

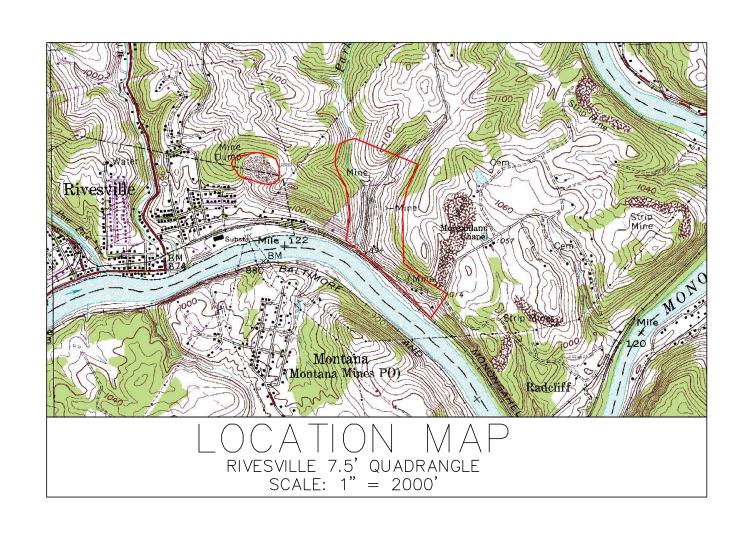
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF ABANDONED MINE LANDS AND RECLAMATION

EARL RAY TOMBLIN, GOVERNOR

RANDY C. HUFFMAN, CABINET SECRETARY

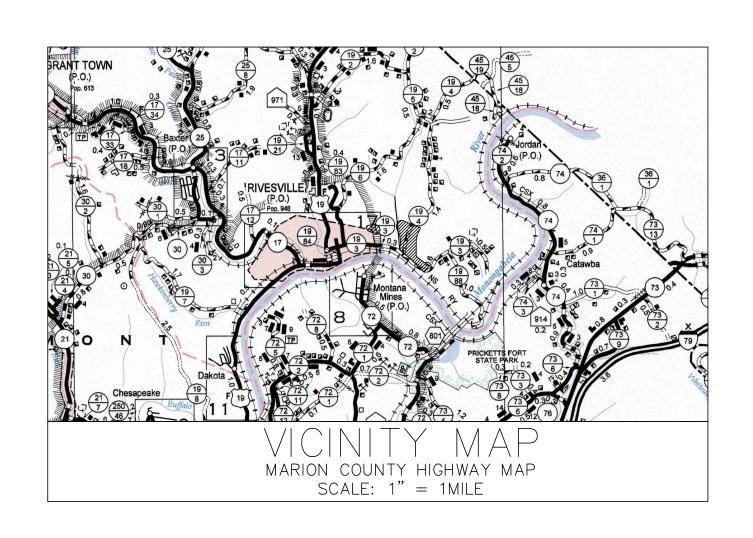
PARKER RUN

PAW PAW DISTRICT, MARION COUNTY, WEST VIRGINIA



DRAWING INDEX	
DESCRIPTION	SHEET NO.
COVER SHEET	1
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ITEM	DESCRIPTION	UNITS	QUANTITY
1.0	MOBILIZATION AND DEMOBILIZATION (CANNOT BE MORE THAN 10%	LUMP SUM	1
	OF TOTAL AMOUNT BIDCLEARING & GRUBBING		
2.0	CONSTRUCTION LAYOUT STAKES (CANNOT BE MORE THAN 5% OF TOTAL AMOUNT BID)	LUMP SUM	1
3.0	QUALITY CONTROL (CANNOT BE MORE THAN 3% OF TOTAL AMOUNT BID)	LUMP SUM	1
4.1	SITE PREPARATION (CANNOT BE MORE THAN 10% OF TOTAL AMOUNT BID)	LUMP SUM	1
4.2	ACCESS ROAD REHABILITATION	TON	130
4.3	TEMPORARY ACCESS ROAD	LINEAR FOOT	746
4.4	TEMPORARY STONE ACCESS RAMP	TON	106
4.5	FARM GATE	EACH	1
5.1	STONE CONSTRUCTION ENTRANCE	EACH	5
5.2	SUPER SILT FENCE	LINEAR FOOT	430
5.3	SILT FENCE	LINEAR FOOT	3200
5.4	STRAW WATTLES	LINEAR FOOT	3770
5.5	ROCK CHECK DAM	EACH	15
5.6	ROLLED EROSION CONTROL MATTING	SQUARE YARD	3100
6.0	REVEGETATION	ACRES	12
7.1	1.75 FT. DEEP RIPRAP "VEE" SHAPED DITCH	LINEAR FOOT	1256
7.2	1.75 FT. DEEP VEGETATED "VEE" SHAPED DITCH	LINEAR FOOT	443
7.3	12" SDR35 PVC PIPE	LINEAR FOOT	226
7.4	18" HDPE PIPE	LINEAR FOOT	40
7.5	24" HDPE PIPE	LINEAR FOOT	25
7.6	NATURAL DRAINAGE RIPRAP	TON	80
8.0	UNCLASSIFIED EXCAVATION	CUBIC YARD	26000
9.1	BAT GATE MINE SEAL (PORTAL 3)	LUMP SUM	1
9.2	BAT GATE MINE SEAL (PORTAL 5)	LUMP SUM	1
9.3	BAT GATE MINE SEAL (PORTAL 6)	LUMP SUM	1
9.4	BAT GATE MINE SEAL (PORTAL 7)	LUMP SUM	1
9.5	BAT GATE MINE SEAL (PORTALS 11 AND 12)	EACH	2
9.6	DRY MINE SEAL (PORTALS 13,14, AND 15)	EACH	3
9.7	SODA ASH BRIQUETTES	BAGS	50
10.0	SUBSURFACE DRAIN	LINEAR FOOT	45

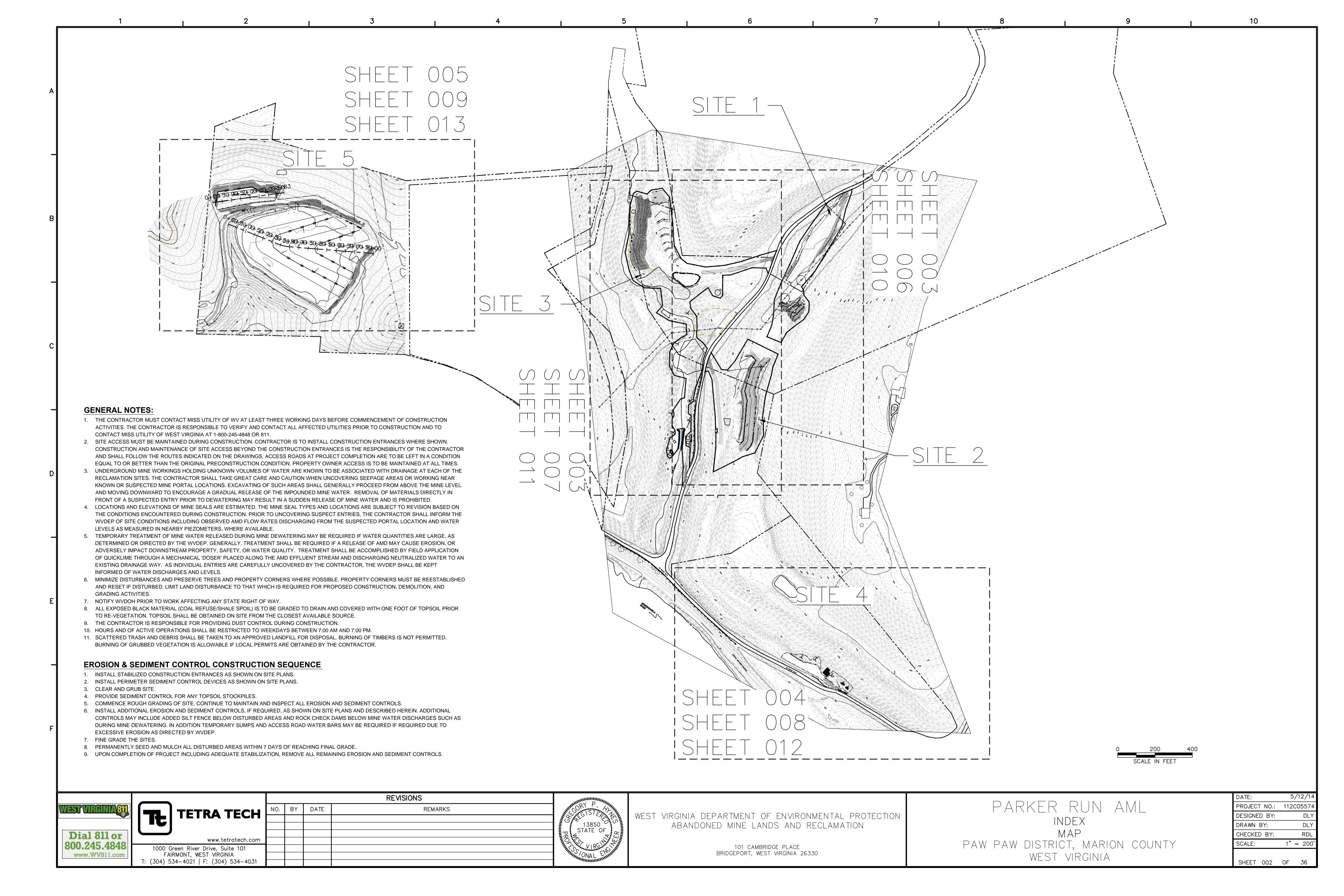


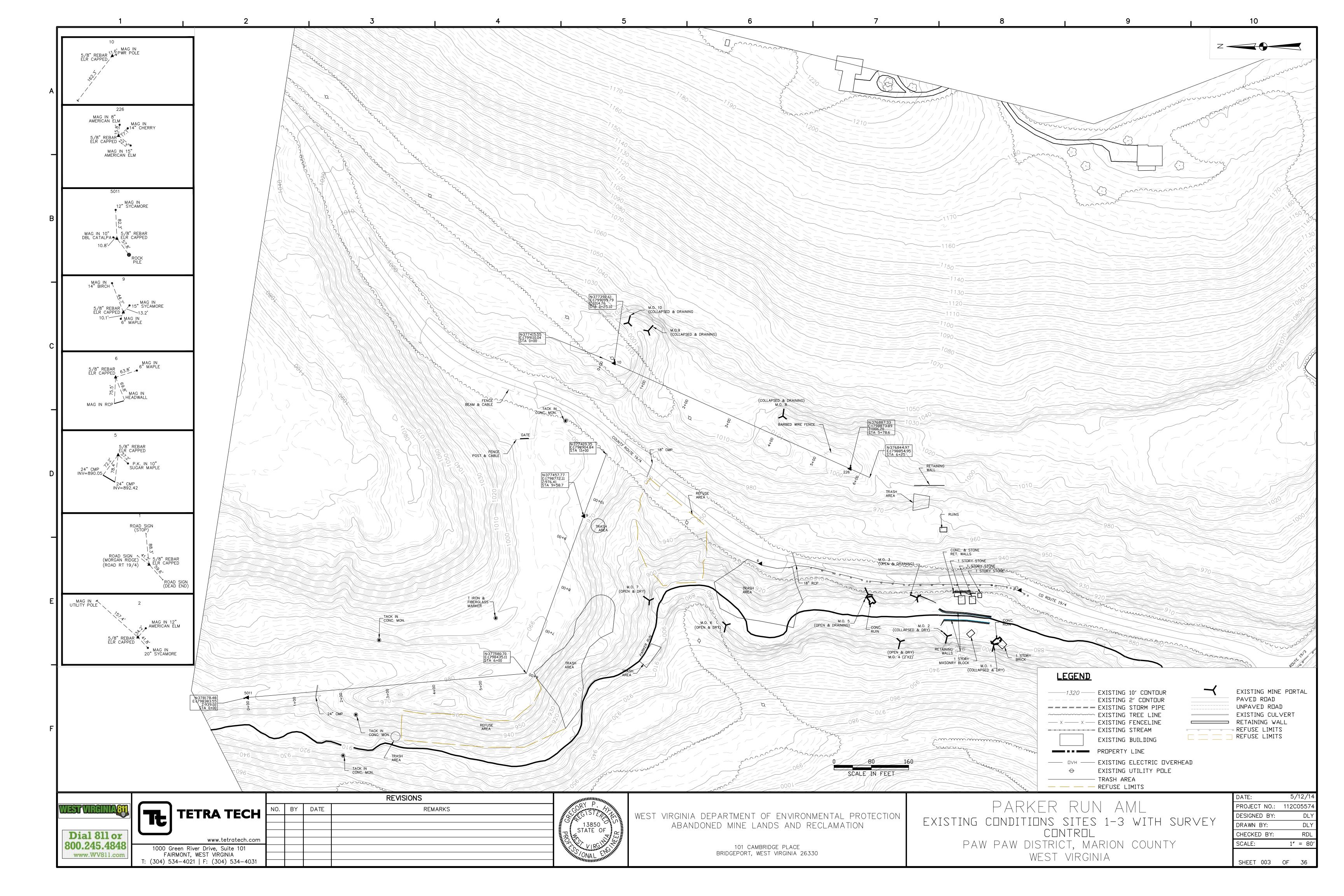


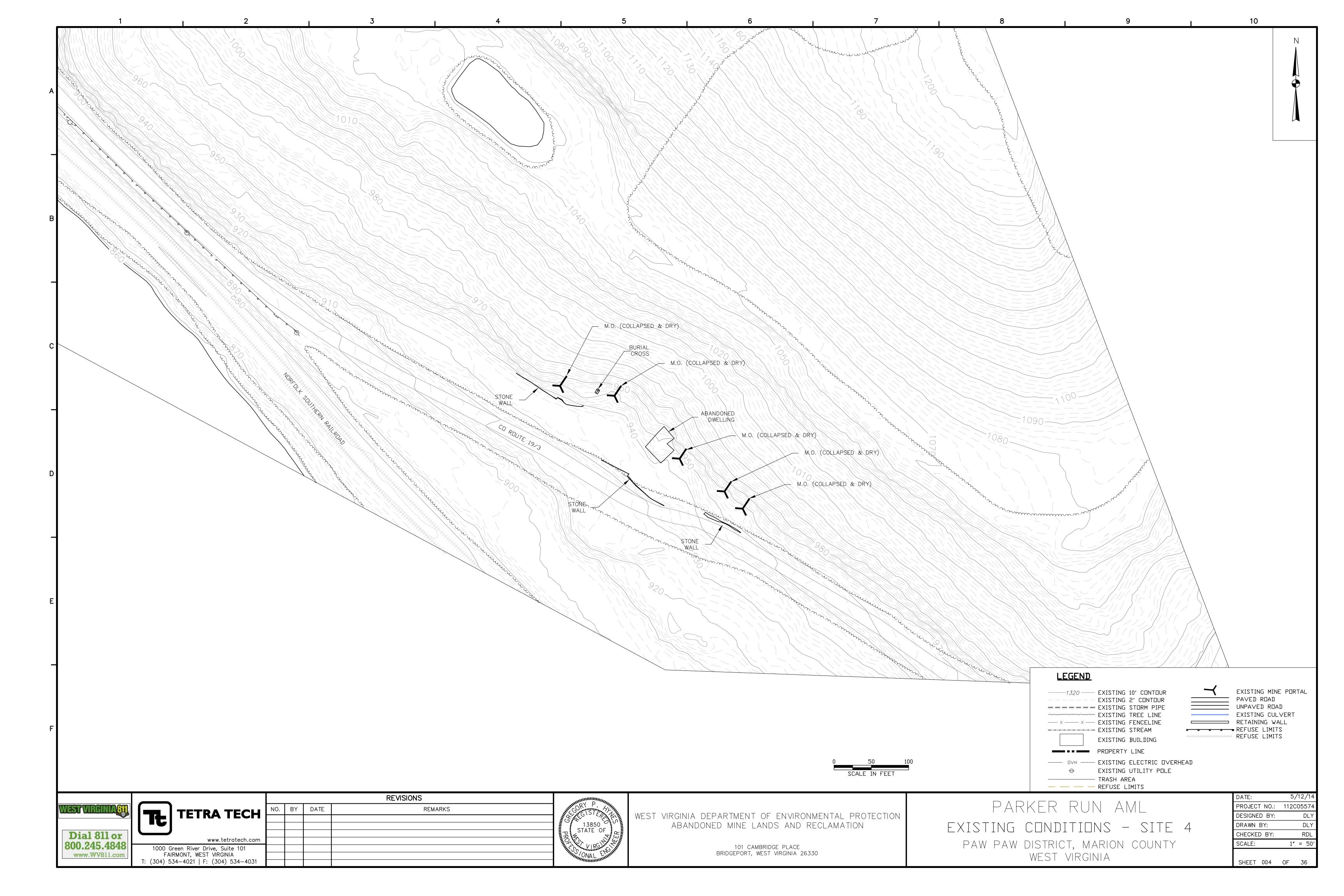
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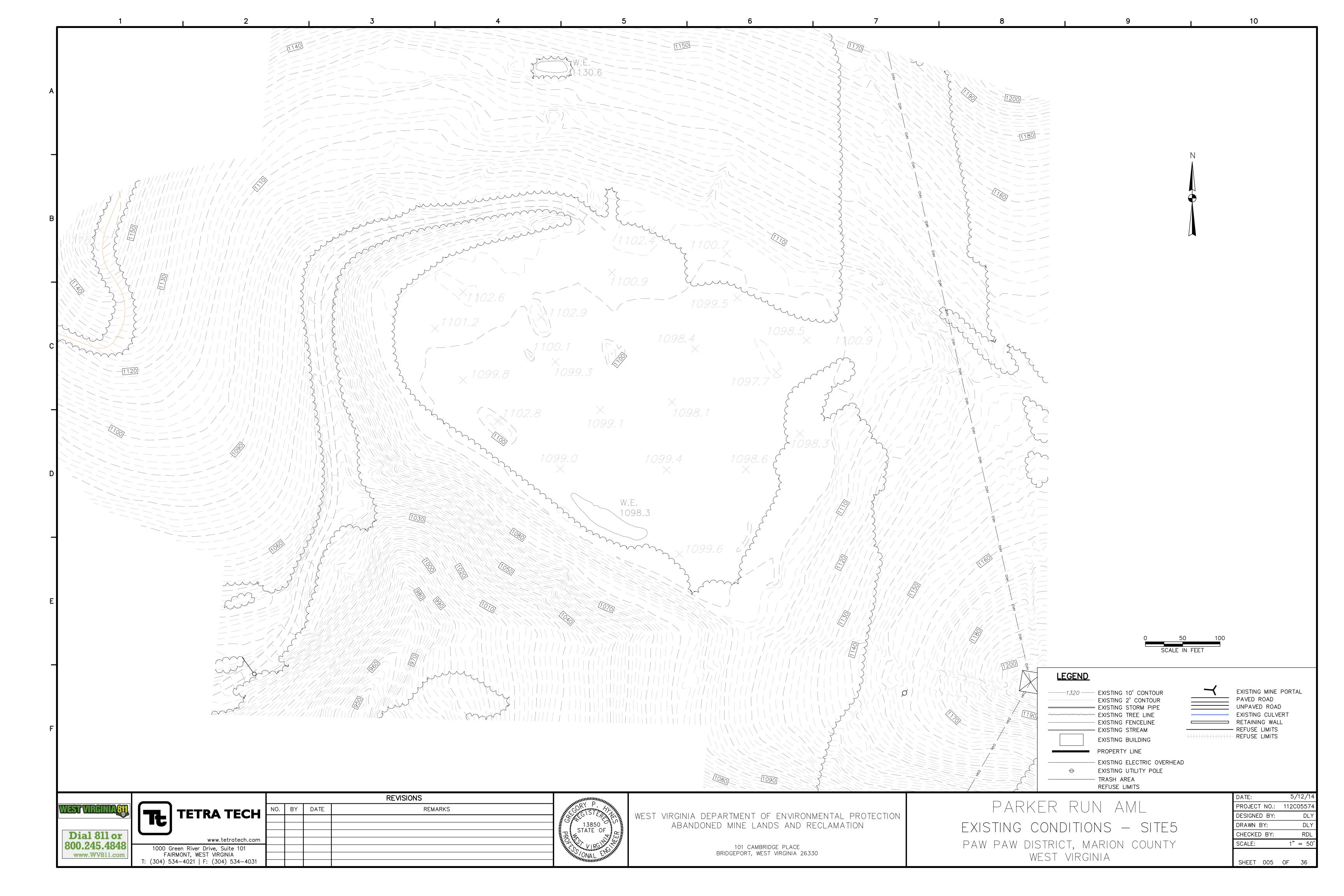


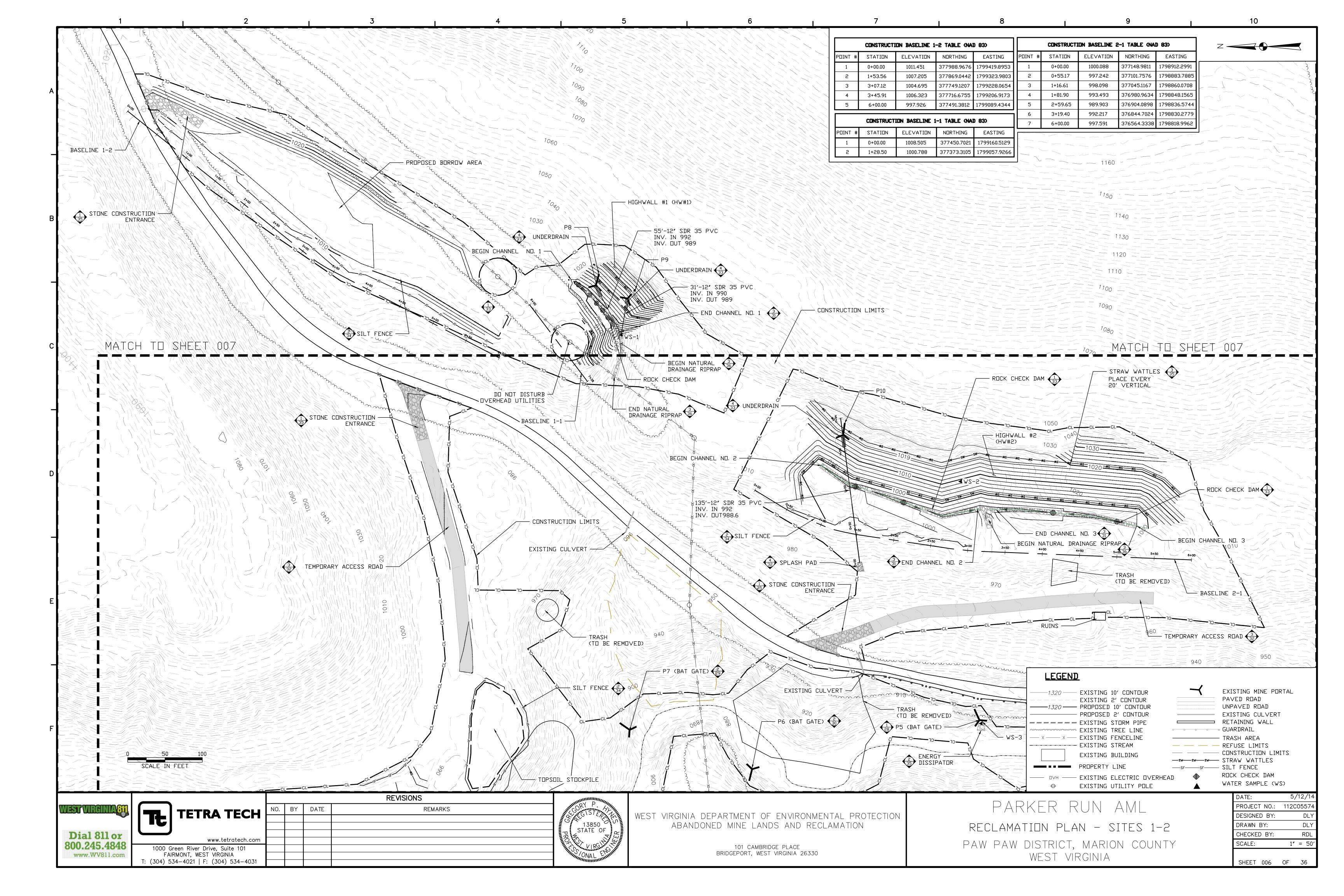


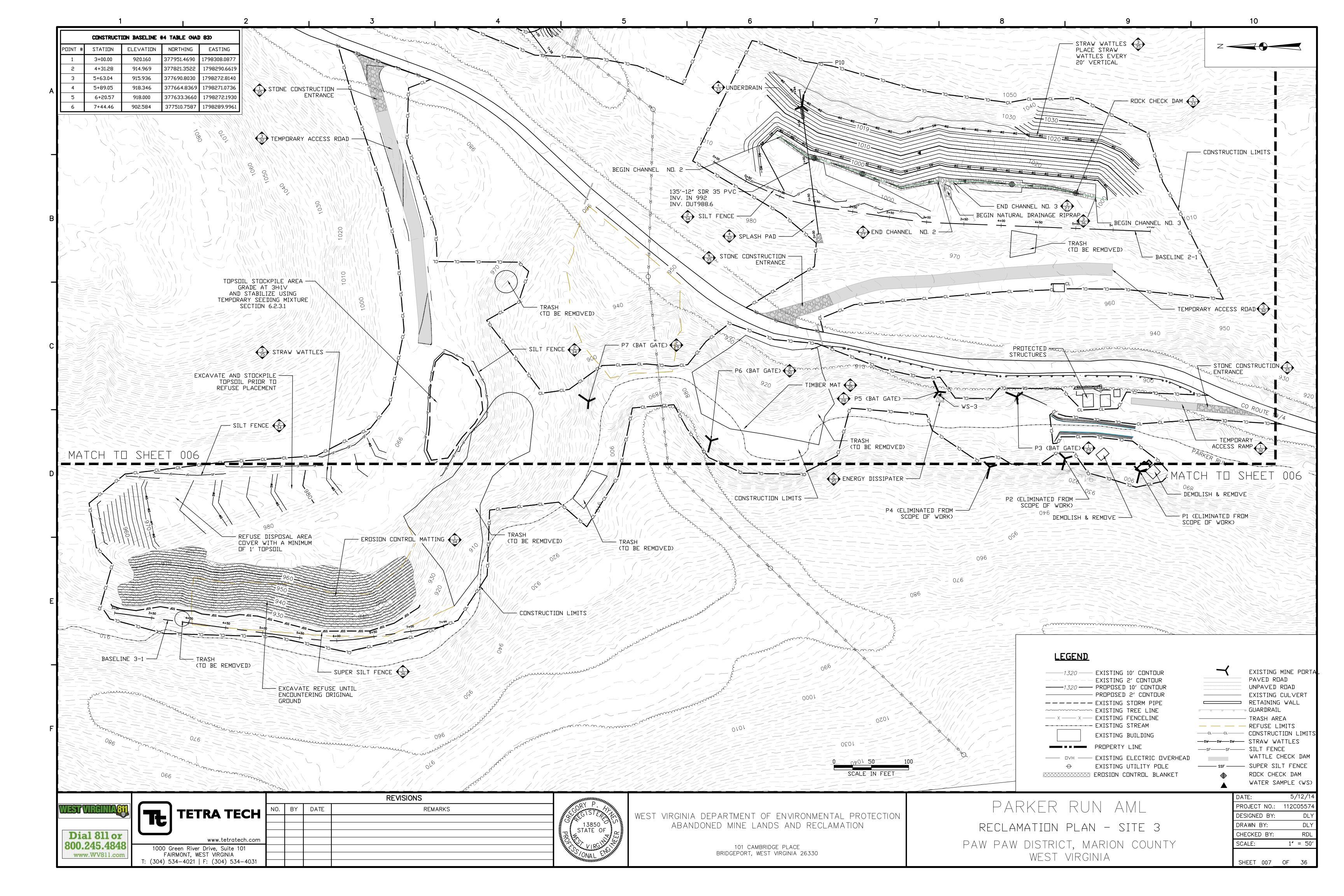


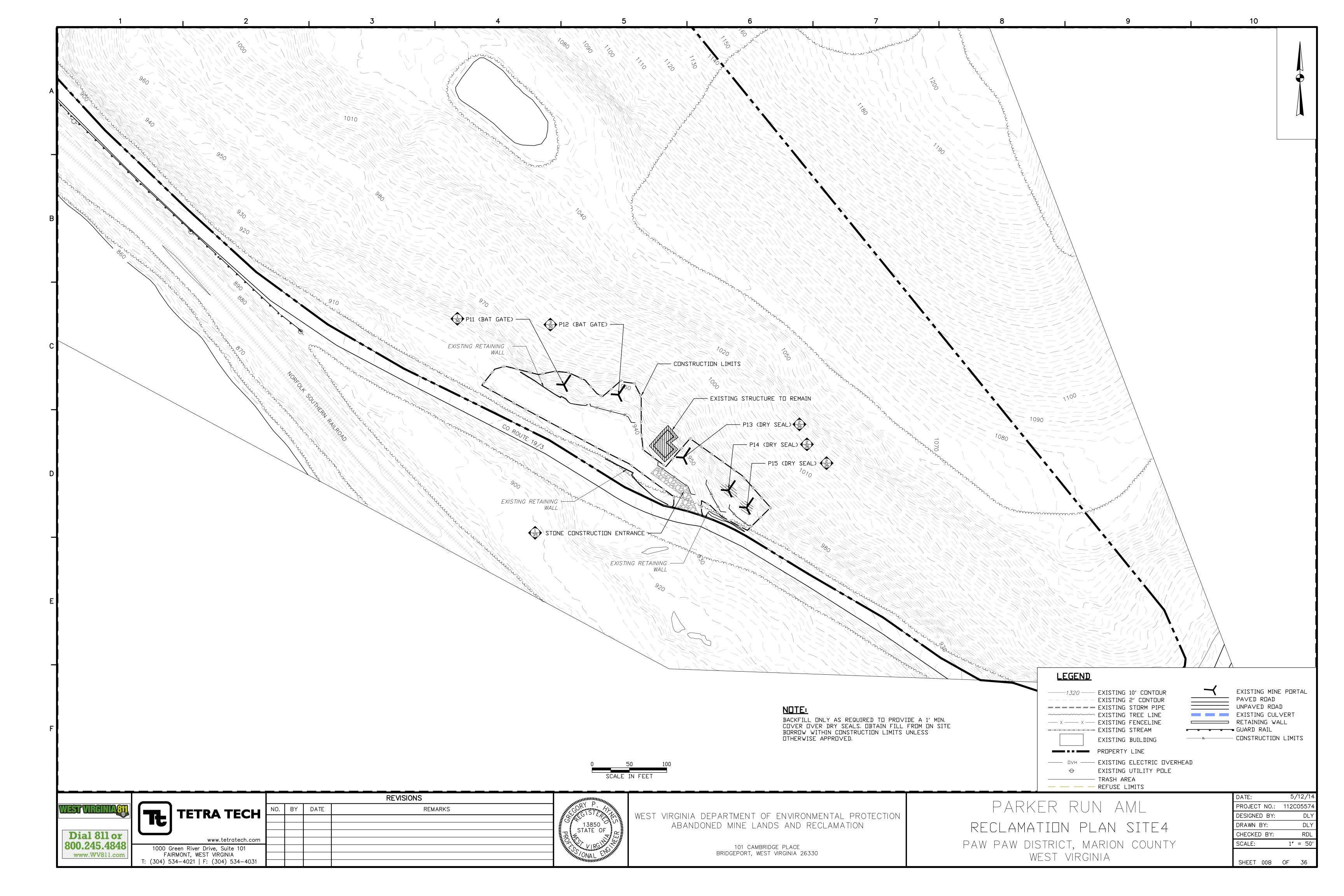


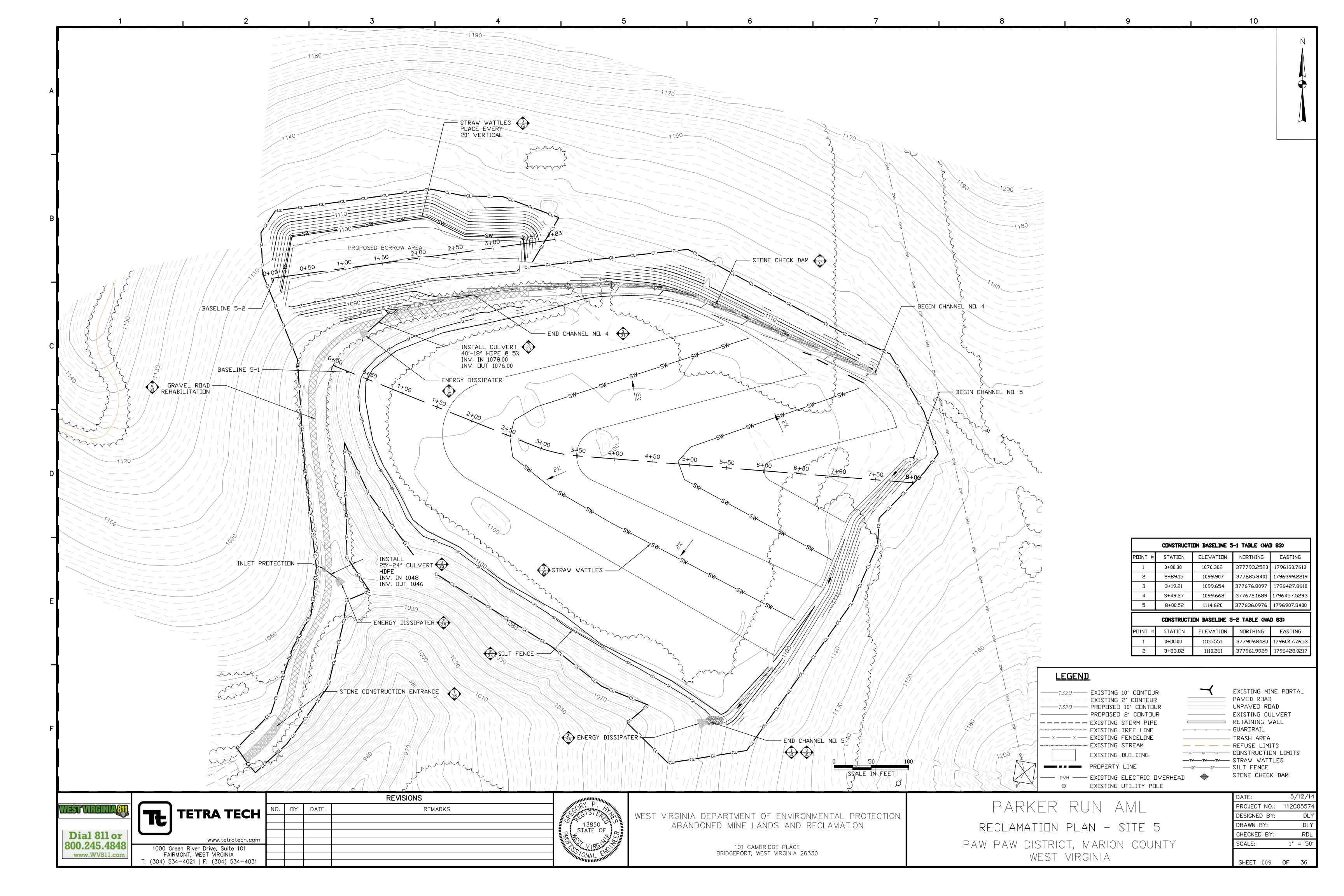


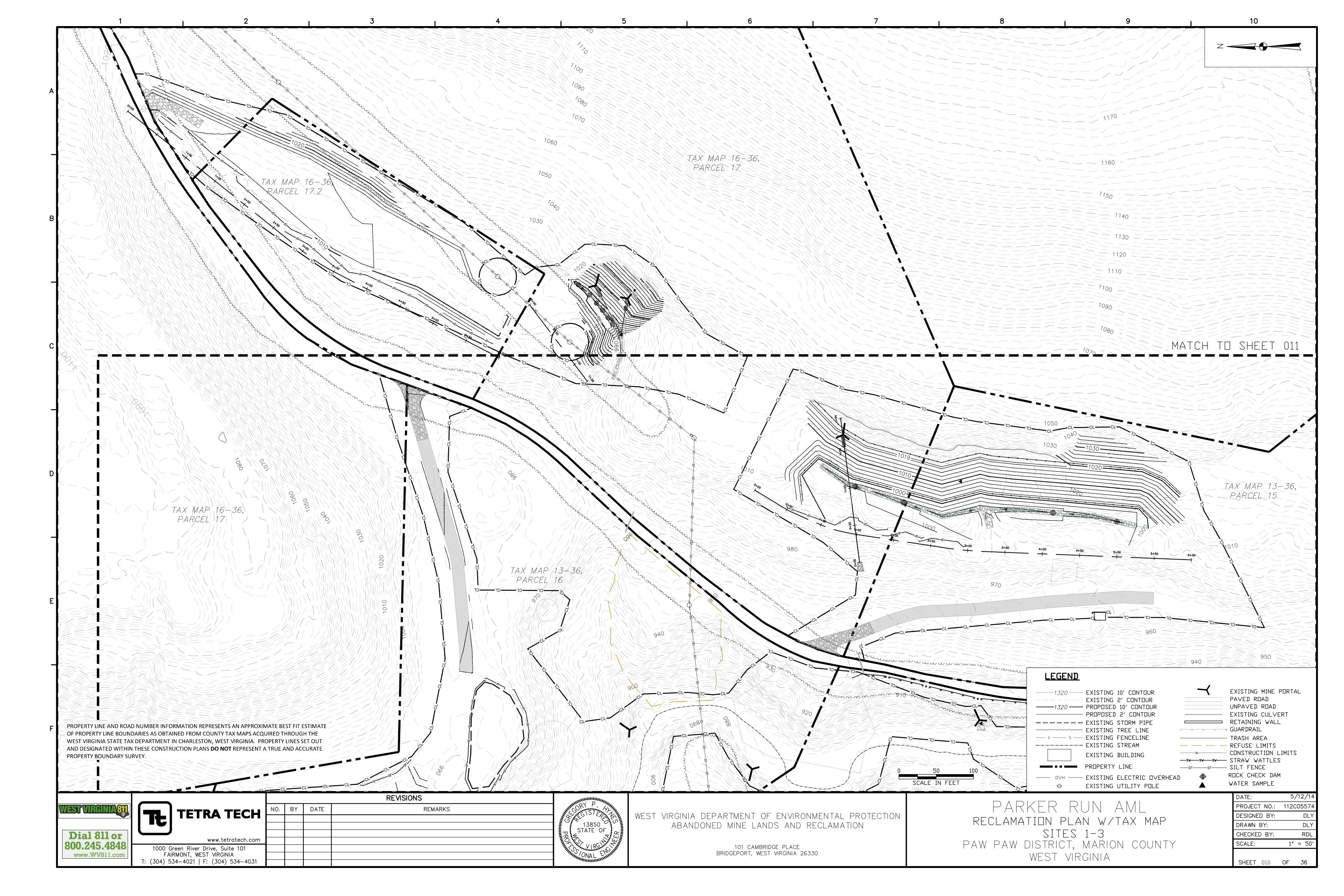


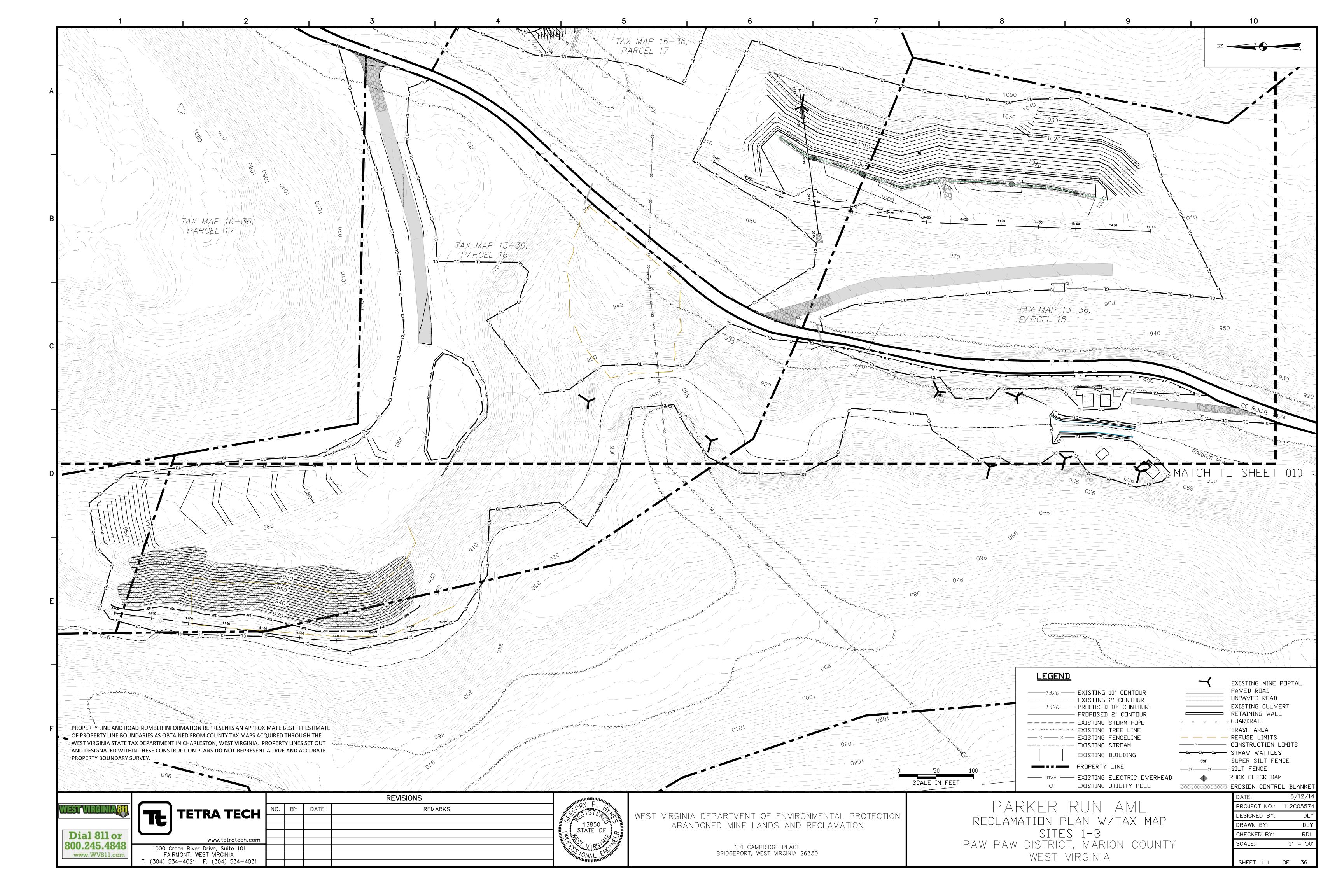


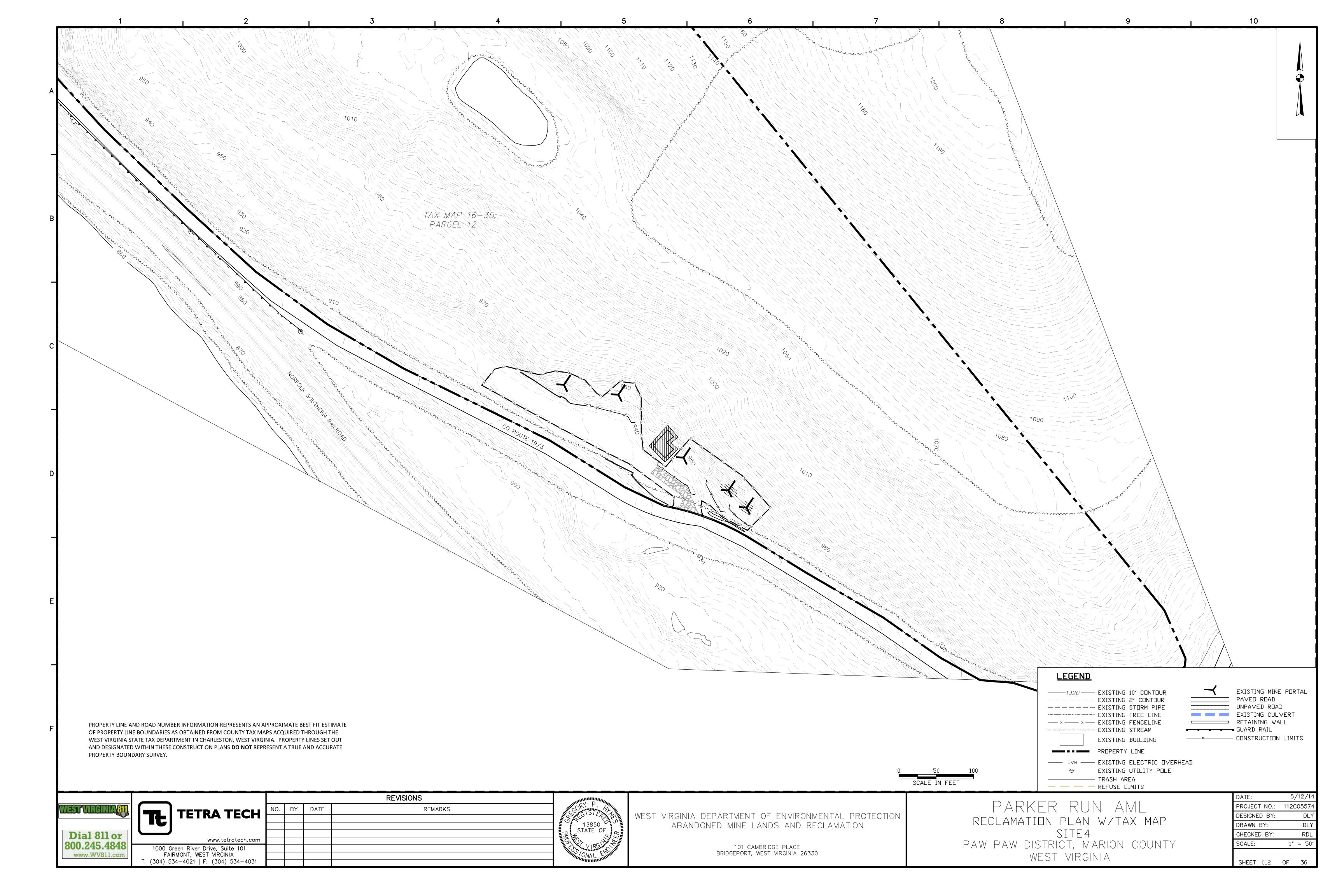


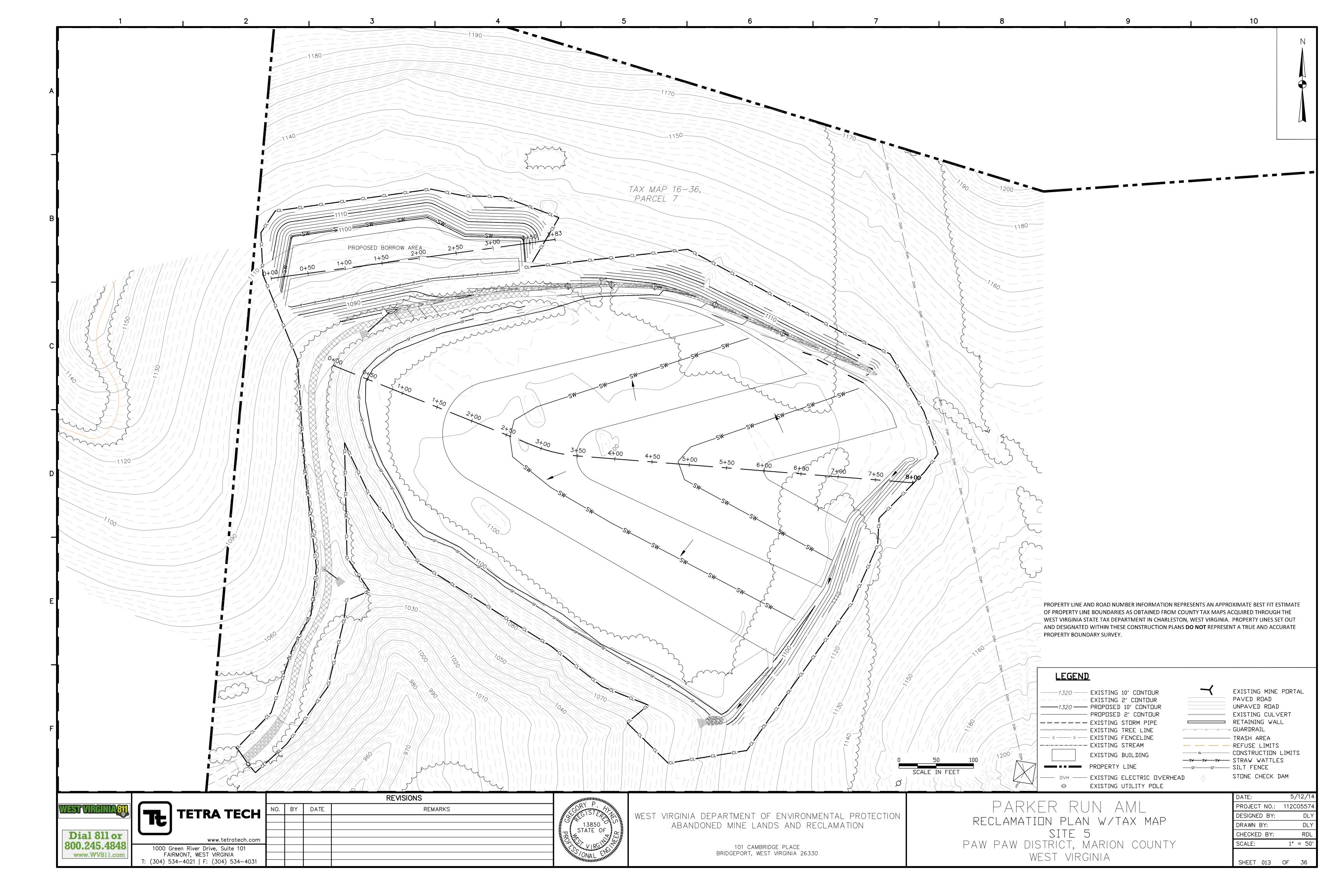


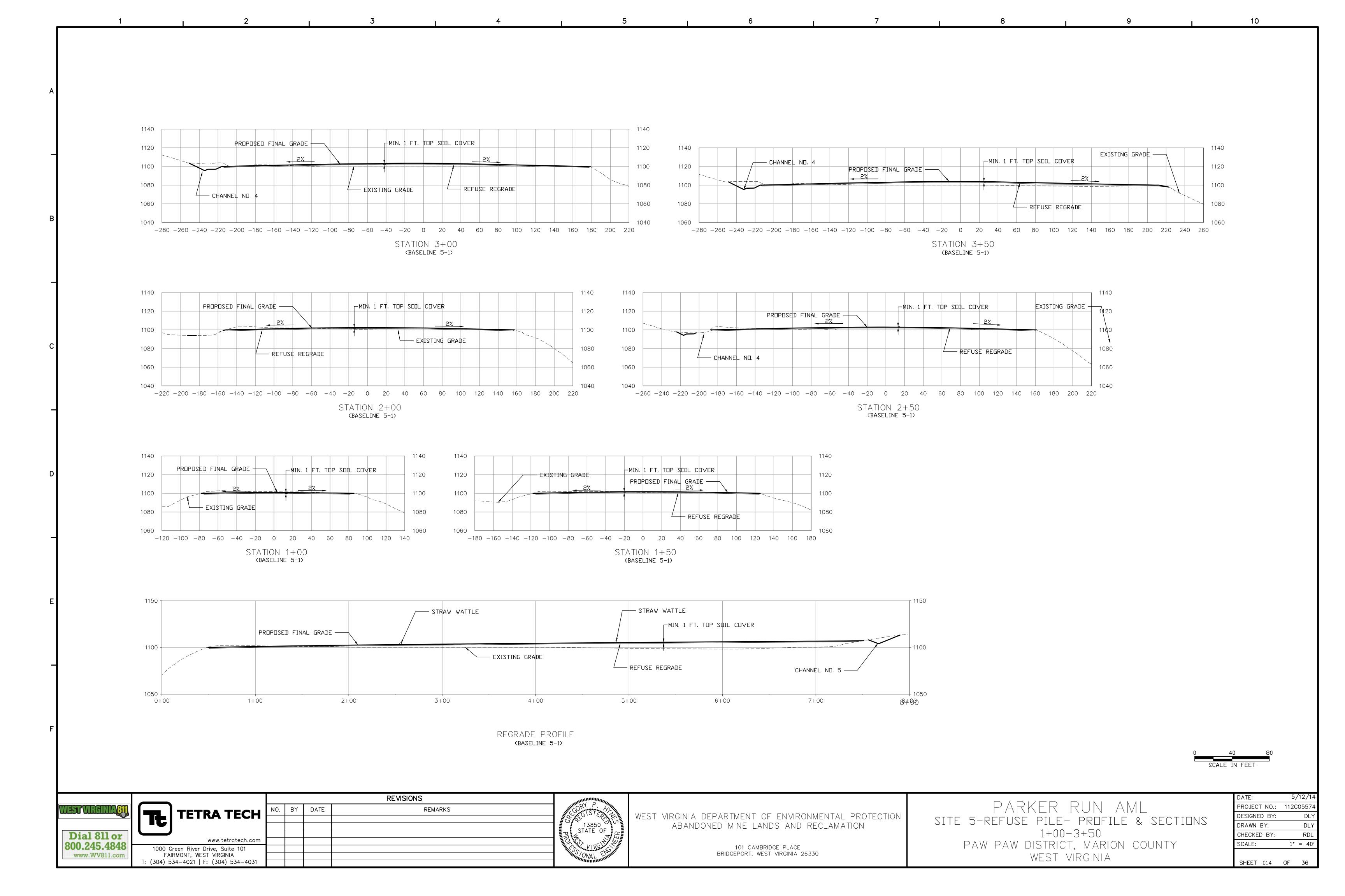


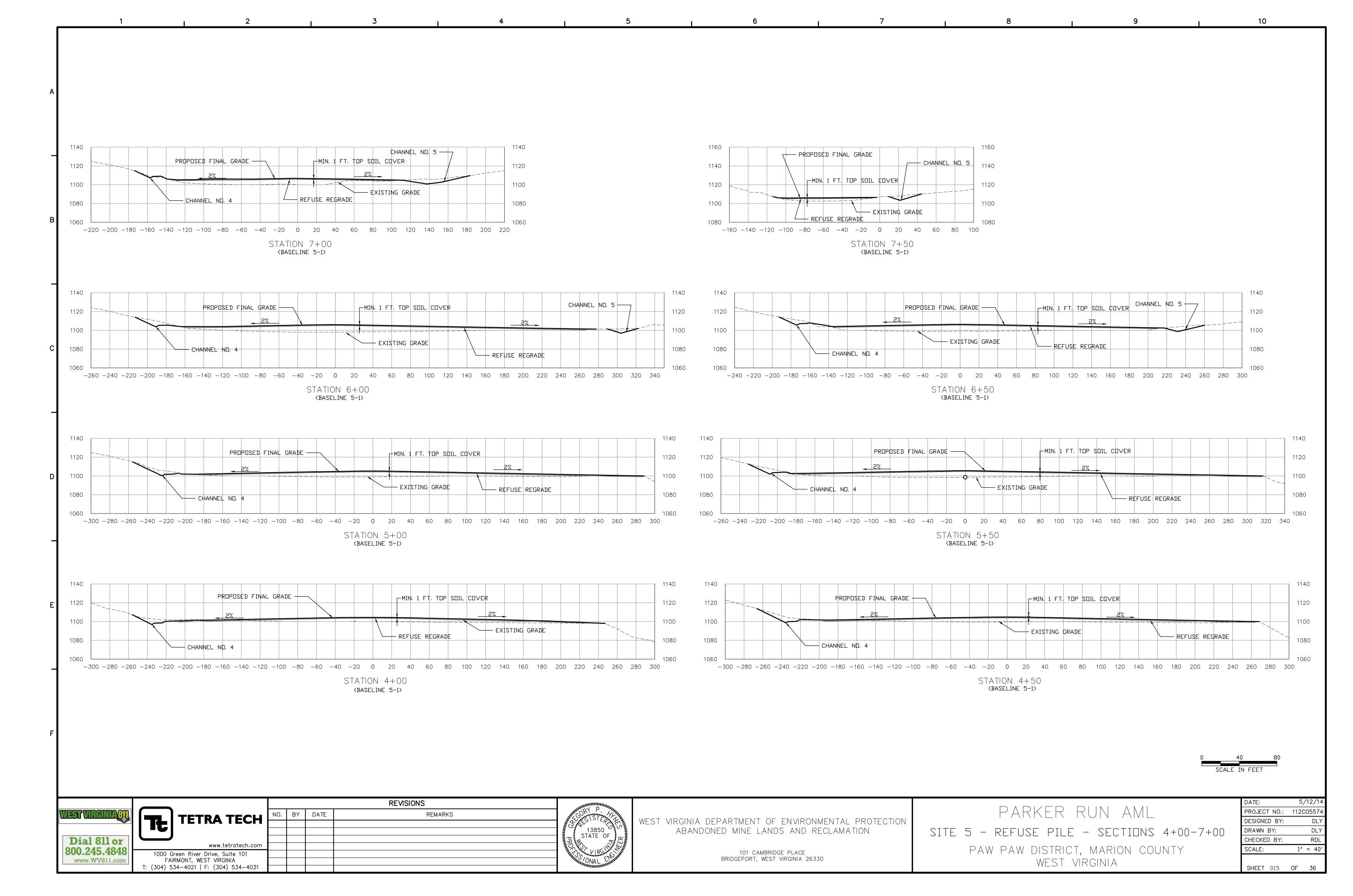


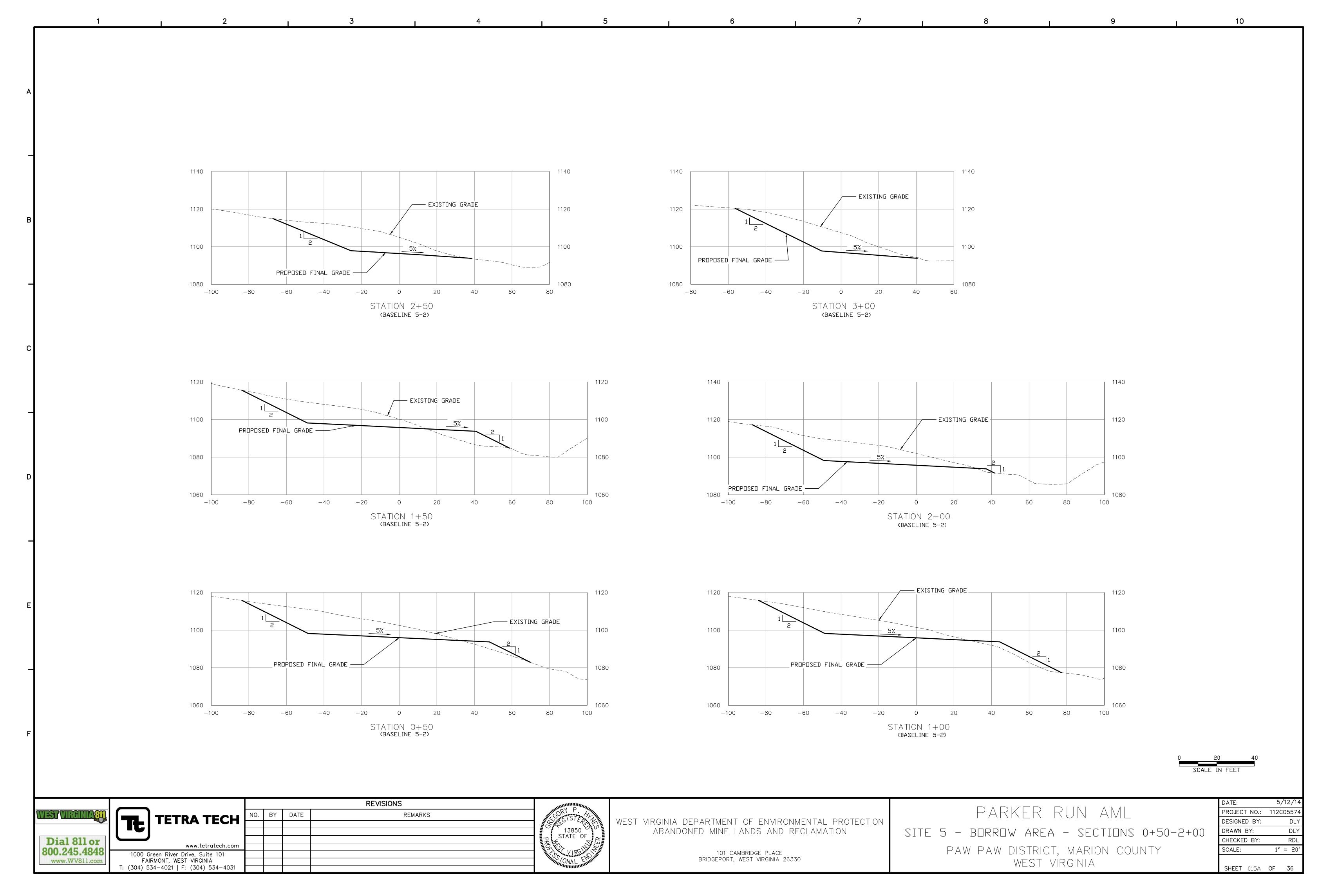












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1000 1000 - 1' MIN. SOIL COVER 1' MIN. SOIL COVER 980 980 EROSION CONTROL MATTING 960 - EROSION CONTROL MATTING 960 REFUSE DISPOSAL AREA -- EXISTING GRADE — EXISTING GRADE REFUSE DISPOSAL AREA 940 940 940 PROPOSED FINAL GRADE —— PROPOSED FINAL GRADE ----920 920 EXCAVATE REFUSE UNTIL ENCOUNTERING EXCAVATE REFUSE UNTIL ENCOUNTERING ORIGINAL GROUND. ORIGINAL GROUND. -20 -100-80 -40-120-100-80 -60 STATION 4+50 STATION 5+00 (BASELINE 3-1) (BASELINE 3-1) ┌ 1' MIN. SOIL COVER 1' MIN. SOIL COVER - EROSION CONTROL MATTING EROSION CONTROL MATTING 960 960 960 960 EXISTING GRADE REFUSE DISPOSAL AREA - EXISTING GRADE 940 940 PROPOSED FINAL GRADE ----REFUSE DISPOSAL AREA ----PROPOSED FINAL GRADE ---920 920 920 EXCAVATE REFUSE UNTIL ENCOUNTERING ORIGINAL GROUND. EXCAVATE REFUSE UNTIL ENCOUNTERING ORIGINAL GROUND. 20 -200 -180**−160 −140** -120-100-60 -40-200 -140-120-100-60 -20 0 20 -80 -80 -40STATION 4+00 STATION 3+50 (BASELINE 3-1) (BASELINE 3-1)

> 0 20 40 SCALE IN FEET



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330 PARKER RUN AML

SITE 2 - REFUSE AREA - SECTIONS 3+50-5+00

PAW PAW DISTRICT, MARION COUNTY

WEST VIRGINIA

DATE:	5/12/14
PROJECT NO.:	112C05574
DESIGNED BY:	DLY
DRAWN BY:	DLY
CHECKED BY:	RDL
SCALE:	1" = 20'
SHEET 016	OF 36

1000 1000 1' MIN. SOIL COVER ----- EXISTING GRADE -980 980 980 980 - EROSION CONTROL MATTING ---- EROSION CONTROL MATTING 960 ___ EXISTING GRADE REFUSE DISPOSAL AREA 940 940 940 940 PROPOSED FINAL GRADE ----PROPOSED FINAL GRADE -920 920 920 920 EXCAVATE REFUSE UNTIL ENCOUNTERING EXCAVATE REFUSE UNTIL ENCOUNTERING ORIGINAL GROUND. ORIGINAL GROUND. -160-140-120-100-60 -20 -140-120-100-80 -60 -40STATION 6+50 STATION 7+00 (BASELINE 3-1) (BASELINE 3-1) 1000 1000 1' MIN. 1' MIN. SOIL SOIL COVER COVER 980 980 980 980 - EROSION CONTROL MATTING - EXISTING GRADE 960 960 · 960 960 REFUSE DISPOSAL AREA REFUSE DISPOSAL AREA — EXISTING GRADE - EROSION CONTROL MATTING PROPOSED FINAL GRADE 940 940 940 940 PROPOSED FINAL GRADE ----920 920 920 920 EXCAVATE REFUSE UNTIL ENCOUNTERING ORIGINAL GROUND. EXCAVATE REFUSE UNTIL ENCOUNTERING ORIGINAL GROUND. 900 900 -100-20 20 -240-220-20-160-140-120-80 -60 -120-100-80 STATION 5+50 STATION 6+00 (BASELINE 3-1) (BASELINE 3-1) REVISIONS 5/12/14 PARKER RUN AML PROJECT NO.: 112C05574 REMARKS TE TETRA TECH WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION DESIGNED BY: ABANDONED MINE LANDS AND RECLAMATION 13850 STATE OF DRAWN BY: SITE 2 - REFUSE AREA - SECTIONS 5+50-7+00 Dial 811 or CHECKED BY: www.tetratech.com PAW PAW DISTRICT, MARION COUNTY 800.245.4848 SCALE: 1" = 20'

1000 Green River Drive, Suite 101

FAIRMONT, WEST VIRGINIA

T: (304) 534-4021 | F: (304) 534-4031

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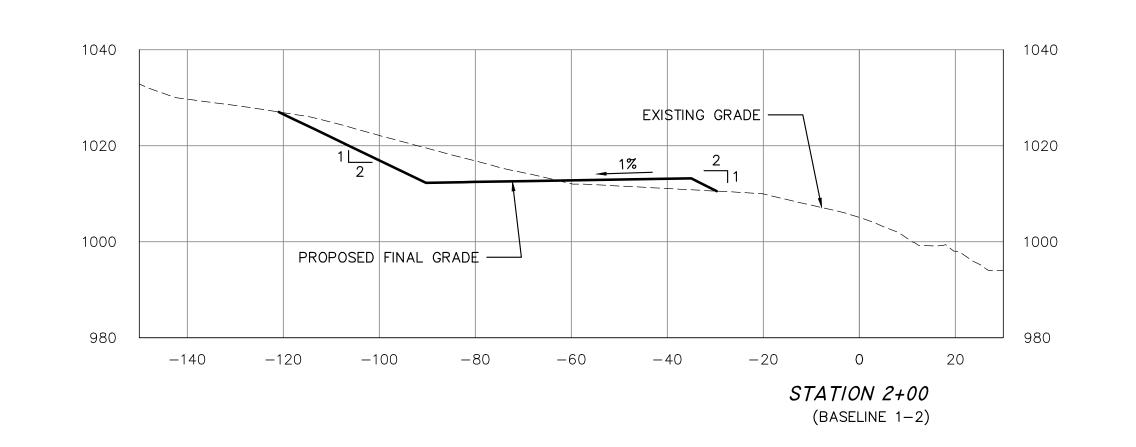
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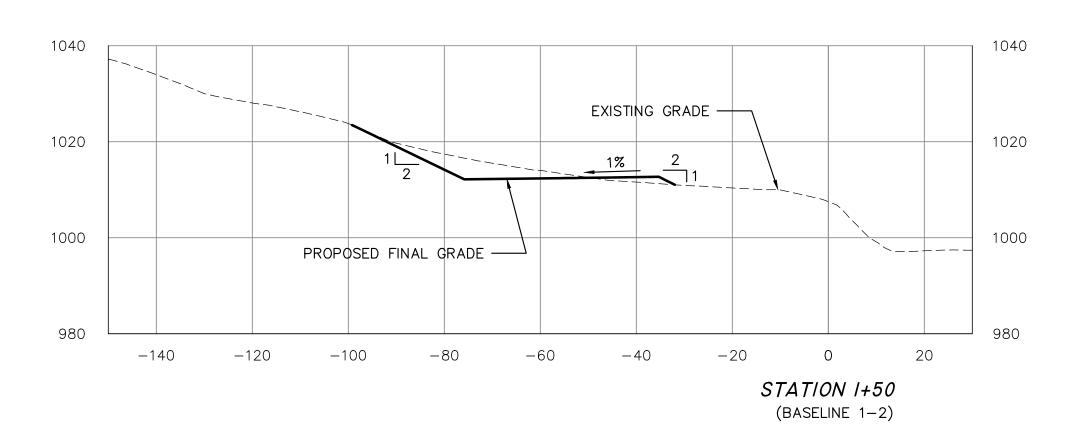
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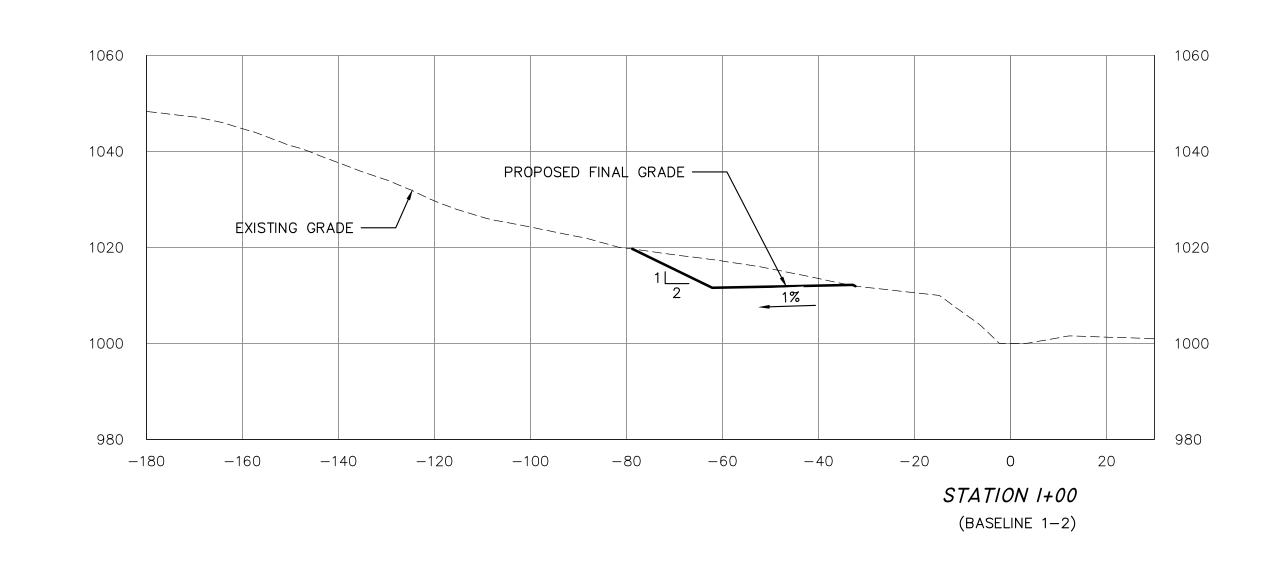
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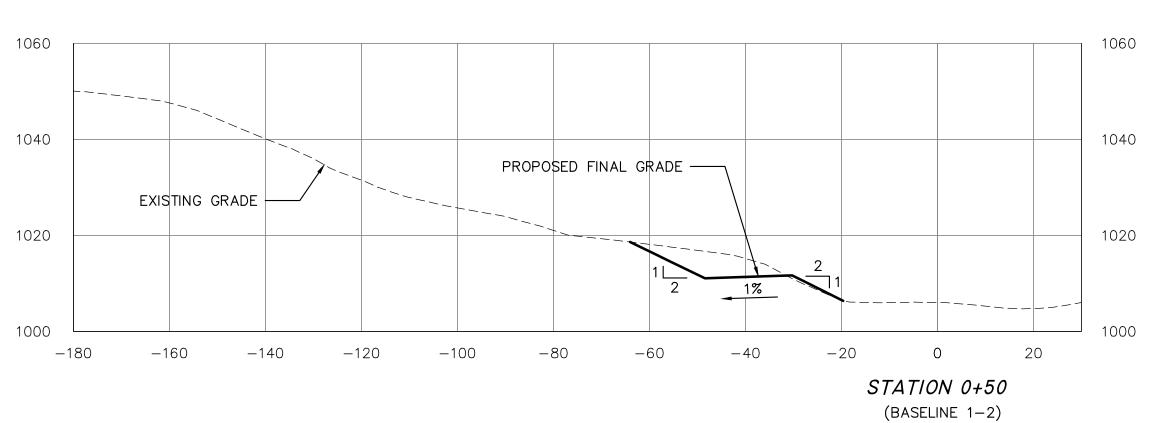
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WEST VIRGINIA



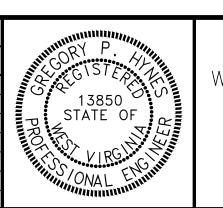






REMARKS



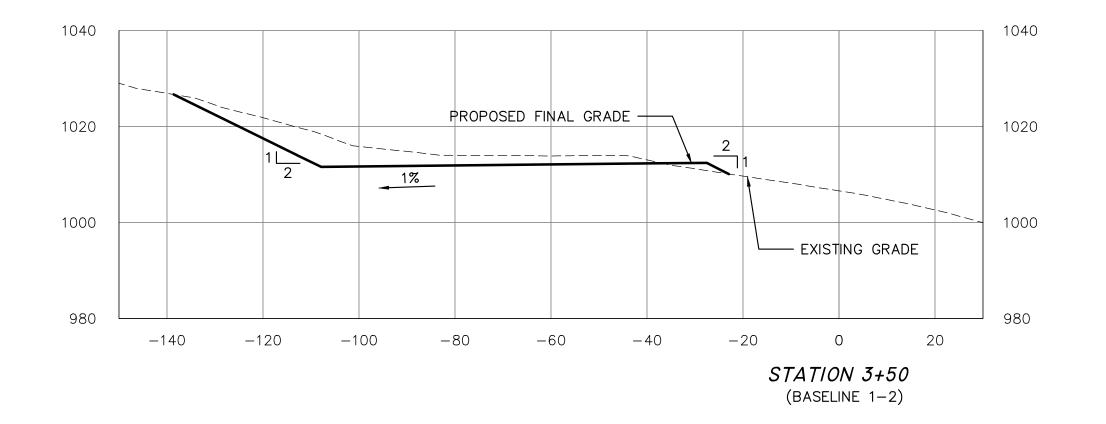


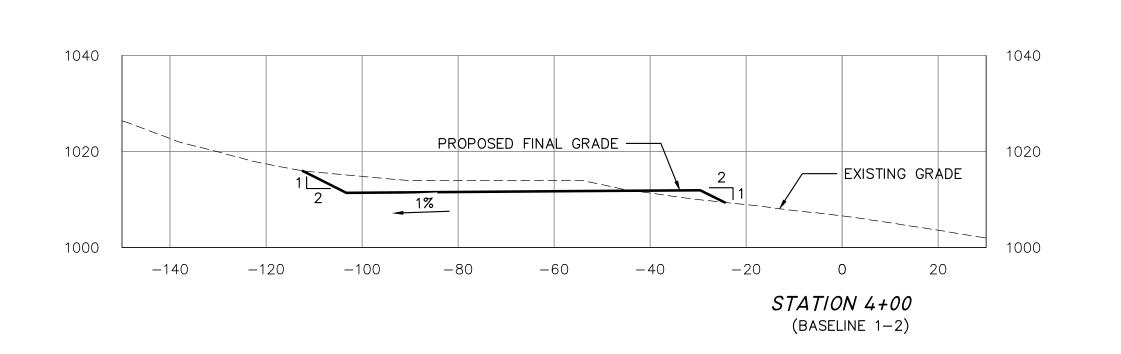
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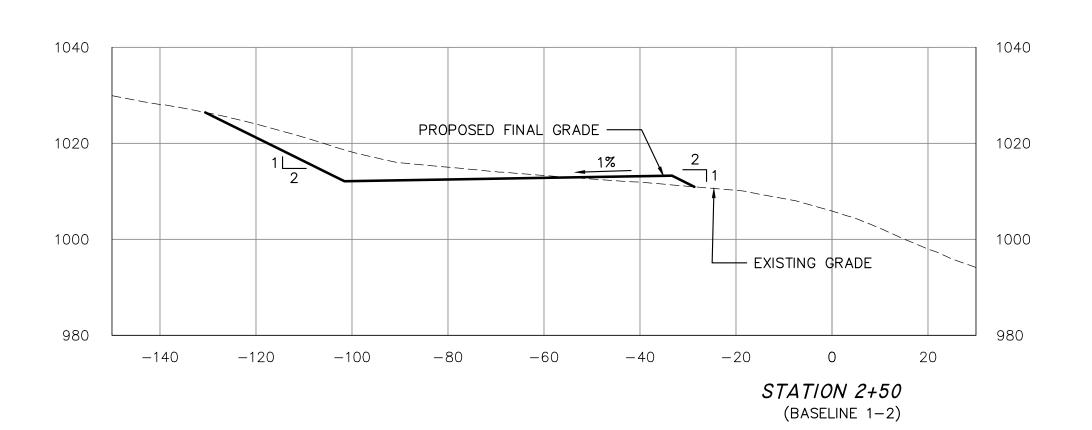
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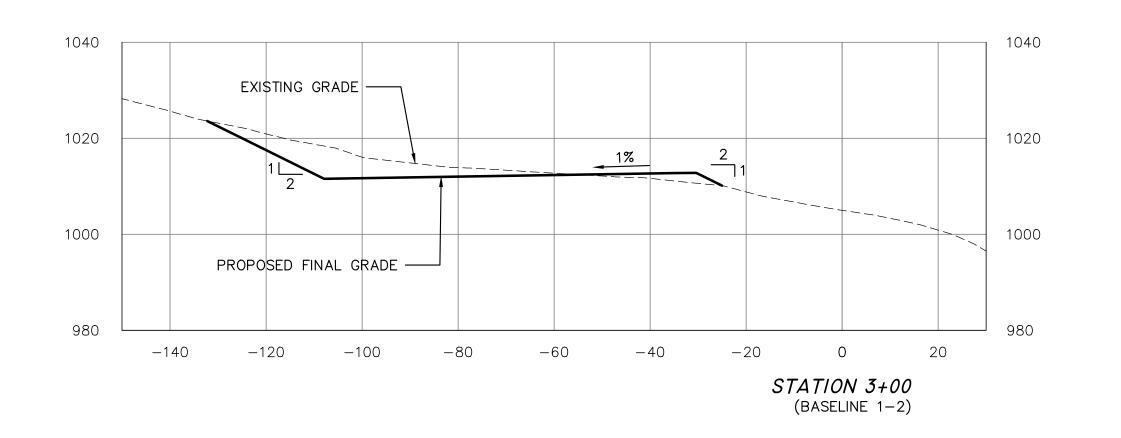
PARKER RUN AML
HIGHWALL BORROW AREA SECTIONS 0+50-2+00
PAW PAW DISTRICT, MARION COUNTY WEST VIRGINIA

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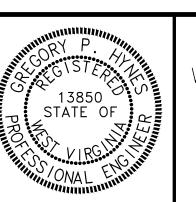












WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

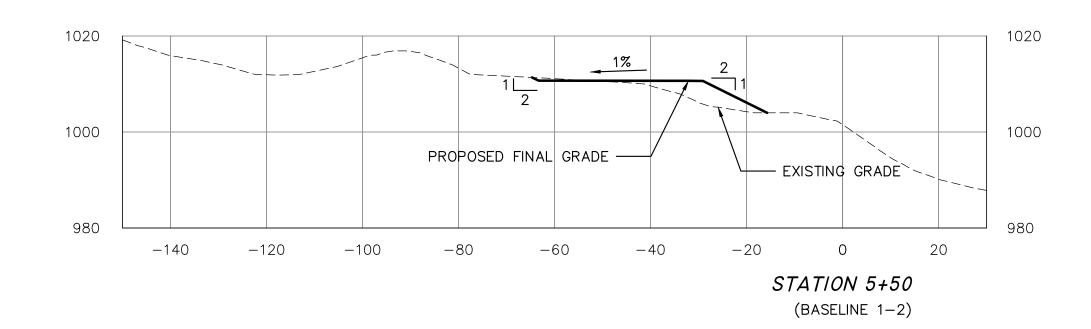
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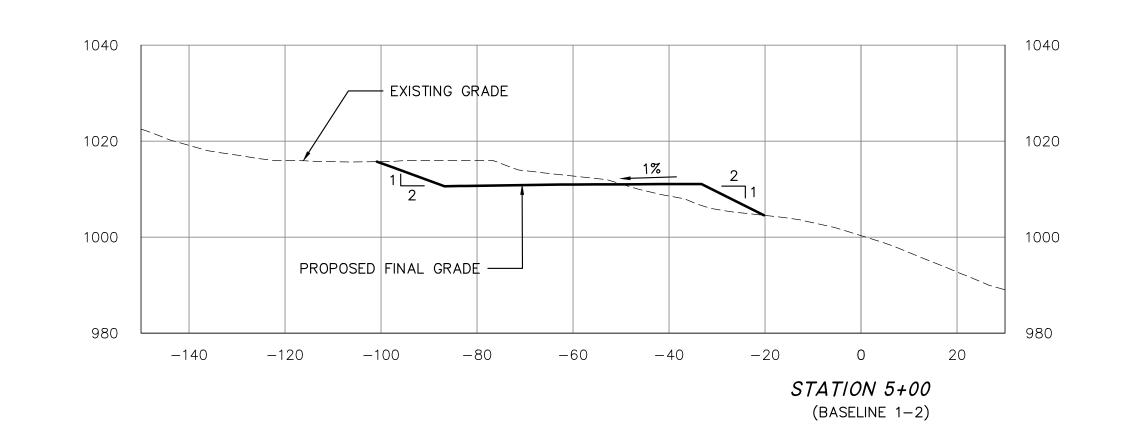
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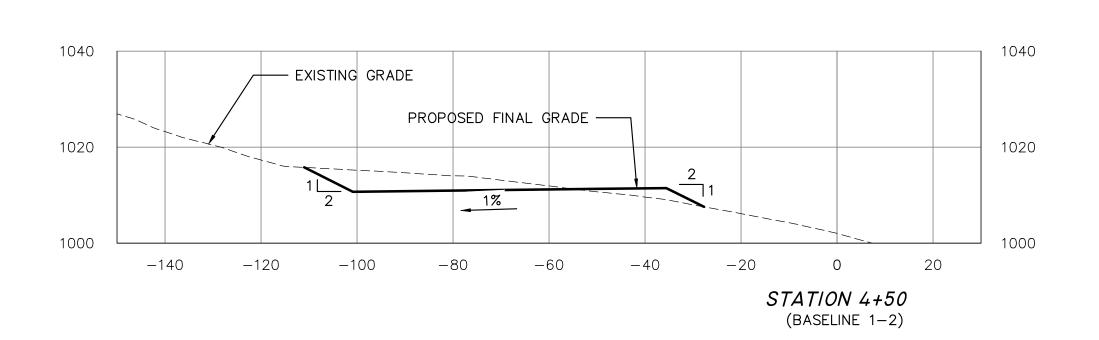
PAW PAW DISTRICT, MARION COUNTY

WEST VIRGINIA

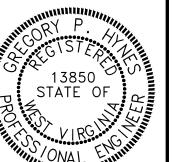
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DRAWN BY:	DLY
CHECKED BY:	RDL
SCALE:	1" = 20'
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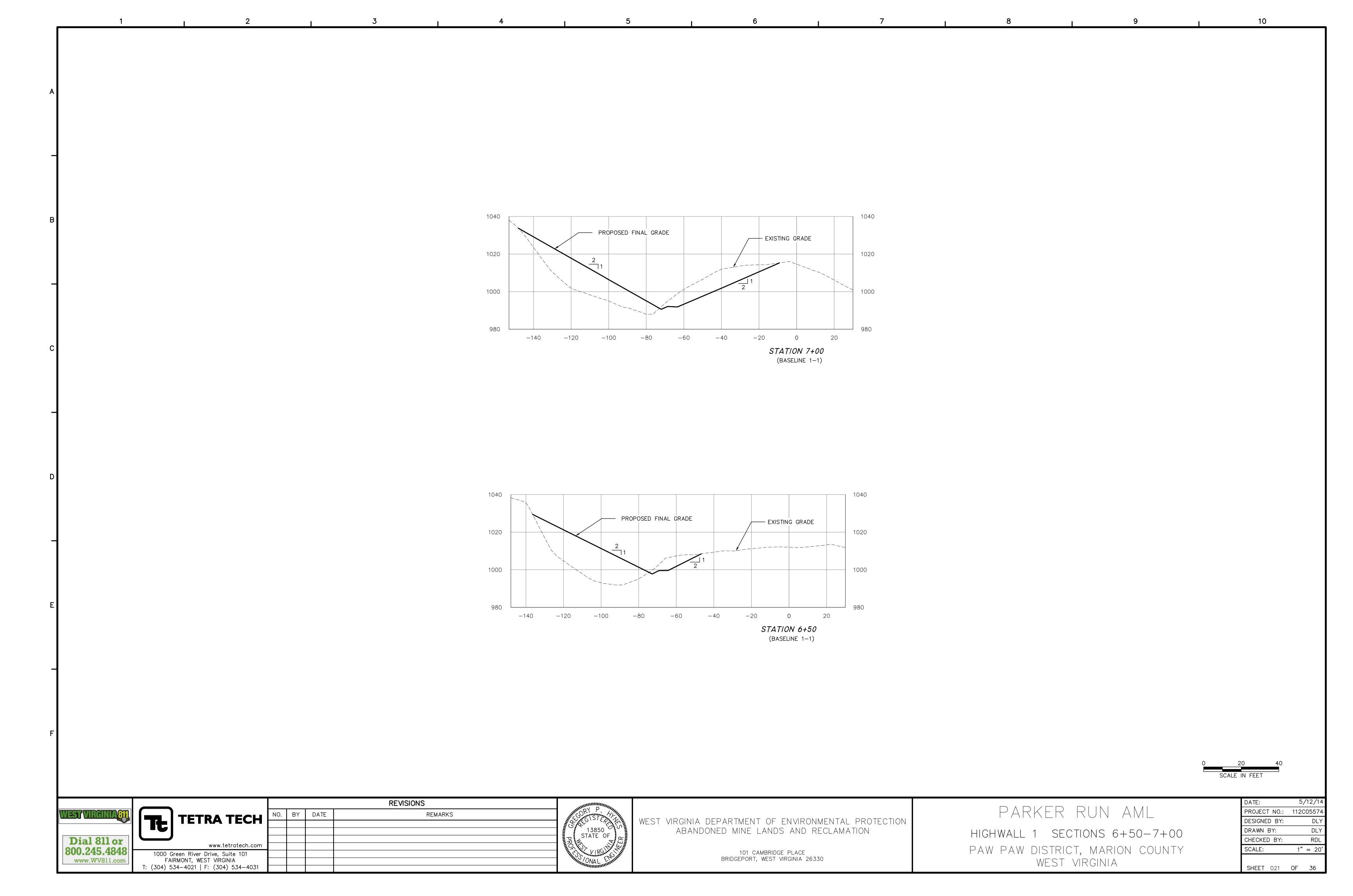


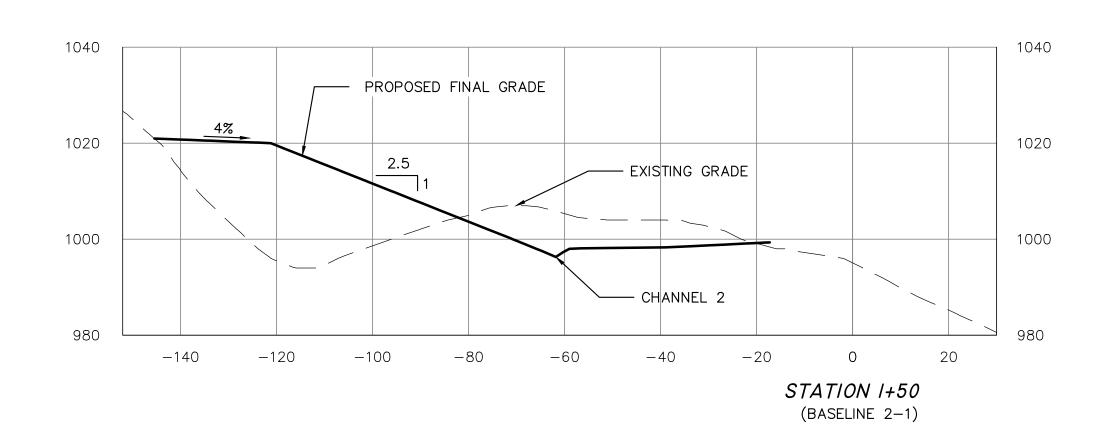
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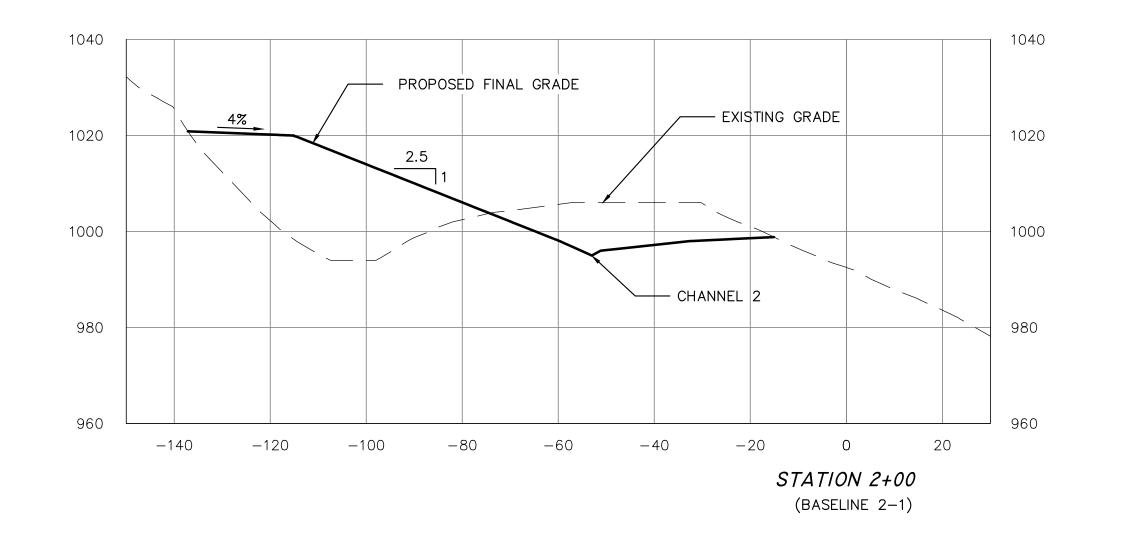
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HIGHWALL BORROW AREA SECTIONS 4+50-5+50

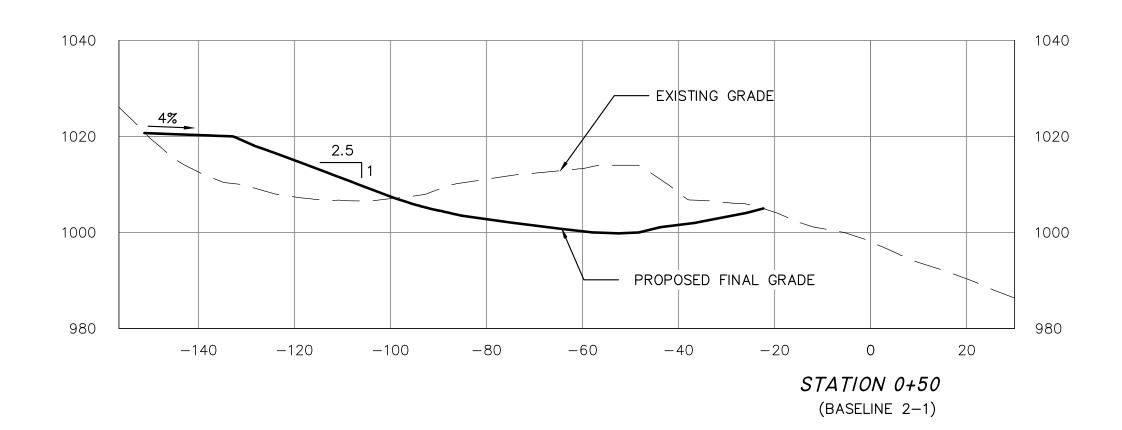
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PAW PAW DISTRICT, MARION COUNTY
WEST VIRGINIA

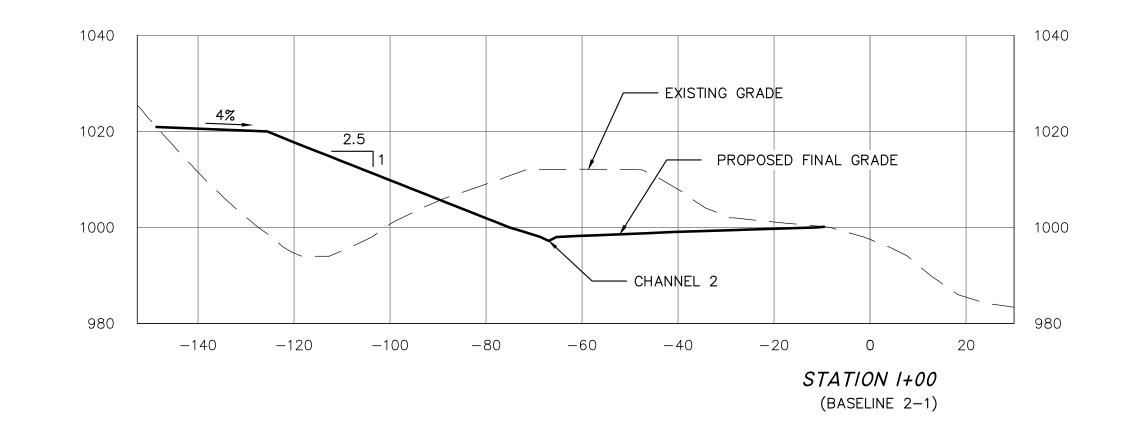
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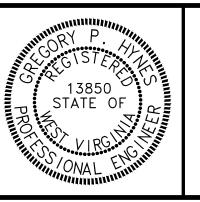




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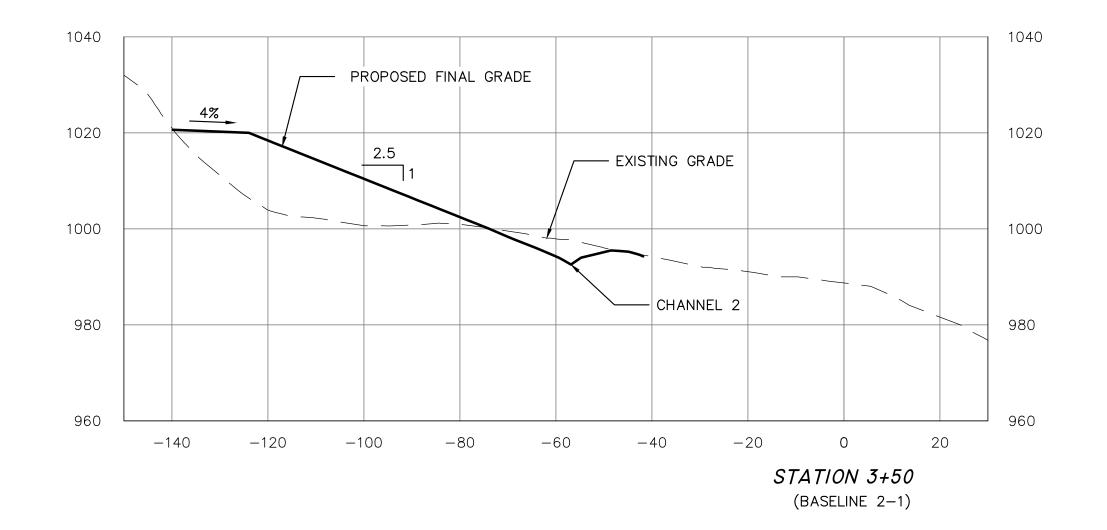
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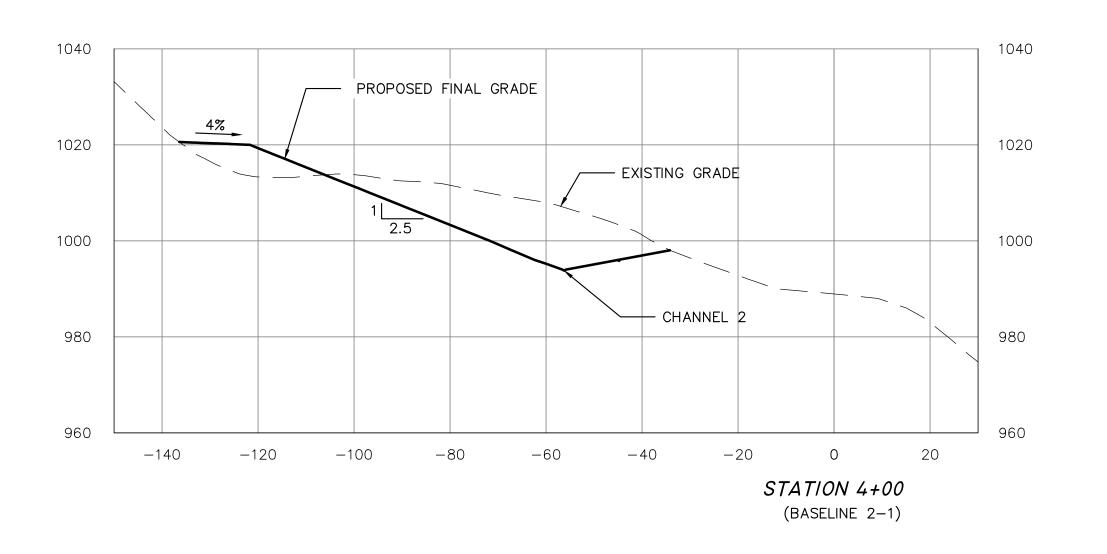
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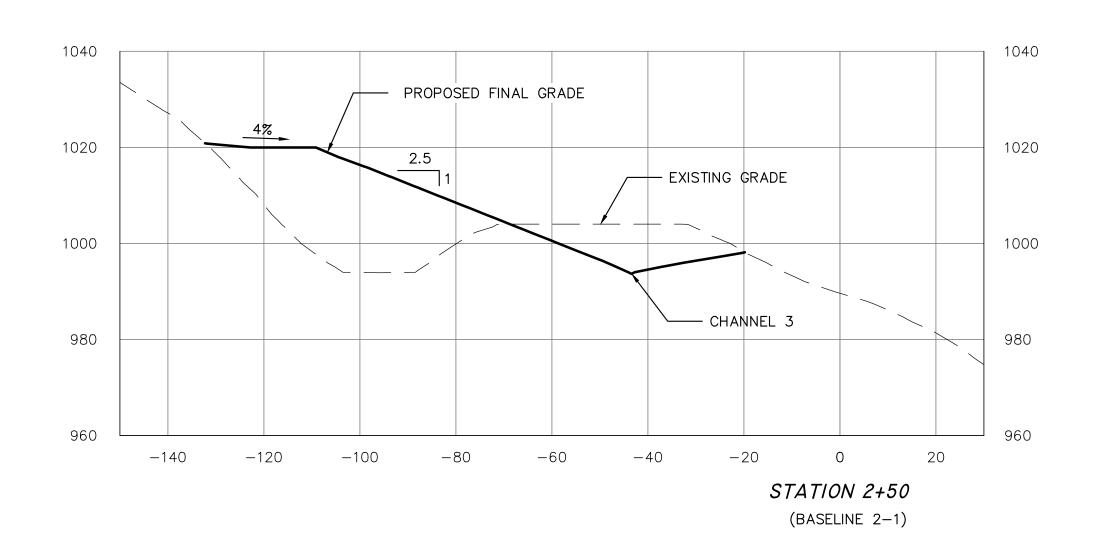
PAW PAW DISTRICT, MARION COUNTY

WEST VIRGINIA

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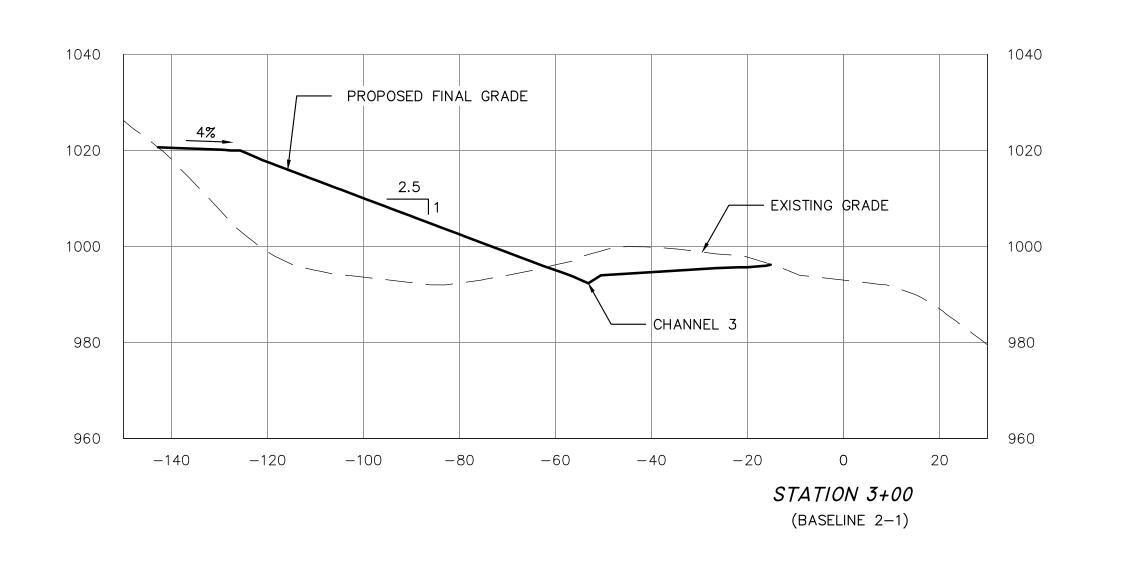




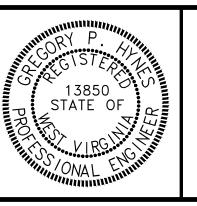


REVISIONS

REMARKS



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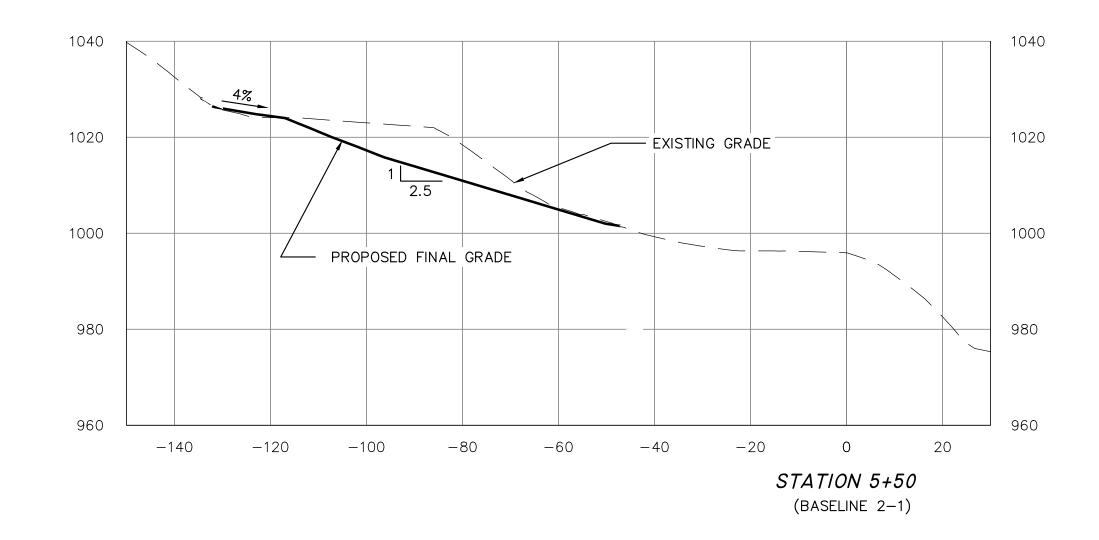


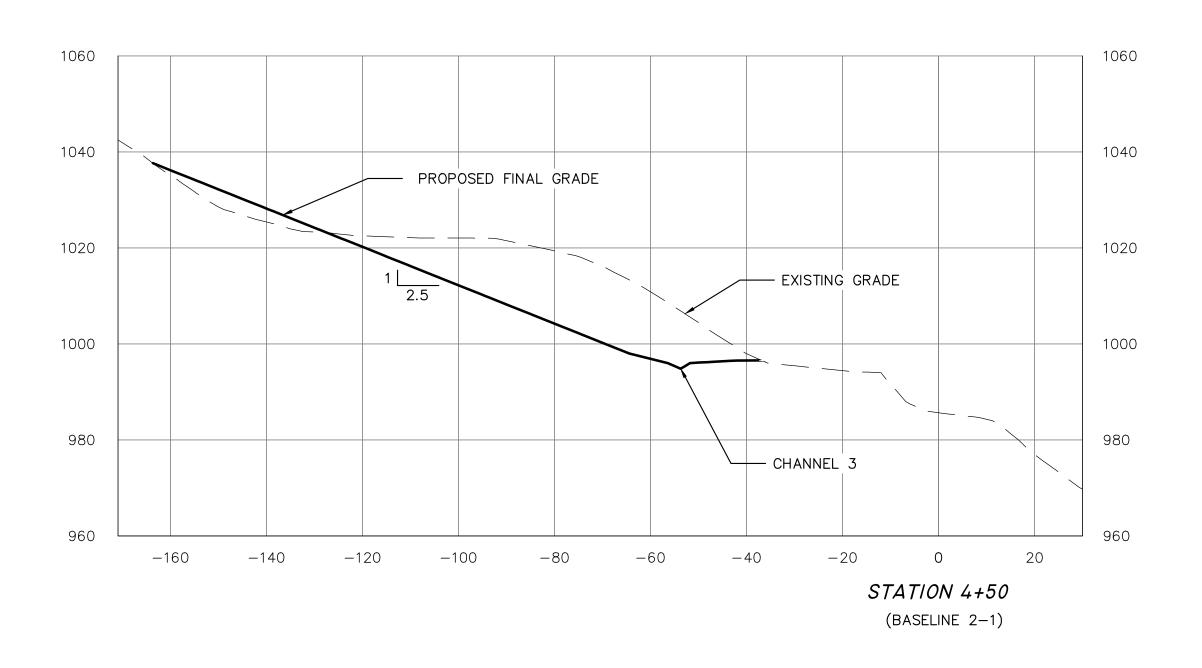
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330 PARKER RUN AML
HIGHWALL 2 2+50-4+00 SECTIONS
PAW PAW DISTRICT, MARION COUNTY

WEST VIRGINIA

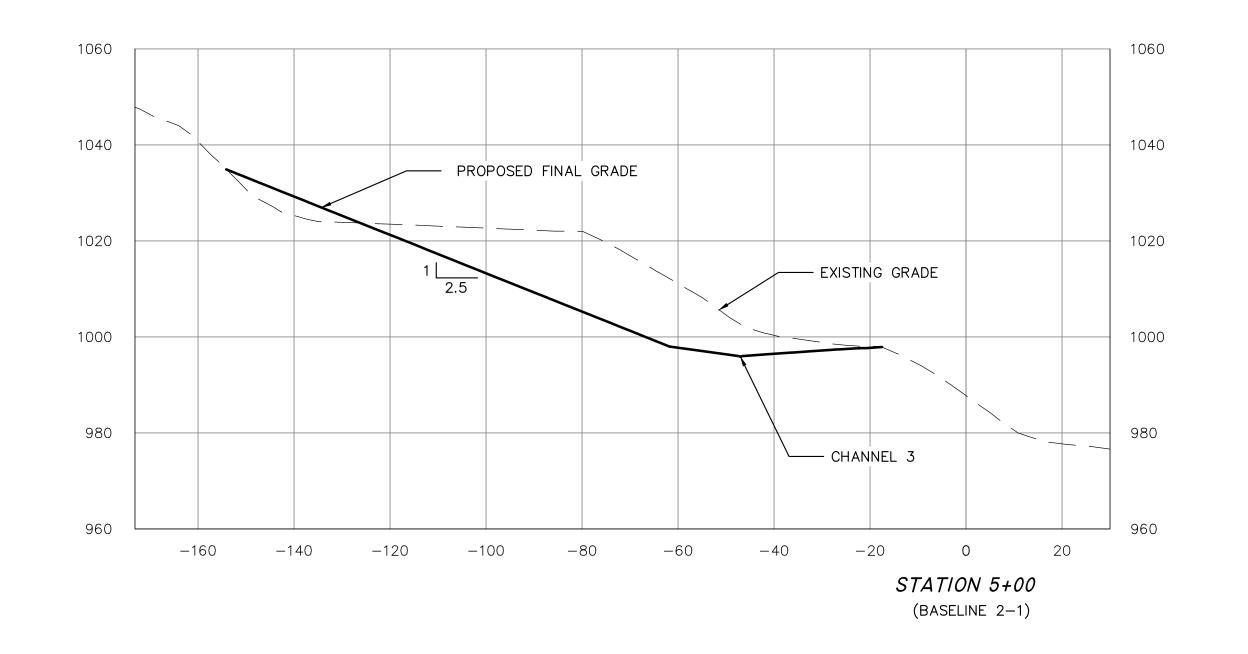
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REVISIONS

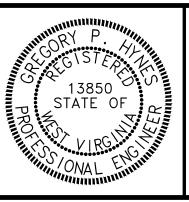
REMARKS



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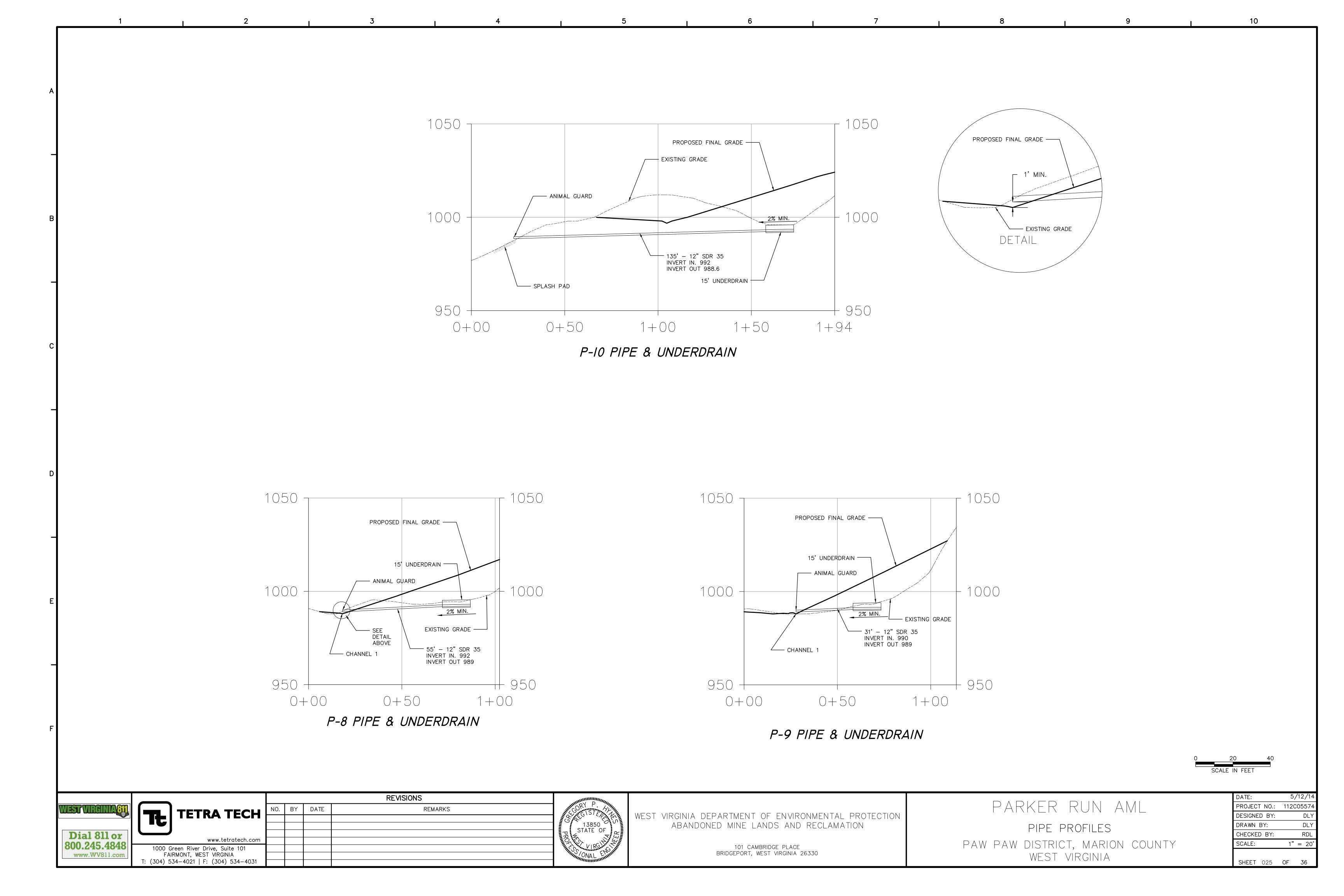


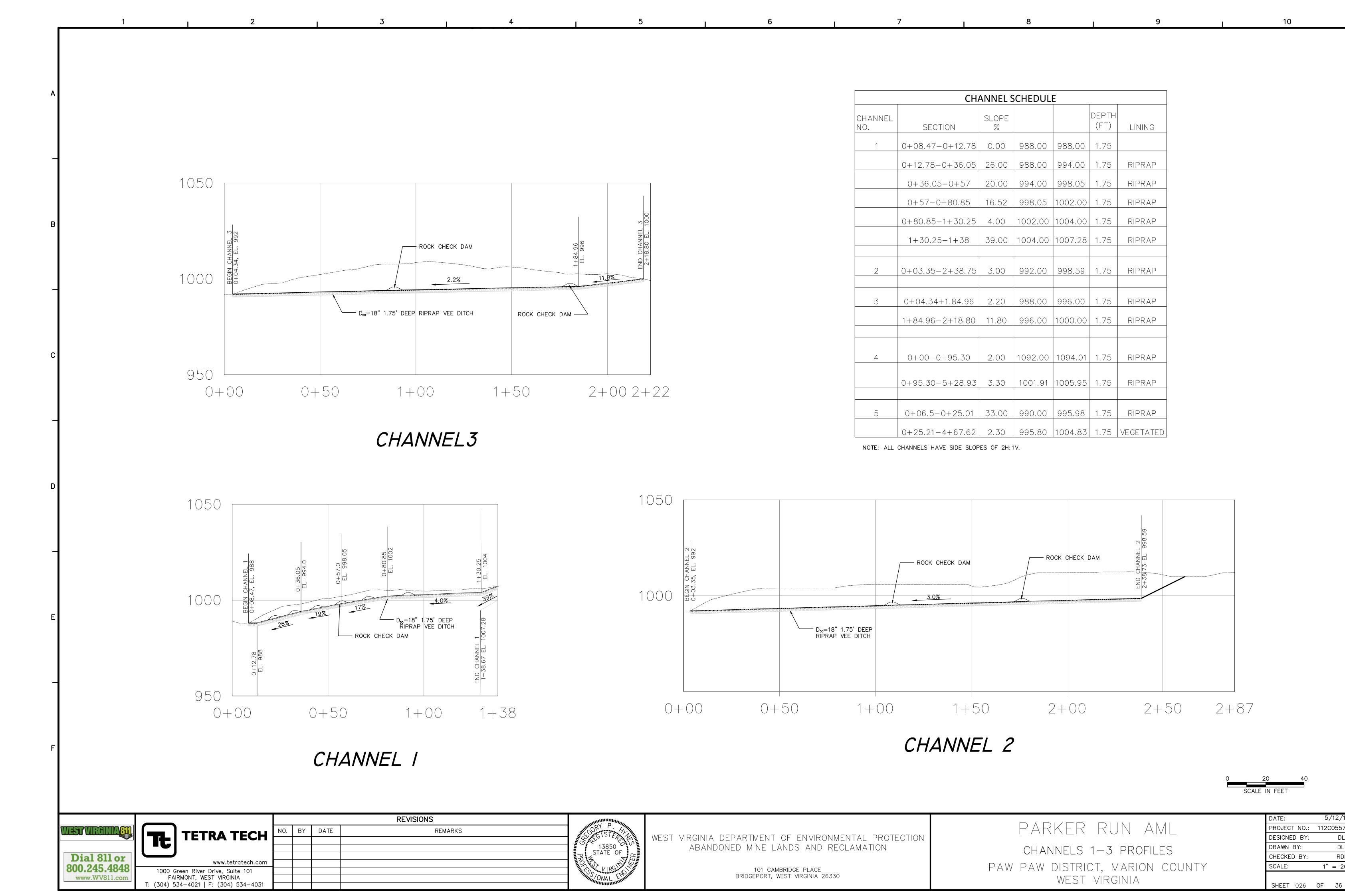
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330 PARKER RUN AML

HIGHWALL 2 4+50-5+50 SECTIONS
PAW PAW DISTRICT, MARION COUNTY
WEST VIRGINIA

DATE:		5,	/12/14
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SHEET	024	OF	36

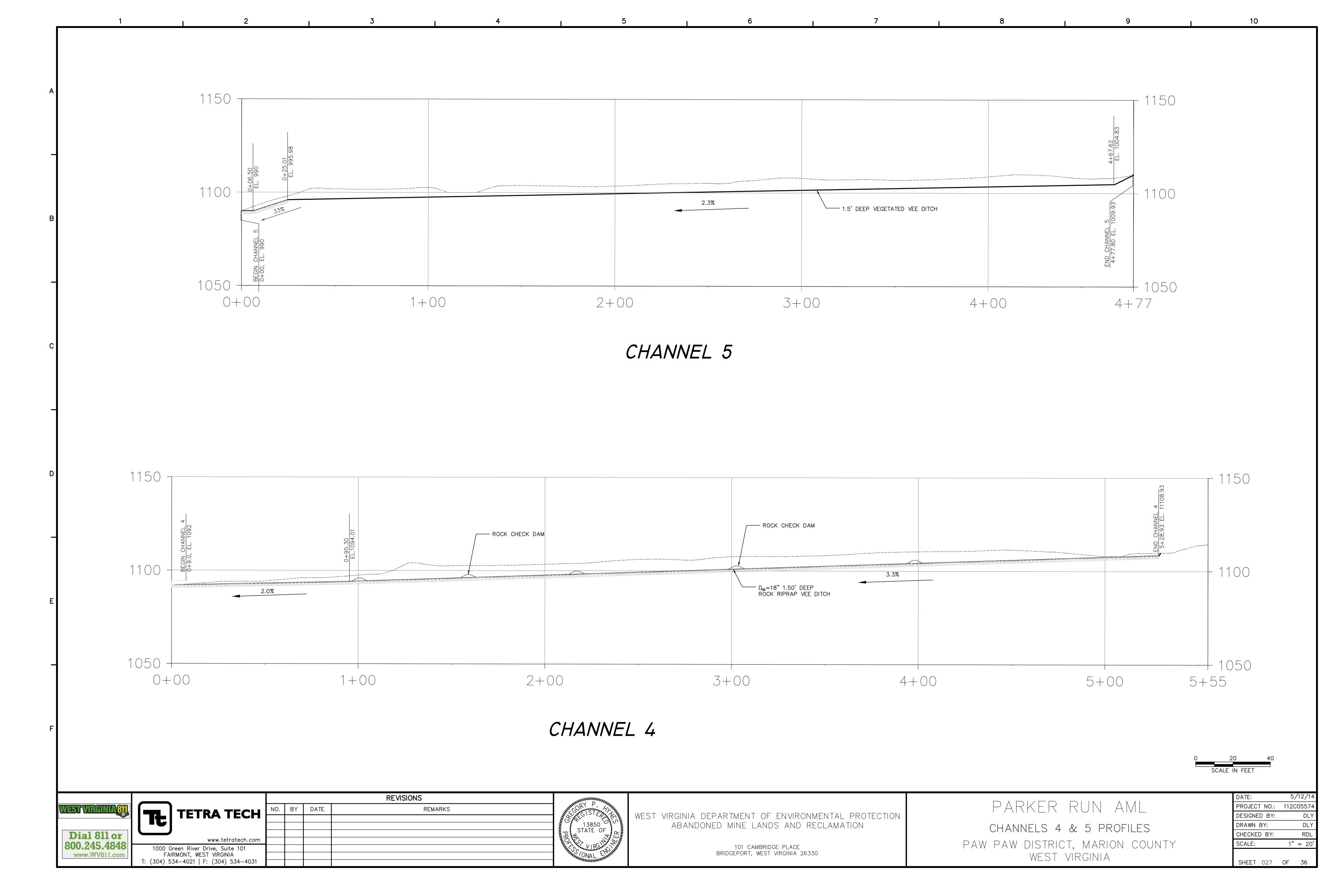


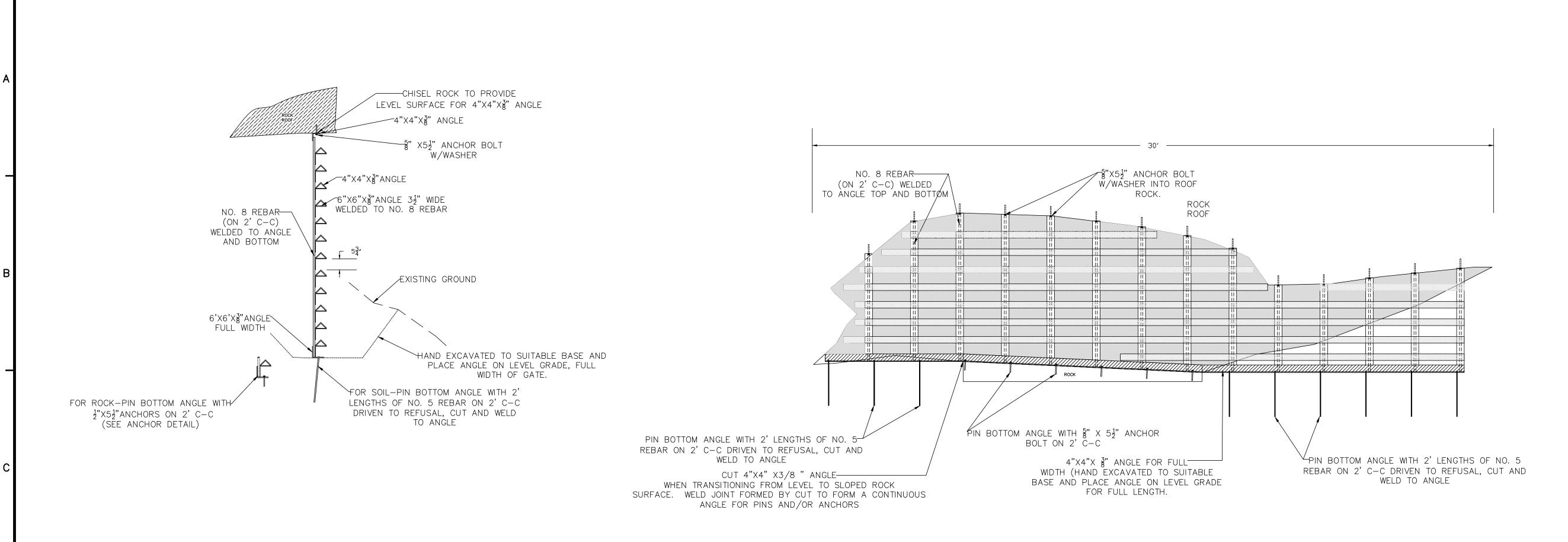


5/12/14

1" = 20'

112C05574









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				REVISIONS	
TETRA TECH	NO.	BY	DATE	REMARKS	
TE I TE I KA TECH					
www.tetratech.com					
1000 Green River Drive, Suite 101					
FAIRMONT, WEST VIRGINIA					
T: (304) 534-4021 F: (304) 534-4031					

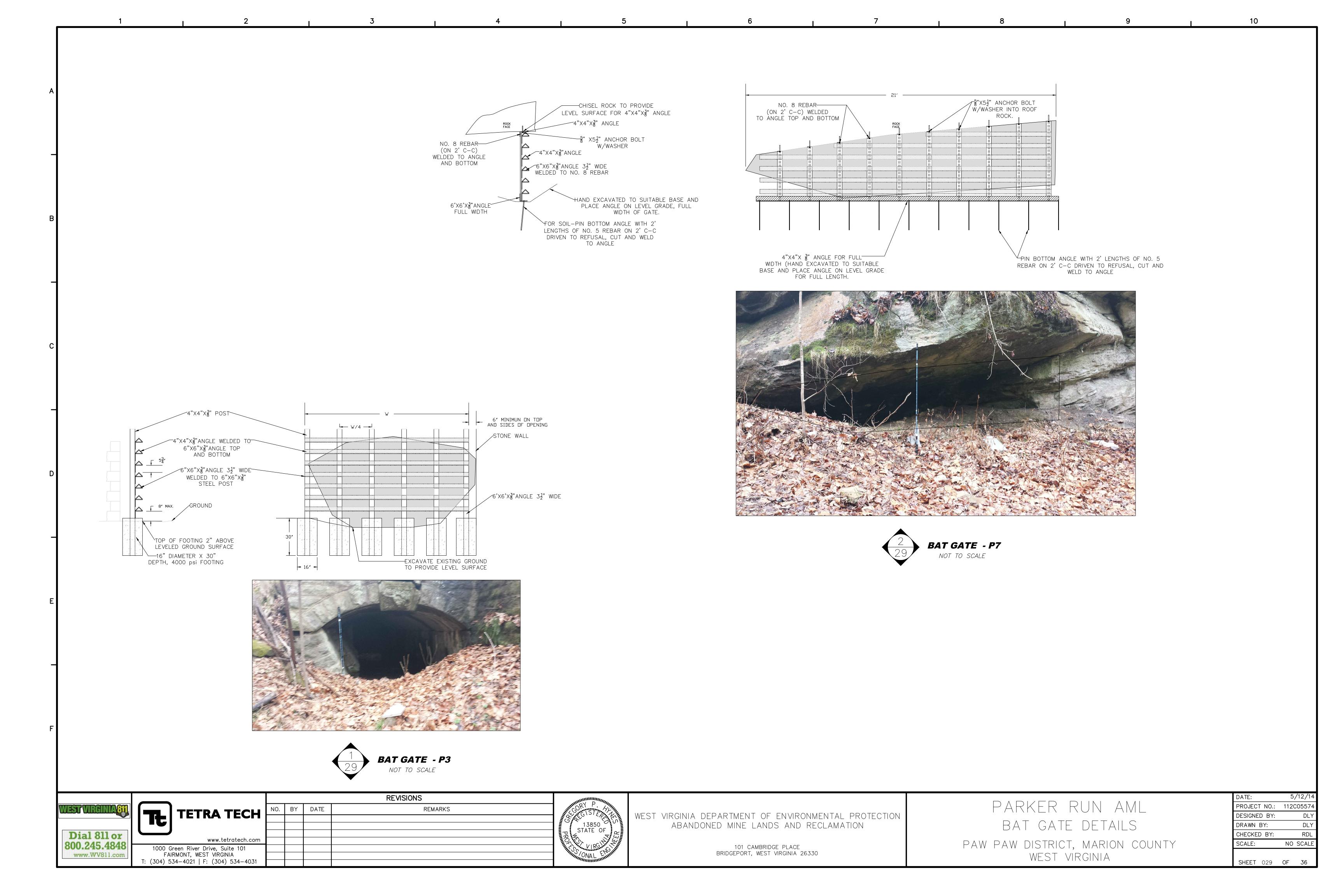


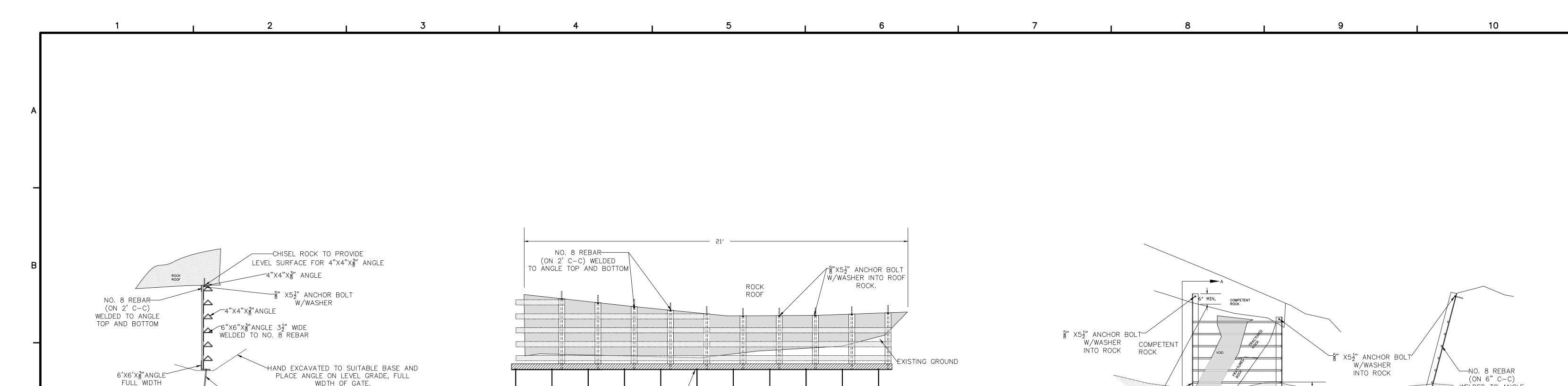
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

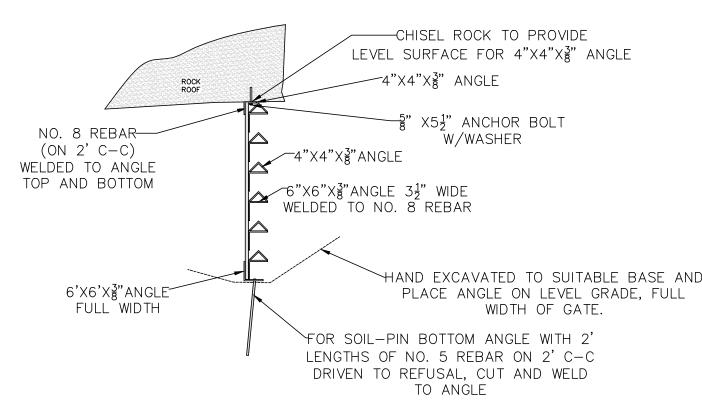
101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330 PARKER RUN AML
BAT GATE DETAILS

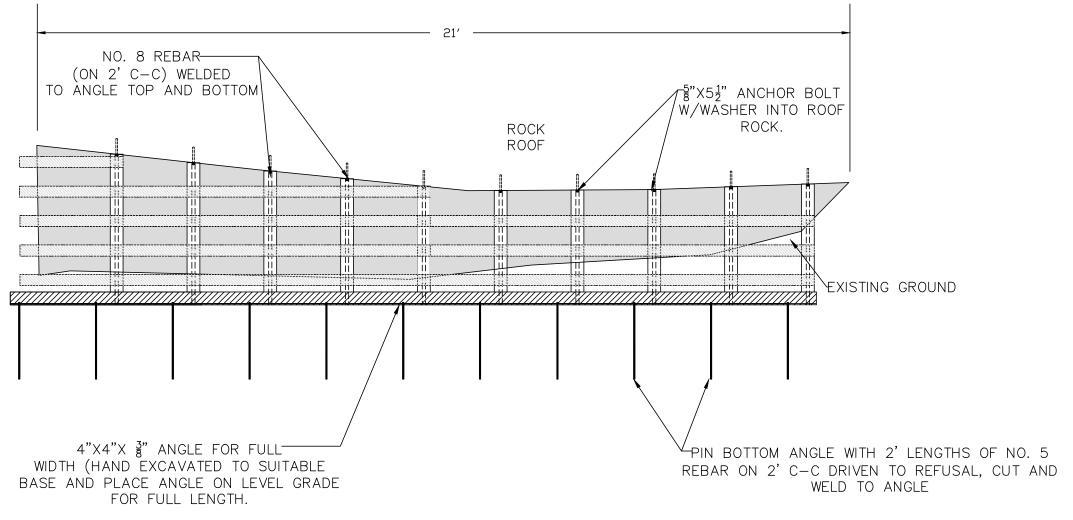
PAW PAW DISTRICT, MARION COUNTY
WEST VIRGINIA

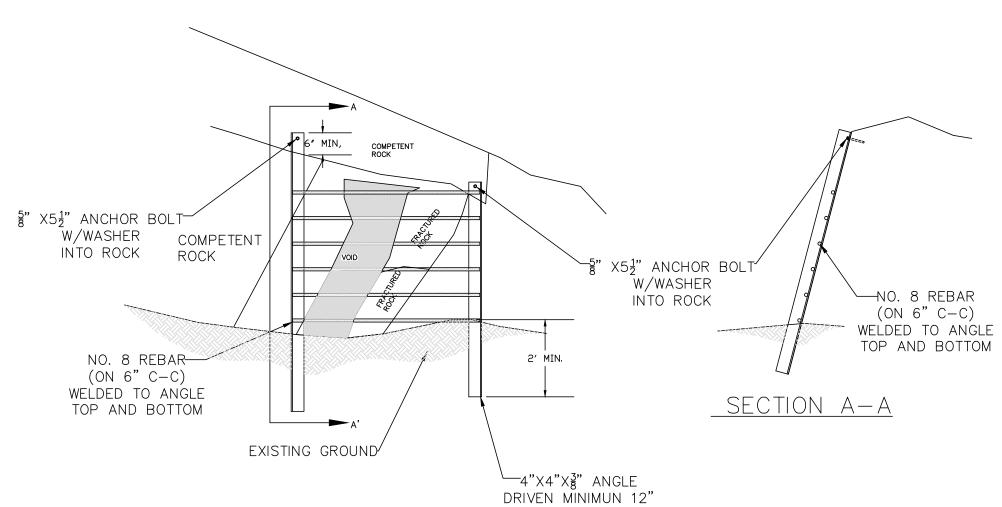
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CHECKED BY:	RDL
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SHFFT 028	OF 36

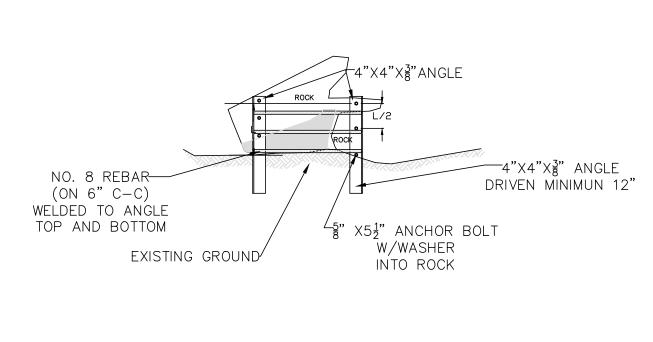














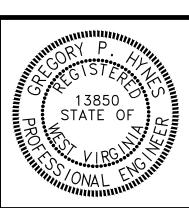








					REVISIONS
WEST VIRGINIA 811	TETRA TECH	NO.	BY	DATE	REMARKS
Dial 811 or					
	www.tetratech.com				
800.245.4848	1000 Green River Drive, Suite 101				
www.WV811.com	FAIRMONT, WEST VIRGINIA				
	T: (304) 534-4021 F: (304) 534-4031				

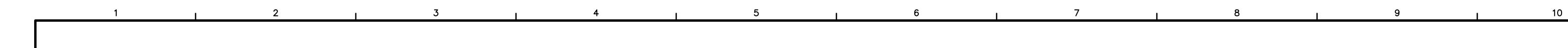


WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330

PARKER RUN AML BAT GATE DETAILS PAW PAW DISTRICT, MARION COUNTY WEST VIRGINIA

DATE:	5/12/14
PROJECT NO.:	112C05574
DESIGNED BY:	DLY
DRAWN BY:	DLY
CHECKED BY:	RDL
SCALE:	NO SCALE
SHEET 030	OF 36

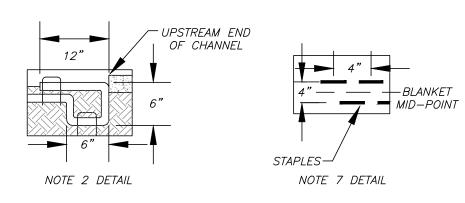


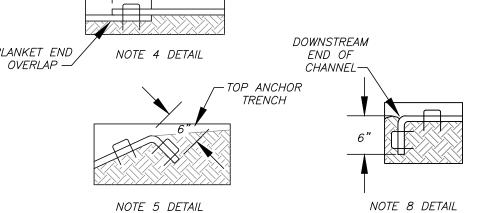
NOTES:

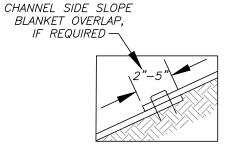
- 1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- 2. BEGIN AT THE UPSTREAM END THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" ACROSS THE WIDTH OF THE BLANKET.
- 3. ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
- 4. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4" 6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER TO SECURE BLANKETS.
- 5. FULL LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 6. ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2" 5" (DEPENDING ON BLANKET TYPE) AND STAPLED.

(CORONILLA VARIA) AT 20 LBS./AC. SHALL BE SUBSTITUTED FOR BIRDSFOOT TREFOIL.

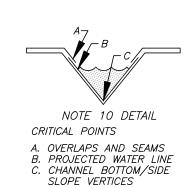
- 7. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF THE CHANNEL.
- 8. THE DOWNSTREAM END OF THE CHANNEL BLANKET MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- 9. IN LOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE REQUIRED TO PROPERLY ANCHOR THE
- 10. HORIZONTAL STAPLE SPACING SHOULD BE ALTERED, IF NECESSARY, TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL
- 11. PERMANENT SEED MIXTURE, IN ACCORDANCE WITH THE SPECIFICATIONS, SHALL BE USED FOR VEGETATED CHANNELS EXCEPT CROWNVETCH
- 12. "TW" = TOP WIDTH "D" = DEPTH

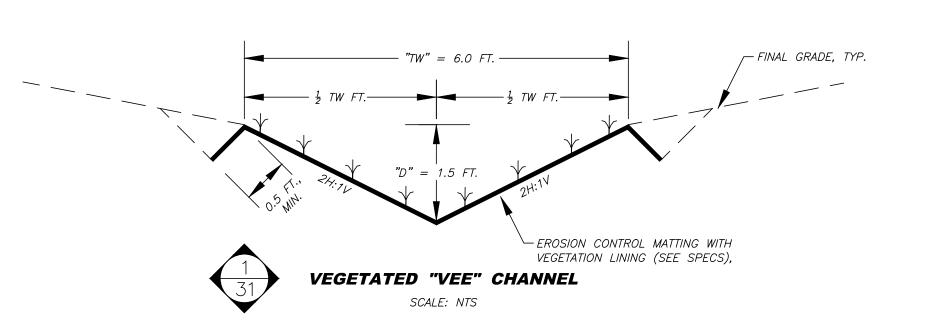


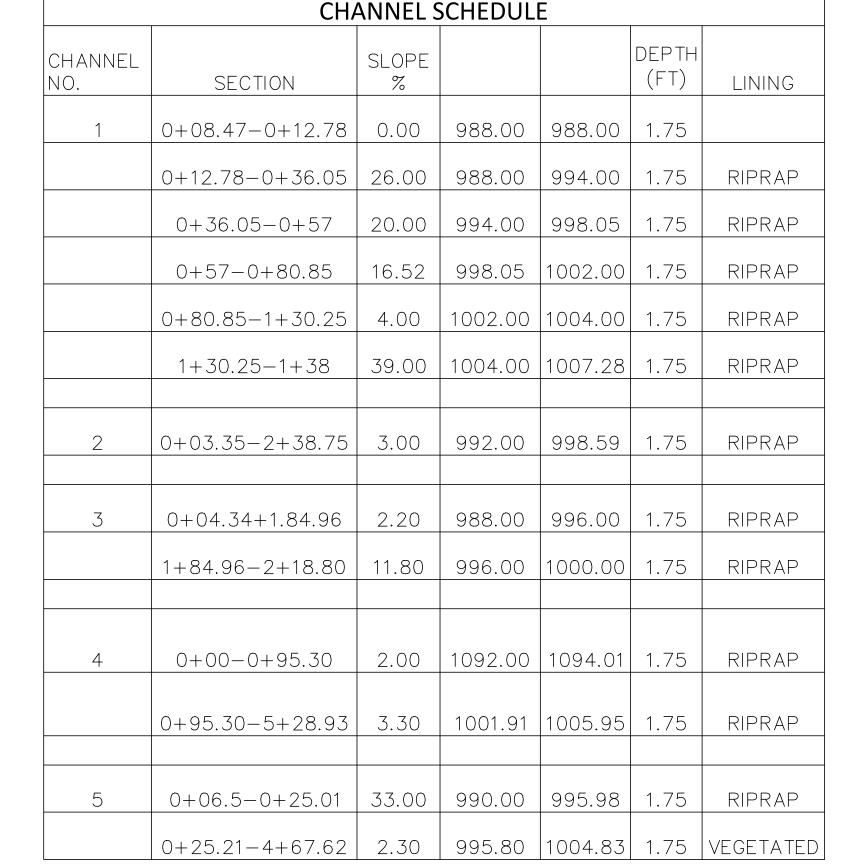




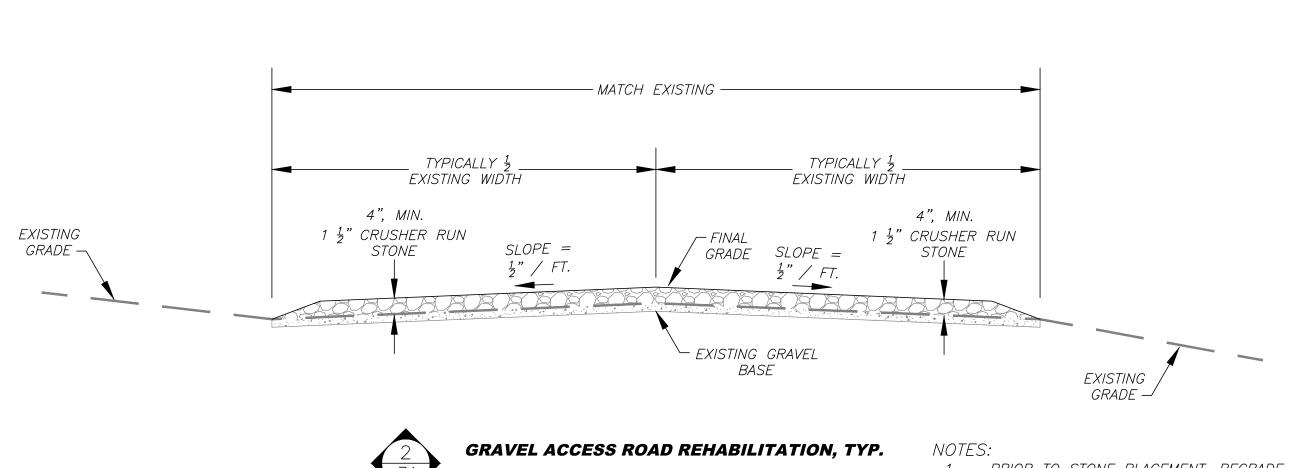
NOTE 6 DETAIL

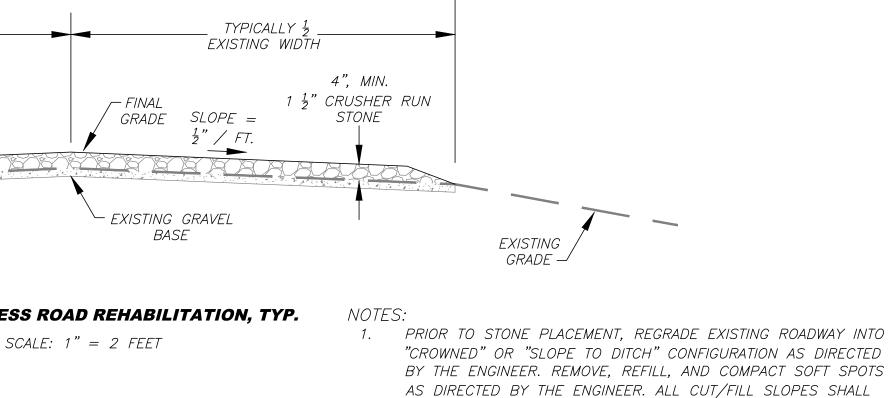






NOTE: ALL CHANNELS HAVE SIDE SLOPES OF 2H: 1V.





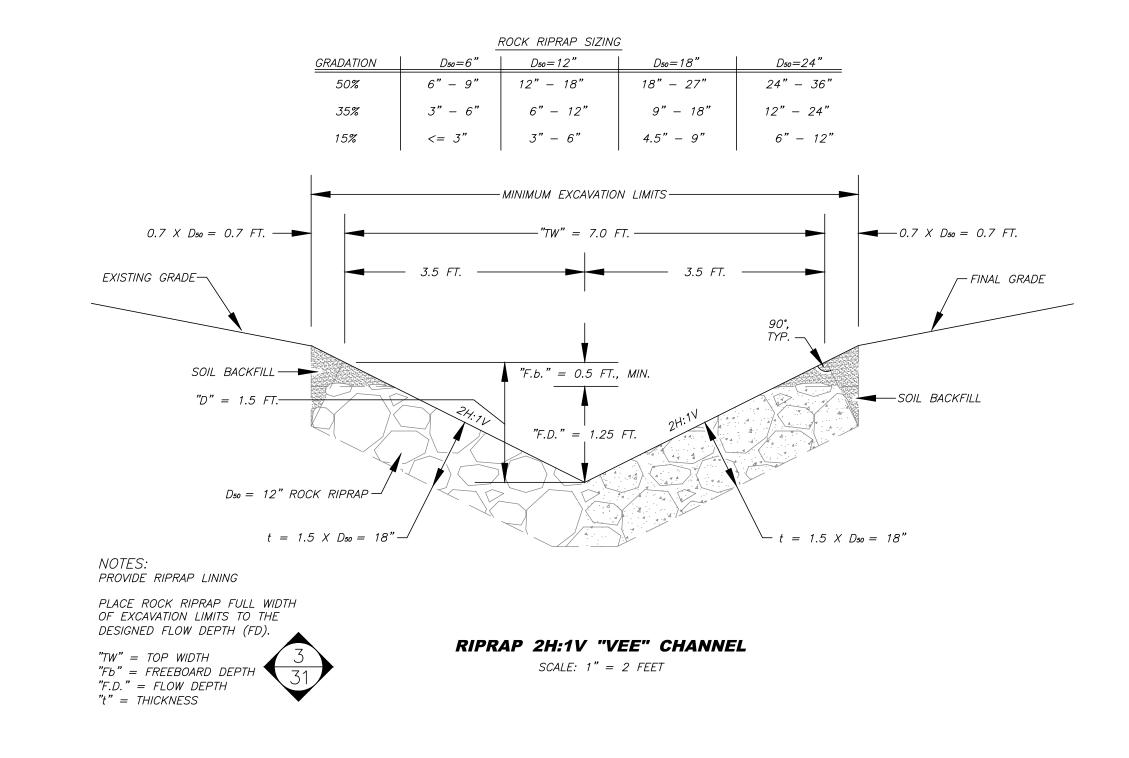
2. 1 1/2" CRUSHER RUN STONE SHALL MEET THE GRADATION

THE WVDOH STANDARD SPECIFICATIONS FOR ROADS AND

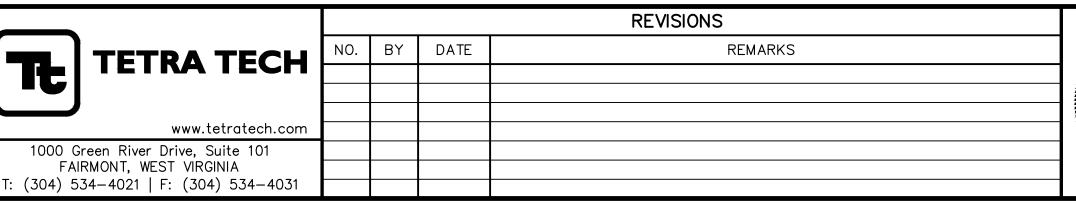
REQUIREMENTS FOR CLASS I AGGREGATE IN TABLE 704.6.2A OF

BE 2H:1V.

BRIDGES.









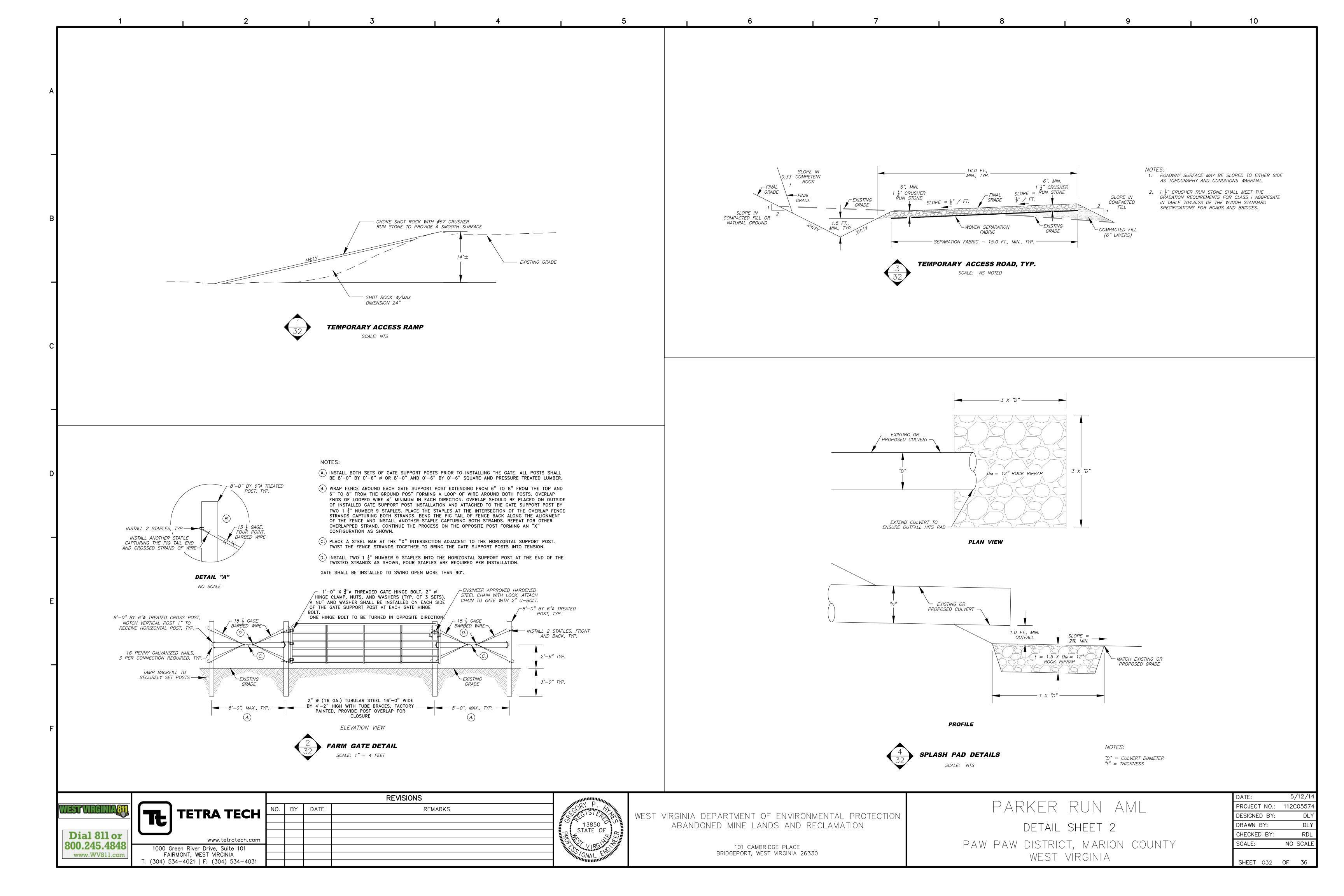
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

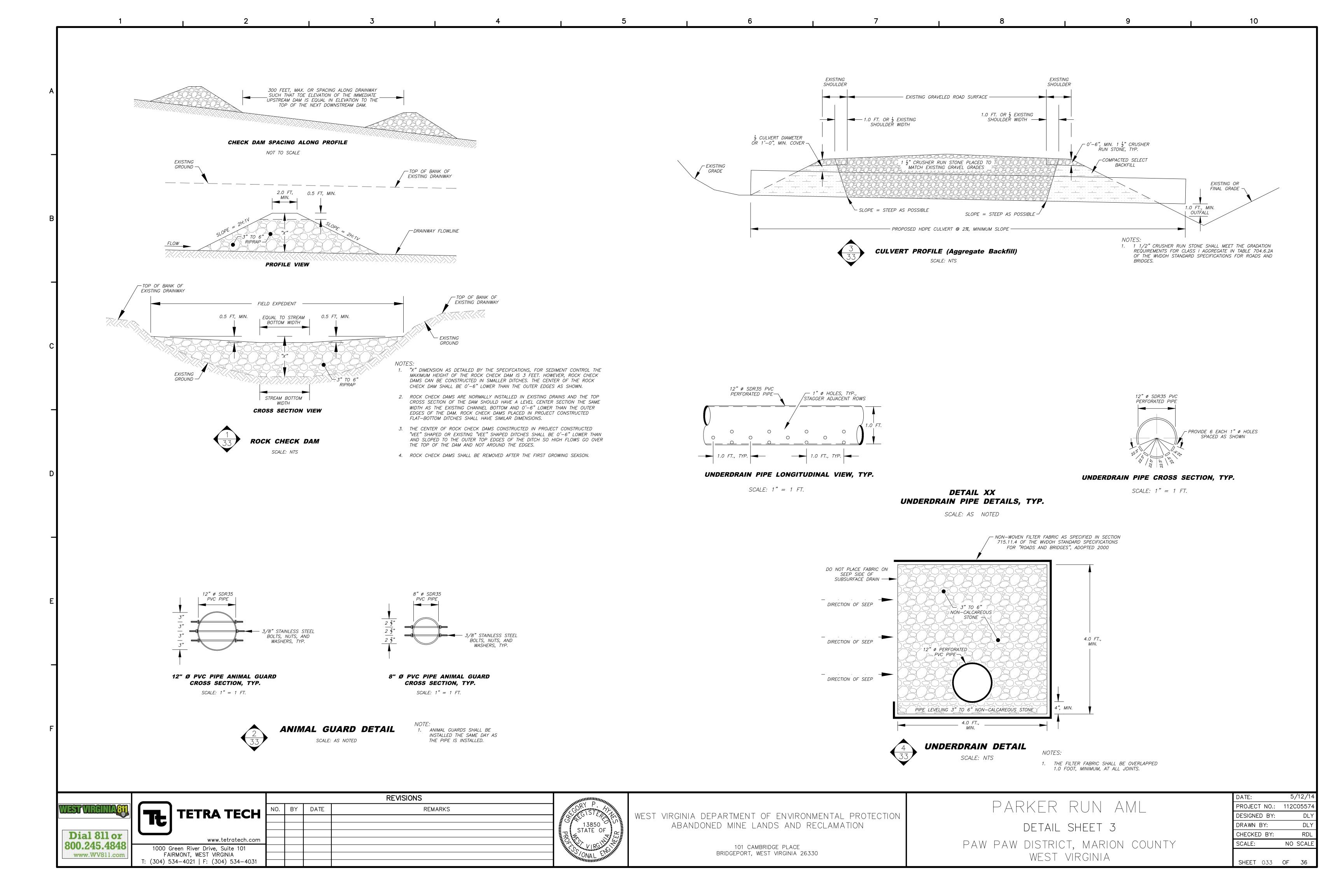
> 101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330

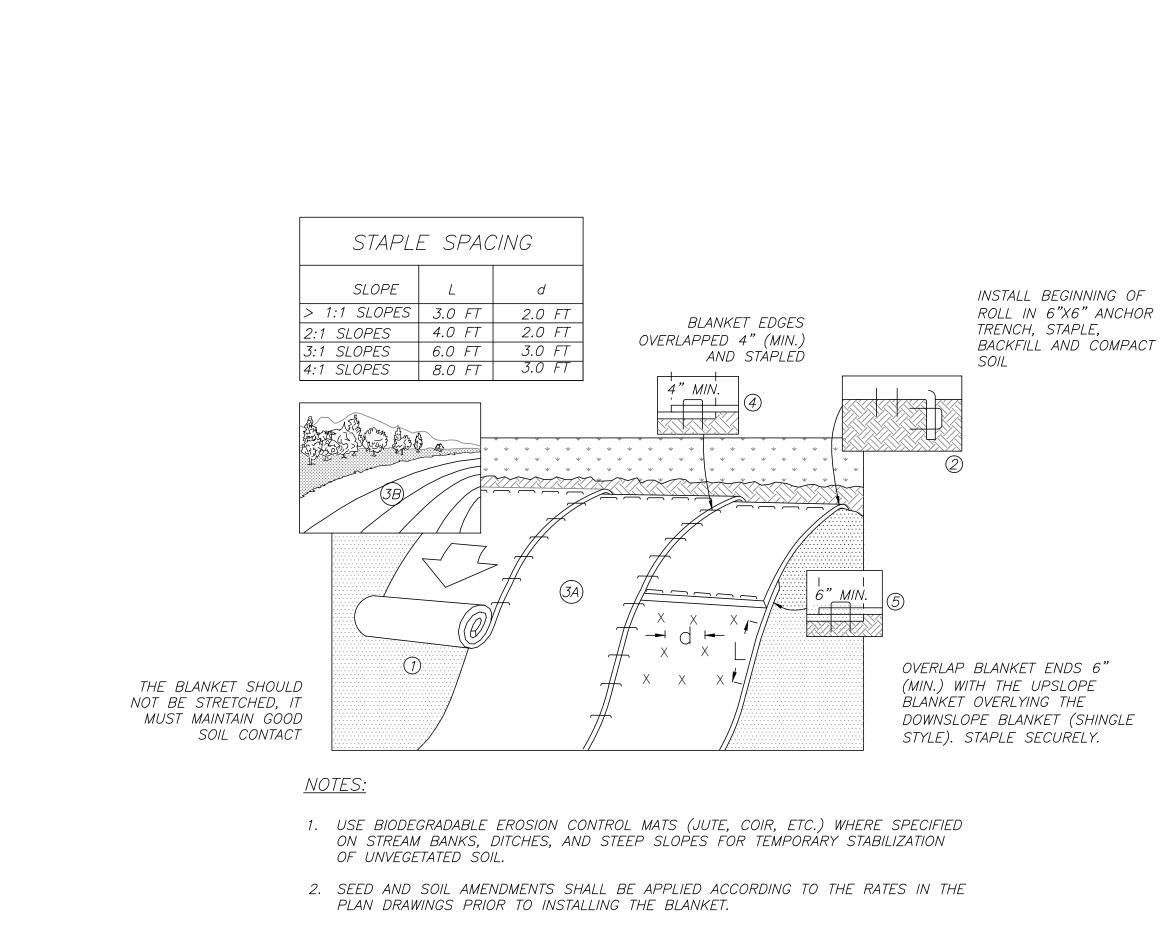
PARKER RUN AML DETAIL SHEET 1 PAW PAW DISTRICT, MARION COUNTY

WEST VIRGINIA

DATE:	5/12/14
PROJECT NO.	: 112C05574
DESIGNED BY	: DLY
DRAWN BY:	DLY
CHECKED BY:	: RDL
SCALE:	NO SCALE
SHEET 031	OF 36



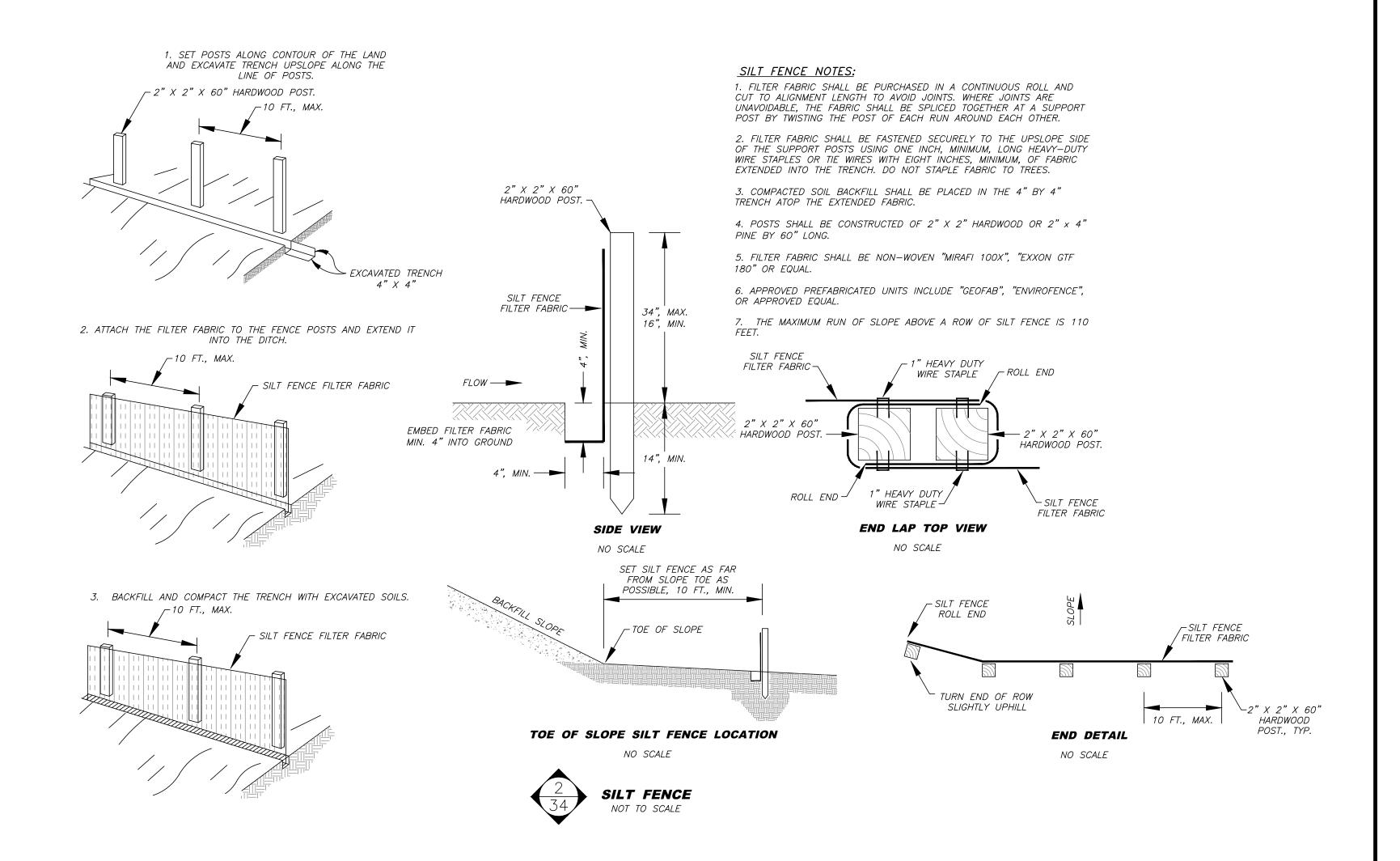




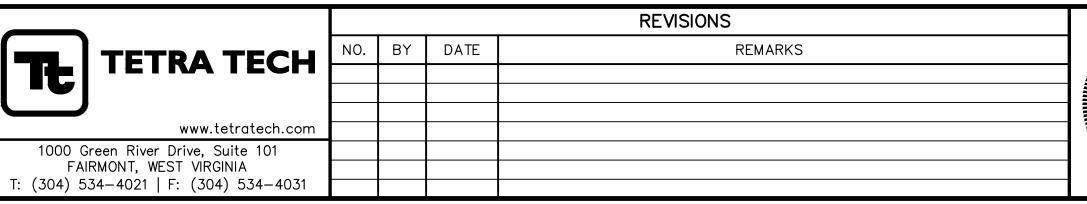
- 3. PROVIDE ANCHOR TRENCH AT TOE OF SLOPE IN SIMILAR FASHION AS AT TOP OF
- 4. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS, AND GRASS.
- 5. BLANKET SHALL HAVE GOOD CONTINUOUS CONTACT WITH UNDERLYING SOIL THROUGHOUT ENTIRE PROJECT LENGTH. LAY BLANKET LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH SOIL. DO NOT STRETCH BLANKET.
- 6. THE BLANKET SHALL BE STAPLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS,
- 7. BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.



EROSION CONTROL BLANKET-SLOPE INSTALLATION SCALE: AS NOTED



WEST VIRGINIA811.	۱
Dial 811 or	
800.245.4848 www.WV811.com	





WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

> 101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330

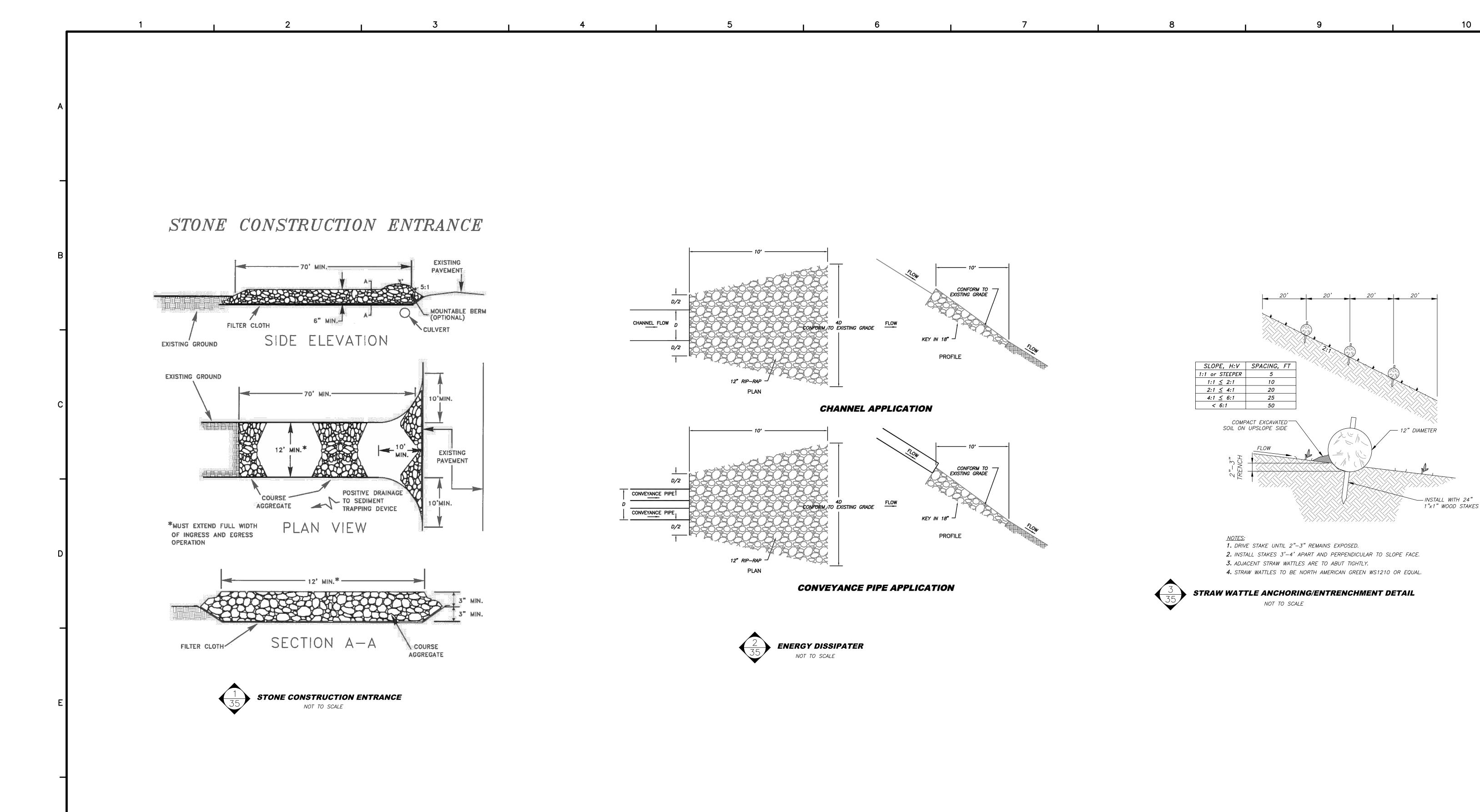
PARKER RUN AML DETAIL SHEET 4

WEST VIRGINIA

PROJECT NO.:	112C0557
DESIGNED BY:	DL
DRAWN BY:	DL
CHECKED BY:	RD
SCALE:	NO SCAL
SHEET 034	OF 36

5/12/1

PAW PAW DISTRICT, MARION COUNTY





WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ABANDONED MINE LANDS AND RECLAMATION

101 CAMBRIDGE PLACE BRIDGEPORT, WEST VIRGINIA 26330 PARKER RUN AML

DETAIL SHEET 5

PAW PAW DISTRICT, MARION COUNTY
WEST VIRGINIA

DATE:	5/12/14
PROJECT NO.:	112C05574
DESIGNED BY:	DLY
DRAWN BY:	DLY
CHECKED BY:	RDL
SCALE:	NO SCALE
SHEET 035	OF 36

