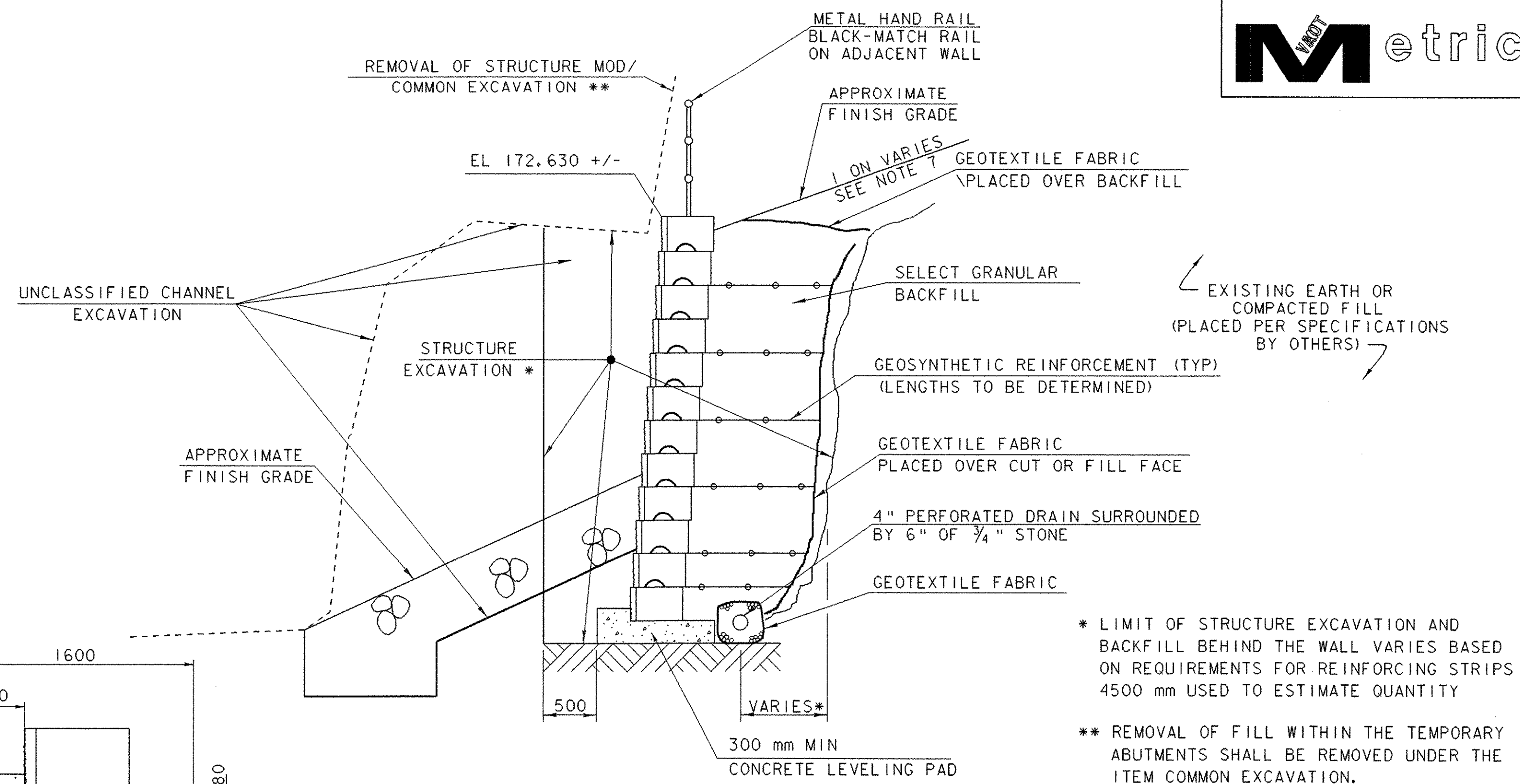


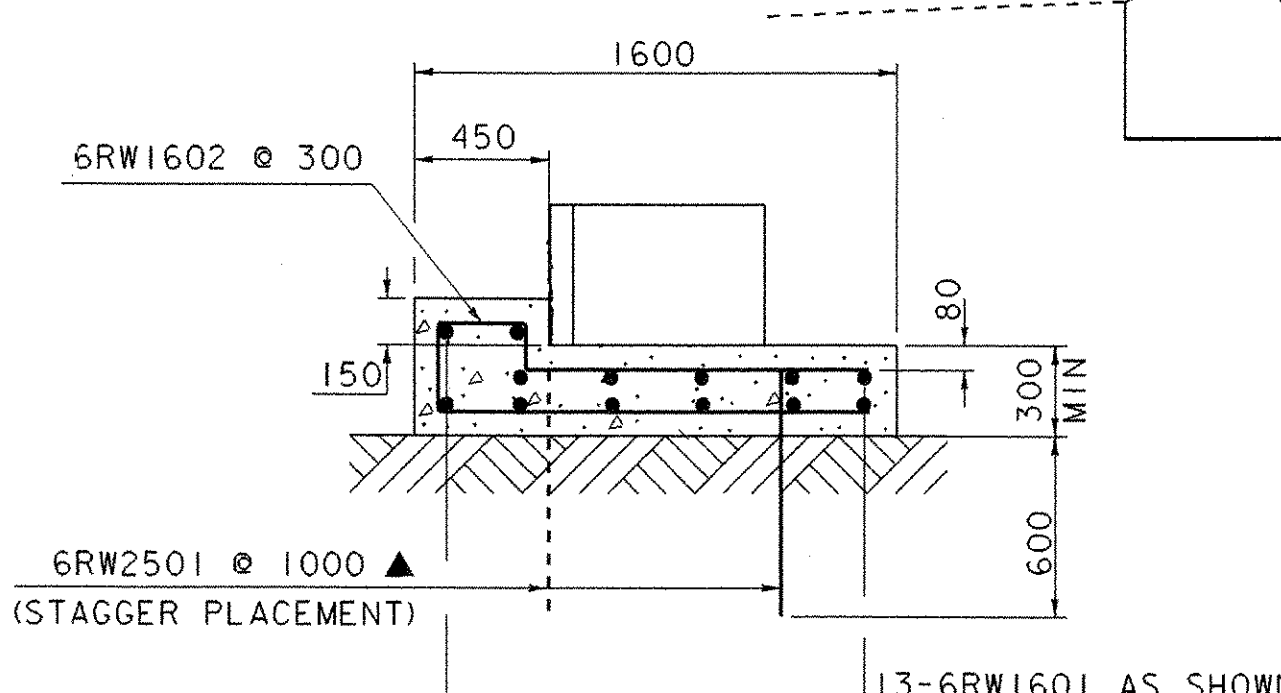
**GENERAL NOTES:**

- ITEM 526.20 CONCRETE BIN-TYPE RETAINING WALL (MOD "REDI-ROCK MSE") SHALL CONSIST OF THE DESIGN, CONSTRUCTION AND ALL MATERIALS INCLUDING BUT NOT LIMITED TO CONCRETE BLOCKS, GEOSYNTHETIC REINFORCEMENT, SELECT GRANULAR BACKFILL, ALL GEOTEXTILE FABRIC AND ANY DRAINAGE MATERIAL REQUIRED FOR THE RETAINING WALL SHOWN ON THIS SHEET.
- THE DETAILS SHOWN ARE CONCEPTUAL IN NATURE AND ARE INTENDED TO PROVIDE OVERALL INFORMATION SUCH AS BEGINING AND END OF WALL AND APPROXIMATE TOP AND BOTTOM PROFILE OF THE WALL.
- THE DESIGN SHALL BE IN ACCORDANCE WITH THE APPROPRIATE SECTIONS OF THE AASHTO 2002 STANDARD SPECIFICATIONS 17th EDITION FOR HIGHWAY BRIDGES .
- FOR DESIGN PURPOSES THE UNIT WEIGHT OF SELECT GRANULAR BACKFILL SHALL BE TAKEN AS 22 KG/m<sup>3</sup> WITH AN INTERNAL FRICTION ANGLE OF 34 DEGREES. THE ALLOWABLE BEARING CAPACITY FOR SPREAD FOOTINGS ON LEDGE IS 480 KPa. SEE SPECIAL PROVISIONS FOR ADDITIONAL DESIGN PARAMETERS.
- IF LEDGE PROVES TO BE HIGHER OR LOWER THAN WHAT IS SHOWN ON THIS SHEET THE BEARING PAD MAY REQUIRE ADJUSTMENT. ANY ADJUSTMENTS MADE MUST MAINTAIN AN ALLOWABLE BEARING PRESSURE OF 480 KPa.
- NO LIVE LOAD SURCHARGE.
- BACK SLOPE VARIES SEE CHANNEL SECTIONS FOR SLOPE VALUES TO USE IN DESIGN OF THE WALL.
- SEE SHEETS 129 - 130 FOR RETAINING WALL FABRICATION DRAWINGS.
- THE CONTRACTOR SHALL REMOVE ANY UNSUITABLE MATERIAL AS DIRECTED BY THE ENGINEER. THE OVER EXCAVATED MATERIAL SHALL BE REPLACED WITH MATERIAL MEETING THE REQUIREMENTS FOR ITEM 704.08. GRANULAR BACKFILL FOR STRUCTURES, VT AOT SPECIFICATIONS, LATEST EDITION.
- THE LEVELING PAD SHALL BE A REINFORCED CONCRETE PAD FOUNDED ON LEDGE AS SHOWN ON THIS SHEET.
- BACK FILL AND COMPACT THE FILL MATERIAL BEHIND THE WALL AS THE WALL IS INSTALLED.
- PLACE A GEOTEXTILE FILTER FABRIC OVER THE BACKFILL MATERIAL TO MINIMIZE SOIL MIGRATION INTO THE DRAINAGE MATERIAL.
- TURF SHALL BE ESTABLISHED AT THE TOP OF THE WALL BY THE AS SOON AS THE WALL IS COMPLETED.
- A METAL HAND RAIL SHALL BE PLACED ALONG THE TOP OF THE RETAINING WALL. THE TOP BLOCK MAY BE CORED TO ACCEPT THE RAIL POST. IF CORING THE TOP BLOCK, TYPE IV MORTAR NON-SHRINK GROUT MUST BE USED TO SEAL THE CORED HOLE TO PREVENT WATER INFILTRATION.
- THE METAL HAND RAIL SHALL MATCH THE GEOMETRY AND COLOR OF THE RAIL ON THE ADJACENT WALL. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR THE NEW METAL HANDRAIL.
- IF CONDITIONS ARE DIFFERENT THAN THOSE STATED IN THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACTOR MUST CONTACT THE PROJECT MANAGER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL.
- CONTRACTOR SHALL ORDER EXTRA BLOCKS AS REQUIRED TO RETAIN THE FILL BETWEEN THE MSE WALL AT ABUTMENT NO. 1 AND EXISTING RETAINING WALL ALONG THE RAILROAD TRACKS. PAYMENT FOR THE EXTRA BLOCKS WILL BE MADE UNDER THE ITEM RETAINING WALL (MOD. - "REDI ROCK").
- THE CONCRETE BLOCKS SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B. A MIX DESIGN SHALL BE SUBMITTED TO THE STRUCTURAL CONCRETE ENGINEER AND APPROVED PRIOR TO CASTING THE BLOCKS.
- ADVANCE NOTIFICATION OF ATLEAST TWO WEEKS MUST BE PROVIDED BY THE FABRICATOR TO THE PROJECT MANAGER AND THE STRUCTURAL CONCRETE ENGINEER CONCERNING THE PROPOSED INTENTION TO COMMENCE WORK. A MINIMUM OF FIVE DAYS NOTIFICATION MUST BE PROVIDED TO THE STRUCTURAL CONCRETE ENGINEER BY THE FABRICATOR TO CONFIRM THE START DATE AND SCHEDULE AN INSPECTOR TO BE AT THE PLANT.

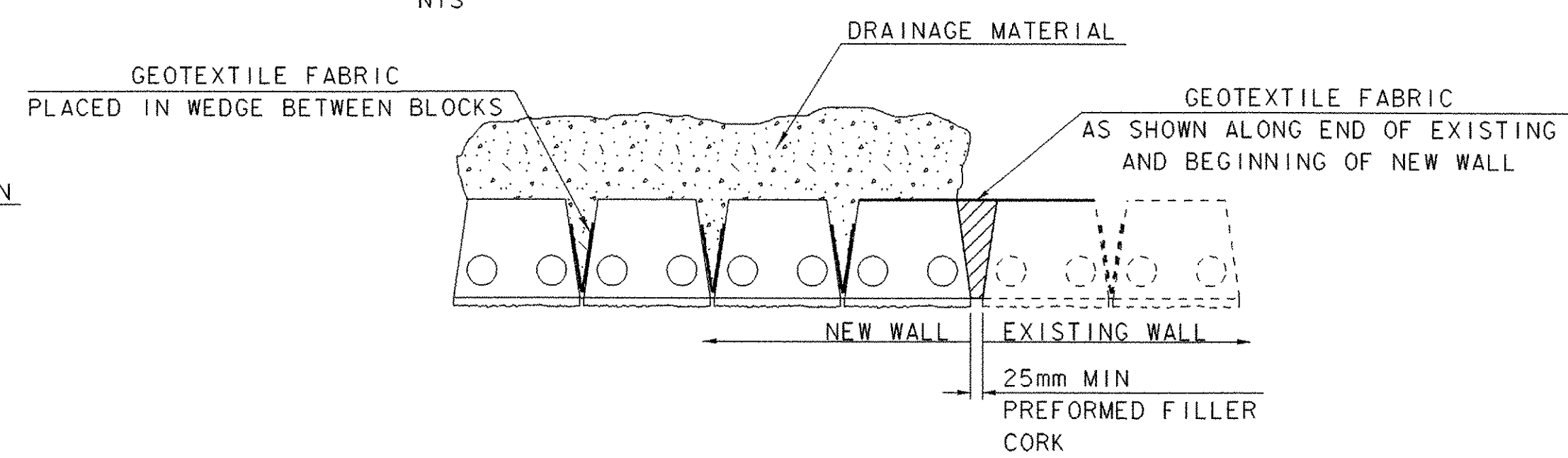


\* LIMIT OF STRUCTURE EXCAVATION AND BACKFILL BEHIND THE WALL VARIES BASED ON REQUIREMENTS FOR REINFORCING STRIPS 4500 mm USED TO ESTIMATE QUANTITY

\*\* REMOVAL OF FILL WITHIN THE TEMPORARY ABUTMENTS SHALL BE REMOVED UNDER THE ITEM COMMON EXCAVATION.

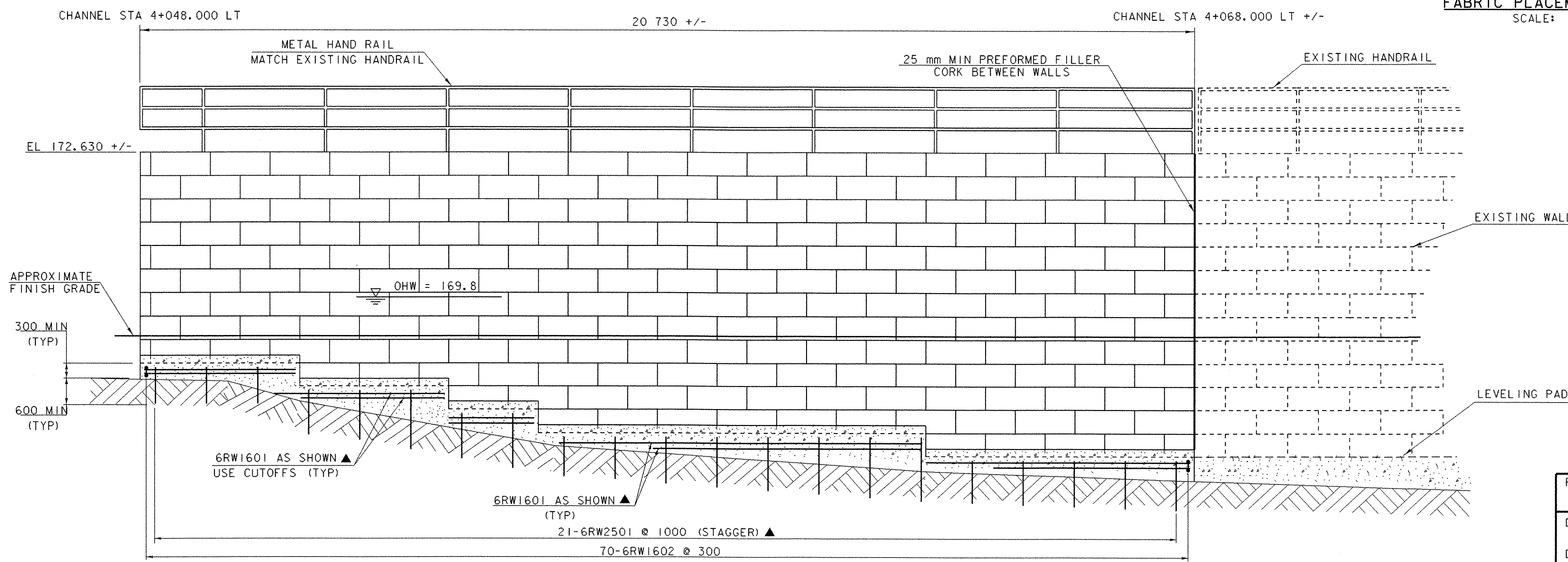


**LEVELING PAD DETAILS**  
NTS

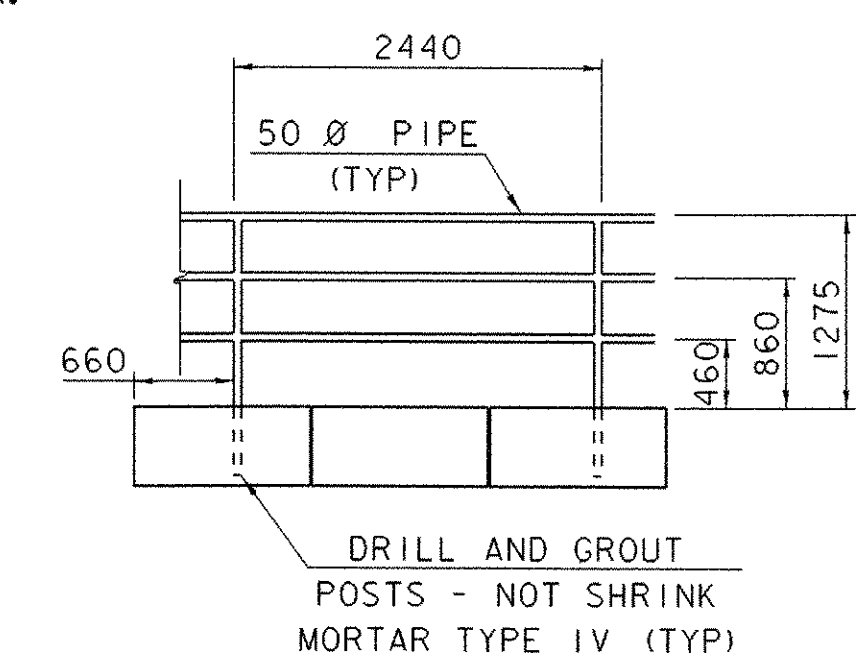


**FABRIC PLACEMENT DETAIL**  
SCALE: 1:50

NOTE: MORTARLESS CONSTRUCTION ALLOWS FOR WATER TO DRAIN THROUGH BLOCK GAPS. THE GEOTEXTILE FABRIC MINIMIZES SOIL MIGRATION.

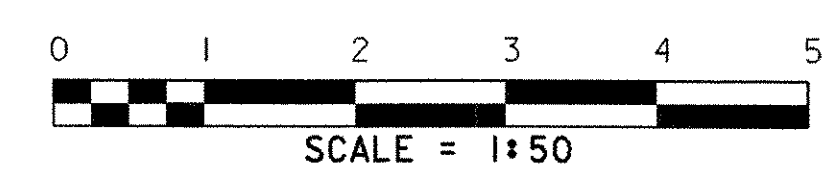


**RETAINING WALL #6 ELEVATION**  
SCALE: 1:50



**METAL HAND RAIL DETAIL**  
SCALE: 1:50

VERIFY ALL DIMENSIONS IN THE FIELD (MATCH EXISTING HAND RAIL)



PROJECT: <b>BETHEL</b>	PROJECT NO.: <b>BRF0241 (33) C/2</b>
DESIGN FILE NAME: 02c180/structures/s02c180retainwall.dgn	IPARM FILE NAME: s02c180retwall16.i
DESIGNED BY: K. M. HIGGINS	DRAWN BY: J. WHITE
SQUAD LEADER: C. P. WILLIAMS	CHECKED BY: K. M. HIGGINS
RETAINING WALL #6 DETAILS	SHEET: 73 OF 130