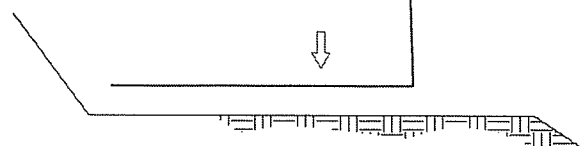


STEP 1

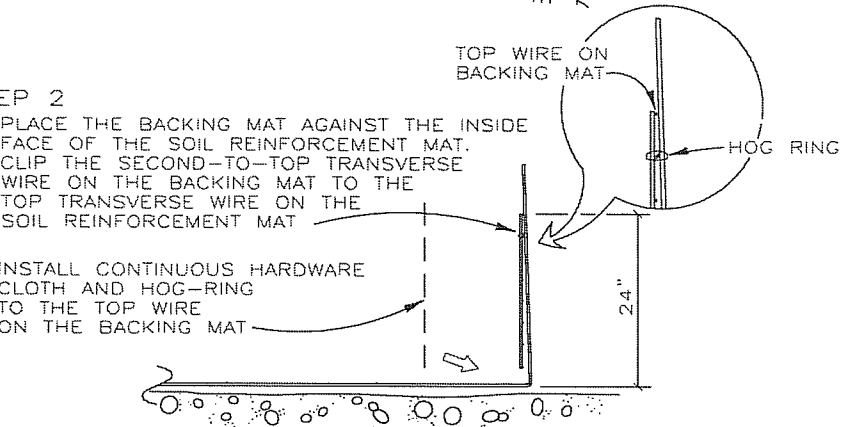
PLACE THE FIRST COURSE OF SOIL REINFORCEMENT MATS ON PREPARED FOUNDATION



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

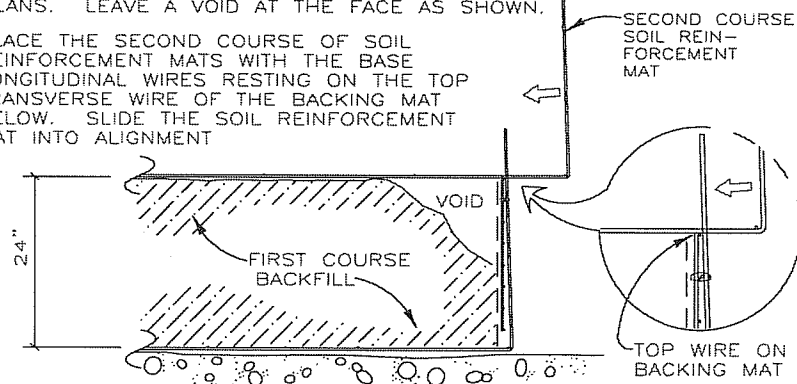
INSTALL CONTINUOUS HARDWARE CLOTH AND HOG-RING TO THE TOP WIRE ON THE BACKING MAT



STEP 3

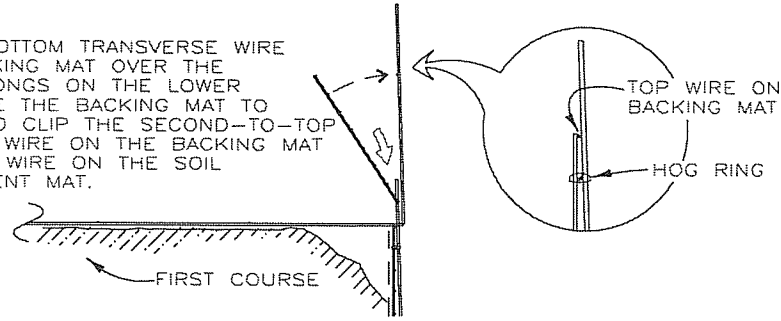
PLACE AND COMPACT THE BACKFILL IN LAYERS AND DENSITIES AS SPECIFIED IN THE PROJECT PLANS. LEAVE A VOID AT THE FACE AS SHOWN.

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



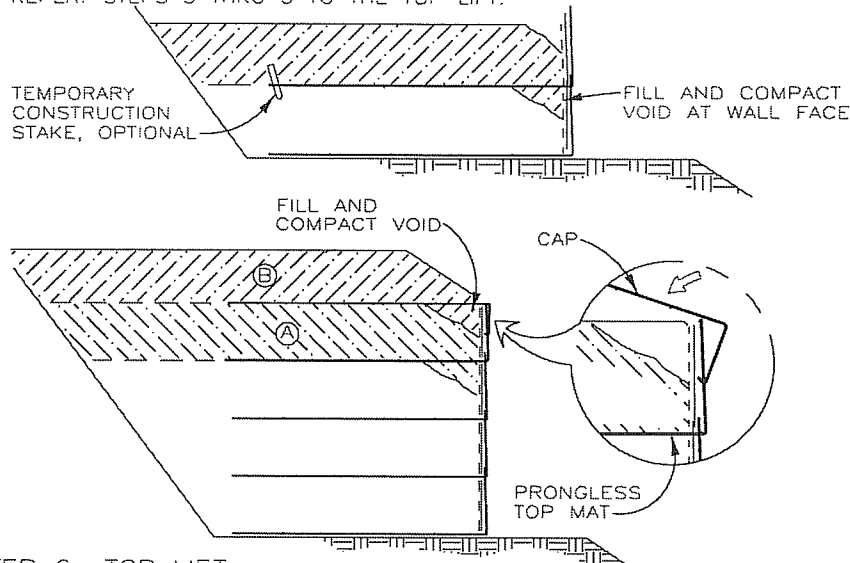
STEP 4

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.



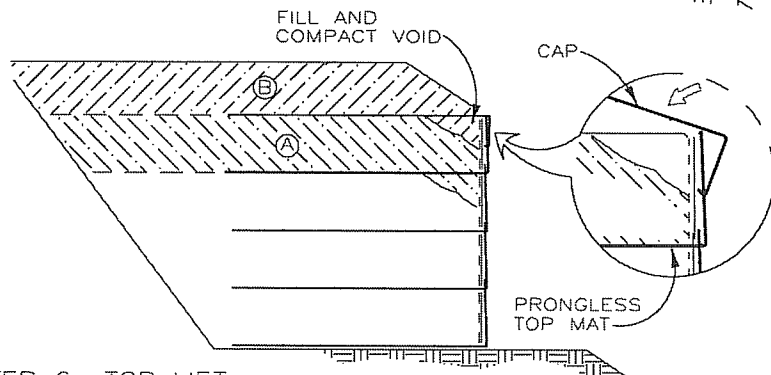
STEP 5

INSTALL THE HARDWARE CLOTH. PLACE AND COMPACT THE BACKFILL TO THE BASE ELEVATION OF THE NEXT MAT. REPEAT STEPS 3 THRU 5 TO THE TOP LIFT.

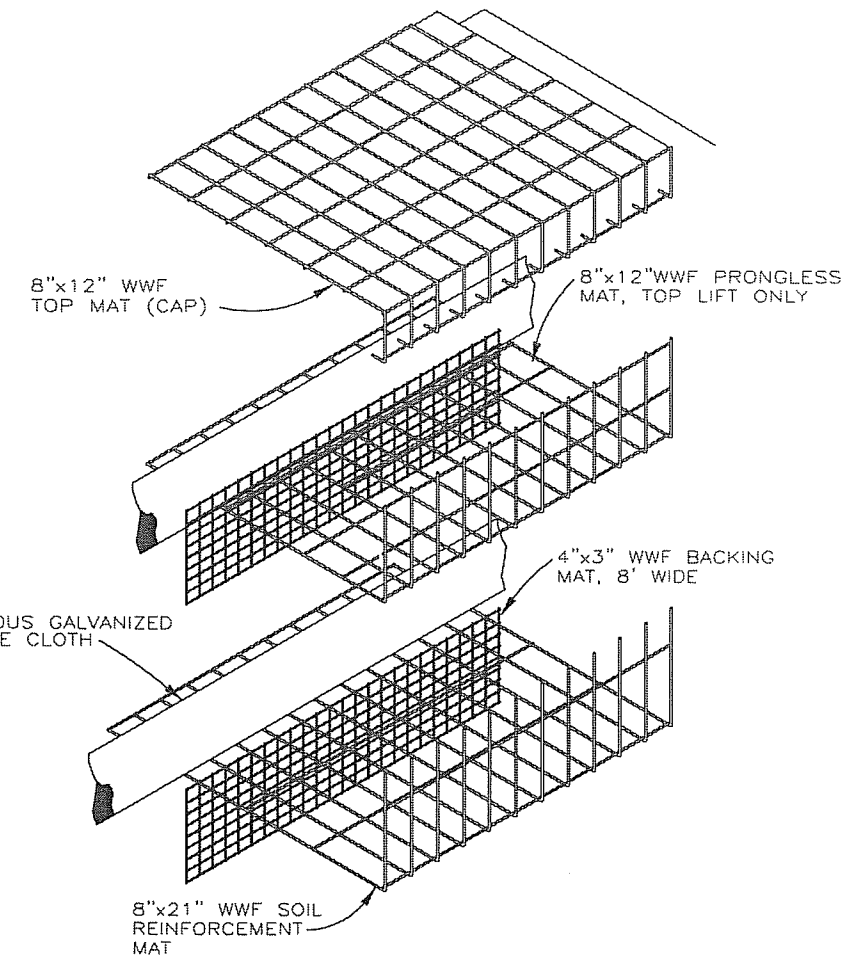


STEP 6: TOP LIFT

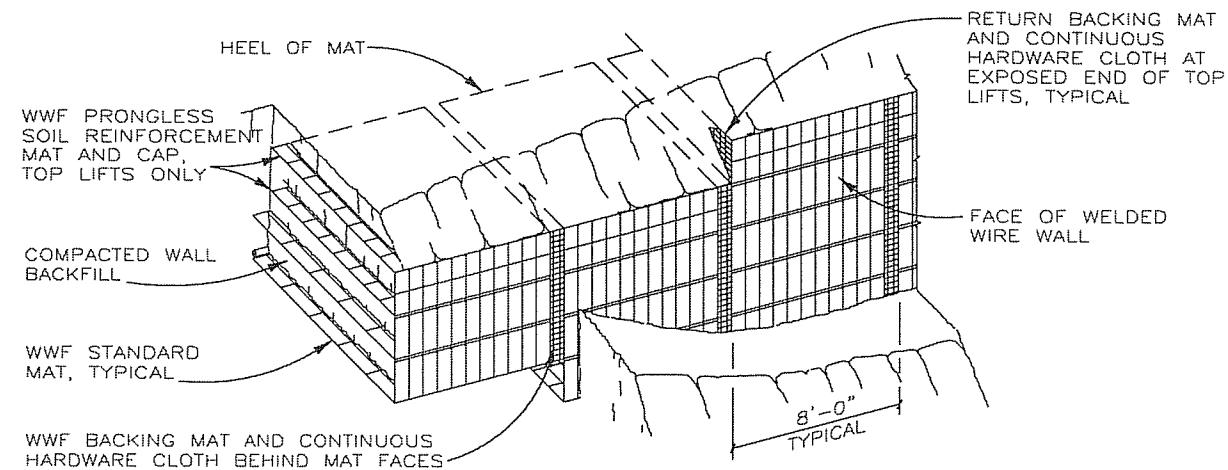
PLACE THE TOP LIFT PRONGLESS MAT, BACKING MAT AND HARDWARE CLOTH. PLACE AND COMPACT BACKFILL IN AREA "A" HOOK THE CAP OVER THE MIDDLE TRANSVERSE WIRE ON THE PRONGLESS MAT, AND ROTATE INTO PLACE BACKFILL "B" TO 1'-6" MINIMUM COVER OVER THE CAP.



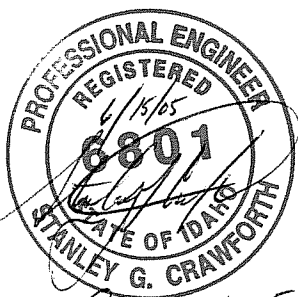
CONSTRUCTION SEQUENCE NOT TO SCALE



WALL COMPONENTS NOT TO SCALE



PICTORIAL ELEVATION NOT TO SCALE



for sheets 1 thru 5

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AND OTHERS. OTHER PATENTS PENDING (2004)

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DETAILS AND NOTES

Kings Corner Railroad overpass

S. Kings Road - North and South Abutments

Nampa, Idaho

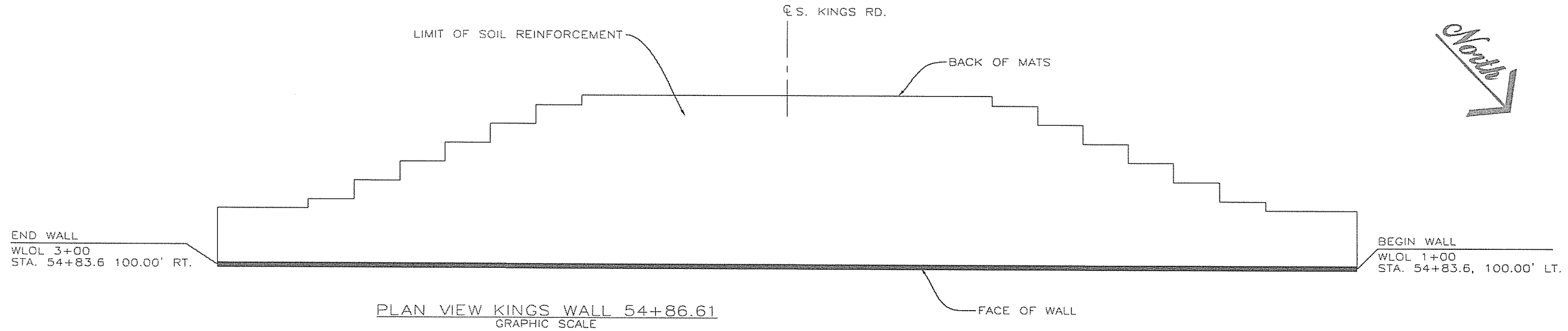
ITD No. NH-4110(133)

Key No. 7769

Date: June, 2005

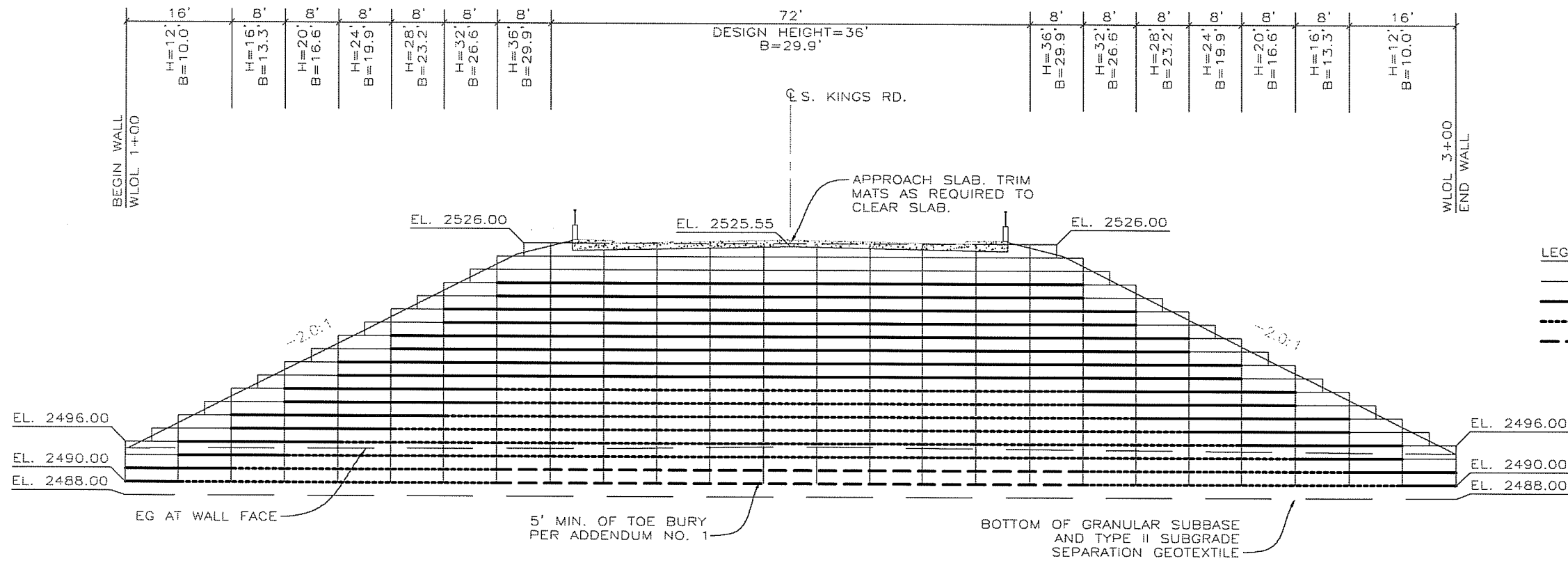
Sheet 1 of 5





PLAN VIEW KINGS WALL 54+86.61
GRAPHIC SCALE

NOTE: WALL LOCATIONS AS SHOWN SHALL BE VERIFIED BY CONTRACTOR PRIOR TO MAT INSTALLATION.



DEVELOPED ELEVATION STA 54+83.6 (BACKFACE)
KINGS CORNER RAILROAD OVERPASS, S. KINGS ROAD, SOUTH ABUTMENT

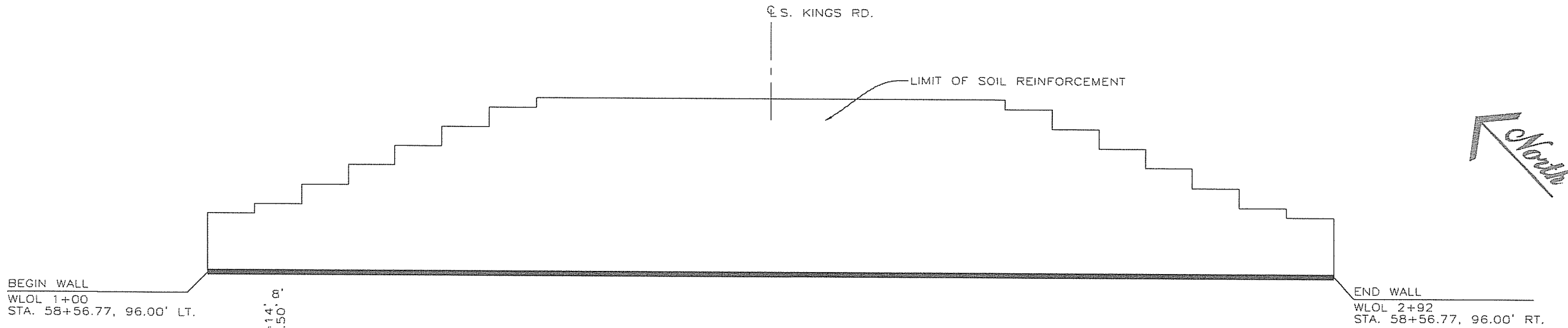
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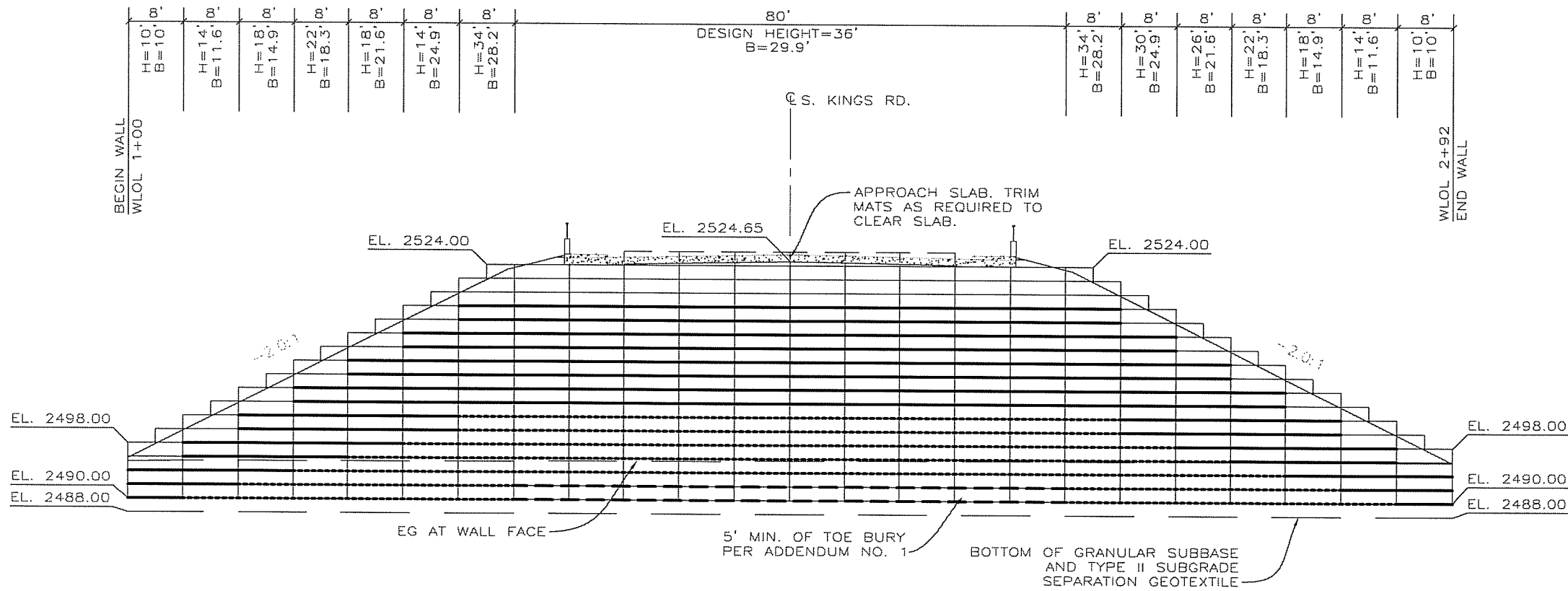
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WALL AT STATION 54+83.6
Kings Corner Railroad Overpass
S. Kings Road - North and South Abutments
Nampa, Idaho
ITD No. NH-4110(133)
Key No. 7769
Date: June, 2005

Sheet 2 of 5
AMERICAN
GO
TECHNICS



PLAN VIEW KINGS WALL 58+56.8



DEVELOPED ELEVATION STA 58+56.8
KINGS CORNER RAILROAD OVERPASS, S. KINGS ROAD, NORTH ABUTMENT

NOTE: WALL LOCATIONS AS SHOWN SHALL BE VERIFIED BY CONTRACTOR PRIOR TO MAT INSTALLATION.

- LEGEND
- TYPE 1 - 8"x12", W4.5xW3.5
 - TYPE 2 - 8"x21", W7xW4
 - TYPE 3 - 8"x21", W9.5xW4
 - TYPE 4 - 6"x12", W9.5xW4

WALL AT STATION 58+56.8
 Kings Corner Railroad Overpass
 S. Kings Road - North and South Abutments
 Nampa, Idaho

Sheet 3 of 5



ITD No. NH-4110(133)
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GENERAL NOTES:

1. THIS WALL SHALL BE CONSTRUCTED TO THE PROVISIONS IN "MECHANICALLY STABILIZED EARTH (MSE) RETAINING WALL" BY THE IDAHO TRANSPORTATION DEPARTMENT.
2. DESIGN LIFE IS FOR 100 YEARS FOR THE CHEMICAL COMPOSITION OF SPECIFIED MSE WALL BACKFILL.
3. MSE BACKFILL IS REINFORCED BACKFILL.
4. GRANULAR SUBBASE PER STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION BY IDAHO TRANSPORTATION DEPARTMENT SHALL BE USED AS BACKFILL BENEATH THE WALL SYSTEM. CLASS A COMPACTION IS SPECIFIED.
5. GRANULAR BORROW PER STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION BY IDAHO TRANSPORTATION DEPARTMENT SHALL BE USED AS EMBANKMENT FILL OR RETAINED BACKFILL BEHIND THE WALL SYSTEM. CLASS A COMPACTION IS SPECIFIED.
6. TYPE II SUBGRADE SEPARATION GEOTEXTILE PER STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION BY IDAHO TRANSPORTATION DEPARTMENT SHALL SEPARATE ALL GRANULAR SUBBASE FROM FOUNDATION SOILS.
7. DESIGN ASSUMPTIONS:
MSE BACKFILL OR REINFORCED BACKFILL
 PI = 34 DEGREES
 COHESION = 0 PSF
 UNIT WEIGHT = 125 PCF

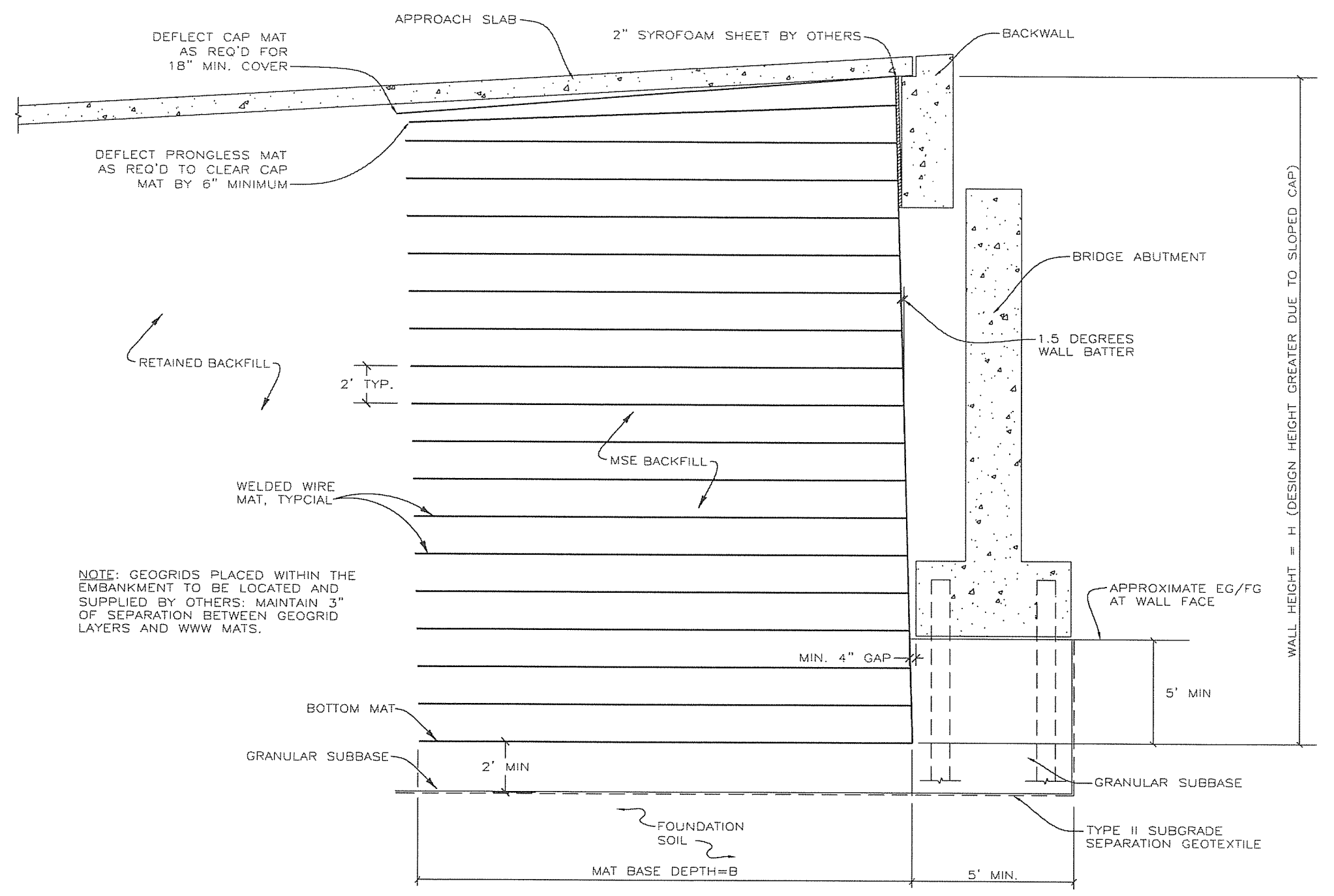
RETAINED BACKFILL OR EMBANKMENT
 PI = 32 DEGREES
 COHESION = 0 PSF
 UNIT WEIGHT = 125 PCF

FOUNDATION SOIL
 PI = ZERO DEGREES
 COHESION = 2700 PSF
 TOTAL UNIT WEIGHT = 110 PCF

 MAXIMUM GROUNDWATER LEVEL AT THE BASE OF THE WALL

 EQUIVALENT SOIL DEPTH OF 2.5 FEET AT 120 PCF REPRESENTING TRAFFIC SURCHARGE LOADS WITHIN THE PAVED AREAS.

 UNSATURATED CONDITIONS FOR REINFORCED BACKFILL AND RETAINED BACKFILL.
8. WELDED WIRE MATS SHALL BE PROVIDED BY HILFIKER RETAINING WALLS, INC AND SHALL MEET THE TECHNICAL SPECIFICATIONS FOR HILFIKER M.S.E. SYSTEM AND THE FOLLOWING:
 A) HOT DIP GALVANIZED (2.0 OZ/SF, ASTM A-123: 605 G/M²)
 B) MINIMUM 65 KSI YIELD STRENGTH PER ASTM A-82
9. BACKING MAT AND FILTER CLOTH SHALL BE USED AT ALL WALL FACINGS AND SHALL BE PROVIDED BY HILFIKER RETAINING WALLS, INC.
10. THE PROFILE AND ALIGNMENT, SMOOTHNESS, MATERIAL QUALITY, AND COMPACTION OF THE LEVELING SURFACE SHALL BE DOCUMENTED PRIOR TO INSTALLATION OF BASE REINFORCEMENT.
11. THE FACE OF THE MSE WALL SHALL BE LOCATED AT LEAST 4 INCHES FROM PILE CAPS.
12. THE DESIGN CONTAINED ON THESE DRAWINGS IS BASED ON PROJECT INFORMATION PROVIDED BY THE OWNER AND PRODUCT INFORMATION PROVIDED BY HILFIKER RETAINING WALLS, INC. ON THE BASIS OF THIS INFORMATION AND ASSUMING GOOD CONSTRUCTION PRACTICES, AMERICAN GEOTECHNICS HAS DEVELOPED AN INTERNAL WALL DESIGN. EXTERNAL STABILITY, INCLUDING STAGED FOUNDATION STABILITY, IS THE RESPONSIBILITY OF THE OWNER.



NOTE: GEOGRIDS PLACED WITHIN THE EMBANKMENT TO BE LOCATED AND SUPPLIED BY OTHERS: MAINTAIN 3" OF SEPARATION BETWEEN GEOGRID LAYERS AND WWW MATS.

TYPICAL SECTION
3 X GRAPHIC SCALE

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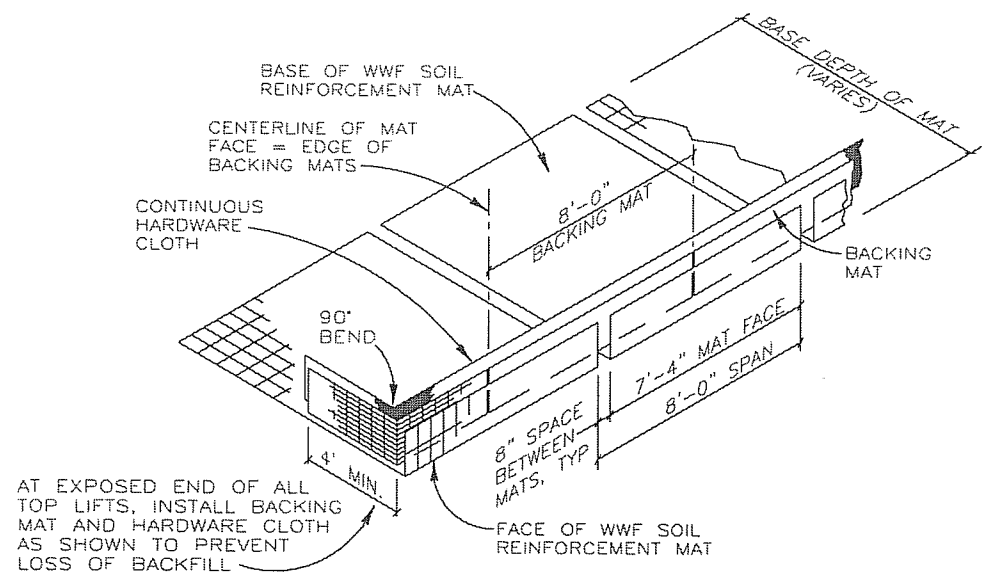
TYPICAL SECTION
 Kings Corner Railroad Overpass
 S. Kings Road - North and South Abutments
 Nampa, Idaho

ITD No. NH-4110(133)
 Key No. 7769

Date: June, 2005

Sheet 4 of 5

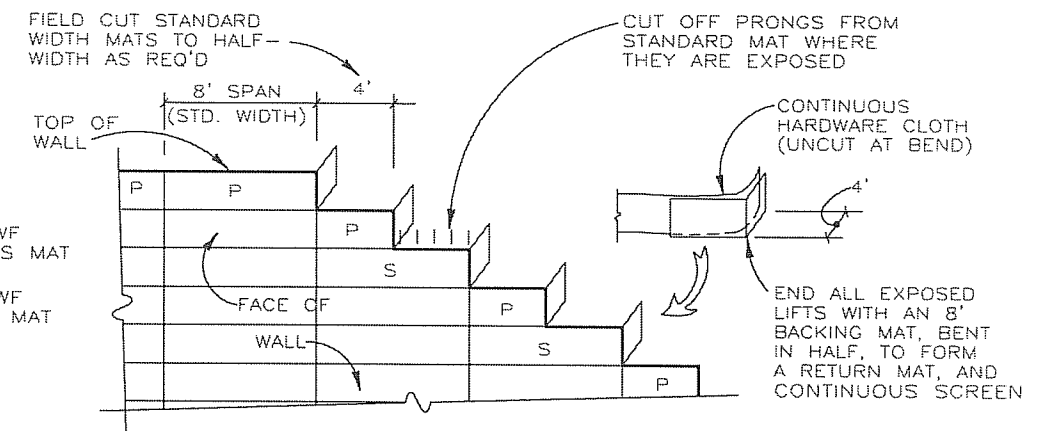
AMERICAN
GEO
TECHNICS



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

LEGEND
 (THIS DETAIL ONLY)

- P 8"x12" WWF PRONGLESS MAT
- S 8"x21" WWF STANDARD MAT



RETURN MATS DETAIL
 NOT TO SCALE

STEP 4

PLACE AND COMPACT THE BACKFILL OVER THE SLOPED CAPS TO FINAL GRADE

STEP 2

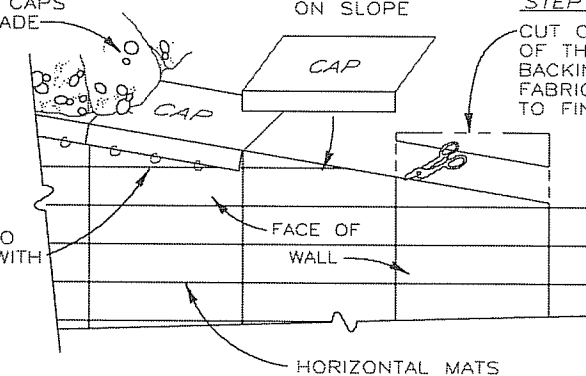
PLACE CAPS ON SLOPE

STEP 1

CUT OFF THE TOP OF THE MAT FACES, BACKING MATS, AND FABRIC PARALLEL TO FINAL GRADE

STEP 3

CLIP CAPS TO MAT FACES WITH HOG RINGS



PICTORIAL ELEVATION
SLOPED CAP MAT DETAIL
 NOT TO SCALE

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DETAILS

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