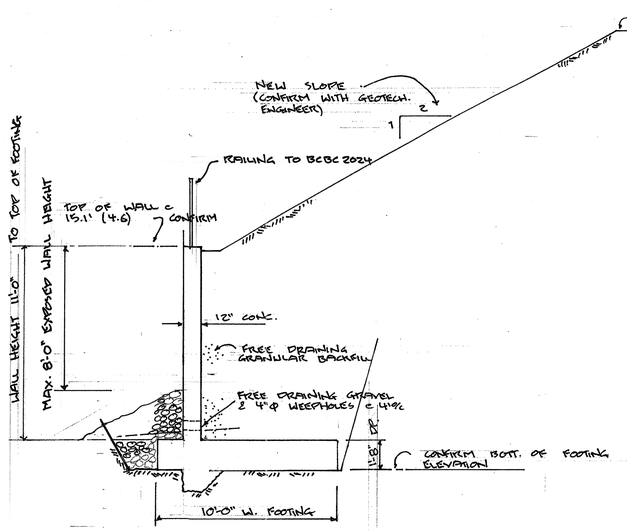
## General Structural Notes:

1. All construction is to be in accordance with the B.C.B.C. 2024 and local building codes as applicable.
2. All structural details are for structural information only and are to be read in conjunction with architectural drawings.
3. These drawings show a completed project, they do not show any temporary structures or bracing that may be necessary to complete this project. The general contractor is responsible for all temporary structures, bracing, and site safety on and about the job site.
4. Provide shop drawings for structural steel for review and approval prior to fabrication.
5. Confirm all structural details on site.
6. The various aspects of concrete work shall conform to the requirements of the following reference standards.
   - Concrete materials and methods of concrete construction: CAN3-A23.1 - 94
   - Methods of test for concrete: CAN3-A23.2 - 94
   - Design of concrete structures for buildings: CAN3-A23.3 – 94
7. Submit proposed concrete mix design to the engineer for approval prior to ordering concrete. Minimum 28 days concrete compressive strengths shall be as indicated below:
   - Concrete to be 35 MPa @ 28 days and is to be a sulfate-resistant cement.
   - The maximum water/cement ratio for the concrete shall be 0.45.
8. Consolidate all concrete using appropriately sized and powered mechanical vibrators.
9. Protect concrete from adverse weather conditions as determined by the engineer and in accordance with the referenced practise standards.
10. Use only new deformed bars from billet steel to CSA G30.14-M1983 grade 400
11. Place reinforcing bars to CSA A23.1 – M90. Tie all bars securely in place to prevent displacement. Provide corner lap bars for all wall horizontal rebar. Where concrete surfaces are to be exposed, only non-corrosive type reinforcing chairs shall be used to support reinforcing.
12. Provide clear concrete cover for rebar as follows:
    - surfaces poured against ground: 3" clear
    - formed surfaces exposed to ground or weather: 2"
13. Splice rebar as follows unless noted otherwise:

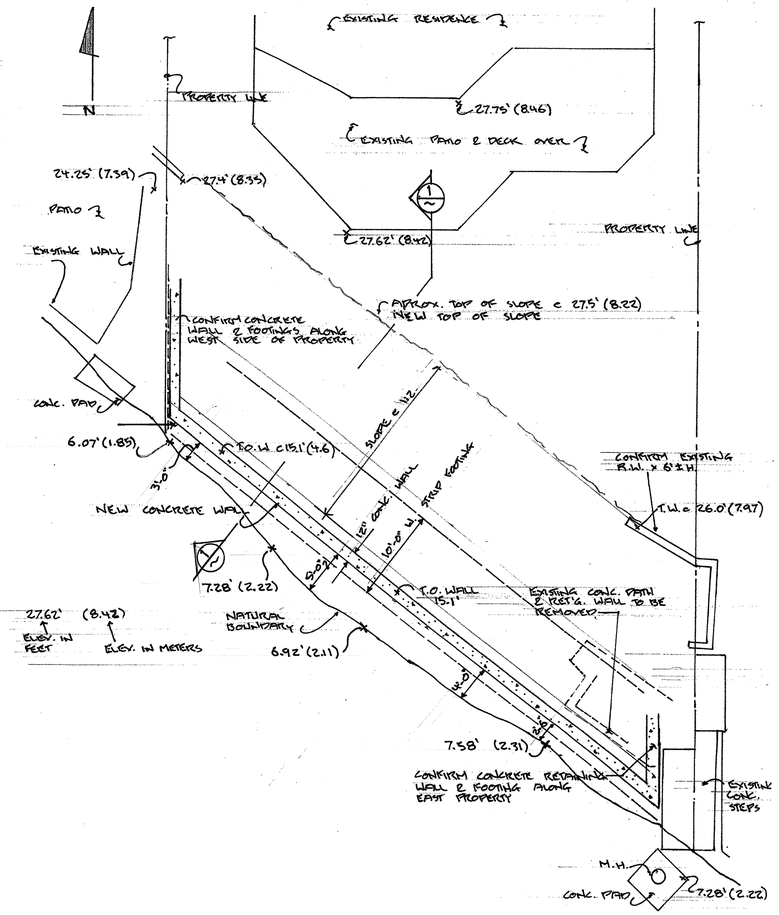
| Bar size | 15m | 20m | 25m |
|---|---|---|---|
| Lap splice | 24" | 30" | 48" |

14. Minimum reinforcing around openings larger that 12" shall be 2-15M rebars each side of opening, extended 24" past corner of an opening.
15. The curing and protection of concrete during extreme hot, cold or dry weather conditions shall be as per "cold weather requirements" set out in the referenced standards or on the structural drawings.
16. All footings to bear onto firm undisturbed bearing with a minimum frost cover of 24" provided. The bearing conditions are to be reviewed and approved prior to forming for a safe bearing capacity of 3,000 psf (140 KPA). The foreshore and erosion protection of the wall and footings is to be specified and approved by others.

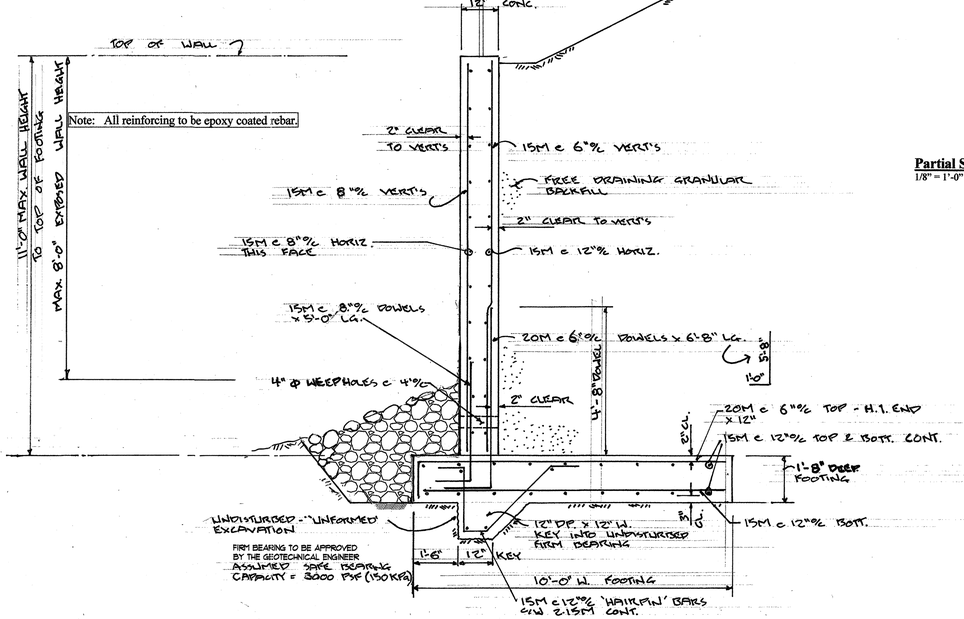
NOTE: ALL REINFORCING IN THE FOOTINGS AND WALLS IS TO BE EPOXY COATED REBAR




**Section '1'**
1/4" = 1'-0"




**Partial Site Plan – Proposed New Concrete Wall at Foreshore**
1/8" = 1'-0"




**Structural Detail for Foreshore Concrete Retaining Wall**
1/2" = 1'-0"

Note: These drawings are to be used for structural information only.
Refer to Architectural plans for all dimensions and elevations.

Reference Notes:

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
B. KLARICH
# 11092
2026-04-22
Structural Only

PERMIT TO PRACTICE # 1002588

| Revision | Description | Date |
|---|---|---|
| 5 | Updated | April 22, 2026 |
| 4 | UPDATED | MAR. 31'26 |
| 3 | PERMIT ISSUE | FEB 12'26 |
| 2 | REVIEW ISSUE | JAN 07'25 |
| 1 | | |

| | Signed | Date |
|---|---|---|
| Design: | BK / ES | JAN. '25 |
| Drawn: | E.S. | JAN. '25 |
| Checked: | BK | JAN. '25 |
| Approved: | | |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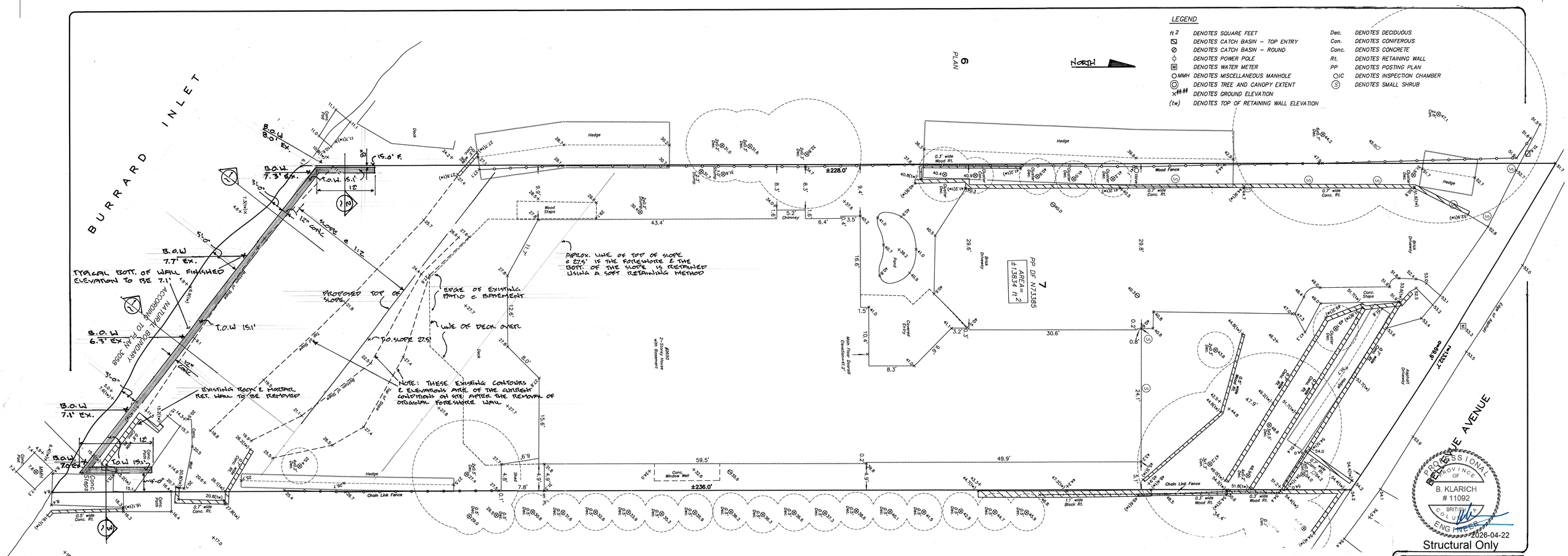
Principal Consultant:

Client:

Project Title:
New Foreshore Concrete Retaining Wall at 2650 Bellevue Ave., West Vancouver

Drawing Title:
Structural Plan and Structural Details

Job No: 25.036
Drawing No: S01 of 2
Revision: 5

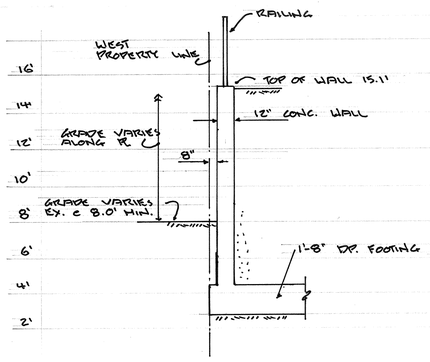



**Site Plan – Proposed New Concrete Wall at Foreshore**
1/8" = 1'-0"

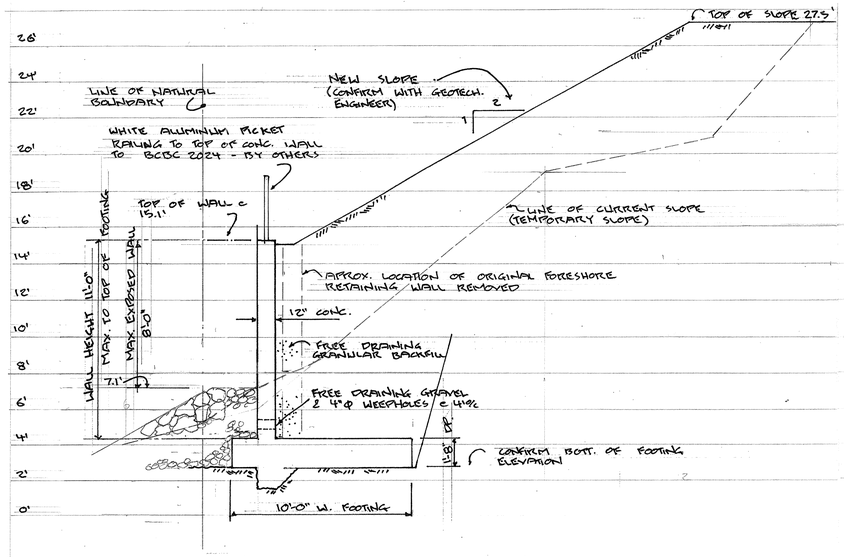
Site plan and topography information as per the topographic site plan as prepared by Target Land Surveying dated December 21, 2025.

### Zoning Variance Identification

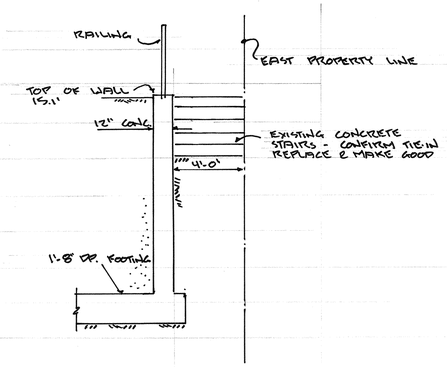
- **Section 120.22(2)(b)**
- **Section 120.22(2)(c)**
- **Section 120.22(6)**




**Section '2'**
1/4" = 1'-0"




**Section '1'**
1/4" = 1'-0"




**Section '3'**
1/4" = 1'-0"

Note: These drawings are to be used for structural information only.
Refer to Architectural plans for all dimensions and elevations.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
B. KLARICH # 11092
2026-04-22
Structural Only

PERMIT TO PRACTICE * 1002588

| Revision | Description | Date |
|---|---|---|
| 4 | | |
| 3 | Updated | April 22, 2026 |
| 2 | UPDATED | MAR. 31'26 |
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| Drawn: | ES | FEB '26 |
| Checked: | BK | FEB. '26 |
| Approved: | | |


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Principal Consultant:

Client:

Project Title:
New Foreshore Concrete Retaining Wall at 2650 Bellevue Ave., West Vancouver

Drawing Title:
Site Plan and Sections

Job No: 25.036
Drawing No: S02 of 2
Revision: 4

# Zoning Table Summary – Foreshore Retaining Wall

| Bylaw Section | Regulation | Bylaw Requirement | Proposed | Variance Required |
|---|---|---|---|---|
| s.120.22(2)(b) | Waterfront Site Line – Retaining Wall Height | Must not project above the waterfront site line measured from natural grade at a 100% (45°) slope inland from the waterfront lot line | Proposed retaining wall exceeds the permitted envelope due to steep existing grade and proximity to the waterfront lot line; maximum exposed wall height up to 8'-0" | **YES** |
| s.120.22(2)(c) | Measurement Reference | Height measured from natural grade, not finished grade or artificial build-up | Wall height measured from existing natural grade in accordance with survey and structural drawings | **YES** |
| s.120.22(6) | Location on Lot / Setback from Property Line | Structures must be located on private property | Retaining wall generally aligned with existing structure. Erosion protection shown relative to property line and constrained by limited horizontal space between wall and property line | **YES** |
| s.130.17(2)(b) | Fence & Retaining Wall Combined Height | Maximum combined height of fence and retaining wall shall not exceed 2.4 m elsewhere on the site | Proposed retaining wall with guardrail exceeds permitted combined height due to required wall height and safety railing | **YES** |