

GENERAL NOTES

DESIGN PROVISIONS:

1. THE DESIGN SHOWN ON THESE DRAWINGS IS FOR THE RECON PRECAST CONCRETE BLOCK WALL SYSTEM ONLY. ALL OTHER COMPONENTS, INCLUDING BACKFILL, DRAINAGE AND LANDSCAPING TO BE DESIGNED BY OTHERS. THE FOLLOWING EFFECTIVE STRENGTH PARAMETERS WERE ASSUMED IN THE PREPARATION OF THE STRUCTURAL CALCULATIONS FOR THE RECON RETAINING WALL SYSTEM:

	ϕ	c	γ	SOIL TYPE
RETAINED SOIL (WALL 1)	32°	0 PSF	22 kN/m ³	GRANULAR BACKFILL
FOUNDATION SOIL (BELOW LEVELING PAD)	30°	0 PSF	18 kN/m ³	ONSITE LEAN CLAY
LEVELING PAD	40°	0 PSF	21 kN/m ³	CRUSHED STONE

SOILS INFORMATION OBTAINED FROM SLOPE STABILITY ASSESSMENT REPORT PREPARED BY MOREY ASSOCIATES LIMITED DATED MAY 7, 2021. FOUNDATION SOILS SHALL BE EVALUATED BY A GEOTECHNICAL ENGINEER OR OWNERS REPRESENTATIVE TO ENSURE THAT BEARING SOILS MEET OR EXCEED THE DESIGN CONDITIONS OR ASSUMPTIONS.

2. THE WALLS ARE DESIGNED TO MEET THE FOLLOWING DESIGN PARAMETERS AND MAXIMUM SURCHARGE LOADINGS:

UNIT TYPE:	RECON SERIES 50
REINFORCEMENT:	GRAVITY (WALL 1)
DESIGN METHOD:	NCMA 2009 (3RD EDITION)
LIVE LOAD:	12kPa (WALL 1)
DEAD LOAD:	NONE
BACK SLOPE:	NONE
SEISMIC:	0.32G
HYDROSTATIC:	N/A (DRAINAGE PROVIDED)

3. LEVELING PAD TO BEAR ON UNDISTURBED NATIVE MATERIAL WITH MINIMUM ALLOWABLE BEARING STRENGTH OF 100 kPa. OWNER TO RETAIN SERVICES OF A GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFORMANCE OF BEARING PRIOR TO PLACEMENT OF LEVELING PAD.

4. WALL 1 IS DESIGNED AS A GRAVITY WALL.

5. WALL 1 SHALL BE BACKFILLED AT A 1H:1V EXTENDING OFF THE BACK OF THE BOTTOM UNIT WITH 100% FREE DRAINING, WASHED, ANGULAR CRUSHED STONE.

6. SEE MANUFACTURER INFORMATION FOR ADDITIONAL CONSTRUCTION DETAILS FOR THE RECON RETAINING WALL SYSTEM. THE MANUFACTURER INFORMATION SHALL ACCOMPANY THE CONSTRUCTION PLANS.

7. UPON EXCAVATION, WHERE UNSUITABLE SOILS ARE FOUND, SUBCUT TO DEPTH "D" AS REQUIRED BY THE ONSITE GEOTECHNICAL ENGINEER AND REPLACE WITH SUITABLE COMPACTED STRUCTURAL FILL TO ACHIEVE THE REQUIRED BEARING CAPACITY. THE FILL SHALL BE INSTALLED AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

8. APPROXIMATE LIMITS OF EXCAVATION VARIES WHERE SUBCUT IS REQUIRED. ACTUAL LIMITS AND SIDE SLOPES SHALL BE DETERMINED BY OSHA REGULATIONS AND MATCH FIELD CONDITIONS AS DETERMINED BY THE CONTRACTOR.

9. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL PROVINCIAL AND CITY REGULATIONS AND CODES AS WELL AS OSHA STANDARDS.

10. THE WALLS SHALL BE CONSTRUCTED WITH RECON UNITS USING 3.6° BATTER.

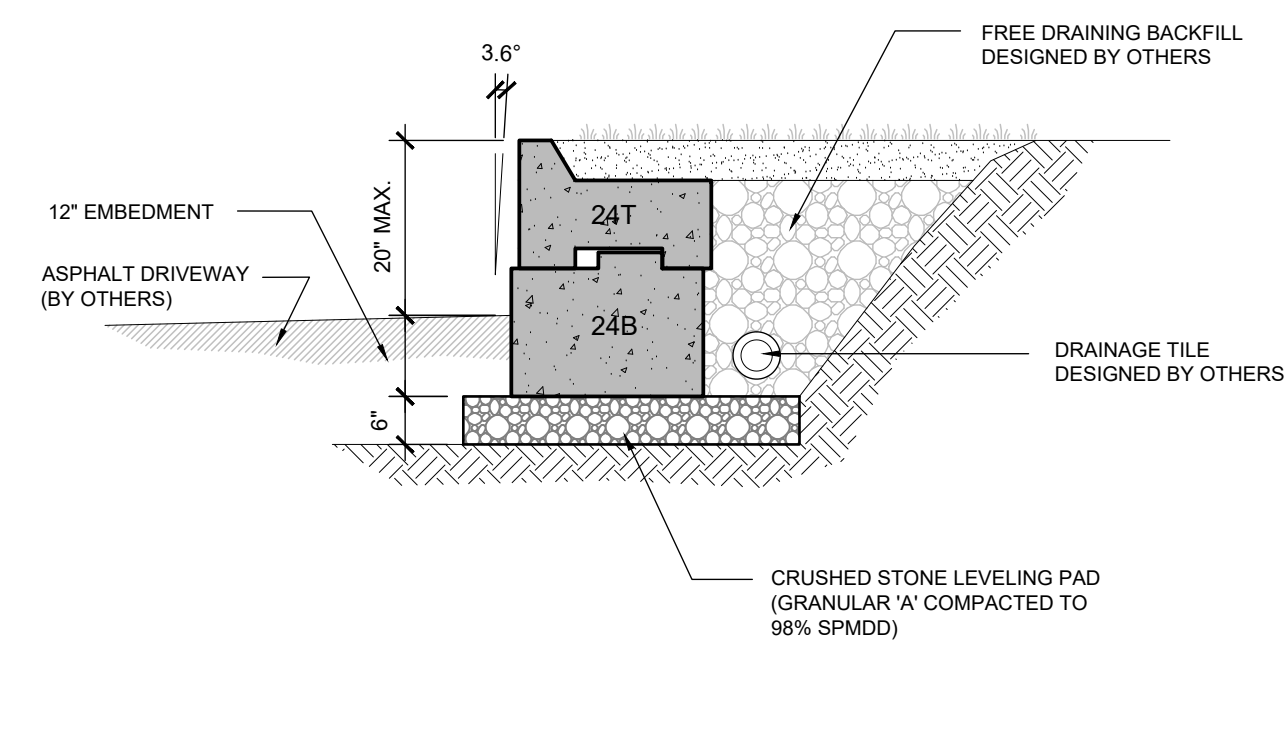
11. INSPECT EXCAVATION SLOPES FOR ACTIVE SEEPAGE AND PLACE ADDITIONAL DRAINS WHERE SEEPAGE OCCURS.

12. DO NOT BRING HEAVY COMPACTION OR PAVING EQUIPMENT WITHIN 3' OF THE BACK OF THE RECON RETAINING WALL.

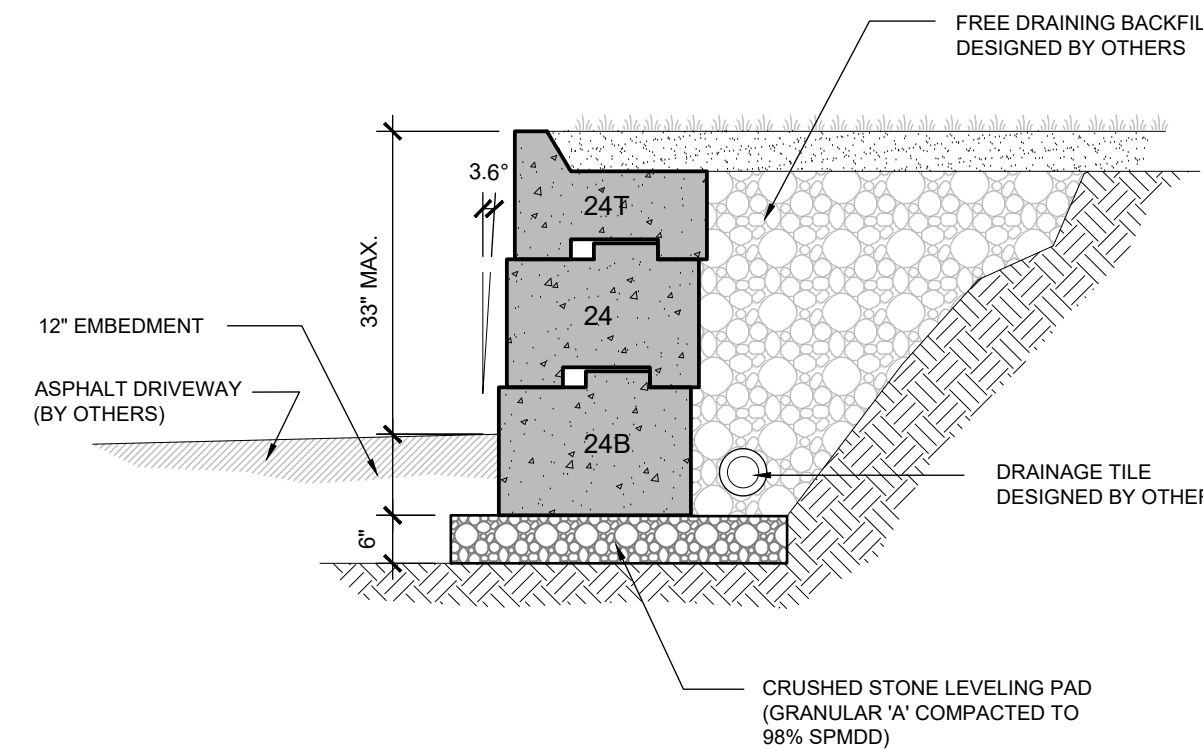
13. THE LEVELING PAD SHALL BE CONSTRUCTED WITH A MINIMUM 6" OF CRUSHED STONE (GRANULAR 'A' COMPACTED TO 98% SPMD).

14. RECON UNITS:

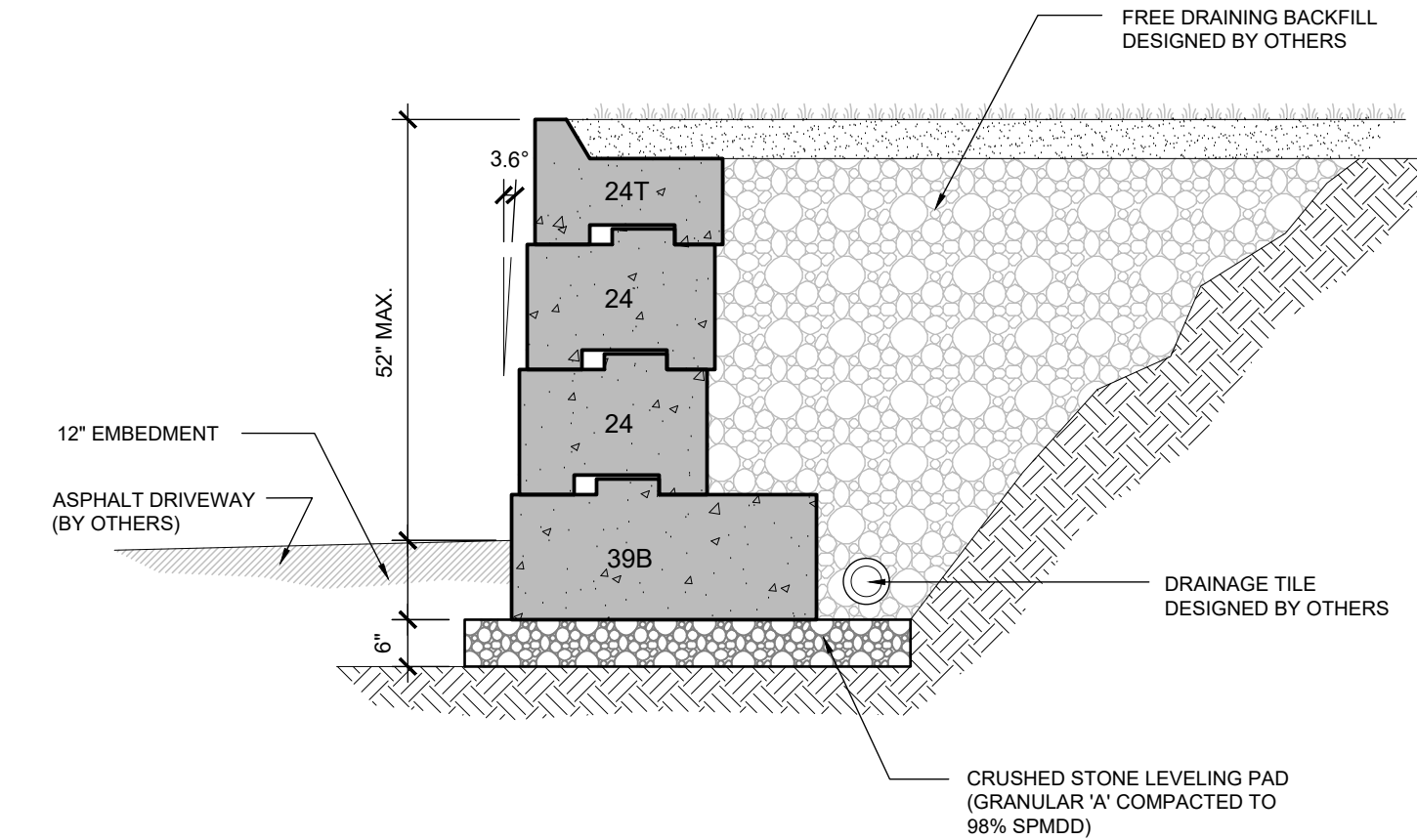
- A. RECON WALL UNITS HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 27.5 MPa. STANDARD WEIGHT CONCRETE SHALL HAVE A 6% AIR ENTRAINMENT BY VOLUME. EIGHT OF CONCRETE SHALL BE 2320 kg/m³.
- B. TEXTURE ON THE FACE OF THE BLOCK SHALL BE WEATHERED EDGE.



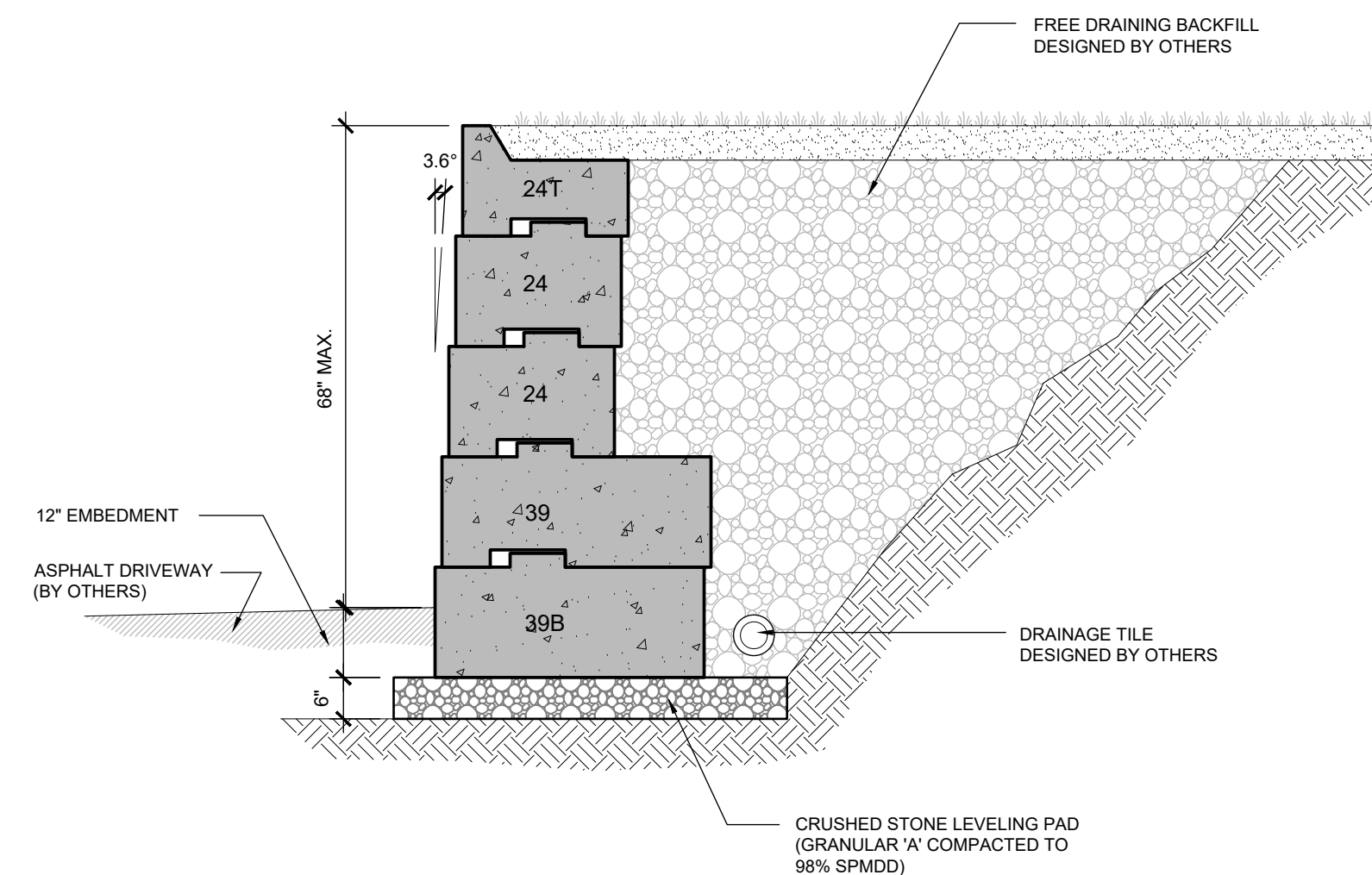
7 SECTION: RETAINING WALL
SCALE: N.T.S.



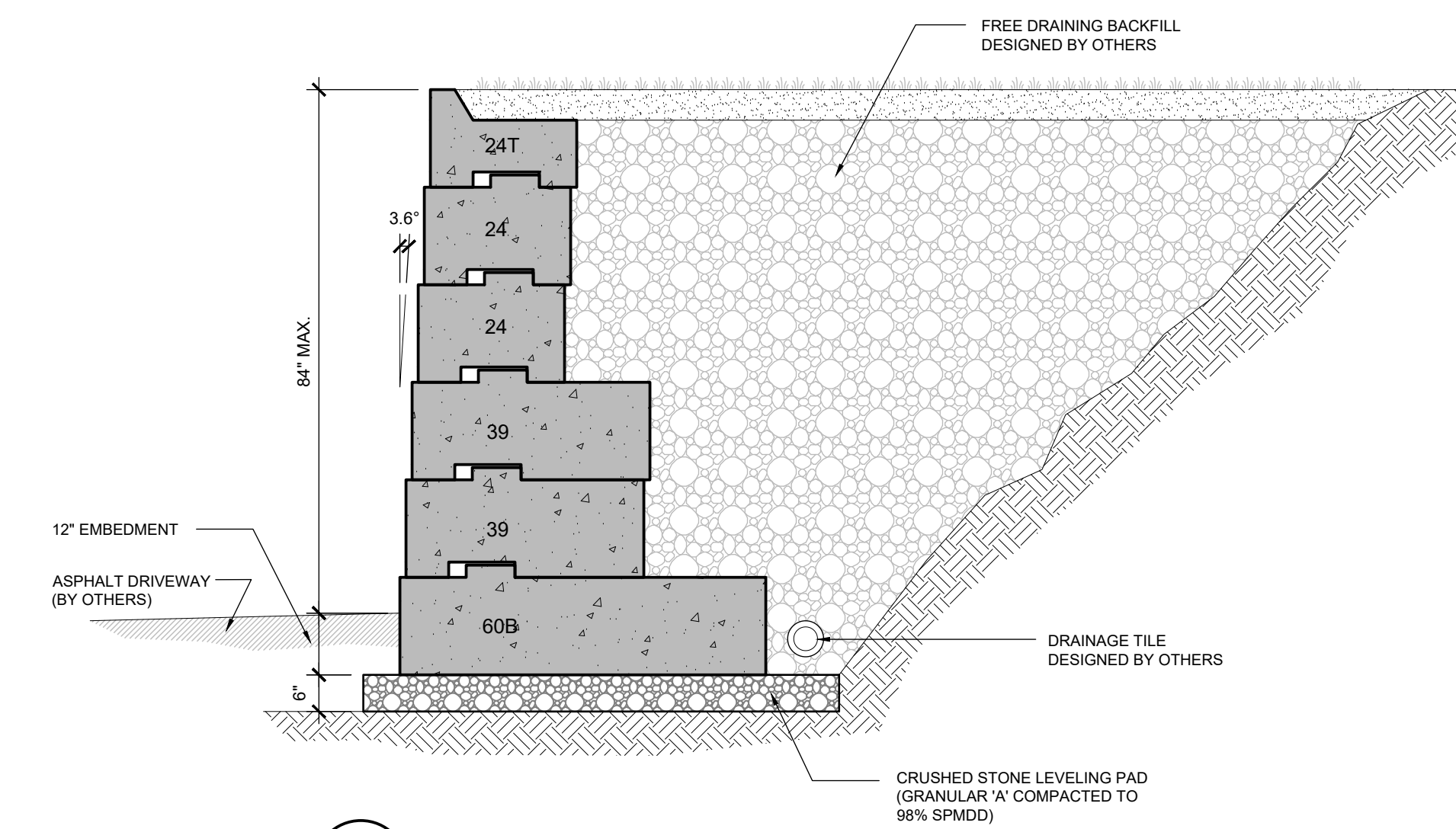
6 SECTION: RETAINING WALL
SCALE: N.T.S.



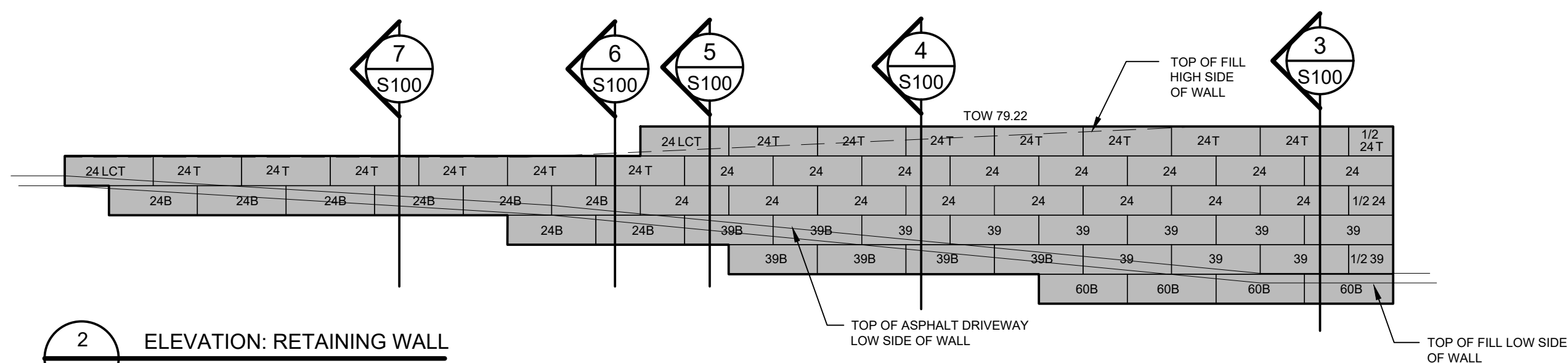
5 SECTION: RETAINING WALL
SCALE: N.T.S.



4 SECTION: RETAINING WALL
SCALE: N.T.S.



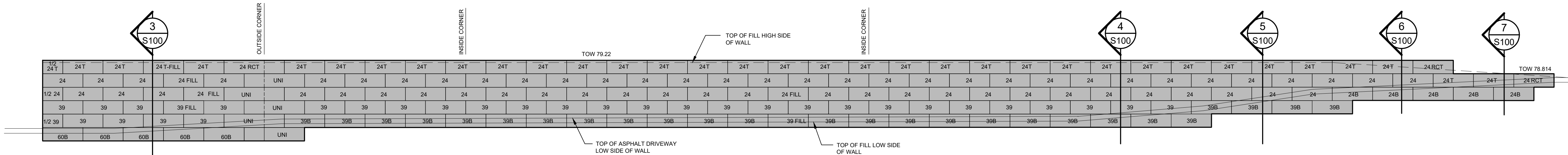
3 SECTION: RETAINING WALL
SCALE: N.T.S.



2 ELEVATION: RETAINING WALL
SCALE: N.T.S.

RECON BLOCK	METRIC BLOCK NAME	DIMENSIONS (WxHxD)	WEIGHT
24	60	48"x16"x24"	±1411 lbs
39	100	48"x16"x39"	±2201 lbs
60B	150	48"x16"x60"	±3115 lbs

LEGEND:
B: BOTTOM BLOCK
T: TOP BLOCK
RCT: RIGHT CORNER TOP
LCT: LEFT CORNER TOP
UNI: UNIVERSAL CORNER BLOCK
FILL: FITTING BLOCK



1 ELEVATION: RETAINING WALL
SCALE: N.T.S.

The Contractor shall check and verify all dimensions on site. This drawing is not to be used for construction unless stamped and signed by the Engineer. Do not scale drawings. Copyright reserved. This drawing is the exclusive property of Cleland Jardine Engineering Ltd.

No.	DATE	REVISIONS	BY
2	SEPT 07/21	RE-ISSUED FOR APPROVAL	ME
1	SEPT 03/21	ISSUED FOR APPROVAL	ME

PROJECT NORTH

STAMP

LICENSED PROFESSIONAL ENGINEER
K. M. ELLWOOD
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PROVINCE OF ONTARIO

CLELAND JARDINE
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PROJECT
172 ST. THOMAS ROAD,
RETAINING WALL

DRAWING
GENERAL NOTES,
ELEVATIONS & SECTIONS

DRAWN:	M. EPPICH	DRAWING No.	S100
DESIGNED:	K.W./G.D.		
DATE:	AUG 31/21		
SCALE:	AS SHOWN		
PROJECT No:	21-2247		