

**APPROVED**  
By Adam Brown at 8:18 am, Aug 25, 2021



**ADAM BROWN**  
MANAGER, DEVELOPMENT REVIEW - RURAL  
PLANNING, INFRASTRUCTURE & ECONOMIC  
DEVELOPMENT DEPARTMENT, CITY OF OTTAWA

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE LATEST VERSION OF GRADING PLAN C-3 AND RETAINING WALLS C-4 PREPARED BY D.B. GRAY ENGINEERING INC.



REVISION	JULY 05, 2021
REVISION	MAY 17, 2021
REVISED FOR SITE PLAN CONTROL APPROVAL APPLICATION	MARCH 11, 2021
ISSUE FOR PERMIT	MAY 27, 2020
REVISION	DATE

**LAMPKIN**  
Structural Services Ltd.

34 - 5330 CANOTEK ROAD  
OTTAWA, ONTARIO K1J 9C4  
PHONE: (613) 745-6437

CLIENT  
NIVO DEVELOPMENTS INC.

PROJECT  
1164-1166 HIGCROFT DRIVE

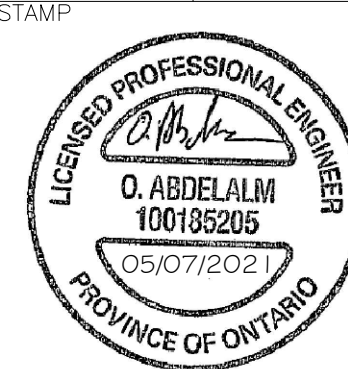
OTTAWA ONTARIO

TITLE  
NEW RETAINING WALL

PROJECT # 20-14289 DRAWN BY J.R.

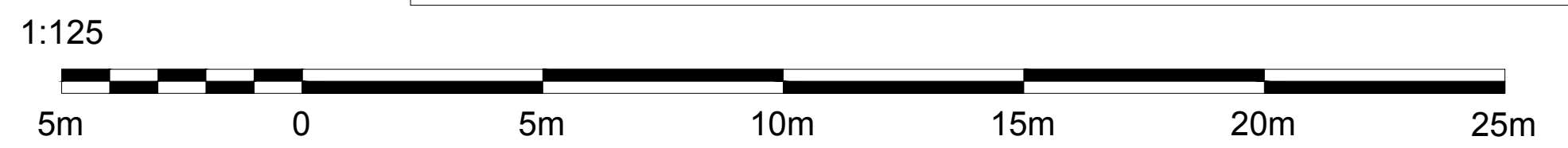
SCALE AS NOTED DATE 05/07/2021

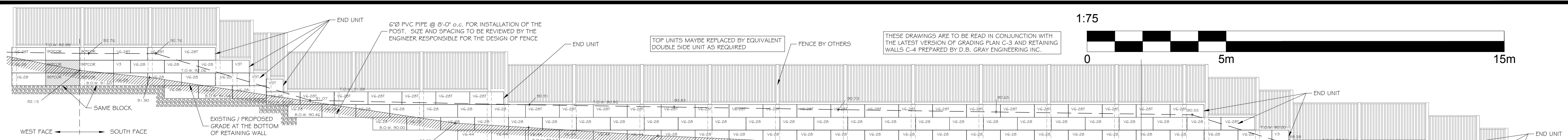
DRAWING #



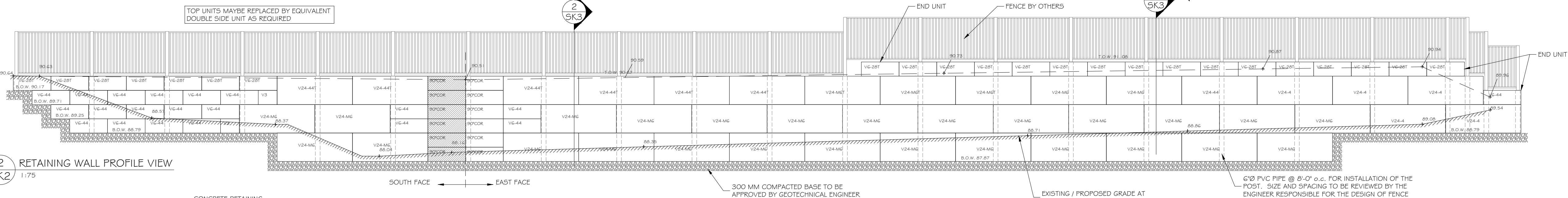
SKI

1 SKI 1:125  
RETAINING WALL LOCATION PLAN

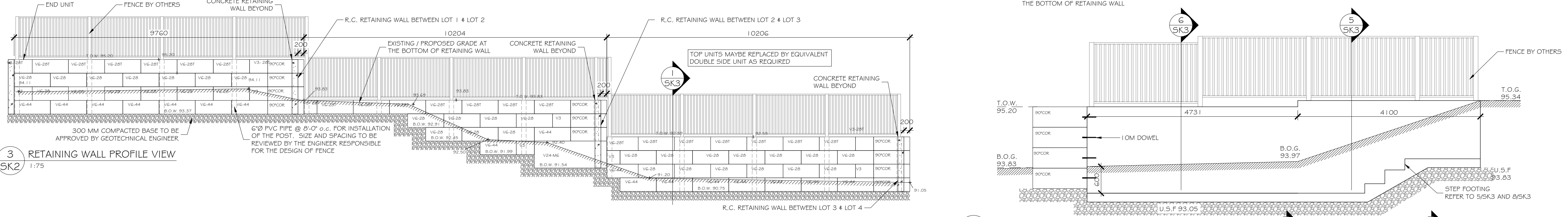




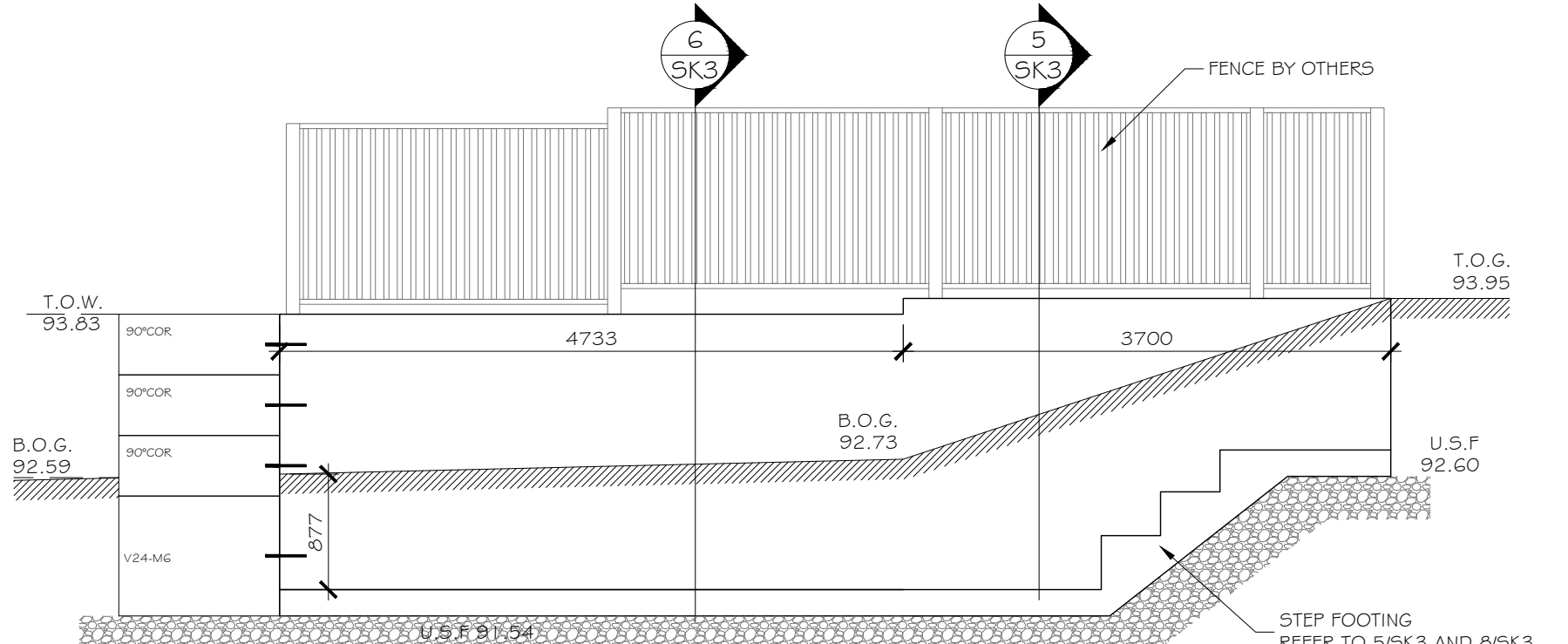
1 SK2 1:75



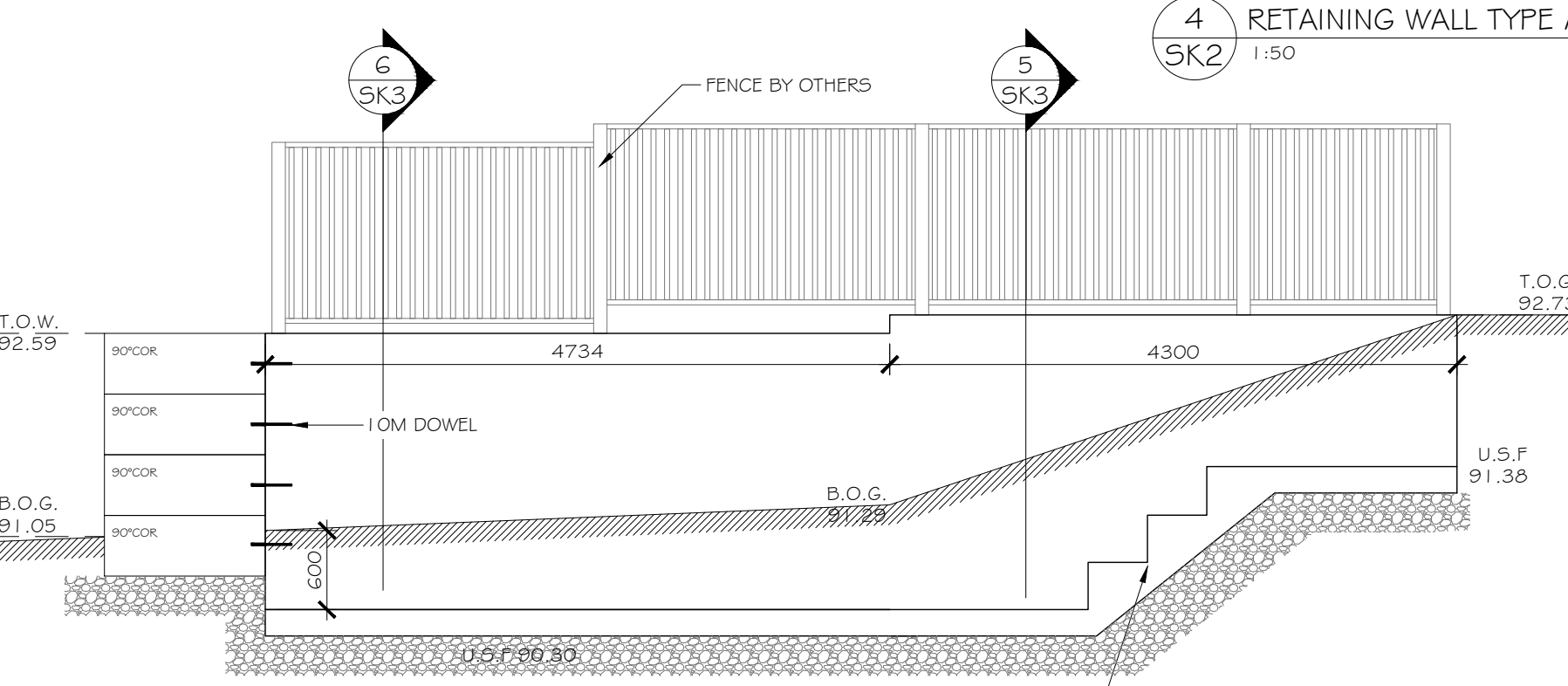
2 SK2 1:75



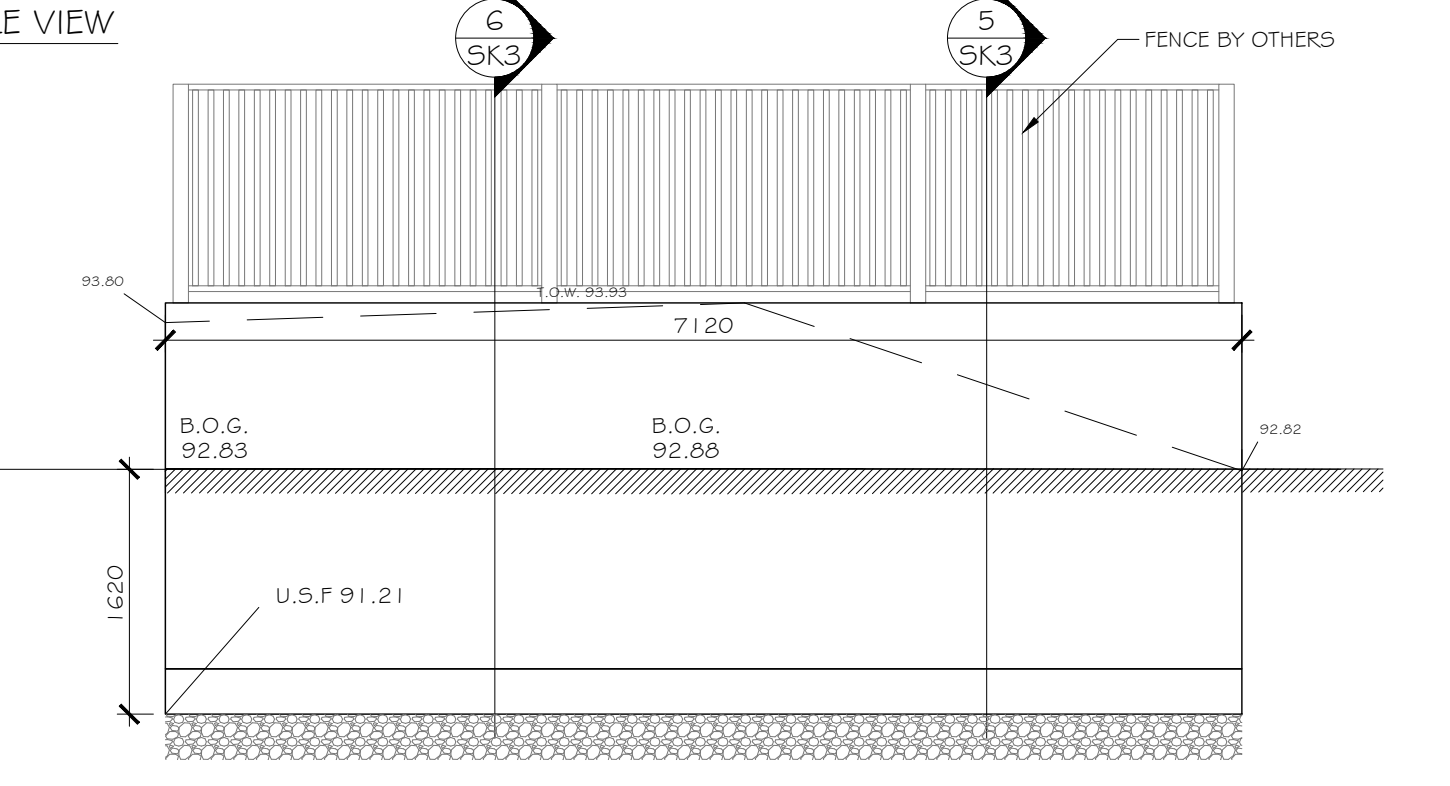
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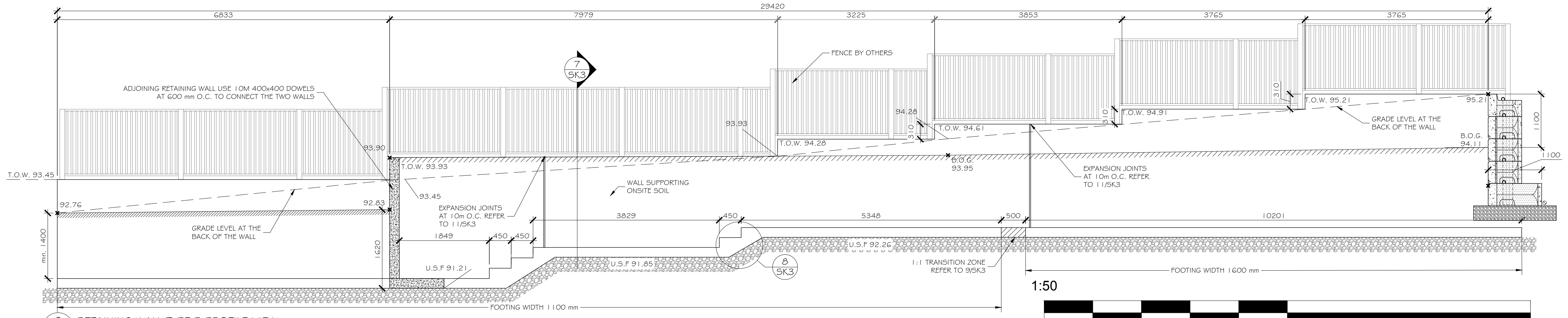
5 SK2 1:50



6 SK2 1:50



7 SK2 1:50



8 SK2 1:50

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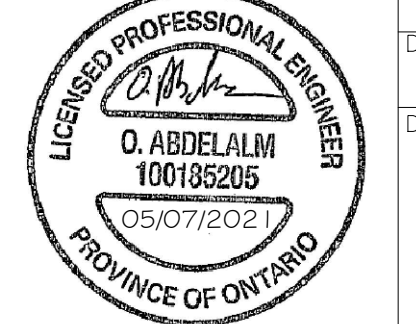
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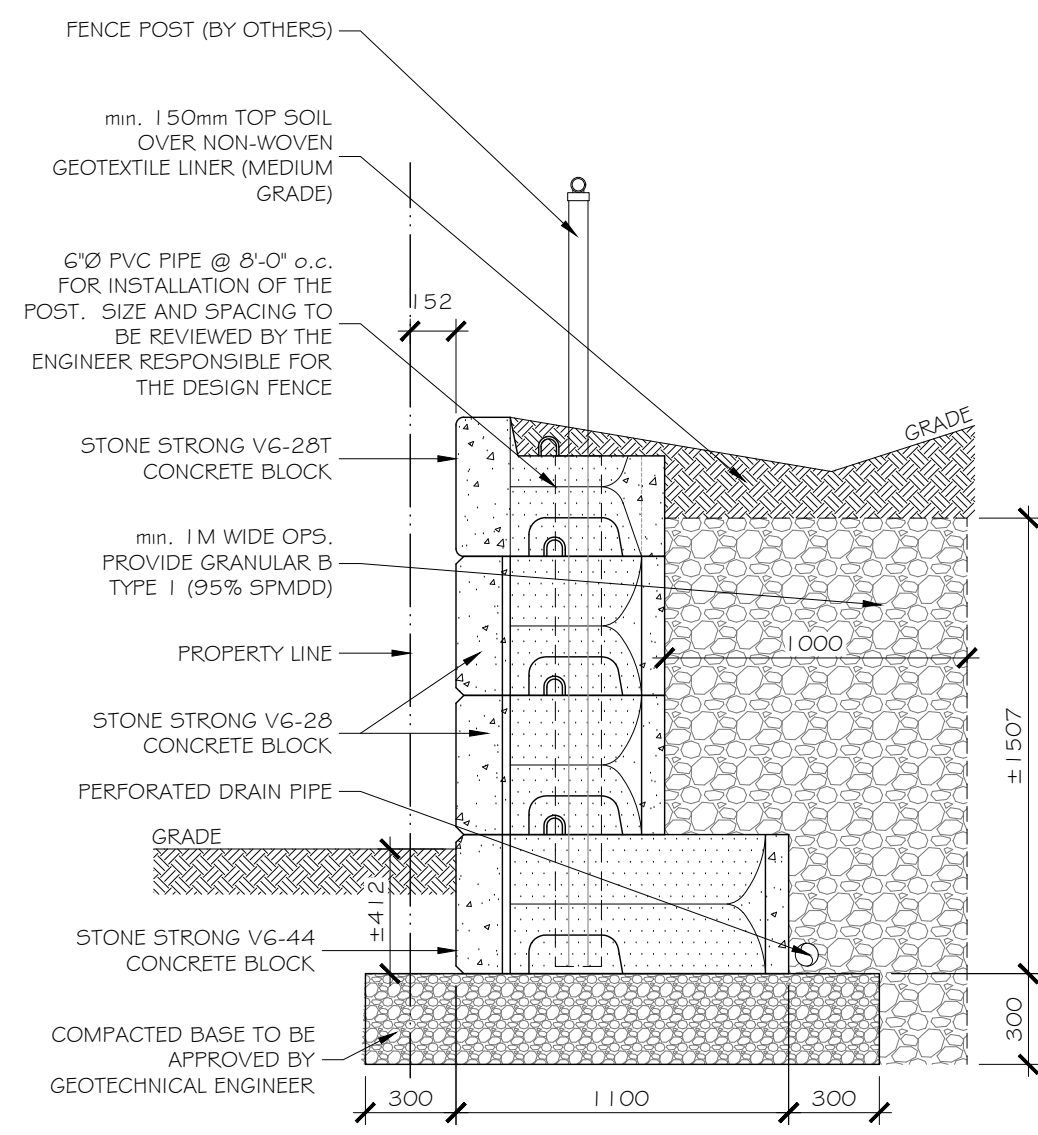
PROJECT # 20-14289  
DRAWN BY R.L.  
J.R.

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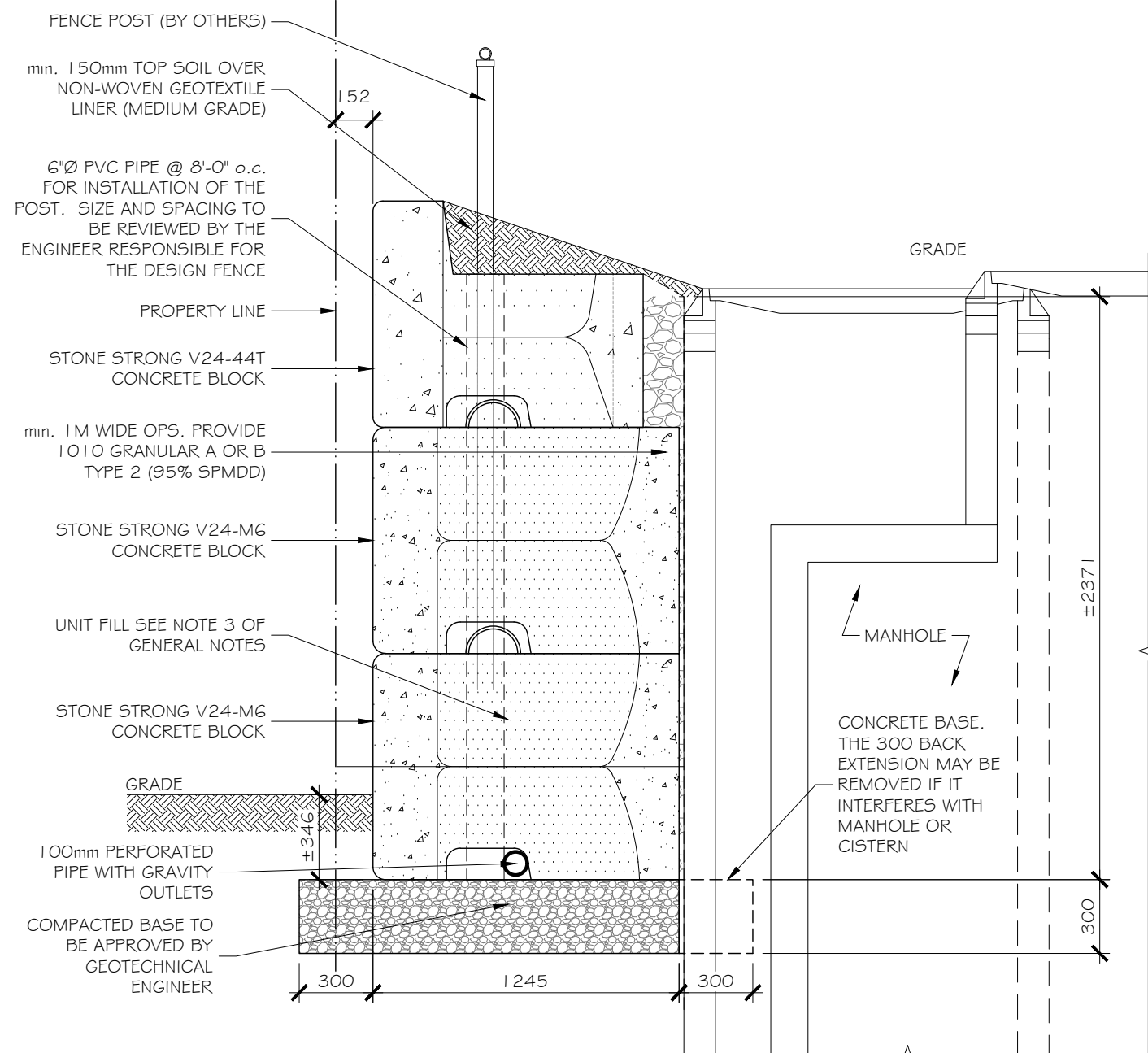


SK2

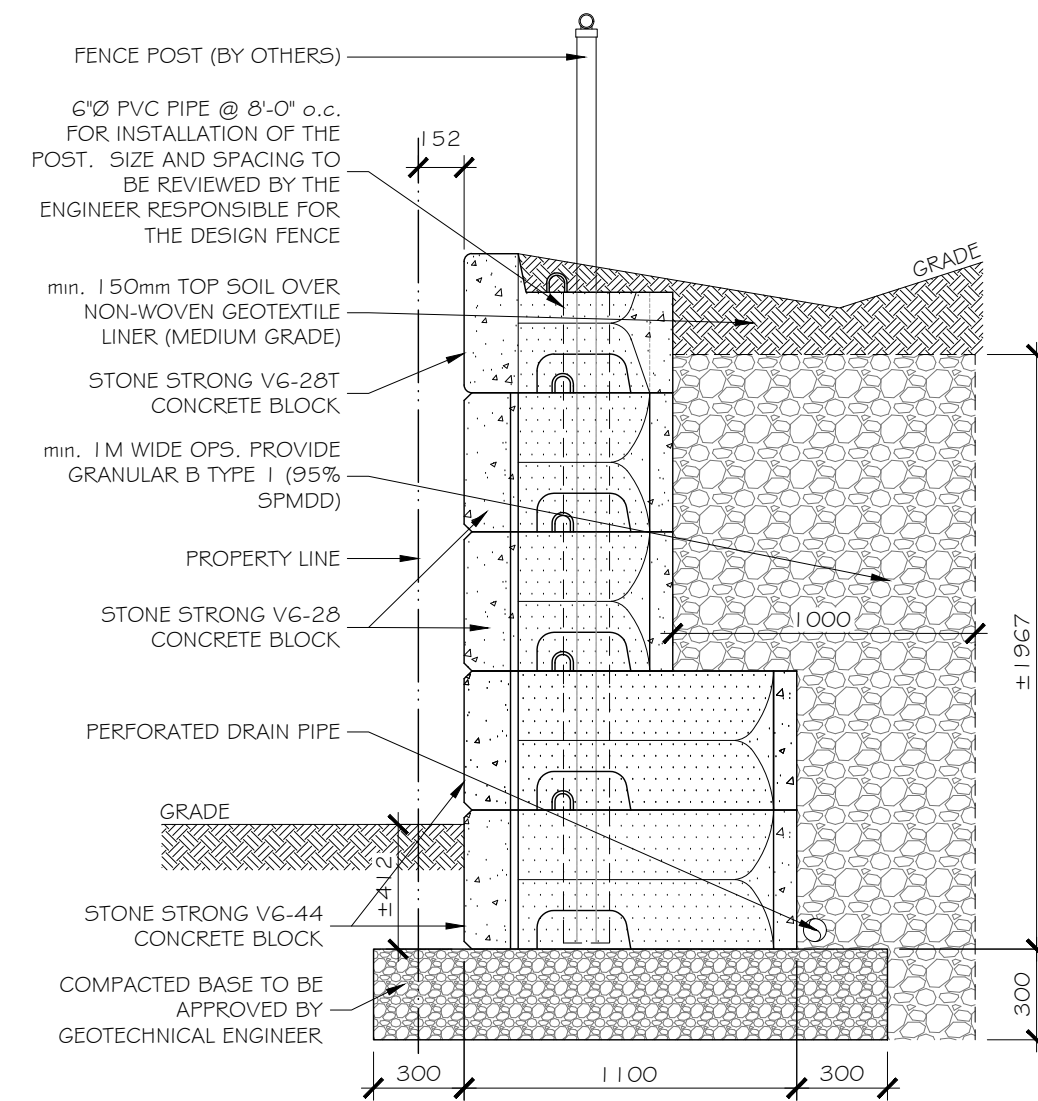
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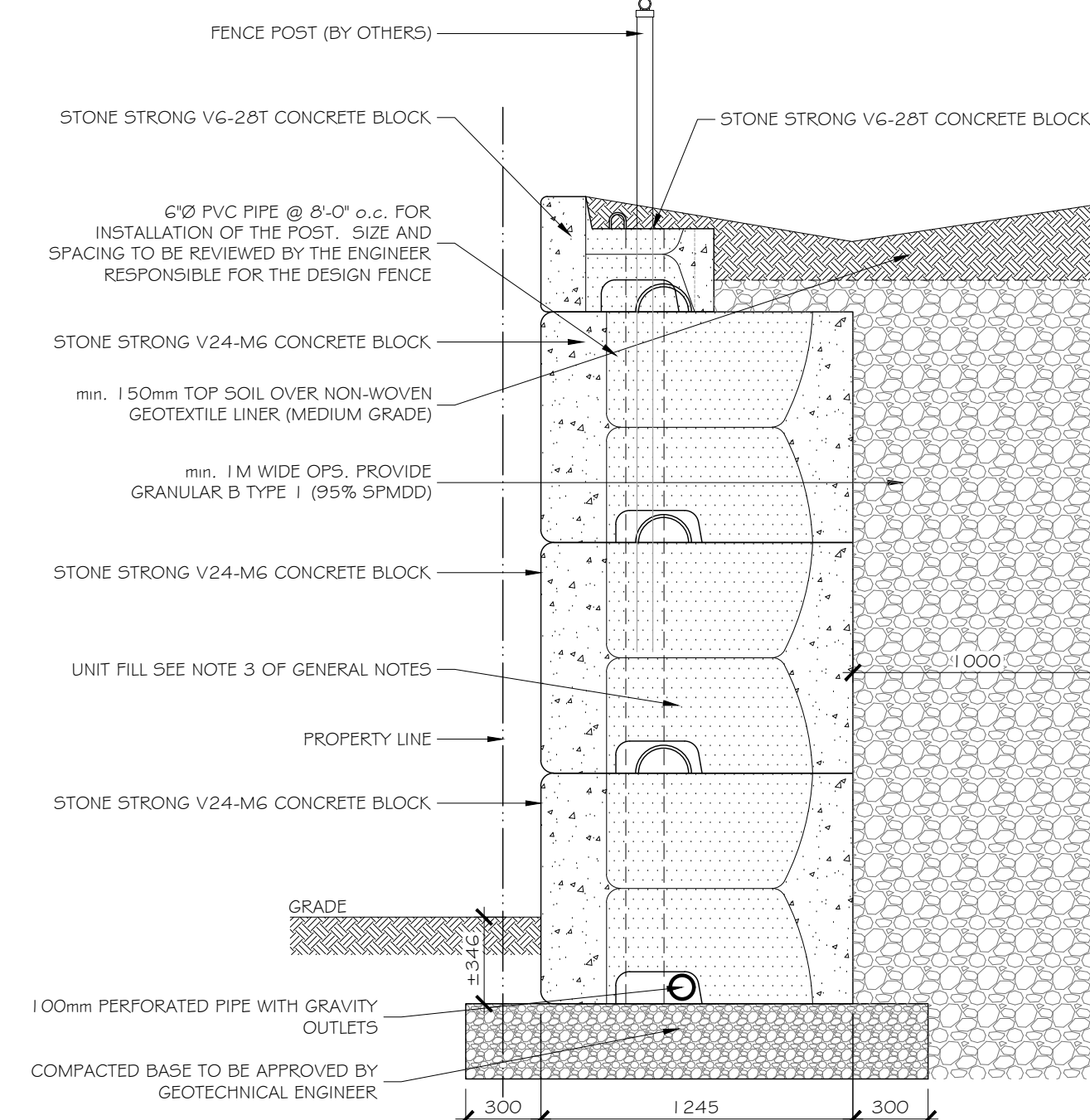
1 STONE STRONG RETAINING WALL CROSS SECTION  
SK3 1:25



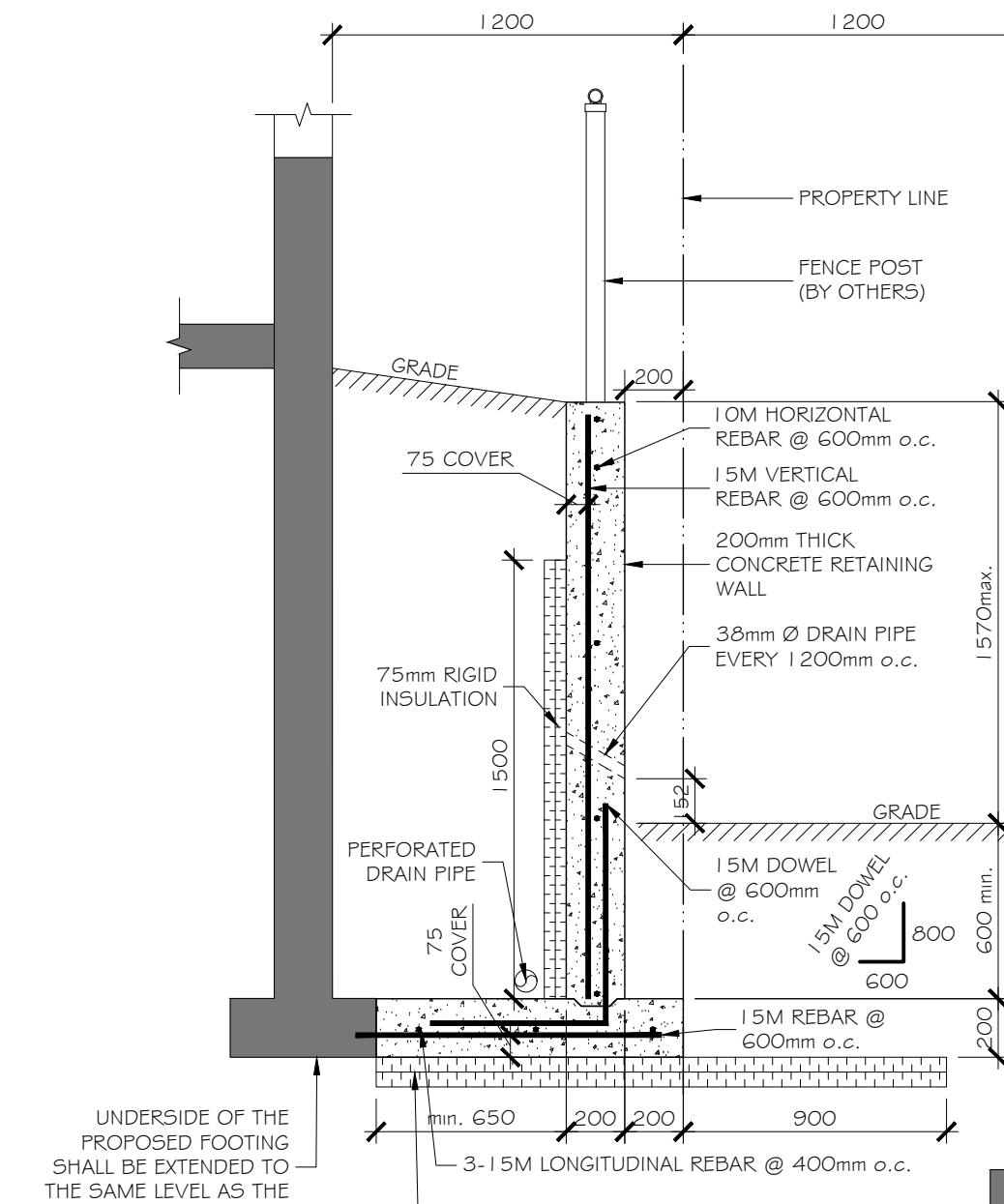
2 STONE STRONG RETAINING WALL CROSS SECTION  
SK3 1:25



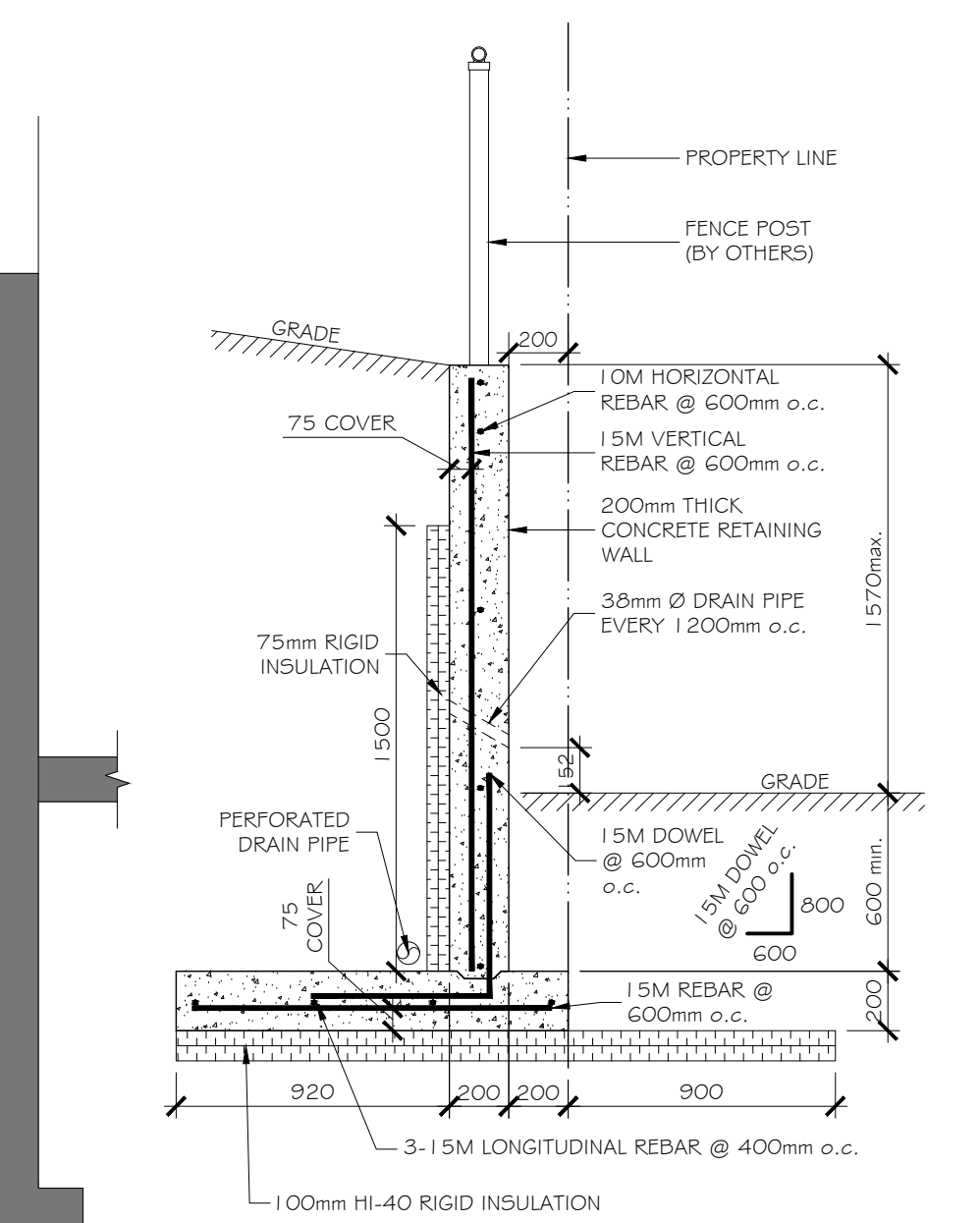
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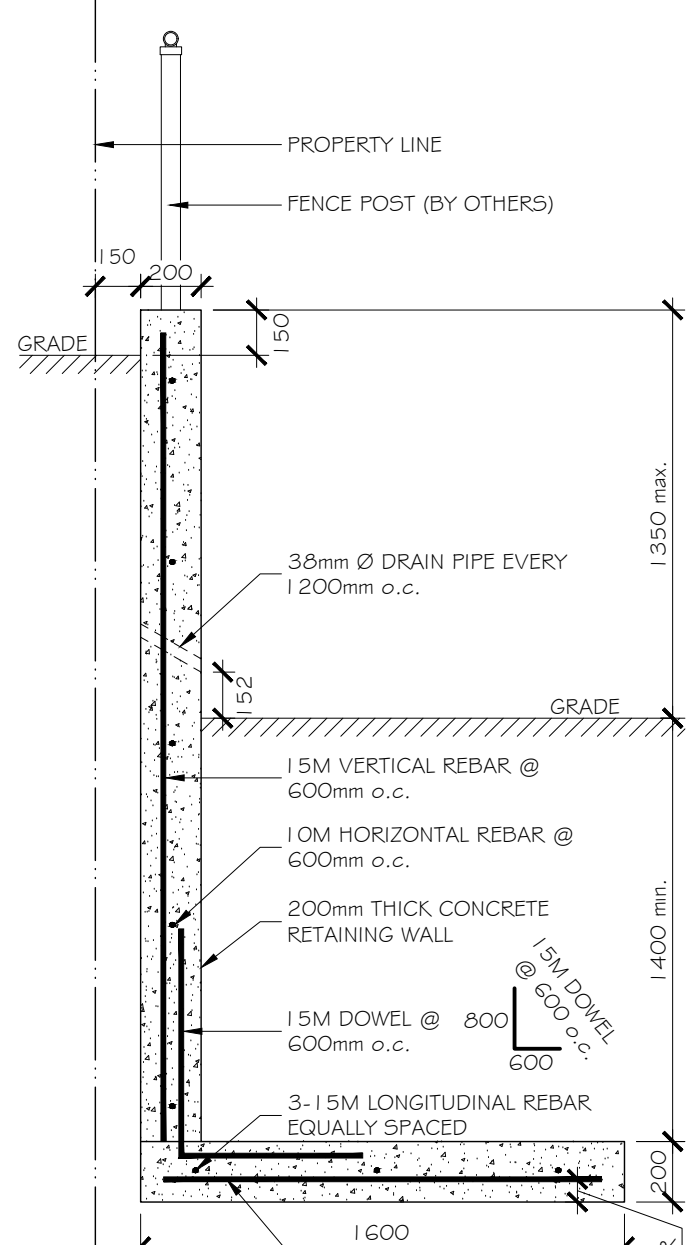
4 STONE WALL CROSSING RETAINING WALL CROSS SECTION  
SK3 1:25



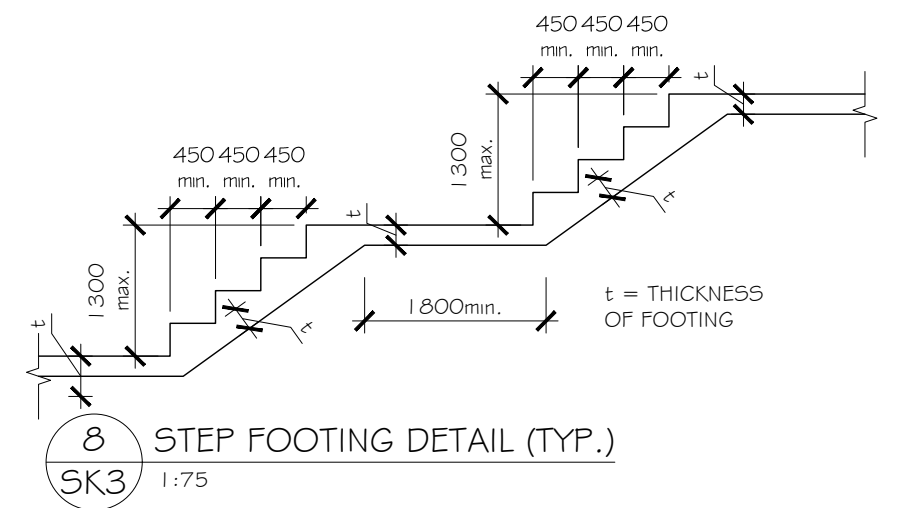
5 R.C. RETAINING WALL TYPE A #1  
SK3 1:25



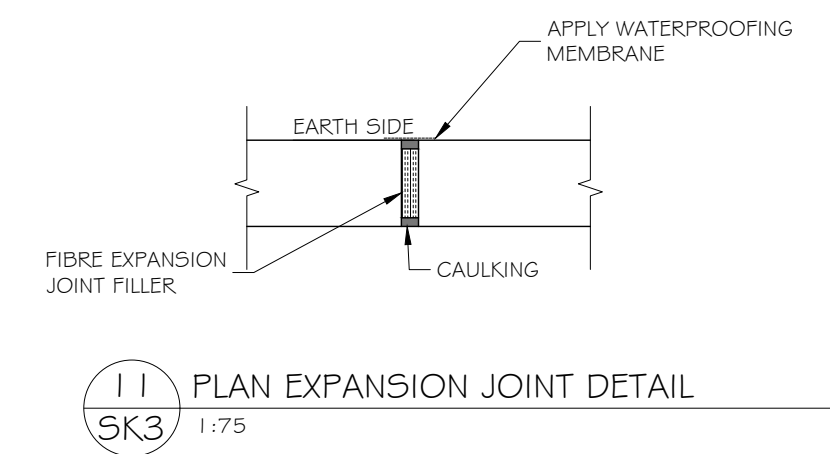
6 R.C. RETAINING WALL TYPE A #2  
SK3 1:25



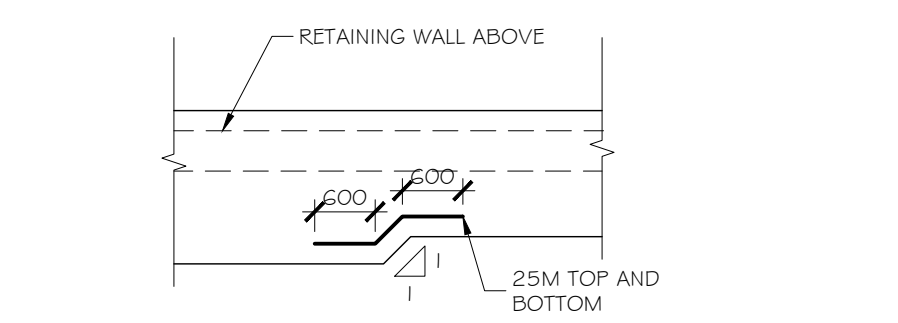
7 R.C. RETAINING WALL TYPE B  
SK3 1:25



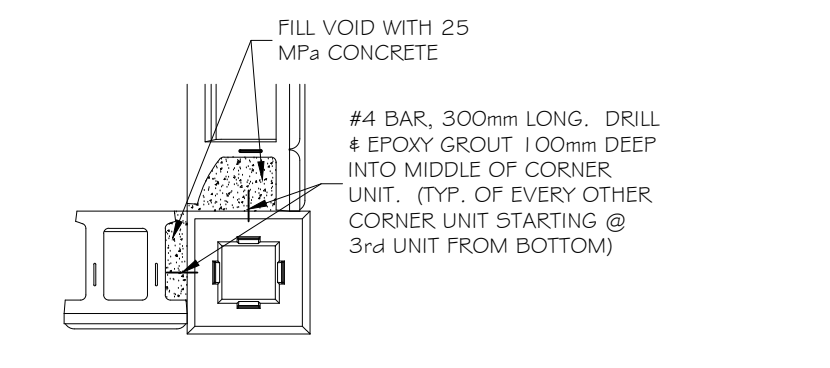
8 STEP FOOTING DETAIL (TYP.)  
SK3 1:75



11 PLAN EXPANSION JOINT DETAIL  
SK3 1:75



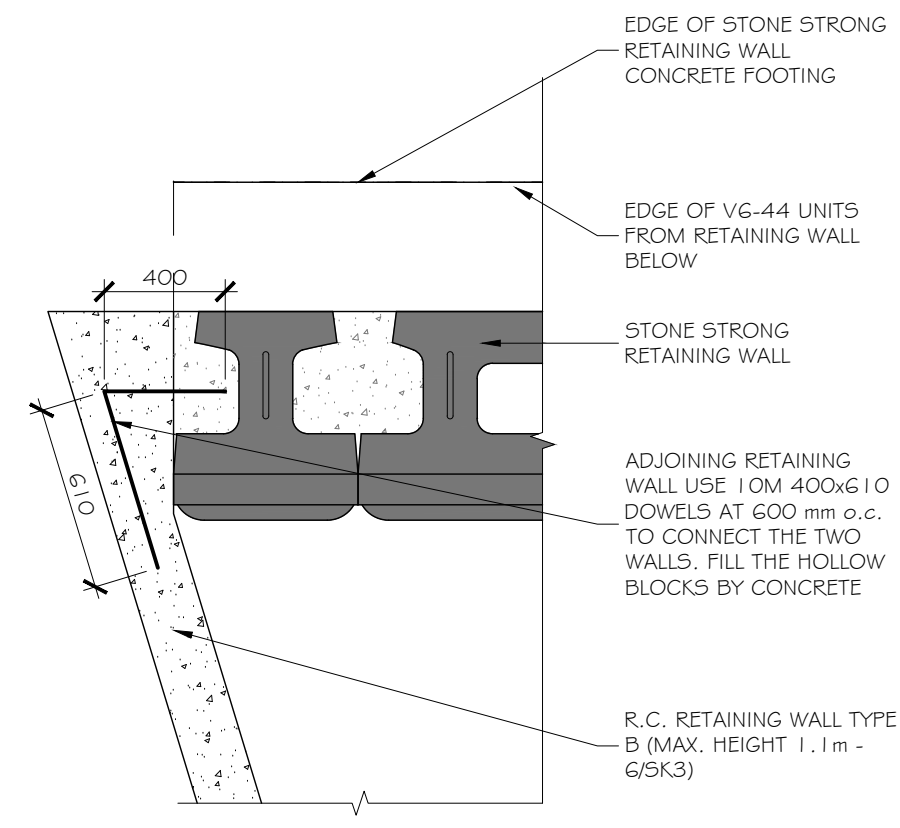
9 FOOTING WIDTH TRANSITION DETAIL PLAN (TYP.)  
SK3 1:75



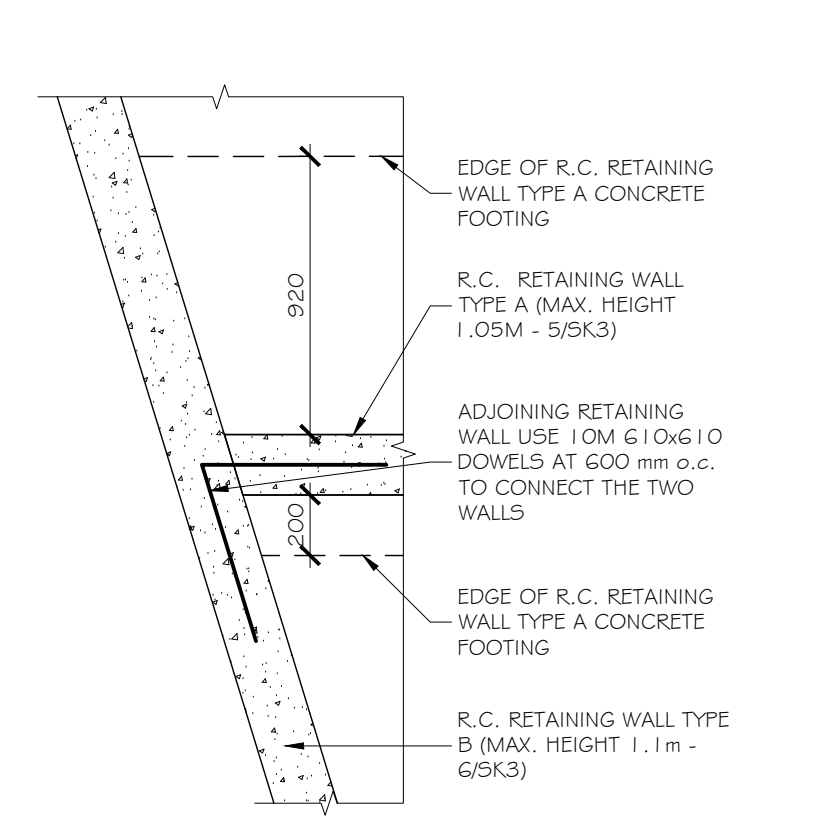
10 90° CORNER TIEBACK  
SK3 N.T.S.

 STONE STRONG V3-44 UNIT	 STONE STRONG V6-28 TOP UNIT	 STONE STRONG V24-44 UNIT	 STONE STRONG V24-M6 UNIT	 STONE STRONG V24-M6 UNIT
 STONE STRONG V6-28 UNIT	 STONE STRONG V3-28 TOP UNIT	 STONE STRONG V3-28 TOP UNIT	 STONE STRONG V6-44 UNIT	 90° CORNER UNIT

11 INDIVIDUAL UNITS VIEW  
SK3 N.T.S.



12 R.C. RETAINING WALL TO STONE STRONG RETAINING WALL CONNECTION  
SK3 1:25



13 R.C. RETAINING WALL TO R.C. RETAINING WALL CONNECTION  
SK3 1:25

- GENERAL NOTES:**
- ANY DEVIATION FROM CONDITIONS SHOWN ON THESE DRAWINGS, SHALL BE REPORTED TO THE ENGINEER.
  - DESIGN LOADS:
    - SOIL PRESSURE  $K_p = 3.0$
    - $K_a = .33$
    - $\delta = 20kN/m^2$
    - SURCHARGE ( $q$ ) = 3.6 kPa
    - LATERAL LOAD ON FENCE (LL) = 0.75 kNm
    - FACTOR OF SAFETY: 1.5
  - MATERIALS:
    - CONCRETE STRENGTH AT 28 DAYS TO BE 28 MPa w/ 5% TO 8% AIR ENTRAINMENT.
    - REINFORCING STEEL TO BE DEFORMED TYPE  $f_y = 400$  MPa
    - UNIT FILL SHALL BE CLEAN COURSE GRANULAR MATERIAL. UNIT FILL SHALL FILL CAVITIES WITHIN AND BETWEEN THE UNITS
    - STONE STRING (S.S.) BLOCKS AS SHOWN IN SECTION DETAILS.
  - ALL WORK TO BE CONDUCTED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE (2012).
  - ALL CONCRETE WORK TO BE CONDUCTED IN ACCORDANCE WITH CSA A23.3-19.
  - SOIL BEARING TO BE 90kPa AS PER GEOTECHNICAL REPORT DATED MAY. 31, 2021 BY LRL ASSOCIATES LTD.
  - SITE REVIEW OF STRUCTURAL ITEMS, AS NOTED ON THESE DRAWINGS, SHALL BE COORDINATED WITH LAMPKIN STRUCTURAL SERVICES LTD. THROUGH THE DURATION OF THE PROJECT.
  - PROVIDE 75mm CONCRETE COVER FOR REBAR
  - min. LAP LENGTH TO BE 800mm FOR 15M & 500mm FOR 10M.

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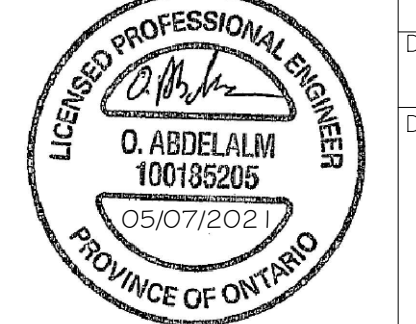
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SK3