DESIGN NOTES

1. 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.

2. Assumed Soil Characteristics:
   Wall Backfill:
   Unit Weight: 125 pcf
   Internal Friction Angle: 34°
   Retained Backfill:
   Unit Weight: 125 pcf
   Internal Friction Angle: 34°
   Foundation Soils:
   Unit Weight: 125 pcf
   Friction Angle for Sliding: 34°

Surcharge Loading on Top of 10'H Wall Section = 2150 psf at 1.0' from Face of Wall
Maximum Applied Bearing Pressure from 10'H Wall Section = 3600 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.

3. 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.

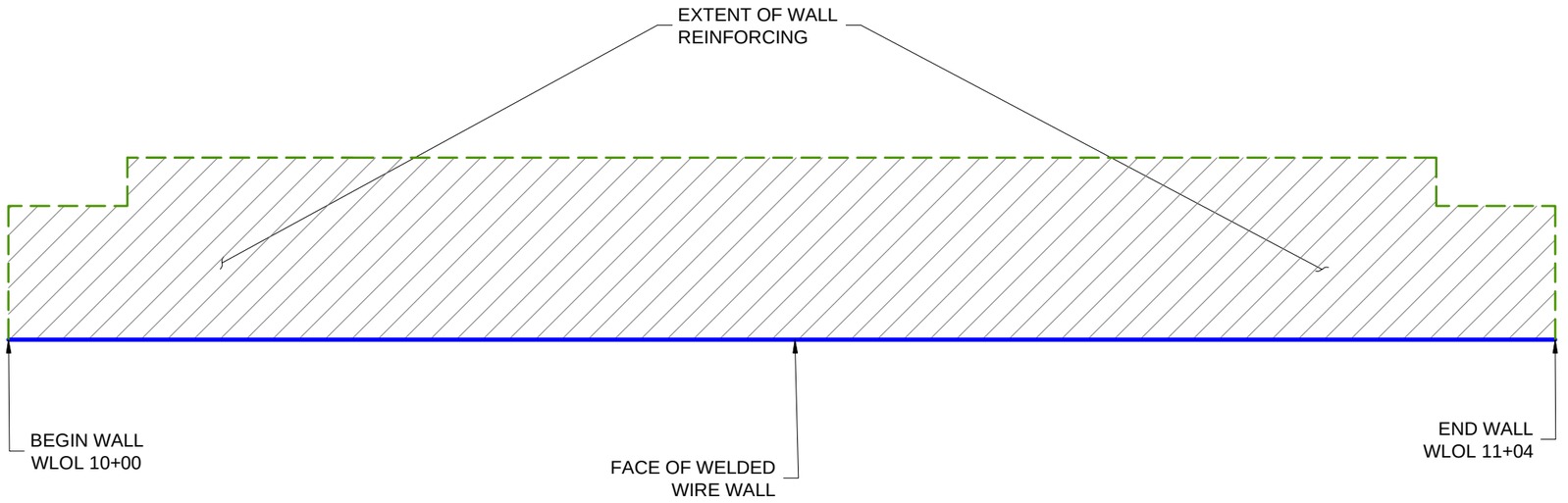
4. The design requires a non-saturated backfill. Surface and sub-surface drainage control may be required to prevent saturation of the backfill or relieve hydrostatic pressures.

5. Design Procedure:
Mechanically Stabilized Earth walls and Reinforced Soil Slopes, FHWA report No. FHWA-NHI-00-043 with Safety Factors base upon Par. 4.2.

6. Hilfiker Retaining Walls shall be responsible only for the internal stability of the retaining wall.

SUPPLIED QUANTITIES:

WALL AREA:	944 FT^2



PLAN VIEW
SCALE: 1" = 30'

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HW 170404AW

REV.NO.	DATE	BY	DESCRIPTION
	5-12-17	KLC	Initial .pdf Release

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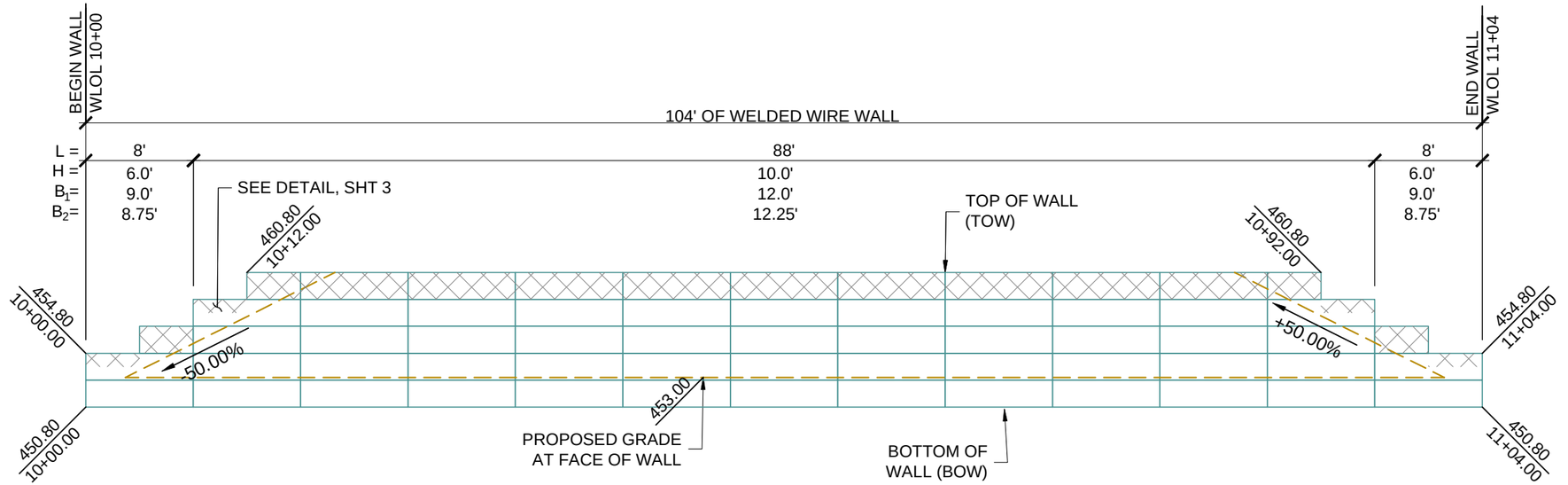
Oroville Emergency Recovery Spillways

TEMP MSE WELDED WIRE WALL
PLAN VIEW
& GENERAL NOTES

PROJECT	17-034
DATE	5-12-17
DESIGN	KLC
DRAWN	KLC

SHT 1 OF 4



ELEVATION VIEW - MSE WELDED WIRE WALL

SCALE: 1" = 10'

WELDED WIRE WALL PARAMETERS		
Height of Wall (H) ft	Length of Cap & Prongless Mats (B_1) ft	Base Length of Mats (B_2) ft
6'	9.0'	8.75'
10'	12.0'	12.25'

Cap & Top Mats (B1) are 8x12 W7.0x3.5 WWR (Type 1)
Standard Mats (B2) are: 8x21 W7.0x4.0 WWR (Type 2)
Finish: Black (Unfinished) - 1 Year Service Life

WALL WIRE TYPE LEGEND

FINISH: BLACK (UNFINISHED)
SERVICE LIFE: 1 YEARS

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

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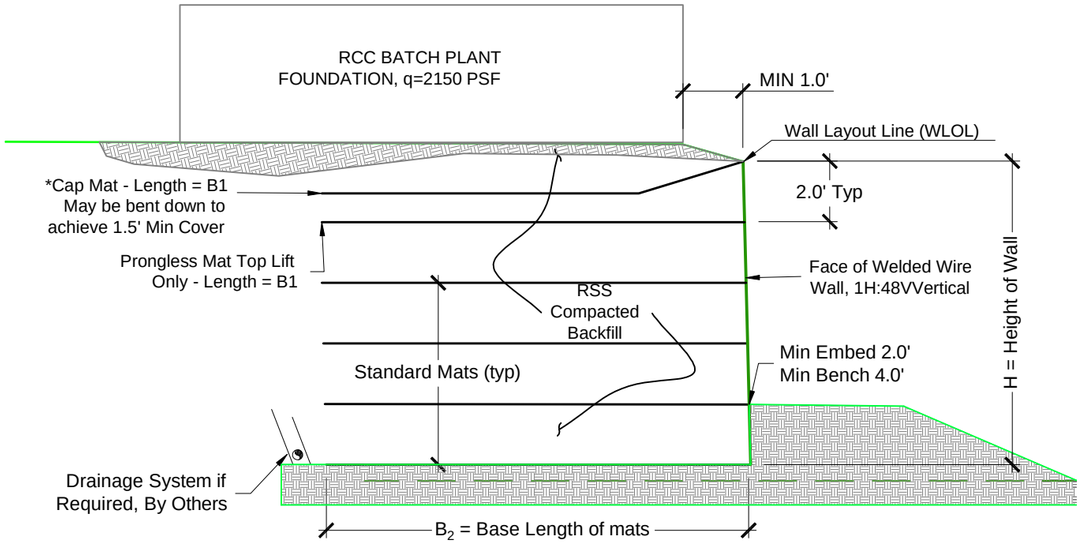
Oroville Emergency Recovery Spillways

TEMP MSE WELDED WIRE WALL
ELEVATION VIEW

PROJECT	17-034
DATE	5-12-17
DESIGN	KLC
DRAWN	KLC

SHT 2 OF 4

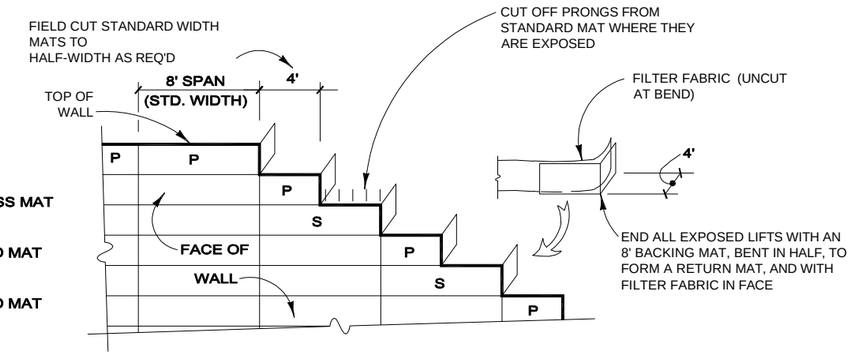


CROSS SECTION, TYP

SCALE: 1" = 5'

LEGEND
(THIS DETAIL ONLY)

P	PRONGLESS MAT
S	STANDARD MAT
	STANDARD MAT



RETURN MATS AND TOP OF WALL DETAIL

NOT TO SCALE

HW 170404AW

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Oroville Emergency Recovery Spillways

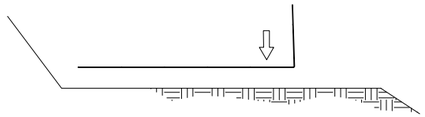
TEMP MSE WELDED WIRE WALL
CROSS SECTION VIEW AND DETAIL

PROJECT	17-034
DATE	5-12-17
DESIGN	KLC
DRAWN	KLC

SHT 3 OF 4

STEP 1

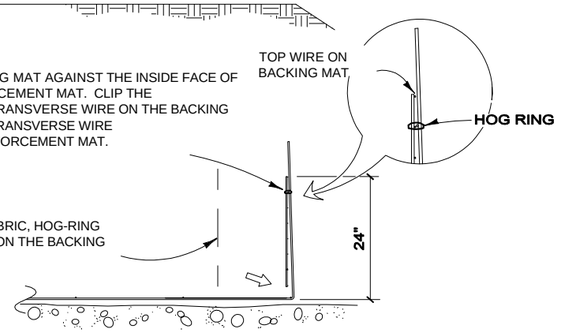
PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION



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.

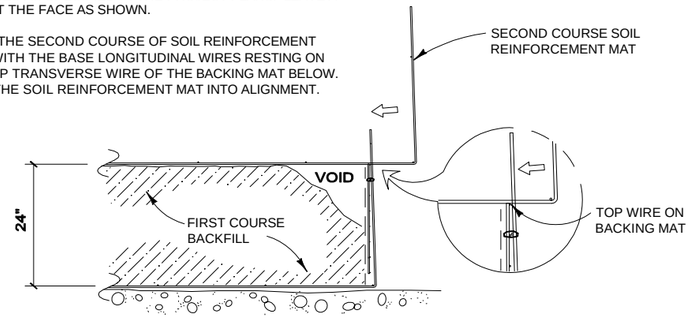
INSTALL FILTER FABRIC, HOG-RING TO THE TOP WIRE ON THE BACKING MAT.



STEP 3

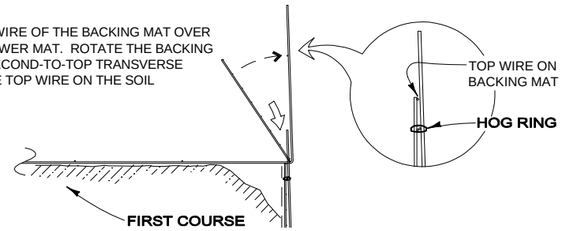
PLACE AND COMPACT THE BACKFILL IN LAYERS AND DENSITIES AS SPECIFIED IN THE PROJECT PLANS. LEAVE A VOID AT THE FACE AS SHOWN.

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.



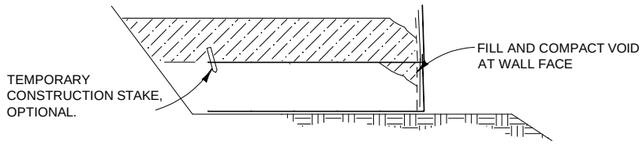
STEP 4

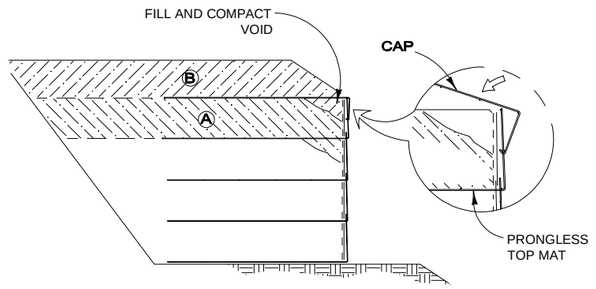
HOOK THE BOTTOM TRANSVERSE WIRE OF THE BACKING MAT OVER THE VERTICAL PRONGS ON THE LOWER MAT. ROTATE THE BACKING MAT TO VERTICAL AND CLIP THE SECOND-TO-TOP TRANSVERSE WIRE ON THE BACKING MAT TO THE TOP WIRE ON THE SOIL REINFORCEMENT MAT.



STEP 5

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



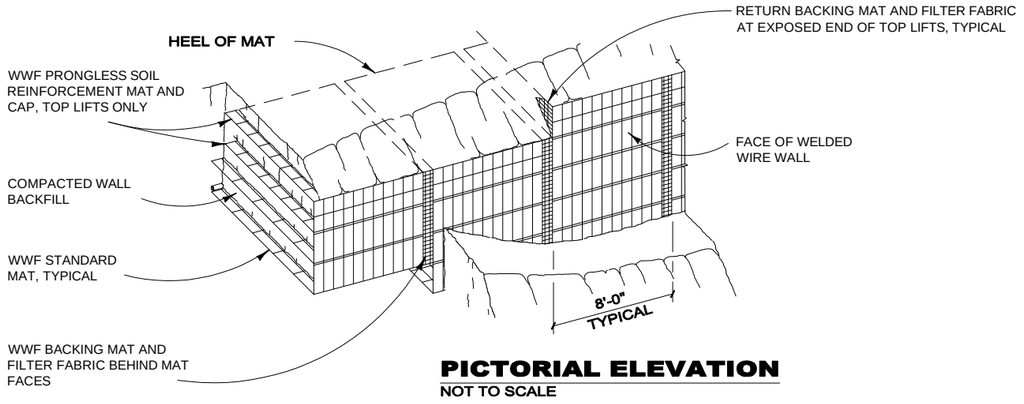


STEP 6: TOP LIFT

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

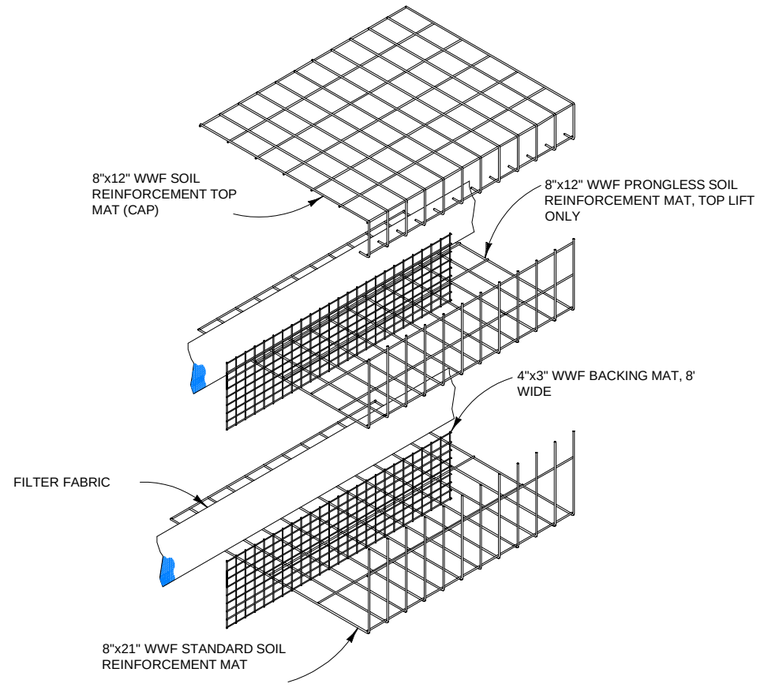
CONSTRUCTION SEQUENCE

NOT TO SCALE



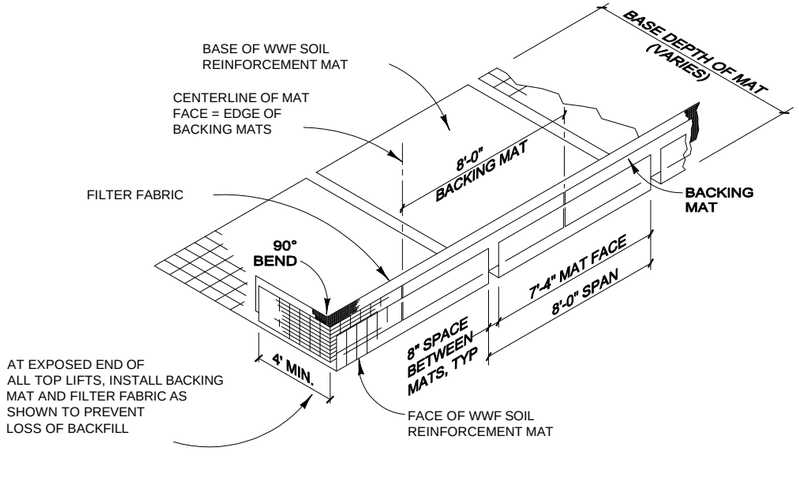
PICTORIAL ELEVATION

NOT TO SCALE



WALL COMPONENTS

NOT TO SCALE



ISOMETRIC VIEW

WELDED WIRE WALL COMPONENTS WITH RETURN MAT

NOT TO SCALE

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TEMP MSE WELDED WIRE WALL CONSTRUCTION SEQUENCE & DETAILS

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SHT 4 OF 4