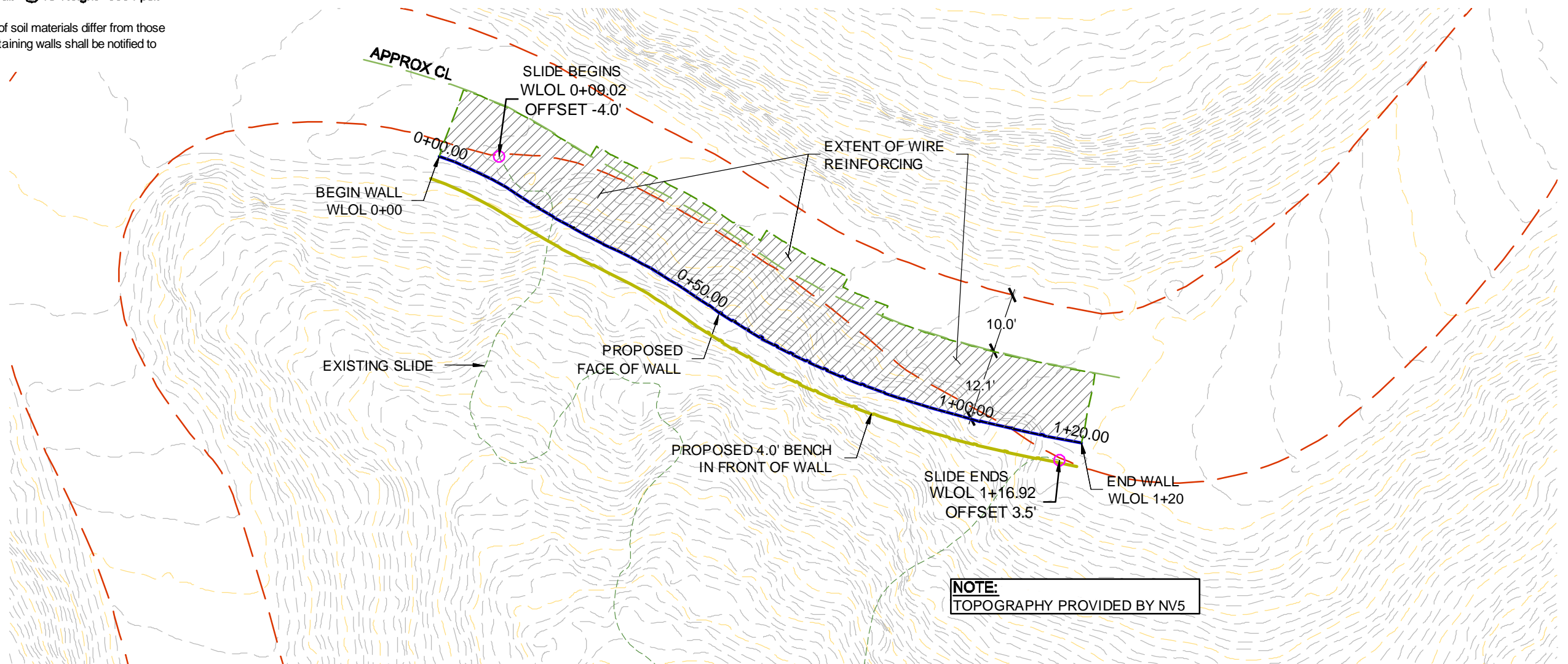


DESIGN NOTES

- Design is based on the assumption that backfill within the reinforced soil mass, methods of construction and quality of materials conform to the requirements of Hilfiker Retaining Walls.
- Assumed Soil Characteristics:
 Wall Backfill:
 Unit Weight: 130 pcf
 Internal Friction Angle: 36°
 Cohesion = 0 psf
 Retained Backfill:
 Unit Weight: 130 pcf
 Internal Friction Angle: 34°
 Cohesion = 0 psf
 Foundation Soils:
 Unit Weight: 130 pcf
 Internal Friction Angle: 34°
 Cohesion = 100 psf
 Traffic Surcharge Loading (LL) = 250 psf
- If during construction, the wall location, structure location or loads are different than that proposed in this plan set and calculation package, HRW shall be notified to evaluate the need for a redesign.
- The design requires a non-saturated backfill. Surface and sub-surface drainage control may be required to prevent saturation of the backfill or relieve hydrostatic pressures.
- Design Procedure:
 Mechanically Stabilized Earth walls and Reinforced Soil Slopes, FHWA report No. FHWA-NHI-00-043.
- All information hereon is derived from the reference drawings, and is subject to geometric and geotechnical confirmation. The applicable Hilfiker construction guide and specifications are an integral part of this submittal.
- Hilfiker Retaining Walls shall be responsible only for the internal stability of the retaining wall, and not for global stability or foundation bearing capacity. The Owner shall be responsible for global stability and foundation competence. The Owner is responsible for all job site drainage, safety and fall protection provisions for workers in compliance with OSHA and any other applicable requirements.

Worst Case Applied Bearing Pressure by MSE Wall - @ 16' Height - 3834 psf.

If actual characteristics, grades or dimensions of soil materials differ from those listed above or shown on the plans, Hilfiker Retaining walls shall be notified to evaluate the need to redesign.



INSTALLED QUANTITIES:

WELDED WIRE WALL : 1232 FT²

PLAN VIEW

SCALE: 1" = 20'



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	7-8-19	KLC	Initial .pdf Release

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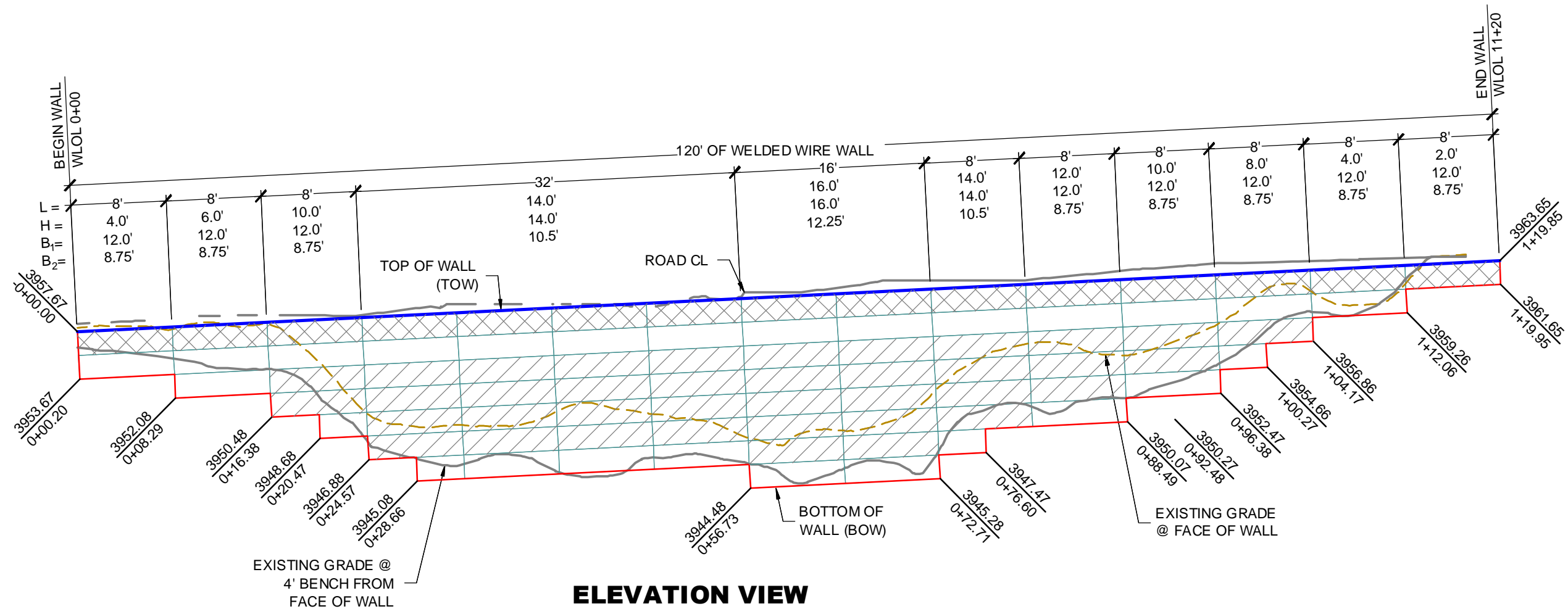
HW 190523AW

PROJECT 19-045
 DATE 7-8-19
 DESIGN KLC
 DRAWN KLC

CA ERFO Santa Ysabel 46(1) Angel Mountain Road

**MSE WELDED WIRE WALL
 PLAN VIEW & GENERAL NOTES**

SHT 1 OF 4



ELEVATION VIEW
SCALE: 1" = 10'

WALL WIRE TYPE LEGEND

FINISH: HOT DIP GALVANIZED
SERVICE LIFE: 75 YEARS

	TYPE 1 - 8X12 W4.5x3.5 MATS
	TYPE 2 - 8x21 W4.5x4.0 MATS
	TYPE 3 - 8x21 W7.0x4.0 MATS

WELDED WIRE WALL PARAMETERS		
Height of Wall (H) ft	Length of Cap & Prongless Mats (B ₁) ft	Base Length of Mats (B ₂) ft
≤12'	12.0'	8.75'
14'	14.0'	10.5'
16'	16.0'	12.25'

Cap & Top Mats (B₁) are: 8x12 W4.5x3.5 WWR (Type 1)
Standard Mats (B₂) are: 8x21 W4.5x4.0 WWR (Type 2)
8x21 W7.0x4.0 WWR (Type 3)

Finish: Hot Dip Galvanized - 75 Year Service Life

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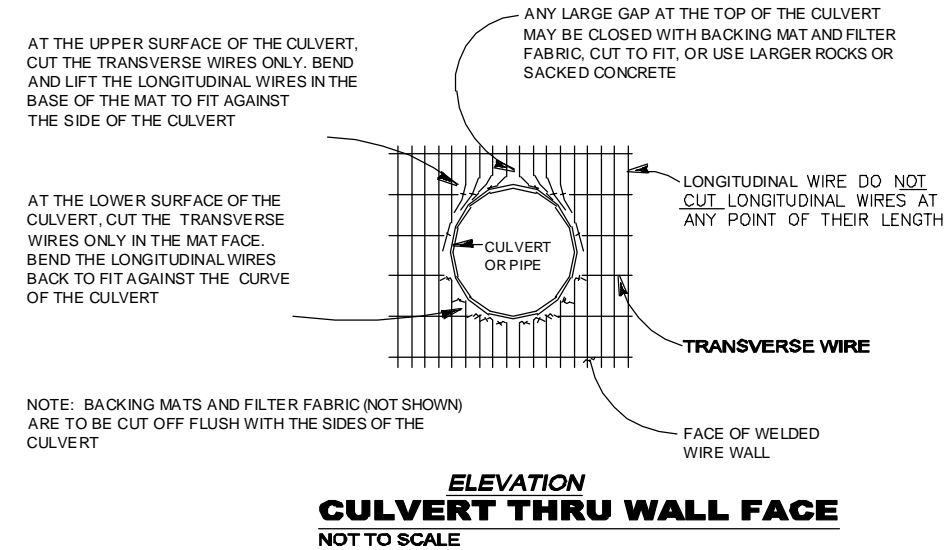
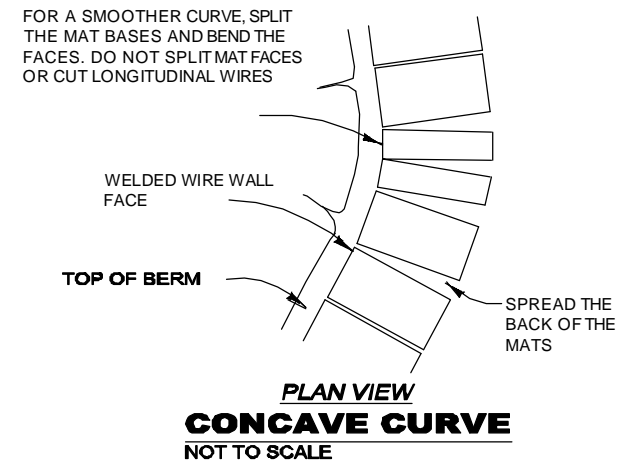
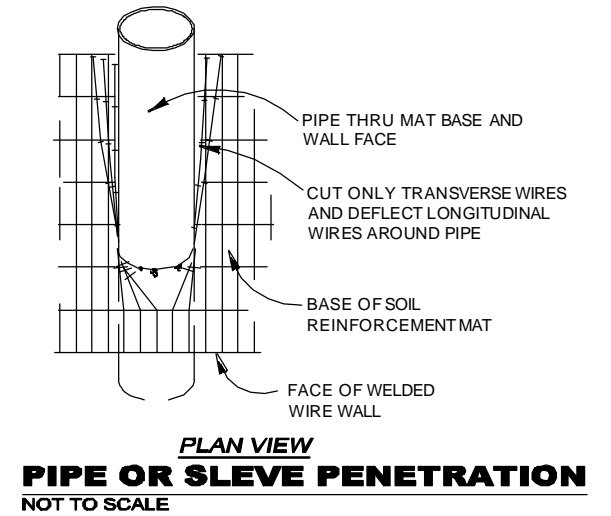
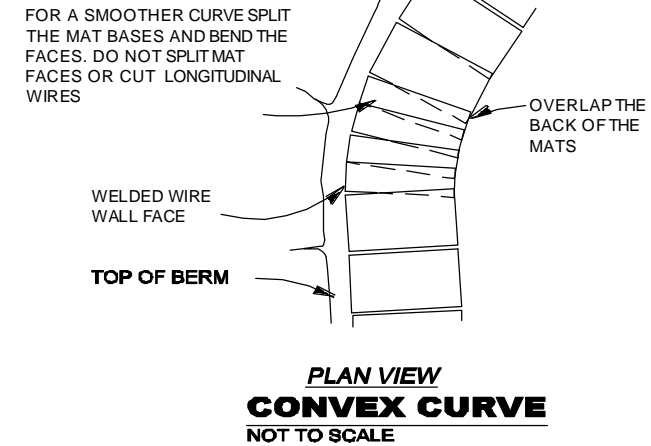
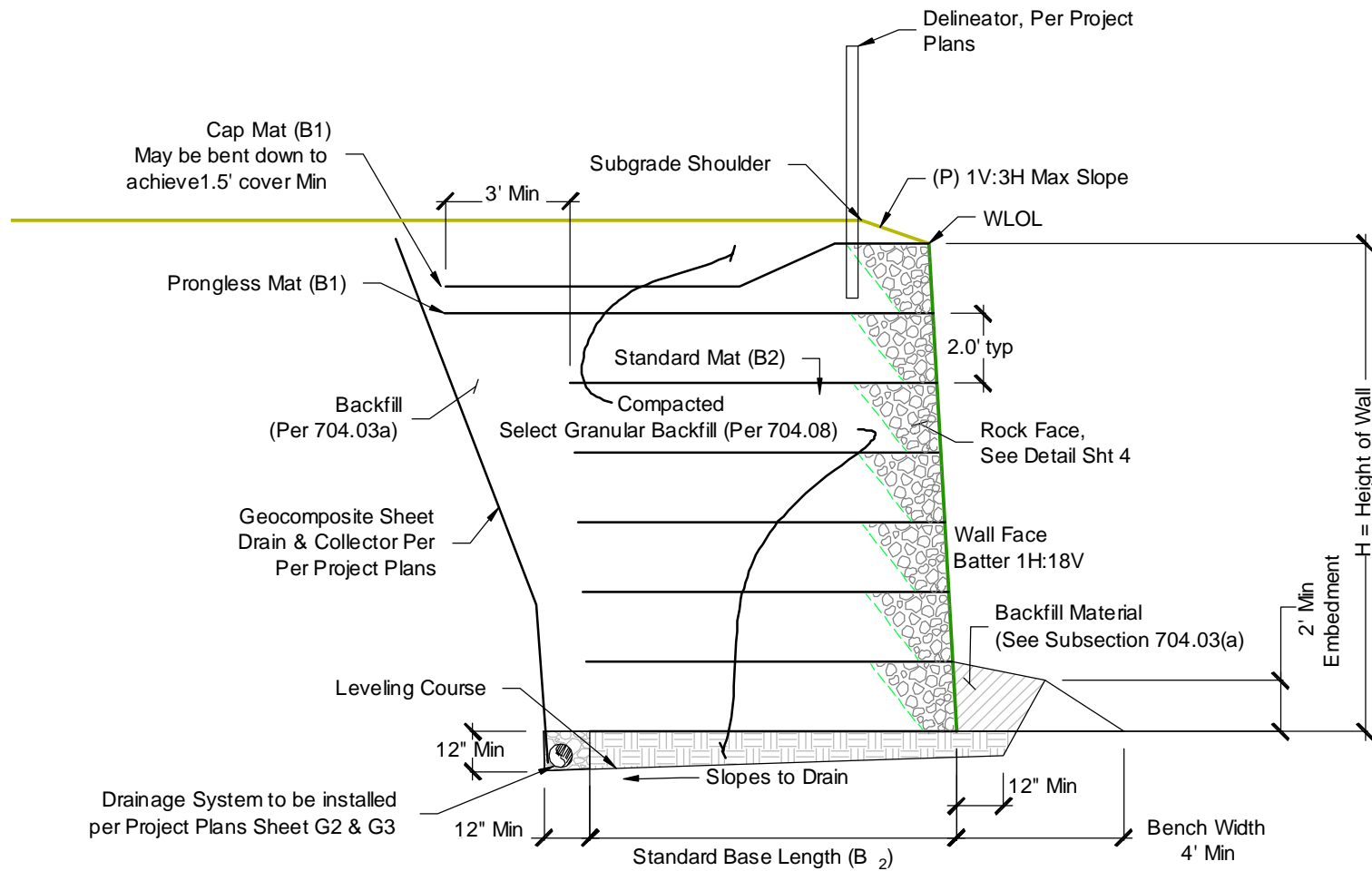
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**MSE WELDED WIRE WALL
ELEVATION VIEW**

HW 190523AW

PROJECT	19-045
DATE	7-8-19
DESIGN	KLC
DRAWN	KLC
SHT	2 OF 4



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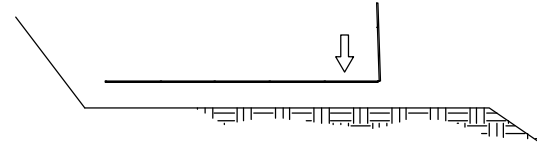
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**MSE WELDED WIRE WALL
CROSS SECTION & DETAILS**

PROJECT	19-045
DATE	7-8-19
DESIGN	KLC
DRAWN	KLC
SHT	3 OF 4

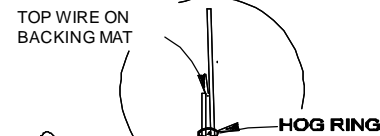
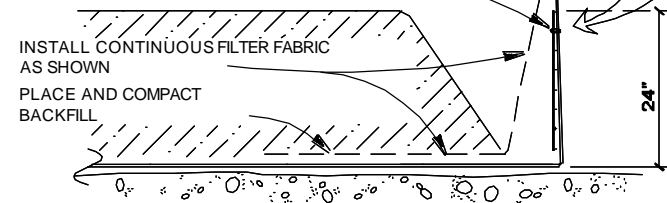
STEP 1

PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION.



STEP 2

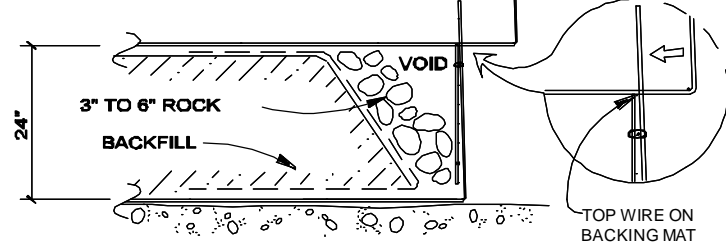
PLACE THE BACKING MAT AGAINST THE INSIDE FACE OF THE SOIL REINFORCEMENT MAT. CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP TRANSVERSE WIRE ON THE SOIL REINFORCEMENT MAT.



STEP 3

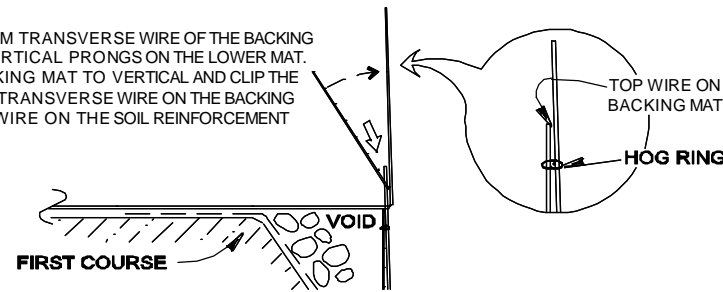
BRING THE FILTER FABRIC OVER THE FRONT AND TOP OF THE BACKFILL AS SHOWN. PLACE THE ROCK IN THE FACE OF THE WALL. LEAVE A VOID AS SHOWN.

PLACE THE SECOND COURSE OF SOIL REINFORCEMENT MATS WITH THE BASE LONGITUDINAL WIRES RESTING ON THE TOP TRANSVERSE WIRE OF THE BACKING MAT BELOW. SLIDE THE SOIL REINFORCEMENT MAT INTO ALIGNMENT.



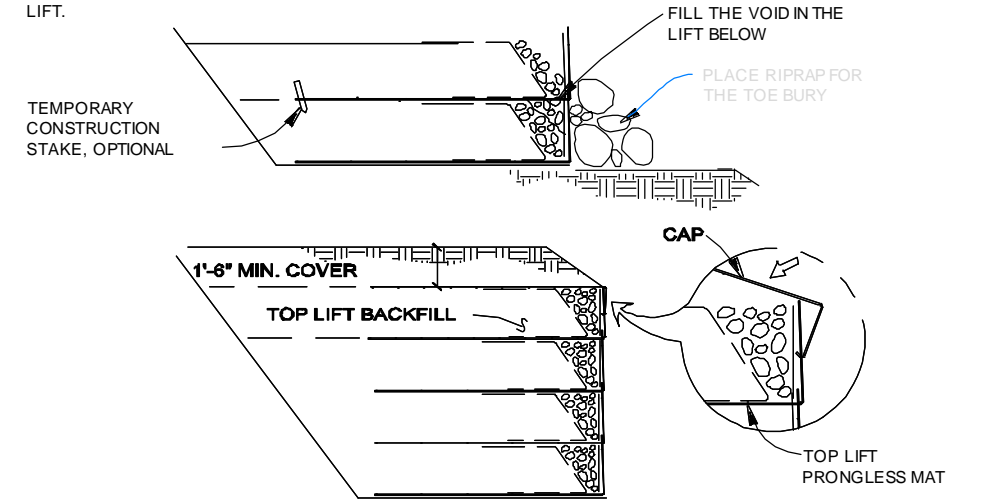
STEP 4

HOOK THE BOTTOM TRANSVERSE WIRE OF THE BACKING MAT OVER THE VERTICAL PRONGS ON THE LOWER MAT. ROTATE THE BACKING MAT TO VERTICAL AND CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP WIRE ON THE SOIL REINFORCEMENT MAT.



STEP 5

INSTALL THE FILTER FABRIC AS IN STEPS 2 AND 3. PLACE AND COMPACT THE BACKFILL AND ROCK TO THE BASE ELEVATION OF THE NEXT MAT. REPEAT STEPS 2 THROUGH 5 TO THE TOP LIFT.

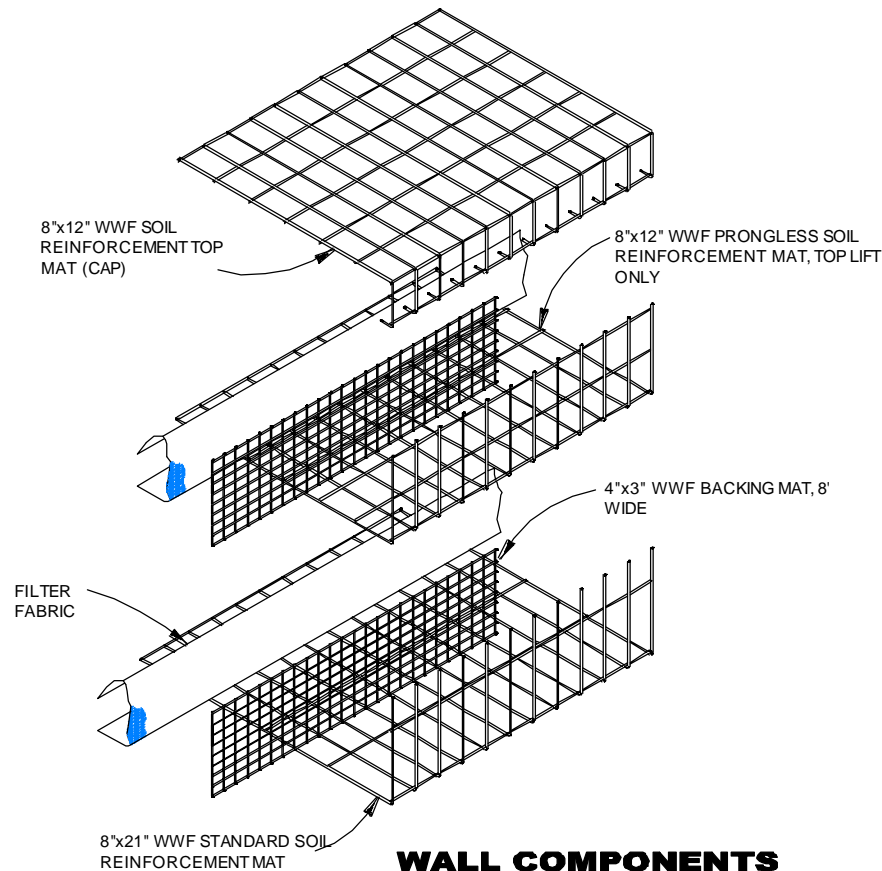


STEP 6: TOP LIFT

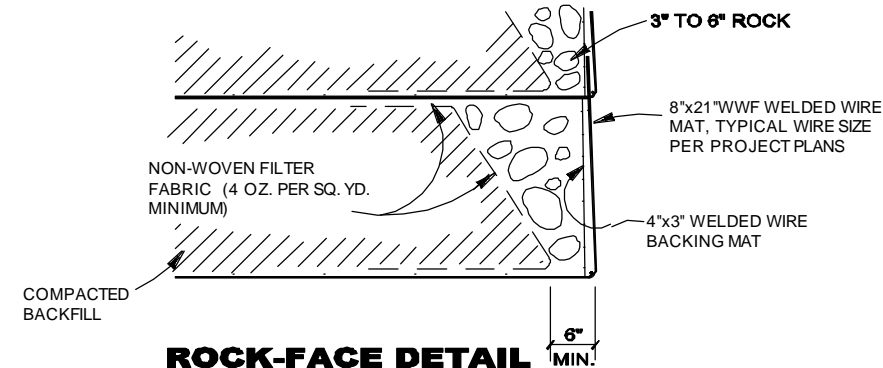
PLACE THE TOP LIFT PRONGLESS MAT, BACKING MAT AND FILTER FABRIC. PLACE AND COMPACT BACKFILL AND ROCK IN THE TOP LIFT. HOOK THE CAP OVER THE MIDDLE TRANSVERSE WIRE ON THE PRONGLESS MAT, AND ROTATE INTO PLACE. PLACE AND COMPACT COVER OVER TOP MAT TO 1'-6" MINIMUM DEPTH.

CONSTRUCTION SEQUENCE

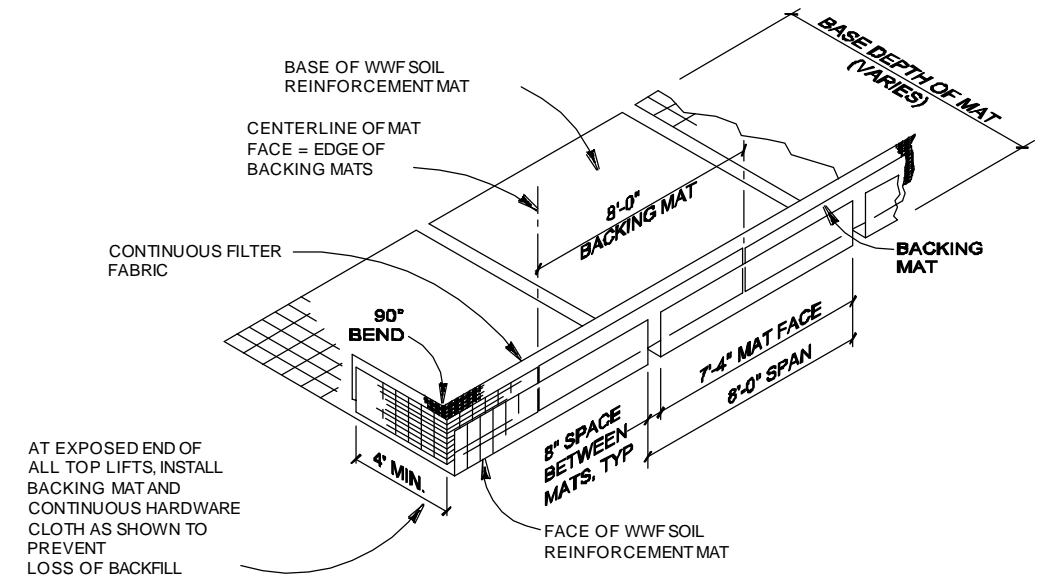
NOT TO SCALE



WALL COMPONENTS
NOT TO SCALE



ROCK-FACE DETAIL
NOT TO SCALE



ISOMETRIC VIEW
WELDED WIRE WALL COMPONENTS WITH RETURN MAT
NOT TO SCALE

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MSE WELDED WIRE WALL
PLAN VIEW & GENERAL NOTES

HW 190523AW

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DRAWN	KLC

SHT 4 OF 4