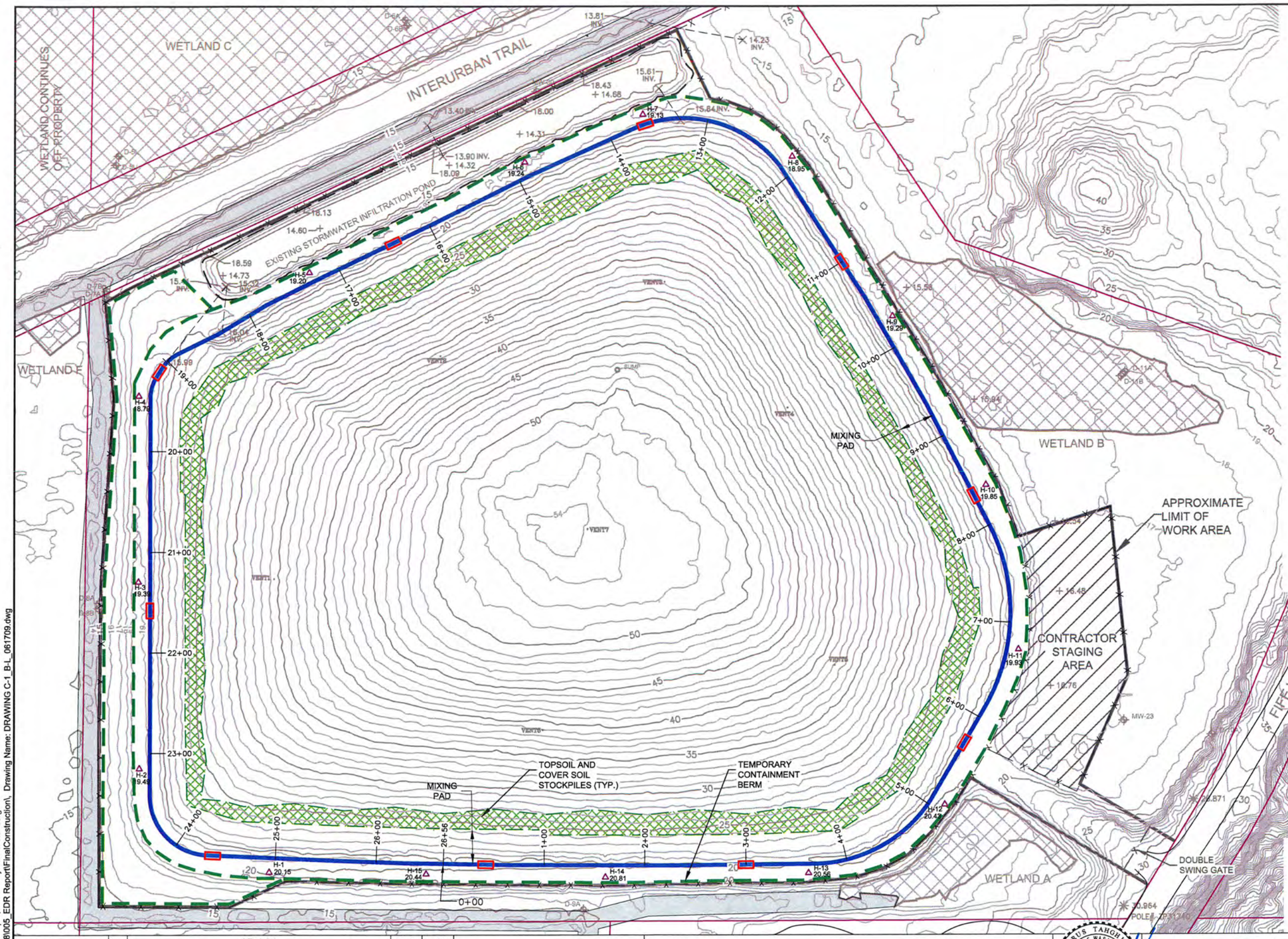

EXPLANATION

- BARRIER WALL ALIGNMENT
- TAX PARCEL LINE
- FENCE LINE
- EXISTING STORMWATER INFILTRATION POND
- 12" DIAMETER CULVERT
- H-10 19.85 HSA BORING LOCATION AND SURFACE ELEVATION
- MW-13 MONITORING WELL LOCATION
- VENT3 VENT LOCATION
- LIGHT POLE
- SPOT ELEVATION (NAVD88–FT)
- AGRICULTURAL DITCH
- WETLAND
- APPROXIMATE LIMIT OF WORK AREA
- TEMPORARY CONTAINMENT BERM
- APPROXIMATE LOCATION OF TEST TRENCH

NOTES:

1. EXCAVATE 10 TEST TRENCHES AT LOCATIONS SHOWN. THESE WILL BE INSPECTED BY ENGINEER AND ARCHEOLOGIST. MITIGATE ANY PROBLEMS FOUND FOR BARRIER WALL CONSTRUCTION (E.G. COBBLES AT H–10).
2. SUBSURFACE CONDITIONS ARE KNOWN ONLY AT THE BORING LOCATIONS. VARIATIONS BETWEEN THE GEOLOGIC INTERPRETATION SHOWN ON DRAWINGS C–2 THROUGH C–5 AND ACTUAL SUBSURFACE CONDITIONS MAY EXIST.
3. BARRIER WALL BACKFILL SHALL BE SITE SOIL WITH A MINIMUM OF 3% BENTONITE BY WEIGHT.
4. CONTRACTOR SHALL START BARRIER WALL CONSTRUCTION FROM STA 0+00 TO STA 26+56. THE WALL THICKNESS SHALL BE A MINIMUM OF 2 FEET WIDE.
5. LANDFILL WASTE IS NOT EXPECTED TO BE ENCOUNTERED DURING EXCAVATION. ANY LANDFILL WASTE ENCOUNTERED MUST BE INCORPORATED INTO THE LANDFILL.
6. SPREAD A 6–INCH THICK LAYER OF THE EXCAVATED SOIL OVER THE MIXING PAD AND COVER WITH A LAYER OF 4 OZ/SY GEOTEXTILE AS DEMARCATION. BACKFILL MIX SHALL NOT PENETRATE THIS LAYER.

0 50 100
APPROXIMATE SCALE IN FEET

Plot Date: 07/02/09 - 3:25pm, Plotted by: adam.stenberg
Drawing Path: S:\13488\005_EDR Report\FinalConstruction\, Drawing Name: DRAWING C-1_B-L_061709.dwg

REFERENCES:
PLANS

DATUM
HORIZONTAL: WASP–NAD83–S FEET
VERTICAL: NAVD88 FEET

NO.	REVISION	DATE	APRVD
1	ISSUED FOR AGENCY REVIEW	6/16/09	
2	ISSUED FOR CONSTRUCTION	6/29/09	KT

DRAWN AS
DESIGNED MZ
CHECKED KT
REVIEWED LM

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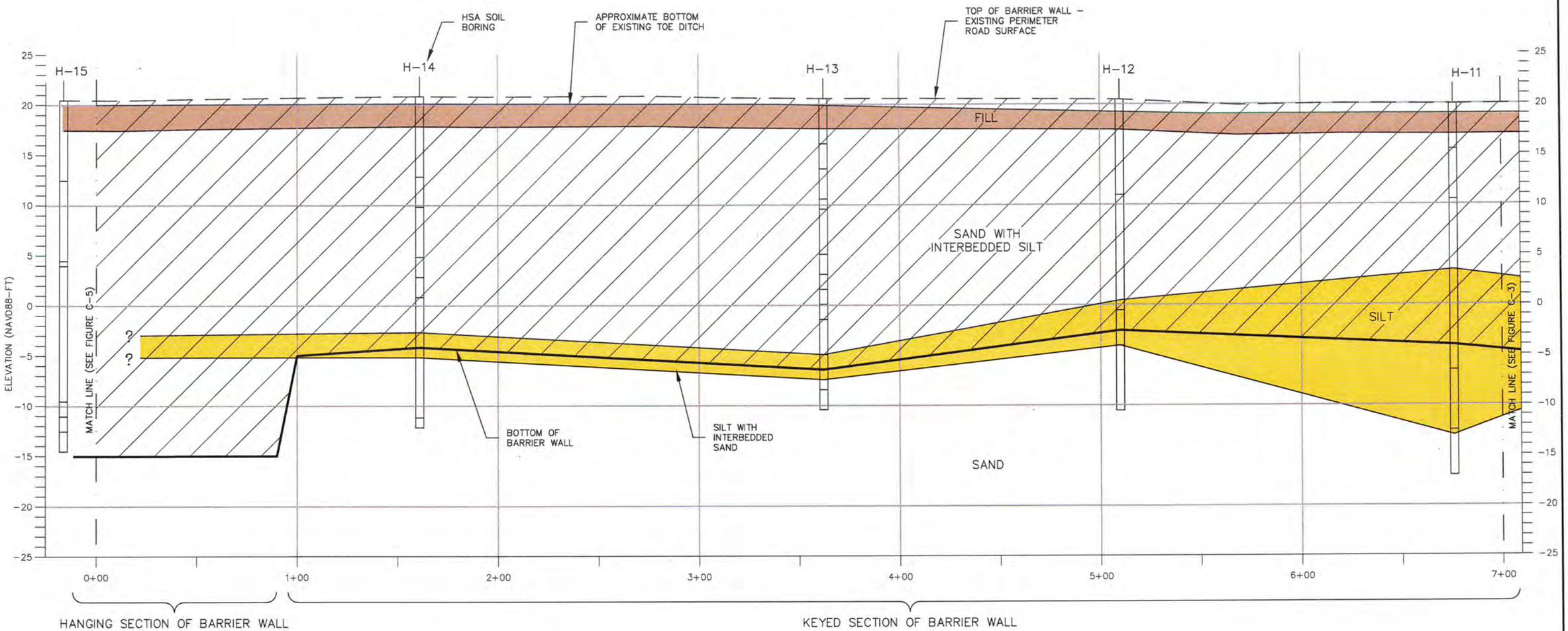
AMEC Geomatrix

EXPIRES JAN 10, 2010

BARRIER WALL PLAN
ADDENDUM 1

B&L WOODWASTE SITE
PIERCE COUNTY, WASHINGTON

DATE: 07/02/09
PROJECT NO.: 13488
DRAWING C–1



EXPLANATION

H-14 — HOLLOW STEM AUGER (HSA) BORING LOCATION (SEE C-1 FOR LOCATIONS)

BARRIER WALL DEPTH

BARRIER WALL

FILL

LOWER SILT AQUITARD

NOTES:

1. THE WALL PROFILES SHOWN ON DRAWINGS C-2 THROUGH C-5 ARE APPROXIMATE. CONSTRUCT BARRIER WALL TO THE MINIMUM DEPTHS INDICATED ON DRAWINGS C-2 THROUGH C-5. FINAL DEPTH SHALL BE DETERMINED BY ENGINEER.
2. PREPARE BENTONITE SLURRY AT AN ON-SITE BATCH PLANT. KEEP TRENCH FULL WITH BENTONITE SLURRY AT ALL TIMES.
3. BENTONITE SLURRY SHALL HAVE A MINIMUM DENSITY OF 66 PCF AND TESTED AT LEAST ONCE FOR EACH BATCH. TEST DENSITY OF THE SLURRY IN THE TRENCH WEEKLY, OR AS REQUIRED BY ENGINEER.
4. BACKFILL MIX SHALL CONTAIN A MINIMUM OF 3% BENTONITE BY WEIGHT, AND MIXED TO A HOMOGENEOUS MIX WITH A SLUMP OF 4 TO 6 INCHES. PERFORM SLUMP TESTS TWICE A DAY OR MORE FREQUENTLY AS REQUIRED BY ENGINEER.
5. COLLECT A PAIR OF BACKFILL CYLINDERS FOR EVERY 200 LINEAR FEET OF BARRIER WALL AND TEST FOR HYDRAULIC CONDUCTIVITY USING TRIAXIAL MACHINE. THE BACKFILL SHALL HAVE A MINIMUM HYDRAULIC CONDUCTIVITY OF $1X10^{-6}$ CM/S.
6. BACKFILL OF THE TRENCH WITH SOIL-BENTONITE SLURRY SHALL LAG BEHIND THE EXCAVATION SUCH THAT THE TOE OF THE BACKFILL IS AT LEAST 15 FT FROM THE TOE OF THE EXCAVATION.
7. PROFILE THE TOP OF THE BACKFILL EVERY 5 FT AT THE END OF EACH SHIFT AND AT THE START OF NEXT SHIFT. EXCAVATE ANY EXCESS MATERIAL AT THE START OF EACH SHIFT.
8. BACKFILL BARRIER WALL TO TOP OF EXISTING PERIMETER ROAD. MEASURE BACKFILL SETTLEMENT DAILY FOR AT LEAST ONE WEEK, AND WEEKLY THEREAFTER. ADD BACKFILL TO ROAD ELEVATION AS NEEDED.
9. PRIOR TO CONSTRUCTION OF LANDFILL CAP, INSTALL A LAYER OF GEOGRID ACROSS THE TOP OF THE BACKFILL AND EXTEND AT LEAST 2 FT BEYOND THE EDGES OF THE BACKFILL. OVERLAP GEOGRID SECTIONS A MINIMUM DISTANCE OF 2 FT. GEOGRID SHALL BE TENSAR BIAXIAL GEOGRID BX-1500 OR APPROVED EQUIVALENT.
10. ENGINEER WILL DETERMINE WHEN LANDFILL CAP MAY BE CONSTRUCTED BASED ON SETTLEMENT MONITORING.
11. INCORPORATE EXCESS BENTONITE SLURRY INTO THE LANDFILL.

0 5 10 25 50

APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 5X

REFERENCES:
PLANS

DATUM
HORIZONTAL: WASP-NAD83-S FEET
VERTICAL: NAVD88 FEET

NO.	REVISION	DATE	APRVD
1	ISSUED FOR AGENCY REVIEW	6/16/09	
2	ISSUED FOR CONSTRUCTION	6/29/09	KT

DRAWN AS
DESIGNED MZ
CHECKED KT
REVIEWED LM

FLOYD | SNIDER
AMEC Geomatrix

AKORUS TAHGHIGHI — STATE OF WASHINGTON — PROFESSIONAL ENGINEER
EXPIRES JAN 10, 2010

BARRIER WALL PROFILE STA 0+00 - 7+00
ADDENDUM 1

B&L WOODWASTE SITE
PIERCE COUNTY, WASHINGTON

DATE: 07/02/09
PROJECT NO.: 13488

DRAWING C-2

Plot Date: 07/02/09 - 3:38pm, Plotted by: adam.stenberg
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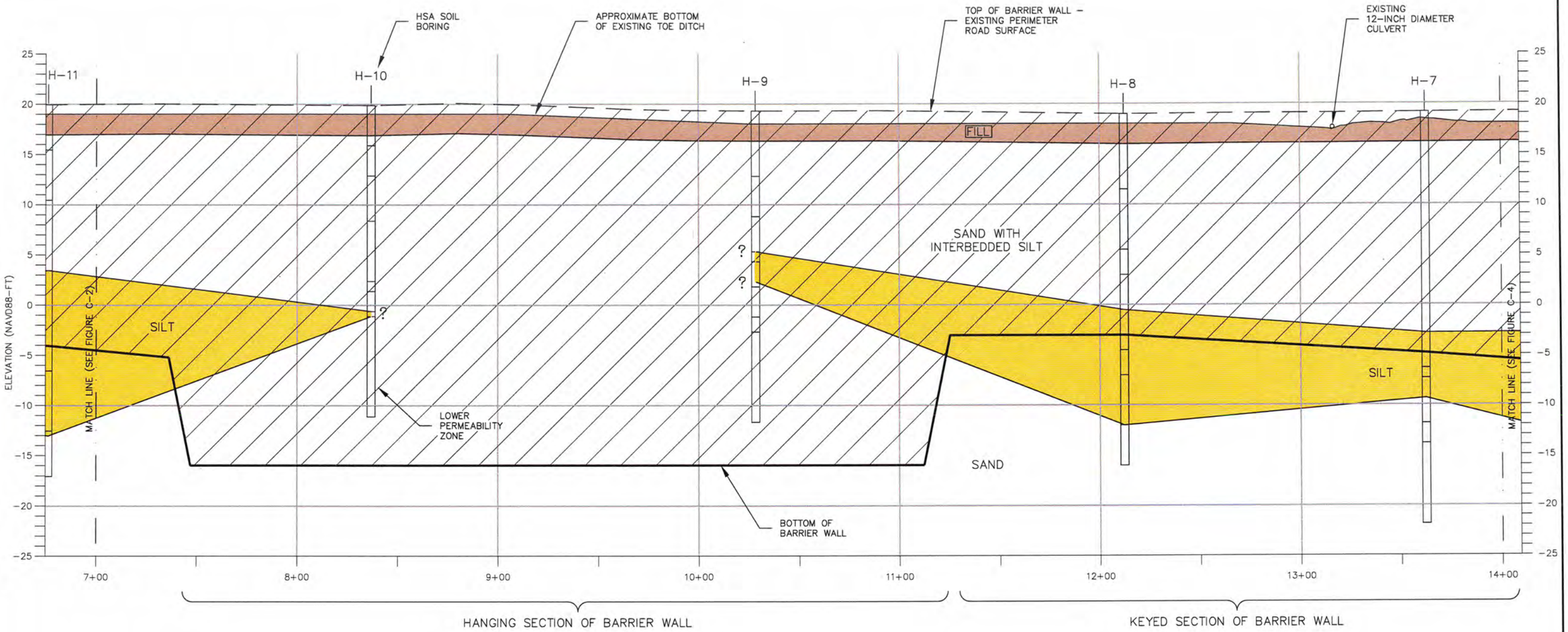


EXPLANATION

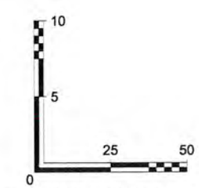
H-10 — HOLLOW STEM AUGER (HSA) BORING LOCATION (SEE C-1 FOR LOCATIONS)

BARRIER WALL DEPTH

BARRIER WALL

FILL

LOWER SILT AQUITARD



APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 5X

REFERENCES:
PLANS

DATUM
HORIZONTAL: WASP-NAD83-S FEET
VERTICAL: NAVD88 FEET

NO.	REVISION	DATE	APRVD
1	ISSUED FOR AGENCY REVIEW	6/16/09	
2	ISSUED FOR CONSTRUCTION	6/29/09	KT

DRAWN ASS.
DESIGNED MZ.
CHECKED RT
REVIEWED DRI

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AMEC Geomatrix

EXPIRES JAN 10, 2010

BARRIER WALL PROFILE STA 7+00 - 14+00
ADDENDUM 1

B&L WOODWASTE SITE
PIERCE COUNTY, WASHINGTON

DATE: 07/02/09
PROJECT NO.: 13488

DRAWING
C-3

Plot Date: 07/02/09 - 3:39pm, Plotted by: adam.stenberg
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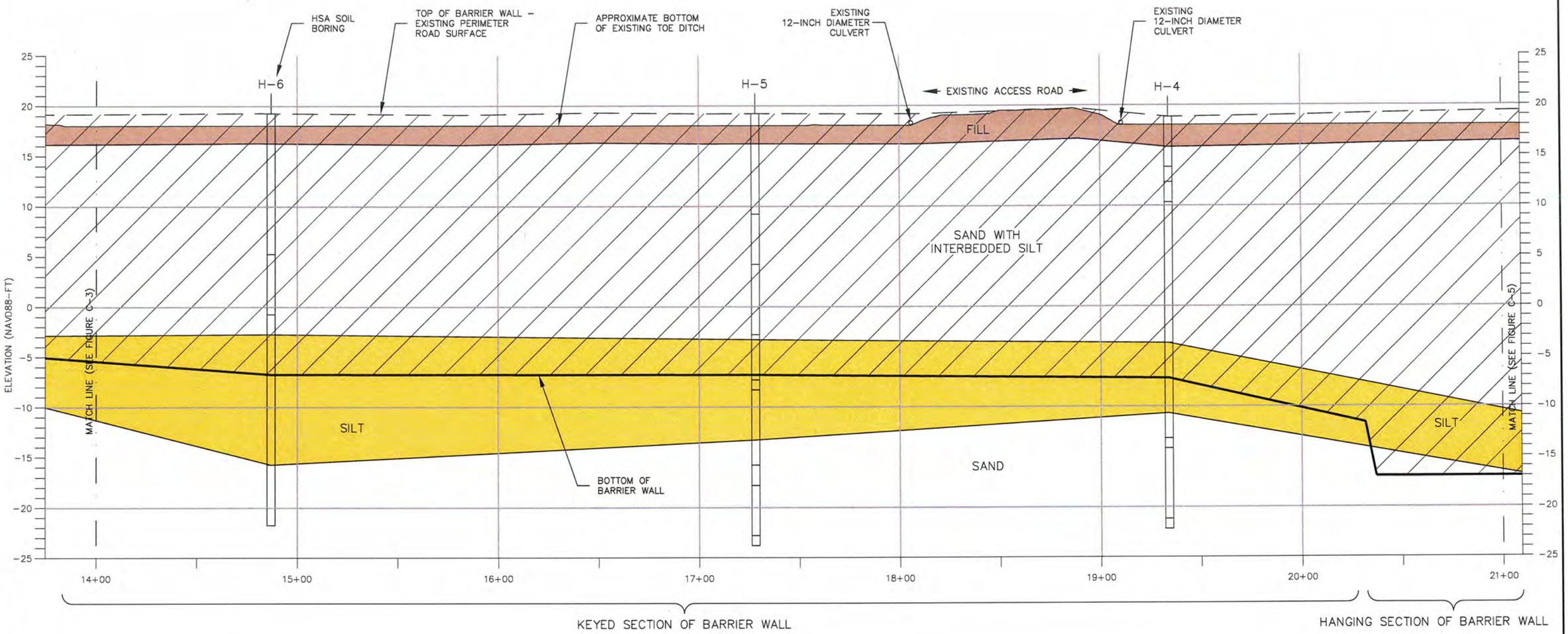

EXPLANATION

H-6 — HOLLOW STEM AUGER (HSA) BORING LOCATION (SEE C-1 FOR LOCATIONS)

BARRIER WALL DEPTH

BARRIER WALL

FILL

LOWER SILT AQUITARD

10 5 0 25 50

APPROXIMATE SCALE IN FEET
VERTICAL EXAGGERATION = 5X

REFERENCES:
PLANS

DATUM
HORIZONTAL: WASP-NAD83-S FEET
VERTICAL: NAVD88 FEET

NO.	REVISION	DATE	APRVD
1	ISSUED FOR AGENCY REVIEW	6/16/09	
2	ISSUED FOR CONSTRUCTION	6/29/09	KT

DRAWN AS
DESIGNED MZ
CHECKED KT
REVIEWED LM

FLOYD | SNIDER
AMEC Geomatrix

KOORUS TAHGA
STATE OF WASHINGTON
22240
REGISTERED PROFESSIONAL ENGINEER
EXPIRES: JAN 10, 2010

BARRIER WALL PROFILE STA 14+00 - 21+00
ADDENDUM 1

B&L WOODWASTE SITE
PIERCE COUNTY, WASHINGTON

DATE: 07/02/09
PROJECT NO.: 13488

DRAWING
C-4

Plot Date: 07/02/09 - 3:40pm, Plotted by: adam.stenberg
Drawing Path: S:\13488\005_EDR Report\FinalConstruction\, Drawing Name: DRAWING C-2-3-4-5_B-L_070209.dwg