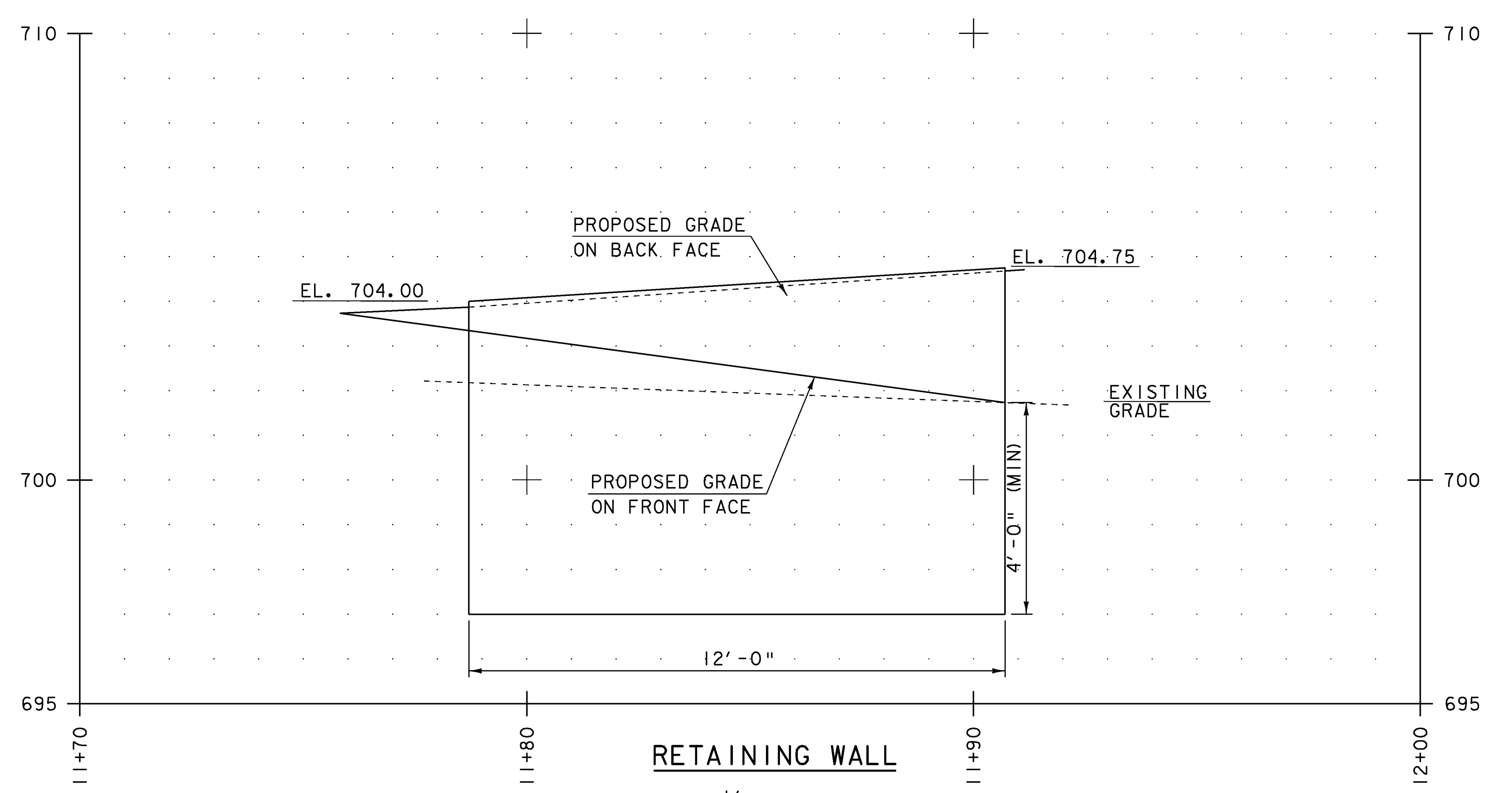
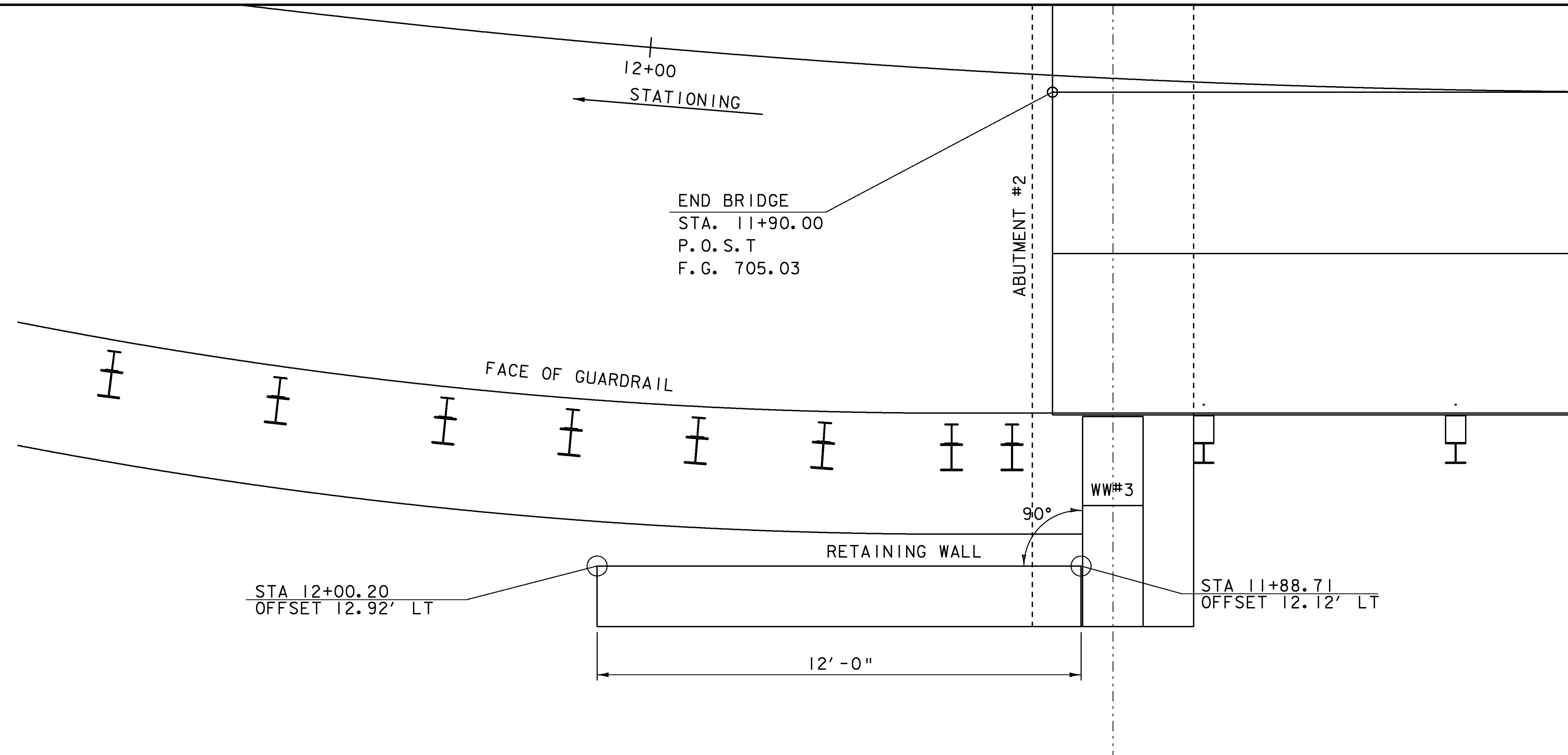


**TYPICAL RETAINING WALL EARTHWORKS DETAIL**

SCALE 1/2" = 1'-0"

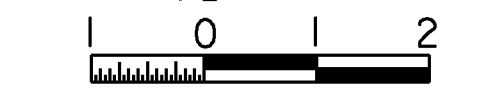
**RETAINING WALL NOTES:**

1. THE DETAILS SHOWN ARE CONCEPTUAL IN NATURE AND ARE INTENDED TO PROVIDE OVERALL INFORMATION SUCH AS BEGINNING AND END OF WALL AND APPROXIMATE TOP AND BOTTOM PROFILE OF THE WALL.
2. THE WALL SHALL BE SELECTED FROM THE LIST OF WALLS IN THE APPROVED RETAINING WALL DOCUMENT AVAILABLE FROM VAOT MATERIALS & RESEARCH WEB SITE.
3. THE BOTTOM OF WALL SHALL BE A MINIMUM OF 4 FEET BELOW THE FINISH GRADE IN THE FRONT OF WALL.
4. THE WALL SHALL BE DESIGNED IN ACCORDANCE WITH THE 2009 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND ITS LATEST REVISIONS.
5. THE DESIGN SHALL CONSIDER THE EFFECTS OF ALL LOADS INCLUDING BUT NOT LIMITED TO LOADS FROM THE GUARDRAIL, EARTH SURCHARGE, LIVE LOAD SURCHARGE, AND HYDROSTATIC PRESSURE.
6. THE TYPE OF WALL SELECTED SHALL BE COMPATIBLE WITH THE GUARD RAIL SYSTEM SHOWN ON THE PLANS AND SHALL CONSIDER THE EFFECT OF 8 FOOT GUARD RAIL POSTS ON ANY REINFORCING OR ANCHORING SYSTEM.
7. THE FOLLOWING SOIL PROPERTIES SHALL BE USED IN THE DESIGN:
  - a. SELECT BACKFILL (GRANULAR BACKFILL FOR STRUCTURES)
    - i. UNIT WEIGHT: 140 PCF
    - ii. FRICTION ANGLE: 34 DEGREES
    - iii. COHESION, c: 0
  - b. RETAINED SOIL
    - i. UNIT WEIGHT: 130 PCF
    - ii. FRICTION ANGLE: 32 DEGREES
    - iii. COHESION, c: 0
  - c. FOUNDATION SOIL
    - i. UNIT WEIGHT: 115 PCF
    - ii. FRICTION ANGLE: 30 DEGREES
    - iii. COHESION, c: 0
    - iv. NOMINAL BEARING RESISTANCE: 9 KSF
8. THE INTERFACE BETWEEN THE RETAINING WALL AND THE ABUTMENT STEM SHALL BE DESIGNED AND SUBMITTED TO THE PROJECT MANAGER FOR REVIEW AND APPROVAL.
9. THE WALL, INCLUDING ALL COMPONENTS, EXCAVATION AND BACKFILL, NECESSARY TO CONSTRUCT THE WALL, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.670 "SPECIAL PROVISION (RETAINING WALL)".



**RETAINING WALL**

SCALE 1/2" = 1'-0"



PROJECT NAME: BRAINTREE	PLOT DATE: 31-DEC-2009
PROJECT NUMBER: BRO 1444(36)	DRAWN BY: K. PATTERSON
FILE NAME: s95j292sub.dgn	DESIGNED BY: T. FILLBACH
PROJECT LEADER: K. HIGGINS	CHECKED BY: T. FILLBACH
RETAINING WALL	SHEET 20 OF 26