



Greg Lewicki and Associates, PLLC

11541 Warrington Court Parker, CO USA 80138 Phone: (303) 346-5196 E-Mail: info@lewicki.biz Fax (303)-346-6934

June 30, 2015

RECEIVED

Travis Marshall Colorado Division of Reclamation, Mining, and Safety 1313 Sherman Street, Room 215 Denver, CO 80203

DIVISION OF RECLAMATION MINING AND SAFETY

JUI 10 2015

RE: Revenue Mine, Permit M-2012-032, Amendment AM-1 Adequacy Review #1 Response

Dear Mr. Marshall

Fortune Revenue Silver Mines, Inc. has received your comments and questions regarding Amendment No. 1 for the Revenue Mine reclamation permit. Each of the adequacy items brought to our attention in your May 15, 2015 letter have been directly addressed in-line in this response letter. Additionally, attached to this letter are the revised pages and maps that reflect corrections and revisions from this response.

As of June 2015, the removal of old ore piles in Governor Basin is being conducted under an US Environmental Protection Agency (EPA) 106 Action Order. Therefore, all elements of the Revenue Mine amendment related to activity in Governor Basin have been removed from that application. The remaining adequacy items related to the Revenue portal area are what is addressed in this letter.

Exhibit C — Mine Plan Maps

Maps C-11, C-12, and C-13 have been added to this exhibit. Maps C-7 through C-10 have been removed, and are not part of the EPA Action Order. To avoid confusion, the numbering for these maps has been maintained.

1. The series of mine plan maps does not fully include depiction of a couple features that are important and which should be added to the maps. On the set of maps for the Revenue Mine complex (Map C-1 through C-4), the lacking features specifically are: the underground decline leading from the mill level down to the crushing gallery; and the surface pipe(s) that convey portal discharge water to the mine pond. Please ensure that the upland diversion ditches are shown in their correct locations.

Map C-1 represents the pre-mine conditions for the site, and therefore does not contain any of the structures built as part of mining operations. Map C-11 has been created to show all of the facilities and mill details in greater scale and clarity. Other maps have been clarified as needed to address this adequacy item.

2. Please provide more information about these features that appear on the Revenue Mine area maps (such as Map C-4, for example): the "potentially contaminated concrete lined tailings storage area" near the thickener, and the "temporary wet tailings storage area (unlined)" behind the dry building.

Map C-12 shows the design of the "Potentially Contaminated Concrete Lined Tailings Storage Area". The "temporary wet tailings storage area (unlined)" located behind the dry building and avalanche protection berm is where tailings is stored during the winter when it cannot be safely spread and compacted due to weather. Starting in spring of each year, the tailings from this area is spread out into the lifts required for permanent storage, once all of the snow has melted.

3. On the set of maps for the Governor Basin area (Maps C-7 through C-9), it appears that the features that have been overlaid on the topographic base area "shifted" to the southeast by about 150 feet. This makes the drainages, roads, pads, dump materials (to be removed by excavation), etc., not fit the topographic setting defined by the contour lines. Please correct this discrepancy in a set of revised maps.

All Governor Basin activity has been removed from the amendment.

4. Also, please ensure that when the locations for the set of shifted features are corrected, the proposed permit boundary lines in the Governor Basin area encompass all areas that where the removal of old tails and ore is proposed.

All Governor Basin activity has been removed from the amendment.

5. The cross sections shown on Map C-10 should be examined to ensure their features are integrated with the topography too.

All Governor Basin activity has been removed from the amendment.

6. On the Governor Basin area maps, there are some symbols that are either not identified in the legend, or that are not consistent on the map. Specifically, please identify or explain: the solid purple line (on west side of map) that changes to a purple dash and two dots; the "Revenue Controlled Property" symbol on the map does not match its symbol in the legend; while most roads are dark brown, one appears to be a thin green line; and there is a thin purple dashed line superimposed by a thin green line, possibly a road or drainage. Please clarify or correct these features, by providing brief description and corrected maps.

All Governor Basin activity has been removed from the amendment.

7. Regarding the concrete apron to be installed outside the filter building, please confirm that the narrative on page D-6 mistakenly states that the apron will be sloped to drain to the south, whereas it actually will drain to the north (away from the building) toward the gutter.

The concrete apron will drain to the north. See the revised page D-6.

8. The narrative on page D-15 identifies three "storage areas": the Revenue area, the Atlas area, and the "East end," where tailings and waste rock will be stored (presumably permanently disposed). Please clarify or confirm that the East end storage area will only hold waste rock, and no tails.

No tailings will be stored in the East end storage area. See the revised page D-15.

9. The narrative for Section 7.1 on page D-19 states that mine water drains into waste rock, though this is not the case anymore. Please confirm that all mine water is piped to the lined mine water pond.

Mine water flows via pipe to the mine water pond. See item 29.

10. The narrative for Section 7.2 on page D-20 discusses the Atlas waste pile. Please clarify whether it will be 90 feet high or 60 feet high.

See the revised page D-20.

11. The narrative for Section 8 on page D-24 mentions an ore storage pad to be built. There is no follow-up description of the site preparation or construction details for this pad, though it is required. Detailed drawings that will be provided should include a cross section. Please provide this information.

Map C-13 shows the details of this ore pad. Revised page D-24 now references Map C-13.

12. The narrative for Section 11 on page D-26 mentions the shop and storage building (which also appears on the maps) but there is no description of the stacked sea-cans presently being used on the site for storage, and they are not shown on the maps. Please provide this information.

All of the sea cans that will be maintained onsite are shown on Map C-11. See revised page D-26.

13. The narrative for Section 21 on page D-32 describes the removal of ore from the vein slot, followed by backfilling of the slot with clean waste rock. Please state whether this slot conveys storm water runoff, and if so, how the backfilled material will be stabilized to not erode.

The vein slot does convey runoff. The vein material to be mined from the vein slot is loose rock. The clean waste to be placed in the vein slot upon reclamation will also be loose rock. It is

designed to mimic the pre mine conditions physically, so the erosive conditions will be unchanged. The surrounding talus will be graded over the clean waste rock so that the final surface condition will be the same as the pre mine surface condition.

14. The narrative on page D-33 mentions reopening old portals, but there is insufficient discussion of control of possible discharge, diversion, or the later closure by backfilling. Please provide this information.

All Governor Basin activity has been removed from the amendment.

Exhibit E — Reclamation Plan

15. The narrative states that the Revenue portal, the mill portal and the shop portals currently contain portal doors, but that final reclamation will consist of closure by "backfilling." Please clarify what is meant by backfilling (for example: whether the backfilling will be the installation of stronger steel doors, or replacement of the doors with earthwork, or other method).

The reclamation steps for each portal have been clarified in the permit. See revised page E-5.

16. The narrative provides a backfill measurement of 25 feet, which may be a sufficient distance inby to backfill the smaller shop portals (by earthwork method), however 25 feet is not sufficient for the 30-foot—plus height of the mill interior. Please clarify of revise the description, and describe whether it pertain to the outer building door or the inner mill door.

Backfilling of all portals will be to the surface highwall. In the case of the mill portal, this is the inner mill door. See revised page E-5.

17. Are there two or three shop portals? Please provide dimensions of all of them.

There are three shop portals, two of which are used by personnel, the third is for ventilation. See revised page D-8 for their dimensions.

18. Section 8 covers topsoil. The reclamation plan requires topsoil replacement, and a significant amount of the required quantity is not generated onsite. Since the amount available and the land area to be topsoiled are variable but pertinent to the bond amount, how will the quantities necessary for reclamation be tracked over time?

The Revenue Mine will provide a volume of topsoil stored on site in its annual report to DRMS. See page E-7.

19. Table E-2 on page E-7 shows the areas needing topsoil for reclamation and the amounts needed. However, there are areas shown on the reclamation map as needing topsoil that are not shown on the table. Please clarify and provide figures for all areas.

See revised page E-7.

20. The "mine water perforated pipe" continues to be included in the narrative and map exhibits as a primary mine water conveyance, yet it is no longer the primary structure that is used for conveying (or disposing of) mine water. Please update references to this item in the exhibit narratives (such as in Section 11, for example).

All of the currently approved water conveyance structures at the Revenue portal are unchanged by AM-01. This is due to the ongoing pursuit of long term water treatment and conveyance systems by the operator. See item 29.

21. Please clarify what the earthwork will consist of for removing the sediment ponds. Will it be simply breaching the impoundment dams, fully removing the dams by spreading that dam material, or filling the impoundments up to the top of the dam heights? This earthwork item affects the bond amount.

Sediment Pond 1 will be reclaimed by pushing the embankment into the pond bottom to restore pre mine grades. Sediment Pond 2 will be backfilled with material from general site regarding. Sediment Pond 3 will be reclaimed by pushing the embankment into the pond bottom to restore pre mine grades.

Exhibit F — Reclamation Maps

22. According to the Reclamation Plan in Exhibit E, all affected sloped areas are to be reduced to a maximum 3H: IV gradient. However, the slope gradient shown for Waste Rock Area 3 (East End) on Map F-1 is not 3:1. Please correct this.

Map F-1 has been revised to reflect the 3H:1V slopes in the Waste Rock Area 3.

23. It is permissible for the maps to continue to include the leach pond and the lines leading into and out of it, because they were previously approved for the plan, even though they may not actually be installed. However, please clarify and/or correct these labeled features also on Map F-1: mine water perforated buried pipes to the mine pond, and the perforated pipe crossing in front of the mill filter building.

All water conveyance and treatment items are remaining as is in the permit for the time being. The perforated buried pipes to the mine pond are labeled as Upper Delivery Pipes on Map F-1. The perforated mine water discharge pipes are shown in the correct location on Map F-1.D

24. The topography shown for the road and slope located northwest of the crusher is far steeper than 3H:1V, though this slope should be reduced to 3:1. Please revise the contours to correct this area too.

See the revised Map F-1.

25. The Exhibit E narrative says the compressor building will be removed, yet it still appears on the Reclamation Map F-1. Please clarify or correct the map, for this detail.

The compressors have been removed from Map F-1.

26. Section 10 of Exhibit E states that all access roads will be permanent, but the Atlas access road is not shown (besides by the new bridge location) on the reclamation map. Please show this road on a revised Map F-1.

Map F-1 has been revised to show the road crossing area clearer. Only the crossing will remain; the rest of the Atlas access road will be reclaimed.

27. Map F-1 shows the green "land use boundaries" to delineate areas to be topsoiled and seeded from those that will not be. There are four locations where that boundary is depicted as a double line, which is unclear. These areas are: on the East Waste Rock area by the gabion wall; east of Atlas Creek; a strip of land above and south of the Atlas tailings area; and the area bordering the new (west) bridge. Please clarify this by cleaning up the boundary line or explaining what is meant by the double line.

The revegetation areas on Map F-1 have been clarified.

Exhibit G — Water Information

28. The narrative on page G-7 references Table G-1, but the table does not appear in the exhibit. Please provide this table.

See the attached Table G-1.

29. Primary discharge will be from the mine pond, which will be treated if necessary. As it appears increasingly likely that treatment will be necessary, please describe what treatment options are being considered, whether they will need structures built onsite, and where they may be located.

Fortune Revenue Silver Mines, Inc. is pursuing treatment options as part of addressing the needs of its CDPHE discharge permit. Since these treatment options are varied in size and scope, Fortune does not have sufficient details to delineate the scope of the treatment facilities in the DRMS permit. DRMS will be kept abreast of the selection of the treatment system, and the system itself will be incorporated into the DRMS permit via technical revision once it is selected.

30. Some of the symbols used on Map G-1 cannot be easily differentiated, especially certain similar colors, when the maps are scanned and projected on a computer monitor (as our permit file documents are). On future map revisions, please provide clearer distinction between symbols for diversion ditch basins and streams or channels.

All revised maps have been evaluated for clarity and revised as needed.

31. Map G-1 (Surface Hydrology) does not include the three sediment ponds. Please add these ponds and all related necessary features.

See revised Map G-1.

32. Map G-1B does not show an inlet pipe delivering water to the mine pond.

See revised Map G-1B.

33. Map G-1B does not show the upland diversion ditch above the Revenue Mine portal and filter building in the proper location, as it appears to be too low on the slope.

The upland diversion ditch above the Revenue Mine portal now shows the current location.

34. Map G-1C suffers from the same "shifted features" issue for Governor Basin that was discussed above, under Exhibit C, and should be similarly corrected.

All Governor Basin activity has been removed from the amendment.

35. Map G-1C shows the pond at the toe of the area to be excavated and the collection ditches. Please provide the dimensions of the pond and the ditches. A cross section of the slope and the control structures would be helpful.

All Governor Basin activity has been removed from the amendment.

36. Section 3.4 on pages G-16 and G-17 mentions the old portals in Governor Basin. Please state whether there is any observed seepage or suspected mine pool, and how sufficient precautions will be taken to completely control any exposed water. Please explain whether this water should be directed to the sediment pond or diverted around the control structures.

All Governor Basin activity has been removed from the amendment.

37. The right-hand column of Table G-5 on page G-22 was cut off in the printing of that page. Please provide a full Table G-5.

See the revised pages G-22 and G-23.

38. Revenue Portal discharge is variously described as being conveyed to the mine pond (page G-16) or through the perforated pipe (page 0-25). Please clarify which of these is correct.

Both the mine pond and the perforated pipes are available as portal discharge structures.

39. Map G-10 depicts the two perforated pipes along the toe of the hill slope, and Map G-11 also shows the details of this. Please clarify if this is to be considered the most current plan for the mine water.

See Item 38.

40. Map G-16 and Map G-17 contain the same "shifted features" issue for Governor Basin that was discussed above, under Exhibit C, and both maps should be similarly corrected.

All Governor Basin activity has been removed from the amendment.

41. Detail C of Map G-17 shows the bench trench drains to the southwest. The narrative on page G-30 (paragraph 2) misstates this direction of flow.

All Governor Basin activity has been removed from the amendment.

Exhibit J — Vegetation Information

42. The plant communities in Governor Basin, in Sections 3 and 4 on page J-6, does not contain any explanatory text. There is no vegetation information shown on Map I-J for Governor Basin. Please provide the missing information for this area.

All Governor Basin activity has been removed from the amendment.

Exhibit L — Reclamation Cost

43. As requested under Exhibit E, above, please describe the method of reclaiming the sediment ponds.

See revised pages E-6.

44. Please describe the term "backfilling" for portal closure.

See the revised pages L-2, L-7 and E-5.

45. Please clarify what will be the reclamation of the concrete around and under the thickener.

The thickener and its concrete foundation will be removed during final reclamation activities. See the revised pages L-4, L-5, and L-9.

46. Please list the various type of reclamation equipment anticipated to be used in Governor Basin (for the shaft headframe, sea-containers, concrete slabs, etc.)

All Governor Basin activity has been removed from the amendment.

Exhibit M — Other Permits and Licenses

47. Please update this list, since it should include US Forest Service for the road use, and CDPHE for all of the discharge permitting. You may copy the list provided in Exhibit T on page T-37 if it is complete.

See the revised page M-1.

Exhibit T — Environmental Protection Plan

48. Tables T-1 through T-4 do not appear on the pages where their captions appear (pages 1-19 through T-22). Please provide the missing tables.

Please see the revised pages T-2 and T-11. All table in Exhibit T have corresponding references in the text itself.

49. In the narrative on page T-26 the concrete apron is described. It incorrectly states that it will be sloped to the south away from the building, with a trough along the southern end. It should read "sloped to the north" with a trough on the northern edge.

Please see the revised page T-26.

50. The narrative on page T-28 states that the avalanche path is shown on the Exhibit C maps, but the path is not shown on those maps.

Please see the revised Maps C-2, C-3, and C-4.

Other Agency Comments

All Governor Basin activity other than the installation of secondary escapeway support facilities, has been removed from this amendment. All other activity to take place at Governor Basin will now fall under an EPA 106 Action Order. Therefore the comments provided by the US Forest Service and the Colorado Department of Public Health and Environment about Governor Basin operations are now inapplicable.

Revised Permit Portions

Revised pages	Revised maps
C-1	Maps C-1, 2, 3, 4, 11, 12, & 13
D-6, 7, 8, 20, 24, & 26	Maps F-1
E-1, 5, 6, & 7	Maps G-1 & 1B
G-2, 16, 17, 22, 23, & 26-31	
J-6	Removed Maps
All of Exhibit L	Maps C-7, C-8, C-9, & C-10
M-1	Map F-2
T-2, 11, 26, 59, & 60	Maps G-1C, G-16, & G-17

Please contact GLA or Fortune offices with any questions regarding this adequacy response of any other components of the AM-01 application.

Sincerely,

Ben Langenfeld, P.E.

CC: Fortune Revenue Silver Mines, Inc.

PRE-MINING AND MINING PLAN MAPS

OF AFFECTED LANDS

EXHIBIT C

Mining Maps

<u>Map</u>	<u>Description</u>
C-1	Baseline conditions at Revenue portal
C -2	Phase 1 mining extents at Revenue portal
C -3	Phase 2 mining extents at Revenue portal
C-4	Phase 3 mining extents at Revenue portal
C -5	Shaft surface locations
C-6	Cross sections at Revenue portal
C-11	Facilities details
C-12	Tailings transfer pad
C-13	Ore pad

The above maps are included in Appendix 11 of this application:

uses a number of chemicals and frothers to selectively float various sulfide minerals, which will be skimmed from the surface of the cells and rinsed and dewatered. This concentrate will then be bagged in super sacs for transportation off site for sale. This concentrate will contain primarily all sulfides from the ore, producing a concentrate that is ~2-10% of the original ore feed mass. The concentrate will be fed to highway haul trucks via the mill portal.

A combination of a 26 feet wide thickener and filter press will handle water from the mill. Filter presses will be used to extract water from the tailings, and this water will be recycled in the mill. The tailings will be delivered outside by gravity from the second floor of the filter building, where the filter presses are located. Two bays with concrete foundation exist on the 1st floor where a front end loader will take the tails to the tailings piles for permanent compaction and reclamation. The filter building and thickener are shown on Maps C-2, C-3 and C-4. The filter building is a steel building of dimensions 20 feet x 30 feet x 20 feet high. It will have a 12" thick steel reinforced concrete foundation. The tailings material size is approximately 100-200 mesh and due to the water filter recycling, the water content of the tailings will be approximately 13-16%. This building will have two large garage doors on the north side for tailings removal. From these openings, a backhoe or small loader will load the tailings on a truck, which will deliver the tailings to either the Revenue Waste Pile or the Atlas Waste Pile to the west.

It has been decided to provide a secondary method of containment for tailings in the two center garage bays and also for the reagent room. This will be accomplished by installing a steel bar reinforced concrete apron immediately outside the 3 easternmost doors (two tailings doors and reagent door). This apron will be 58 ft long and nearly 14 feet wide, as shown on the attached apron drawings. The apron will be graded to run slightly to the north, away from the building. On the southern end of the apron, a concrete trough will be installed to dimensions of 2.0 ft wide and 1.0 ft deep. This trough will be covered by a steel grating so that vehicles and the front end loader can travel over the trough. The trough will be graded to the eastern side, where a sump of 4 ft wide x 4 ft long x 6 ft deep will be constructed. A slurry pump will be located at the bottom of this sump, which will be automatically turned on if any liquid or slurry enters the sump. The pipe from the pump will lead to a tee inside the reagent room of the filter building, which can

direct the water to either the 18,000 gallon tailings slurry tank or the 18,000 gallon process water tank.

The concrete apron will have a hydronic tubing system with boiler fired heat to prevent the buildup of ice and snow on the apron and in the trough.

Highway trucks will deliver the chemicals to the site, to the new apron with trough that was added to the outside of the filter building as part of TR-05 in 2014. From this apron, they will be taken to the reagent room in the filter building by small Bobcat or forklift. Approximately 2000 lbs or less of each chemical will be stored on site in factory containers inside the reagent room, as shown on Map C-2.

5. Surface Facilities

The proposed surface facilities are shown on Maps C-2 through C-4. Map C-11 shows the facilities in detail. Minor changes may be made to the proposed layouts during construction; however, construction activities will be confined to the permit area and collection basins. The majority of material excavated underground will be processed in the mill, but about 20% will be hauled out of the mine portal as waste rock to be stored in the waste embankment or sold from the site.

A surface equipment list can be found below in Section 6. The surface facilities at the Revenue Mine include the following items:

- 2 Tailings/waste rock embankments (Revenue Pile and Atlas Pile)
- Temporary waste rock stockpile area
- Ore pad
- Topsoil stockpile areas

- Sediment Ponds #1,#2, & #3
- Mine Equipment storage and maintenance shop building on 12" concrete foundation
- Mine offices and Lunch room on 6" concrete foundation
- Dry room inside mine office building with concrete foundation
- Designated parking and storage areas
- Mine access road (compacted gravel)
- Compressor Building on 6" concrete foundation
- Solid waste storage bins (for trash). Each bin will be 250 gallons in volume.
- 3 Ventilation shafts (proposed and not connected to the surface facility area)
- 2 power poles
- Drainage collection and diversion structures
- Ventilation fan at Revenue portal
- Septic tank
- Filter Building Apron with Collection Trough on 6" concrete foundation
- 1x 10,000 gallon portable diesel fuel tank
- Small sections of 24" wide mine track
- Revenue portal
- Mill Portal
- Underground storage portals (3): Two portals are 32'x 26'; one portal is 8.5x6'
- 2 old historical wooden structures from the 1880's that will not be disturbed
- Retaining Wall east of dry building
- Avalanche deflection berm
- Thickener and piping

7.2 Atlas Waste Rock and Tailings Pile

The Atlas waste pile will have a total capacity of roughly 811,000 tons. There may be jurisdictional wetlands in this area which have not yet been confirmed. Once they are confirmed, either these wetlands will be avoided, thus lessening the capacity of the pile, or a COE permit will be approved prior to their disturbance. It is understood that Fortune will not be allowed to disturb any areas of the Atlas waste pile until the wetlands have been delineated, approved by the COE and if any wetlands are to be disturbed, an approved nationwide or individual permit must be supplied to the DRMS. If the full pile is constructed, this will satisfy the needs of Revenue Mine for an additional 8.1 years at the anticipated production, assuming no waste rock is removed from the site. This waste pile will be constructed on the moderately flat area west of the main Revenue mining area. Prior to construction of this waste pile, the area will be regraded to provide a flat area for the pile and Sediment Pond 1 will be constructed. Due to the size of the pile, and the issues presented by the topography south of the Atlas waste piles, the diversion and collection structures for this pile will be built in stages. This will allow the construction of a diversion ditch in easier to excavate material and on a gentler slope, saving on initial cost. Prior to expanding the Atlas waste pile to full build-out, the new diversion and collection structures will have to be constructed. These two sets of structures can be seen on Maps C-3 and C-4 for the respective stages. The maximum height of the Atlas waste pile will be 60 feet, and therefore a 10 feet wide bench will be placed approximately 50 feet from the toe of the pile.

Both waste pile areas will be stripped of any usable topsoil material prior to disturbance. No topsoil is expected to be encountered in the Revenue waste pile area, but some may be present on the Atlas waste pile area. Topsoil stripped from either area will be placed in the footprint of the other waste pile for storage. Additionally, over the course of the construction of the Revenue waste pile, topsoil will be imported for its reclamation. This topsoil will be stored on the Atlas waste pile area once the wetland issue is addressed and either wetlands will be avoided or they will be subject to an approved COE permit. If necessary, this topsoil will be stored in the Revenue Pile area. Once the Revenue pile is finished, and successfully capped, topsoil for use reclaiming the Atlas waste pile will be stored on top of the Revenue waste pile.

Concentrate will be packed in super sacs and transported to the surface through the mill tunnel via bobcat or fork lift and hauled off site for direct sale using highway trucks. Tailings produced by the mill will be hauled via off-highway truck to the waste piles.

Ore brought to the portal area from outside of the mine is stored on an ore pad built near the dry house and portal. The ore pad will be built on the site of the old lean ore pile. The design specifications of the ore pad are shown on Map C-13.

9. Soil Excavation and Stockpile Areas

The vast majority of the Revenue Mine is in existing disturbance from the historical mining activities that have taken place there. No topsoil was ever salvaged from this past activity. Topsoil will be stripped from any area where it is identified prior to using an area for mining activities. Details of the existing site soils are presented in Exhibit I.

Topsoil on site is available from 3 areas:

1- the low area where Sediment Pond 2 and Mine water Pond 3 will be located. This is estimated as 12 inches over 1.58 acres = 2,550 cy.

2- portions of the Atlas tailings/waste pile. This is estimated as 12 inches over 7.39 acres = 11,922 cy.

3- small area above existing Revenue Pond where the Revenue Pile will be extended to the south. This is estimated as six inches over 0.5 acres = 806 cy.

Therefore, the total salvageable volume of topsoil on site is expected to be 15,278 cy.

This soil will be stripped as required for mine activities at the time when it is needed. As much as possible, topsoil will be directly placed on final waste pile surfaces as they are constructed. If topsoil needs to be stockpiled on site, it will be placed in one of two designated areas. The first area is immediately uphill of Sediment Pond 1. This topsoil stockpile area will be used while the Revenue waste pile is being built. Once the Revenue waste pile is full, an area on the top of the

Additional chemicals will be stored underground in the Mill Tunnel for use in the processing of the ore. The handling, storage and disposal of these chemicals is addressed in Exhibit T and Material Containment Plan of Appendix 10.

11. Mine Equipment Storage and Surface Shop Building

The mine equipment storage and shop will be a 150' x 50' structure located on the east end of the upper bench of the Revenue surface facilities area. It will be constructed on a 6" reinforced concrete foundation. Large surface equipment will be stored and serviced in this structure. The primary storage facility for underground equipment will be the underground storage facilities immediately west of the mill. Both of these storage and maintenance facilities can be found on Map C-11. Several sea cans are being used for storage onsite. They can be seen on Map C-11.

12. Personnel Facilities and Compressor Building

There will be two personnel facilities as part of the Revenue Mine. The first is the mine office and lunch room located just outside the portal. The mine track from the Revenue portal goes through this building. It is a roughly 70' x 40' wood and steel structure on a 6-inch concrete foundation. The second facility is the set of portable dry-room trailers north of the portal. These trailers area each 40' x 10', and do not have a foundation. The trailers are covered with a braced corrugated metal structure for protection. The covering is in poor condition, and will be removed early in the mine's operation. Also, a 6-inch concrete foundation will be installed at the trailer area during operations. Immediately south of this dry-room is a 50' x 20' building that houses the air compressors for the mine; it sits on a 6-inch concrete foundation. All three of these structures are existing buildings on site.

13. Designated Parking and Storage Areas

A gravel parking area will be provided for employees and visitors just northwest and adjacent to the mine offices. Signs will be posted stating that visitors must check in at the mine office. See Map C-11 for location.

14. Mine Access Roads

its way into the mine causing no harm. There is no structure at this shaft location that could be compromised by any avalanche.

As of the end of 2014, the raise bore shaft at Governor Basin (Monogahela shaft) has been installed. It is 8.0 feet in diameter.

18. Surface Drainage Control Structures

Surface drainage will be controlled by a system of collection and diversion ditches as well as sediment ponds. The detail designs for all of these structures, as well as the surface water data used to design them can be found in Exhibit G.

19. Sneffels Creek Intake

Fortune Revenue Silver Mines, Inc. has water rights in Sneffels Creek which are shown in Appendix 2. Fortune Revenue Silver Mines, Inc. may use these water rights through an intake structure placed in Sneffels Creek immediately upstream of the Atlas tailings/waste pile. Up to 1000 gallons per minute may be diverted from Sneffels Creek to a 12" HPDE pipe which can be used in the mining operation, if needed.

20. Temporary Closure

In the event that market conditions or other circumstances require a temporary shutdown of mine operations, Fortune Revenue Silver Mines, Inc. will provide notice to DRMS in accordance with Section 1.13.5 of the Colorado Hard Rock/Metal Mining Rules and Regulations. During non-operating periods, Fortune Revenue Silver Mines, Inc. will maintain the buildings, drainage structures, ponds, roads, and other surface facilities in a safe and environmentally acceptable condition. Underground openings, gates, and buildings will be locked to discourage unauthorized access when mine personnel are not present.

21. Governor Basin - REMOVED

1. General Reclamation Plan

The total permit area for this permit consists of the following sub-areas:

Description	<u>Area</u>	
Revenue waste pile	7.39	acres
Atlas waste pile (including sediment pond 1)	4.64	acres
Operations area	2.35	acres
Lower pond area (sediment pond 2 and mine water pond)	1.37	acres
Slopes between operations area and lower pond area	2.50	acres
Atlas access road	0.66	acres
Equipment Storage	0.37	acres
Undisturbed area	30.56	acres
Revenue portal area	49.84	acres
Shafts	0.46	acres
Other	0.46	acres
Total Permit Area	50.30	acres

Most of the disturbed areas will be reclaimed to a post-mine land use of high altitude rangeland. The Operations Area and the Atlas Access Road will be left for use by the landowner. Map F-1 shows the final reclamation topography and conditions of the site. Map C-6 shows cross sections for the site.

As discussed in the mine plan (see Exhibit D), the site will be partially reclaimed as the waste piles are constructed. The Revenue waste pile will be constructed first, while topsoil for reclamation of it will be stored at the Atlas waste pile location. Then, the Revenue waste pile will be capped with 12 inches of topsoil from said stockpiles and be revegetated. The Atlas waste pile will begin construction at this point, and the topsoil for its reclamation will be stockpiled on top of the Revenue waste pile. This will keep the amount of exposed mine waste to a minimum. Once the

5. Dismantle Buildings and Structures at Portal Area

Reclamation will include the removal of all buildings and other structures. The following structures will be removed at the Revenue Portal area:

- Surface equipment storage and shop
- Old Mine office
- Compressor room
- Thickener and Piping

All of the facilities have a 12 inch concrete foundation. As shown on Map F-1, various structures will remain as part of the post-mine land use.

6. Reclaim Portal Areas

There are three portal areas that will have to be reclaimed at Revenue: the underground storage room, the mill, and the Revenue tunnel portal itself. The reclamation of each portal will proceed in the following manner:

<u>Portal</u>	Rec	clamation steps
Underground storage room (3)	1.	Remove steel doors
	2.	Backfilling with waste rock 50 feet into the tunnel
	3.	Topsoil and seed exposed backfill face
Mill (1)	1.	Remove steel doors
	2.	Backfilling with waste rock 50 feet into the tunnel
	3.	Topsoil and seed exposed backfill face
Revenue tunnel (1)		Install steel bat gate

Backfilling will be conducted via dozer to the surface highwall. No bat survey has been conducted in this area and no bats have been seen in the existing Revenue Tunnel but Division of Parks and Wildlife stated that the installation of a bat gate at this portal was acceptable in their comment letter on the application.

7. Backfill Ponds and Collection Ditches

All sediment ponds will be removed after successful revegetation of the mine areas that drain to it. Map F-1 shows the remaining earthworks for each pond. The ponds will be re-graded to the outside natural ground. The material for pond re-grading will come from the general regrading of the site at the end of mine life. Similarly, the collection ditches will be removed once the revegetation of disturbed mine areas that drain to them is successful.

The mine water pond will remain after reclamation, as shown on Map F-1. Mine water will continue to be delivered by gravity in HDPE pipes to this pond and the pond will discharge into Sneffels Creek.

8. Regrading and Topsoiling

Disturbed areas at the Revenue Mine will either be placed at a final 3H:1V maximum slope or regraded to this sloped. Grading at the Revenue Mine will be accomplished by dozer as much as possible, since most of the regrading will be the simple knocking down of slope crests to 3H:1V. A mine access road will remain after reclamation to facilitate the monitoring of the reclamation process. The ore pad will be buried with tailings prior to the final capping of the Revenue Waste Pile.

Topsoiling of the areas will take place once these areas have had their structures removed and have been re-graded. Topsoil available on site will be limited, and import will be necessary for full reclamation. As the waste piles and lower work area are successfully vegetated, the sediment ponds will be removed. The upper bench of the operations area will be left as a commercial site for the use by the landowner, and therefore will not be topsoiled. Table E-2 shows the topsoil requirements for the entire site. The waste piles will be partially topsoiled and seeded throughout the mine life at the end of each summer; the tailings lifts that are in the final regraded conditions at that point will be topsoiled and seeded.

Topsoil will have to be imported to the Revenue Mine site during the course of operations. In order to prevent a deficit of topsoil from preventing successful reclamation, Fortune Revenue Silver Mines, Inc. will never have a deficit of topsoil (topsoil needed minus topsoil stockpiled on site) of

more than 4,000 cubic yards. This will ensure that reclamation can be conducted as planned, and that the financial warranty for the operation is sufficient. Fortune Revenue Silver Mines, Inc. will certify this balance in its annual report.

Table E-2 Topsoil Import Requirements

Revenue Mine Topsoil	<u>Area</u>	Topsoil Replacement	Tomasil Dominion and (CV)
<u>Needs</u>	(acres)	Thickness	Topsoil Requirement (CY)
Atlas Waste Area	4.63	12 inches	7,470
Revenue Waste	10.21	12 inches	16,472
Non-waste disturbed areas	2.44	6 inches	1,968
Total			25,910

9. Revegetation

Once topsoil is placed on the appropriate locations, the seed mix shown below should be immediately used. It has been developed by the local NRCS office specifically for high altitude rangeland.

Table E-3 Reclamation Seed Mix:

<u>Species</u>	Portion of Mix (%)	Seeding Rate (PLS lbs/acre)
Letterman Needlegrass	15	3.3
Nodding Bromegrass	20	4.0
Slender Wheatgrass	20	4.4
Arizona Fescue	20	1.8
Muttongrass	24.9	0.5
Silver Sagebrush	0.03	0.4
Louisiana Sage	0.01	0.2
Western Yarrow	0.01	0.2
Silvery Lupine	0.05	0.8
Total	100	15.6

The rates above are for dill seeding. Seed application rates will be doubled when using broadcast methods.

Certified weed free hay or straw mulch will be applied after seeding at the rate of 2,000 lbs per acre. This mulch will be applied manually given the restricted access to this site and the undulating surface created by pocking.

(WQCD) records for Sneffels Creek. As further data is gathered over the life of the mine, it will be added to the permit if it has a material impact on mining or reclamation plans.

The closest ground water well is located on site immediately outside of the portal, and is owned by the mine. This well has not been used or monitored in some time. The lack of any ground water well data in the immediate vicinity of the mine is offset by the water monitoring data that has been collected at the Revenue and Atlas portals. For the purpose of ground water analysis at the Revenue Mine, these portal discharges will be used. Surface water sampling at the Revenue Mine has been conducted sporadically since the early 1980s. However, most of this sampling focused only on dissolved zinc, copper, and lead. More recent sampling has tested for a broad suite of total and dissolved metals. All of the old water data can be found in Appendix 3.

1.1 Governor Basin - REMOVED

3.3 Mine Water Discharge Management

Historically, the mine water discharge was not hazardous to the local watershed and wildlife, as proved by the successful WET tests in Appendix 3. The mining operations within Revenue may lessen the quality of water in the mine, therefore Fortune Revenue Silver Mines, Inc. plans on taking steps to improve the mine water discharge quality. Additionally, a portion of the mine water will be used in the mill operations, so cleaner mine water will be beneficial to processing. An analysis of the mine water discharge chemistry and how it will be handled during operations can be found in Exhibit T.

The primary mine water discharge will be from the Mine Water Pond approved in TR 01. This discharge falls under the CDPHE CO000003 permit. Water from the mine will flow through a treatment system (if needed) and out the Mine Water Pond spillway shown on Map G-1B. This spillway discharge is NPDES Outfall 001A for that permit.

Details of the mine water handling system can be found in Appendix 12. This system is designed to safely direct the water from the mine through to an appropriate discharge technique. The treatment technology plan adopted to address the parameters of concern determined in the mine water quality analysis is also discussed in this Appendix.

It is possible that a system for the capturing of water from the Yellow Rose Drift and the Atlas/Cumberland Drift pumping back to old areas of the Virginius workings will be installed. This system is being evaluated as of the 1st quarter of 2015.

3.4 Governor Basin - REMOVED

4. Surface Water

4.1 Existing Water System

Surface water flows in the area of the Revenue Mine are dominated by Sneffels Creek and its drainage basin (Yankee Boy Basin). This drainage basin begins as high as 14,150' (peak of Mt. Sneffels) and is over 3600 acres in size. Much of the drainage basin is above timberline. Immediately north of the mine, Sneffels flows from 700 gpm to over 10,000 gpm depending on the season. These flows are supplied by both surface runoff from the drainage basin and from old open mine workings such as the Atlas Mine. The old mines are all pre-law, and therefore do not have environmental controls in place to protect surface water. However, sampling data from Sneffels upstream of Revenue and Atlas shows that the creek water is usually clean.

The surface water flows at the Revenue Mine all funnel to Sneffels Creek. Sneffels Creek is Stream Segment 9 of the Uncompaghre River basin (Region 10) as designated by the Colorado Department of Public Health and the Environment (CDPHE). Sneffels Creek near the mine alternates between shallow wide sections and very narrow steep areas that are in small canyons of extremely high energy. The stream drops from 10670 feet elevation at the upper edge of the permit to 10580 feet at the bottom of the permit area, over a distance of 2400 feet, therefore the grade is approximately 3.75%. A flume of steeper grade exists just south of the permit area before the Creek reaches Canyon Creek and the Camp Bird Mine. From there, the combined flow meets the Uncompaghre River at Ouray, approximately 5 miles downstream from the mine.

Table G-5 – Zinc Mass Balance Analysis

Mass Balance for Zinc		Atlas Drainage	Sneffels Upstream	Calc. Sneffels Before Seep	Revenue Seep	Atlas Drift	Revenue Mine Water Upstream from Atlas Drift	Yellow Rose Drift	Revenue Mine Water Upstream from Yellow Rose Drift	Calc. Rev. Mine Discharge	Sneffels Downstream	Calc. Sneffels Downstream
Q4 2011		SW-1	SW-2	SW-1 + SW-2	SW-3	UG-3	UG-4	UG-1	UG-2	UG-1 + UG-2	SW-4	SW-1 + SW-2 + SW-3
Flow	gpm	500	1,200	1,700	200			20	195	215	2,000	1,900
Flow	L∕min	1,893	4,542	6,435	757			76	738	814	7,571	7,192
Zinc, dissolved	mg/L	0.63	0.03	0.21	0.13			-	0.37	0.34	0.13	0.20
Zinc, total	mg/L	0.69	0.04	0.23	0.14			-	0.37	0.34	0.14	0.22
Zinc, total	mcg/L	690.00	40.00	231.18	140.00	No Sa	ample Taken	-	370.00	335.58	140.00	221.58
Zinc, dissolved	mg/min	1,192.40	136.27	1,328.68	98.42			-	273.12	273.12	984.21	1,427.10
Zinc, total	mg/min	1,305.97	181.70	1,487.67	105.99			-	273.12	-	1,059.92	1,593.66
Zinc, dissolved	g/hr	71.54	8.18	79.72	5.91			-	16.39	16.39	59.05	85.63
Zinc, total	g/hr	78.36	10.90	89.26	6.36		·	-	16.39	16.39	63.59	95.62

												SW-1 + SW-2 +
Q1 2012		SW-1	SW-2	SW-1 + SW-2	SW-3	UG-3	UG-4	UG-1	UG-2	UG-1 + UG-2	SW-4	SW-3
Flow	gpm		500	500	75	20	50	10	75	85	700	575
Flow	L/min	E E	1,893	1,893	284	76	189	38	284	322	2,650	2,177
Zinc, dissolved	mg/L	, ozo	0.10	0.03	0.14	9.40	0.04	-	0.41	0.00	0.15	0.11
Zinc, total	mg/L	er fi	0.09	0.03	0.14	9.40	0.04	-	0.41	1=1	0.15	0.10
Zinc, total	mcg/L	vat	90.00	26.47	140.00	9,400.00	40.00		410.00	-	150.00	96.52
Zinc, dissolved	mg/min	e c	189.27	189.27	39.75	711.66	7.57	-	116.40	0.42	397.47	229.02
Zinc, total	mg/min	ırfa	170.34	170.34	39.75		7.57	-		1-	397.47	210.09
Zinc, dissolved	g/hr	Su	11.36	11.36	2.38	42.70	0.45	-	6.98	6.98	23.85	13.74
Zinc, total	g/hr		10.22	10.22	2.38	-	0.45	-	-	-	23.85	12.61

										UG-1 + UG-		SW-1 + SW-2 +
Q2 2012		SW-1	SW-2	SW-1 + SW-2	SW-3	UG-3	UG-4	UG-1	UG-2	2	SW-4	SW-3
Flow	gpm	750	3,500	4,250	400	25	150	100	500	600	5,000	4,650
Flow	L/min	2,839	13,249	16,088	1,514	95	568	379	1,893	2,271	18,927	17,602
Zinc, dissolved	mg/L	0.15	0.23	0.54	0.09	14.70	0.11	0.01	0.31	0.00	0.20	0.21
Zinc, total	mg/L	0.15	0.23	0.54	0.09	14.70	0.11	0.01	0.31	0.00	0.20	0.21
Zinc, total	mcg/L	150.00	230.00	539.71	90.00	14,700.00	110.00	10.00	310.00	0.94	200.00	205.05
Zinc, dissolved	mg/min	425.86	3,047.26	3,473.12	136.27	1,391.14	62.46	3.79	586.74	2.13	3,785.41	3,609.39
Zinc, total	mg/min	425.86	3,047.26	3,473.12	136.27	1,391.14	62.46	3.79	586.74	2.13	3,785.41	3,609.39
Zinc, dissolved	g/hr	25.55	182.84	208.39	8.18	83.47	3.75	0.23	35.20	35.43	227.12	216.56
Zinc, total	g/hr	25.55	182.84	208.39	8.18	83.47	3.75	0.23	35.20	35.43	227.12	216.56

		THE RESERVE								UG-1 + UG-		SW-1 + SW-2 +
Q3 2012		SW-1	SW-2	SW-1 + SW-2	SW-3	UG-3	UG-4	UG-1	UG-2	2	SW-4	SW-3
Flow	gpm	250	1,000	1,250	400	25	75	30	200	230	1,500	1,650
Flow	L/min	946	3,785	4,732	1,514	95	284	114	757	871	5,678	6,246
Zinc, dissolved	mg/L	0.32	0.04	0.07	0.15	10.60	0.11	-	0.29	0.00	0.10	0.11
Zinc, total	mg/L	0.39	0.04	0.08	0.15	10.60	0.11	-	0.29	0.00	0.11	0.12
Zinc, total	mcg/L	390.00	40.00	80.88	150.00	10,600.00	110.00	-	290.00	0.91	110.00	119.70
Zinc, dissolved	mg/min	302.83	151.42	454.25	227.12	1,003.13	31.23	-	219.55	0.79	567.81	681.37
Zinc, total	mg/min	369.08	151.42	520.49	227.12	1,003.13	31.23	-	219.55	0.79	624.59	747.62

Notes

- 1. All columns noted as (calculated) are generated based on the appropriate sample data. They are meant for discussion purposes only. Ex: Atlas Drainage (calculated) is generated by using the lab concentration values measured at the Atlas Drainage, but calculating the appropriate flow and zinc mass necessary to generate this concentration AND the zinc mass found in the Sneffels Downstream samples.
- 2. The Atlas Drainage did not have flow during the Q1 2012 sampling.
- 3. All flow measurements are visual estimates from the mine sampler, John Trujillo or Martin Pitz

Table G-6 Storm Data

100-YR Rainfall	3.2 inches
25-YR Rainfall	2.8 inches
10-YR Rainfall	2.2 inches

Stormwater event rainfall from NOAA Atlas 2 Precip-Frequency Atlas of the Western US Volume III-Colorado

4.5 Sediment Pond Designs

The discussion below applies to **Sediment Ponds 1-3** at the Revenue portal area:

The ponds will all be temporary structures, and therefore must be able to hold the 10-YR, 24-HR runoff while either holding the 25-YR or passing it safely through an emergency spillway. Maps G-2, G-3, and G-4 show the pond design details, including stage-storage curves, plan views of the ponds, and spillway designs. As shown in Table G-7 below, all of the ponds can contain the 10-YR and 25-YR events. For this reason, there is no flood routing demonstration of the emergency spillways, but there are designs for these spillways in case a much larger event occurs. This goes beyond the design requirements but has been employed regardless.

The ponds will each have two discharge devices: 1) a 4" pipe with a valve that is normally shut and will only be opened after large storm events and 2) a trapezoidal emergency spillway built into the top of the embankment. These ponds will only be present for the life of the mine. After such time as the reclaimed vegetation is deemed to be adequate, the drainage areas leading to the ponds will be fully reclaimed. It is important to note that these areas are now almost devoid of vegetation so that Fortune Revenue Silver Mines, Inc. will be significantly improving the long term reclamation of the site and lessening the sediment contributions to Sneffels Creek.

Sediment Pond 4 - REMOVED

Table G-7 – Pond Capacities

Pond	Stormwater	10-YR Event	25-YR Event	100-YR Event	Pond
	Basin	Runoff	Runoff	Runoff	Capacity ¹
Sediment Pond 1	SWB-6	0.55 ac-ft	0.84 ac-ft	1.05 ac-ft	1.06 ac-ft
Sediment Pond 2	SWB-7	0.39 ac-ft	0.66 ac-ft	0.87 ac-ft	1.59ac-ft
Sediment Pond 3	SWB-8	0.07 ac-ft	0.15 ac-ft	0.21 ac-ft	0.48 ac-ft
Sediment Pond 4	REMOVED				

¹Measured at the emergency spillway.

4.6 Site Discharges

There are three discharge from sediment ponds. These are Outfalls 001,002, and 003 in the CDPHE Discharge Permit. All sediment ponds will be designed to fully contain the 25-YR 24-HR storm inflow from their respective drainage areas and will only discharge when a very large event occurs. For normal operation, the 4" primary spillway pipe will remain closed and will only discharge when the water passes the CDPHE discharge limits. This is expected to be within 72 hours of any storm event. The ponds will be emptied as soon as possible following a storm event to maximize available capacity for future events.

As described above, Pond 4 will not have any discharge and is not subject to a CDPHE permit.

4.7 Surface Water Control System Construction Timeline

The table below dictates when in the Revenue Mine's operation what sediment control structures will be built, and what map that situation can be seen on.

Table G-8 – Construction Timeline

Map	Structure Built	Stage of Project	
C-2	Diversion ditches 2 & 3; Collection Ditches 2,3, & 4;	Preparing site for mining;	
	Sediment Ponds 2 & 3; Hay bales placed south of	Regrading Revenue waste slope	
	Sediment Pond 2.		
C-3	Initial Diversion Ditch 1; Initial Collection Ditch 1;	Preparing Atlas waste pile area;	
	Sediment Pond 1	Finishing Revenue waste pile	
		area	
C-4	Diversion Ditch 1 & 1B (final location); Collection Ditch	Expansion of Atlas waste pile	
	1 (final location)	to final footprint; Revenue	
		waste pile capped and vegetated	
		by this point.	

4.8 Governor Basin – REMOVED

5. Maps

The following is a comprehensive list of the hydrology related maps for the Revenue Mine.

Hydrology Maps

	•
<u>Map</u>	Description
G-1	Surface Hydrology
G-1B	Mine Area Surface Hydrology
G-1C	REMOVED
G-2	Sediment Pond 1
G-3	Sediment Pond 2
G-4	Sediment Pond 3
G-5	Ditch Designs
G-6	Embankment Design
G-7	General Half Culvert Designs
G-8	Diversion #3 HDPE Inlet
G-9	Diversion #3 HDPE Profile
G-10	Mine Water Plan
G-11	Mine Water Site Plan
G-12	Mine Water Plan Cross-Sections & Details
G-13	Weep Line Trench
G-14	Well Installation and Cross Sections
G-15	Monitor Well Installation Details
G-16	REMOVED
G-17	REMOVED

6. Revenue Water Balance

The Revenue Mine ground water and surface water system can best be described using a water balance diagram showing how the water systems of Revenue will interact with the existing water system on site. The values in Figure G-1 are based on rough water flow proportions extrapolated from Q4 2011 and Q1 2012 measurements and input from Revenue personnel. The flows will vary dramatically from season to season, as seen in the historical data found in Appendix 3. Since the source of ground water in the mine is snow melt water passing through fracture systems in the mountain above, there may be lag time between changes in surface water flows and the ground water flows.

Engineers. Maps C-1, C-2, C-3 and C-4 all show the current delineation of wetlands and waters of the US. This is not expected to change. The detailed delineation report is included in Appendix 9. Although the revised DRMS application of October 2012 shows that the low lying wetlands around the old mine buildings will not be disturbed, Fortune Revenue Silver Mines, INC. will submit a Nationwide permit to the US Army Corps of Engineers to disturb 0.49 acres of this area in case a mine pond needs to be constructed there. This is not part of the current plan, as shown on the maps in this revised application to the DRMS. The Pre-Construction Notice for this application is also included in Appendix 9. Mitigation to disturb this small area may come from creating new wetlands downstream of Ouray on the Uncompaghre River or may come purchase wetlands from a bank on the upper Gunnison River to offset disturbance as part of mining. This or any other USACOE permits that are necessary for the disturbance of jurisdictional wetlands will be added to Appendix 9 when acquired. The results of the Delineation Report will not have any effect on the mine operation or the reclamation plan since there is no room to construct any new wetlands on the site.

3. Governor Basin - REMOVED

1. Introduction

As shown on Map F-1, Reclamation Plan, the site will be restored to high altitude rangeland, and some commercial area around some of the buildings that will remain. The worst case reclamation scenario at the Revenue Mine will take place early in the mine life, when the entire Revenue waste pile is opened up and the 4.53 acres of Atlas pile has also been opened. It is shown on Map L-1. Also, the additional disturbance in the lower storage area of 0.37 acres will be utilized. It is expected that the worst case reclamation scenario will occur when the areas described above are opened, but no topsoil has yet been imported for the reclamation. It is assumed that the underground development for the mill and additional underground storage will be completed at this point. It is at this time in the mine's life that the greatest amount of earthwork needs to be conducted for successful reclamation.

2. Worst Case Reclamation Details

The bond estimate is based on the following details. Table L-1 shows the bond estimate.

- Grading all of the disturbed areas steeper than 3H:1V to 3H:1V. The retaining wall near the dry building will be bulldozed and backfilled as part of the reclamation process. All wood and steel will be removed from the site.
- The thickener and its concrete containment will be removed for reclamation. The "TH' drawings included in Appendix 17 show the details of the thickener, its supports and its concrete foundation.
- Topsoil required is based on the areas and replacement thicknesses shown on Map L-1. The operator will document the importation of topsoil in the Annual Reports to the Division.
- All topsoil areas will need to be seeded and mulched.
- The underground storage portals and mill portal will have to be backfilled with an MSHA seal, and a bat gate will be installed on the Revenue tunnel portal.
 - o See Table E-1 in Exhibit E for a detailed description of portal closure.

- All chemicals used in the mill will be removed and properly disposed of off-site.
- Table L-2 shows a breakdown of what structures are being removed and what are remaining

3. Topsoil Replacement Area

Atlas area	=	4.53 acres
Revenue Pile area		10.21 acres
Mine water pond remaining behind		-0.35 acres
Northeast rangeland area		0.97 acres
Southeast rangeland area		1.06 acres
Total area to be topsoiled	=	16.42 acres

Table L-1 shows the bond estimate for topsoiling the areas listed above.

Table L-1: Worst Case Reclamation Cost Summary

Task#	Description	Quantity	Unit	Un	it Cost	Cost		Time Needed (Months)	Time Needed (Years)
	Grade all disturbed areas steeper than 3H:1V. Leave all three			ĺ					
1	sediment ponds until reclamation is satisfory then remove them.	47,000	CY	\$	0.65	\$	30,550	6.0	0.50
2	Topsoil of regraded waste pile areas and all other rangeland areas to a depth of 6 inches. This is a volume of 23,780 cy. Since there is 3045 cy available on site, the remaining 10,200 cy of topsoil will be imported.	3,045	CY CY	\$	1.40	\$	4,263	3.0	0.25
	Seed all topsoiled areas with high altitude seed mix from reclamation	10,200	CI	Þ	13.00	⊅	153,000	3.0	0.25
3	plan.	16.42	acres	\$	780	\$	12,808	1.0	0.08
4	Mulch all seeded areas at 2000 lbs/acre	16.42	acres	\$	250	\$	4,105	1.0	0.08
	Backfill underground storage and mill portals. <u>Undergorund storage</u> Two portals at 32'x26'x50' One portal at 8.5'x6'x25' <u>Mill</u>								
5	One portal at 30'x35'x50'	5,073	CY	\$	1.40	\$	7,102	2.5	0.21
6	Reinforce gate at Revenue Mine portal				·	\$	3,000	0.5	0.04
7	Weed Control					\$	1,200	0.2	0.02
8	Structure Removal (See Table L-2)					\$	89,700	1.0	0.08
9	Half-Culvert Removal					\$	7,840	0.1	0.01
10	Mobilization					\$	13,000		
	Subtotal Direct Costs					\$	326,568		
	DRMS Overhead 28%					\$	91,439		
	Total Bond Estimate					\$	418,007	15.3	1.28

Table L-2: Building Inventory and Cost Summary of Building Removal

#	Structure	Construction	Foundation	Permanent	Post Mine Use	Reclamation Cost
1	Office/Dry Building	2 story	6" concrete slab/w rebar	Yes, but remove certain inside items	Storage	\$ 2400
2	Filter Building	2 story 6" concrete walls	12" concrete slab/ w rebar	Yes, but remove inside equipment	Storage	\$ 4000
3	500 gal Water Tanks (4)	Plastic 500 gallon tanks	None	No	None	\$ 600
4	Snow Shed/Battery Charger Bldg	45' x 120' with track with metal siding	6" slab concrete	Yes, but remove inside equipment	Storage	\$ 1400
5	Crusher Retaining Wall	28 ft long x 16 ft high	Wood beams and steel beams	No	None	\$ 4000
6	Septic Tank/Septic Field			Yes	None	\$ 0
7	Access Road Retaining Wall	100 ft long gabions	None	Yes	Site Access	\$0
8	Miscellaneous Surface Cleanup	Various materials on site	None	No	None	\$ 3500
9	8000 gal diesel tank	Steel tank on skids	None	No	None	\$ 500
10	Propane Tanks		None	No	None	\$ 300
11	Mine Equipment Storage/Shop	145' x 50' Quonset Hut	6" foundation to be covered/reclaimed	Building No, Slab Yes	None	\$ 2000

12	Switchgear Building	25' x 30'	Concrete slab	Yes	Electrical use	\$ 0
13	Misc pipes, Structures, materials			No		\$5000
14	Remove Thickener, Foundation and Piping	26' diameter x 8 ft high steel structure on steel beams	1692 sq ft foundation plus 4 ft high walls plus footers for beam supports	No	None	\$23,000
15	Remove 3 shaft superstructures and foundations	16' high x 12' x 12' steel structure on steel beams with corrugated metal housing in Quonset hut	12' x 12' x 1' foundation and two sea-cans	No	None	\$43,000
	Total					\$89,700

The following additional permits and environmental plans are needed for the site:

- 1. Ouray County Permit Mining in Ouray County is use by right, and therefore no permit is necessary. Ouray County has confirmed this with the applicant in writing.
- 2. Colorado Discharge Permit System process water and storm water discharge permits issued by the Water Quality Control Division of CDPHE. A stormwater management plan and material containment plan will be prepared in conjunction with these permits
 - a. CDPHE Mine Water Discharge permit CO0000003
- 3. Air Pollution Emission Notice for Fugitive Dust construction permit issued by Air Pollution Control Division of CDPHE.
- 4. MSHA ID# 0503528
- 5. A Spill Prevention, Control and Countermeasure (SPCC) Plan will be prepared in accordance with 40 CFR, Part 112 of federal regulations for storage of fuel and oil on site.
- 6. USACOE Wetland Delineation Certification This will be added to the permit when it is available

Revenue seep (SW-3). Ground water samples have been taken within the Revenue mine starting from just inby the Atlas Drift (UG-4), a sample of the Atlas Drift (UG-3), where its water joins with the Revenue mine water, the mine water inby the Yellow Rose Drift (UG-2), and the Yellow Rose Drift itself (UG-1). All of the locations for the underground and surface sample points are shown on Map G-1. Additional discussion of the surface and ground water regimes are discussed in Exhibit G.

The Revenue Mine water has been subject to CDPHE discharge permits in the recent past and some of this data is available, included in Appendix 3. Additionally, a recent compilation was conducted for some of the available past data. This data was analyzed in terms of parameters that have CDPHE discharge permit limits to determine past water quality compliance with current permit limits. This data compilation is shown below in Table T-1. Note that parameters with concentrations highlighted in red are of a level higher than the current permit limit.

Data collected from 2011 until 4th quarter of 2014 is included in Appendix 4.

isolated to ensure compliance with the CDPHE discharge permit. A full compilation of all water sampling data collected through Q4 of 2014 can be found in Appendix 4.

Because zinc has been determined the ion of most concern in the water leaving the mine historically, it is discussed in further detail. This discussion is based on initial analysis of mine water data collected in the first year of sampling. Figures T-1, T-2, T-3, and T-4 show how these different points of water flow interact and Table T-3 shows the flows, concentrations of zinc, and the calculated mass flow balance of zinc for this system. The mass flow rate at each sample point is calculated from the measured flow and the lab results for concentration of dissolved and total zinc.

Based on the mass flow balance calculations shown in Table T-4 for Q4 2011, it was determined that the Sneffels Downstream values (63.59 g/hr) did not reflect the known contributions of zinc added together (Atlas Discharge + Upstream Sneffels + Revenue Seep = 95.62 g/hr). It was off by ~33%. Q1 2012 cannot be effectively analyzed regarding surface water flows, since the Atlas Discharge did not have a surface flow due to the harsh winter conditions, therefore, it was not sampled, but it is believed that considerable water was flowing in the gravel below the surface. We know that the source of this water, the Atlas portal higher on the mountain, flows all year. It is by far the largest surface water contributor of zinc known in this system.

As shown in Table T-3 below, the proportion of zinc mass and the water flow that each upstream sample point contributes to the whole is shown. The primary zinc source in Q4 2011 and Q3 2012 was SW-1, the Atlas drainage. In both of these cases, the flow from the Atlas drainage was dwarfed by the flow in Sneffels itself (SW-2). This aligns with the understanding that the Atlas Mine encountered high zinc sulfide concentrations in its operation, and therefore its discharge is zinc laden. However, in Q2 2012 the primary zinc contributor was Sneffels Creek itself. This sample was taken at a high flow time of year (SW-2 flow of 3500 gpm), much higher than the next highest sample flow (Q4 2011 SW-1 flow of 1200 gpm). The zinc mass flow rate is also magnitudes higher between these two samples (182.84 g/hr versus 10.90 g/hr). Fortune Revenue Silver Mines, Inc. believes that the source of the tremendous additional zinc contribution in high flow times of the year is from other abandoned mines upstream, where large snow melt infiltration has generated discharges from mines that are dormant the rest of the year.

thickener. These are 1) the tank itself, 2) the concrete secondary containment and 3) the sediment pond capture system.

Since the thickener and pipe structure will be removed for reclamation, there is a bond increase, which is included in the revised Exhibit L.

1.3.2 Item 2 - Inclusion of Concrete Apron, Trough, Sump and Pump in front of Filter Building

As of December 2014, there are four large garage doors in the filter building. The two in the middle are where the tailings from the filter presses drop down and are loaded with the small front end loader. The door to the left of these two, on the east side of the building, is the reagent room door, where the reagent chemicals are loaded into the room and empty containers are removed and taken back to the manufacturer for re-loading. The door on the far west side is used for access to the underground mill. See Exhibit D for the details of these facilities.

The estimated soil salvage volumes are given in Exhibit D. The plans for this stockpiling are also explained in Exhibit D. All stockpiles will be seeded with the mix described in the Reclamation Plan once the piles are established. The process of spreading, grading, and harrowing the topsoil prior to reseeding has been described in the Exhibit E – Reclamation Plan. Some topsoil will need to be imported over the life of the mine in order to make up for the lack of salvage when the site was disturbed in the past. To achieve the reclamation plan, an area around the access road and buildings will remain for commercial use. Non-tailings areas will get 6 inches of topsoil. Tailings areas will get 12 inches of topsoil.

This commitment for topsoil will greatly improve the site over its current unreclaimed condition.

18. Wildlife Protection

Most of the land in the permit area has been previously disturbed. Through ongoing reclamation of tailings piles, land will be reclaimed to high altitude rangeland, thus increasing the wildlife value over the current status. As described in the reclamation plan, the site will be fully reclaimed to high altitude rangeland once the mine is closed, with the exception of a small portion of the area left where the main buildings are located for commercial use after the mine is closed.

The main Revenue Tunnel will be left with a bat gate for bat habitat. The Colorado Division of Parks and Wildlife commented in their evaluation letter to the DRMS that this was acceptable.

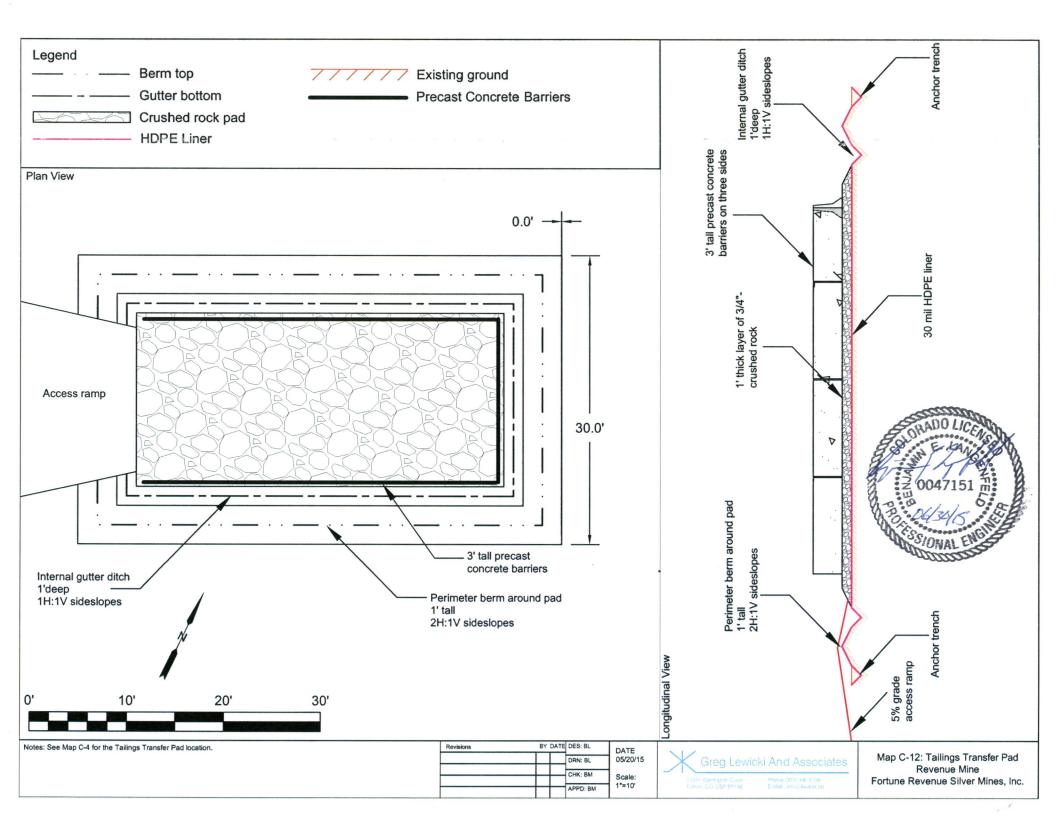
19. Governor Basin - REMOVED

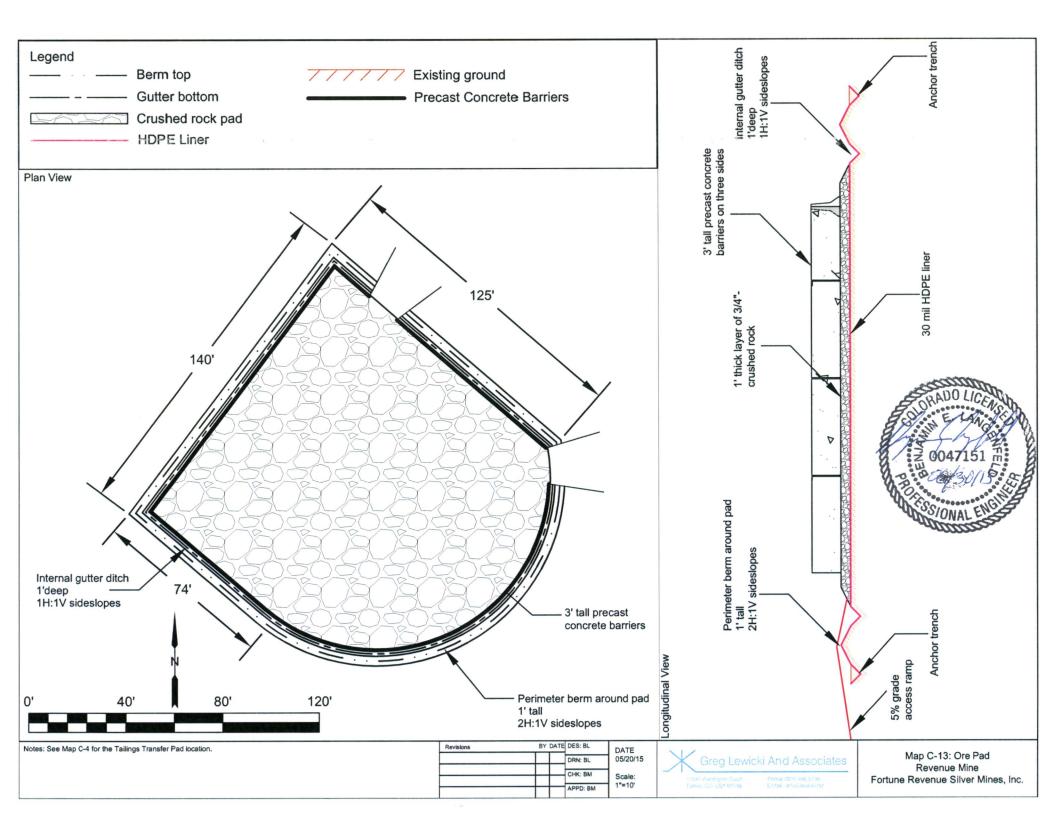
19. Works Cited

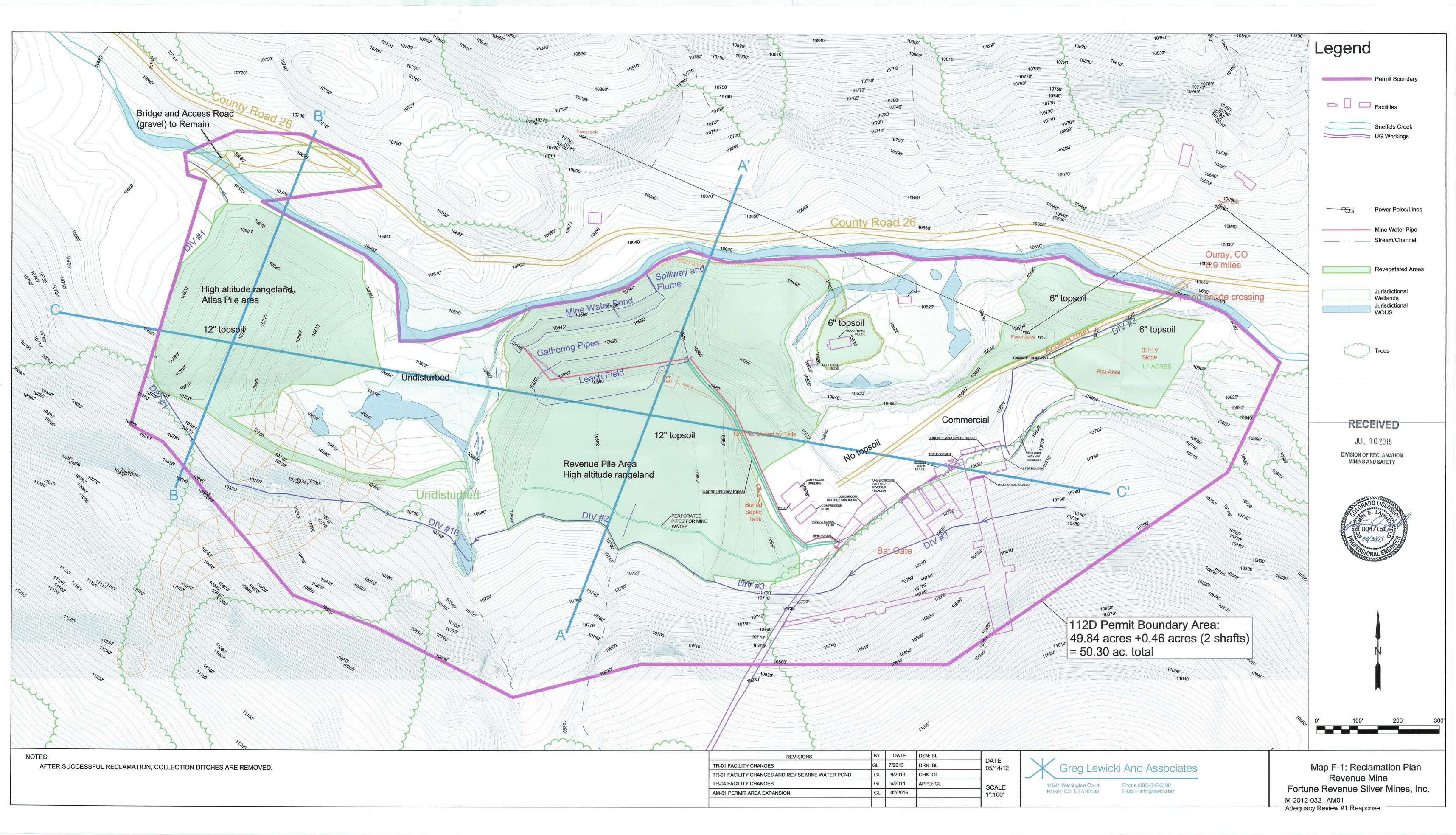
Colorado Department of Public Health and Environment. (2013). Water Quality Assessment of Sneffels Creek.

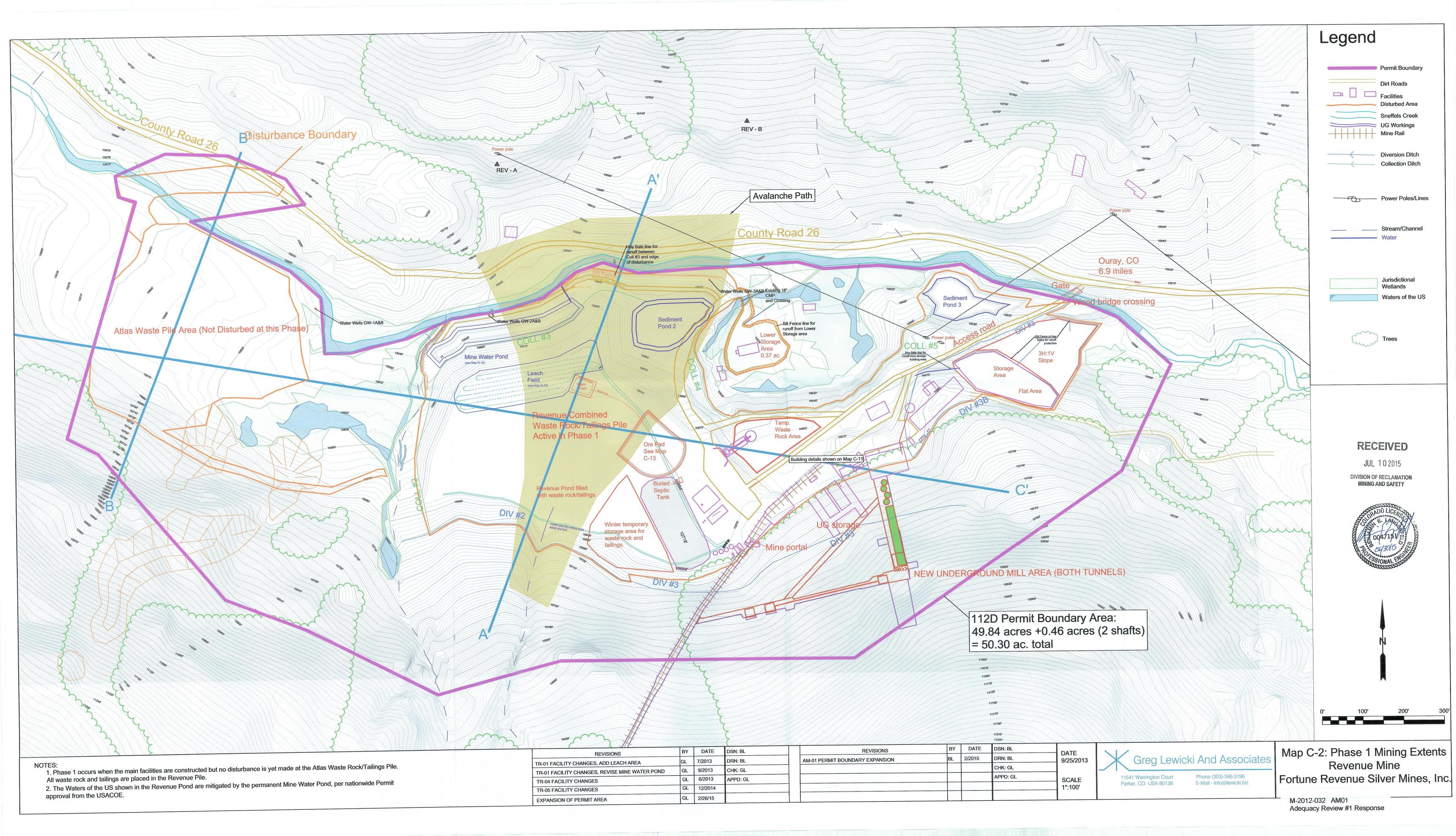
Fact Sheet for Modification No. 1, Fact Sheet for Modification No. 1 (2014).

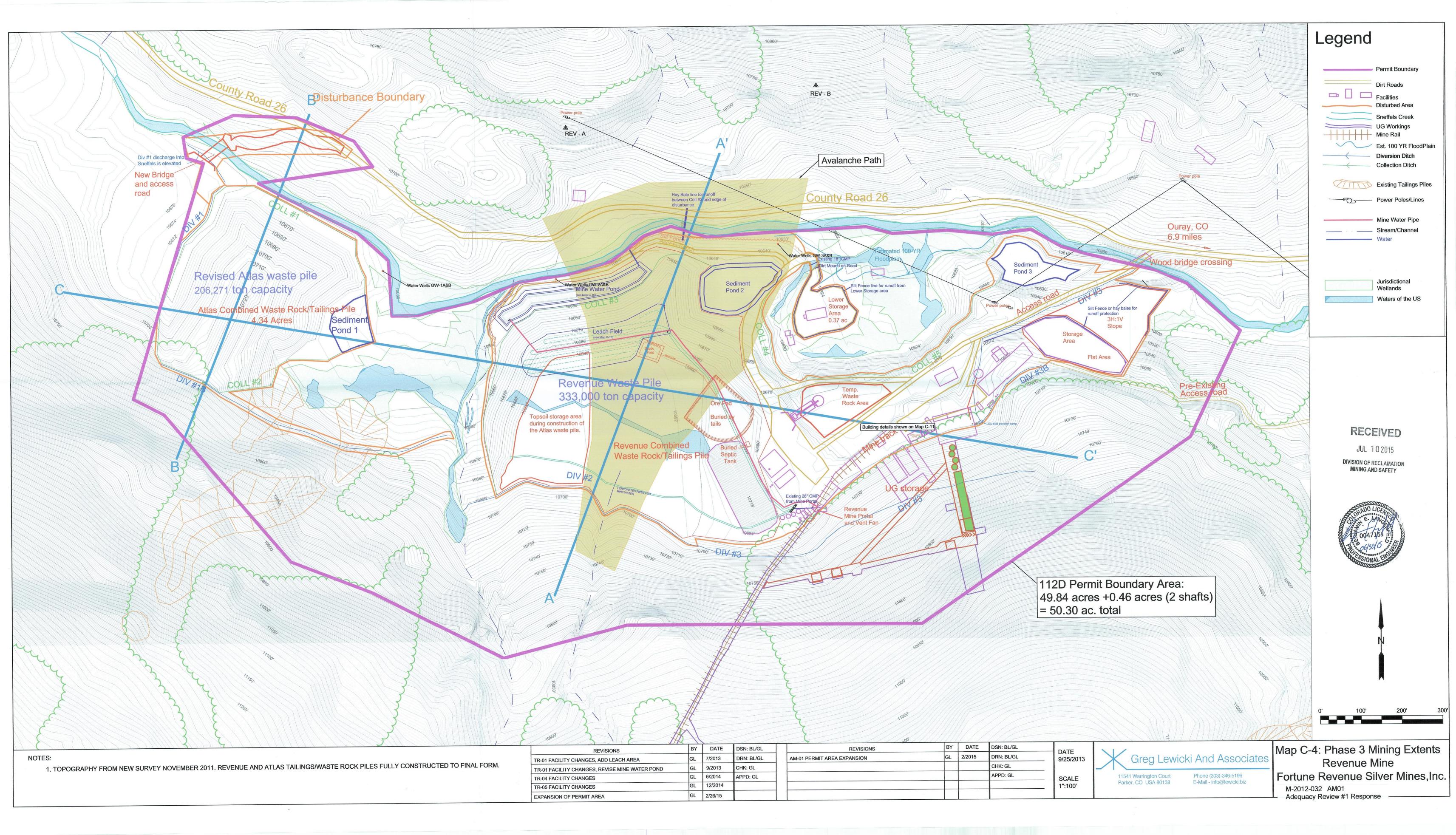
Revenue Mine Discharge Permit Modification No. 1 (March 28, 2014).

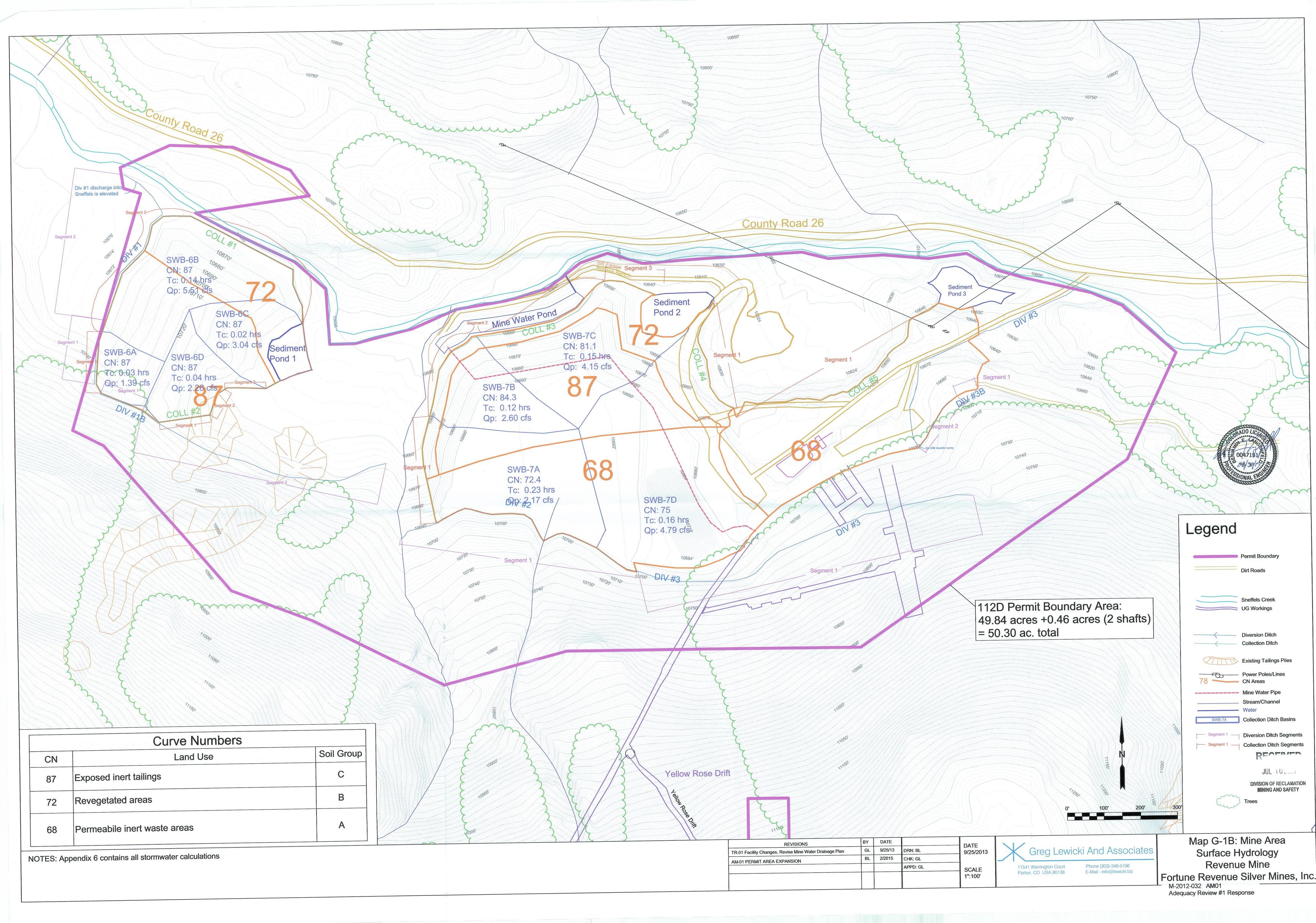


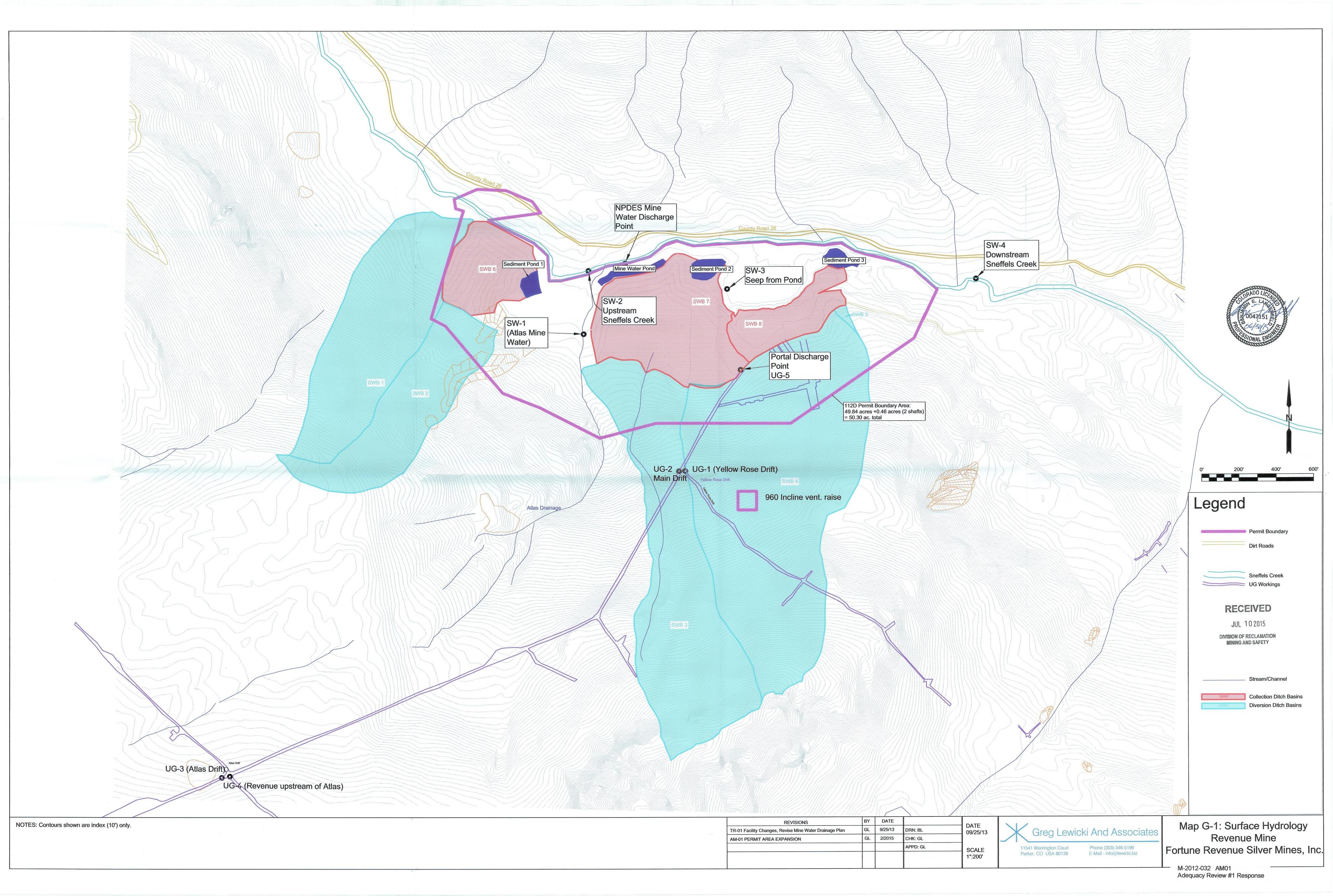


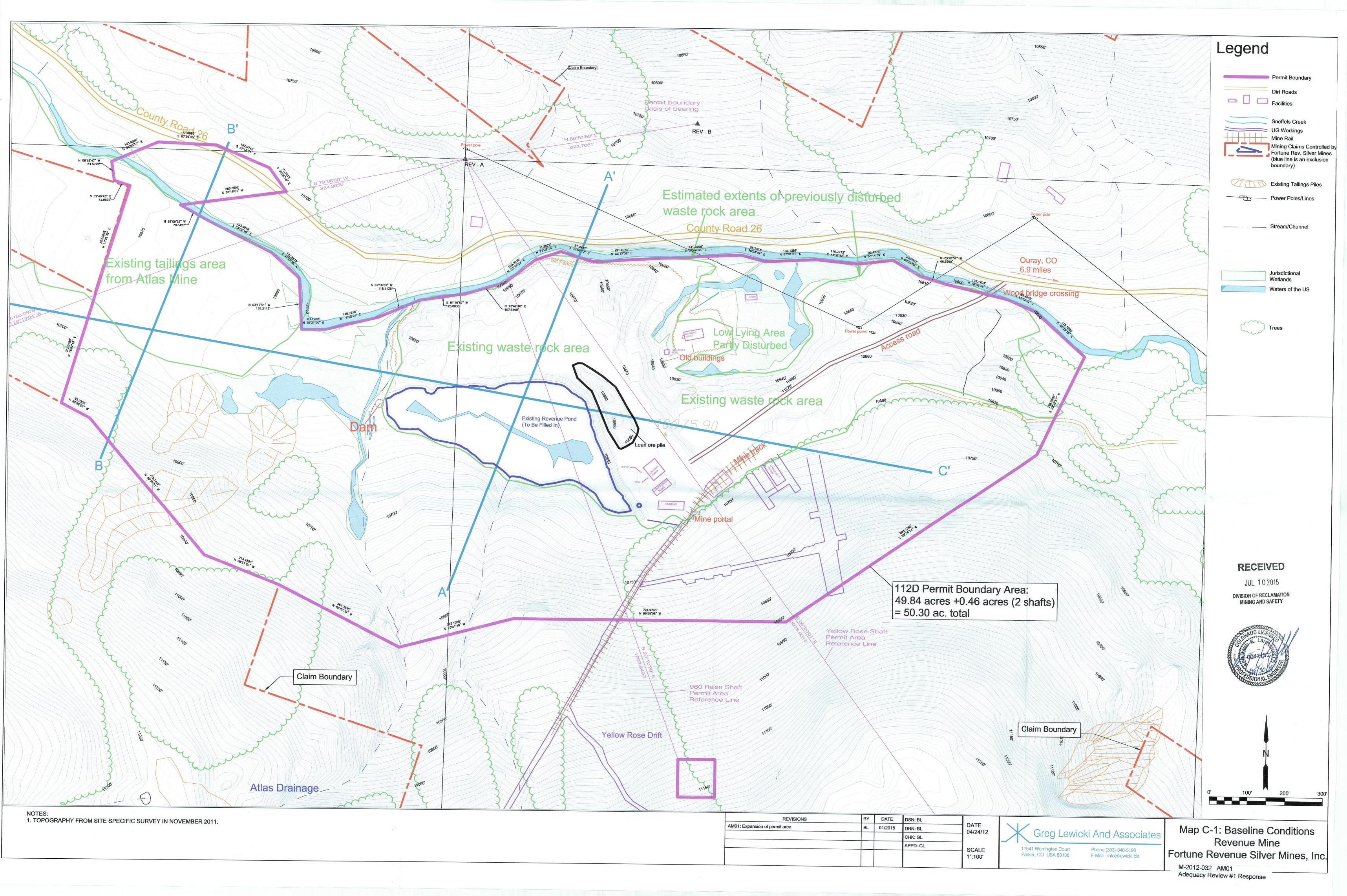


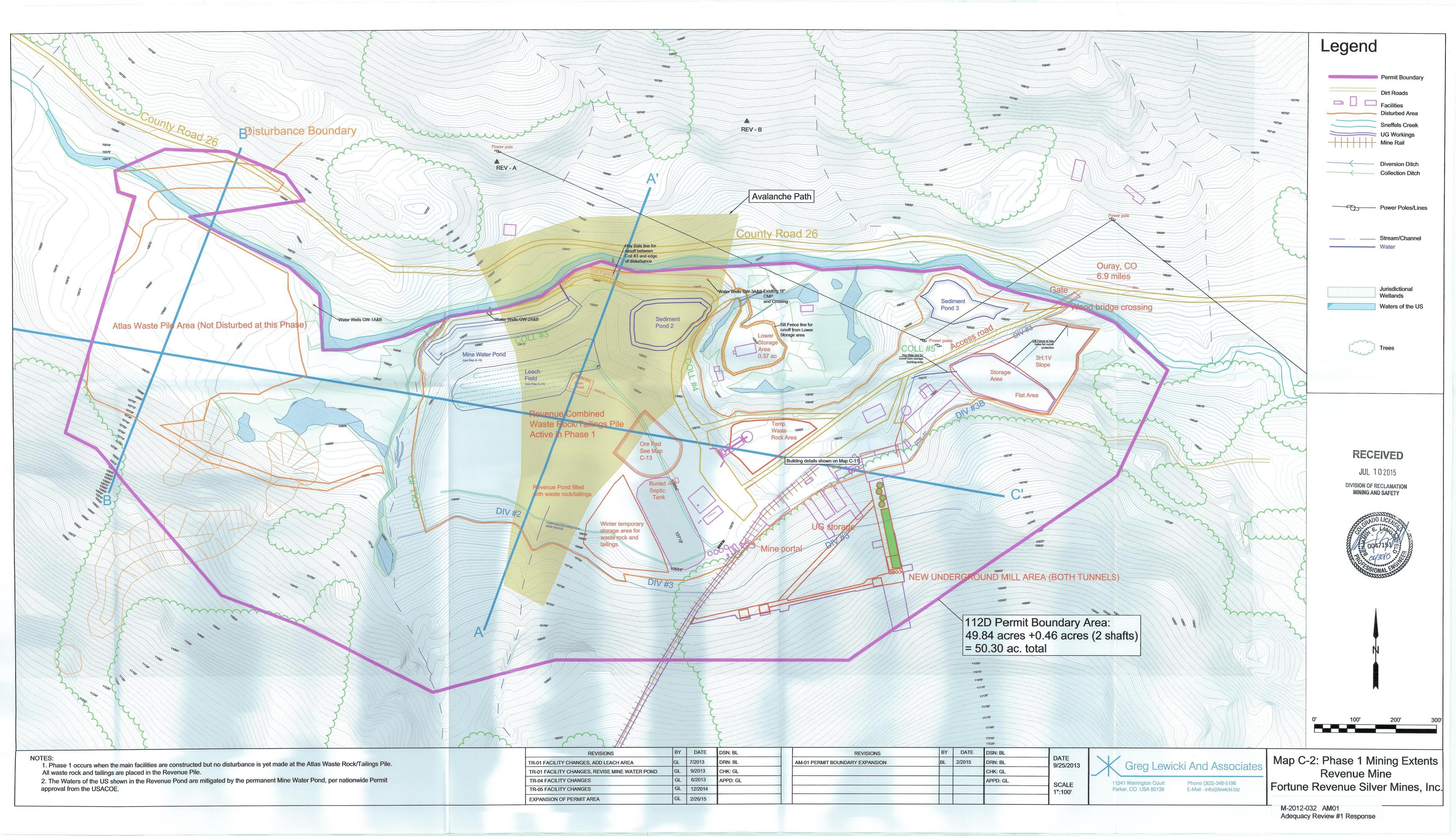


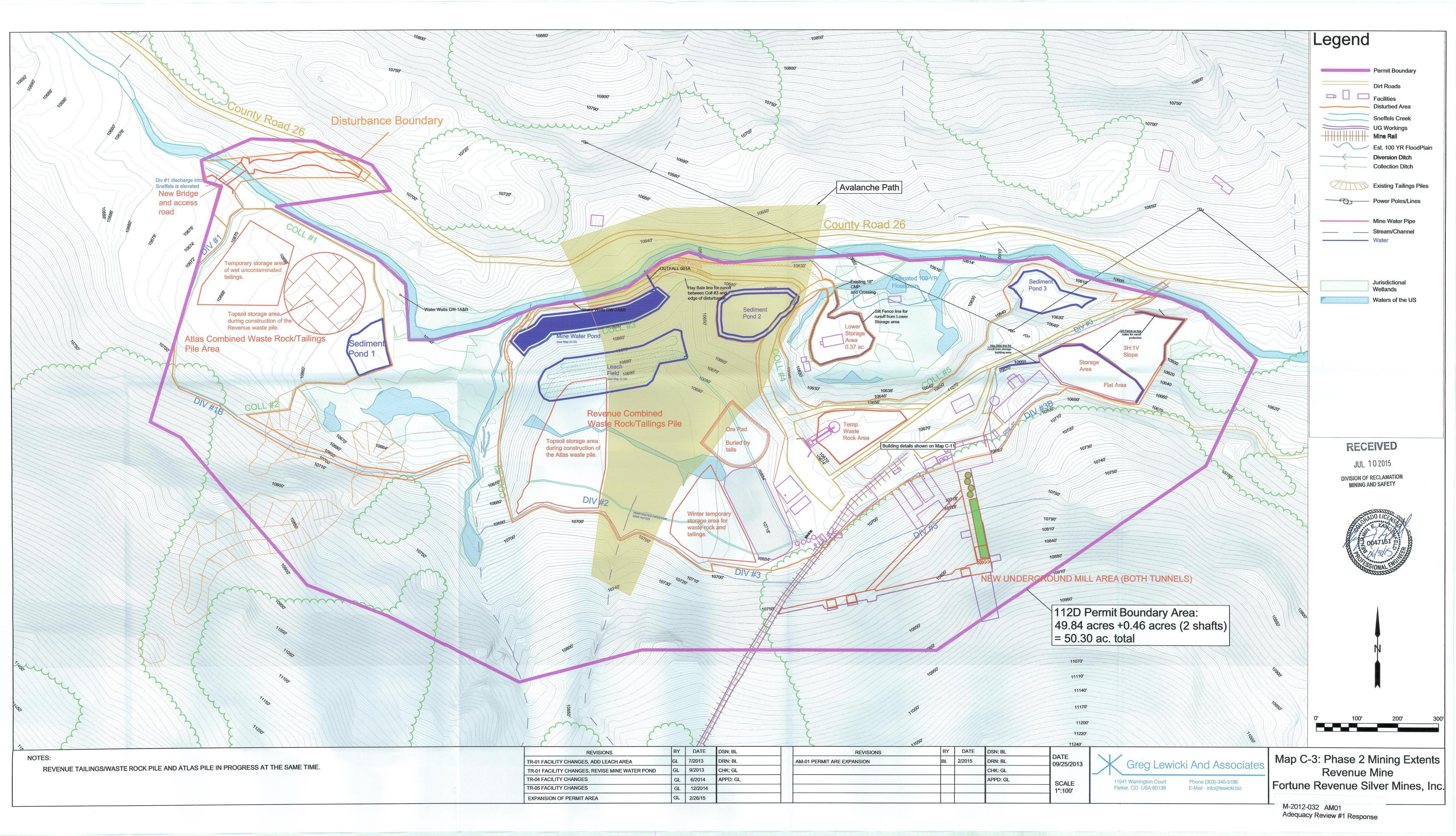


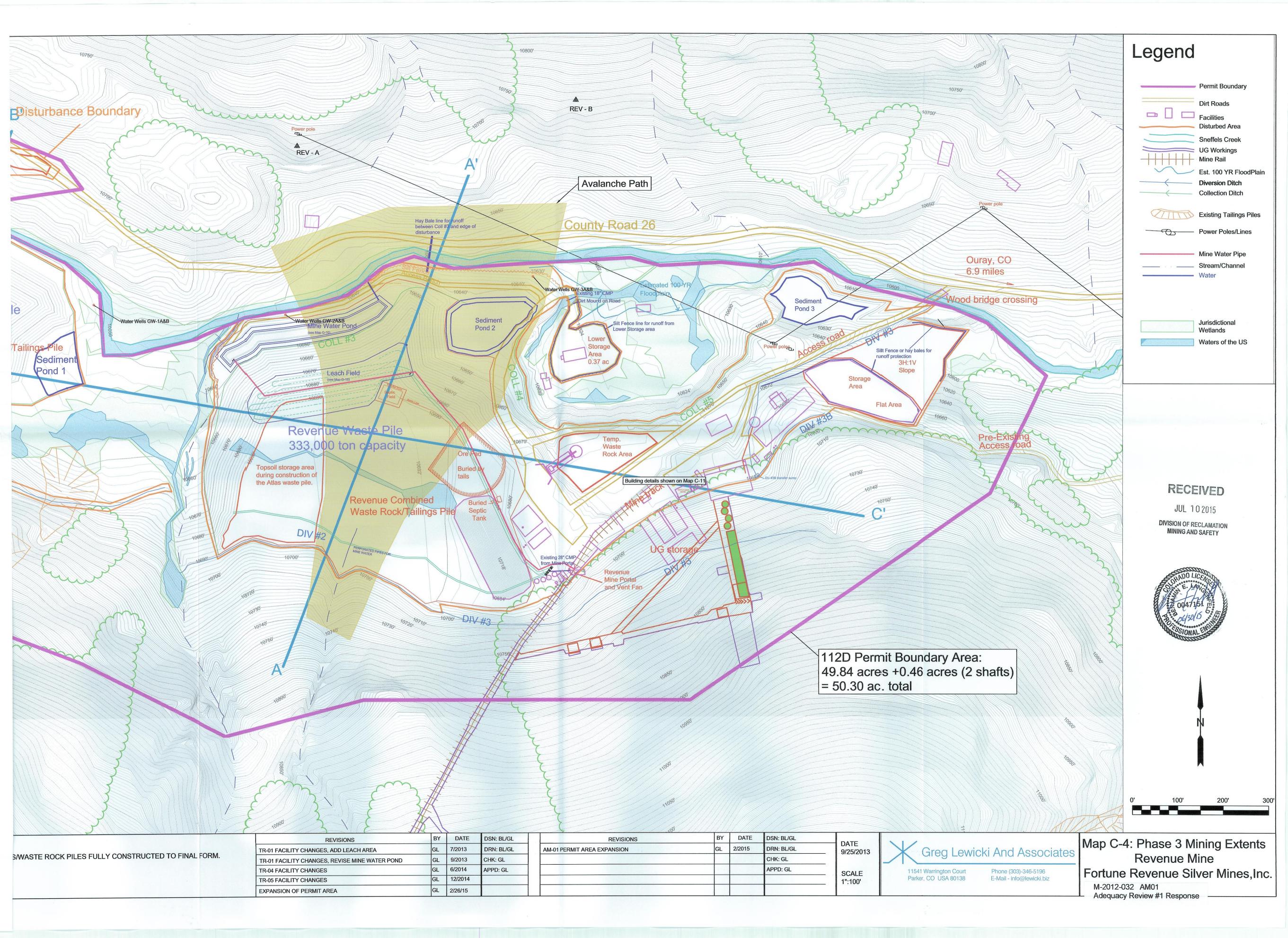


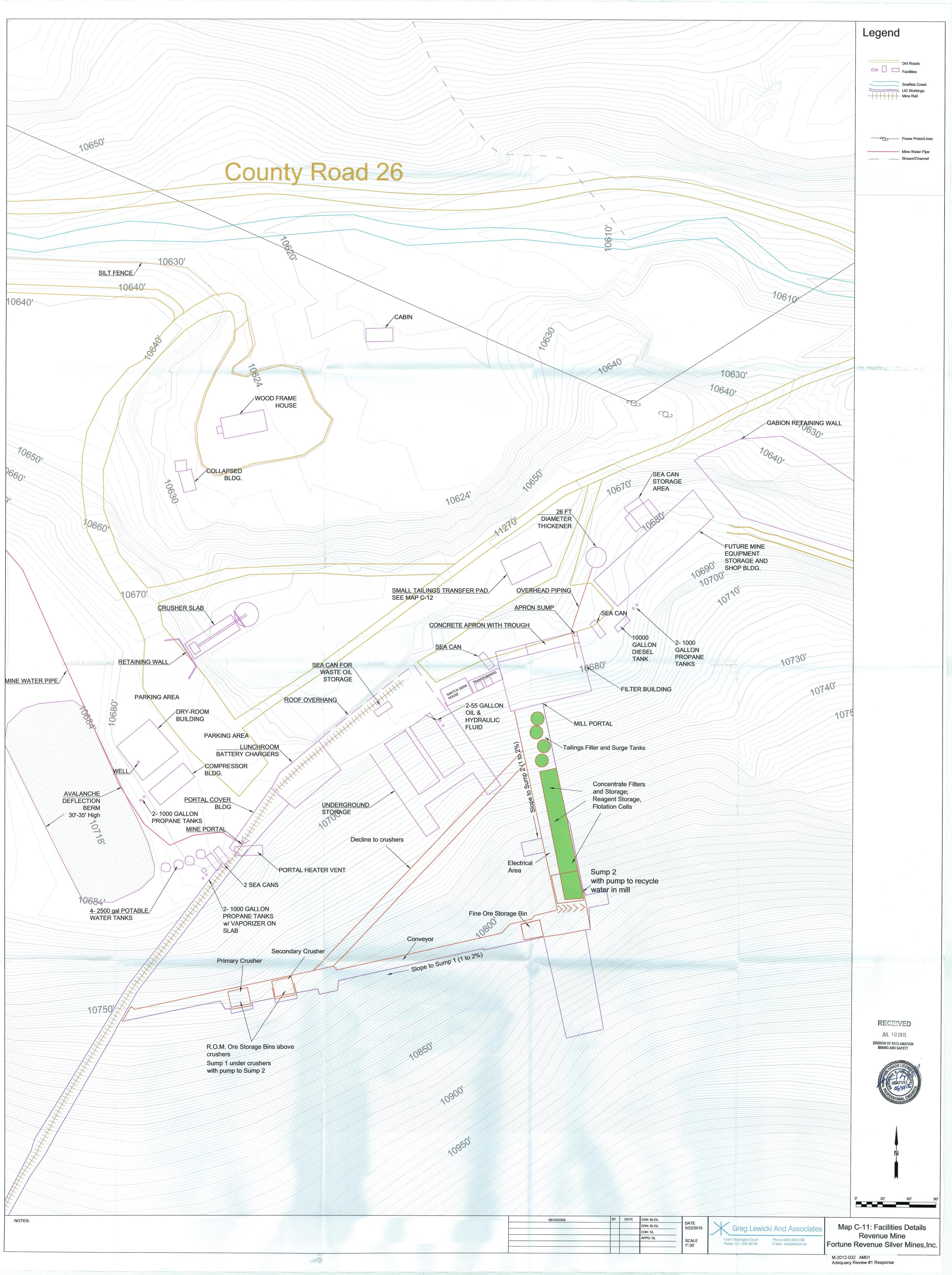














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