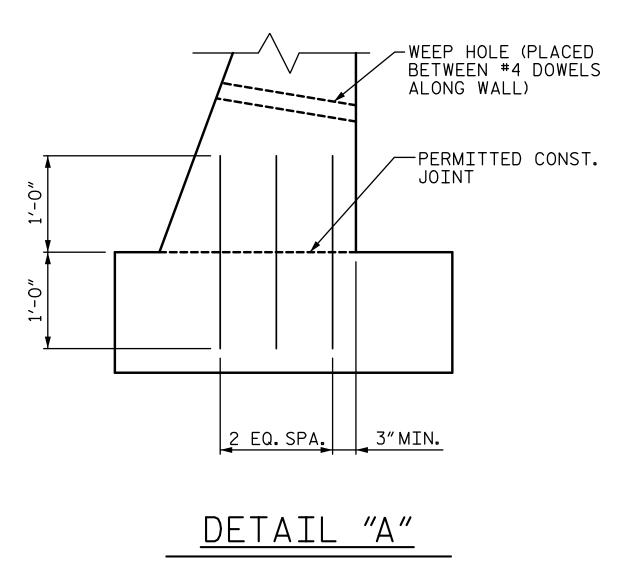
SECTION THRU CIP GRAVITY WALL

VARIES (SEE "B"/"H" RATIO)



STV Engineers, Inc. 900 West Trade St., Suite 7 Charlotte, NC 28202 NC License Number F-0991

PROJECT REFERENCE NO. SHEET NO. U-5114 W - 12STRUCTURAL DESIGN ENGINEER **DOCUMENT NOT CONSIDERED FINAL**

UNLESS ALL SIGNATURES COMPLETED

NOTES:

FOR CAST-IN-PLACE (CIP) GRAVITY RETAINING WALL, SEE SECTION 453 OF THE STANDARD SPECIFICATIONS.

FOR SUBSURFACE DRAINAGE AT WEEP HOLES, SEE ARTICLE 414-8 OF THE NCDOT STANDARD SPECIFICATION.

A WIRE SCREEN SHALL BE SECURED TO THE FILL FACE OF ALL WEEP HOLES. SEE ARTICLE 420-11 OF THE NCDOT STANDARD SPECIFICATION.

CIP GRAVITY WALL IS BASED ON THE FOLLOWING IN-SITU ASSUME SOIL PARAMETERS:

UNIT WEIGHT, $\delta = 120$ LB/CF FRICTION ANGLE, $\phi = 35$ DEGREES

COHESION, c = 0 LB/SF

(GROUNDWATER WITHIN 7'OF BOTTOM OF FOOTING) FRICTION ANGLE, $\emptyset = 30$ DEGREES (GROUNDWATER MORE THAN 7' BELOW BOTTOM OF FOOTING)

DO NOT USE CIP GRAVITY WALL IF ASSUMED SOIL PARAMETERS ARE NOT APPLICABLE OR GROUNDWATER IS ABOVE BOTTOM OF FOOTING.

DO NOT USE CIP GRAVITY WALL WHEN VERY LOOSE OF SOFT SOIL OR MUCK IS BELOW WALL.

BEFORE BEGINNING CIP GRAVITY WALL CONSTRUCTION, SURVEY WALL LOCATIONS AND SUBMIT WALL PROFILE VIEWS (WALL ENVELOPES) FOR REVIEW. FOR WALL ENVELOPES, INCLUDE BOTTOM OF WALL, EXISTING GROUND AND GRADE ELEVATIONS AND OTHER ELEVATIONS AS NEEDED AT INTERVALS OF 25' OR LESS ALONG WALL. DO NOT START WALL CONSTRUCTION UNTIL WALL ENVELOPE IS ACCEPTED.

DO NOT PLACE CONCRETE FOR FOOTING UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.

WHEN CONSTRUCTING CIP GRAVITY WALL WITH A CONSTRUCTION JOINT AS SHOWN IN DETAIL "A", PROVIDE A MINIMUM OF 3 EQUALLY SPACED #4 DOWELS AT INTERVALS OF 1'-6" ALONG THE WALL.

FOR HANDRAIL, SEE SPECIAL PROVISIONS.

CONTRACTOR SHALL INSTALL HANDRAIL IN ACCORDANCE WITH ROADWAY "DETAIL OF PIPE HANDRAIL MOUNTED ON RETAINING WALL" ON SHEET 2C-3.

RETAINING WALL -W3- CAST-IN-PLACE (CIP) GRAVITY RETAINING WALL