Environment, Inc.

LARRY E. O'BRIAN
FOUNDER

7985 VANCE DRIVE, SUITE 205A
ARVADA, COLORADO 80003
303-423-7297
FAX 303-423-7599

April 26, 2007

Mr. Carl Mount
Division of Reclamation, Mining & Safety
1313 Sherman Street, Room 215
Denver, CO 80215

Dear Carl;

RE: Albert and Mary Jane Frei Irrevocable Trust
Is It Mining packet and studies

Attached it the review packet the Division requested at the February 2007 Mined Land Reclamation Board hearing. It contains the fill plan, the rehabilitation plan, a rehabilitation cost estimate, maps and an slope and fill stability analysis prepared by Arcadis USA, Inc. This should be attached to the "Is It Mining" packet we submitted in January. This same packet will be given to Gilpin County once the Board makes the determination. As you may remember if the Board decides that it is not mining we will be posting a bond with Gilpin County to cover reclamation of the filled area.

Thanks for your help and if you have any questions please call me.

Sincerely,
Environment, Inc.

Steve

Stevan L. O'Brian
President

cc Albert Frei and Sons, Inc.
file

enclosure

Albert and Mary Jane Irrevocable Trust
P.O. Box 700
Henderson, CO 80640
(303) 289-1837

Project: Section 35 Fill area - is it mining?
Contact: Ben Frei
Date: April 24, 2007

INFORMATION PACKET CONTAINING:

- FILLING PLAN
- REHABILITATION PLAN
- MAPS
- REVEGETATION COST ESTIMATE
- ARCADIS USA, INC - SLOPE STABILITY ANALYSIS

PREPARED BY:
Environment, Inc.
Stevan L. O'Brian
7985 Vance Dr., #205A
Arvada, CO 80003
(303) 423-7297

Applicant: Albert and Mary Jane Irrevocable Trust
Operator: Albert Frei and Sons, Inc.
Project: Section 35 Fill area
Date: April 24, 2007

FILL PLAN

The fill area lies in the NW¼, Section 35, T-3-S, R-72-W, 6th P.M. and is entirely within Gilpin County on lands owned BY the Albert and Mary Jane Irrevocable Trust. It will be a valley fill operation where the material consists of a mixture of material found in the quarry generated by rock crushing. The material is a clean, dirt and rock by product, and contains no materials considered hazardous. No fill will be imported from areas that are not part of the Frei property. When filling is complete, approximately 5,485,000 cubic yards will have been placed on the site. It will take from 10 to 20 years to place this much material.

This site was chosen because it is in a remote location, in close proximity to where the fill is generated and hauling would take place over land controlled by the Frei family. The material will be delivered using existing internal roads built by Albert Frei and Sons, Inc. (AFSI) and the trust. Off-road haul trucks will be used to avoid impacting County or State roads. The closest public road is SH 119 to the east. HWY 119 lies approximately 600 feet below the fill area and 3750 feet at the closest point. In most cases the activities associated with a fill will not be visible from offsite.

The fill area lies in a steep and deep "V" shaped ephemeral drainage in the central part of the property. Please refer to the **VICINITY MAP** for the location of the site in relation to surrounding land forms. This filling will allow us to create two flat meadow areas in the hilly terrain that can be developed for various uses in the future. In addition, the fill area will lie west of a ridge line that shields the site from the visual impacts to the east. **FIGURE 1** shows the current property configuration and **FIGURE 4** shows how we think the site will look when filling is complete.

Aracdis USA, Inc. prepared a slope stability analysis for this project using the test results for the specific material we plan to place. In the report they make recommendations regarding the sloping rates, face grading options,, crowning of the fill and a sub-drain under the fill. The recommendations will be followed during construction and final rehabilitation of the site.

Three roads exist on the site at this time. Review of **FIGURE 1** shows a southern or upper road that transects the property from west to east. The second road is lower near the elevation of a saddle that lies on the county line and the third road crosses from north to south acting as the western limit of the site.

The fill will begin near the midpoint of the western line. The first lift will be at the same elevation as the saddle elevation shown on the map. It will start just north of where the N-S road and the lower road meet. The material will be dumped into this corner and pushed into the draw using a dozer. **Figure 2** shows how the site will look after the first five years of filling. As the draw is filled, creating a level area, filling will progress to the east using the saddle elevation as a guide for the first bench. Filling will take place from top to bottom and the sides will be shaped to blend with the surround land. During placement the material will be watered to keep dust under control and improve the placement compaction.

As filling progresses across the valley a near level bench will be created on the southern end and the face slope will be graded and revegetated. **Figure 3** shows how the site would look when the first lift is complete and filling has begun where the upper road meets the N-S Road. The area between the two roads will eventually be filled to an elevation that is nearly level with the upper road. This will create a bench that completes the second lift. The slope between the two benches will be somewhat less than the 2½ horizontal to 1 vertical used for the lower slope area. This is a result of blending the slope with the natural land configuration on both sides of the fill area.

Prior to commencement of filling a sediment trap will be built in the area below the fill to contain any stormwater runoff that may come in contact with the fill material. This structure will be monitored and cleaned as needed. The dams of these traps will be built to 25 yr. 24 hr. event standards, to filter the water not, retain it. This way the sediment in the water will be trapped in the structure so clean water exits below. The idea is not to create a pond but to create a filter. The interior of each dam will be small crushed stone and the exterior will be course rock. As filling progresses to the north, new catch basins will be built as needed until the filling is complete and the old ones will be buried by the fill. The final 100 year stormwater detention facility (pond) will remain until revegetation is complete.

As filling progresses rock lined side channels will be placed across the fill to collect any runoff and channel it across and down the fill face. AFSI uses these types of channels to eliminate erosion along roadways and fill areas within the mine area. The first to be installed will be along the southern perimeter where stormwater runs onto the fill area. They act as French drains that allow the water to flow thru the rocks without eroding channels thru the fill. In other words we are creating man-made flow channels to take the place of the ones being filled. As filling progresses, a slight dome will be maintained on the level fill area to direct the surface stormwater to the armor lined side channels on the perimeter of the fill. We believe that most stormwater will be absorbed by the fill and there will be little of no runoff from

the fill area. The moisture will soak into the material or evaporate off the surface.

Reclamation will take place as filling progresses. Once we have 10.0 acres filled, that will not be redisturbed in the near future, the area will be seeded. In some cases the seeding done along the southern side of the first bench will be covered when filling begins on the second lift. A tacifier will be used to reduce wind and water erosion as much as possible on the areas that are not being filled but not ready for seeding. The rehabilitation plan that follows discusses revegetation plans.

REHABILITATION PLAN

As this site develops reclamation will become an important part of the over all plan. As described in our Fill Plan we note that filling will begin in the west-central part of the fill area. Revegetation will run concurrent with filling. The idea is to create level area using the elevation of the saddle that now exists between a drainage that runs southwest toward the rock quarry and the one we will partially fill. This plan contains four figures showing various times during the filling phase of the project. **Figure 1** is how the site looks now; **Figure 2** shows how the site will look when the first 10 acres are revegetated; **Figure 3** shows how the site will look when the first bench is complete revegetated and filling has started on the second bench. **Figure 4** shows how the site will look when filling and revegetation is complete.

During the permitting phase of this project the County and neighbors requested we have a trigger point when revegetation would take place. So during the design phase we discussed the options and decided that 12.0 acres of completed fill area would be a good trigger point. Once we reached 12.0 acres, 10.0 acres would be resoiled and revegetated. The remaining 2.0 acres would be roadways, the rim of the filling operations and the slopes below the fill area. Filling would continue until another 10.0 acres are ready for rehabilitation. This would continue until filling is complete. In some case we may have to re disturb seeded areas but that is to be expected because of the way filling will be done.

Figure 2 shows how this 10.0 acre (green) scenario would look during the initial stage of filling. The tan area shows the area where active filling is taking place until the next 10.0 acre cell is ready for revegetation. We estimate it will take five to seven year to get to this point. During that time period a tacifier will be used to control wind and water erosion. Note the location of the stormwater pond (blue) and that the uncolored areas remain undisturbed by filling. All final slopes will be graded 2h to 1v or less and reseeded as soon as practical. As requested we have attached a bond analysis based on 15 acres needing reseeding but only 12 acres needing soiling and shaping per the previous discussion.

Once a 10.00 acre plot is filled it will be resoiled with 6 inches of growth medium and seeded with the proposed seed mix listed in Table A below. The seeded area will then be covered with straw and crimped at a rate of 2 tons/acre. The seed mix was designed for use at the quarry by a qualified range specialist.

We chose to use the term growth medium instead of top soil since there is no topsoil on the site at this time. The fill material being used is a mixture of the material generated by rock crushing operation. This material is used as seedbed cover for the rock benches in the mine and we find it is capable of sustaining vegetation. In addition, fertilizers and organics (manure) maybe added if test results show that the growth medium needs enhancing. We will do whatever is necessary to assure that the area is successfully revegetated.

Once filling is complete and revegetated the area will be monitored for three years or until the grass cover matches the surrounding areas. If remedial seeding is needed, it will be done on a yearly basis.

TABLE A

Species	Rate (#PLS/Acre-broadcast)
Intermediate Wheatgrass	3.00
Western Wheatgrass	2.00
Streambank Wheatgrass	1.00
Russian Wildrye	3.00
Blue Grama	2.00
Sideoats Grama	1.00
Little Bluestem	1.00
Sand Dropseed	0.20
Yellow Sweetclover	1.00
TOTAL	14.20*

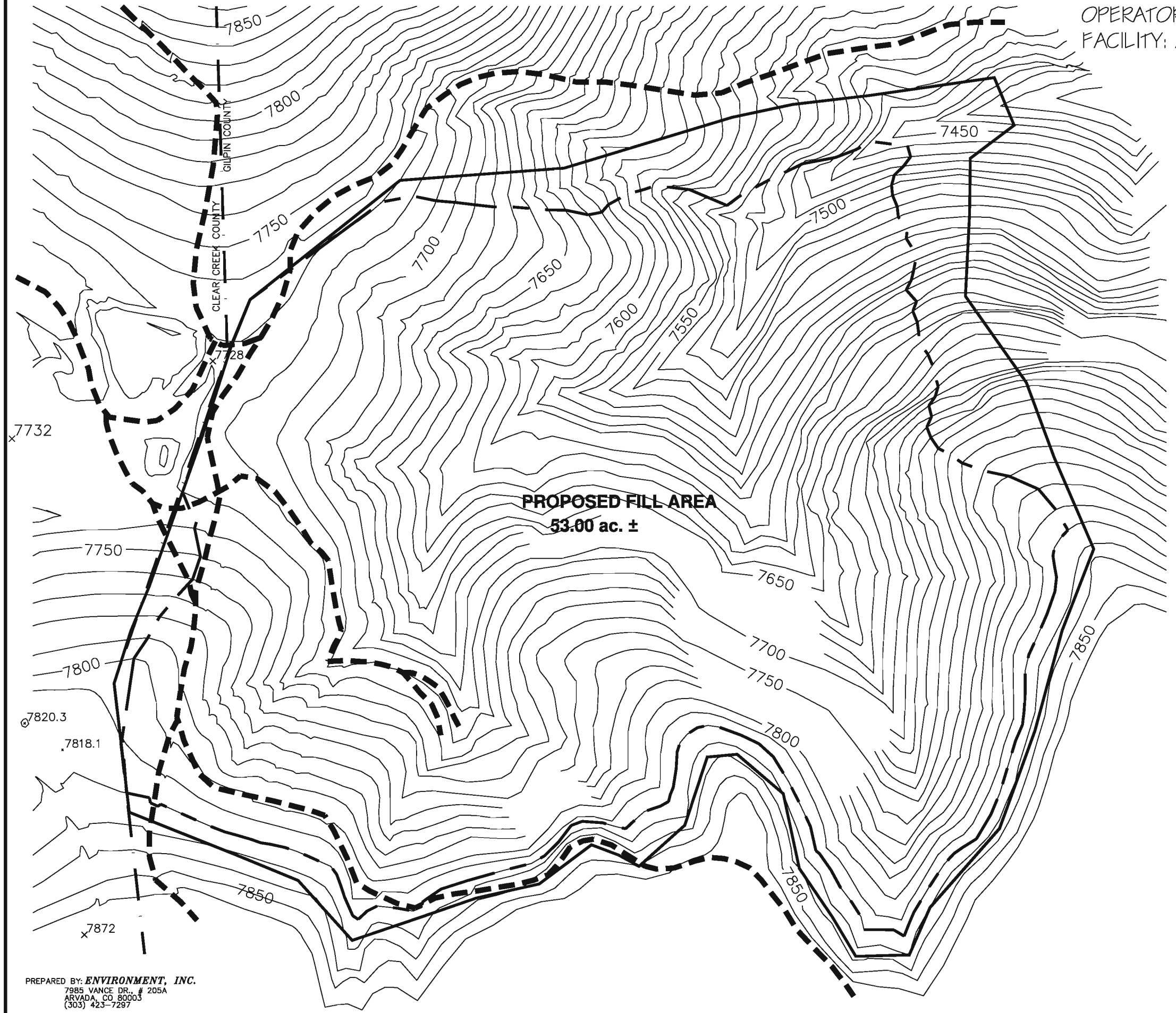
* if drilled, rate will be divided by 2.

OPERATOR: ALBERT FREI AND SONS, INC

FACILITY: ALBERT & MARY JANE FREI IRRIVOCABLE TRUST

SECTION 35 FILL

PARTS OF THE NE/4NW/4, SE/4NW/4, SW/4NW/4 AND NW/4NW/4
SECTION 35, TOWNSHIP 3 SOUTH, RANGE 72 WEST, 6TH P.M.,
GILPIN COUNTY, COLORADO



L E G E N D

- PROJECT AREA
- ROADS
- COUNTY LINE
- FILL LIMITS

N
W E
S

0 100 200 400

SCALE 1"=200'
CONTOUR INTERVAL 10 FT.
MAR 29, 2007 – 16:31:07

FIGURE 1

PROPERTY OWNER: ALBERT & MARY JANE FREI IRREVOCABLE TRUST
W. ROBERT ARNOLD, TRUSTEE
P.O. BOX 700
HENDERSON, CO 80640

DATE	DESCRIPTION	BY

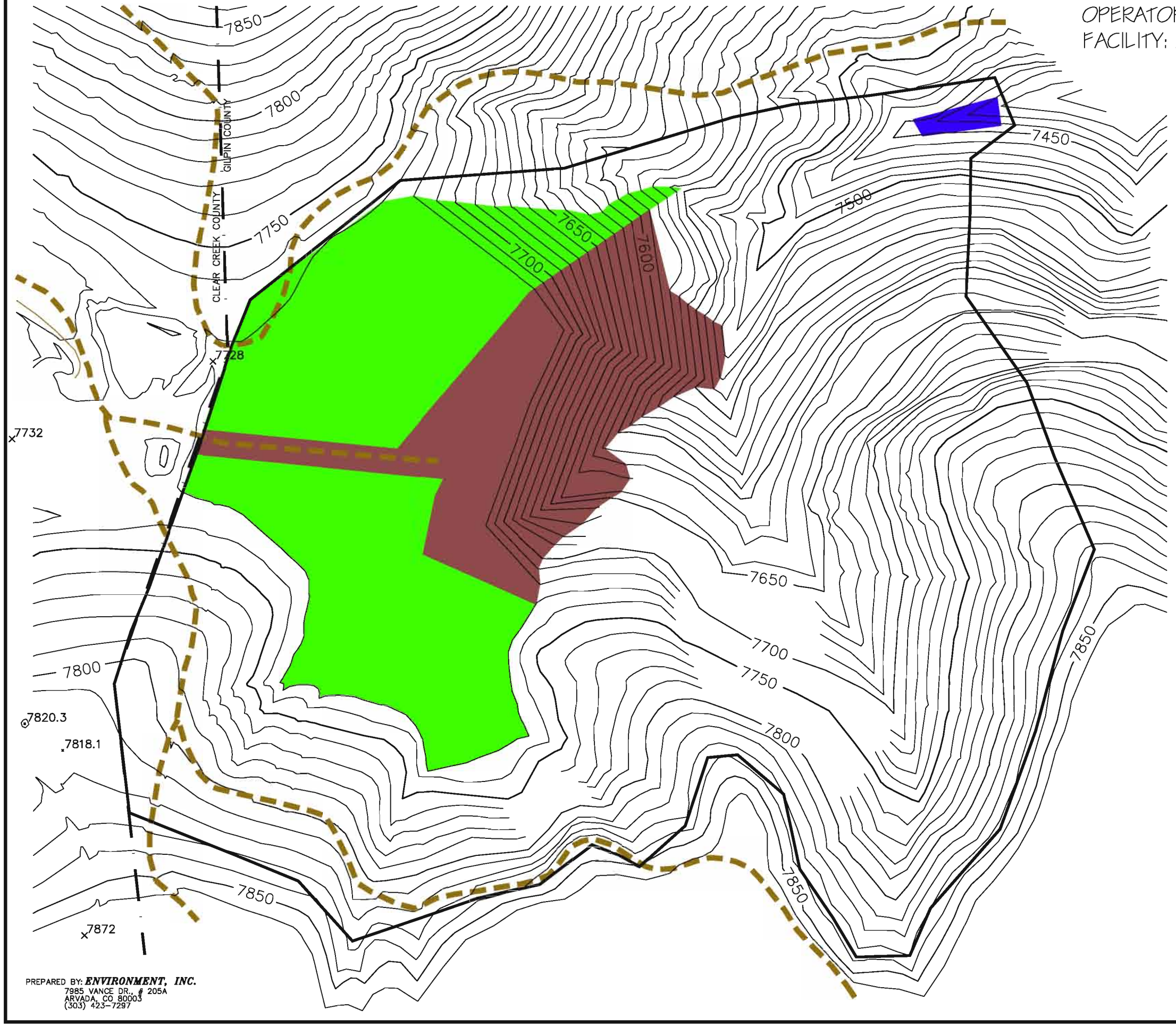
PREPARED BY: *ENVIRONMENT, INC.*
7985 VANCE DR., # 205A
ARVADA, CO 80003
(303) 423–7297

OPERATOR: ALBERT FREI AND SONS, INC

FACILITY: ALBERT & MARY JANE FREI IRRIVOCABLE TRUST

SECTION 35 FILL

PARTS OF THE NE/4NW/4, SE/4NW/4, SW/4NW/4 AND NW/4NW/4
SECTION 35, TOWNSHIP 3 SOUTH, RANGE 72 WEST, 6TH P.M.,
GILPIN COUNTY, COLORADO



LEGEND

- PROJECT AREA
- ROADS
- COUNTY LINE
- STORMWATER POND
- REVEGETATED 10.00 ACRES ±
- ACTIVE FILL AREA 5.89 AC. ±

N
W E
S

0 100 200 400

SCALE 1"=200'

CONTOUR INTERVAL 10 FT.

MAR 29, 2007 – 16:32:38

FIGURE 2

PROPERTY OWNER: ALBERT & MARY JANE FREI IRREVOCABLE TRUST
W. ROBERT ARNOLD, TRUSTEE
P.O. BOX 700
HENDERSON, CO 80640

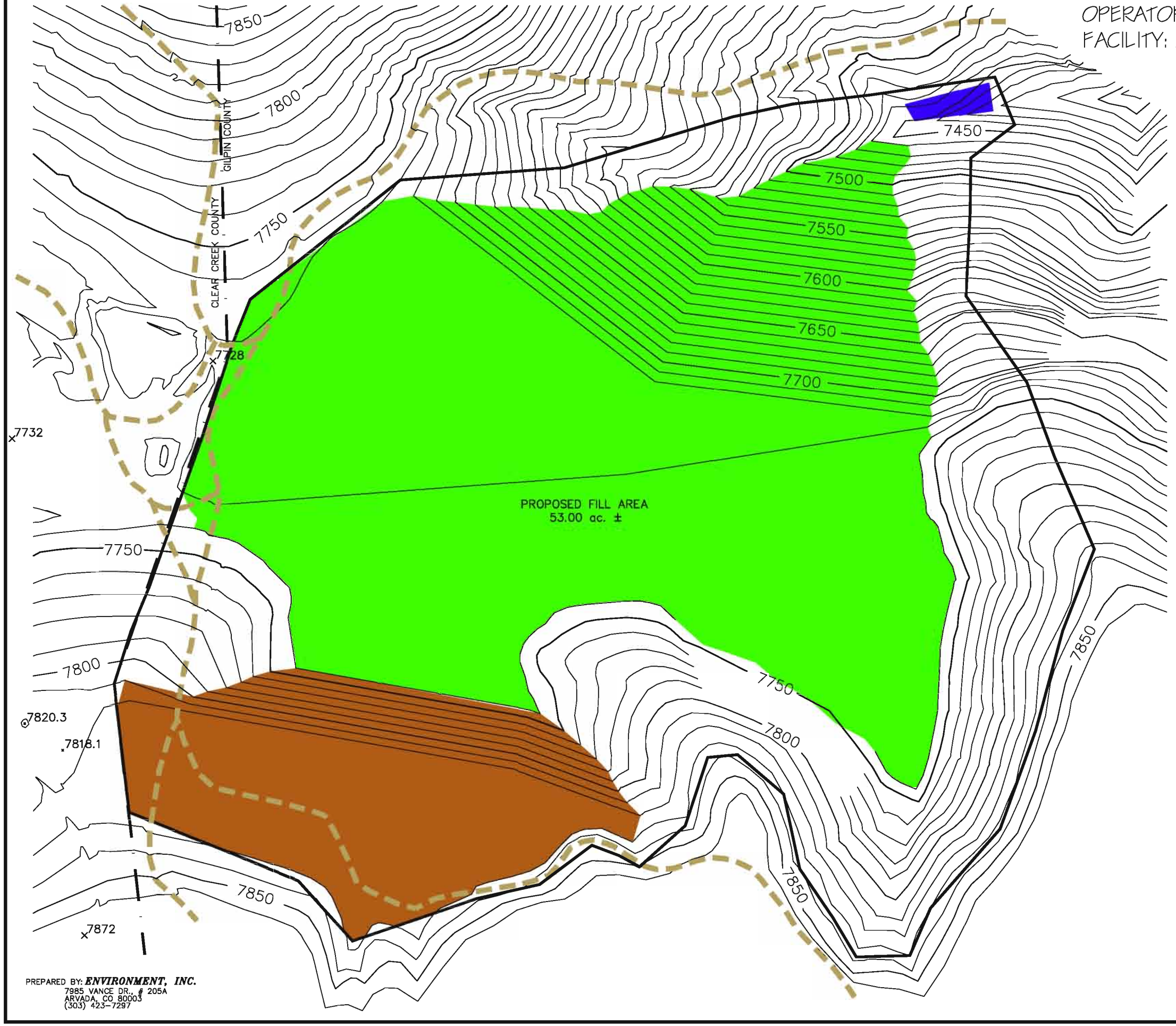
DATE	DESCRIPTION	BY

PREPARED BY: ENVIRONMENT, INC.
7985 VANCE DR., # 205A
ARVADA, CO 80003
(303) 423–7297

OPERATOR: ALBERT FREI AND SONS, INC
FACILITY: ALBERT & MARY JANE FREI IRRIVOCABLE TRUST

SECTION 35 FILL

PARTS OF THE NE/4NW/4, SE/4NW/4, SW/4NW/4 AND NW/4NW/4
SECTION 35, TOWNSHIP 3 SOUTH, RANGE 72 WEST, 6TH P.M.,
GILPIN COUNTY, COLORADO



LEGEND

- PROJECT AREA
- ROADS
- COUNTY LINE
- STORMWATER POND
- REVEGETATED
- FILL AREA

0 100 200 400

SCALE 1"=200'
CONTOUR INTERVAL 10 FT.
MAR 29, 2007 – 17:01:46

FIGURE 3

PROPERTY OWNER: ALBERT & MARY JANE FREI IRREVOCABLE TRUST
W. ROBERT ARNOLD, TRUSTEE
P.O. BOX 700
HENDERSON, CO 80640

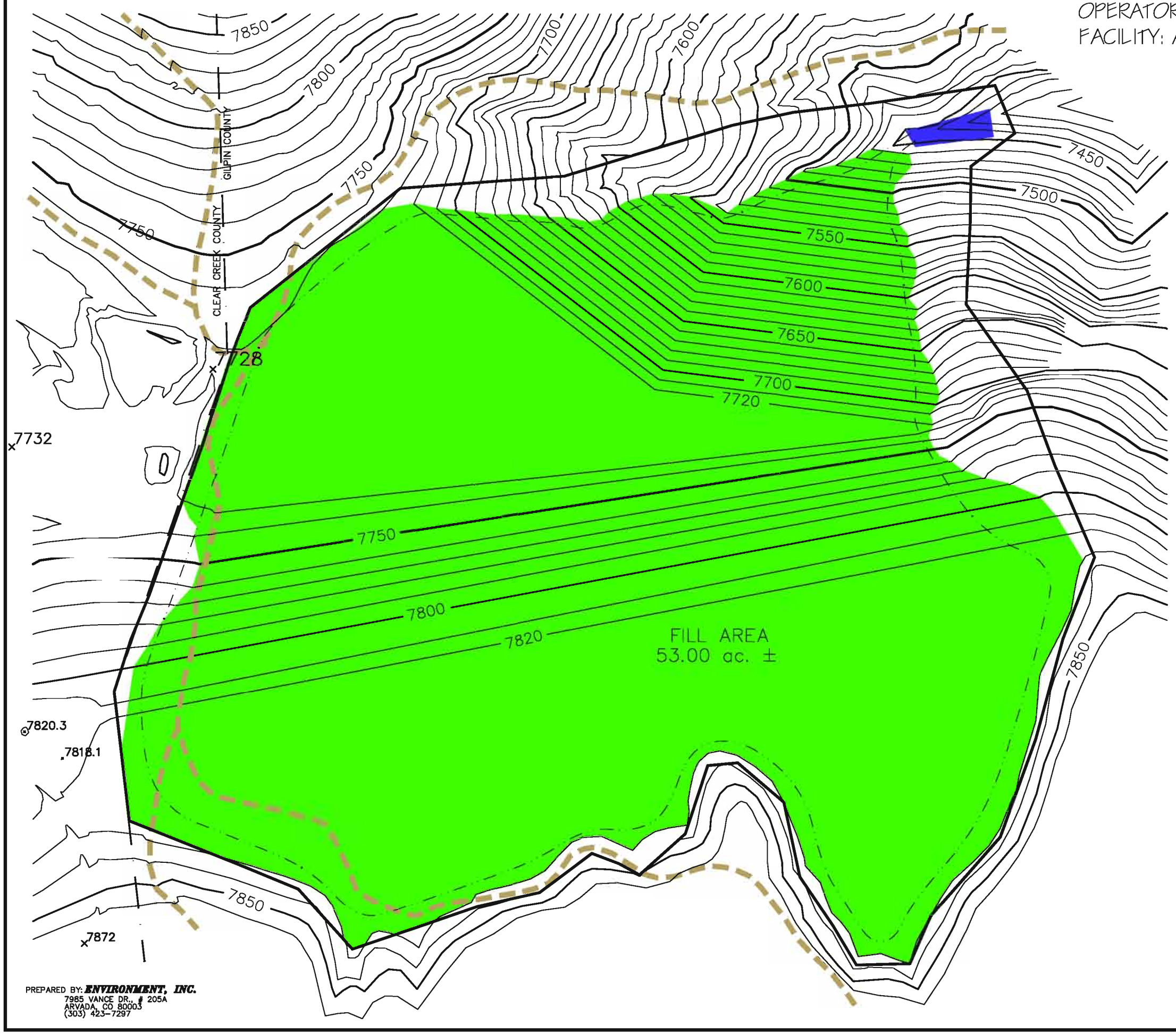
DATE	DESCRIPTION	BY

PREPARED BY: ***ENVIRONMENT, INC.***
7985 VANCE DR., # 205A
ARVADA, CO. 80003
(303) 423-7297

OPERATOR: ALBERT FREI AND SONS, INC
FACILITY: ALBERT & MARY JANE FREI IRRIVOCABLE TRUST

SECTION 35 FILL

PARTS OF THE NE/4NW/4, SE/4NW/4, SW/4NW/4 AND NW/4NW/4
SECTION 35, TOWNSHIP 3 SOUTH, RANGE 72 WEST, 6TH P.M.,
GILPIN COUNTY, COLORADO



LEGEND

- PROJECT AREA
- ROADS
- COUNTY LINE
- RIP RAP DITCH
- STORMWATER POND
- REVEGETATED

N
W E
S

0 100 200 400

SCALE 1"=200'
CONTOUR INTERVAL 10 FT.
MAR 29, 2007 - 17:03:01

Figure 4

PROPERTY OWNER: ALBERT & MARY JANE FREI IRREVOCABLE TRUST
W. ROBERT ARNOLD, TRUSTEE
P.O. BOX 700
HENDERSON, CO 80640

DATE	DESCRIPTION	BY

PREPARED BY: ***ENVIRONMENT, INC.***
7985 VANCE DR., # 205A
ARVADA, CO 80003
(303) 423-7297

REHABILITATION COSTS

This reclamation cost estimate in based on the assumption that there will be no more that 15.00 acres ± disturbed at any one time. The following information also depicts a worse case scenario. At that time we will have to respread 12,100.00 cubic yards of topsoil, do 6,650.00 cubic yards of cut/fill dozer work, and revegetate 15.00 ac. ±. The table below outlines the various areas of disturbance at that time. The amount of topsoil that will be re-spread is based on an average of 6 inches. A D-8N dozer will be used to do all of the dirt work. These figures are then used in the calculations for the bond amount. The revegetation cost figure includes fertilizer, grass seed, mulch and drilling costs.

STAGE	TOTAL	SOIL DEPTH
NEEDS RESOILING	15.00	6"
NEEDS SEEDING	15.00	
SLOPE CUT/FILL	350 LINEAR FEET	
RESOIL @ 6"	12,100.00 CUBIC YARDS	

ESTIMATED UNIT COSTS FOR RECLAMATION ITEMS:

	Unit Cost
1. Revegetation includes grass seed mix and labor to drill	$500.00/AC.
2. Re-spreading soil and/or growth media with **D-9 cat, push distance 300'**	0.40/YD^3 1/
3. Sloping using cut/fill method **D-9 cat, push distance less than 300**	0.63/YD^3 1/
4. Grading and shaping seed bed using a **140G motor grader**	$49.24/AC. 1/

RECLAMATION COSTS

1. Revegetation, 15.00 ac @ $500.00/ac	$ 7,500.00
2. Resoiling, 12,100.00 yd^3 x $0.40/yd^3	4,895.42
3. Sloping using cut/fill method 6,650.00 yd^3 x $0.63/yd^3	4,200.76
4. Grading and shaping 15.00 ac @ $49.24/ac.	738.66
Net Total	$17,334.85
5. Indirect costs	
Mobilization	4,316.95
Insurance, Bond, & Profit	2,265.66
6. Administration costs	1,366.74
TOTAL ESTIMATE	$25,284.74

RECLAMATION COST ESTIMATE $25,000.00

1/ Figured using Cat Handbook and rental costs from local sources for 83% efficiency, for eastern Colorado.

ARCADIS U.S., Inc.
630 Plaza Drive
Suite 100
Highlands Ranch
Colorado 80129
Tel 720-344-3500
Fax 720.344.3535
www.arcadis-us.com

Mr. Ben Frei
Albert Frei & Sons, Inc.
PO Box 700
Henderson, CO 80640

(303) 289-1837

Environmental

Subject: Slope Stability Analysis for Proposed Section 35 Fill Area in Gilpin County, Colorado

Date:
April 16 2007

Contact:
P. Brandon Evans

Phone:
303-471-3452

Email:
brandon.evans@arcadis-us.com

Our ref:
GC1898.0003.00001

Dear Mr. Frei:

ARCADIS U.S., Inc. (ARCADIS) has completed its stability analysis of multiple slopes associated with the construction of the proposed Section 35 Fill Area in Gilpin County, Colorado (**Figure 1**). The fill area covers approximately 53 acres in the NW¼, Section 35, T-3-S, R-72-W, 6th P.M. and is entirely within Gilpin County on lands owned by the Albert and Mary Jane Irrevocable Trust. It will be a valley fill operation where the material consists of stripped overburden and fill material from the adjacent quarry. Approximately 5,485,000 cubic yards will be placed over a 10 to 20 year period. All supporting data are provided at the end of this report.

Objective

The objectives of these analyses are:

- To determine classification and suitability of the fill material; and,
- To evaluate the stability of constructed slopes associated with the proposed fill to achieve a safety factor of 1.3 for static loading without compaction of fill material.

Assumptions

These analyses were based on the following assumptions. The existing site condition is shown on **Figure 2**.

Timing

These analyses are completed under the assumption that the fill would be completely finished as shown in **Figure 3**.

Material Properties and Soil Classification

Based on physical properties testing data provided by CTL/Thompson (CTL), assumed normal and typical material properties were selected (**Table 1**).

Table 1 Representative Material Properties

Soil Property	Structural Fill (GP)	Existing Ground
Soil Density (loose lbs per cu ft)	105	135
Internal Friction Angle (degrees)	>37^{o}	34^{o}
Cohesion (lbs per sq in)	0	0

The Unified Soil Classification System (USCS) was used to classify both the in-place material and fill materials. The Structural Fill is classified as poorly graded, clean gravels, gravel sand mixtures (GP). To further classify the material, the Hazen Uniformity Coefficient and Coefficient of Gradation were calculated based on the CTL material tests. The material was found to be well-graded and non-uniform in particle size distribution. Additionally, the fill material was assumed to have no cohesion.

The existing ground consists of pinyon-juniper vegetative cover that will not be removed prior to fill placement. The site is dominated by Tahana-Legault-Rock Outcrop soil type, as classified by the United States Department of Agriculture (USDA), National Resources Conservation Service (NRCS), approximately 23 to 28 inches deep. Depth to bedrock is approximately 28 inches. The existing ephemeral drainage area is v-shaped with slopes ranging from 2H:1V to 3H:1V.

Construction Methods

Off-road haul trucks will be used to transport and place the fill material. Periodically, a tracked dozer may be used to distribute and construct the fill area. The fill will be constructed to a final condition as shown in **Figure 3**. Front slopes are approximately 2H:1V.

Other Assumptions

No distributed loads or seismic loading was accounted for in these analyses. Slope stability generally decreases under a fully saturated condition, having a piezometric surface approximately equal to the slope surface; therefore, these analyses assume a fully saturated condition. These analyses also assume no vegetative cover on the fill and no sub-drain. Large landslips or block movements have not been identified and localized failures were not observed in the fill area. Although a fully saturated condition is assumed, filed conditions would differ in that surface water would be collected and directed around the fill via armored channels.

Procedure

The stability analyses were performed using the simplified Bishop's Method (GALENA Slope Stability Analysis System, Version 3.10). Four types of slope failure were analyzed: toe circle failure, slope circle failure, base circle failure, and total slope failure. GALENA output reports are provided at the end of this report. Multiple analyses were run using a variety of failure types and sizes to find the minimum safety factor for each failure type.

Conclusion

Based upon these analyses, conservative assumptions, and the information available, the proposed Section 35 Fill slope safety factors are as follows:

Table 2 Factors of Safety

Failure Type	Static Loading
Toe Circle Failure	1.44
Slope Circle Failure	1.65
Base Circle Failure	1.51
Total Slope Failure	2.39

Catastrophic slope failure is not likely given the results of these analyses. Base circle failure is highly unlikely to occur due to the shallow soils and bedrock base. All safety factors reported are sufficient to ensure the stability of these slopes; greater than 1.3 for static loading. Safety factors greater than 1.5 ensure maximum stability. These results are based on a worse-case-scenario and field conditions at the fill area should be more favorable, where some compaction will occur under the materials own weight and through active use of heavy machinery to place and shape the fill.

Recommendations

Although these analyses suggest a stable slope condition for the proposed fill, a few minor improvements to the fill design are generally recommended for fills greater than 1,000,000 cubic yards, and would greatly increase the stability of the slope.

- Change the face of the fill from a 2H:1V slope to 2.5H:1V.
- Add 20-foot wide benches to the face of the fill every 40 vertical feet.
- Crown the fill with a 1 to 3 percent slope to allow for positive drainage to the armored side channels.

- Add a durable, non-acid, non-toxic forming rock sub-drain under the fill in the existing channel bottom, with a minimum height of 8 feet and minimum width of 16 feet. Ensure that at least 90 percent of the drain rocks are larger than 12 inches and have a maximum dimension of less than ¼ the width.
- Non-active fill surfaces exposed for more than 6 months should be mulched and seeded to minimize surface erosion caused by wind and water.

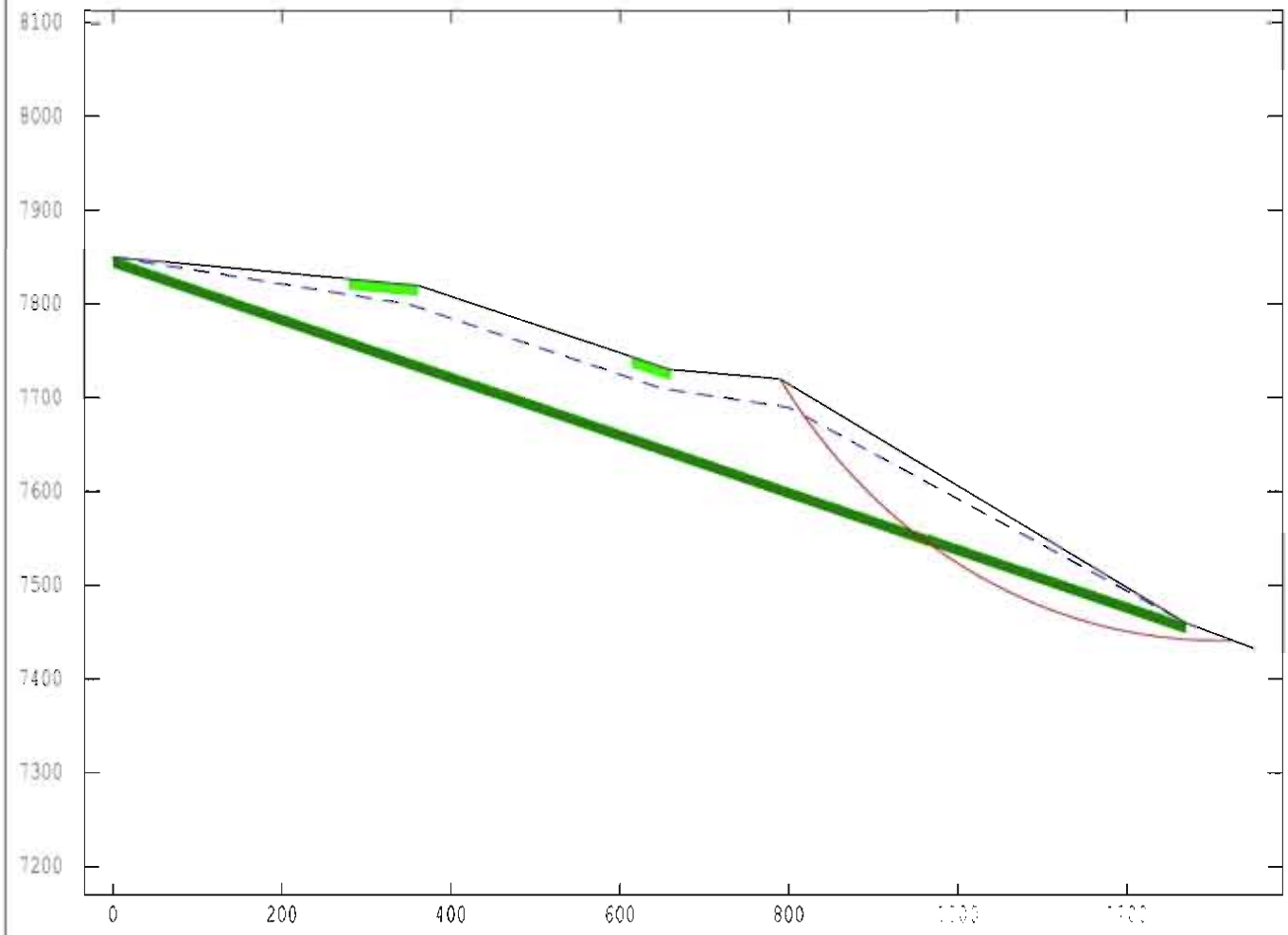
Limitations

This report has been prepared in accordance with generally accepted engineering practices. The results presented in this report are based upon the fill proposed by Environment, Inc., and other data obtained from a variety of sources and is assumed to be correct and complete. ARCADIS does not assume any liability for findings or lack of findings based on misrepresentation of information presented to us.

Should you have questions regarding this report, or wish further discussion, please call. ARCADIS appreciates this opportunity to be of service to Albert Frei & Sons.

Sincerely,

P. Brandon Evans, P.E.
Project Engineer, ARCADIS



GALENA

Version 3.10

Clover Technology

Analysis

Method: Bishop Simplified

Type: Single

Surface: Circular

Results

Factor of Safety: 1.51

Chronology

Last Edit: 9 Apr 2007

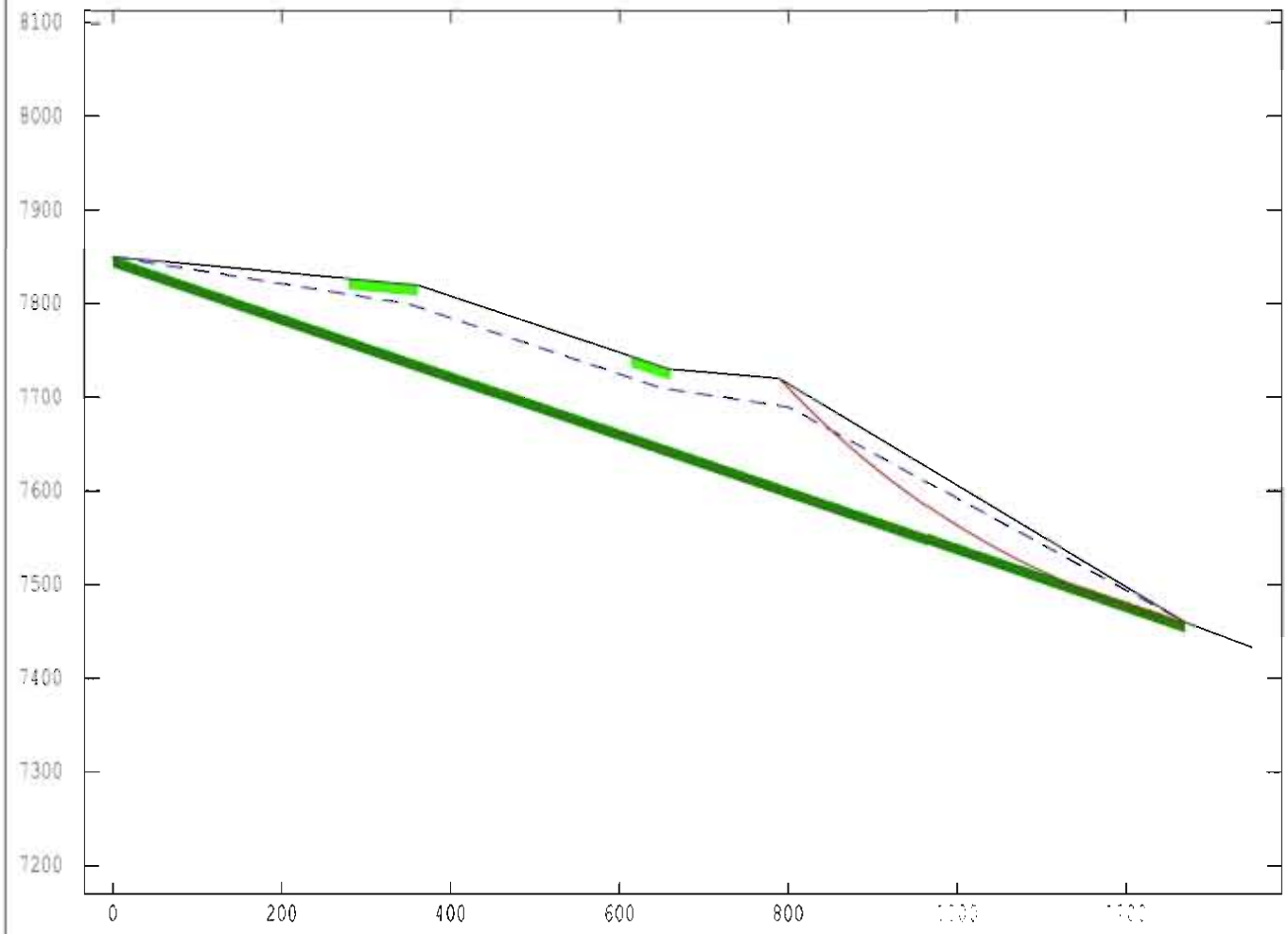
Processed: 9 Apr 2007

Project: SECTION 35 FILL
BASE CIRCLE FAILURE

File: R:\Projects\1898 - Pit 4 Permit A Frei &...\Fill Slope Stability Analysis 1.gmf

Analysis: 1

ARCADIS U.S., INC.



GALENA

Version 3.10

Analysis

Method: Bishop Simplified
Type: Single
Surface: Circular

Results

Factor of Safety: 1.44

Chronology

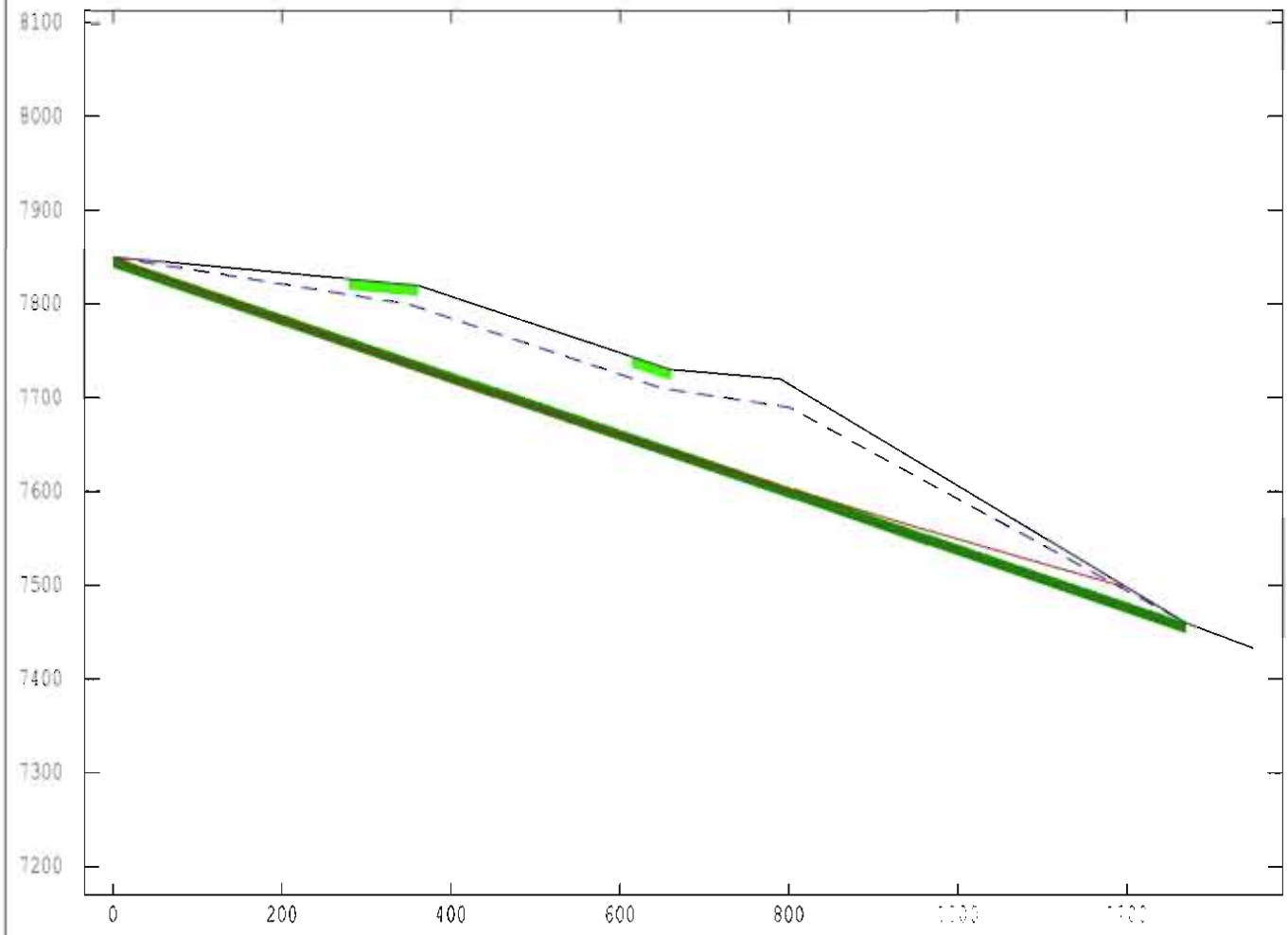
Last Edit: 9 Apr 2007
Processed: 9 Apr 2007

Project: SECTION 35 FILL
TOE CIRCLE FAILURE

File: R:\Projects\1898 - Pit 4 Permit A Frei &...\Fill Slope Stability Analysis 1.gmf

Analysis: 1

ARCADIS U.S., INC.



GALENA

Version 3.10

Clover Technology

Analysis

Method: Bishop Simplified

Type: Single

Surface: Circular

Results

Factor of Safety: 2.39

Chronology

Last Edit: 9 Apr 2007

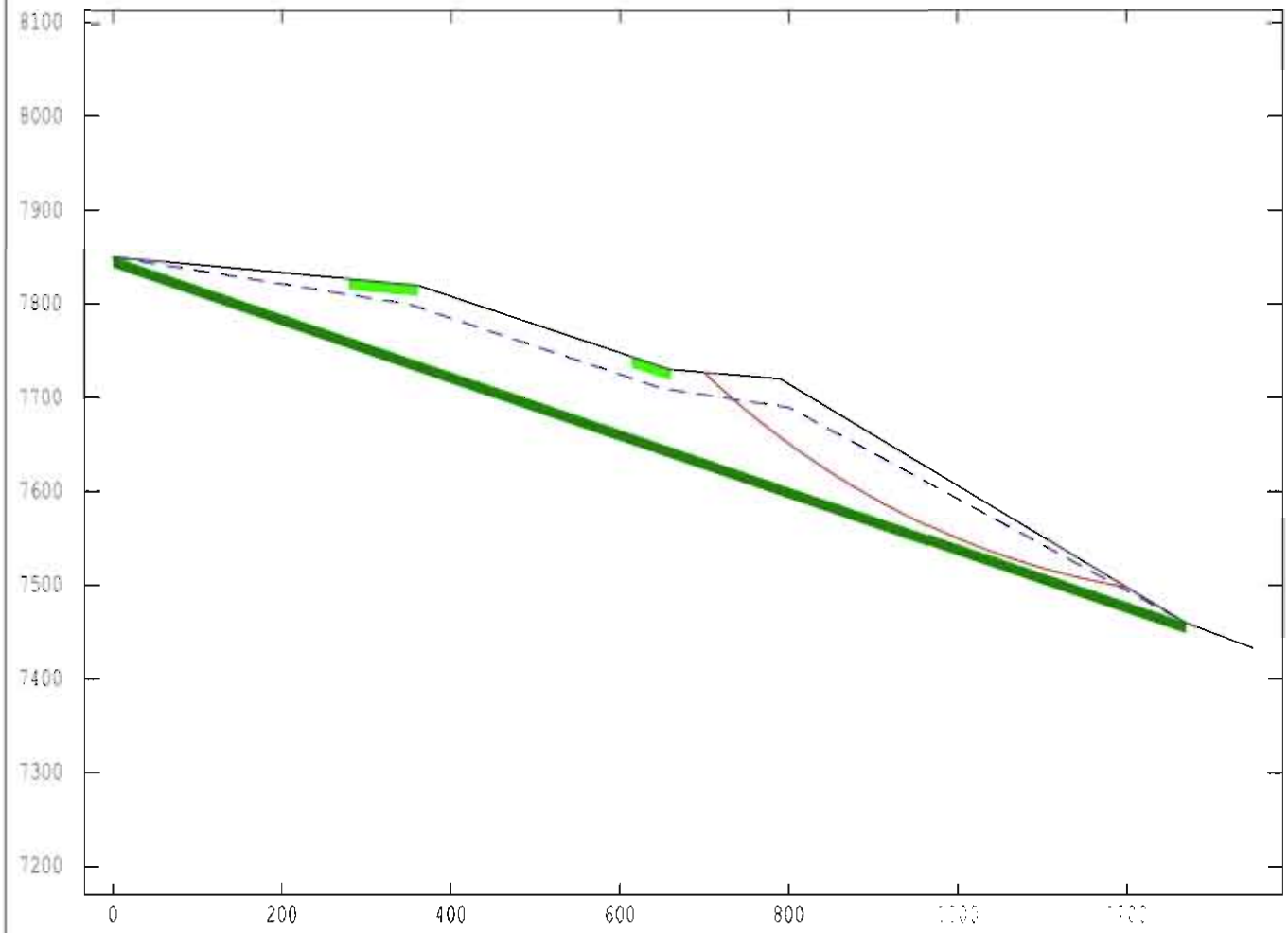
Processed: 9 Apr 2007

Project: SECTION 35 FILL
TOTAL SLOPE FAILURE

File: R:\Projects\1898 - Pit 4 Permit A Frei &...\Fill Slope Stability Analysis 1.gmf

Analysis: 1

ARCADIS U.S., INC.



GALENA

Version 3.10

Analysis

Method: Bishop Simplified
Type: Single
Surface: Circular

Results

Factor of Safety: 1.65

Chronology

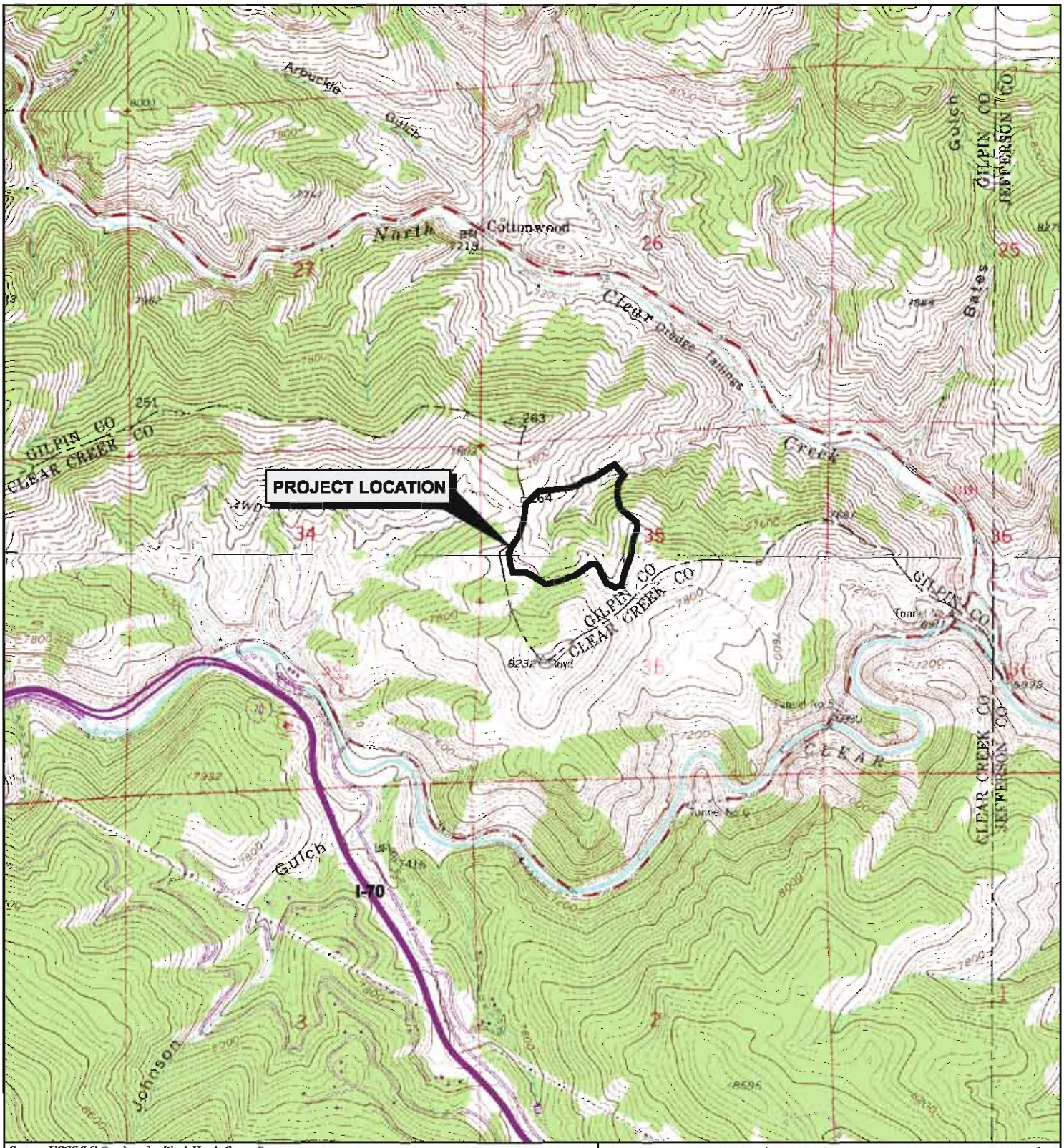
Last Edit: 9 Apr 2007
Processed: 9 Apr 2007

Project: SECTION 35 FILL
SLOPE CIRCLE FAILURE

File: R:\Projects\1898 - Pit 4 Permit A Frei &...\Fill Slope Stability Analysis 1.gmf

Analysis: 1

ARCADIS U.S., INC.



Source: USGS 7.5' Quadrangles Black Hawk, Squaw Pass.

NORTH

0 2000 4000

Scale in Feet

R:\Projects\1898 - Pit 4 Permit A Frei & Sons\Walstrum Pit\Fill\Figure 1.dwg

ALBERT FREI AND SONS, INC.

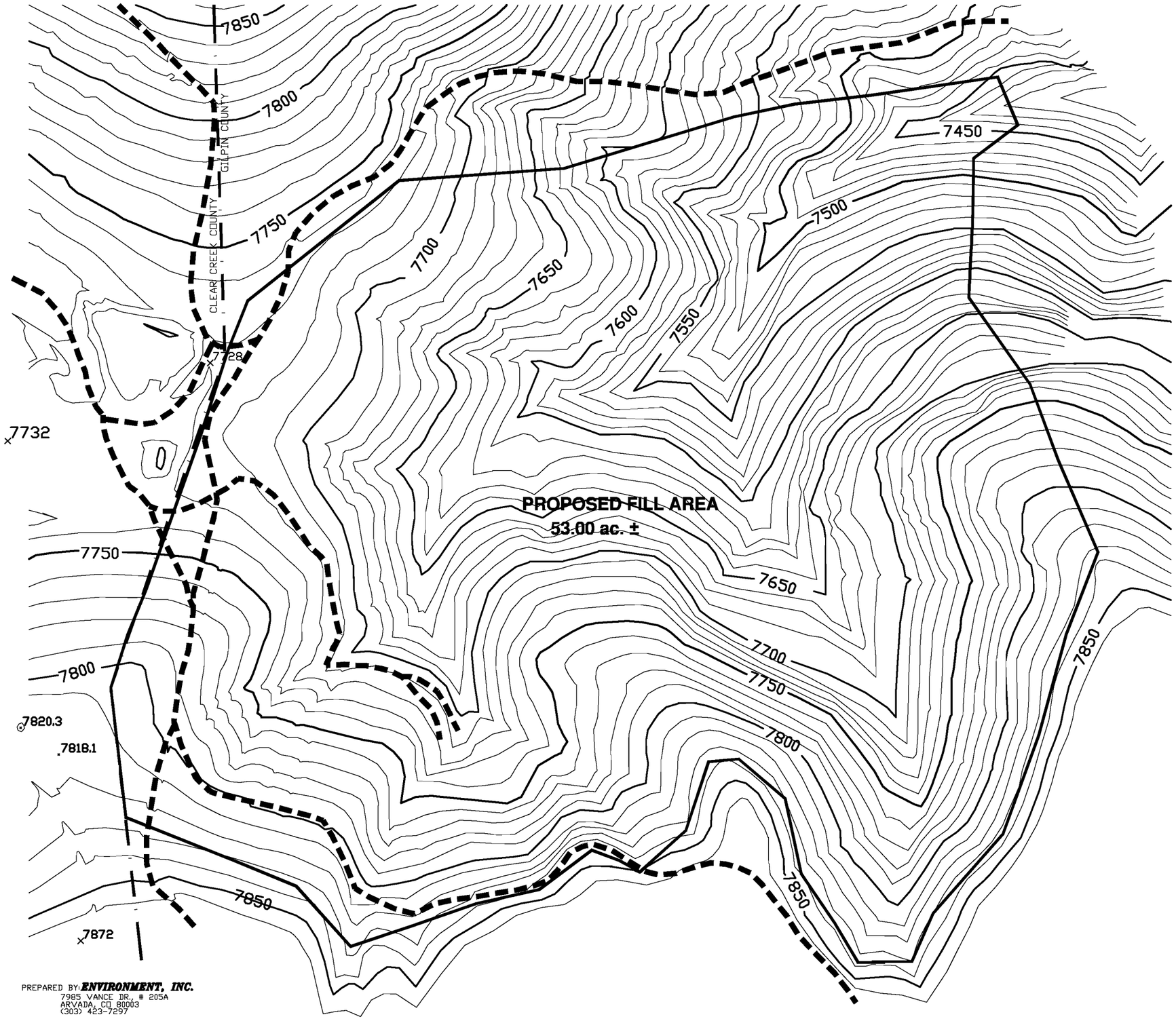
SECTION 35 FILL AREA
Gilpin County, Colorado

PROJECT LOCATION MAP

REV	DESCRIPTION	BY	DATE
0	ISSUED FOR REVIEW	PBE	4/6/07

DRAWN BY: PBE | PREPARED BY: PBE | DATE: 4/6/07

FIGURE 1



PREPARED BY: ***ENVIRONMENT, INC.***
7985 VANCE DR., # 205A
ARVADA, CO 80003
(303) 423-7297

R:\Projects\1898 - Pit 4 Permit A Frei & Sons\Walstrum Pit\Fill\Figure 2.dwg

ALBERT FREI & SONS, INC.

SECTION 35 FILL

PARTS OF THE NE/4NW/4, SE/4NW/4, SW/4NW/4 AND NW/4NW/4
SECTION 35, TOWNSHIP 3 SOUTH, RANGE 72 WEST, 6TH P.M.,
GILPIN COUNTY, COLORADO

PROPERTY OWNER: ALBERT & MARY JANE FREI IRREVOCABLE TRUST

W. ROBERT ARNOLD, TRUSTEE
P.O. BOX 700
HENDERSON, CO 80640

L E G E N D

- PROJECT AREA
- ROADS
- COUNTY LINE
- FILL LIMITS

N
W E
S

0 100 200 400

SCALE 1"=200'
CONTOUR INTERVAL 10 FT.
MAR 21, 2007 - 15:29:21

ALBERT FREI & SONS, INC.
SECTION 35 FILL AREA
Gilpin County, Colorado

FILL DESIGN
EXISTING CONDITION

REV	DESCRIPTION	BY	DATE
0	ISSUED FOR REVIEW	SO	4/6/07

DRAWN BY: SO | PREPARED BY: SO | DATE: 4/6/07

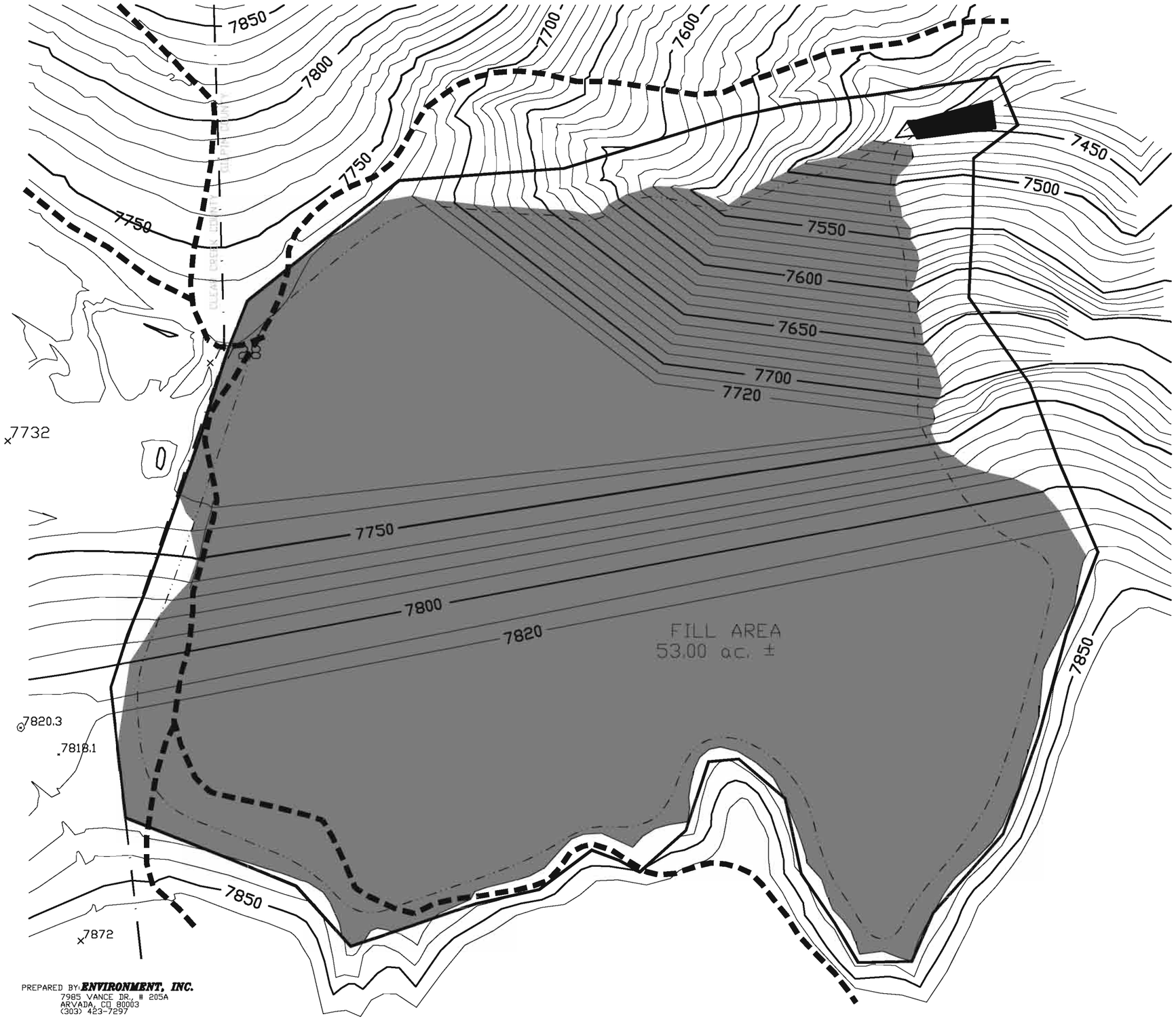
FIGURE 2

ALBERT FREI & SONS, INC.

SECTION 35 FILL

PARTS OF THE NE/4NW/4, SE/4NW/4, SW/4NW/4 AND NW/4NW/4
SECTION 35, TOWNSHIP 3 SOUTH, RANGE 72 WEST, 6TH P.M.,
GILPIN COUNTY, COLORADO

PROPERTY OWNER: ALBERT & MARY JANE FREI IRREVOCABLE TRUST
W. ROBERT ARNOLD, TRUSTEE
P.O. BOX 700
HENDERSON, CO 80640



PREPARED BY: ENVIRONMENT, INC.
7985 VANCE DR., # 205A
ARVADA, CO 80003
(303) 423-7297

LEGEND

- PROJECT AREA
- ROADS
- COUNTY LINE
- RIP RAP DITCH
- STORMWATER POND
- REVEGETATED

N
W E
S

0 100 200 400

SCALE 1"=200'
CONTOUR INTERVAL 10 FT.
MAR 21, 2007 - 10:58:40

ALBERT & FREI SONS, INC.
SECTION 35 FILL AREA
Gilpin County, Colorado

FILL DESIGN
FINAL CONDITION

REV	DESCRIPTION	BY	DATE
0	ISSUED FOR REVIEW	SO	4/6/07

DRAWN BY: SO | PREPARED BY: SO | DATE: 4/6/07

FIGURE 3

R:\Projects\1898 - Pit 4 Permit A Frei & Sons\Walstrum Pit\Fill\Figure 3.dwg

CTL | THOMPSON
MATERIALS ENGINEERS, INC.

May 21, 2006

Albert Frei and Sons
P.O. Box 700
Henderson, Colorado 80640

Attention: Mr. Rick Foster

Subject: Physical Properties Testing
Structural Fill, Pit 6
Project No. CT 13440-400

Dear Mr. Foster:

This report presents results of physical properties tests performed on material delivered to our laboratory in January, 2006. Representative samples delivered were identified as Structural Fill from Pit 6. Testing was performed to determine the materials compliance with Colorado Department of Transportation (CDOT) specifications. Testing was performed in general conformance with the applicable AASHTO and ASTM test methods. A summary of test results is presented below. Complete test results are presented in Attachment A.

Summary Table
Structural Fill, Pit 6

Test	Structural Fill	CDOT Specifications Class 1 Structural Backfill (Section 703.8)
Sieve Analysis (ASTM C 33, AASHTO M 43)	See Table 1	See Table 1
Passing No. 200 Sieve (ASTM C 117, AASHTO T 11)	6.7%	5%-20%
Specific Gravity (SSD) (ASTM C 127, AASHTO T 85)	2.77	NA
Absorption (ASTM C 127, AASHTO T 85)	1.1%	NA
L.A. Abrasion, Grading D (ASTM C 131, AASHTO T 96)	36%	NA
Sodium Soundness Coarse Fraction (ASTM C 88, AASHTO T 104) Weighted Loss	6.0%	NA
Sodium Soundness Fine Fraction (ASTM C 88, AASHTO T 104) Weighted Loss	0.2%	NA
Clay Lumps and Friable Particles Fine Fraction (ASTM C 142, AASHTO T 112) Weighted Average	115 pcf 1.55 tons/yd^3 31% Voids	NA
Rodded Unit Weight & Voids (ASTM C 29, AASHTO T 19)	105 pcf 1.42 tons/yd^3 37% Voids	NA

Loose Unit Weight & Voids (ASTM C 29, AASHTO T 19)	6.0%	NA
Maximum Density @ Optimum Moisture Content Standard Effort (ASTM D 698, Method B)	133.0 pcf @ 9.5%	NA
Maximum Density @ Optimum Moisture Content Modified Effort (ASTM D 1557, Method B)	138.0 pcf @ 6.0%	NA
HVEEM R-Value (ASTM D 2844)	79 @ 300 psi	NA
Liquid Limit (AASHTO T 89)	NL	35 max
Plasticity Index (AASHTO T 90)	NP	6 max

If you have any questions regarding this report, please call.

Very truly yours,

CTL|Thompson Materials Engineers Inc.

Matthew A. Best
Materials Lab Manager

Reviewed by:

Damon B. Thomas, P.E.
Division Manager / Associate

MAB:DBT/mab
Enclosures
(2 copies sent)

ATTACHMENT A

LABORATORY TEST RESULTS

TABLE 1
PHYSICAL PROPERTIES OF AGGREGATES

Client: Albert Frei and Sons
Sample: Structural Fill, Pit 6
Date Submitted: January, 2006

Sieve Analysis of Fine Aggregate
(ASTM C 128, AASHTO T 27)

Sieve Size	Percent Passing Crusher Fines	CDOT Specifications Class 1 Structural Backfill (Section 703.8)
2 inch (50 mm)	100	100
⅜ inch (9.5 mm)	100	-
No. 4 (4.75 mm)	84	30-100
No. 8 (2.36 mm)	69	-
No. 16 (1.18 mm)	53	-
No. 30 (600 µm)	48	-
No. 50 (300 µm)	37	10-60
No. 100 (150 µm)	22	-

Material Finer Than No. 200 Sieve by Washing
Coarse Aggregate
(ASTM C 117, AASHTO T 11)

Sample ID	Initial Dry Weight	Final Dry Weight	Percent of Material Finer than No. 200 Sieve
Structural Fill	559.3	521.6	6.7

Specific Gravity and Absorption of Fine Aggregate
(ASTM C 127)

Sample ID	Pycnometer Weight with Water	SSD in Air Weight (g)	Pycnometer Weight with Sample	Bulk Volume	Oven Dry Weight	Bulk (SSD) Specific Gravity	Absorption (%)
Structural Fill	676.4	500.0	996.0	180.4	494.6	2.77	1.1

Resistance to Degradation of Small-size Coarse Aggregate by abrasion and Impact in the Los Angeles Machine
(ASTM C 131, AASHTO T 96)

Sample ID	Grading	Initial Weight	Final Weight	Percent Loss
Structural Fill	D	5000.0	3185.0	36

TABLE 1
PHYSICAL PROPERTIES OF AGGREGATES

Client: Albert Frei and Sons
Sample: Structural Fill, Pit 6
Date Submitted: January, 2006

Soundness of Fine Aggregates by Use of Sodium Sulfate (ASTM C 88, AASHTO T 104)

Sieve Size		Percent Grading of Sample	Weight Before (g)	Weight After (g)	Percent Loss	Weighted Percent Loss
⅜ inch	No. 4	16	300.2	279.2	6.9	1.1
No. 4	No. 8	15	100.0	89.8	10.2	1.5
No. 8	No. 16	16	100.0	88.2	11.9	1.9
No. 16	No. 30	5	100.1	90.7	9.4	0.5
No. 30	No. 50	12	100.0	91.9	8.1	1.0

Weighted Total Percent Loss: 6.0%

Clay Lumps and Friable Particles in Fine Aggregate (ASTM C 142, AASHTO T 112)

Sieve Size		Percent Grading of Sample	Weight Before (g)	Weight After (g)	Percent Loss	Weighted Percent Loss
No. 4	No. 16	31	69.6	69.1	0.7	0.2

Weighted Total Percent Loss: 0.2%

Bulk Density ("Unit Weight") and Voids in Aggregates (Rodded Method) (ASTM C 29, AASHTO T 19)

Sample Weight (lbs)	Bucket Volume (ft^3)	Unit Weight (pcf)
11.20	0.098	114.3
11.25	0.098	114.8
11.34	0.098	115.7

Average: 115 pcf

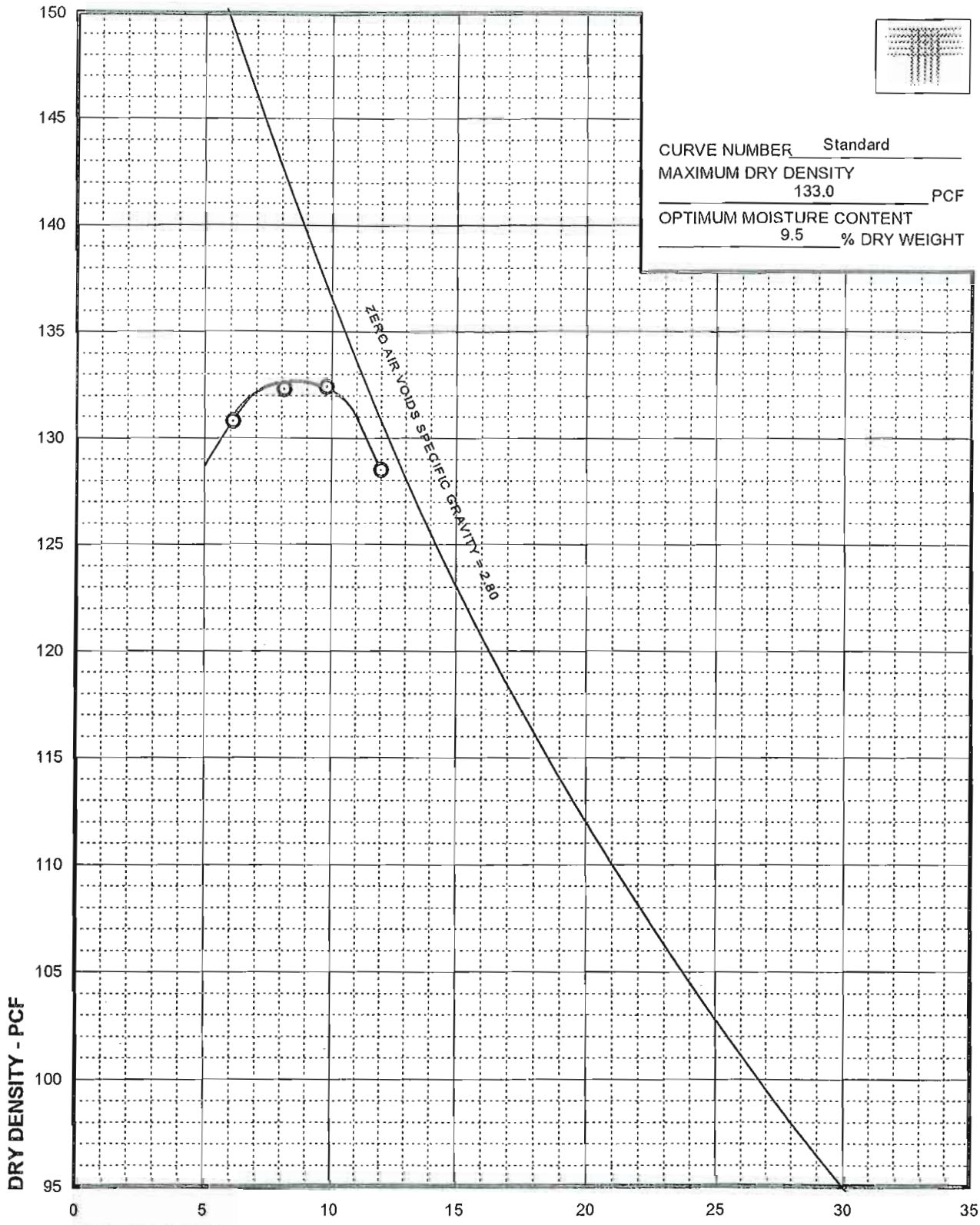
Bulk Specific Gravity (OD) = 2.74
Voids in aggregate compacted by rodding = 31%

Bulk Density ("Unit Weight") and Voids in Aggregates (Loose Method) (ASTM C 29, AASHTO T 19)

Sample Weight (lbs)	Bucket Volume (ft^3)	Unit Weight (pcf)
10.18	0.098	103.9
10.28	0.098	104.9
10.29	0.098	105.0

Average: 105 pcf

Bulk Specific Gravity (OD) = 2.74
Voids in loose aggregate = 37%



CURVE NUMBER Standard

MAXIMUM DRY DENSITY
133.0 PCF

OPTIMUM MOISTURE CONTENT
9.5 % DRY WEIGHT

Sample Description Structural Fill

Location

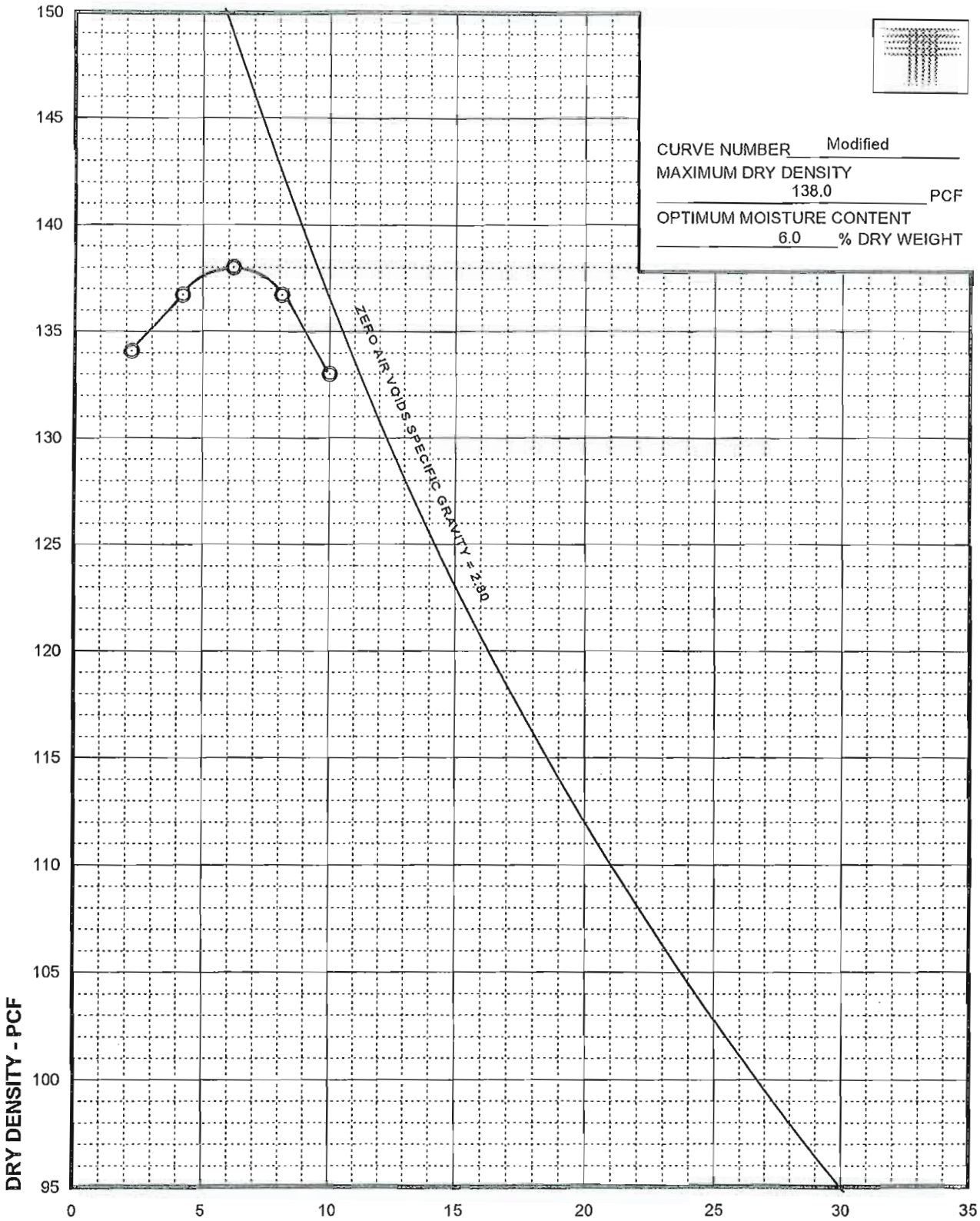
Compaction Test Procedure ASTM D 698 - 91
METHOD "B"

LIQUID LIMIT	NL	%
PLASTICITY INDEX	NP	%
GRAVEL	-	%
SAND	0	%
SILT AND CLAY	93.3	%

Compaction Test Results

Project No. CT13,440-400

Fig. A-4



Sample Description Structural Fill

Location

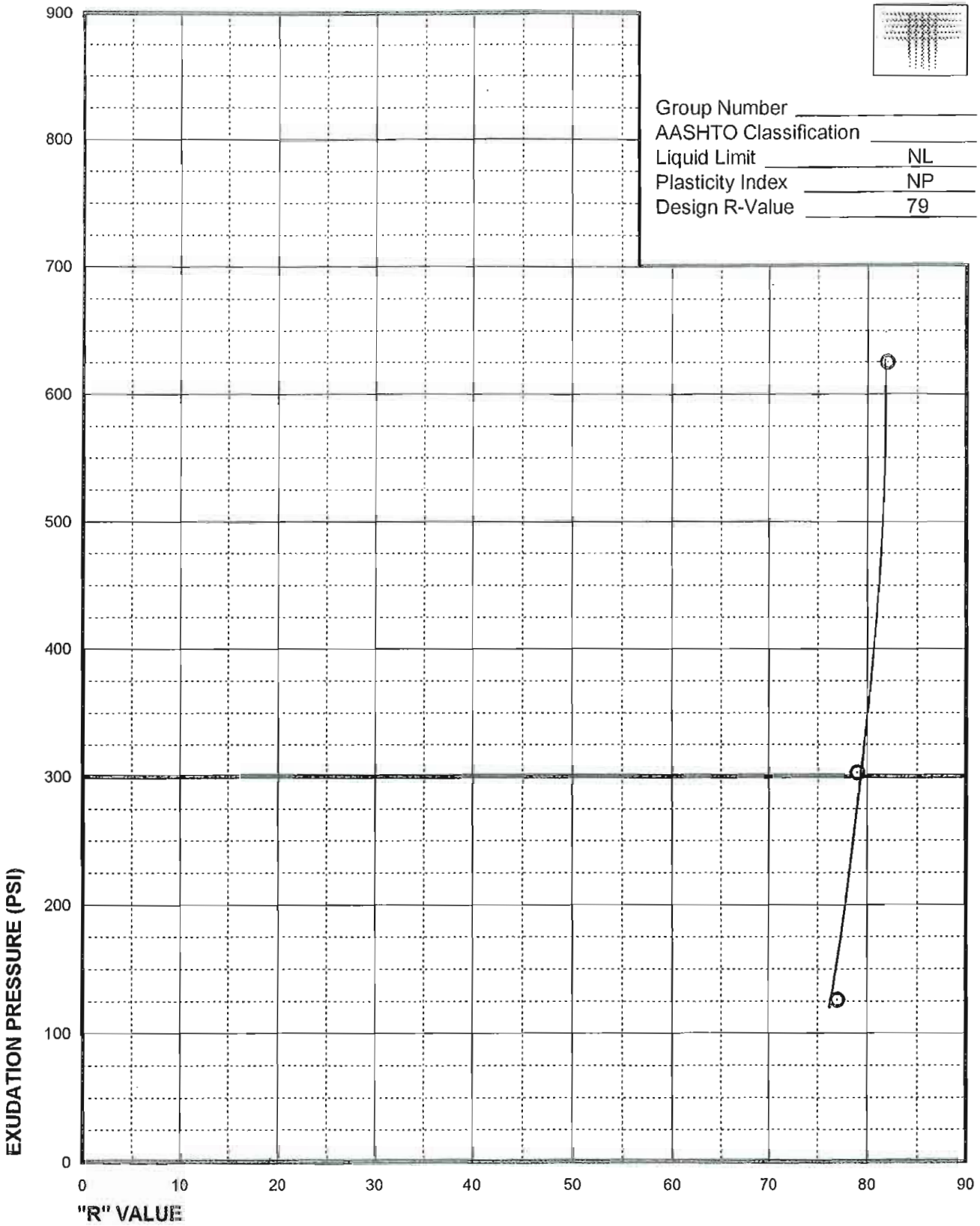
Compaction Test Procedure ASTM D 1557
METHOD "B"

LIQUID LIMIT	NL	%
PLASTICITY INDEX	NP	%
GRAVEL	-	%
SAND	0	%
SILT AND CLAY	93.3	%

Compaction Test Results

Project No. CT13,440-400

Fig. A-5



Hveem Stabilometer Test Results

Project No. CT13,440-400

Fig. A-6

Engineering Properties

Georgetown Area, Colorado, Parts of Clear Creek, Gilpin, and Park Counties

Map symbol and soil name	Depth	USDA texture	Classification		Fragments		Percent passing sieve number--				Liquid limit	Plasticity index
			Unified	AASHTO	>10 Inches	3-10 Inches	4	10	40	200		
	In				*Pct*	*Pct*					*Pct*	
56:												
Tahana	0-1	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	1-2	Moderately decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	2-8	Gravelly sandy loam	GC-GM, GM, SC-SM, SM	A-1, A-2	0-5	0-15	60-80	55-75	35-50	20-30	20-25	NP-5
	8-20	Very gravelly loamy sand	GC-GM, GM	A-1	0-5	5-20	35-55	30-50	20-40	10-25	20-25	NP-5
	20-24	Extremely gravelly loamy sand	GW	A-1	0-5	15-25	15-30	10-25	5-20	0-5	20-25	NP-5
	24-28	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Legault	0-2	Slightly decomposed plant material	PT	A-8	0	0	100	100	---	---	---	---
	2-6	Very gravelly loamy sand	GM	A-1	0-5	0-5	35-55	30-50	20-40	10-15	---	NP
	6-19	Very gravelly loamy sand, Very gravelly sand	GM	A-1	0-5	0-10	35-55	30-50	20-40	0-15	---	NP
	19-23	Weathered bedrock	---	---	---	---	---	---	---	---	---	---
Rock outcrop	0-60	Unweathered bedrock	---	---	---	---	---	---	---	---	---	---

Engineering Properties

This table gives the engineering classifications and the range of engineering properties for the layers of each soil in the survey area.

"Depth" to the upper and lower boundaries of each layer is indicated.

"Texture" is given in the standard terms used by the U.S. Department of Agriculture. These terms are defined according to percentages of sand, silt, and clay in the fraction of the soil that is less than 2 millimeters in diameter. "Loam," for example, is soil that is 7 to 27 percent clay, 28 to 50 percent silt, and less than 52 percent sand. If the content of particles coarser than sand is 15 percent or more, an appropriate modifier is added, for example, "gravelly."

"Classification" of the soils is determined according to the Unified soil classification system (ASTM, 2005) and the system adopted by the American Association of State Highway and Transportation Officials (AASHTO, 2004).

The Unified system classifies soils according to properties that affect their use as construction material. Soils are classified according to particle-size distribution of the fraction less than 3 inches in diameter and according to plasticity index, liquid limit, and organic matter content. Sandy and gravelly soils are identified as GW, GP, GM, GC, SW, SP, SM, and SC; silty and clayey soils as ML, CL, OL, MH, CH, and OH; and highly organic soils as PT. Soils exhibiting engineering properties of two groups can have a dual classification, for example, CL-ML.

The AASHTO system classifies soils according to those properties that affect roadway construction and maintenance. In this system, the fraction of a mineral soil that is less than 3 inches in diameter is classified in one of seven groups from A-1 through A-7 on the basis of particle-size distribution, liquid limit, and plasticity index. Soils in group A-1 are coarse grained and low in content of fines (silt and clay). At the other extreme, soils in group A-7 are fine grained. Highly organic soils are classified in group A-8 on the basis of visual inspection.

If laboratory data are available, the A-1, A-2, and A-7 groups are further classified as A-1-a, A-1-b, A-2-4, A-2-5, A-2-6, A-2-7, A-7-5, or A-7-6. As an additional refinement, the suitability of a soil as subgrade material can be indicated by a group index number. Group index numbers range from 0 for the best subgrade material to 20 or higher for the poorest.

"Rock fragments" larger than 10 inches in diameter and 3 to 10 inches in diameter are indicated as a percentage of the total soil on a dry-weight basis. The percentages are estimates determined mainly by converting volume percentage in the field to weight percentage.

"Percentage (of soil particles) passing designated sieves" is the percentage of the soil fraction less than 3 inches in diameter based on an ovendry weight. The sieves, numbers 4, 10, 40, and 200 (USA Standard Series), have openings of 4.76, 2.00, 0.420, and 0.074 millimeters, respectively. Estimates are based on laboratory tests of soils sampled in the survey area and in nearby areas and on estimates made in the field.

"Liquid limit" and "plasticity index" (Atterberg limits) indicate the plasticity characteristics of a soil. The estimates are based on test data from the survey area or from nearby areas and on field examination.

References:

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.
American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

STATE OF COLORADO

Bill Ritter, Jr., Governor
James B. Martin, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.
Denver, Colorado 80246-1530
Phone (303) 692-2000
TDD Line (303) 691-7700
Located in Glendale, Colorado

http://www.cdphe.state.co.us

Laboratory Services Division
8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3090

Colorado Department
of Public Health
and Environment

5/1/2007

Albert R. Frei, Jr., President
Albert Frei & Sons, Inc.
P.O. Box 700
Henderson, CO 80640
303/289-1837

RE: Final Permit, Colorado Discharge Permit System – Stormwater
Certification No: COR-03B854, Gilpin County
Section 35 Fill Area

Local Contact: Albert Frei Jr., President, 303/ 289-1837

Anticipated Activity: 04/16/2007 through 12/31/2007
On 53 acres (46 acres disturbed)

Dear Sir or Madam:

Enclosed please find a copy of the permit certification that was issued to you under the Colorado Water Quality Control Act.

Your certification under the permit requires that specific actions be performed at designated times. You are legally obligated to comply with all terms and conditions of the permit.

Note that the stormwater permit for construction activities now covers construction sites disturbing down to one acre (the previous threshold was 5 acres). Effective July 1, 2002, any construction activity that disturbs at least 1 acre of land (or is part of a larger common plan of development or sale that will disturb at least 1 acre) must apply for permit coverage.

Please read the permit and certification. If you have any questions please visit our website at http://www.cdphe.state.co.us/wq/permitsunit/wqcdpmt.html, or contact Matt Czahor at (303) 692-3575.

Sincerely,

Kathryn Dolan
Stormwater Program Coordinator
Permits Unit
WATER QUALITY CONTROL DIVISION

Enclosure

xc: Regional Council of Governments
Gilpin County Health Department
District Engineer, Technical Services, WQCD
Permit File
Fee File

CERTIFICATION

CDPS GENERAL PERMIT

STORMWATER DISCHARGES ASSOCIATED WITH

CONSTRUCTION

Construction Activity: Clean Fill Disposal Area

This permit specifically authorizes: **Albert Frei & Sons, Inc.**

to discharge stormwater from the facility identified as Section 35 Fill Area

which is located at: Near I-70 & Hwy 6 (NW Quadrant)
, Co

latitude 39/45/04, longitude 105/25/12 in Gilpin County

North Clear Creek to: Clear Creek

effective: 05/01/2007

Annual Fee: $270.00 (**DO NOT PAY NOW**. You will receive a prorated bill.)

STATE OF COLORADO

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
AIR POLLUTION CONTROL DIVISION
TELEPHONE: (303) 692-3150

CONSTRUCTION PERMIT

PERMIT NO: **07GI0347F**

INITIAL APPROVAL

DATE ISSUED: May 23, 2007

ISSUED TO: **Albert Frei and Sons, Inc.**

THE SOURCE TO WHICH THIS PERMIT APPLIES IS DESCRIBED AND LOCATED AS FOLLOWS:

Valley fill project, known as **Albert and Mary Jane Frei Trust**, located in Section 35, Township 3 South, Range 72 West, approximately 5 miles southeast of Black Hawk, Gilpin County, Colorado.

THE SPECIFIC EQUIPMENT OR ACTIVITY SUBJECT TO THIS PERMIT INCLUDES THE FOLLOWING:

Haulage of dirt from neighboring quarries, dumping, leveling / grading. Emissions of fugitive particulate matter is abated using emission control measures.

THIS PERMIT IS GRANTED SUBJECT TO ALL RULES AND REGULATIONS OF THE COLORADO AIR QUALITY CONTROL COMMISSION AND THE COLORADO AIR POLLUTION PREVENTION AND CONTROL ACT C.R.S. (25-7-101 et seq), TO THOSE GENERAL TERMS AND CONDITIONS INCLUDED IN THIS DOCUMENT AND THE FOLLOWING SPECIFIC TERMS AND CONDITIONS:

1. The particulate emission control measures listed on the attached page (as approved by the Division) shall be applied to the particulate emission producing sources as required by Regulation No. 1, Section III.D.1.b.

2. Within one hundred and eighty days (180) after commencement of operation, compliance with the conditions contained on this permit shall be demonstrated to the Division. It is the permittee's responsibility to self certify compliance with the conditions. Failure to demonstrate compliance within 180 days may result in revocation of the permit. (Information on how to certify compliance was mailed with the permit.)

3. This source shall be limited to a material handling rate as listed below and all other activities, operational rates and numbers of equipment as stated in the application. Annual records of the actual production rate shall be maintained by the applicant and made available to the Division for inspection upon request. (Reference: Regulation No. 3, Part B, Section II.A.4.)

   Dirt (overburden and aggregate plant rejects) handled shall not exceed 1,530,000 tons per year.

STATE OF COLORADO

Bill Owens, Governor
Dennis E. Ellis, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Denver, Colorado 80230-6928
(303) 692-3090

http://www.cdphe.state.co.us

Colorado Department
of Public Health
and Environment

AIR POLLUTION CONTROL DIVISION CONSTRUCTION PERMIT FINAL APPROVAL SELF-CERTIFICATION FORM

SOURCE NAME: [Insert Company Name] Albert Frei & Sons

FACILITY IDENTIFICATION NUMBER: [Insert AIRS number] 041/0010/001
(The AIRS number is found in the lower left corner of the permit)

PERMIT NUMBER: [Insert Construction Permit Number] 07GI0347F

All information related to the Final Approval certification of the above referenced Initial Approval construction permit must be certified by a responsible official as defined on the attached page. This certification means that each condition of the Initial Approval permit has been reviewed and that the source is in compliance with all conditions of the permit. A Final Approval permit will be issued only if all permit conditions are being met. The attached memo provides guidance on what steps must be taken to certify compliance with various types of permit conditions. This signed certification document must be packaged with the documents being submitted for the request for Final Approval of this permit. A separate Certification along with the associated documentation is required for each individual Initial Approval permit. This includes "dash numbered " permits (e.g. 96LA199-2).

I have reviewed the above paragraph, the attached document entitled "Guidance for Self-Certification", terms and conditions of the initial approval permit referenced above, and the information being submitted for final approval of this permit in its entirety. Based on information and belief formed after reasonable inquiry, I certify that the source is in full compliance with each permit and condition of this initial approval permit, and the statements and information contained in this submittal are true, accurate and complete.

Please note that the Colorado Statutes state that any person who knowingly, as defined in § 18-1-501(6), C.R.S., makes any false material statement, representation, or certification in this application is guilty of a misdemeanor and may be punished in accordance with the provisions of § 25-7 122.1, C.R.S.

Bernard S. Frei — Printed or Typed Name

Sec. — Title

Signature

5/29/07 — Date Signed

4. Emissions of air pollutants shall not exceed the following limitations (as calculated in the Division's preliminary analysis): (Reference: Regulation No. 3, Part B, Section II.A.4.)

Particulate Matter - Fugitive:	26.0 tons per year.
PM10 (Particulate Matter<10 μm) - Fugitive:	9.0 tons per year.

Compliance with the fugitive particulate matter emission limits shall be demonstrated by not exceeding the material handling limit, and by the application of the emission control measures.

5. A Revised Air Pollutant Emission Notice (APEN) shall be filed: (Reference: Regulation No. 3, Part A, Section II.C.)

a. Annually whenever a significant increase in emissions occurs as follows:

For any criteria pollutant:

For sources emitting **less than 100 tons per year**, a change in actual emissions of five tons per year or more, above the level reported on the last APEN submitted; or

b. Whenever there is a change in the owner or operator of any facility, process, or activity; or

c. Whenever new control equipment is installed, or whenever a different type of control equipment replaces an existing type of control equipment; or

d. Whenever a permit limitation must be modified; or

e. No later than 30 days before the existing APEN expires. APEN/s expires five (5) years from the date/s of submittal.

Ram N. Seetharam
Permit Review Engineer

R K Hancock III, P.E.
Construction Permits Unit Supervisor

Permit History:

Date	Action	Description
This issuance	IA	Initial Approval. Issued to Albert Frei and Sons, Inc.

APEN Submittal Log (to be maintained further by the permittee):

APEN Submittal Date	APEN Expiry Date	Renewal APEN to be submitted by	Remarks
April 16, 2007	April 16, 2012	March 17, 2012	

Notes to Permit Holder:

1) The material handling and emission limits contained in this permit are based on the production/processing rates requested in the permit application. These limits may be revised upon request of the permittee providing there is no exceedance of any specific emission control regulation or any ambient air quality standard. A revised air pollution emission notice (APEN) and application form must be submitted with a request for a permit revision.

2) This source is subject to the Common Provisions Regulation Part II, Subpart E, Upset Conditions and Breakdowns. The permittee shall notify the Division of any upset condition which causes a violation of any emission limit or limits stated in this permit as soon as possible, but no later than two (2) hours after the start of the next working day, followed by written notice to the Division explaining the cause of the occurrence and that proper action has been or is being taken to correct the conditions causing said violation and to prevent such excess emission in the future.

3) This source is classified as a:
Minor Source
At a: Minor Facility

4) The emission levels contained in this permit are based on the following emission factors:

Truck haulage (pounds per vehicle-mile-traveled). 7,250 Vehicle-Mile-Traveled/year

Pollutant	EmiFactor	Emission Controls	Cont.Eff. %
Particulate Matter – Fugitive	18.5116	Graveling / Frequent Watering	75.00
PM10 – Fugitive	5.3500		75.00

Material dumping (pounds per ton material handled). 1,530,000 tons / year

Pollutant	EmiFactor	Emission Controls	Cont.Eff. %
Particulate Matter – Fugitive	0.0040	Moist Material	50.00
PM10 – Fugitive	0.0020		50.00

Dozer / Front End Loader operation (pounds per hour of operation). 1,000 hours/year

Pollutant	EmiFactor	Emission Controls	Cont.Eff. %
Particulate Matter – Fugitive	60.0000	Water Sprays	75.00
PM10 – Fugitive	24.0000		75.00

PARTICULATE EMISSIONS CONTROL PLAN FOR MATERIAL PROCESSING ACTIVITIES

THE FOLLOWING PARTICULATE EMISSIONS CONTROL MEASURES SHALL BE USED FOR COMPLIANCE PURPOSES ON THE ACTIVITIES COVERED BY THIS PERMIT, AS REQUIRED BY THE AIR QUALITY CONTROL COMMISSION REGULATION NO.1, Section III.D.1.b. THIS SOURCE IS SUBJECT TO THE FOLLOWING EMISSION GUIDELINES:

a. **Processing Activities** - Visible emissions not to exceed 20% opacity, no off-property transport of visible emissions.

b. **Haul Roads** - No off-property transport of visible emissions shall apply to on-site haul roads, the nuisance guidelines shall apply to off-site haul roads.

c. **Haul Trucks** - There shall be no off-property transport of visible emissions from haul trucks when operating on the property of the owner or operator. There shall be no off-vehicle transport of visible emissions from the material in the haul trucks when operating off of the property of the owner or operator.

Control Measures

1. Material stockpiles shall be sprayed with tacifier-treated watere as necessary to control fugitive particulate emissions.

2. Plant entryway, truck service roads, and areas used in connection with the activities shall be graveled, and watered (with tacifier-treated water) frequently to effectively control the emissions.

3. Vehicle speed on haul roads and service roads shall be restricted to 15 miles per hour. Speed limit signs shall be posted.

4. Activities generating fugitive particulate matter emissions shall be suspended if the wind speed exceeds 30 miles per hour. Activities shall be resumed only after the winds calm down.

GENERAL TERMS AND CONDITIONS: (IMPORTANT! READ ITEMS 5,6,7 AND 8)

1. This permit is issued in reliance upon the accuracy and completeness of information supplied by the applicant and is conditioned upon conduct of the activity, or construction, installation and operation of the source, in accordance with this information and with representations made by the applicant or applicant's agents. It is valid only for the equipment and operations or activity specifically identified on the permit.
2. Unless specifically stated otherwise, the general and specific conditions contained in this permit have been determined by the APCD to be necessary to assure compliance with the provisions of Section 25-7-114.5(7)(a), C.R.S.
3. Each and every condition of this permit is a material part hereof and is not severable. Any challenge to or appeal of, a condition hereof shall constitute a rejection of the entire permit and upon such occurrence, this permit shall be deemed denied *ab initio*. This permit may be revoked at any time prior to final approval by the Air Pollution Control Division (APCD) on grounds set forth in the Colorado Air Quality Control Act and regulations of the Air Quality Control Commission (AQCC), including failure to meet any express term or condition of the permit. If the Division denies a permit, conditions imposed upon a permit are contested by the applicant, or the Division revokes a permit, the applicant or owner or operator of a source may request a hearing before the AQCC for review of the Division's action.
4. This permit and any required attachments must be retained and made available for inspection upon request at the location set forth herein. With respect to a portable source that is moved to a new location, a copy of the Relocation Notice (required by law to be submitted to the APCD whenever a portable source is relocated) should be attached to this permit. The permit may be reissued to a new owner by the APCD as provided in AQCC Regulation No. 3, Part B, Section II.B. upon a request for transfer of ownership and the submittal of a revised APEN and the required fee.
5. Issuance (initial approval) of an emission permit does not provide "final" authority for this activity or operation of this source. Final approval of the permit must be secured from the APCD in writing in accordance with the provisions of 25-7-114.5(12)(a) C.R.S. and AQCC Regulation No. 3, Part B, Section III.G. Final approval cannot be granted until the operation or activity commences and has been verified by the APCD as conforming in all respects with the conditions of the permit. If the APCD so determines, it will provide written documentation of such final approval, which does constitute "final" authority to operate. ***Compliance with the permit conditions must be demonstrated within 180 days after commencement of operation.***
6. **THIS PERMIT AUTOMATICALLY EXPIRES IF** you (1) do not commence construction or operation within 18 months after either the date of issuance of this permit or the date on which such construction or activity was scheduled to commence as set forth in the permit, whichever is later; (2) discontinue construction for a period of 18 months or more; or (3) do not complete construction within a reasonable time of the estimated completion date. Extensions of the expiration date may be granted by the APCD upon a showing of good cause by the permittee prior to the expiration date.
7. **YOU MUST notify the APCD at least thirty days (fifteen days for portable sources) prior to commencement of the permitted operation or activity.** Failure to do so is a violation of Section 25-7-114.5(12)(a), C.R.S. and AQCC Regulation No. 3, Part B, Section III.G.1., and can result in the revocation of the permit. *You must demonstrate compliance with the permit conditions within 180 days after commencement of operation as stated in condition 5.*
8. Section 25-7-114.7(2)(a), C.R.S. requires that all sources required to file an Air Pollution Emission Notice (APEN) must **pay an annual fee** to cover the costs of inspections and administration. If a source or activity is to be discontinued, the owner must notify the Division in writing requesting a cancellation of the permit. Upon notification, annual fee billing will terminate.
9. Violation of the terms of a permit or of the provisions of the Colorado Air Pollution Prevention and control Act or the regulations of the AQCC may result in administrative, civil or criminal enforcement actions under Sections 25-7-115 (enforcement), -121 (injunctions), -122 (civil penalties), -122.1 (criminal penalties), C.R.S.