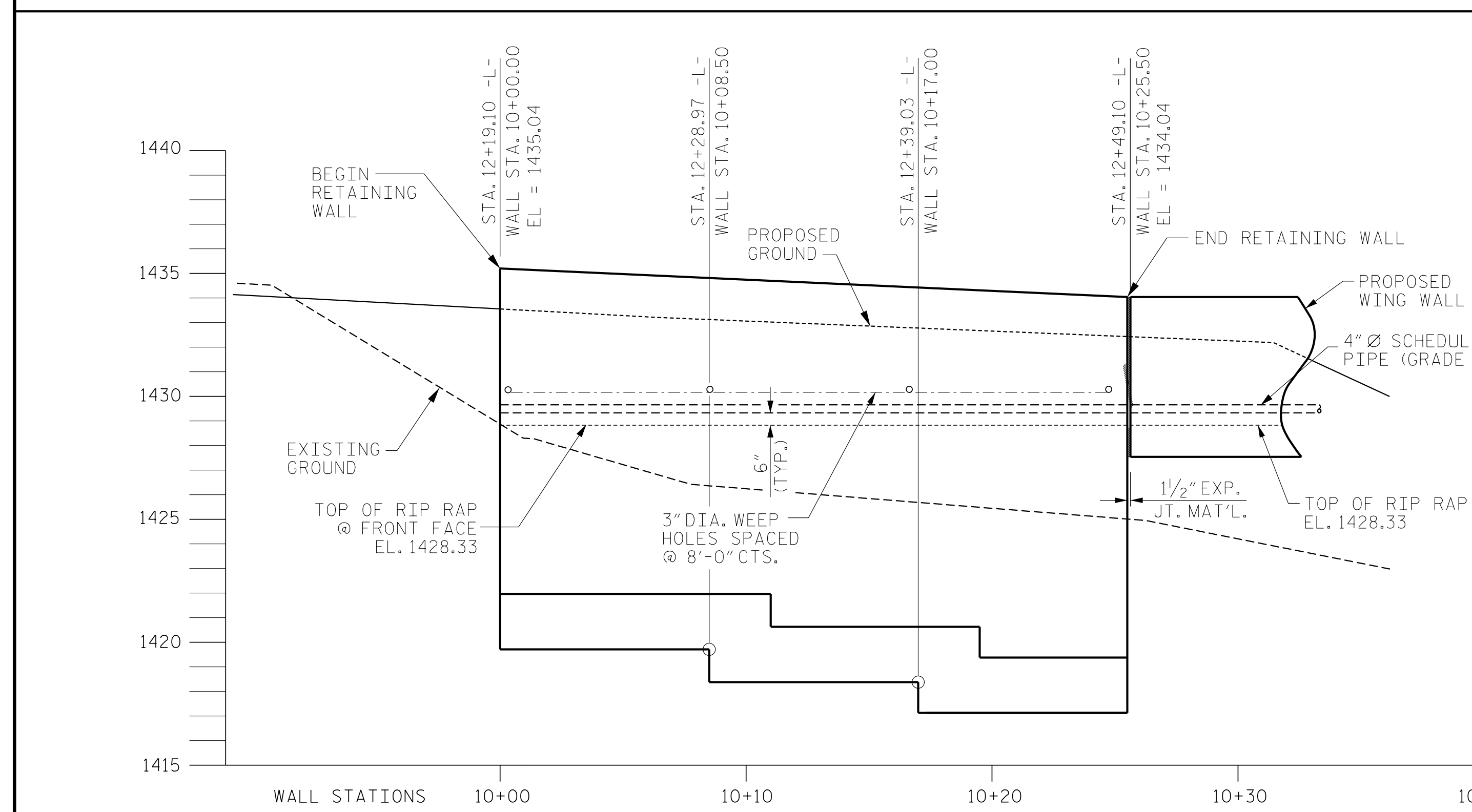


LOCATION SKETCH



RETAINING WALL NO. 1 PROFILE

VIEWING FRONT FACE

**NOTES:**

- 1) FOR STANDARD CAST-IN-PLACE (CIP) CANTILEVER RETAINING WALLS, SEE CAST-IN-PLACE CANTILEVER RETAINING WALL SPECIAL PROVISION.
- 2) FOR STEEL BEAM GUARDRAIL, SEE ROADWAY PLANS AND SECTION 862 OF THE STANDARD SPECIFICATIONS.
- 3) FOR FENCES OR HANDRAILS ON TOP OF THE WALLS, SEE ROADWAY PLANS FOR FENCE OR HANDRAIL ATTACHMENT DETAILS.
- 4) DRAIN PIPES ARE REQUIRED FOR RETAINING WALL NO. 1.
- 5) FOR SUBSURFACE DRAINAGE AT WEEP HOLES, SEE ARTICLE 414-8 OF THE STANDARD SPECIFICATIONS.
- 6) STANDARD DESIGN OF THE CIP RETAINING WALLS IS BASED ON THE FOLLOWING PARAMETERS:
  - A) MAXIMUM FACTORED VERTICAL PRESSURE ON FOUNDATION MATERIAL = 6,250 LBS/SF FOR RETAINING WALL NO. 1.
  - B) MINIMUM EMBEDMENT ELEVATION FOR RETAINING WALL NO. 1 IS 1,419.5 FT. (LT), 1,418.0 FT (CT), 1,417.0 FT (RT).
  - C) IN-SITU ASSUMED MATERIAL PARAMETERS:

MATERIAL TYPE	UNIT WEIGHT (Y) PCF	FRICITION ANGLE (Φ) DEGREES	COHESION (c) LB/SF
BACKFILL	120	28	0
FOUNDATION	120	26	0

- 7) DESIGN RETAINING WALL NO. 1 FOR A LIVE LOAD (TRAFFIC) SURCHARGE OF 250 LBS./SF.
- 8) DO NOT PLACE CONCRETE FOR FOOTINGS FOR RETAINING WALL NO. 1 UNTIL EXCAVATION DIMENSIONS AND FOUNDATION MATERIALS ARE APPROVED.
- 9) AT THE CONTRACTOR'S OPTION, TEMPORARY SHORING FOR WALL CONSTRUCTION MAY BE USED TO CONSTRUCT RETAINING WALL NO. 1. SEE CANTILEVER RETAINING WALL SPECIAL PROVISION FOR TEMPORARY SHORING FOR WALL CONSTRUCTION.
- 10) FOOTING SHALL BE EMBEDDED 1'-0" MIN. IN SOLID ROCK.

**TOTAL STRUCTURE QUANTITIES**

* CLASS 'A' CONCRETE	48.2	CY
* REINFORCING STEEL	6,697	LBS.
* 4" Ø PERFORATED SCHEDULE 40 PVC DRAINAGE PIPE	26.0	LF.
4" Ø SCHEDULE 40 PVC OUTLET PIPE	13.25	LF.
GEOTEXTILE	44.0	SY.
* #78M STONE BACKFILL	41.0	TONS

\* QUANTITIES ARE FOR INFORMATION ONLY, WALL SHALL BE PAID FOR BY SQUARE FOOT.

STRUCTURAL ENGINEER	GEOTECHNICAL ENGINEER

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

**RETAINING WALL NO. 1 ELEVATIONS**

-L- STA	WALL STATIONS	OFFSET FROM C -L- (RIGHT)	ELEV @ TOP OF WALL	BOTTOM OF FOOTING ELEVATION
12+19.01	10+00.00	23.80	1435.04	1419.5
12+28.97	10+08.50	24.69	1434.70	1418.0
12+39.03	10+17.00	25.05	1434.37	1417.0
12+49.10	10+25.50	24.88	1434.04	1417.0

CAST-IN-PLACE CANTILEVER RETAINING WALL NO. 1  
348 SQ. FT.

PROJECT NO. 14SP.20441.1  
HAYWOOD COUNTY  
STATION: 13+33.99 -L-  
SHEET 1 OF 4

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
**RETAINING WALL NO. 1  
DETAILS**

**JMT** Johnson, Mirmiran, & Thompson Inc.  
1318-F Patton Ave.  
Asheville, NC, 28806  
License No: C-3097

DWN. BY: AW	DATE: 02/18	NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
CHKD. BY: HLW	DATE: 02/18	1			3			RW1-1
DES. EGR. OF RECORD: RTS	DATE: 02/18	2			4			TOTAL SHEETS 9