

MSE WALL SCHEMATIC PLAN AT ABUTMENT 1

SCALE: 1:100

INSTRUMENTATION TYPE	STATION	OFFSET
Inclinometer, I-1, Item No.623.30	14 + 129	11 m RT
Inclinometer, I-2, Item No.623.30	14 + 129	11 m LT
Type II Settlement Platform (Vibrating Wire Strain Gage), SP-101, Item No.623.23	14 + 130	5 m RT
Type II Settlement Platform (Vibrating Wire Strain Gage), SP-102, Item No.623.23	14 + 130	5 m LT
Type I Settlement Platform, SP-1 Item No.623.21	14 + 110	8 m RT
Type I Settlement Platform, SP-2 Item No.623.21	14 + 122	8 m LT
Type I Settlement Platform, SP-3 Item No.623.21	14 + 130	8 m RT

DESIGN CRITERIA

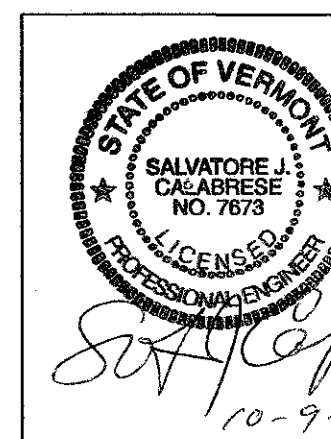
- $\gamma = 22.0 \text{ kN/m}^3$ or 139 pcf (Random Fill)
- $\gamma = 22.0 \text{ kN/m}^3$ or 139 pcf (Soil Density At OMC, Select Fill)
- $\phi = 34 \text{ Deg}$ (Soil Internal Friction, M.S.E. Select Fill)
- $\phi = 30 \text{ Deg}$ (Soil Internal Friction, Random Fill)
- $\phi = 33 \text{ Deg}$ (Soil Internal Friction—Existing Subgrade soil)
- $q = 13.31 \text{ kpa}$ (Traffic Surcharge)

- Factors Of Safety:
 FSOT ≥ 2.0 (Overturning)
 FSSL ≥ 1.5 (Sliding)
 FSPO ≥ 1.5 (Pullout)

SUPERSTRUCTURE DESIGN LOADS FOR SPREAD FOOTING ABUTMENT

Vertical Dead Load = 287 kN/m
 Vertical Live Load = 89 kN/m
 Horizontal Load = 16.5 kN/m

CERTIFIED FOR INTERNAL STABILITY OF RETAINED EARTH™ STRUCTURES ONLY. EXTERNAL STABILITY, INCLUDING BUT NOT LIMITED TO FOUNDATION AND SLOPE STABILITY, IS THE RESPONSIBILITY OF THE OWNER. DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE RETAINED EARTH™ MASS, METHODS OF CONSTRUCTION, AND QUALITY OF PREFABRICATED MATERIALS CONFORM TO THE MANUFACTURER'S SPECIFICATION.



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GENERAL NOTES

- ALL WALLS ARE SHOWN FRONT FACE. NOTE STATIONING.
- PANEL TYPE IS DESIGNATED ON EACH PANEL. CONNECTOR LABELS INDICATE NUMBER OF CONNECTORS PER ROW.
 EXAMPLE: 5B30 IS A "B30" PANEL WITH FIVE (5) CONNECTORS PER ROW.
- SEE RETAINED EARTH INSTALLATION MANUAL PUBLISHED BY FOSTER GEOTECHNICAL FOR PROPER WALL ERECTION PROCEDURES AND GUIDELINES. MANUAL IS AVAILABLE BY CALLING FOSTER GEOTECHNICAL AT (703) 499-9818.
- CONSTRUCTION PROCEDURES SHALL PREVENT BACKFILL SATURATION AND PONDING.
- HEAVY EQUIPMENT SHALL NOT BE USED WITHIN .914 M OF THE BACK OF THE RETAINED EARTH PANELS. HAND COMPACTORS SHALL BE USED IN THIS AREA.
- CARE SHALL BE TAKEN TO PREVENT DAMAGE TO GALVANIZING. DAMAGED GALVANIZING SHALL BE COATED WITH AN APPROVED SEALER.
- BEARING PADS AND FILTER FABRIC ARE NOT REQUIRED BETWEEN THE LEVELING PAD AND THE FIRST ROW OF PANELS. TEMPORARY WEDGES MAY BE USED TO PROVIDE PROPER ALIGNMENT.
- PANEL LIFTING EYE AND SPACING TOOL ARE SUPPLIED BY FOSTER GEOTECHNICAL FOR USE BY THE CONTRACTOR. OTHER TOOLS AND EQUIPMENT ARE NOT SUPPLIED BY FOSTER GEOTECHNICAL.
- COPING MAY BE INSTALLED ONCE TOP ROW OF PANELS IS COMPLETE.
- FOSTER GEOTECHNICAL RETAINED EARTH IS PROTECTED UNDER U.S. PATENT 4,725,170.
- ALL DETAILING AND CHECKING OF REINFORCING STEEL FOR ANY CAST IN PLACE CONCRETE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONCRETE FOR PRECAST PANELS TO BE CLASS A HAVING 28 DAY COMPRESSIVE STRENGTH OF 30 MPa.
- ALL PRECAST PANELS SHALL HAVE AN ASHLAR STONE FINISH AND SHALL BE COLORED. THE FEDERAL SPECIFICATION COLOR FOR PRECAST CONCRETE IS AS FOLLOWS: FEDERAL SPECIFICATION COLOR 7690-01-162-2210; FEDERAL STANDARD 5958 COLORS (JULY 1994); PRECAST PLANT COLOR 24670. THE PIGMENT COLOR SHALL BE BAYFERROX 3950 3-1/2 PERCENT (HEAT STABLE).
- ALL DIMENSIONS ARE SHOWN IN METERS (M) UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE SHOWN IN METERS (M).

COPING NOTES

- CAST-IN-PLACE (C.I.P.) COPING CONCRETE AND REINFORCEMENT SHOWN FOR INFORMATION ONLY; NOT SUPPLIED BY FOSTER GEOTECHNICAL.
- EXPOSED CORNERS SHALL BE CHAMFERED 25 mm BY 25 mm.
- C.I.P. COPING SHALL USE CLASS B OR $f_c' = 25 \text{ MPa}$ CONCRETE.
- ALL REINFORCING BARS SHALL BE EPOXY COATED AND HAVE A YIELD STRENGTH OF 420 MPa.
- SPACING FROM THE LAST STIRRUP TO THE END OF COPING SHALL NOT BE GREATER THAN ONE-HALF STANDARD STIRRUP SPACING.
- REINFORCEMENT SHALL HAVE 50mm MINIMUM CLEAR COVER, UNLESS NOTED OTHERWISE.
- EQUIVALENT WELDED WIRE FABRIC MAY BE USED AT MANUFACTURER'S DISCRETION.
- C.I.P. COPING EXPANSION JOINT SPACING SHALL NOT EXCEED 10M.
- SEE PROJECT SPECIFICATIONS FOR PRECAST AND C.I.P. COPING AND C.I.P. LEVEL-UP REQUIREMENTS.
- THE COPING CONCRETE SHALL BE COLORED TO MATCH THE MSE WALL PANELS.

VT0699

STATE OF VERMONT AGENCY OF TRANSPORTATION	
Town Of BENNINGTON	Bridge No. BR400
Highway No. VT. RTE. 9	Log Sta. Surv. Sta. 14+140
VT. RTE. 9 OVER AIRPORT BROOK WEST	
SITE PLAN AND GENERAL NOTES	
Designed By I. LIONG	Drawn By I. LIONG
Checked By L. CLAY/M. MAGARELLI	Date 11/99
PROJECT BENNINGTON-HOOSICK	PROJECT NO. D.P.I. 0146(1) C/3
I.G.C. Info.	
Bridge Sheet No. BR 431	Sheet 220 of 473