revision no./ La Révision no.
R.090408.001	E06	5





BASE DRAWING DATA PROVIDED BY GOLDER ASSOCIATES LTD., TURKAN CONSULTING ENGINEERS INC. AND FIRST TEAM CONSULTING LTD.
DRAWING COORDINATES ARE LOCAL BASED ON UTM NAD 83, ZONE 10.
ALL DISTANCES ARE GROUND LEVEL
AND ELEVATIONS ARE GEODETIC.
UTM SCALE CONVERSION FACTOR 0.9996147574

THE LOCATION AND ELEVATION OF EXISTING UNDERGROUND SERVICES ON THIS DRAWING MAY NOT BE ACCURATE OR COMPLETE. THE ACTUAL HORIZONTAL AND VERTICAL LOCATIONS MUST BE CONFIRMED BY UTILITY COMPANIES AND THE CONTRACTOR PRIOR TO THE START OF ANY EXCAVATIONS.

5	ISSUED FOR TENDER	OCT 2, 2013
4	ISSUED FOR 100% CD REVIEW	AUG 13, 2013
3	90% DESIGN DEVELOPMENT	JUL 8, 2013
2	66% DESIGN DEVELOPMENT	MAY 27, 2013
1	33% DESIGN DEVELOPMENT	MAY 6, 2013
0	SCHEMATIC DESIGN	
Revision/ Revision	Description/Description	Date/Date

Client/client

ESQUIMALT GRAVING DOCK

825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1

Project title/Titre du projet
825 ADMIRALS ROAD VICTORIA BC
ESQUIMALT GRAVING DOCK
ELECTRICAL SAFETY UPGRADE

SERVICE ENTRANCE SUBSTATION (SES) & PUMPHOUSE SUBSTATION (PHS)

Consultant Signature Box Only

Designed by/Concept par
F.C./B.B.

Drawn by/Dessine par
F.C./B.B.

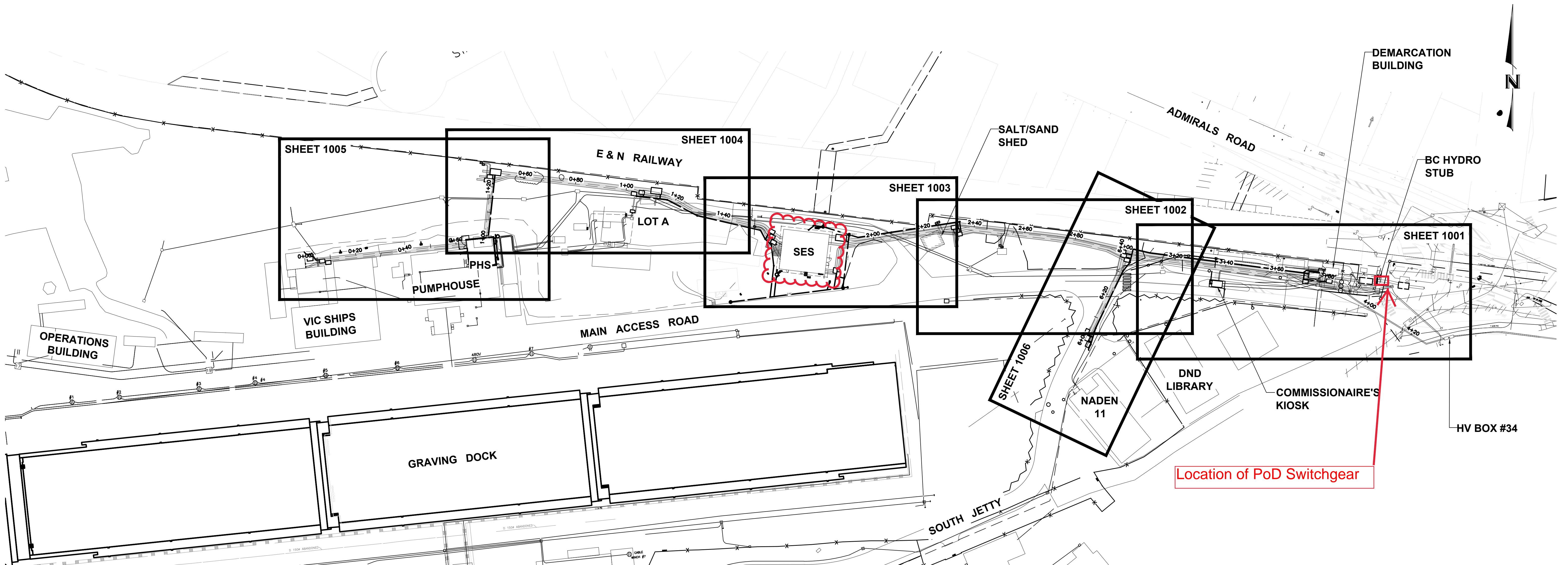
PWSSC Project Manager/Administrateur de Projets TPSGC
Jamie Leblanc

PWSSC, Réseau Manager, Architectural and Engineering Services/Service régional, Services d'architecture et de génie, TPSGC
Prestipal Paul

Drawing title/Titre du dessin

KEY PLAN

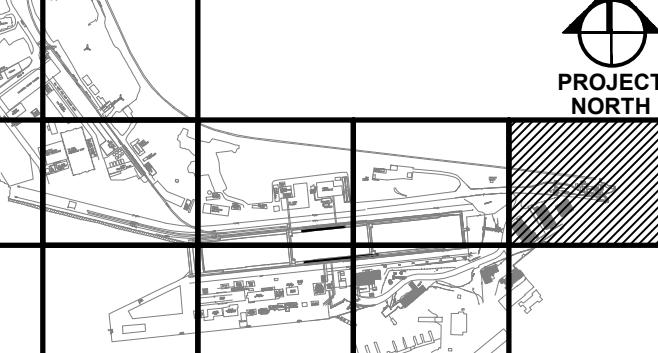
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66% DESIGN DEVELOPMENT	MAY 27, 2010
33% DESIGN DEVELOPMENT	MAY 6, 2010
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ALT GRAVING DOCK
AL SAFETY UPGRADE

**CE ENTRANCE
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(RHS)**

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Architectural and Engineering Services /

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TO STATION 4+40

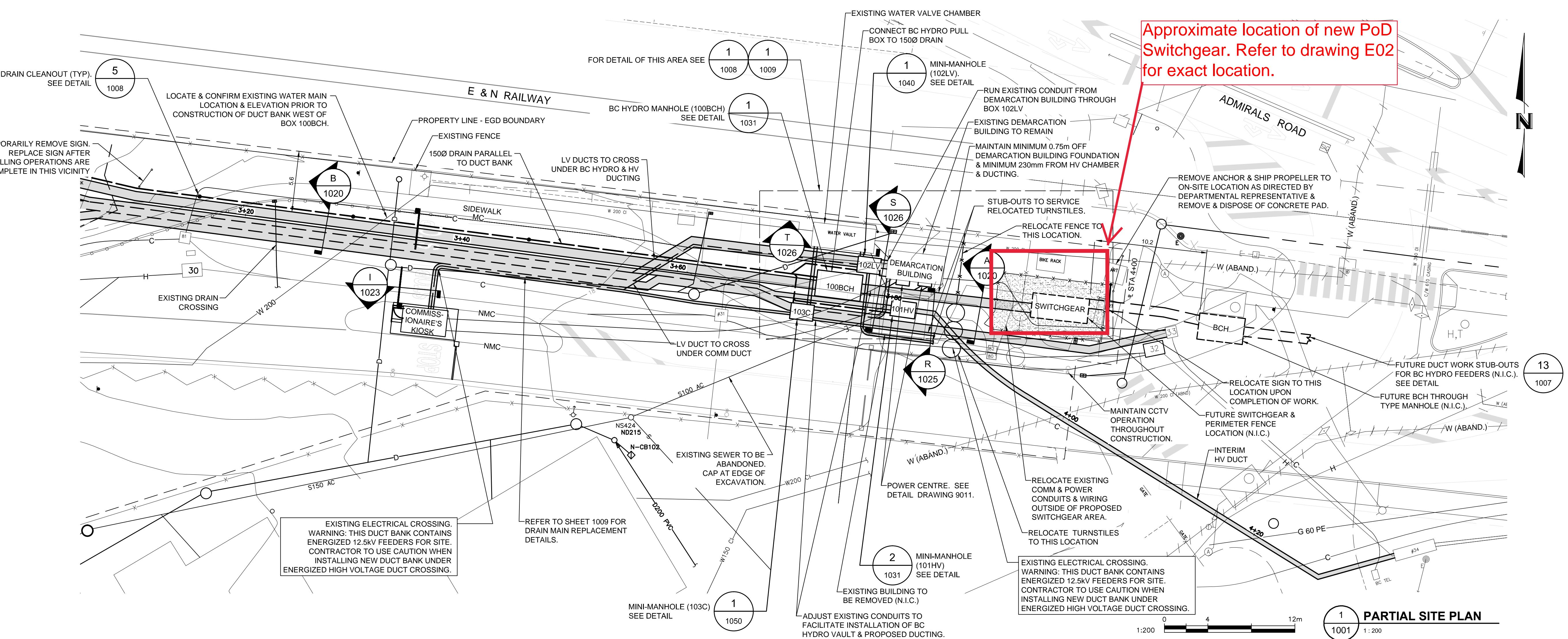
Sheet/Feuille

1001 | 5

For more information about the study, please contact the study team at 1-800-258-4929 or visit www.cancer.gov.

 1

Approximate location of new PoD
Switchgear. Refer to drawing E02
for exact location.





BASE DRAWING DATA PROVIDED BY COLDER ASSOCIATES LTD., TURKAN CONSULTING ENGINEERS INC. AND FIRST TEAM CONSULTING LTD. DRAWING COORDINATES ARE LOCAL BASED ON UTM NAD 83, ZONE 10. ALL DISTANCES ARE GROUND LEVEL AND ELEVATIONS ARE GEODETIC. UTM SCALE CONVERSION FACTOR 0.9996147574

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0	SCHEMATIC DESIGN	
Revision/ Revision/ Client/client	Description/Description	Date/Date

ESQUIMALT GRAVING DOCK

825 ADMIRALS ROAD
VICTORIA, BC, V9A 2P1

Project Title/Titre du projet
825 ADMIRALS ROAD VICTORIA BC
ESQUIMALT GRAVING DOCK
ELECTRICAL SAFETY UPGRADE

SERVICE ENTRANCE SUBSTATION (SES) & PUMPHOUSE SUBSTATION (PHS)

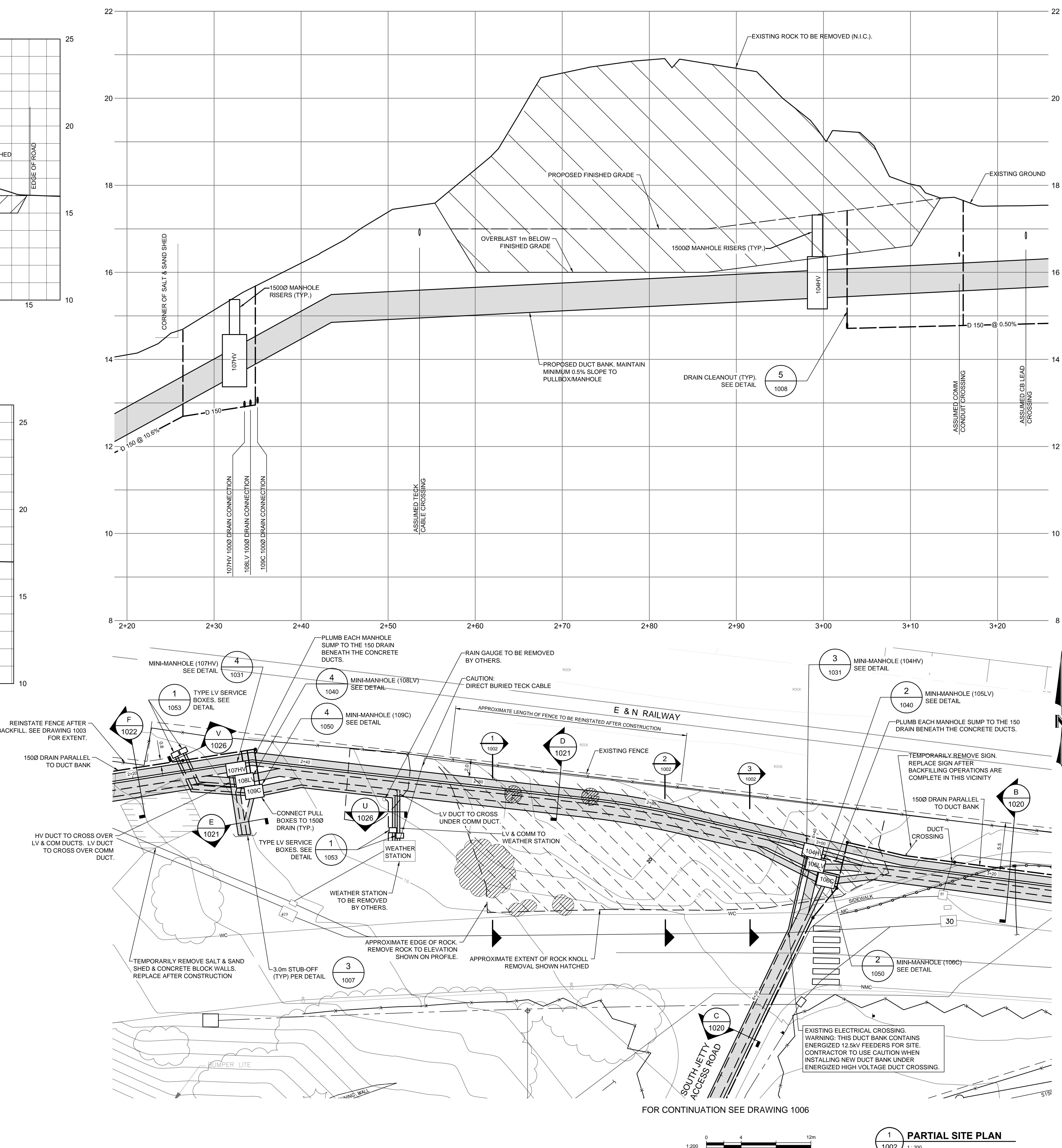
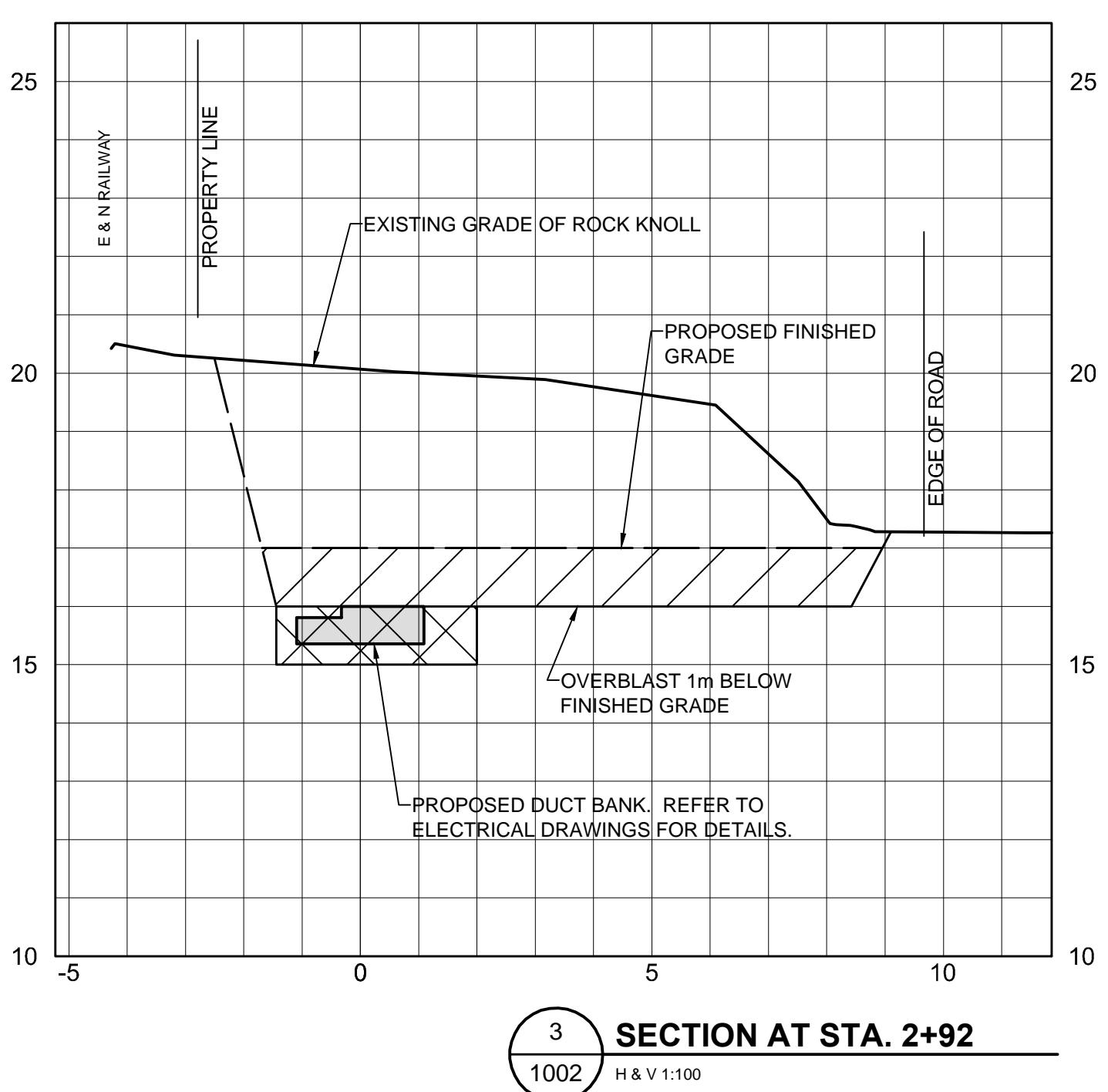
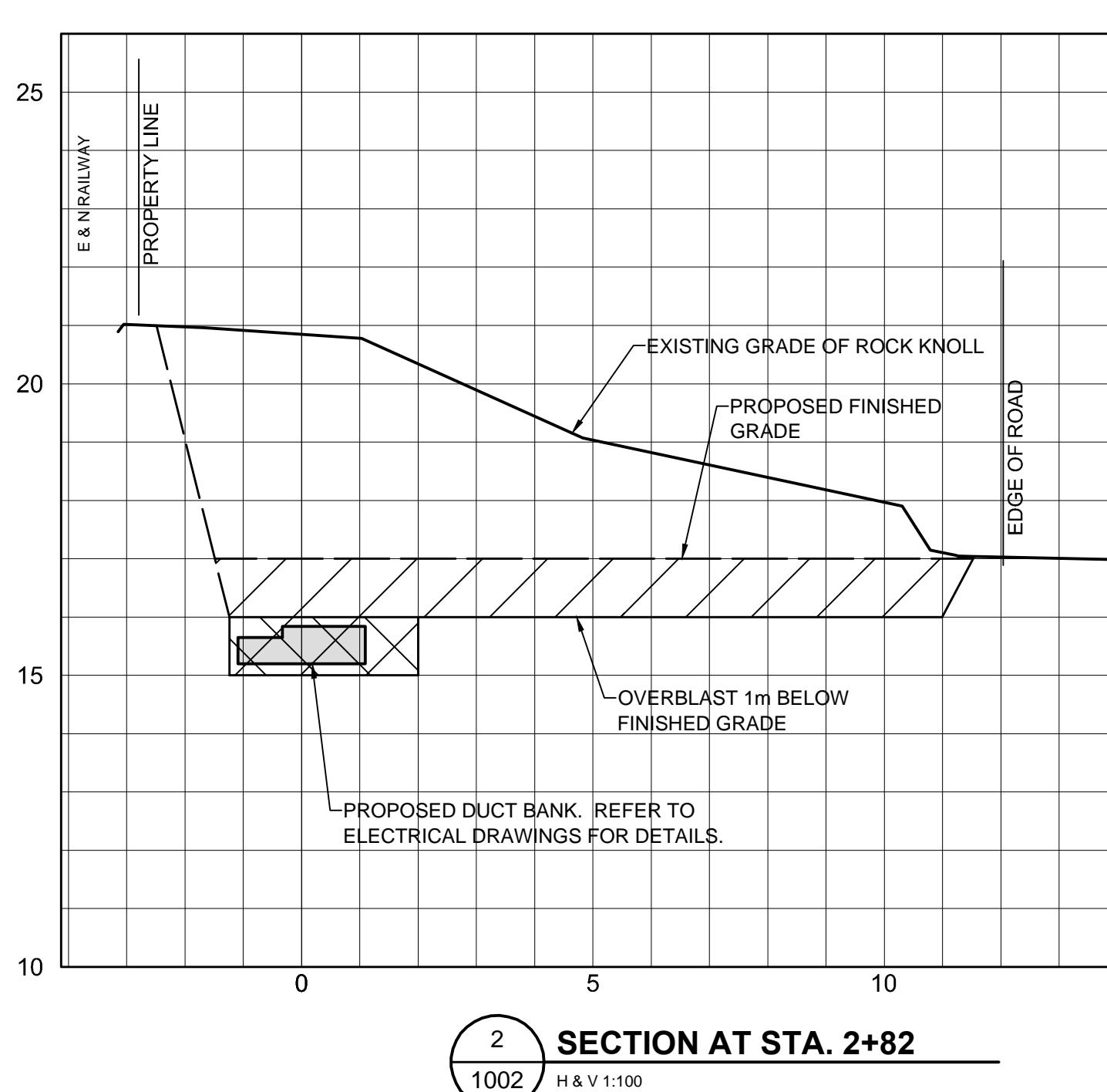
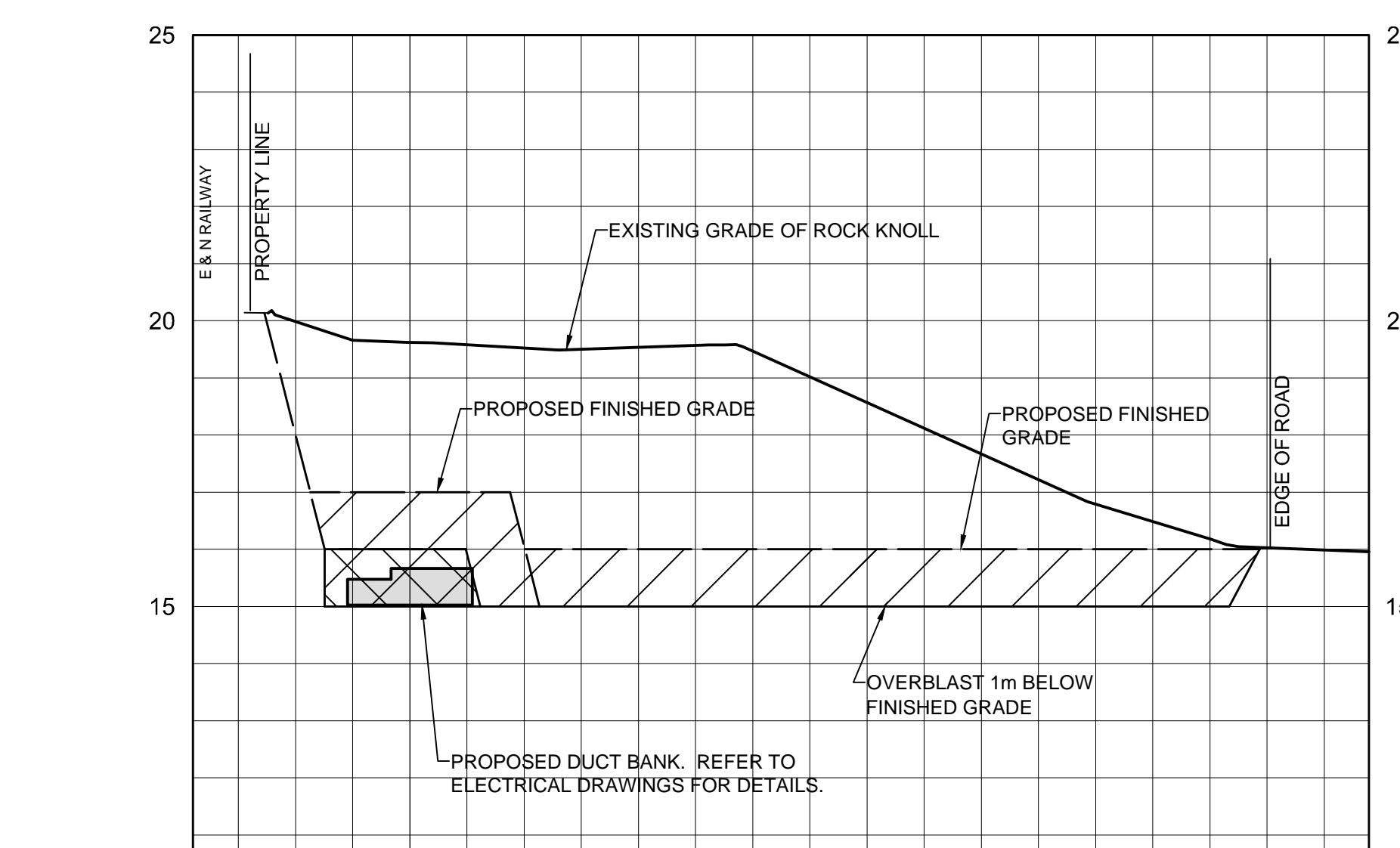
Consultant Signature Box Only
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B.C.
Drawn by/Dessiné par
F.G./B.B.
PWSSC Project Manager/Administrateur de Projets PWSSC
Jamie Leblanc
Geotechnical Manager, Architectural and Engineering Services, PWSSC
Preeta Paul

Drawing Title/Titre du dessin
**PLAN & PROFILE
STATION 2+30 TO STATION 3+20**

Project No./No. du projet
R.018739.001

Sheet/Feuille
1002

Revision no./
La Révision
no.
5



MMCD

STANDARD DETAIL DRAWINGS

CONCRETE BASE INDEX			
TYPE	DRAWING	BASE TYPES	POLE TYPES
A	CE1.2	SONOTUBE	TYPE 4 SIGNAL POST
B	CE1.2	SONOTUBE	TYPE 4A AND 5 SIGNAL POSTS & 4.0m, 6.0m & 7.5m POST TOP LUMINAIRE POLES.
C	CE1.3 & CE1.4	TRAPEZOIDAL	9.0m & 11.0m DAVIT LUMINAIRE POLES
C1	CE1.3 & CE1.4	TRAPEZOIDAL	8.1m & 10.1m DAVIT LUMINAIRE POLES ON 0.9m HIGH SERVICE BASE
C2	CE1.3 & CE1.4	TRAPEZOIDAL	4.0m, 6.0m & 7.5m POST TOP LUMINAIRE POLES & 7.5m DAVIT LUMINAIRE POLES
C3	CE1.3 & CE1.4	TRAPEZOIDAL	6.6m DAVIT LUMINAIRE AND 3.1m, 5.1m & 6.6m POST TOP LUMINAIRE POLES ON 0.9m HIGH SERVICE BASE
C4	CE1.5 TO CE1.7	SPREAD FOOTING	9.0m & 11m DAVIT LUMINAIRE POLES
C5	CE1.5 TO CE1.7	SPREAD FOOTING	8.1m & 10.1m DAVIT LUMINAIRE POLES ON 0.9m HIGH SERVICE BASE
E2	CE1.8 & CE1.9	TRAPEZOIDAL	TYPE 1 & 3 SIGNAL POLES
F1	CE1.10 TO CE1.12	SPREAD FOOTING	TYPE 6 & 7 SIGNAL POLES
F2	CE1.13 & CE1.14	TRAPEZOIDAL	TYPE 6 & 7 SIGNAL POLES
L1	CE1.10 TO CE1.12	SPREAD FOOTING	TYPE L SIGNAL POLES
L2	CE1.13 & CE1.14	TRAPEZOIDAL	TYPE L SIGNAL POLES
S1	CE1.10 TO CE1.12	SPREAD FOOTING	TYPE S SIGNAL POLES
S2	CE1.13 & CE1.14	TRAPEZOIDAL	TYPE S SIGNAL POLES
-	CE1.18	-	POST MOUNTED FLASHER

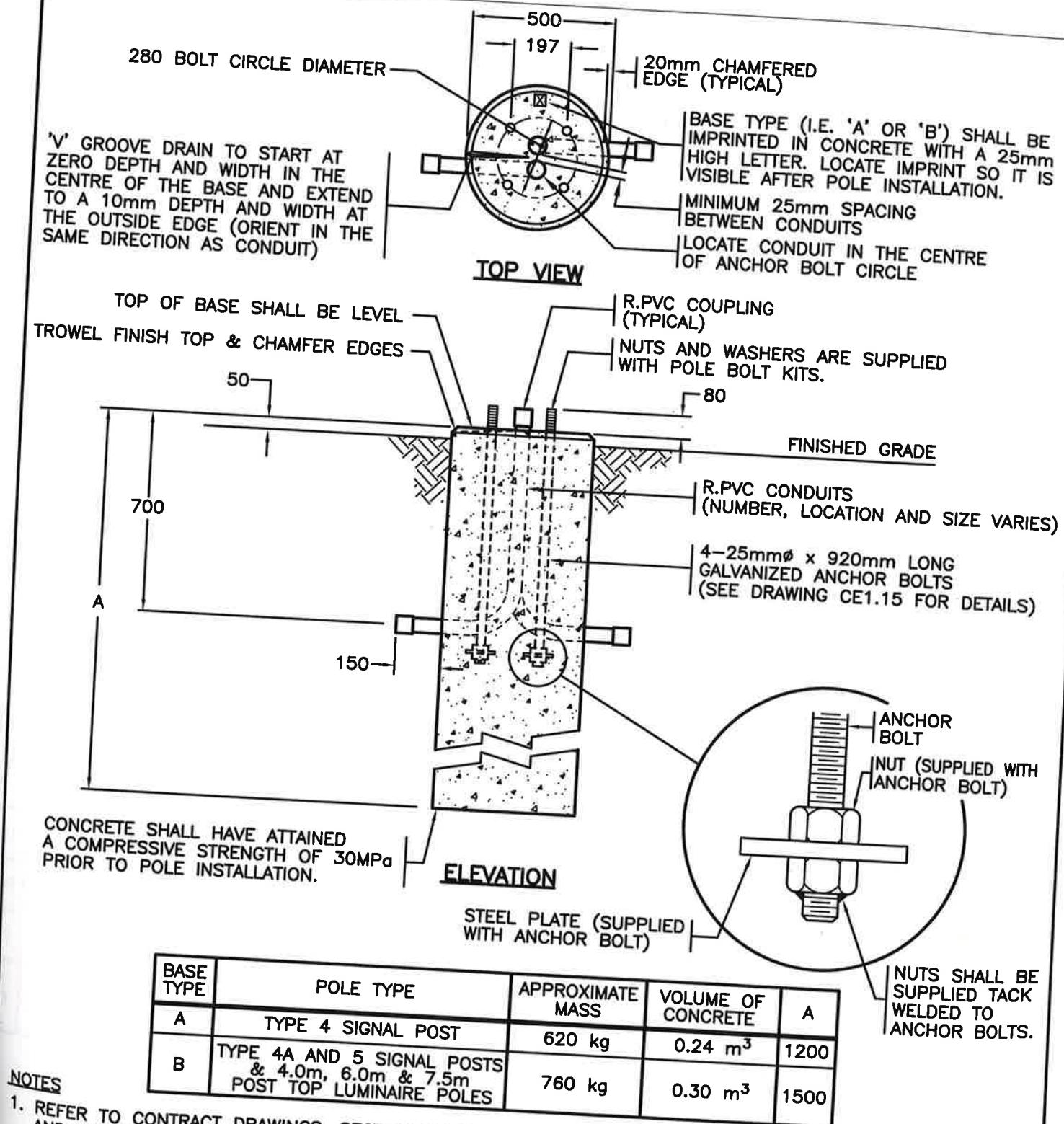
NOTES

1. REFER TO CONTRACT DRAWINGS, SECTIONS: 34 41 13 TRAFFIC SIGNALS, 25 56 01 ROADWAY LIGHTING, 03 30 53 CAST IN PLACE CONCRETE, 03 40 01 PRECAST CONCRETE FOR DETAILED SPECIFICATIONS.

DRAWING NUMBER:
CE1.1

MMCD

STANDARD DETAIL DRAWINGS



NOTES

1. REFER TO CONTRACT DRAWINGS, SECTION 03 30 53 AND SECTION 34 41 13 FOR DETAILED SPECIFICATIONS.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
3. SEE DRAWINGS CE1.19 & CE1.20 FOR BACKFILL REQUIREMENTS.

NOT TO SCALE

USE 450mm SQUARE TOP WHERE BASE IS LOCATED IN SIDEWALKS

TYPE A AND B SONOTUBE CONCRETE BASES

DRAWING NUMBER: