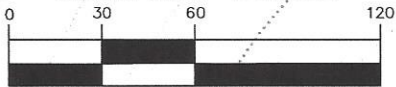


GRAPHIC SCALE



(IN FEET)

1 inch = 60 ft.

Notes:

1. Contact utility line locators before digging. CALL 811
2. Earth work quantities are estimated and should be used at contractors own discretion.
3. Earth work is based on the removal of 6 inches of topsoil on all disturbed areas

4. ROAD SURFACES TO BE FINISHED WITH 6 INCHES OF CLASS 6 ROAD BASE AFTER INSTALLATION OF PIPELINE

5. Extra material is to be added to the fill slope of the pad.

CUTTINGS PIT

Capacity with 2' freeboard = 2843 Bbls
Total Pit Volume = 928 CY

DISTURBED AREA = 3.03 ACRES

CUT SLOPES: 2:1

FILL SLOPES: 2:1

PAD QUANTITIES:

TOTAL CUT = 5617 CUBIC YARDS

TOTAL FILL = 5119 CUBIC YARDS

SPOIL = 498 (CUT) CUBIC YARDS

SPOIL DOES NOT INCLUDE TOP SOIL

COMPACTION SHRINKAGE NOT ACCOUNTED FOR IN VOL. CALCS. ESTIMATED AT 10%

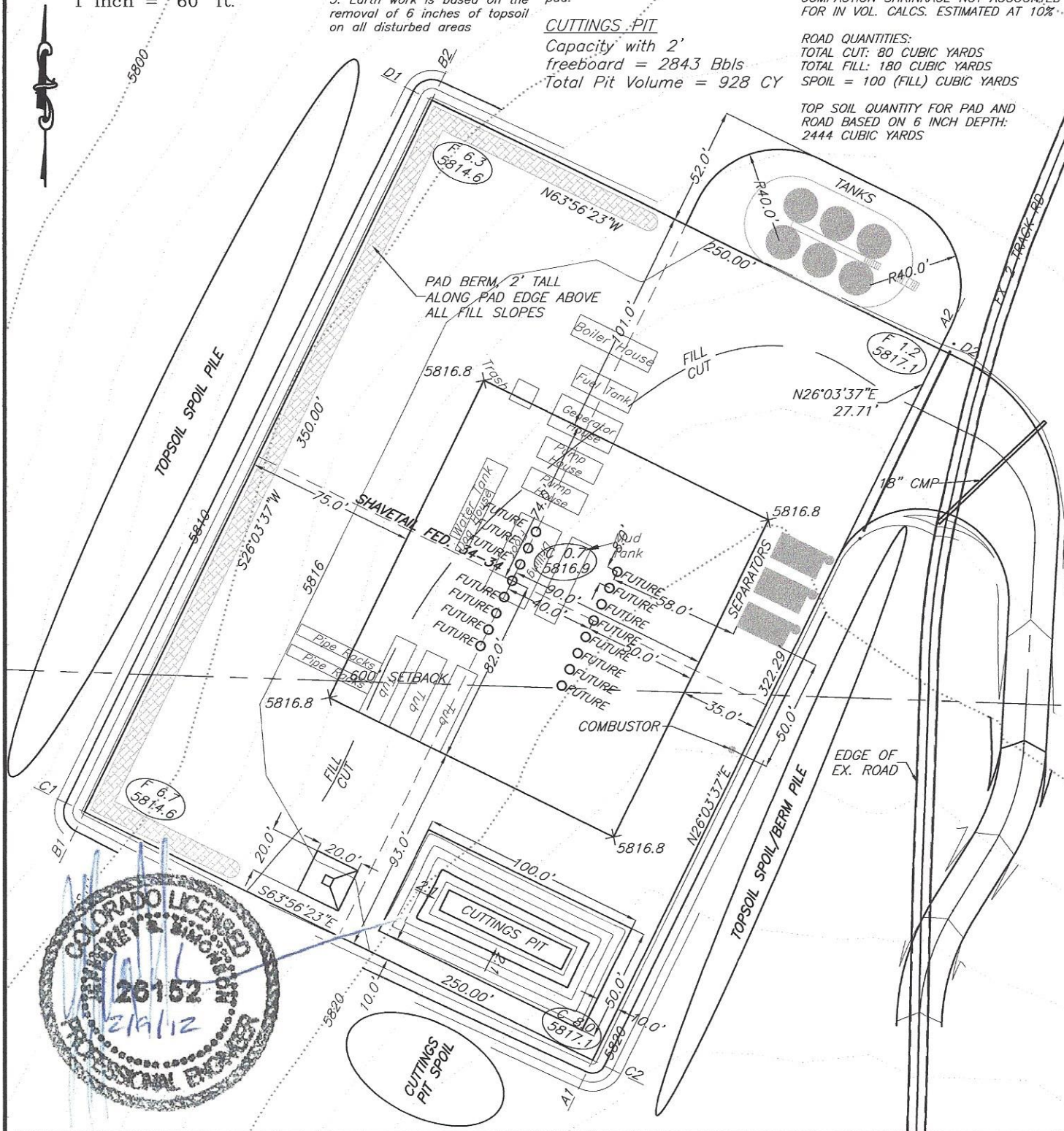
ROAD QUANTITIES:

TOTAL CUT: 80 CUBIC YARDS

TOTAL FILL: 180 CUBIC YARDS

SPOIL = 100 (FILL) CUBIC YARDS

TOP SOIL QUANTITY FOR PAD AND ROAD BASED ON 6 INCH DEPTH: 2444 CUBIC YARDS



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Pad 34-34

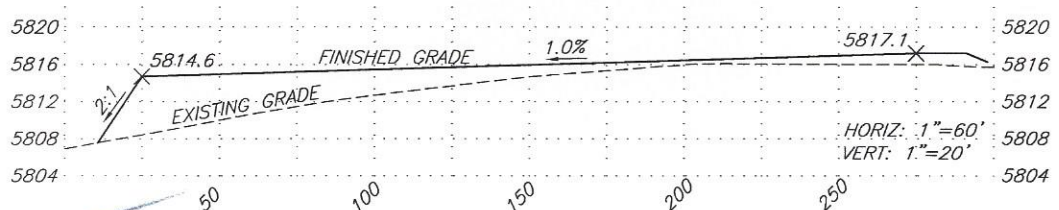
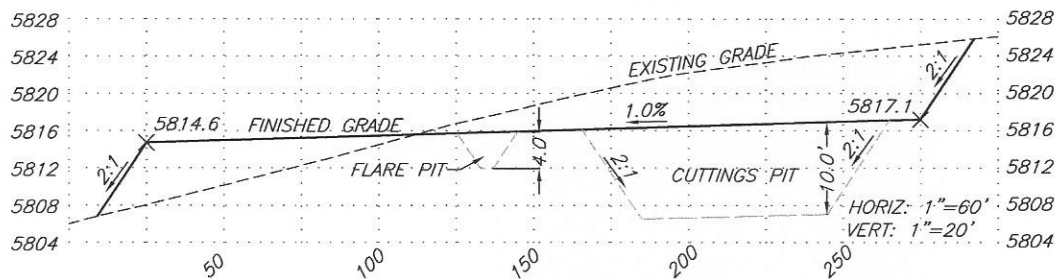
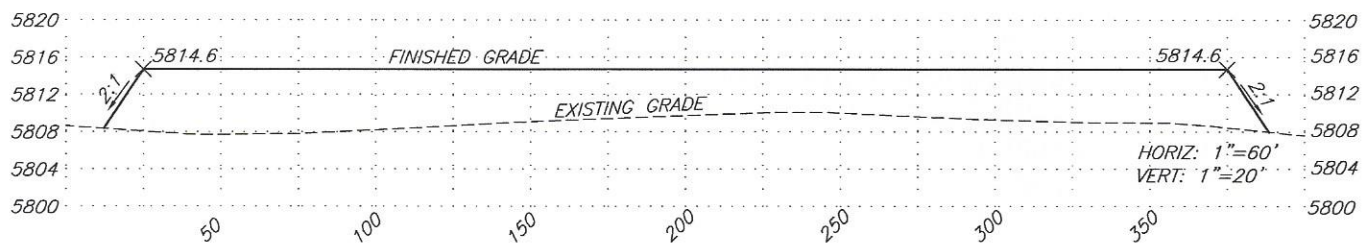
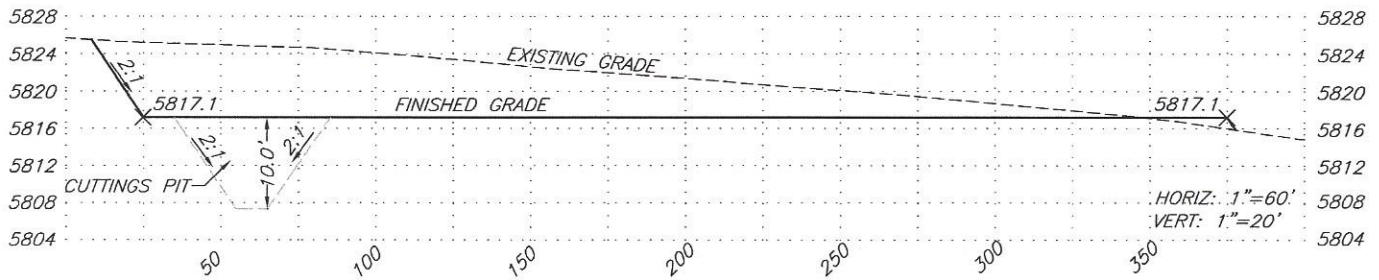
Shavetail 34 Construction Layout
Lot 3, Section 34, T.1N., R.103W, 6TH P.M.

Job# 2010-112.006

Date: 2.7.2012

By: DCS

File: 34-34BM



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Pad 34-34

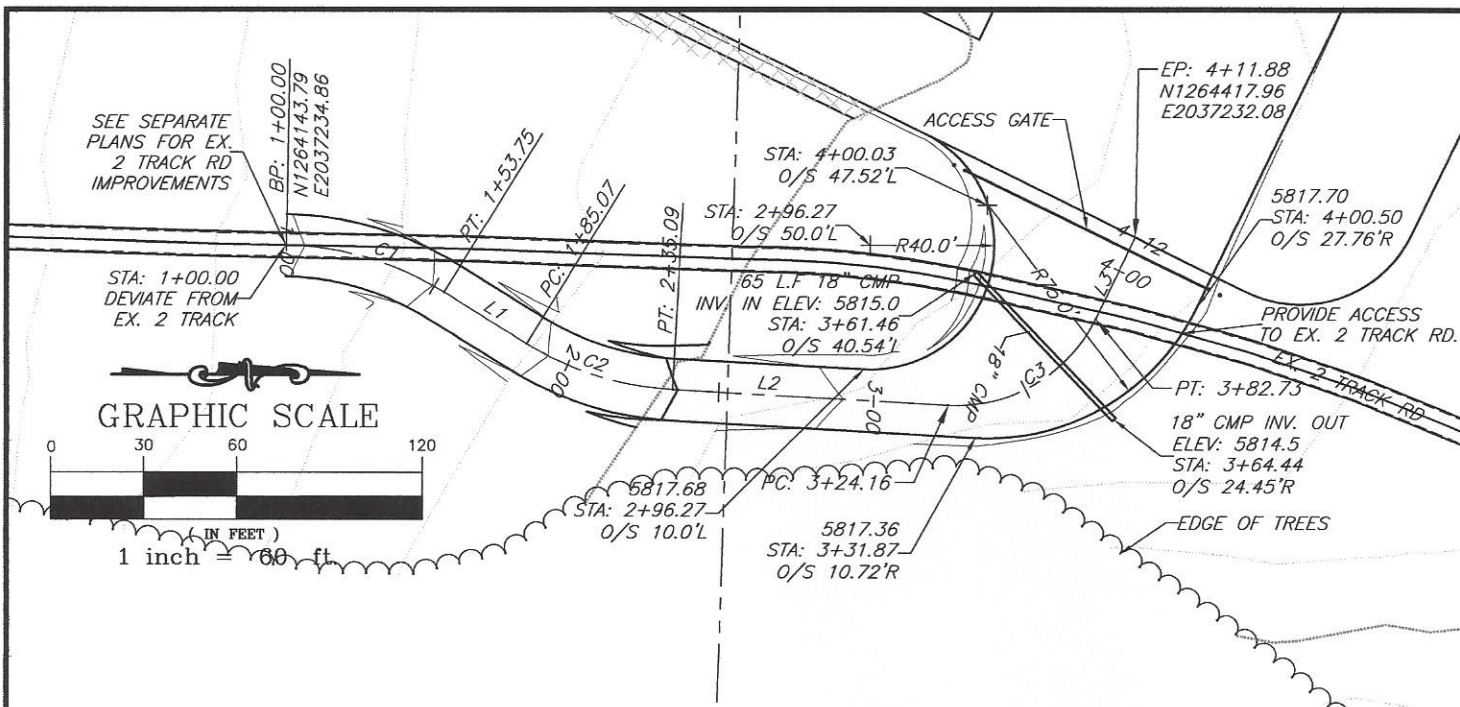
Shavetail 34 Pad Cross-Sections
Lot 3, Section 34, T.1N., R.103W, 6TH P.M.

Job# 2010-112.006

Date: 2.7.2012

By: DCS

File: 34-34BM

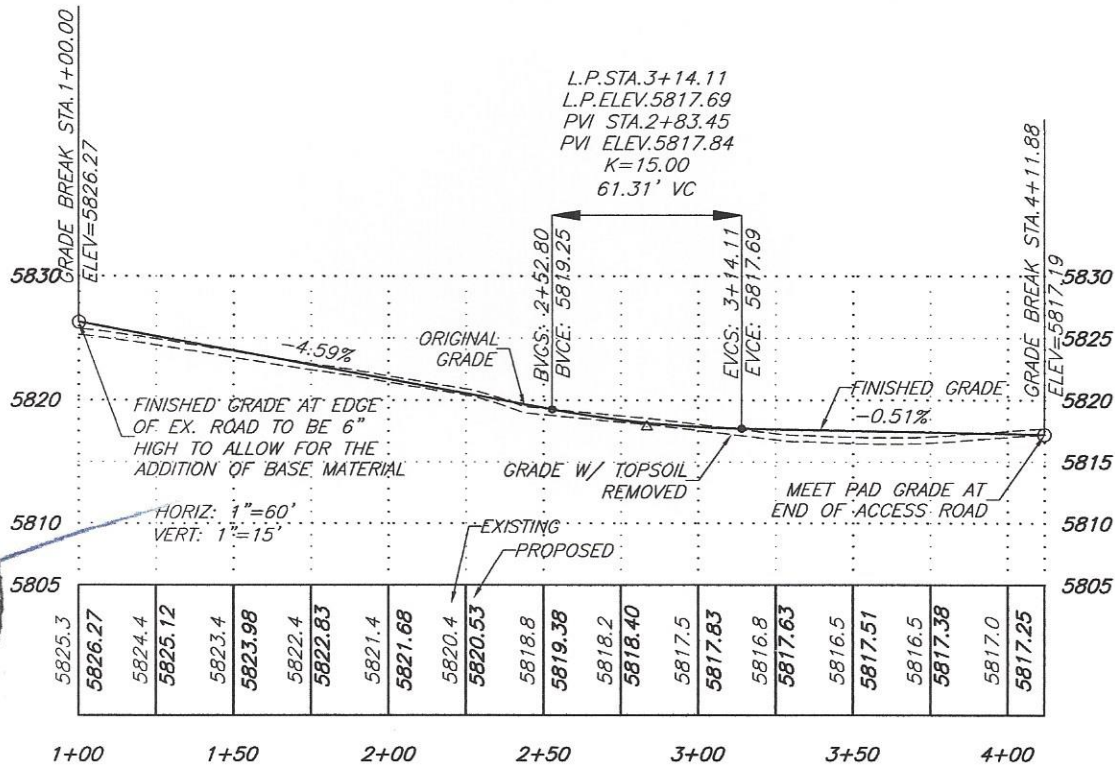


LINE TABLE: ALIGNMENTS

LINE	BEARING	LENGTH	START PT. (N,E)	END PT. (N,E)
L1	N31°49'56"E	31.33'	1264194.72,2037249.88	1264221.33,2037266.41
L2	N3°10'29"E	89.07'	1264268.54,2037281.29	1264357.47,2037286.23
L3	N63°56'23"W	29.16'	1264405.15,2037258.27	1264417.96,2037232.08

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	100.00'	53.75'	27.54'	53.10'	N16°26'06"E	30° 47' 41"
C2	100.00'	50.02'	25.54'	49.50'	N17°30'13"E	28° 39' 27"
C3	50.00'	58.57'	33.17'	55.28'	N30°22'57"W	67° 06' 53"



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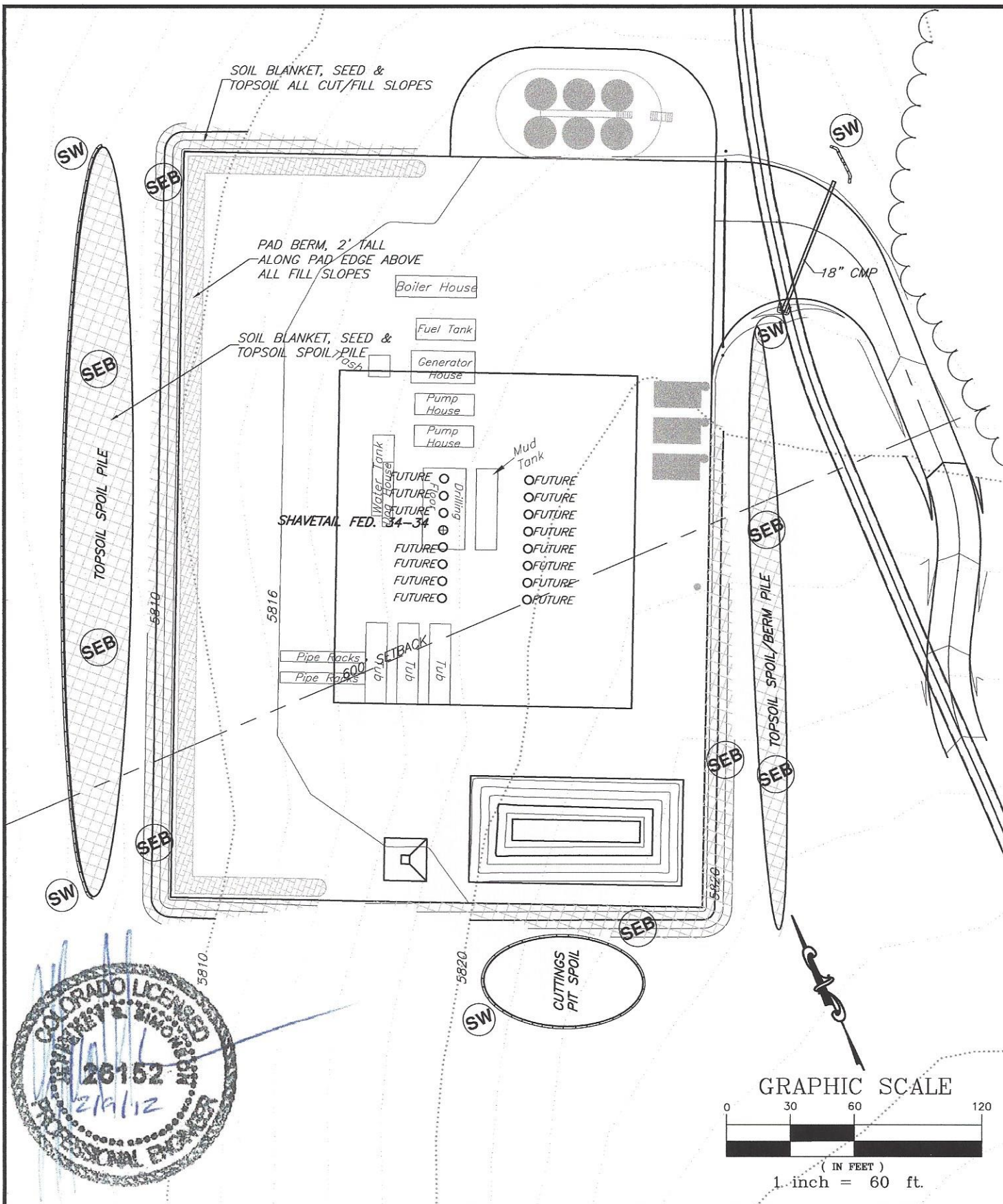
Shavetail 34 Road Plan & Profile
Lot 3, Section 34, T.1N., R.103W, 6TH P.M.

Job# 2010-112.006

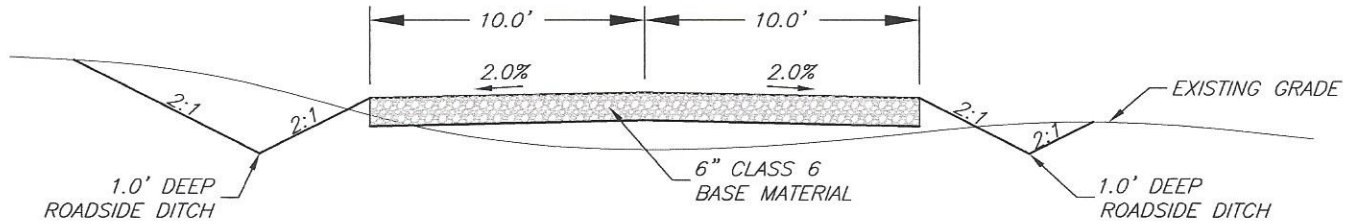
Date: 2.7.2012

By: DCS

File: 34-34BM

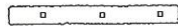


	SGM INC. 118 W. 6th Street, Suite 200 Glenwood Springs, Colorado 81601 (970) 945-1004 (FAX 945-5948) Aspen, Colorado (970) 925-6727	Scale: 1" = 60' Sheet 2D of 8 Pad 34-34	Shavetail 34 SWMP Lot 3, Section 34, T.1N., R.103W, 6TH P.M. Job# 2010-112.006 Date: 2.7.2012 By: DCS File: 34-34BM
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TYPICAL ROAD SECTION

SW



STRAW
WATTLE

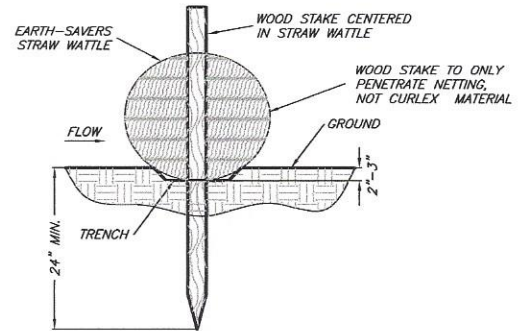
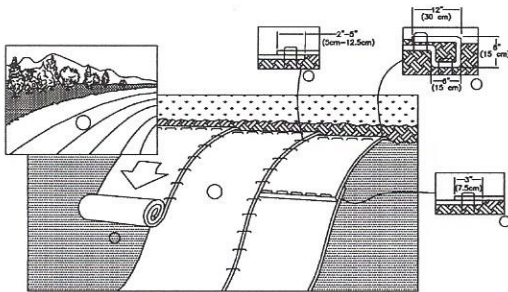
A temporary sediment barrier composed of netted straw rolls placed parallel with grade of slope to intercept and detain flow to allow sediment to settle; for low flow velocities where sheet and rill erosion potential is low. Install to manufacturer specs.

SEB



SOIL
EROSION
BLANKET

Apply to all new fill slopes steeper than 4:1. See slope installation detail.



STRAW WATTLE INSTALLATION DETAIL

N.T.S.

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30 CM) OF RECP'S EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP'S BACK OVER SEED AND COMPACTED SOIL. SECURE RECP'S OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM*, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPUNCE DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH.
NOTE:
*IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

SLOPE INSTALLATION

SEEDING (RIGHT-OF-WAY)

SEEDING PLAN

SOIL PREPARATION, FERTILIZER, SEEDING, MULCHING (WEED FREE) AND MULCH TACKIFIER WILL BE REQUIRED FOR AN ESTIMATED 0.9 ACRES OF DISTURBED AREA WITHIN THE RIGHT-OF-WAY LIMITS WHICH ARE NOT SURFACED. THE FOLLOWING TYPES AND RATES SHALL BE USED:

COMMON NAME	SCIENTIFIC NAME	LBS PLS/ACRE
"ARRIBA" WESTERN WHEATGRASS	PASCOPIRYM SMITHII	5.0
SAND DROPSEED	SPOROBOLUS CRYPTANDRUS	1.0
"SALADO" ALKALI SACATON	SPOROBOLUS AIROIDES	2.0
"PALOMA" INDIAN RICEGRASS	ORYZOPSIS HYMENOIDES	3.0
"CHEYENNE" INDIANGRASS	SORGHASTRUM NUTANS	4.0
"COMARON" LITTLE BLUESTEM	SCHIZACHYRIUM SCOPARIUM	4.0
"BROMAR" MOUNTAIN BROME	BROMUS MARGINATUS	6.0
TOTAL		25.0 LBS

*APPLY SEED MIX TO ALL TOPSOIL AREAS AND SOIL EROSION BLANKET AREAS BEFORE BLANKET IS INSTALLED.



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Scale: NA

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Pad 34-34

Shavetail 34 Details

Lot 3, Section 34, T.1N., R.103W, 6TH P.M.

Job# 2010-112.006

Date: 2.7.2012

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File: 34-34BM