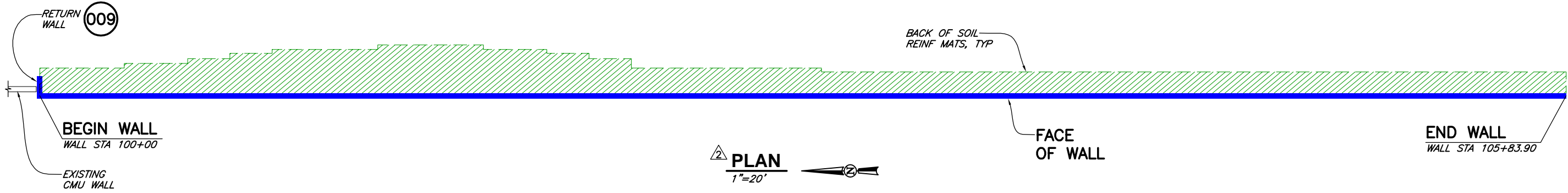


CAD: \\EUREKA\PROJECTS\2016\016006-DOVE-MOUNTAIN\DWGS\016006-DEL-WEBB-R2.DWG
(HRW 151210 CW)



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: 125 PCF
 INTERNAL FRICTION ANGLE: 34°
 COHESION: 0 PSF
 RANDOM BACKFILL:
 UNIT WEIGHT: 120 PCF
 INTERNAL FRICTION ANGLE: 34°
 COHESION: 0 PSF
 COEFFICIENT OF ACTIVE SOIL PRESSURE: 0.283
 FOUNDATION SOILS:
 FRICTION ANGLE FOR SLIDING: 30°
 COHESION: 0 PSF
 MAXIMUM APPLIED BEARING PRESSURE: 5.98 KSF (FACTORED)
 4.24 KSF (UNFACTORED) (D.L.+L.L.)
 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.
- 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.
 DRAINAGE CONTROL SHALL BE AS SPECIFIED IN THE PROJECT PLANS AND SPECIFICATIONS OR AS DIRECTED BY THE OWNER'S ENGINEER. PAYMENT FOR DRAINAGE SHALL BE AS SPECIFIED IN THE PROJECT SPECIFICATIONS.
- REFERENCE DOCUMENTS:
 ELECTRONIC FILES IN .PDF FORMAT, PREPARED BY BAKER & ASSOCIATES ENGINEERING INC. DRAWINGS DATED 11/13/15.
- THE GEOTECHNICAL REPORT FOR THE PROJECT, PREPARED BY PATTISON-EVANOFF DATED AUGUST 12, 2011, HAS BEEN REVIEWED AND THE WELDED WIRE WALL DESIGN MEETS THE DESIGN CRITERIA IN THE REPORT.

WALL QUANTITIES

BASE DEPTH	CAP MAT W4.5xW3.5 (8x12)	PRONGLESS MAT W4.5xW3.5 (8x12)	STANDARD MAT W7xW4 (8x21)	STANDARD MAT W7xW3.5 (8x10.5)	STANDARD MAT W9.5xW4 (8x21)
19'-3"	-	-	50	-	10
19'-0"	5	5	-	-	-
17'-6"	-	-	85	-	-
17'-0"	8	8	-	-	-
16'-0"	4	4	-	-	-
15'-9"	-	-	36	-	-
14'-0"	4	4	32	-	-
12'-3"	-	-	20	-	-
12'-0"	3	3	-	-	-
10'-6"	-	-	30	39	-
10'-0"	13	13	-	-	-
9'-0"	36	36	-	-	-
8'-9"	-	-	70	39	-
5'-3"	-	-	3	3	-
5'-0"	1	1	-	-	-
3'-6"	-	-	1	-	-
3'-0"	3	5	-	-	-
WALL FACE SUPPLIED	8,096 SQ FT				
MSE BACKFILL (BY OTHERS)	*3,839 CU YD				
BACKING MATS 2' HIGH	489 EA				
BACKING MATS 3' HIGH	18 EA				
FILTER FABRIC 7'-6" WIDE	4,056 LF				
HOG RINGS	12,000 EA				
PLIERS	5 EA				

* TOP MAT TO BOTTOM MAT, NEAT.

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WELDED WIRE WALLS
HILFIKER RETAINING WALLS

1902 HilfiKER Lane
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WEBSITE www.hilfiKER.com E-MAIL info@hilfiKER.com

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 812 W. Wabasha
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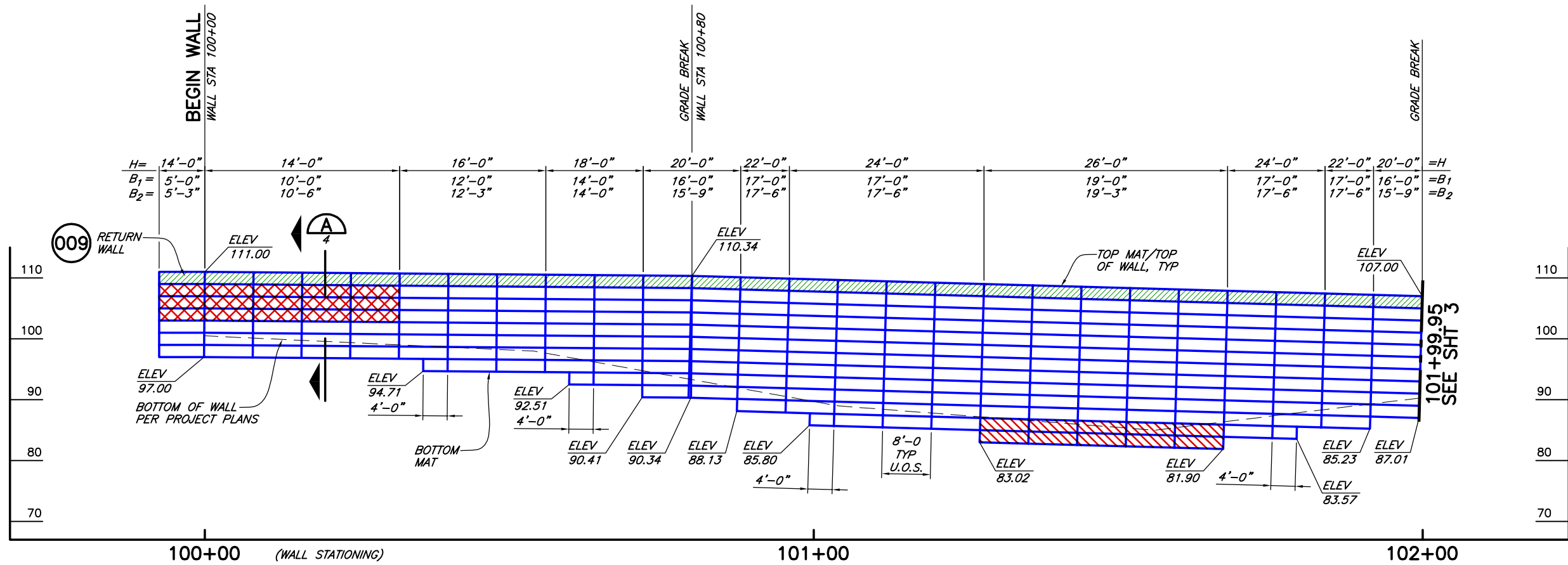
SM

DESIGN	K/JM	BY
DR	MMD	
CHK	K/JM	
APVD		
NO.	NO.	REVISION
02/04/16	01/15/16	CHANGED TOP OF WALL ADD FACE ROCK
DATE	DATE	

LANDMARK TITLE
 DEL WEBB AT DOVE MOUNTAIN (SOUTH)
 MARANA, PIMA COUNTY, ARIZONA
WALL PLAN,
NOTES & QUANTITIES

SHEET
 1 OF 5
 DATE 1/13/16
 PROJ. NO.
 016006

CAD: \\EUREKA\PROJECTS\2016\016006-DOVE-MOUNTAIN\DWGS\016006-DEL-WEBB-R2.DWG
(HRW 151210 CW)



WALL DEVELOPED ELEVATION
1"=10' HORIZ AND VERT
U.O.S.= UNLESS OTHERWISE STATED

- WWR MAT LEGEND**
- 8x12, W4.5xW3.5 WWR SOIL REINFORCING MATS
 - 8x21, W7xW4 WWR SOIL REINFORCING MATS
 - 8x10.5, W7xW3.5 WWR SOIL REINFORCING MATS
 - 8x21, W9.5xW4 WWR SOIL REINFORCING MATS



WELDED WIRE WALLS
HILFIKER RETAINING WALLS

HW

1902
SINCE 1902

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SEE SHT 3

101+99.95
SEE SHT 3

02/04/16
DATE

CHANGED TOP OF WALL
REVISION

NO.

APPROVED

CHECKED

DRAWN

DESIGNED

LANDMARK TITLE
DEL WEBB AT DOVE MOUNTAIN (SOUTH)
MARANA, PIMA COUNTY, ARIZONA

WALL ELEVATION

SHEET
2 OF 5

DATE 1/13/16

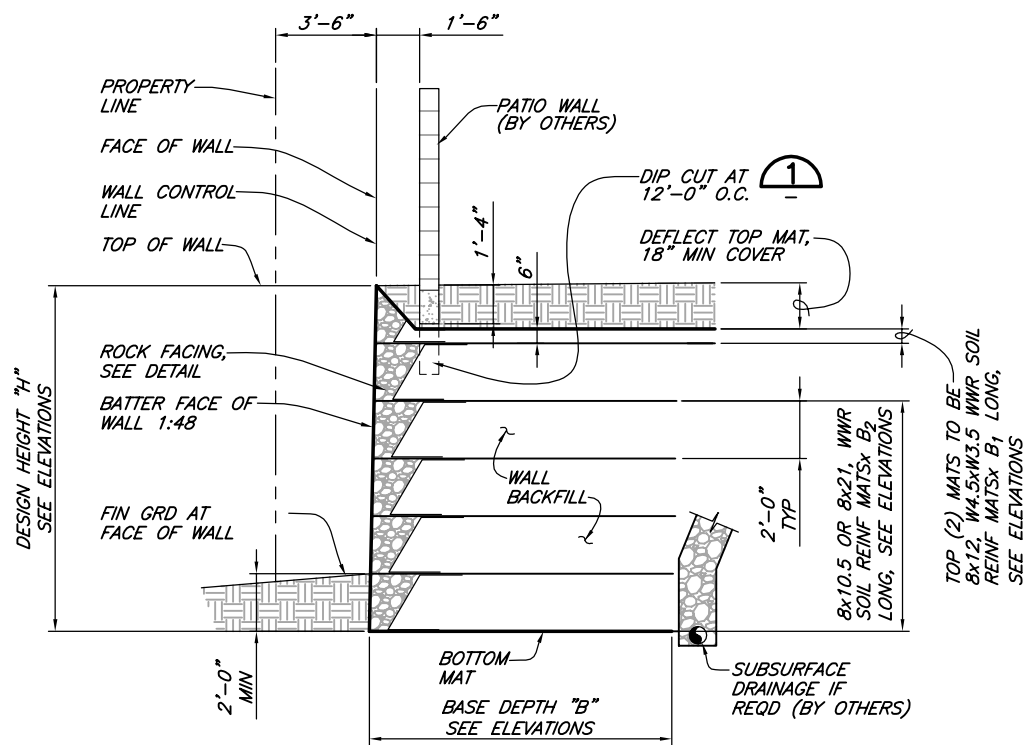
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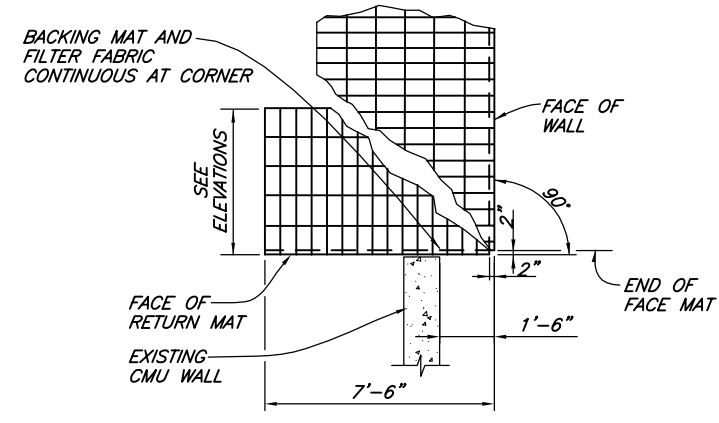
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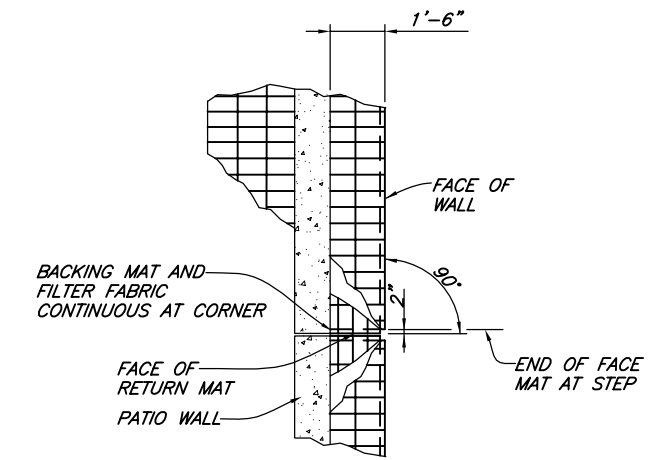
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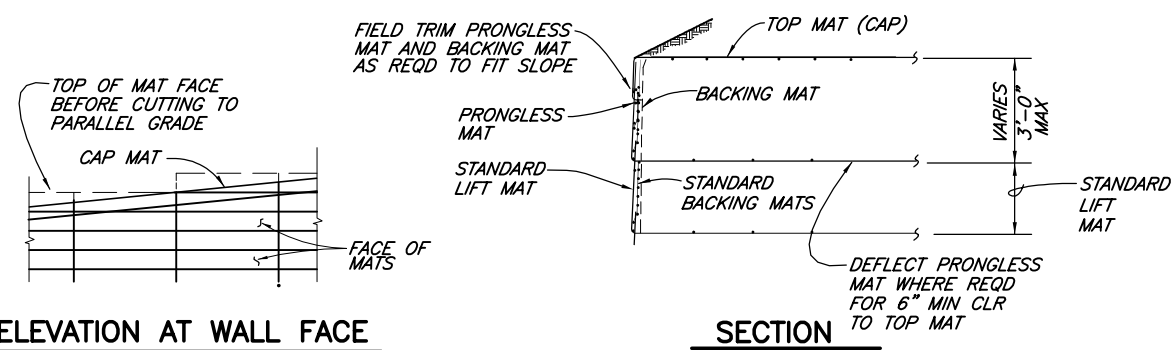
SECTION A
NO SCALE



END OF WALL RETURN
NOT TO SCALE



STEP AT TOP OF WALL
NOT TO SCALE

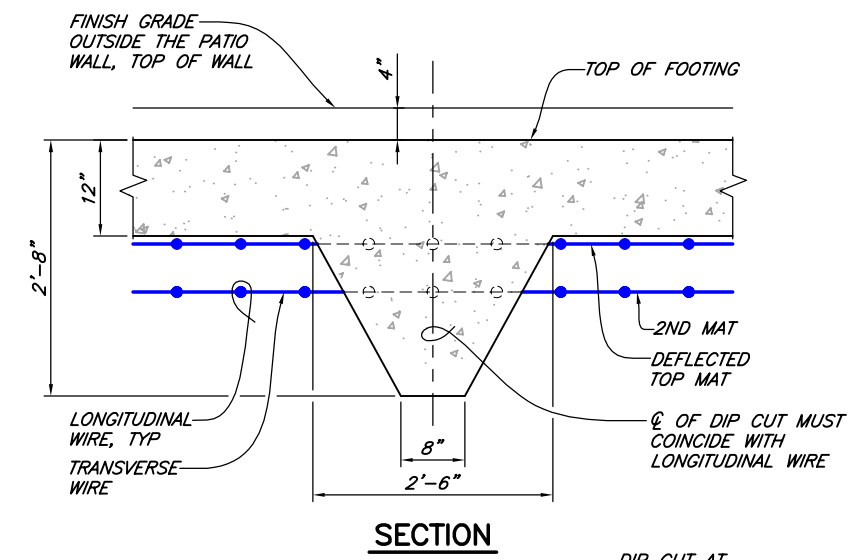


ELEVATION AT WALL FACE

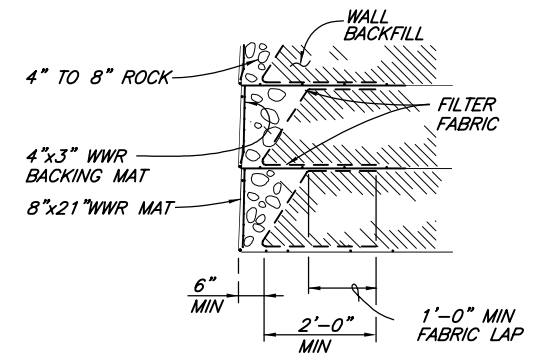
SECTION

- INSTALLATION SEQUENCE**
1. PLACE THE PRONGLESS MATS AND BACKING MATS FOR THE TOP LIFTS.
 2. CUT THE PRONGLESS AND BACKING MAT FACES OFF PARALLEL TO THE SLOPE OF THE FINAL GRADE.
 3. PLACE AND COMPACT THE BACKFILL IN THE TOP LIFTS TO PARALLEL THE FINAL GRADE SLOPE.
 4. PLACE THE CAPS ON THE BACKFILL AND CLIP THEM TO THE PRONGLESS MAT FACES WITH HOG RINGS.
 5. PLACE AND COMPACT THE FINAL COVER OVER THE CAP MATS.

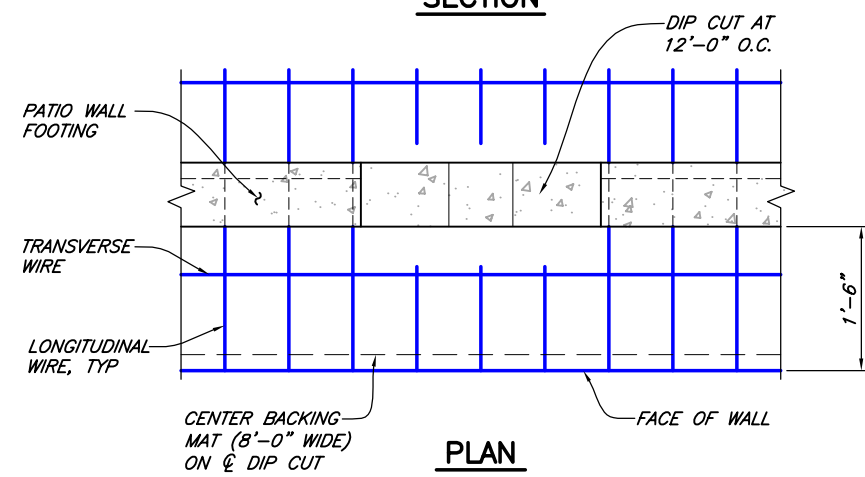
SLOPED CAP DETAILS
NOT TO SCALE



SECTION



ROCK FACING
NOT TO SCALE



PLAN

PATIO WALL DIP CUT
NOT TO SCALE

NOTE: MAXIMUM OF 3 LONGITUDINAL WIRES AND 1 TRANSVERSE WIRE MAY BE CUT AT EACH DIP CUT



WELDED WIRE WALLS

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(707)441-8855
FAX (707)441-8877

NO.	DATE	BY	REVISION
02/04/16		K/JM	CHANGED TOP OF WALL
01/15/16		K/JM	ADD FACE ROCK

LANDMARK TITLE
DEL WEBB AT DOVE MOUNTAIN (SOUTH)
MARANA, PIMA COUNTY, ARIZONA

WALL SECTION & DETAILS

SHEET
4 OF 5
DATE 1/13/16
PROJ. NO. 016006

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(HRW 151210 CW)

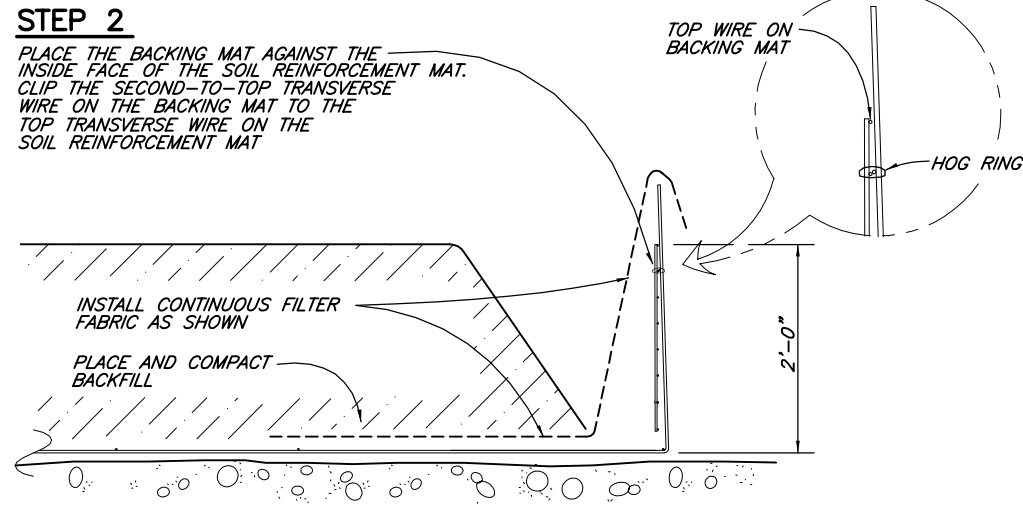
STEP 1

PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION



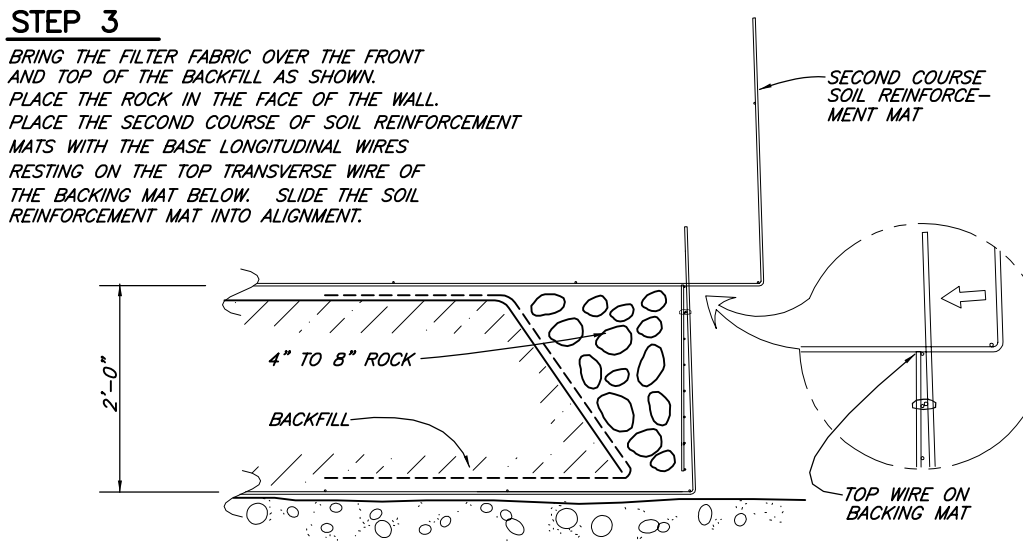
STEP 2

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. 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.

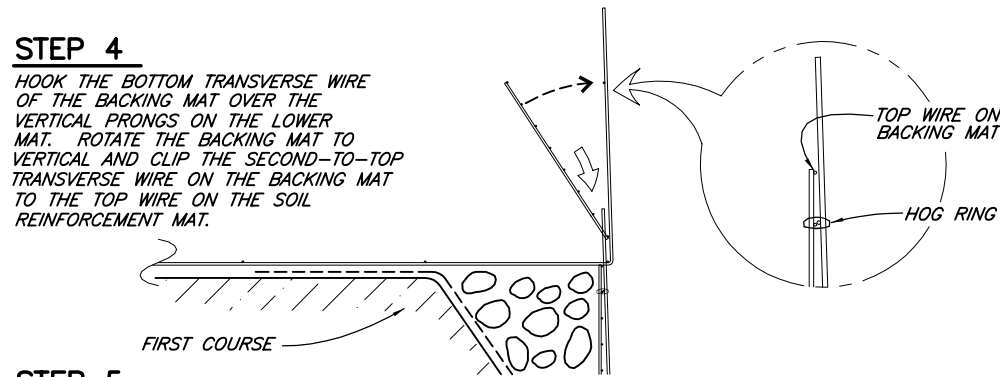


CONSTRUCTION SEQUENCE- ROCK FACE

NO SCALE

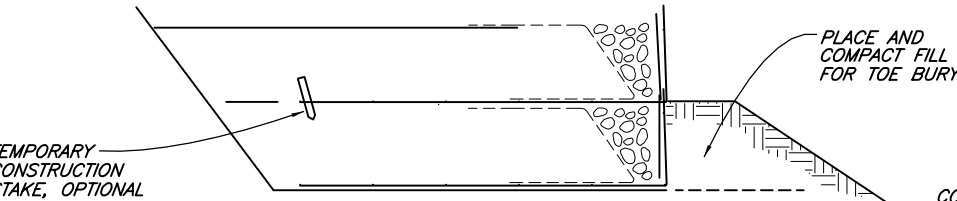
STEP 4

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 THRU 5 TO THE TOP LIFT.

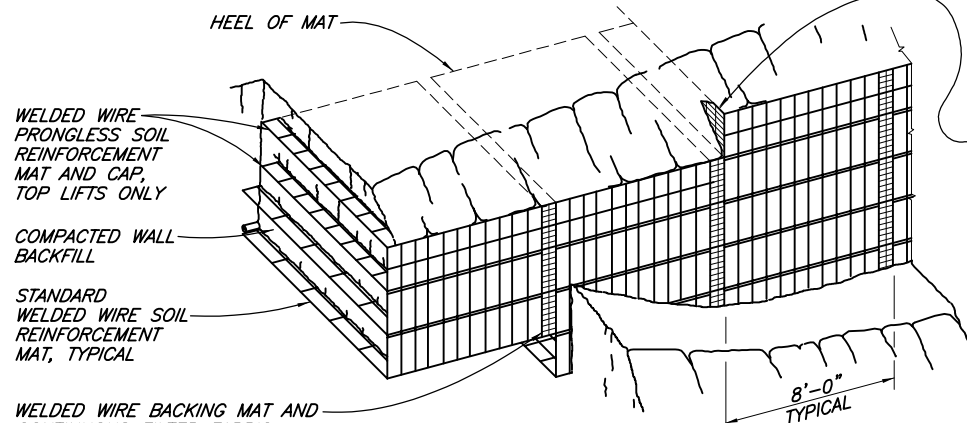
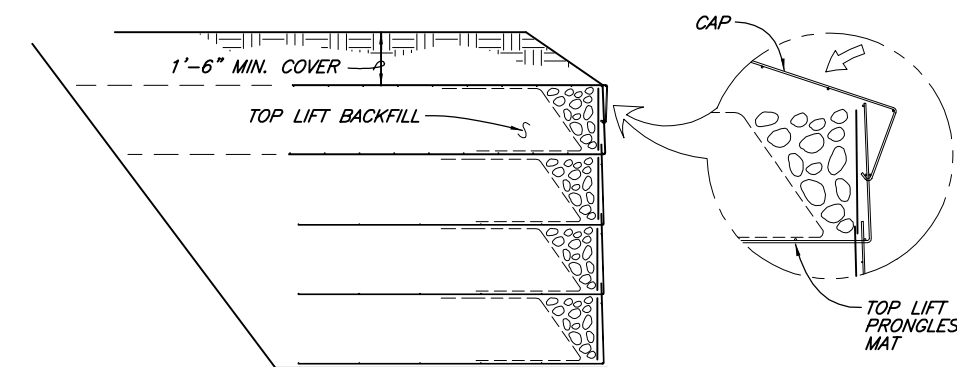


STEP 6: TOP LIFT

PLACE THE TOP LIFT PRONGLESS MAT, BACKING MAT AND FILTER FABRIC.

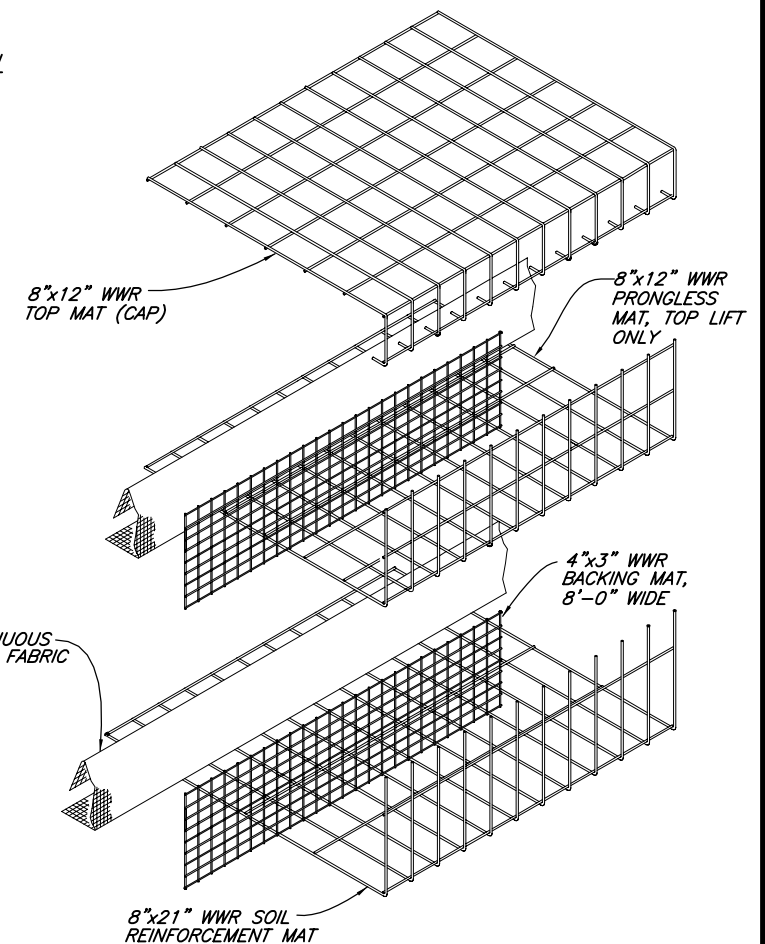
PLACE AND COMPACT BACKFILL AND ROCK IN THE TOP LIFT.

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.



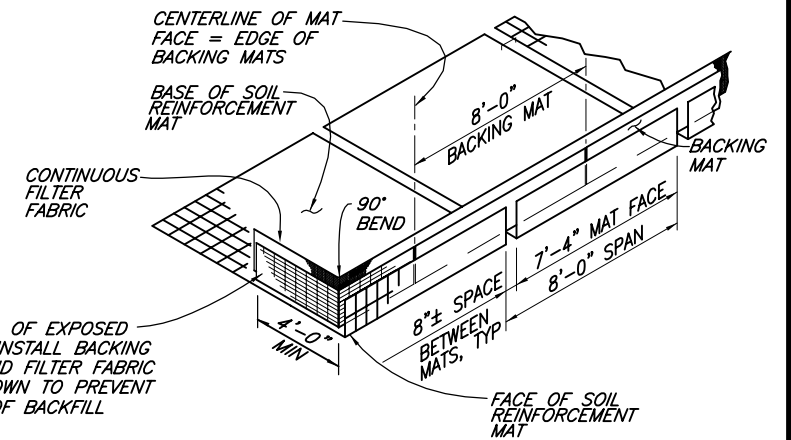
PICTORIAL ELEVATION- COBBLE FACE

NO SCALE



WALL COMPONENTS

NO SCALE



ASSEMBLED WALL COMPONENTS

NO SCALE

AT END OF EXPOSED LIFTS, INSTALL BACKING MAT AND FILTER FABRIC AS SHOWN TO PREVENT LOSS OF BACKFILL

RETURN BACKING MAT AND CONTINUOUS FILTER FABRIC AT EXPOSED END OF TOP LIFTS, TYPICAL



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SEA	
DESIGN	DATE
DR	NO.
CHK	REVISION
APVD	BY
01/15/16	ADD FACE ROCK
LANDMARK TITLE DEL WEBB AT DOVE MOUNTAIN (SOUTH) MARANA, PIMA COUNTY, ARIZONA	
WALL COMPONENTS AND CONSTRUCTION SEQUENCE	
SHEET 5 OF 5	
DATE 1/13/16	
PROJ. NO. 016006	

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