



RETAINING WALL NOTES

GENERAL

1. ALL CONCRETE WORK, INCLUDING MATERIALS, MIXING, PLACING, CURING AND FORMWORK SHALL BE IN ACCORDANCE WITH CSA A23.1.
2. TESTING OF CONCRETE AND CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH CSA A23.2.
3. FALSEWORK AND FORMWORK SHALL BE IN ACCORDANCE WITH CSA S269.1 (R2019).
4. UNLESS NOTED OTHERWISE, ALL EXPOSED CORNERS SHALL BE FINISHED WITH 20mm CHAMFER.

REINFORCING STEEL

1. REINFORCING STEEL SHALL BE DEFORMED STEEL BARS IN ACCORDANCE WITH CSA G30.18, GRADE 400R.
2. ALL REINFORCING STEEL SHALL BE DETAILED, FABRICATED, PLACED AND SUPPORTED IN ACCORDANCE WITH THE REINFORCING STEEL INSTITUTE OF CANADA MANUAL OF STANDARD PRACTICE AND CSA A23.3, UNLESS NOTED OTHERWISE.
3. UNLESS INDICATED OTHERWISE, REINFORCING TO BE EXTENDED INTO ADJACENT CONCRETE ELEMENTS AND DEVELOPED WITH A STANDARD HOOK OR LAP SPLICE.
4. PROVIDE DOWELS TO MATCH REINFORCING IN ALL PIERS, COLUMNS, WALLS AND CURBS. PROVIDE CLASS 'B' TENSION LAP SPLICE UNLESS NOTED OTHERWISE AND FULLY EMBED. / DEVELOP REINFORCING.
5. REINFORCING SHALL BE EFFECTIVELY CONTINUOUS AT ALL CORNERS AND INTERSECTIONS. HOOK AND SPLICE AS REQUIRED.
6. STANDARD HOOKS SHALL BE USED UNLESS NOTED OTHERWISE.
7. SPLICE REINFORCING AS INDICATED ON STRUCTURAL DRAWINGS OR OTHERWISE APPROVED BY THE STRUCTURAL ENGINEER.

CONCRETE COVER

1. CONCRETE COVER TO REINFORCING BARS SHALL BE AS FOLLOWS OR AS NOTED ON THE DRAWINGS (WHICHEVER IS GREATER):
FOUNDATIONS - CAST AGAINST SOIL: 75 mm
FOUNDATIONS - NOT CAST AGAINST SOIL: 50 mm
WALLS: 40 mm
2. MAINTAIN SPECIFIED CONCRETE COVER AT ALL SLOPES, DEPRESSIONS, CORNERS AND CHANGES IN ELEVATION / THICKNESS.

CONCRETE MIXES

1. UNLESS NOTED OTHERWISE, PROPORTION NORMAL DENSITY CONCRETE IN ACCORDANCE WITH CSA A23.1 TO ACHIEVE THE FOLLOWING PERFORMANCE CHARACTERISTICS:

| LOCATION | 28-DAY STRENGTH | EXPOSURE CLASS | ENTRAINED AIR CONTENT |
|-----------------|-----------------|----------------|-----------------------|
| FOOTINGS | 25 MPa | F-2 | - |
| RETAINING WALLS | 25 MPa | F-2 | 5 - 8% |

2. CONCRETE STRENGTHS NOTED ON SPECIFIC PLANS OR SCHEDULES TAKE PRECEDENCE OVER ABOVE VALUES.
3. CONCRETE SHALL BE TYPE GU OR GU_b PORTLAND CEMENT UNLESS SPECIFIED OTHERWISE.
4. IF BLENDED PORTLAND CEMENT / SLAG IS USED, SLAG CONTENT SHALL NOT BE MORE THAN 25% OF TOTAL MASS OF CEMENT.
5. USE OF CALCIUM CHLORIDE IS NOT PERMITTED.
6. SUBMIT CONCRETE MIX DESIGNS FOR REVIEW.

DESIGN LOADS

GROUND LEVEL SURCHARGE (LIVE LOAD): 4.8 kPa
ACTIVE SOIL PRESSURE COEFFICIENT (K_a): 0.3
UNIT WEIGHT OF BACKFILL: 22 kN-m³

STRUCTURAL DESIGN OF THE RETAINING WALL IS IN ACCORDANCE WITH THE ONTARIO BUILDING CODE (2024) AS PER LIMIT STATES DESIGN.

Allison Hamlin

ALLISON HAMLIN
MANAGER, DEVELOPMENT REVIEW ALL WARDS
PLANNING, DEVELOPMENT & BUILDING SERVICES
DEPARTMENT, CITY OF OTTAWA

APPROVED

By Allison Hamlin at 3:52 pm, Apr 22, 2025



ISSUED FOR SITE PLAN APPROVAL

DESIGNED BY: C. DAVIES

DRAWN BY: A. WITTICH

START DATE: 25 03 11

D+M PROJECT #: 24-064

SK1



D+M Structural Ltd.
110-333 Preston Street, Ottawa, ON, K1S 5N4
Phone: (613) 651-9490

PROJECT NAME AND ADDRESS:

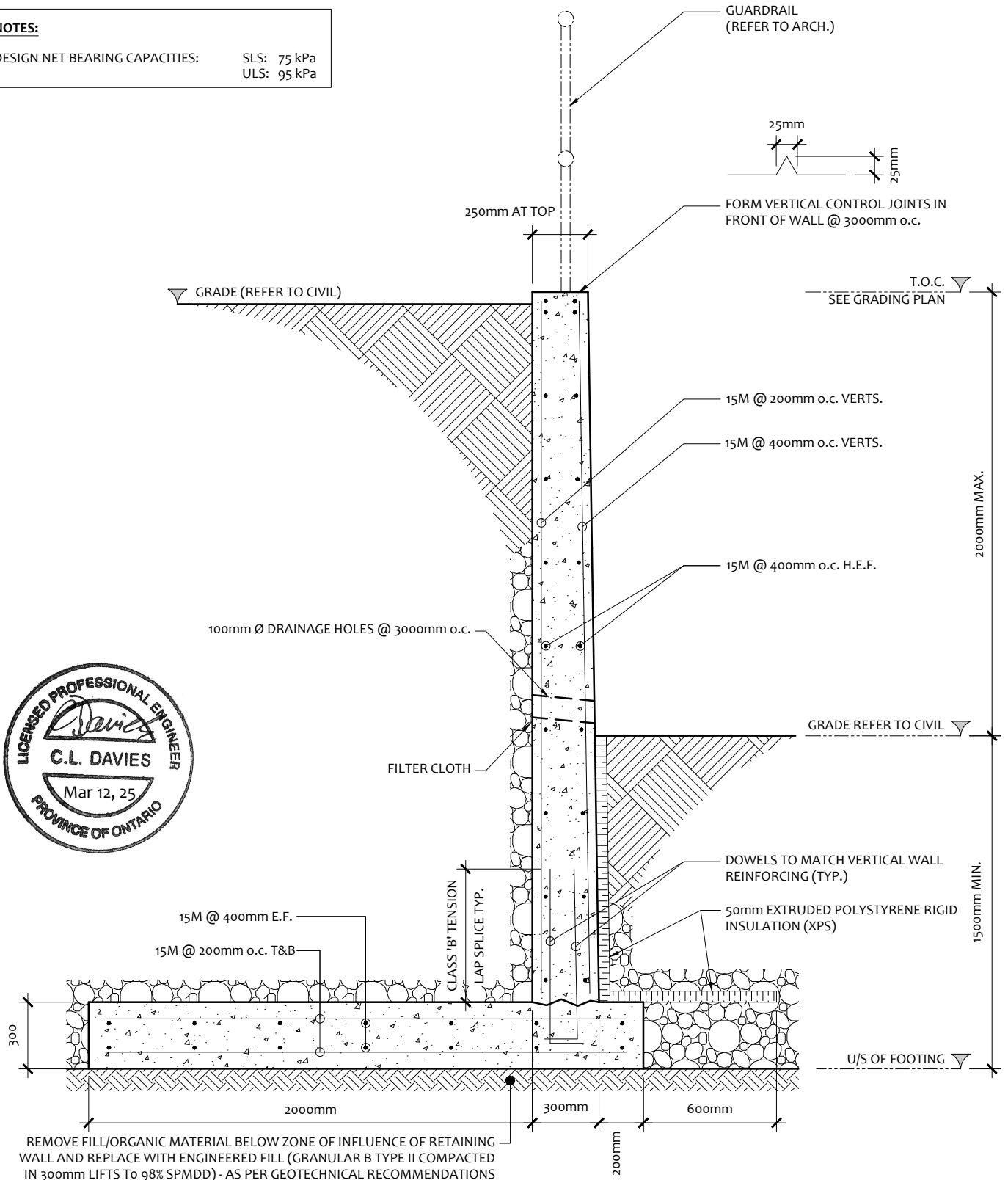
EAST URBAN ELEMENTARY SCHOOL
700 SPRING VALLEY DRIVE, OTTAWA.

DRAWING NAME:

NORTHERN RETAINING WALL - GENERAL NOTES

NOTES:

DESIGN NET BEARING CAPACITIES: SLS: 75 kPa
ULS: 95 kPa



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SECTION: RETAINING WALL

SK2

SCALE: 1:25



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PROJECT NAME AND ADDRESS:

EAST URBAN ELEMENTARY SCHOOL
700 SPRING VALLEY DRIVE, OTTAWA.

DRAWING NAME:

NORTHERN RETAINING WALL - TYPICAL SECTION

ISSUED FOR SITE PLAN APPROVAL

DESIGNED BY: C. DAVIES

DRAWN BY: A. WITTICH

START DATE: 25 03 11

D+M PROJECT #: 24-064

SK2