

NOTES

IN ELEVATION VIEW, SHOW THE TOP OF WALL (SOLID LINE), THE EXISTING GROUND LINE (LARGE DASHED LINE), AND THE BOTTOM OF WALL (SOLID LINE). SHOW ELEVATIONS FOR THE TOP OF WALL AT VERTICAL BREAK POINTS, AND AT NO GREATER THAN 50 FOOT INTERVALS. LABEL WHETHER THE ELEVATION VIEW IS FRONT FACE OR BACK FACE.

FINAL PLANS MUST BE ON REPRODUCIBLE SHEETS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN NORTH CAROLINA.

PROVIDE A CAST-IN-PLACE CONCRETE FACE WITH AN ASHLAR STONE PATTERN FINISH ON THE FACE OF THE WALL. SEE SPECIAL PROVISIONS.

NOTE ON CONTRACTOR'S WORKING DRAWINGS: VERIFY BEARING CAPACITY OF THE WALL FOUNDATION SOILS IN THE FIELD.

THE RESIDENT ENGINEER WILL SCHEDULE A PRECONSTRUCTION CONFERENCE WITH REPRESENTATIVES FROM THE CONTRACTOR, THE RETAINING WALL SYSTEM SUPPLIER, AND THE GEOTECHNICAL ENGINEERING UNIT TO DISCUSS DETAILS AND INSPECTION OF THE RETAINING WALL PRIOR TO ANY WORK BEING PERFORMED AT THE SITE.

SEE ROADWAY PLANS FOR CROSS SECTIONS AND TYPICAL SECTIONS.

FOR DESIGN CRITERIA AND DETAILS, SEE SPECIAL PROVISIONS.

PLANS, WORKING DRAWINGS, SOIL REINFORCEMENT, AND DESIGN CALCULATIONS SHALL BE SUBMITTED BY THE CONTRACTOR TO THE ENGINEER FOR REVIEW AND APPROVAL. SEE SPECIAL PROVISIONS.

ALL NAIL BARS FOR THE SOIL NAIL RETAINING WALLS SHALL BE ENCAPSULATED FOR CORROSION PROTECTION.

CONCRETE LEVELING PADS FOR THE CAST-IN-PLACE WALL FACING AND THE DRAINAGE DITCHES BEHIND THE WALLS WILL BE CONSIDERED INCIDENTAL TO THE COST OF THE WALLS.

THE WALLS SHALL BE DESIGNED TO MEET THE LATEST FHWA REPORT NO. SA-96-069 AND THE LATEST AASHTO DESIGN CRITERIA AND ITS INTERIM, SEE THE SPECIAL PROVISIONS, AND THE PLANS.

PLANS SUBMITTED FOR REVIEW SHALL INCLUDE THE FOLLOWING: PLAN VIEW, ELEVATION VIEW, TYPICAL SECTIONS, CAST-IN-PLACE FACING, OBSTRUCTION DETAILS AND DRAINAGE DETAILS.

BLASTING WILL NOT BE ALLOWED TO INSTALL THE NAIL BARS OF THE PROPOSED SOIL NAIL RETAINING WALLS.

THE SOIL NAIL RETAINING WALLS SHALL BE DESIGNED WITH THE FOLLOWING SOIL PARAMETERS:

FRICTION ANGLE  $\phi = 33^\circ$  COHESION  $c = 0.0$  PSF  
 UNIT WEIGHT OF SOIL ABOVE WATER TABLE,  $\gamma = 120$  PCF  
 UNIT WEIGHT OF SOIL BELOW WATER TABLE,  $\gamma = 60$  PCF

THE OFFSET FOR WALL LAYOUT TO FRONT FACE OR BACK FACE OF WALL NEEDS TO BE GIVEN WITH STATIONING INCREASING FROM LEFT TO RIGHT ON PLAN SHEETS.

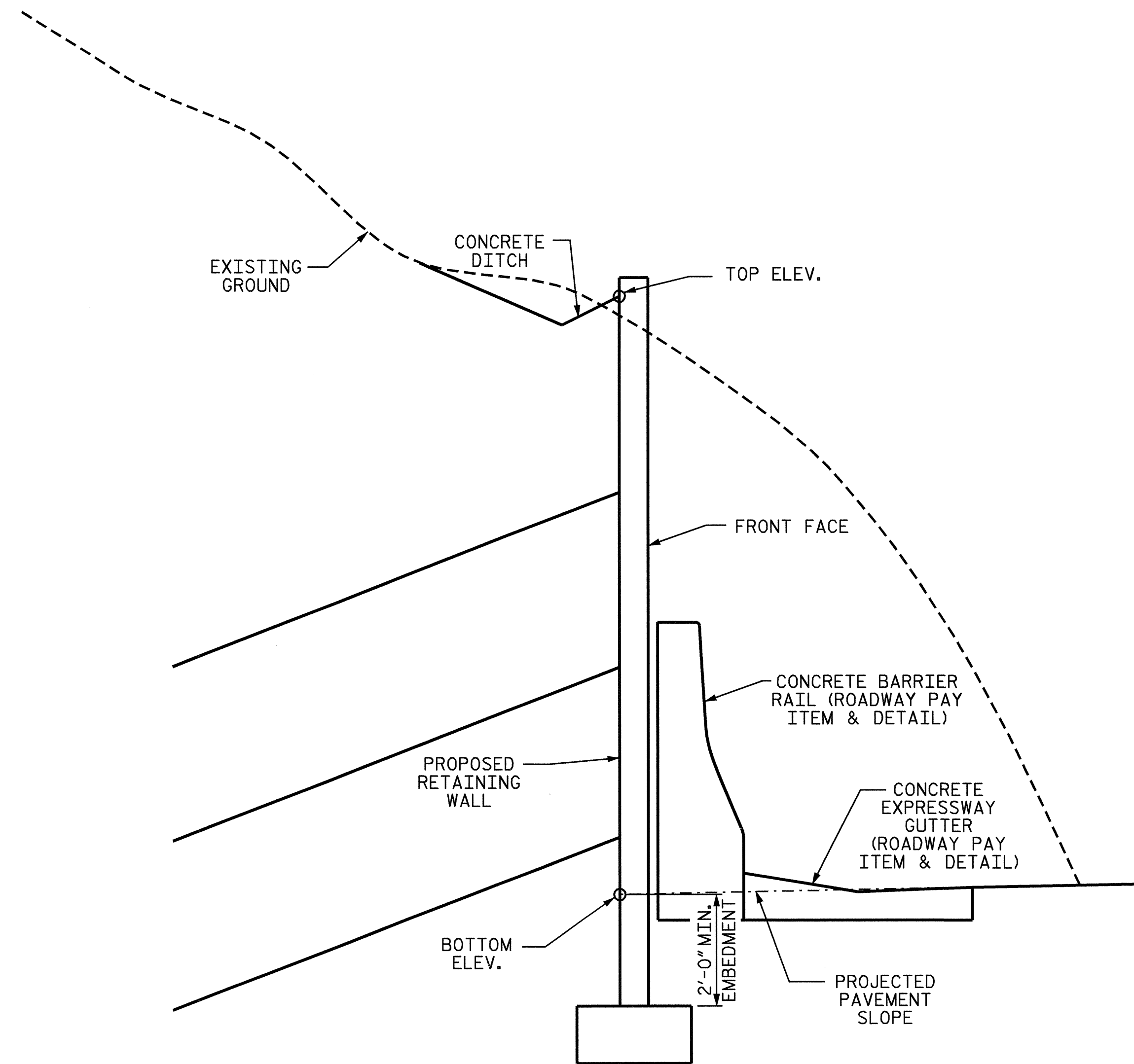
PROPER CONSIDERATION SHALL BE GIVEN TO THE DRAINAGE SYSTEMS BEHIND THE WALL AT STATION 282+81.32 -L-. SEE ROADWAY DRAINAGE PLANS FOR DETAILS.

FOR POTENTIAL CONFLICTS WITH WATER SUPPLY PIPES, DRAINAGE STRUCTURES, OR UTILITIES, SEE ROADWAY PLANS.

PROVIDE PAVED DRAINAGE DITCH ON TOP OF THE WALLS.

BOTTOM OF WALL ELEVATIONS ARE FINISHED GRADE ELEVATIONS AND THESE ELEVATIONS DO NOT INCLUDE EMBEDMENT FOR THE SOIL NAIL WALLS.

ALL STRUCTURE EXCAVATION AND BACKFILL NECESSARY FOR THE CONSTRUCTION OF THE PERMANENT SOIL NAIL RETAINING WALLS WILL BE CONSIDERED INCIDENTAL TO THE COST OF THE WALLS.



SOIL NAIL WALL TYPICAL SECTION

(NOT TO SCALE)

DRAWN BY : D. G. ELY DATE : 09/14/04  
 CHECKED BY : W. F. PARKER DATE : 09/15/04

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PROJECT NO. R-2237B  
 CALDWELL COUNTY  
 STATION: 282+81.32 -L-

SHEET 2 OF 2

STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH

SOIL NAIL  
 RETAINING WALL  
 DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	W-10
1			3			TOTALS
2			4			20