

Revision Dates
09-16
10-24

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By						
Checked By						

\* The panels should be placed at the nominal spacing shown on the plans with a 1/4" gap between the panels. The width of the gap may vary due to panel tolerances.

\*\* Grout material for the vertical panel joint shall be rodded or vibrated to ensure that all voids in the joint are filled.

Refer to Roadway Quantities

Wall Layout Line

DETAILER: Turn off level for Bridge Rail not needed.

3" HMA

2' Traffic Surcharge

5% for  $DH \leq 16$   
10% for  $DH > 16$

Panel Depth (D)

LLDPE Geomembrane  
30 mils thick

Existing Slope

Optional GRS Backfill (Typ)

(Max)(Typ)

Reinforced Zone  
(Soil reinforcements not shown for clarity)

Daylight drain pipe  
(non-perforated) @  
100'-0" intervals

5% (Min)  
10% (Max)

Concrete  
Class D

Larger of .45 DH OR 4'

0.375 DH @ 1/2 DH

1'-6" Min  
1'-6"  
Min=D+12"  
4'-0" Minimum  
Bench For Slope

☆ Barrier required when  
located within clear zone.  
See M-606-15 Style CD  
for details.

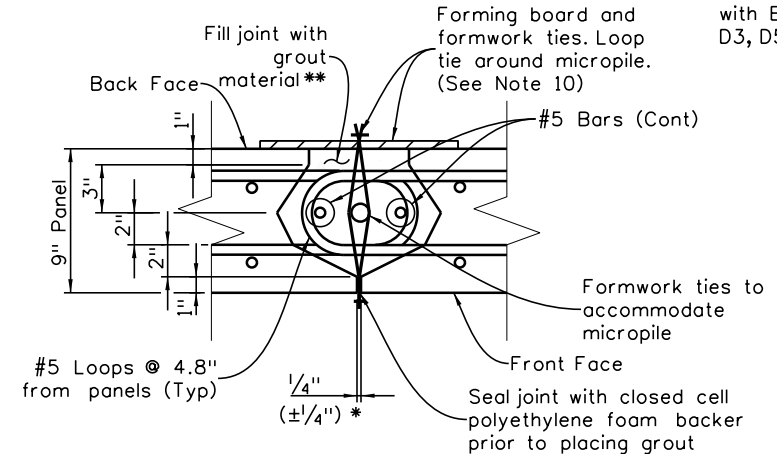
☆☆ 1'-0" (Typ) Casing  
Socket into Rock

### SECTION VIEW

Note for the Designer:  
Check slope stability during excavation  
shown on Geotech recommendation.

### Wall Segment Table

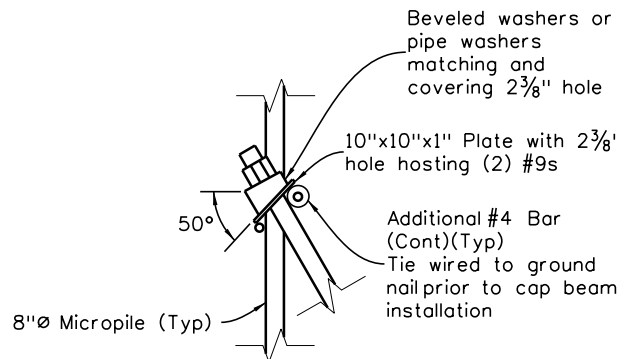
Wall Station	Estimated Bedrock Elevation	DH or Casing Pay Length (Ft)	Minimum Bond Length (Ft)	Micropile Pay Length (Ft)	Actual Bedrock Elevation



### VERTICAL JOINT DETAIL

### NOTES:

- Stage I is for panel/micropile erection. Stage II is for MSE backfill.
- For 9" thick panel, no casing is required at the panel vertical joint during Phase I construction. However, prior to backfill and reinforcement installation, kickers and battered micropile with casing as bracing are required for panel erection.
- Panels are braced by micropiles with both front and back casings and additional bracing or kickers at the front may be required prior to grouting of vertical joints and subsequent MSE backfill.
- Soil reinforcements may be spliced or modified to avoid interference with slanted micropile/casing.
- For micropile installation, coring is allowed through concrete leveling pad.
- Drain modifications, pieceable filter fabrics and holes are allowed where drain and micropiles conflict.
- To accommodate loop bars and vertical panel joint, the panel thickness and reinforcements must be modified from B-504-13 by the panel supplier. Extra material and labor shall not be paid separately but shall be included in the cost of Pay Item Panel Facing.
- Wall shop drawings including panel details are required and are subject to the Engineer's approval.
- Refer to B-504-T1 (Without Wire Basket) for optional backfill.
- Stay-in-place fiber reinforced cement backer board drilled/nailed to panels with concrete screws may be used at joint.
- Geotechnical report shall include anticipated MSE settlement. Roadway construction shall begin after a minimum of 45 days or 90% of anticipated settlement to avoid cracking due to differential settlement.



### BATTERED MICROPILE HEAD DETAIL

(Vertical and slanted micropiles are in the same plane)

8"Ø Micropile (Typ) with  
#18 Grade 75 all-  
thread bar 5'-0"  
spacing (Vertical and  
Slanted in same plane)

All seals for this set of  
drawings are applied to  
the cover page(s)

Print Date: \$DATE\$  
File Name: Sheet\_B-504-V6 .dgn  
Horiz. Scale: Vert. Scale: As Noted  
Unit Information Unit Leader Initials

### Sheet Revisions

Date:	Comments	Init.

Colorado Department of Transportation



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Staff Bridge Branch

Initials

As Constructed

No Revisions:

Revised:

Void:

TWO PHASE PANEL FACING MSE/GRS  
A-FRAME WALL FRONT MICROPILE  
EMBEDDED BETWEEN PANELS

Designer: XXXXXXXX Structure Numbers XXXXXXXXXXXX  
Detailer: XXXXXXXX  
Sheet Subset: WALL Subset Sheets: WXX of XXX

Project No./Code

Sheet Number