

NOTES:

FOR MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALLS, SEE MECHANICALLY STABILIZED EARTH RETAINING WALLS PROVISION.

FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.

A FENCE OR HANDRAIL IS REQUIRED ON TOP OF RETAINING WALLS NO.1 & 2. SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.

USE AN MSE WALL SYSTEM WITH PRECAST CONCRETE PANELS THAT MEET SECTION 1077 OF THE STANDARD SPECIFICATIONS FOR RETAINING WALLS NO.1 & 2.

CAST-IN-PLACE OR PRE-CAST REINFORCED CONCRETE COPING IS REQUIRED FOR RETAINING WALLS NO.1 & 2.

A HAND-LAID BRICK FACADE IS REQUIRED FOR RETAINING WALLS NO.1 & 2. SEE ARCHITECTURAL DETAILS FOR SURFACE FINISH AND PATTERNS. THE PRECAST MSE PANEL WALL SHOULD BE CONSTRUCTED AND ALLOWED TO SETTLE PRIOR TO CONSTRUCTION OF THE BRICK FACADE FOOTING AND THE BRICK FACADE.

A WAITING PERIOD IS REQUIRED PRIOR TO CONSTRUCTION OF THE BRICK FACADE FOOTING AND THE BRICK FACADE. THE WALLS SHOULD BE ALLOWED TO SETTLE FOR A MINIMUM OF 4 MONTHS FROM COMPLETION TO THEIR PROPOSED HEIGHT OR UNTIL OTHERWISE APPROVED BASED ON SETTLEMENT MONITORING OBSERVATIONS.

A DRAIN IS REQUIRED FOR RETAINING WALLS NO.1 & 2.

BEFORE BEGINNING MSE WALL DESIGN FOR RETAINING WALLS NO.1 & 2, SURVEY WALL LOCATION AND SUBMIT A REVISED WALL PROFILE VIEW (WALL ENVELOPE) FOR REVIEW. DO NOT START WALL DESIGN OR CONSTRUCTION UNTIL THE REVISED WALL ENVELOPE IS ACCEPTED.

DESIGN RETAINING WALLS NO.1 & 2 FOR THE FOLLOWING:
 1) H = DESIGN HEIGHT + EMBEDMENT
 2) DESIGN LIFE = 100 YEARS
 3) FACTORED BEARING RESISTANCE OF FOUNDATION SOILS = 10,000 LB/SF
 4) MINIMUM REINFORCEMENT LENGTH (L) = GREATER OF 0.7H OR 6 FT
 5) MINIMUM EMBEDMENT = 2 FT
 6) AGGREGATE PARAMETERS:

AGGREGATE TYPE*	UNIT WEIGHT (γ) LB/CF	FRICTION ANGLE (φ) DEGREES	COHESION (c) LB/SF
COARSE	110	38	0

*SEE MSE RETAINING WALLS PROVISION FOR COARSE AGGREGATE MATERIAL REQUIREMENTS.

7) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (γ) LB/CF	FRICTION ANGLE (φ) DEGREES	COHESION (c) LB/SF
BACKFILL	120	30	0
FOUNDATION	120	30	0

DESIGN RETAINING WALLS NO.1 & 2 FOR A LIVE LOAD (TRAFFIC) SURCHARGE.

FOUNDATIONS FOR SIGNS AND LIGHTING WILL BE LOCATED BEHIND RETAINING WALLS NO.1 & 2 AND WILL INTERFERE WITH REINFORCEMENT. BEFORE BEGINNING MSE WALL CONSTRUCTION, SUBMIT PROPOSED CONSTRUCTION METHODS FOR THESE FOUNDATIONS FOR APPROVAL. REFER TO STREET LIGHTING PLANS SHEET E-8 AND E-9 FOR LIGHT POLE LOCATIONS.

COORDINATE INSTALLTION OF LIGHT POLE FOUNDATION BLOCKOUTS WITH THE CITY OF GREENVILLE.

EXISTING OR FUTURE OBSTRUCTIONS SUCH AS FOUNDATIONS, GUARDRAIL, FENCE OR HANDRAIL POSTS, PAVEMENTS, PIPES, INLETS OR UTILITIES WILL INTERFERE WITH REINFORCEMENT FOR RETAINING WALLS NO.1 & 2.

PILES FOR END BENT NO.1 LOCATED AT STATION 64+69 -L- ARE TO BE DRIVEN BEFORE CONSTRUCTION OF RETAINING WALL NO.1.

PILES FOR END BENT NO.2 LOCATED AT STATION 66+49 -L- ARE TO BE DRIVEN BEFORE CONSTRUCTION OF RETAINING WALL NO.3.

PILES FOR END BENT NO.1 LOCATED AT STATION 64+69 -L- ARE TO BE SLEEVED IN THE MSE REINFORCED BACKFILL ZONE. SEE DETAILS IN STRUCTURE PLANS.

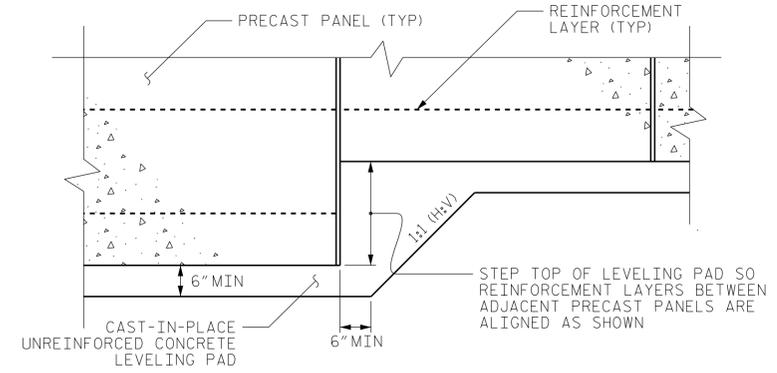
PILES FOR END BENT NO.2 LOCATED AT STATION 66+49 -L- ARE TO BE SLEEVED IN THE MSE REINFORCED BACKFILL ZONE. SEE DETAILS IN STRUCTURE PLANS.

DO NOT PLACE LEVELING PAD CONCRETE, AGGREGATE OR REINFORCEMENT FOR RETAINING WALL NO.1 & 2 UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIAL ARE APPROVED.

TEMPORARY SHORING MAY BE REQUIRED FOR RETAINING WALLS NO.1 & 2 IN ACCORDANCE WITH THE TEMPORARY SHORING PROVISION.

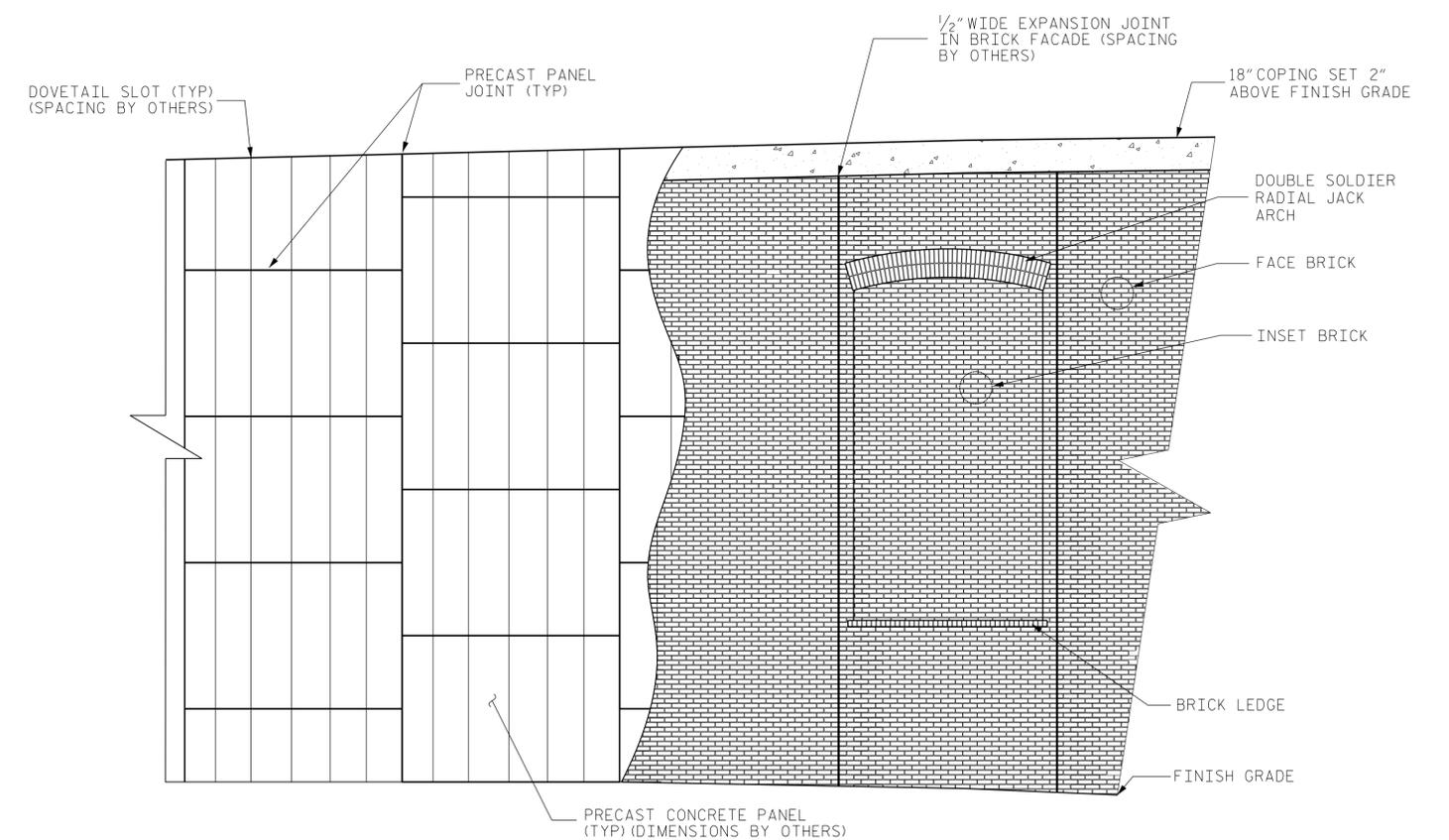
AT THE CONTRACTOR'S OPTION, "TEMPORARY SHORING FOR WALL CONSTRUCTION" MAY BE USED TO CONSTRUCT RETAINING WALLS NO.1 & 2. SEE MSE RETAINING WALLS PROVISION FOR TEMPORARY SHORING FOR WALL CONSTRUCTION.

THE WALL CONTRACTOR SHALL CONSTRUCT A TEST PANEL THAT INCLUDES A WINDOW FOR APPROVAL BY NCDOT AND SHPO PRIOR TO CONSTRUCTION OF THE RETAINING WALLS.



PRECAST CONCRETE PANELS

LEVELING PAD STEP DETAILS



PARTIAL ELEVATION WITH BRICK FACADE

SEE ARCHITECTURAL PLANS FOR BRICK FACADE DIMENSIONS AND DETAILS

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10TH STREET BRIDGE OVER
 DICKINSON AVE (SR 1531)
 AND CSX RAILROAD

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1	MJA	8/2014	3	MJA	6/2015
2	MJA	12/2014	4		