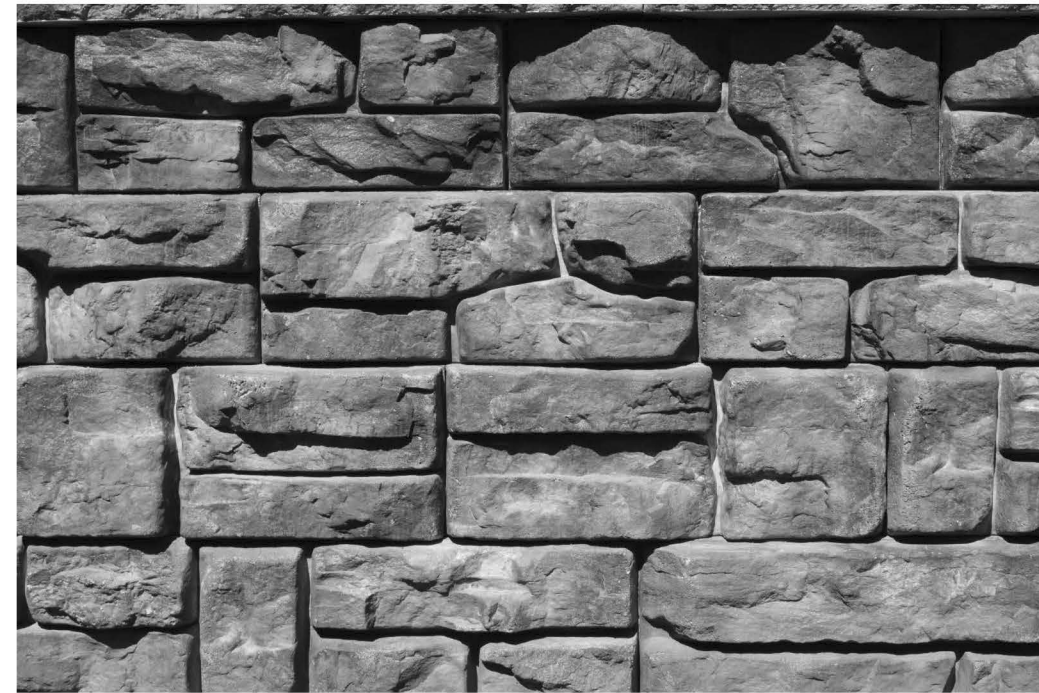


## RETAINING WALL NOTES

### GENERAL:

1. THE AGENCY OF TRANSPORTATION CONDUCTED A FIELD INVESTIGATION INCLUDING SOIL BORINGS, TESTING, ANALYSIS AND RECOMMENDATIONS FOR THE IN-SITU SOIL PARAMETERS FOR THE WALL. THE INVESTIGATION IS SUMMARIZED IN A MEMORANDUM DATED 11/22/2013 THAT IS AVAILABLE FOR THE CONTRACTOR'S USE IN DESIGN OF THE WALL.
2. THE PRECAST CONCRETE GRAVITY RETAINING WALLS SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND SHALL BE FROM THE VAOT'S LIST OF APPROVED RETAINING WALLS.
3. AFTER THE WALL IS ERECTED, ALL EXPOSED CONCRETE SURFACES SHALL BE TREATED WITH WATER REPELLENT, SILANE MEETING THE REQUIREMENTS OF SECTION 514. CONTRACTOR SHALL PROVIDE WRITTEN VERIFICATION THAT THE WATER REPELLENT IS COMPATIBLE WITH THE STAIN USED TO COLOR THE WALL. THE COST OF THE WATER REPELLENT SHALL BE INCIDENTAL TO THE PRECAST GRAVITY RETAINING WALL.
4. EXPOSED FACE OF WALL SHALL HAVE A TEXTURE AND TWO TONE COLOR REPLICATING DRY LAID NATURAL STONE. AN IMAGE DEPICTING THE DESIRED TEXTURE AND COLORING IS INCLUDED BELOW:



5. TOP BLOCK OF RETAINING WALL SHALL BE RECESSED TO ACCEPT LAWN OR LANDSCAPING AS CLOSE AS POSSIBLE TO THE FRONT EDGE OF THE WALL.
6. TOPSOIL, SEED, AND EROSION CONTROL MATTING SHALL BE PAID PER THEIR RESPECTIVE PAY ITEMS. ANY OTHER WORK OR MATERIALS NECESSARY TO ESTABLISH TURF SHALL BE INCIDENTAL TO ALL OTHER CONTRACT ITEMS. SEE SHEET ECD-3 AND SECTION 651 OF THE VAOT STANDARD SPECIFICATIONS FOR TURF ESTABLISHMENT DETAILS.

### PEDESTRIAN RAILING:

7. THE WALL SHALL INCLUDE A FABRICATOR DESIGNED GALVANIZED & PAINTED STEEL PEDESTRIAN RAILING AND CONNECTION TO THE RETAINING WALL WHERE THE HEIGHT OF THE DROP FROM THE TOP OF WALL EXCEEDS 30 INCHES. THE RAILING SHALL BE DESIGNED TO MEET OR EXCEED THE FOLLOWING CRITERIA:

#### MATERIALS:

MATERIALS FOR RAILING SHALL MEET THE REQUIREMENTS OF SECTION 506 AND BE GALVANIZED IN ACCORDANCE WITH SECTION 726.08.

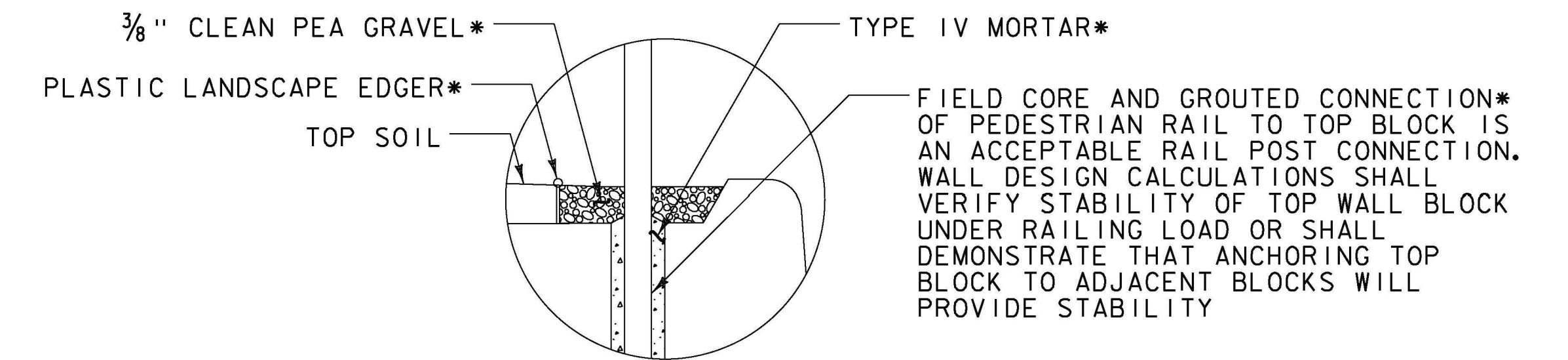
THE GALVANIZED RAILING SHALL BE AIR COOLED, AND NOT WATER QUENCHED OR TREATED WITH A CHROMATE CONVERSION COATING. AFTER THE COMPONENTS ARE GALVANIZED AND ALL CONTAMINATION, ASH RESIDUE, ETC. IS CLEANED OFF, THEIR EXTERIOR SURFACES SHALL BE SWEEP / BRUSH-OFF BLAST CLEANED IN ACCORDANCE WITH PER SSPC-SP 16. THE RAILING SHALL BE PAINTED BLACK IN ACCORDANCE WITH 708.01 WITH A COATING SYSTEM LISTED ON THE QUALIFIED PRODUCTS LIST ON FILE WITH THE AGENCY'S RESEARCH AND DEVELOPMENT SECTION.

#### DESIGN LOAD:

- POST AND BASE PLATE: EQUIVALENT POINT LOAD EQUAL TO THE MAXIMUM OF 200 LB. LOAD OR 50 LB./FT. X POST SPACING (FT.) APPLIED TRANSVERSELY AT TOP RAIL CONNECTION.
- TOP & BOTTOM RAILS: THE MAXIMUM OF EITHER A 50 LB./FT. UNIFORM LOAD OR A 200 LB. CONCENTRATED POINT LOAD APPLIED IN ANY DIRECTION TO THE RAIL.
- HANDRAILS: NOT REQUIRED.
- PICKETS: CONCENTRATED 200 LB. LOAD APPLIED TRANSVERSELY OVER AN AREA OF 1.0 SQUARE FOOT.

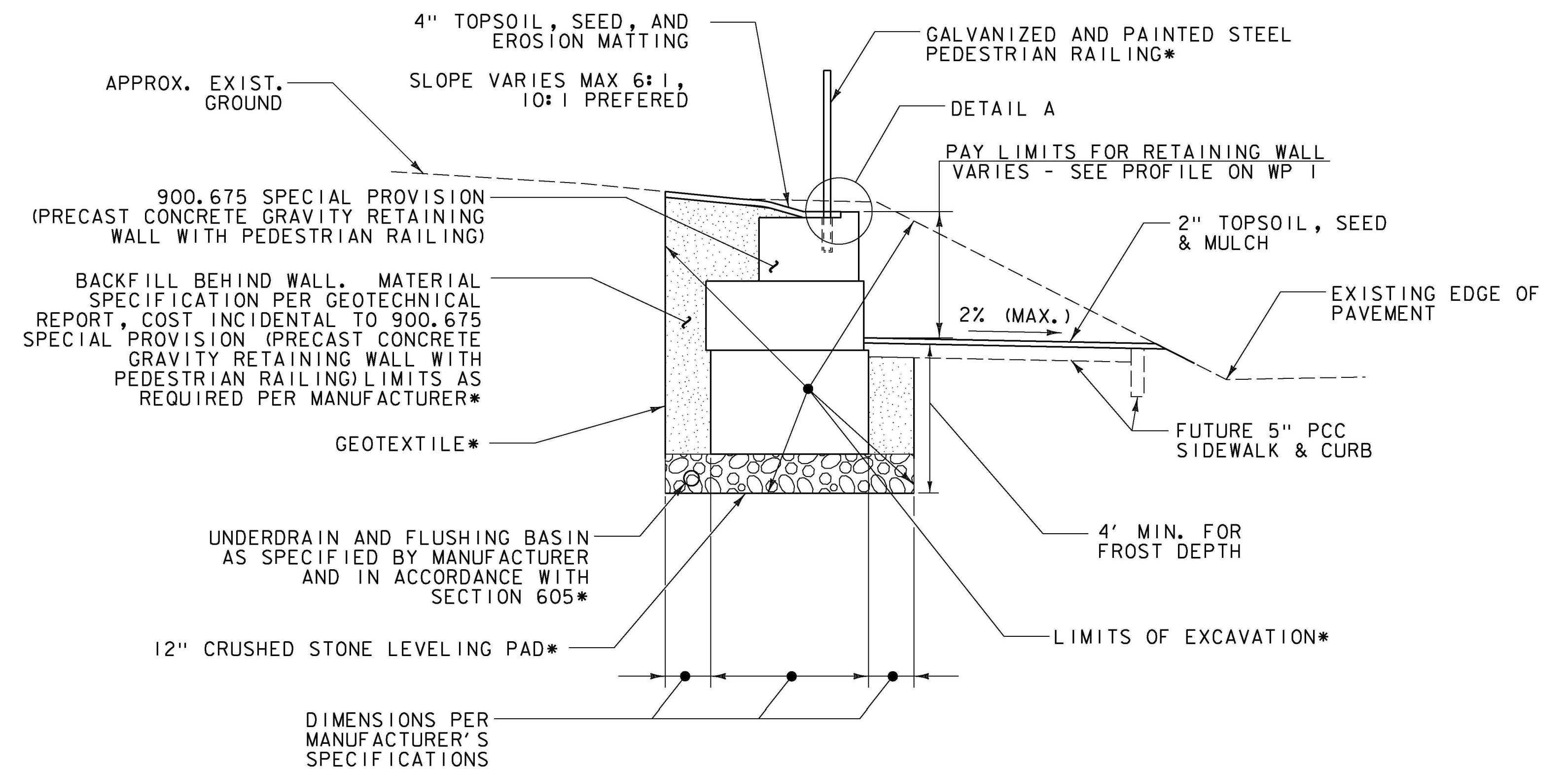
#### GEOMETRY:

- RAILING HEIGHT: 42" MINIMUM.
- CLEAR OPENING BETWEEN PICKETS: SHALL REJECT THE PASSAGE OF A 4" DIAMETER SPHERE BELOW 42" HEIGHT.
- CLEAR OPENING UNDER BOTTOM RAIL: SHALL REJECT THE PASSAGE OF A 2" DIAMETER SPHERE.



### DETAIL A

(ALTERNATE CONNECTION DETAILS MAY BE DETAILED BY THE CONTRACTOR AND SUBMITTED FOR APPROVAL)



### RETAINING WALL CROSS SECTION

NOT TO SCALE

\*INCIDENTAL TO ITEM 900.675 - SPECIAL PROVISION (PRECAST CONCRETE GRAVITY RETAINING WALL WITH PEDESTRIAN RAILING)

PROJECT NAME: EAST MONTEPELIER

PROJECT NUMBER: BF EWP2(1)

FILE NAME: ...XX\_Retaining\_Wall\_det - ER.dwg PLOT DATE: 5/26/2016

PROJECT LEADER: T. KNIGHT

DRAWN BY: J. SOTER

DESIGNED BY: K. RICHARDSON

CHECKED BY: T. KNIGHT

WALL PLAN & PROFILE WP 2

SHEET 20 OF 42

